No. 21-2116

UNITED STATES COURT OF APPEALS FOR THE TENTH CIRCUIT

DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT, *et al.*,

Plaintiff-Appellants,

v.

DEBRA HAALAND, *et al.*,

Defendant-Appellees,

and

DJR ENERGY HOLDINGS, LLC, et al.,

Intervenor Defendants-Appellees.

On Appeal from the United States District Court for the District of New Mexico,
Civil Action No. 1:19-cv-00703-WJ-JFR
Honorable William P. Johnson, Chief United States District Judge

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APPELLANTS' UNCITED PRELIMINARY OPENING BRIEF (DEFERRED APPENDIX APPEAL) (Oral Argument Requested)

RULE 26.1 DISCLOSURE STATEMENT

Pursuant to Federal Rule of Appellate Procedure 26.1(a), Plaintiff-Appellants Diné Citizens Against Ruining Our Environment, San Juan Citizens Alliance, Sierra Club, and WildEarth Guardians each certify to this Court that they are nonprofit organizations and that there are no parent corporations or any publicly held corporations that hold any stock in these organizations.

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[The addendum materials required by Fed. R. App. 28(f) and Tenth Cir. R. 28.2(A)(1) will be included when Appellants file their final cited brief.]

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GLOSSARY OF TERMS

2003 RMP	2003 Resource Management Plan
2014 RFDS	2014 Reasonably Foreseeable Development Scenario
APA	Administrative Procedure Act
APD	Application for Permit to Drill
BLM	Bureau of Land Management
CEQ	Counsel on Environmental Quality
CH_4	Methane
Citizen Groups	Diné Citizens Against Ruining Our Environment *et al.*
CO_2	Carbon Dioxide
EA	Environmental Assessment
EIS	Environmental Impact Statement
FLPMA	Federal Land and Policy Management Act
FONSI	Finding of No Significant Impact
GHG	Greenhouse Gas
GWP	Global Warming Potential
HAPs	Hazardous Air Pollutants
Mancos RMPA	Mancos Shale Resource Management Plan Amendment
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
RFDS	Reasonably Foreseeable Development Scenario
RMP	Resource Management Plan
VOC	Volatile Organic Compound

PRIOR RELATED APPEALS IN THIS COURT

Diné CARE v. Bernhardt, 923 F.3d 831 (10th Cir. 2019)

JURISDICTION

The district court had jurisdiction over this case pursuant to 28 U.S.C. § 1331 (federal question) and the judicial review provisions of the Administrative Procedure Act ("APA"), 5 U.S.C. § 701 *et seq*. This Court has jurisdiction under 28 U.S.C. § 1291.

This is an appeal from the final order and judgment of the U.S. District Court for the District of New Mexico dated August 3, 2021, which disposed of all of Appellants' claims. The notice of appeal in this case, No. 21-2116, was filed on October 4, 2021, within 60 days of entry of judgment.

ISSUES PRESENTED

1. Whether Federal Defendants violated the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4321 *et seq*., and the APA, 5 U.S.C. § 706, by predetermining the outcome of their NEPA analysis for the challenged Mancos Shale drilling permits.

2. Whether Federal Defendants violated NEPA, 42 U.S.C. §§ 4321 *et seq*, and its implementing regulations, when they failed to analyze the direct, indirect, and cumulative impacts of the challenged Mancos Shale drilling permits on environmental resources and communities.

STATEMENT OF THE CASE

In this litigation, Appellants Diné Citizens Against Ruining Our Environment, San Juan Citizens Alliance, Sierra Club, and WildEarth Guardians (collectively, "Citizen Groups") challenge the Bureau of Land Management's ("BLM's") approvals for 370 drilling permits authorizing oil and gas development in the Greater Chaco Landscape of northwest New Mexico. The challenged drilling permits were issued between 2014 and 2019. After Citizen Groups filed this litigation, BLM prepared an Environmental Assessment Addendum ("EA Addendum") and 81 separate Findings of No Significant Impact ("FONSIs") attempting to cure earlier deficiencies in its prior analyses. Citizen Groups amended their complaint to challenge BLM's reliance on these *post-facto* documents to support its prior decisions.

I. BLM's Oil and Gas Planning and Management Framework

Oil and gas development is just one of the multiple uses managed in accord with the Federal Land Policy and Management Act ("FLPMA"), 43 U.S.C. §§ 1701 *et seq*. FLPMA provides, "[i]n managing the public lands," BLM "shall, by regulation or otherwise, take any action necessary to prevent unnecessary or undue degradation of the lands." *Id.* § 1732(b). FLPMA further provides that BLM must manage the public lands "in a manner that will protect the quality of scientific,

scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values." *Id.* § 1701(a)(8).

BLM manages onshore oil and gas development through a three-phase process. In the first phase, BLM prepares a Resource Management Plan ("RMP") in accordance with FLPMA and associated planning regulations, 43 C.F.R. § 1600 *et seq*., along with an environmental impact statement ("EIS") required by NEPA. BLM determines in the RMP which lands containing federal minerals, including oil and gas, will be open to leasing and under what conditions, and analyzes landscape-level cumulative impacts from predicted implementation-stage development. A reasonably foreseeable development scenario ("RFDS") underlies BLM's assumptions regarding the pace and scope of oil and gas development for the duration of the RMP.

In the second phase, BLM identifies the boundaries for lands to be offered through lease sales and proceeds to sell and execute leases. 43 C.F.R. § 3120 *et seq*. After a lease is issued, BLM may impose "reasonable measures," consistent with lease terms and conditions. *Id.* § 3101.1-2.

In the third phase, at issue here, the lessee submits an application for permit to drill ("APD") for BLM's approval prior to developing an oil or gas well. *Id.* § 3162.3-1(c). At this stage, BLM may condition APD approval on the lessee's adoption of conditions delimited by the lease and the lessee's surface use rights. *Id.*

§ 3101.3-1(h)(i). The right to drill is also conditioned upon the agency's compliance with "NEPA…and other applicable law." 81 Fed. Reg. 49912, 49921 (July 29, 2016) (Onshore Order No. 1 (E)(2)(b)).

II. Factual Background

A. Environmental Impacts of Oil and Gas Development in the Greater Chaco Landscape

This litigation challenges BLM decisions to allow the drilling and production of 370[1] new oil and gas wells in the Mancos Shale/Gallup formations ("Mancos Shale") in the San Juan Basin—specifically within the Greater Chaco Landscape. Despite its great cultural, spiritual, archaeological, and ecological significance, Greater Chaco is already over 90% leased for oil and gas development. Today nearly 40,000 oil and gas wells fragment this unique landscape, harming people and communities, as well as air quality, water quality and quantity, climate, and ecological systems. App. at [AR008132].

[1] While the district court held that Plaintiffs' challenge was unripe with respect to APDs that had not yet been approved by BLM, this determination was based on a BLM status update now more than one year old. *See* Op. at 16 n.9 (citing App. at [ECF_No._111, Exs. A, B]. BLM has since approved additional APDs challenged in this litigation, and the Court has jurisdiction over such wells. *New Mexicans for Bill Richardson v. Gonzales*, 64 F.3d 1495, 1502 (10th Cir. 1995) ("[S]ince ripeness is peculiarly a question of timing, it is the situation now rather than the situation at the time of the District Court's decision that must govern' our consideration of this case." (quotation omitted)). Plaintiffs do not appeal the district court's determination that its challenge is moot with respect to expired APDs or abandoned wells.

The use of new extraction technologies, including horizontal drilling and multi-stage hydraulic fracturing, has increased risks and impacts compared to those from traditional extraction technologies previously evaluated by BLM.[2] The agency has acknowledged that "[a]s full-field development occurs [as a result of new horizontal drilling technology], especially in the shale oil play, additional impacts may occur that previously were not anticipated in the [2001] RFDS or analyzed in the current 2003 RMP/EIS, which will require an EIS-level plan amendment and revision of the RFDS for complete analysis of the Mancos Shale/Gallup Formation." 79 Fed. Reg. 10,548 (Feb. 25, 2014). Accordingly, in 2014, BLM began preparing an RMP Amendment and EIS to analyze, for the first time, the environmental impacts of horizontal drilling and fracking in the Mancos Shale ("Mancos RMPA/EIS"). *Id*. In 2018, BLM released a revised RFDS for oil and gas activities in preparation for the Mancos RMPA/EIS, with a baseline projection of 3,200 new wells, largely horizontally drilled and hydraulically fractured. App. at [AR008132]. BLM issued its draft Mancos RMPA/EIS on February 28, 2020, which has yet to be finalized. The impacts of the 370

[2] Hydraulic fracturing, or "fracking," is an oil and gas drilling "stimulation" technique in which fluids are injected under high pressure to fracture the underlying formation holding oil or gas. App. at [AR043966].

challenged Mancos Shale wells, as well as 3,200 foreseeable wells from the 2018 RFDS, will be added to a legacy of nearly 40,000 historic wells across the basin.

B. *Diné CARE* Tenth Circuit Decision

This suit follows a May 2019 decision by the United States Court of Appeals for the Tenth Circuit, *Diné CARE v. Bernhardt*, 923 F.3d 831 (10th Cir. 2019), *reh'g denied* (June 24, 2019). There, the Tenth Circuit held that "[o]nce the 2014 RFDS issued, it became reasonably foreseeable to the BLM that the projected wells would be drilled, so the BLM needed to consider the cumulative impacts of all those wells, even if the wells were not going to be drilled imminently," which BLM failed to do. *Id.* at 854, 857.

C. The Challenged Agency Actions

Following the Tenth Circuit's decision in *Diné CARE*, this lawsuit originally challenged BLM's approval of 255 oil and gas wells, analyzed in 32 separate environmental assessments ("EAs") within the Greater Chaco Landscape, which similarly failed to quantify or analyze cumulative impacts. App. at [ECF_No._1]. After this case was filed, BLM prepared an EA Addendum to update the environmental analysis for the originally-challenged approvals, as well as additional well approvals which suffered from the same deficiencies. BLM then

issued 81 new FONSIs, covering a total of 370 Mancos Shale wells.[3] BLM did not issue new decision records for the EAs, nor did it reconsider its prior APD approvals. Citizen Groups filed an amended and supplemented complaint on May 1, 2020, challenging BLM's analyses and approvals for the 370 APDs. App. at [ECF_No._95]. Collectively, the challenged agency actions include the original EAs, decision records, EA Addendum, and updated FONSIs.

D. The EA Addendum

On December 9, 2019—several months *after* Citizen Groups first initiated this litigation—BLM posted a draft EA Addendum for public comment. App. at [AR000001-55; AR045091]. On January 6, 2020, Citizen Groups submitted comments to BLM detailing numerous outstanding deficiencies in BLM's *post-facto* NEPA analysis. App. at [AR033747-814]. In February 2020, BLM finalized the EA Addendum and issued separate updated FONSIs for each of the challenged EAs. App. at [AR045036-045673].

According to BLM, the EA Addendum was intended "to update the analysis for resources potentially inadequately covered in the original analysis." App. at [AR045092]. Pending completion of the EA Addendum, BLM never cancelled or

[3] While BLM's EA Addendum purports to apply to 82 separate EAs, the agency only identifies 81 separate EAs as "EAs Affected by the Proposed Addendum." AR045042-43; *see also* Decl. Richard Fields ¶ 5 (App. at [__]) (acknowledging mistake)).

suspended the original APD approvals. Instead, BLM stated that it was *not* "reapproving the APDs," which were "approved at the time that BLM prepared the original [81] EAs and those approvals have not been vacated or withdrawn." App. at [AR045091].

E. The District Court's Decision

On August 1, 2019, Citizen Groups filed their initial Petition for Review of Agency Action, in accord with the APA, for NEPA violations relating to 32 EAs and approvals for 255 APDs within the Greater Chaco Landscape. In light of ongoing and imminent drilling activities, Citizen Groups contemporaneously filed a Motion for Temporary Restraining Order and Preliminary Injunction on August 1, 2019. App. at [ECF_No._5].

On August 28, 2019 the district court issued a *sua sponte* Order that initially declined to address Citizen Groups' motion seeking preliminary relief, stating that the Court would "set Plaintiffs' motion for injunctive relief when I am ready for the motion to be heard and not before then." App. at [ECF_No._60]. On September 30, 2019, the district court issued another *sua sponte* order "finding good cause to delay entering a scheduling order at this time due to the pending Motion for Temporary Restraining Order and Preliminary Injunction," and explaining that the court would issue a scheduling order "after the Motion has been resolved by the

Court." App. at [ECF_No._72]. The district court did not separately resolve the Motion prior to its August 3, 2021 ruling on the merits.

On December 9, 2019, BLM notified the district court that it was preparing an addendum to its NEPA analysis for the 32 challenged EAs, as well as 49 additional EAs approving oil and gas drilling, which was completed on February 14, 2020. BLM issued new FONSIs for all 81 EAs. On May 1, 2020, Citizen Groups filed an Amended and Supplemented Petition for Review of Agency Action, App. at [ECF_No._95], to challenge the newly-completed EA Addendum, 81 updated FONSIs, and BLM's prior decisions to approve the 370 APDs. The case proceeded on the merits of the Amended Petition.

On August 3, 2021, the district court issued a Memorandum Opinion and Order Denying Plaintiffs' Motion for Temporary Restraining Order and Preliminary Injunction and Dismissing Plaintiffs' Claims with Prejudice. App. at [ECF_No._125]. The district court's opinion finally resolved Citizen Groups' motion for preliminary relief relating to the original Petition, App. at [ECF_No._5], filed August 1, 2019, and also addressed the merits of the Amended Petition, App. at [ECF_No._95], as applied to all 81 EAs. The district court dismissed all of Citizen Groups' claims with prejudice.

STANDARD OF REVIEW

The district court's denial of Citizen Groups' *Olenhouse* Motion is a question of law that this Court reviews de novo with no deference to the district court's legal conclusion. *Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 704-05 (10th Cir. 2009).

The APA governs judicial review of BLM's actions challenged under NEPA and the APA, 5 U.S.C. § 706, where the reviewing court must set aside an agency action if it "fails to meet statutory, procedural or constitutional requirements or if it was arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." *Olenhouse v. Commodity Credit Corp*., 42 F.3d 1560, 1574 (10th Cir. 1994) (internal quotations omitted). Under this standard, a reviewing court must set aside agency action if:

> [T]he agency…relied on factors which Congress had not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise.

Colo. Envtl. Coal. v. Dombeck, 185 F.3d 1162, 1167 (10th Cir. 1999) (quoting *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 43 (1983)).

SUMMARY OF THE ARGUMENT

Because BLM's decisions to approve the challenged APDs were made prior to completion of the environmental review required by NEPA—and never reconsidered—BLM unlawfully predetermined the outcome of its NEPA analysis.

BLM further violated NEPA by failing to take a hard look at greenhouse gas ("GHG") emissions and climate impacts, cumulative water resources impacts, and air quality and public health impacts.

ARGUMENT

I. Citizen Groups Have Standing

Citizen Groups satisfy Article III standing by demonstrating "injury in fact, causation, and redressability." *Friends of the Earth v. Laidlaw*, 528 U.S. 167, 168 (2000). An organization has standing when: "(a) its members would otherwise have standing to sue in their own right; (b) the interests it seeks to protect are germane to the organization's purpose; and (c) neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit." *Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 343 (1977).

The Tenth Circuit has applied a two-part test to determine injury-in-fact, which a plaintiff satisfies by showing: (1) that the alleged NEPA violation "created an increased risk of actual, threatened, or imminent environmental harm," and (2) "that this increased risk of environmental harm injures its concrete interests."

Comm. to Save Rio Hondo v. Lucero, 102 F.3d 445, 449 (10th Cir. 1996). In other words, "[u]nder [NEPA], an injury results not from the agency's decision, but from the agency's *uninformed* decisionmaking." *Id*. at 452.

"[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." *Laidlaw*, 528 U.S. at 183. *See also Diné CARE*, 923 F.3d at 841-43 (finding standing to challenge drilling permits where plaintiffs demonstrated nexus to affected areas, and rejecting plaintiff's need to establish a geographic nexus to each well).

Citizen Groups' members have demonstrated injury-in-fact by describing their geographic nexus to areas affected by the challenged drilling permits and how they are directly harmed by BLM's failure to comply with NEPA, demonstrated by their declarations describing living, working, recreating, engaging in cultural and spiritual practices, and otherwise using areas adjacent to and near the locations where horizontal drilling and fracking of Mancos Shale wells is occurring, and from which the effects of this drilling are visible and audible.[4] Citizen Groups'

[4] Eisenfeld Decl. ¶¶ 2, 3, 4-5, 8-9 [App. at __]; Grant Decl. ¶¶ 4, 7-12, 13 [App. at __]; King-Flaherty Decl. ¶¶ 5, 8-12, 15-18, 20-22 [App. at __]; Pinto Decl. ¶¶ 4-5, 8-12 [App. at __]; Seamster Decl. ¶¶ 3, 8, 13 [App. at __]; Nichols Decl. ¶¶ 5-8, 12-17 [App. at __].

members describe specific harms from ongoing Mancos Shale development, and how these harms will be increased "due to [the BLM's] alleged uninformed decisionmaking." *Lucero*, 102 F.3d at 451. For example, Citizen Groups' members describe how the character of the landscape has been altered, the viewing of Mancos Shale drilling rigs and flares, impacts from fracking trucks, impacts to resources, impacts to their use and enjoyment of the region, and procedural harm from BLM's failure to comply with NEPA.[5] Having already witnessed the impact of oil and gas development on nearby landscapes, Citizen Groups' members identify imminent injuries from the increased risk of environmental harm caused by more drilling and development of the challenged Mancos Shale wells, including injuries to their use and enjoyment of nearby areas, and from increased concerns about their health and safety.[6] As in *Diné CARE*, Citizen Groups have demonstrated injury-in-fact. 923 F.3d at 841-43.

To establish traceability in NEPA cases, a plaintiff "need only trace the risk of harm to the agency's alleged failure to follow [NEPA] procedures." *Lucero*, 102

[5] Eisenfeld Decl. ¶¶ 4, 8-10 [App. at __]; Grant Decl. ¶¶ 9-12 [App. at __]; King-Flaherty Decl. ¶¶ 10-12, 16, 18 [App. at __]; Pinto Decl. ¶¶ 4, 5, 8-12 [App. at __]; Seamster Decl. ¶¶ 13-14 [App. at __]; Nichols Decl. ¶¶ 7-8, 12-13, 15-17 [App. at __].

[6] Eisenfeld Decl. ¶¶ 9- 11 [App. at __]; Grant Decl. ¶¶ 13-14 [App. at __]; King-Flaherty Decl. ¶¶ 20-22 [App. at __]; Pinto Decl. ¶¶ 8-12 [App. at __]; Seamster Decl. ¶¶ 9, 13-14 [App. at __]; Nichols Decl. ¶¶ 12-18 [App. at __].

F.3d at 452. Here, Citizen Groups' members' injuries are traceable to BLM's authorizations of Mancos Shale APDs without adequately evaluating the impacts of such drilling under NEPA, which increases the risk of harm to Citizen Groups' concrete recreational, aesthetic, and health-related interests.[7] *Diné CARE*, 923 F.3d at 843-44. As in *Diné CARE*, Citizen Groups have demonstrated causation. *Id*.

Redressability is satisfied by showing a plaintiff's "injury would be redressed by a favorable decision requiring the [agency] to comply with [NEPA's] procedures." *Lucero*, 102. F.3d at 452; *see also Diné CARE*, 923 F.3d at 844 (accord). "Under [NEPA], 'the normal standards of redressability' are relaxed; a plaintiff need not establish that the ultimate agency decision would change upon [NEPA] compliance." *Lucero*, 102 F.3d at 452 (quoting *Lujan v. Defenders of Wildlife*, 504 U.S. 555, 572 n.7 (1992)). Citizen Groups' members' injuries would be redressed by a favorable result here because BLM would be required to sufficiently analyze the cumulative, landscape-level environmental impacts from the authorization of the 370 challenged Mancos Shale wells. Such analysis could lead to denial of the drilling permits or application of additional conditions that would lessen potential impacts to people, the environment, and nearby communities. Thus, Citizen Groups have established redressability.

[7] Eisenfeld Decl. ¶ 11 [App. at __]; Grant Decl. ¶¶ 13, 15 [App. at __]; King-Flaherty Decl. ¶ 22 [App. at __]; Nichols Decl. ¶ 18 [App. at __].

II. BLM's Decisions to Approve Mancos Shale APDs Were Unlawfully Predetermined Prior to Completion of the Environmental Review Required by NEPA

NEPA is our "basic national charter for the protection of the environment." 40 C.F.R. § 1500.1.[8] At its core, NEPA's "twin aims" are to promote "informed agency decisionmaking and public access to information." *Richardson*, 565 F.3d at 707. Accordingly, NEPA requires federal agencies to analyze and publicly disclose the environmental impacts of their proposed actions and evaluate all reasonable alternatives to lessen or avoid those impacts. 42 U.S.C. § 4332(2)(c); 40 C.F.R. § 1502.14. "By focusing both agency and public attention on the environmental effects of proposed actions, NEPA facilitates informed decisionmaking by agencies and allows the political process to check those decisions." *Richardson*, 565 F.3d at 703.

Logically, environmental analysis can only be useful in informing agency decision-makers if it is conducted *prior* to a decision being made. Thus, the Tenth Circuit has stated: "NEPA 'requires federal agencies...to analyze environmental consequences *before* initiating actions that potentially affect the environment.'"

[8] All references to the NEPA regulations are to those in effect at the time of BLM's decision-making, which occurred entirely before recent amendments effective September 14, 2020. 85 Fed. Reg. 43304 (July 16, 2020). The new NEPA regulations are subject to legal challenge and have been held in abeyance by Secretarial Order 3399.

Diné CARE, 923 F.3d at 851 (emphasis added) (quoting *Utah Env't Cong. v. Bosworth*, 443 F.3d 732, 735–36 (10th Cir. 2006)). *See also Colorado Envtl. Coal. v. Salazar*, 875 F. Supp. 2d 1233, 1245 (D. Colo. 2012) ("The purpose of NEPA is to require agencies to pause before committing resources to a project to consider the likely environmental consequences of a decision, as well as of reasonable alternatives to it."). Because after-the-fact analysis cannot inform or affect decisions already made, "NEPA's effectiveness depends entirely on involving environmental considerations in the initial decisionmaking process." *Metcalf v. Daley*, 214 F.3d 1135, 1145 (9th Cir. 2000). Accordingly, NEPA regulations require environmental analysis to be "prepared early enough so that it can serve practically as an important contribution to the decisionmaking process and will not be used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5.

Here, however, BLM prepared an Addendum to supplement the challenged EAs only *after* the agency decided to approve the 370 APDs—and without suspending, vacating, or otherwise reconsidering its APD approvals—rendering the supplemental analysis of no value to the agency's decisionmaking. BLM's reliance on the *post-facto* EA Addendum to paper over deficiencies in its original analyses represents an unlawful rationalization of prior decisions. 40 C.F.R. § 1502.5.

As the Tenth Circuit has articulated, unlawful "predetermination" occurs where "an agency *irreversibly and irretrievably* commits itself to a plan of action that is dependent upon the NEPA environmental analysis producing a certain outcome, *before* the agency has completed that environmental analysis—which of course is supposed to involve an objective, good faith inquiry into the environmental consequences of the agency's proposed action." *Forest Guardians v. U.S. Fish & Wildlife Serv.,* 611 F.3d 692, 714 (10th Cir. 2010). While agency staff need not remain subjectively impartial during the environmental review process, the agency cannot irretrievably commit resources prior to completing that review. *Id.* Yet in approving the challenged APDs, BLM irretrievably committed federal lands to the environmental impacts of oil and gas drilling *before* completing required analysis of impacts to climate, water resources, and air quality and health, through the EA Addendum.

After-the-fact supplementation of NEPA analysis can, in certain circumstances, remedy NEPA violations,[9] but only where the supplemental environmental analysis actually informs agency reconsideration of the underlying decision. *See S. Utah Wilderness All. v. U.S. Dep't of the Interior*, 250 F. Supp. 3d

[9] As discussed in Section III below, even if the EA Addendum is considered by this Court, significant deficiencies remain in BLM's assessment of impacts. Notably, BLM's original APD approvals relied on EAs suffering from the same defect identified in *Diné CARE*, 923 F.3d at 854, namely a failure to quantify or assess cumulative impacts. *See infra*.

1068, 1077, 1090 (D. Utah 2017) (affirming that "indefinitely suspending each APD and associated rights of way" allowed "each APD [to] be reevaluated independently and ultimately rise or fall on the basis of a new environmental impacts analysis."). *See also e.g., Diné CARE v. OSMRE*, No. 12-CV-01275-JLK, 2015 WL 1593995, at *3 (D. Colo. Apr. 6, 2015) (supplemental NEPA prepared after vacatur of mining plan allowing new EAs, FONSIs, and permit decision to be informed by post-remand NEPA analysis).

Absent reconsideration of the underlying decision to approve the APDs, BLM's supplemental NEPA was rendered a purely paperwork exercise with no potential to affect the outcome of the proposed project. *But see* 40 C.F.R. § 1500.1(c) ("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 Tenth Circuit "ha[s] generally concluded that predetermination was present only when there was concrete evidence demonstrating that the agency had irreversibly and irretrievably bound itself to a certain outcome—for example, through a contractual obligation or other binding agreement." *Wyoming v. U.S. Dep't of Agric.*, 661 F.3d 1209, 1265 (10th Cir. 2011). Here, BLM's approvals of the challenged APDs—prior to completion of the EA Addendum—represents such a contractual obligation. Because BLM did not utilize the EA Addendum to actually reevaluate the original APD approvals,

BLM unlawfully predetermined that its NEPA process would result in issuance of the challenged APDs.

Notably, BLM's EA Addendum and updated FONSIs admitted as much, expressly disclaiming reconsideration of its prior APD approvals and only purporting "to update the analysis for resources potentially inadequately covered in the original analysis." App. at [AR045092]. In other words, the EA Addendum was an attempt to cure the agency's earlier deficient analysis, not a meaningful reconsideration of its decisions. As BLM explained, the agency was not "reapproving the APDs," which were "approved at the time that BLM prepared the original [81] EAs and those approvals have not been vacated or withdrawn." App. at [AR045091]. Thus, BLM had already irreversibly and irretrievably committed to approving the 370 APDs at the outset of the Addendum process, and refused to reevaluate that commitment. App. at [AR045091-92]. This process is expressly forbidden by NEPA. *Forest Guardians*, 611 F.3d at 714.

Tenth Circuit caselaw is clear that issuance of an oil and gas lease is an irreversible commitment of resources. *Richardson*, 565 F.3d at 718. Similarly, there is no question that issuance of drilling permits—the subsequent and final stage of the federal oil and gas development process—also represents such a commitment. *WildEarth Guardians v. U.S. Forest Serv.*, No. 2:14-CV-00349-DN, 2021 WL 409827, at *3 (D. Utah Feb. 5, 2021) ("*Before approving an APD*, the

BLM must prepare an [EA] to be used in determining whether an [EIS] is required under NEPA.").

Here, the district court recognized that oil and gas drilling and production was already ongoing on dozens of the challenged APDs, which was true before BLM initiated the EA Addendum process. Op. at 20 n.12.[10] Yet contrary to precedent and this on-the-ground reality, the district court nevertheless held that BLM's issuance of hundreds of drilling permits was *not* an irreversible commitment of resources, rationalizing that it was only "a small sum of the granted APDs" and that only predetermined commitments to "large scale projects" violate NEPA. *Id.* (citing *Forest Guardians*, 611 F.3d at 714). But contrary to the district court's unfounded reasoning, the scale of a project is simply not a factor when evaluating predetermination. *See Forest Guardians*, 611 F.3d at 714 (describing test for predetermination).

The district court further contended that "BLM did not irreversibly commit itself to a course of action because it retained an ability to terminate pending APDs." Op. at 23.[11] This represents a fundamental misunderstanding of law and

[10] App. at [ECF_No._44-1 ¶ 67] (39 producing wells, 17 being drilled, as of August 1, 2019).

[11] The district court also erroneously incorporated the D.C. Circuit's vacatur balancing test, *Allied-Signal, Inc. v. U.S. Nuclear Regul. Comm'n*, 988 F.2d 146, 150 (D.C. Cir. 1993), into its consideration of whether BLM predetermined its decisions. Op. at 23-27. *But see, Env't Def. Fund v. FERC,* 2 F.4th 953, 976 (D.C.

fact. APD submission represents the final stage of the oil and gas process and, once an APD is approved, drilling can commence. *See* 81 Fed. Reg. at 49921 (Onshore Order No. 1). While BLM retains inherent authority to terminate or modify unlawfully-issued APDs, *id.*, that is irrelevant to the legal question of when an irretrievable commitment was made. *See S. Utah Wilderness All.*, 250 F. Supp. 3d at 1075 ("Finally, the lessee submits an [APD] to BLM, and, upon BLM's approval, the lessee may explore and extract on the leased parcel.").

At the heart of the district court's decision was its erroneous acceptance of BLM's *post-hoc* argument that the agency "reopened its decisionmaking process" and "affirmed its original approval of each APD." Op. at 21. The EA Addendum stated BLM *would* reconsider its original decision to approve the APDs, App. at [AR045037], which was repeatedly cited by the agency. *See* BLM Br. at 12, 13, 40 (App. at [__]). But there is no evidence such reconsideration occurred. Rather, the record shows BLM explicitly did *not* "reopen" its original APD approval decisions. Each FONSI is clear that it was "prepared to *re-affirm* the findings of the original EA and original FONSI for the selected Proposed Action alternative."[12] *See also* App. at [AR045092] ("The Farmington Field Office is not

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Cir. 2021) (after determining FERC decision to be arbitrary and capricious, "[t]he final question that we must address concerns remedy").

[12] The quoted language appears in each of the updated FONSIs. *See e.g.*, App. at [AR045268] (DOI-BLM-NM-F010-2014-0267-A), [AR045310] (DOI-BLM-NM-F010-2015-0142-EA-A), [AR045401] (DOI-BLM-NM-F010-2016-0210-EA-A),

reapproving the APDs….”). The FONSIs then simply conclude that “neither an [EIS] nor a supplement to the existing EA is necessary and neither will be prepared.” App. at [AR045113].

Reconsideration of the APD decisions is essential for BLM’s supplemental NEPA to be meaningful. According to Interior’s NEPA regulations, an EA process “concludes with one of the following:

(1) A notice of intent to prepare an [EIS];

(2) A finding of no significant impact; or

(3) A result that no further action is taken on the proposal.”

43 C.F.R. § 46.325. Here, BLM eliminated the third option by admitting the EA Addendum was intended to “update analysis” and the FONSIs to “re-affirm” the original decisions. *See* App. at [AR045092]; [AR045268] (DOI-BLM-NM-F010-2014-0267-A). The agency did *not* reconsider *issuance* of the APDs, which was the only decision relevant to BLM’s authorization of drilling and its resultant environmental impacts.

Environmental analysis under NEPA “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*, 611 F.3d at 712. Thus,

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[AR045457] (DOI-BLM-NM-F010-2017-0010-A), [AR045646] (DOI-BLM-NM-F010-2018-0047-EA-A) (emphasis added).

BLM's attempt to paper over its inadequate analyses is no minor procedural error—it undermines the fundamental purpose of NEPA. Instead of informing the agency's decision-making process, as Congress intended, BLM's *post-hoc* supplemental analysis here served only to "rationalize or justify decisions already made." *Id.* at 712-13; *see also* 40 C.F.R. § 1502.5.

The court declined to uphold this type of after-the-fact analysis in *Protect Key West v. Cheney*, 795 F. Supp. 1552, 1561–62 (S.D. Fla. 1992). There, the Navy prepared an EA to assess the impacts of a proposed housing project, issued a FONSI, and then conducted additional studies assessing environmental and engineering issues related to the project. When the adequacy of the EA was challenged, the Navy "argue[d] that the studies, surveys, and investigations conducted after the decision was made to proceed with the…project 'cure[d]' any defects in the original EA," and supported the previously-issued FONSI. *Id.* at 1560. As here, Plaintiffs argued that "the subsequent studies, reports, analyses, performed after the fact, cannot and do not cure the defective EA." *Id.*

Recognizing the EA to be "a fundamental crossroads in the [NEPA] process," the court found it "clear that the Navy's theory of 'cure' in this case would violate the letter and spirit of NEPA." *Id.* at 1561. Because "[t]he documentation offered in support of the EA's 'findings' was prepared *after* the EA and FONSI were issued," and after the agency's decision was made, the court

found that "[a]ccepting the Navy's argument would render the EA/FONSI process a mere formality." *Id.* Thus, *Protect Key West* recognized that allowing *post-facto* 'cure' of BLM's inadequate NEPA analysis would undermine the fundamental purpose of the statute. *See id.* at 1561-62.

Just as in *Protect Key West*, here BLM has attempted to cure its admittedly "potentially inadequate[]" original analysis with an after-the-fact update, which was initiated and completed only after this litigation was filed. App. at [AR045092]. NEPA, however, is not intended to be a "mere bureaucratic formality," but to ensure that "federal agencies meaningfully consider the potential environmental impacts of a proposed action *before* undertaking that action." *Diné CARE v. OSMRE*, 2015 WL 1593995, at *3. As the Tenth Circuit has repeatedly explained, courts "may affirm agency action, if at all, only on the grounds articulated by the agency itself." *High Country Conservation Advocates v. U.S. Forest Serv.*, 951 F.3d 1217, 1225 (10th Cir. 2020) (quoting *Olenhouse*, 42 F.3d at 1565). "Post-hoc examination of data to support a pre-determined conclusion is not permissible because '[t]his would frustrate the fundamental purpose of NEPA, which is to ensure that federal agencies take a 'hard look' at the environmental consequences of their actions, early enough so that it can serve as an important contribution to the decision making process.'" *Sierra Club v. Bosworth*, 510 F.3d 1016, 1026 (9th Cir. 2007) (quote omitted). Thus, while NEPA primarily lays out

procedural requirements, the statute is fundamentally intended to drive on-the-ground results. *See* 40 C.F.R. § 1500.1(c).

By refusing to reconsider the issuance of the challenged APDs, BLM rendered preparation of the EA Addendum a purely paperwork exercise, completely disconnected from the agency's decision-making process. Accordingly, BLM's updated FONSIs were unlawfully predetermined prior to completion of the environmental review required by NEPA, and BLM's approval of the APDs was arbitrary, capricious, and unlawful.

III. BLM Failed to Take a Hard Look at Environmental Impacts

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). 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." *Balt. Gas v. NRDC*, 462 U.S. 87, 97-98 (1983). These "environmental consequences" may be direct, indirect, or cumulative. 40 C.F.R. §§ 1502.16, 1508.7, 1508.8. BLM determines whether these impacts are significant by accounting for both their "context" and "intensity." *Id.* § 1508.27; *Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1274 (10th Cir. 2004). Under NEPA's hard look requirement, an agency's analysis of environmental impacts

must be "fully informed," "well-considered," and based on "[a]ccurate scientific analysis." *NRDC v. Hodel*, 865 F.2d 288, 294 (D.C. Cir. 1988); 40 C.F.R. §§ 1500.1(b), 1502.24. Here, BLM failed to take a hard look at GHG emissions and climate impacts, cumulative impacts to water resources, and air quality and health impacts.

A. Greenhouse Gas Emissions and Climate Impacts

"[T]he key requirement of NEPA" is to "consider and disclose the actual environmental effects in a manner that…brings those effects to bear on decisions to take particular actions that significantly affect the environment." *Balt. Gas*, 462 U.S. at 96. Here, BLM's mere quantification of emissions "does not evaluate the incremental impact that these emissions will have on climate change or on the environment," as NEPA requires. *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1216 (9th Cir. 2008). Indeed, "it is not releases of [pollution] that Congress wanted disclosed; it is the effects, or environmental significance, of those releases." *NRDC v. NRC*, 685 F.2d 459, 487 (D.C. Cir. 1982), *rev'd sub nom. on other grounds, Balt. Gas*, 462 U.S. at 106–07. As detailed above, the Court should not consider BLM's *post-hoc* documentation. However, even if all of BLM's various documents are viewed as a single analysis, BLM still failed to take a hard look at GHG emissions and climate impacts.

1. Direct and Indirect Emissions

BLM's analysis failed to quantify or analyze the *total* direct emissions of Mancos Shale oil and gas production, while also arbitrarily minimizing the magnitude of these emissions. "Direct effects…are caused by the action and occur at the same time and place." 40 C.F.R. § 1508.8(a); *see also Friends of the Earth v. U.S. Army Corps of Eng'rs,* 109 F. Supp. 2d 30, 38 (D.D.C. 2000) (chastising agency for failing to consider direct impacts of project implementation and thus failing to take a "hard look").

First, BLM's EA Addendum quantified direct emissions for only a single year rather than over the 20-year assumed life of each well,[13] thus diminishing the true magnitude of emissions. App. at [AR045058]. Direct emissions were aggregated from "well construction" and "operations." App. at [AR045057-58]. Because "well construction" occurs only once, limiting these emissions to a single year makes sense. However, by their nature, "operations" emissions exist for the entire life of the well and are certainly not limited to a single year. Elsewhere BLM takes this truth into account. For example, BLM purported to quantify downstream/end-use emissions over an assumed 20-year well life. App. at

[13] BLM assumes an average well-life of 20 years; however, this is not the actual "well life," but has been arbitrarily defined as such based on the RFD planning period. App. at [AR045061, 045095]. In reality, many wells operate in the San Juan Basin for decades beyond 20 years. *See e.g.*, App. at [AR065828] ("The lifetime of the proposed wells is anticipated to be 30 to 50 years.").

[AR045061]. Yet the agency failed to quantify direct "operations" emissions in a similar manner—a choice which underrepresented direct emissions by at least 2.4 million metric tons ("MMT") of carbon dioxide equivalent ("CO_2e") emissions.[14]

BLM's quantification errors are compounded in the agency's consideration of combined operations and downstream/end-use GHG emissions, where BLM claims to estimate emissions over an assumed 20-year well life, but only includes a single year's operations emissions in that calculation. App. at [AR045058, 045061]. This misleading and erroneous calculation presented the public and decision-makers with a significant underestimation of total GHG emissions. Thus, "BLM failed to take a hard look at the environmental impacts of [the project] because it failed to quantify and forecast aggregate GHG emissions from oil and gas development." *WildEarth Guardians v. Zinke* ("*Guardians I"*), 368 F. Supp. 3d 41, 71 (D.D.C. 2019).

Second, BLM underrepresented emissions by using an incomplete and outdated warming potential for methane. BLM recognized that "[t]he two primary GHGs associated with the oil and gas industry are CO2 and CH4." App. at [AR045056]. Methane ("CH_4") has greater radiative forcing or global warming potential ("GWP") (i.e., a greater capacity to warm the atmosphere), but shorter

[14] Derived by taking "Highest Potential GHG emissions from operations" of 120,194.5 metric tons ("MT") of CO_2e and multiplying by 20 years. *See* App. at [AR045058].

atmospheric duration, than carbon dioxide ("CO_2").[15] Thus, relative to CO_2, methane has much greater near-term climate impacts. App. at [AR100615]. Despite this recognition, BLM arbitrarily applied an outdated, 100-year warming potential for methane to quantify project emissions, thereby diminishing the magnitude of emission impacts.

NEPA analyses must provide a "full and fair discussion of significant environmental impacts." 40 C.F.R. § 1502.1. Environmental information made available to the public "must be of high quality," and BLM must provide "[a]ccurate scientific analysis" which proves "essential to implementing NEPA." 40 C.F.R. § 1500.1(b). NEPA also requires BLM to ensure the "scientific integrity" of its analysis, including "both short- and long-term effects." 40 C.F.R. §§ 1502.24, 1508.27(a). *See also W. Org. of Res. Councils v. Bureau of Land Mgmt.*, No. 4:16-cv-00021-BMM, 2018 WL 1475470, at *15 (D. Mont., Mar. 26, 2018).

Here, the EA Addendum used a 100-year warming potential for methane, recognizing that it "has a global warming potential that is 21 to 28 times greater than the warming potential of CO2." App. at [AR045056]. Not only did BLM fail to state which of these two figures it ultimately applied in its analysis, but neither

[15] App. at [AR032993-94] (recognizing importance of GWP and including 100- and 20-year GWP for methane); [AR034578-79] (explaining methane's 100- and 20-year GWP).

21 or 28 represents the current best available science—a fact which BLM acknowledges elsewhere.[16] Critically, BLM also failed to account for methane's 20-year warming potential in its analysis, which the Intergovernmental Panel on Climate Change ("IPCC") currently identifies as 87 times greater than that of CO_2. App. at [AR101271]. Consideration of "both short- and long-term effects" is not only required by NEPA, but also consistent with BLM's assumed 20-year well life. App. at [AR045061]. By ignoring these near-term impacts, BLM failed to take the hard look NEPA demands.

BLM failed to adequately justify this choice, claiming that it was "in accordance with international GHG reporting standards" and consistent with the IPCC's 2007 Fourth Assessment. App. at [AR045094]. Yet BLM's *earlier* prepared analysis (*see, e.g.,* App. at [AR065841]) relied on a more recent 2013 IPCC report, which explicitly accounts for the evolving scientific understanding of warming potentials and the value of considering a 20-year time horizon.[17] App. at [AR101270-71]. BLM's choice to ignore this information resulted in a significant

[16] *See, e.g.,* App. at [AR065841] (EA for DOI-BLM-NM-F010-2017-0010-EA, providing: "Methane is 34 times more potent at trapping greenhouse gas emissions than CO2 when considering a time horizon of 100 years." The 2019 Air Resources Technical Report uses a GWP of 28, but also identifies a 20-year GWP of 84. App. at [AR032994].

[17] Notably, the Cumulative Emissions Report recognizes GWP values for a 20-year time horizon, but BLM fails to carry that time horizon over to its EA Addendum analysis. App. at [AR009441].

underrepresentation of the climate impacts of emissions,[18] failed to account for near-term impacts, and is inconsistent with NEPA's duty to ensure "scientific integrity." 40 C.F.R. § 1502.24. As in other cases, here "BLM's unexplained decision to use the 100-year time horizon, when other more appropriate time horizons remained available, qualifies as arbitrary and capricious under these circumstances. BLM's unexplained decision to use the 100-year time horizon further fails to satisfy NEPA's purpose of foster[ing] informed decision-making." *W. Org. of Res. Councils*, 2018 WL 1475470, at *15 (quote omitted).

Finally, NEPA requires more merely disclosing the volume of emissions: BLM must analyze the significance and severity of such emissions, so that decisionmakers and the public can determine whether and how those emissions should influence the choice among alternatives. *See Robertson,* 490 U.S. at 351-52 (recognizing that NEPA analysis must discuss "adverse environmental effects which cannot be avoided[,]" which is necessary to "properly evaluate the severity of the adverse effects"); *San Juan Citizens Alliance v. Bureau of Land Mgmt.,* 326 F. Supp. 3d 1227, 1242 (D.N.M. 2018) (finding BLM arbitrarily failed to "discuss the potential impacts of [greenhouse gas] emissions."); *Sierra Club v. Mainella*,

[18] Because BLM's emission quantification does not distinguish between methane and other pollutants, nor identify which warming potential it applied, it is impossible to determine the magnitude of BLM's underrepresentation. App. at [AR045058-59].

459 F. Supp. 2d 76, 106 (D.D.C. 2006) (agency's significance determination arbitrary where "no determinate criteria" provided for evaluating significance "other than [the agency's] conclusory say-so"). As detailed below, BLM never analyzed the significance and severity of direct, indirect, and cumulative emissions resulting from its APD approvals.

2. Cumulative Emissions

BLM must evaluate "the cumulative impacts of a project." *WildEarth Guardians v. U.S. Fish & Wildlife Serv.*, 784 F.3d 677, 690 (10th Cir. 2015). As relevant here, this consideration must include "the cumulative impact of GHG emissions generated by past, present, or reasonably foreseeable BLM [oil and gas projects] in the region and nation." *Guardians I,* 368 F. Supp. 3d at 77; *see also* 40 C.F.R. §§ 1508.7, 1508.25(a)(2). And as this Court very clearly articulated in *Diné CARE,* which directly preceded this case, "[o]nce the 2014 RFDS issued, it became reasonably foreseeable to the BLM that the projected wells would be drilled, so the BLM needed to consider the cumulative impacts of all those wells, even if the wells were not going to be drilled imminently." 923 F.3d at 854. BLM failed to satisfy this obligation in its ongoing approvals of oil and gas drilling permits.

"NEPA also requires that agencies do more than merely catalogue relevant projects in the area." *WildEarth Guardians v. Bureau of Land Mgmt*., 457 F. Supp. 3d 880, 892 (D. Mont. 2020). Rather, BLM must examine the "ecological[,]…

economic, [and] social" impacts of emissions from these projects, including an assessment of their "significance." 40 C.F.R. §§ 1508.8(b), 1502.16(a)-(b). Here, BLM's piecemeal NEPA documentation offers various charts and datasets, entirely disconnected from the cumulative emissions of its oil and gas program. For example, an aggregated reading of multiple documents ultimately reveals that there are "approximately 21,150 active oil and gas wells in the San Juan Basin" (App. at [AR065844]), total emissions from the 370 challenged wells are 31,487,075.8 $MTCO_2e$ (App. at [AR045061]), and cumulative end-use combustion emissions from 3,200 foreseeable wells are 398.4 $MMTCO_2e$. App. at [AR009454]. BLM then compares these emissions to historic rates of oil and gas production at a national, state, and planning area scale. App. at [AR009458].

Using this baseline, the appropriate scope of the agency's cumulative analysis must similarly be at these scales, thus requiring BLM to consider cumulative emissions from its *entire* oil and gas program—including emissions from all 96,000 active wells managed by BLM.[19] In other words, BLM must analyze the additive, not fractional, contribution of all foreseeable Mancos Shale well approvals to BLM-managed emissions. "BLM cannot, as it claims, satisfy NEPA's cumulative impacts analysis simply because it put the emissions from a

[19] *See* BLM Oil and Gas Statistics, *available at*: https://www.blm.gov/programs-energy-and-minerals-oil-and-gas-oil-and-gas-statistics.

single [project] into context with state and national greenhouse-gas emissions." *WildEarth Guardians*, 457 F. Supp. 3d at 894. BLM's comparison of project emissions to total emissions is, in effect, no analysis at all. As the Council on Environmental Quality ("CEQ") has recognized, such a comparison "does not reveal anything beyond the nature of the climate change challenge itself: the fact that diverse individual sources of emissions each make a relatively small addition to global atmospheric GHG concentrations that collectively have a large impact."[20]

Moreover, merely listing the quantity of emissions is insufficient if the agency "does not reveal the meaning of those impacts in terms of human health or other environmental values," since "it is not releases of [pollution] that Congress wanted disclosed" but rather "the effects, or environmental significance, of those releases." *NRDC*, 685 F.2d at 486-87. BLM cannot simply catalogue emissions of past and reasonably foreseeable projects piecemeal, in disconnected charts, tables, and lists, without relating them to one another and, critically, without "analysis of that catalogue and 'their combined environmental impacts.'" *WildEarth*

[20] 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, 51,866 (Aug. 5, 2016), *available at*: https://ceq.doe.gov/docs/ceq-regulations-and-guidance/nepa_final_ghg_guidance.pdf (withdrawn by 82 Fed. Reg. 16576 (Apr. 5, 2017)); *see also San Juan Citizens Alliance,* 326 F. Supp. 3d at 1243 (finding withdrawn CEQ climate guidance nevertheless "persuasive and worthy of citation").

Guardians, 457 F. Supp. 3d at 892. But here, BLM never connects these abstract quantified figures to the climate effects of its oil and gas permitting decisions.

The agency's indifference to such analysis is exemplified by the EA Addendum, which offers:

> [F]oreseeable [GHG] emissions of the original Proposed Action, when compared to the reasonably foreseeable past, present, and future potential emissions of the state and nation as well as the foreseeable downstream GHG emissions, will incrementally contribute to global GHG emissions with *de minimis* impacts to cumulative GHG emissions.

App. at [AR045102]; *see also*, *e.g.*, App. at [AR065844] (EA stating "[t]he very small increase in GHG emissions that could result from implementing the proposed alternative would not produce climate change impacts that differ from the No Action Alternative."). As articulated in *San Juan Citizens Alliance*, under analogous circumstances:

> 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.

326 F. Supp. 3d. at 1248 (citing *Ctr. for Biological Diversity*, 538 F.3d at 1217); *see also WildEarth Guardians*, 457 F. Supp. 3d at 894. Even accepting that a single Mancos Shale well has a de minimis impact on climate change, such impacts may nevertheless be significant when added to the impacts of existing and

future federal oil and gas wells. *Guardians I*, 368 F. Supp. 3d at 77. BLM's approach also reveals nothing about the *effects* such emissions will have on resource values and communities in Greater Chaco, and the nation as a whole. BLM's recently-prepared *2020 BLM Specialist Report on Annual Greenhous Gas Emissions and Climate Trends* (hereinafter "2020 Climate Report")[21]—which will underlie future oil and gas decision-making—demonstrates not only that such program-wide analysis is possible, but that such analysis is indispensable to the agency's NEPA compliance.[22]

3. Carbon Budget

Importantly, BLM cannot satisfy its hard look duty without "properly evaluat[ing] the severity of the adverse effects" from GHG emissions resulting from the 370 challenged Mancos Shale wells. *Robertson*, 490 U.S. at 352. BLM attempts to escape this obligation by claiming "[t]he incremental contribution of global GHGs from a proposed land management action cannot be translated into effects on climate change globally or in the area of any site-specific action." App. at [AR009438]. This is not the hard look that NEPA requires. Nor do such statements discharge BLM's duty to analyze the severity of emission *impacts* or

[21] BLM, 2020 Climate Report, *available at*: https://www.blm.gov/content/ghg/.

[22] As explained in Section I above, such *post-facto* analysis cannot cure BLM's NEPA violations unless such new information is actually taken into account by the agency in a new supplemental NEPA process resulting in new decisions to either approve or disapprove the APDs.

satisfy NEPA's goal of informed decisionmaking. The agency must provide sufficient detail in its NEPA analysis to assist "decisionmaker[s] in deciding whether, or how, to alter the program to lessen cumulative environmental impacts." *WildEarth Guardians,* 457 F. Supp. 3d at 892; *see also Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 810 (9th Cir. 1998).

One of the measuring standards available to the agency for analyzing the magnitude and severity of BLM-managed oil and gas emissions is the application of those emissions to the remaining global carbon budget. A "carbon budget" offers a cap on the remaining stock of GHGs that can be emitted while still keeping global average temperature rise below scientifically-established warming thresholds—beyond which climate change impacts may result in catastrophic and irreparable harm to the biosphere and humanity. App. at [AR094002-3, 95349]. The record shows that for an 80% probability of staying below the 2°C warming threshold, a global "carbon budget" of 890 gigatons ("Gt") of CO_2e remained, as of 2000.[23] AR095563.[24] Neither the math, nor the timeline, is encouraging.

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[23] The IPCC's Special Report on Global Warming of 1.5°C—which postdates many of the challenged APDs, but is part of the record for the EA Addendum—offered updated figures, showing the remaining global carbon budget as low as 420 $GtCO_2$, as of 2018, for a 66% chance of limiting warming to 1.5 ºC. App. at [AR034272].

[24] *See also* App. at [AR097800] (calculating an upper-bound global carbon budget of 886 $GtCO_2$ as of 2000 for an 80% probability of staying below 2°C, and subtracting emissions from the first decade, leaving a budget of 565 $GtCO_2e$ from 2010 forward); [AR036654] (According to the IPCC, global emissions must be

As detailed by the IPCC, carbon budgeting is essential to understanding and accounting for the severity and significance of emissions, and for developing a pathway toward climate stabilization. App. at [AR036654-55].[25] Notably, BLM also relied on global carbon budgets in its 2020 Climate Report, which it describes as "a convenient tool to simplify communication of a complex issue and to assist policymakers considering options for reducing GHG emissions on a national and global scale."[26] Such consideration is consistent with BLM's mandate under NEPA, and a measure that the agency cannot simply ignore. *See Robertson,* 490 U.S. at 349 (holding that relevant information must be made available to the public). Notably, BLM-managed fossil fuel emissions account for 1.47% of the remaining *global* carbon budget, which is projected to be exhausted in as little as 7 years.[27] Put differently, if BLM-approved emissions and 68 other similarly significant emission sources were eliminated, global greenhouse emissions would be reduced

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limited to 1,000 $GtCO_2e$ as of 2000 for a 66% chance of staying below 2°C); [AR095685] (providing available carbon emissions quota from 2000 of "1,400, 2,300 and 3,200 $GtCO_2$ for warming limits of 2, 2.5 and 3°C at 50% chance of success").

[25] *See also* App. at [AR036611-12] (detailing mitigation pathways to limit warming below 2°C threshold); [AR036635] (detailing anthropogenic greenhouse gas emissions as the driver of climate change); [AR036655-65] (detailing climate impacts).

[26] BLM, 2020 Climate Report, at Section 7.2.

[27] BLM, 2020 Climate Report, at Table 7-3.

to *zero*. When put into proper context of the global carbon budget, the cumulative impact of BLM's approval of the challenged APDs is undeniably significant.

Rather than embrace its obligation to use this essential tool for assessing the significance of the challenged APDs' cumulative contribution to GHG emissions, here the agency offered only that "[t]he BLM is not required to use any specific protocols or methodologies, such as the…global carbon budget, to determine the impact of the APDs on climate change." App. at [AR045095-96]. But as the court articulated in *WildEarth Guardians v. Bernhardt* ("*Guardians II*"), 502 F. Supp. 2d 237, 255-56 (D.D.C. 2020), while "it is within the expertise and discretion of the agency to determine the methodologies underlying [its] analyses…BLM either had to explain why using a carbon budget analysis would not contribute to informed decisionmaking, in response to [Citizen Groups'] comments, or conduct an accurate scientific analysis of the carbon budget." (internal quotations omitted). Simply alleging that such analysis is "not required" fails to support BLM's arbitrary dismissal of an otherwise unmet duty to consider the context and intensity of its actions.[28] 40 C.F.R. §§ 1508.27(a), (b). The court cannot "defer to a void."

[28] *See also* Sec. Order 3289 (Sept. 14, 2009) (requiring BLM to "appl[y] scientific tools to increase understanding of climate change and to coordinate an effective response to its impacts," and mandating that "management decisions made in response to climate change impacts must be informed by [this] science.").

Or. Nat. Desert Ass'n v. Bureau of Land Mgmt., 625 F.3d 1092, 1121 (9th Cir. 2010).

B. Cumulative Water Resources

During the course of the preceding *Diné CARE* litigation, BLM continued to approve new Mancos Shale wells through individual, site-specific EAs. The agency's analyses of impacts to water resources in each of those EAs, challenged here, failed to analyze the cumulative magnitude of impacts across the Greater Chaco Landscape, mirroring the water impacts analyses found deficient by the Tenth Circuit. *Diné CARE*, 923 F.3d at 857. The record plainly shows that BLM never considered cumulative water resources impacts or the magnitude of water extraction from reasonably foreseeable Mancos Shale wells.[29]

BLM has acknowledged these failings. App. at [AR045037]. However, rather than withdrawing its APD approvals and reinitiating the NEPA process, the agency compelled Citizen Groups to bring this action and then prepared the *post-hoc* EA Addendum in an attempt to cure the deficiencies. As detailed above, the EA Addendum is not properly before the Court. Nevertheless, even if the EA Addendum was rightly incorporated into BLM's NEPA documentation for the

[29] *See, e.g.,* App. at [AR050639] (DOI-BLM-NM-F010-2014-0267-EA); [AR051960, 051974, 051977] (DOI-BLM-NM-F010-2015-042-EA); [AR056974, 056982-93, 056983, 056994] (DOI-BLM-NM-F010-2016-0210-EA); AR065809, 065827 (DOI-BLM-NM-F010-2017-0010-EA); [AR081661-63, 081707, 081721-22] (DOI-BLM-NM-F010-2018-0047-EA).

challenged APDs, the agency still failed to take a hard look—in particular because the agency never analyzed the *impacts* that direct or cumulative groundwater extraction would have on water resources.

Setting aside any deficiencies in BLM's quantification of water consumption,[30] the agency nevertheless acknowledged that "over the 20-year development scenario timeframe, total cumulative water volumes would be closer to…125,000 AF, or 6,250 AF in any given year." App. at [AR045070]. This is over 40-billion gallons of water that will be lost from the hydrologic cycle in arid northwest New Mexico. Yet BLM says nothing about the *impact* that this level of additional water consumption will have on the environment or specific groundwater aquifer sources.

Thus, while BLM attempted to quantify its water use, as above, the agency failed to evaluate the *severity* of adverse effects to groundwater resources. *Robertson*, 490 U.S. at 352; 42 U.S.C. § 4332(C)(ii). Neither the 2003 RMP/EIS, the individual EAs, nor the EA Addendum include any assessment of the current status or condition of water resources sourced for the fracking of oil and gas wells.

[30] The use of "slick water stimulation" is a growing trend for wells drilled in the Basin (App. at [AR009393, AR045066]), which uses more than 10 times the amount of water as other hydraulically fractured horizontal wells. App. at [AR045066, AR045069] (quantifying 54-acre feet ("AF") per well). BLM failed to assess direct "slick water" consumption in its NEPA documentation, and instead relied on an estimate of 4.8 AF on average for horizontal wells. App. at [AR045068].

Instead, BLM dismisses such water consumption as "cumulatively represent[ing] about 1.3 percent of San Juan Basin 2015 water withdrawals."[31] App. at [AR045070]. BLM thus fails to consider the cumulative impacts of 40-billion gallons of water consumption *when added to* other activities collectively impacting groundwater resources, as required by NEPA. 40 C.F.R. § 1508.7.

The EA Addendum states that "[w]ater uses of oil and gas development in the New Mexico portion of the San Juan Basin are typically sourced from groundwater[,]" and identifies "ten major confined aquifers in the San Juan Basin." App. at [AR045066]. In particular, the Nacimiento Formation and the Ojo Alamo Sandstone aquifers are used for the hydraulic fracturing of oil wells in the southern portion of the San Juan Basin, where the challenged wells are located. App. at [AR045067]. Yet none of the NEPA documents on which BLM relies provides any statement, let alone analysis, of current or projected condition of these groundwater aquifers, how 40-billion gallons of pumping will impact such conditions, or how other uses and factors—including current drought conditions—will impact these water resources. Moreover, even BLM's *post-hoc* 2019 Water Support Document—which explicitly states that "site-specific NEPA analysis" will occur at

[31] Moreover, because 90% of total water withdrawals in the region comes from surface water sources, while oil and gas operations predominantly source water from groundwater aquifers, App. at [AR045065-66, tbl.16], BLM's decision to lump surface and groundwater extraction together serves to downplay the cumulative impact of oil and gas operations on groundwater resources.

the APD stage, and is thus not a substitute for such analysis—offers only that "[w]ater level monitoring by the U.S. Geological Survey during the 1980s reveals that long-term use of a well drilled into these aquifers will cause water levels to drop, potentially affecting neighboring wells." App. at [AR009416]. While highlighting potential long-term impacts to "wells," BLM is notably silent on impacts to people and the environment from the depletion of groundwater aquifers.

The condition of these water resources is of critical importance, particularly as New Mexico suffers from an historic drought (App. at [AR033883]), and BLM recognizes that predicted warming will cause "decreases in overall water availability by one quarter to one third" of current levels. App. at [AR045056]. Further, approximately 40% of families in the Navajo Nation already lack running water in their homes, compounding the impacts of additional water depletion. App. at [AR044604]. Without assessing projected additional groundwater withdrawals in context of the ongoing decline in groundwater levels and the crisis in water availability on the Navajo Nation and Four Corners region, "there is simply no way to determine what effect the [proposed] project will have on the environment and, consequently, no way to comply with NEPA." *Or. Natural Desert Ass'n v. Rose*, 921 F.3d 1185, 1190 (9th Cir. 2019).

C. Air Emissions and Health Impacts

Protecting public health is fundamental to NEPA's purpose. NEPA was enacted in part "to stimulate the health and welfare of man," 42 U.S.C. § 4321, and its requisite evaluation of significance mandates that agencies consider the degree to which their proposed actions affect public health or safety. 40 C.F.R. § 1508.27(b)(2). NEPA requires federal agencies "to use all practicable means, consistent with other essential considerations of national policy" to "assure for all Americans safe, healthful, productive and aesthetically and culturally pleasing surroundings." 42 U.S.C. § 4331(b). And NEPA's use of the term "human environment" expressed Congressional recognition of the link between environmental integrity and human well-being, App. at [AR041094]. This includes the inexorable relationship between air quality and human health.

The Tenth Circuit and its district courts have affirmed NEPA's requirement that agencies take a hard look at the health effects of their decisions. *See, e.g., Middle Rio Grande Conserv. Dist. v. Norton*, 294 F.3d 1220, 1229 (10th Cir. 2002). On this point, the court in *Wilderness Workshop v. Bureau of Land Management* recognized BLM's duty to take a hard look at health impacts in its NEPA analyses at the oil and gas leasing and development stages. 342 F. Supp. 3d 1145 (D. Colo. 2018). The court reasoned that, while premature to consider health effects at the planning stage, "in the context of oil and gas leasing, the site-specific

impacts occur in the later stages of leasing and development," and therefore, health impacts should be considered. *Id.* at 1163 (citing *Pennaco Energy v. U.S. Dep't of Interior*, 377 F.3d 1147, 1151-1152 (10th Cir. 2004)). NEPA also requires BLM to take a hard look at air quality impacts. *See, e.g., Pennaco*, 377 F.3d at 1159 (finding that BLM failed to analyze impacts to air quality from a new type of oil and gas development). Accordingly, because many of the health impacts associated with air pollution from oil and gas development are reasonably foreseeable at this APD stage, BLM was required to take a hard look at them—but failed to do so.

The record shows that health risks and impacts from oil and gas-related air pollution are reasonably foreseeable and potentially significant, dangerous, and even deadly.[32] Moreover, Health Impact Assessments ("HIAs") and Health Impact Reviews ("HIRs")—such as the information submitted to BLM by the Counselor HIA Committee regarding effects of oil and gas development on people living in Greater Chaco (App. at [AR097837])—provide useful analysis of air quality and health risks and impacts specifically in communities near the challenged APD approvals. BLM ignored all of this record information, citing only one general health study in the EA Addendum, in a "list of references," and otherwise ignoring

[32] *See, e.g.*, App. at [AR041103, 041112, 041141, 043035, 043170, 043646, 043671, 043698, 043964, 043990, 044010, 044438].

health-related impacts. App. at [AR045082]. Moreover, the underlying EAs hardly mention health impacts at all, let alone take the hard look NEPA demands.[33]

What little discussion of air pollution-related health risks and impacts BLM *does* include in the EA Addendum or individual EAs suffers a fundamental flaw: BLM arbitrarily assumes, without explanation or justification, that because air pollutant *emissions* are "temporary" or short-term, so too are the *impacts* of those emissions. This flawed assumption is contrary to best-available science, information in the record, and NEPA's requirement to take a hard look at short-*and* long-term *impacts*, *see* 40 C.F.R. § 1508.27(a). Because of this flawed, arbitrary assumption, BLM failed to consider "all relevant factors" associated with air quality and health, and thus failed to take a hard look at the impacts of the challenged APD approvals. *See Olenhouse,* 42 F.3d at 1574 ("In reviewing the agency's explanation, the reviewing court must determine whether the agency considered all relevant factors and whether there has been a clear error of judgment.").

BLM's EA Addendum *generally* discusses air pollution and includes "health" in the textbook definitions of air quality standards and metrics. *See,*

[33] *See, e.g.*, App. at [AR050626-30] (DOI-BLM-NM-F010-2014-0267-EA); [AR051981-86] (DOI-BLM-NM-F010-2015-042-EA); [AR057004-09] (DOI-BLM-NM-F010-2016-0210-EA); [AR065837-44] (DOI-BLM-NM-F010-2017-0010-EA); [AR081675-80] (DOI-BLM-NM-F010-2018-0047-EA).

e.g., App. at [AR045043-54]. BLM also quantifies annual air pollutant emissions from the challenged APDs in a table in the EA Addendum, but it never actually analyzes the health or other effects of such emissions. App. at [AR045051]. As with GHG emissions and climate impacts, here BLM again fails to connect the dots between *emissions* and *impacts* from the challenged APD authorizations. Mere quantification tells BLM nothing of the "actual environmental effects" of its decisions. *Ctr. for Biological Diversity,* 538 F.3d at 1216 (holding agency violated NEPA by ignoring the 'incremental impact' of emissions and because "[t]he EA does not discuss the *actual* environmental effects resulting from those emissions"); *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt*., 387 F.3d 989, 995 (9th Cir. 2004) (quantifying impacts of agency action is "a necessary component" of the analysis, but does not amount to the "description of actual environmental effects" NEPA requires). Quantification alone does not satisfy NEPA's hard look requirement if the agency "does not reveal the meaning of those impacts in terms of human health or other environmental values." *NRDC*, 685 F.2d at 486-487.

In the EA Addendum and individual EAs challenged here, BLM fails to take NEPA's requisite hard look at the *impacts* of air pollutant emissions, and the meaning of those impacts in terms of human health. *Id*. Instead, BLM callously dismisses *exposures* to criteria air pollutants, including particulate matter, volatile

organic compounds ("VOCs"), and ozone,[34] as merely a "temporary nuisance." App. at [AR045052]. BLM projects each individual well to cause "significant" air emissions for only 90 days, during separate construction, completion, and reclamation phases of 30 days each. App. at [AR045051-52]. BLM then states that Hazardous Air Pollutant ("HAP") emissions associated with oil and gas operations "would not pose a risk to human health…because there would be no long-term exposure to elevated levels of toxic air pollutants." App. at [A045052].

But the record shows that even "temporary" *exposures* to these air pollutants can cause long-term health *impacts*.[35] Short-term exposure to particulate matter and ozone has been linked to increased hospital admissions, adverse cardiovascular effects, emergency room visits, and even *deaths.* App. at [AR094066].[36] Indeed, Hazardous Air Pollutants such as formaldehyde have been found in air samples near oil and gas activity at up to 60 times the level known to raise cancer risks—representing "a significant public health risk" particularly given the "long latency"

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[34] Ozone, "a criteria pollutant that is of most concern" in the Greater Chaco region, is not directly emitted from oil and gas wells, but is a secondary pollutant that results from interactions between directly emitted pollutants (VOCs and nitrogen oxides) in the presence of sunlight. App. at [AR045044].

[35] *See, e.g.*, App. at [AR041103, 041112, 041141, 043646, 043671, 043698, 043964, 043990, 044010, 044438] (studies discussing numerous short *and* long-term health risks and effects of exposure to oil and gas related air pollution)

[36] *See also* U.S. EPA, National Ambient Air Quality Standards for Ozone, 80 Fed. Reg. 65292, 65302 (Oct. 26, 2015); U.S. EPA, National Ambient Air Quality Standards for Particulate Matter, 78 Fed. Reg. 3086, 3086, 3095 (Jan. 15, 2013).

of cancer, whereby "five, 10, 15 years from now, elevation in cancer is almost certain to happen." App. at [AR043173-74].

BLM cannot simply dismiss such "significant public health risks" of air pollutant emissions as temporary just because the effects manifest after the acute exposure is gone. Nor can BLM use county-level National Air Toxics Assessment ("NATA") data to dismiss more localized cancer risks from hazardous air pollutant exposures associated with *these specific APD approvals*. As BLM admits, and EPA cautions, "NATA data are best applied to larger areas." AR045049-50.[37] "In sum, NEPA requires more. BLM cannot discount the localized impacts to people for whom the public health impacts are of clear significance." *State of California v. Bernhardt*, 472 F. Supp. 3d 573, 622 (N.D. Cal. 2020) (*citing Anderson v. Evans,* 371 F.3d 475, 490 (9th Cir. 2004)).

Moreover, "temporary" exposures to air pollutants from these APD approvals can lead to cumulatively significant risks and impacts when combined with other "temporary" exposures from rampant, historical and ongoing oil and gas operations in Greater Chaco. *See, e.g.,* App. at [AR043401, AR043584, AR043376-78. As pointed out to BLM in comments on the EA Addendum, the EPA has long recognized this fundamental concept, and developed cumulative risk

[37] *See also* U.S. EPA, NATA Overview, *available at* https://www.epa.gov/national-air-toxics-assessment/nata-overview.

and impact analyses accordingly. App. at [AR043410]. Yet BLM arbitrarily considers "temporary" exposures from these APD approvals in a vacuum, isolated from other "past, present, and reasonably foreseeable future" emissions and exposures, and divorced of any discussion of their *effects*. *See* 40 C.F.R. § 1508.7; *Diné CARE*, 923 F.3d at 854 (requiring analysis of cumulative impacts).

Beyond simply being callous, BLM's characterization of air pollutant emissions as "temporary"—and its arbitrary refusal to acknowledge that even short-term emissions and exposures have long-term *effects*—reveals a fundamental misunderstanding of the nature and science of air pollution-related health risks and the hard look at impacts NEPA demands. *See* 40 C.F.R. §§ 1502.1 (requiring a "full and fair discussion of significant environmental impacts"), 1502.24 (requiring "scientific integrity" of analysis), 1508.27(a) (requiring consideration of "both short- *and long-term effects*") (emphasis added). Indeed, it is precisely the "incremental" impacts—such as the incremental contributions of even short-term air pollutant emissions to long-term health risks and impacts—that NEPA requires BLM to analyze when assessing the air quality and health impacts of its APD approvals. *Id.* § 1508.7.

One of the key factors BLM must analyze when determining the "significance" of its decisions—in addition to the potential to affect public health and safety—is "[w]hether the action is related to other actions with individually

insignificant but cumulatively significant impacts[.]" 40 C.F.R. § 1508.27(b). Significance "cannot be avoided by terming an action temporary or by breaking it down into small component parts." *Id.* at § 1508.27(b)(7). Yet, that is precisely what BLM's NEPA documentation does, here—breaking air emissions into three separate, "short-term" 30-day phases, and then claiming health impacts are "temporary," based on arbitrary, unsupported assumptions that because a particular *exposure* might be temporary, the *effects* of that exposure are also temporary and thus insignificant. App. at [AR045051-52]. This conclusion is unsupported by science, contrary to the record, and violates NEPA. As numerous health studies in the record show—and as people living in the midst of oil and gas exploitation know firsthand—the myriad health risks and impacts associated with air pollution from oil and gas activity are anything but a "temporary nuisance."[38] BLM cannot continue to ignore the fact that even "temporary" air pollutant emissions and exposures associated with its APD approvals raise significant health risks and impacts that can last a lifetime—and even cut that lifetime short.

[38] *See, e.g.*, App. at [AR041103, 041112, 041141, 043036, 043170, 043646-58, 043671-97, 043698-963, 043964-89, 043990-4009, 044010-16, 044438].

V. CITIZEN GROUPS ARE ENTITLED TO THE RELIEF REQUESTED

A. Vacatur

Based on the seriousness of the NEPA failures articulated herein, the only appropriate remedy is to vacate the challenged APDs. Under the APA, courts "shall…hold unlawful and set aside agency action" that is found to be arbitrary or capricious. 5 U.S.C. § 706(2)(A). Vacatur is the normal remedy for an agency action that fails to comply with NEPA. *WildEarth Guardians v. Bureau of Land Mgmt.*, 870 F.3d 1222, 1239 (10th Cir. 2017). Vacatur is the only remedy that serves NEPA's fundamental purpose of requiring agencies to look *before* they leap, and the only one that avoids a "bureaucratic steam roller." *Davis v. Mineta*, 302 F.3d 1104, 1115 (10th Cir. 2002) (abrogated on other grounds by *Winter v. NRDC*, 555 U.S. 7 (2008)). NEPA regulations instruct that the NEPA process must "not be used to rationalize or justify decisions already made." 40 C.F.R. § 1502.5.[39] Thus, vacatur will also ensure that any subsequent BLM review is not a pro-forma exercise in support of a "predetermined outcome." *Mont. Wilderness Ass'n v. Fry*, 408 F. Supp. 2d 1032, 1038 (D. Mont. 2006); *accord Diné CARE v.*

[39] While courts retain equitable discretion to depart from vacatur to craft an alternate remedy for violations, they do so only in unusual and limited circumstances. *See W. Oil & Gas v. EPA*, 633 F.2d 803, 813 (9th Cir. 1980) (fashioning alternative remedy where vacatur would thwart the objective of the statute at issue).

OSMRE, 2015 WL 1593995, at *3 (vacating mining approval to assure NEPA compliance on remand would not become "a mere bureaucratic formality."). Remand without vacatur would not provide adequate relief.

Recently, the overarching concern that remand without vacatur would result merely in *post-hoc* rationalization was central to the U.S. Supreme Court's decision in *Dep't of Homeland Sec. v. Regents of the Univ. of California*, 140 S. Ct. 1891 (2020). As Chief Justice Roberts explained:

> Requiring a new decision before considering new reasons promotes agency accountability by ensuring that parties and the public can respond fully and in a timely manner to an agency's exercise of authority. Considering only contemporaneous explanations for agency action also instills confidence that the reasons given are not simply convenient litigating positions. Permitting agencies to invoke belated justifications, on the other hand, can upset the orderly functioning of the process of review, forcing both litigants and courts to chase a moving target.

Dep't of Homeland Sec., 140 S. Ct. at 1909 (internal quotations omitted). Indeed, this decision may have altogether recast a court's ability to remand an agency decision without vacatur. Moreover, multiple courts in directly analogous cases considering BLM oil and gas drilling and leasing decisions have found vacatur the appropriate remedy where BLM violated NEPA. *See*, *e.g.*, *Diné CARE*, 923 F.3d at 859 (vacating drilling permits); *San Juan Citizens Alliance*, 326 F. Supp. 3d 1227 (vacating oil and gas leases); *Western Watersheds Project v. Zinke*, 441 F. Supp. 3d 1042, 1088 (D. Idaho 2020) (accord); *WildEarth Guardians*, 457 F. Supp. 3d at

896 (accord).

In vacating BLM approvals for Mancos Shale APDs, the Tenth Circuit recently explained that courts need not analyze injunction factors where vacatur provides NEPA plaintiffs with sufficient relief. *Diné CARE*, 923 F.3d at 859. Accordingly, here, "[b]ecause vacatur is 'sufficient to redress [Citizen Groups'] injury, no recourse to the additional and extraordinary relief of an injunction [is] warranted.'" *Id.* (quoting *Monsanto Co. v. Geertson Seed Farms*, 561 U.S. 139, 166 (2010)). Accordingly, Citizen Groups request that the Court vacate BLM's drilling authorizations.

B. Injunctive Relief

Even if the Court applies the injunction factors when considering relief, including enjoining APD development, the *Monsanto* factors support enjoining APD development.[40] First, Citizen Groups provided detailed declarations from members showing that APD development is, and will continue to, eliminate or significantly degrade their members' use and enjoyment of the lands near and adjacent to the APDs due to dust, fumes, flares, and noise from drill rigs, fracking

[40] A party seeking a permanent injunction must demonstrate: "(1) that it has suffered an irreparable injury; (2) that remedies available at law, such as monetary damages, are inadequate to compensate for that injury; (3) that, considering the balance of hardships between the plaintiff and defendant, a remedy in equity is warranted; (4) that the public interest would not be disserved by a permanent injunction." *Monsanto*, 561 U.S. at 156-57.

trucks, and associated drilling infrastructure.[41] Thus, APD development will irreparably harm Citizen Groups' members. *Davis*, 302 F.3d at 1115-16; *see also San Luis Valley Ecosystem Council v. U.S. Fish and Wildlife Serv.*, 697 F. Supp. 2d 1233, 1240 (D. Colo. 2009) (finding irreparable harm from drilling two exploratory oil and gas wells).

Second, Citizen Groups' injuries are not compensable by money damages. *Amoco Prod. Co. v. Village of Gambell*, 480 U.S. 531, 545 (1987) ("Environmental injury, by its nature, can seldom be adequately remedied by money damages and is often permanent or at least of long duration, *i.e.*, irreparable."); *see also, Catron Cnty. Bd. of Comm'rs, N.M. v. U.S. Fish & Wildlife Serv.*, 75 F.3d 1429, 1440 (10th Cir. 1996) (accord). Citizen Groups do not seek money damages, and no amount of money could compensate for members' losses to their recreational and aesthetic interests, let alone the health impacts caused by APD development.

Third, the balance of harms tips decidedly in Citizen Groups' favor, whose members face irreparable environmental and health impacts, compared to Operators' potential delay and speculative financial loss. *Valley Cmty. Pres. Comm'n v. Mineta*, 373 F.3d 1078, 1087 (10th Cir. 2004) (holding "financial concerns alone generally do not outweigh environmental harm"). As recognized in

[41] *See supra* n.4-7.

Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs, energy needs do not automatically outweigh environmental considerations. 351 F. Supp. 2d 1232, 1260 (D. Wyo. 2005). If irreparable environmental harm "is sufficiently likely…the balance of harms will usually favor the issuance of an injunction to protect the environment." *Amoco*, 480 U.S. at 544. Here, allowing APD development to continue in the absence of a lawful NEPA analysis could preclude opportunities to prevent irreparable impacts once development's full environmental impacts are known and disclosed.

Finally, the public interest would be served by enjoining APD development to protect public lands and natural resources, and is necessary to preserve the status quo while BLM fulfills its obligations under NEPA. *WildEarth Guardians*, 368 F. Supp. 3d at 84 (enjoined issuance of additional drilling permits on leased parcels). "[P]reserving nature and avoiding irreparable environmental injury" and "careful consideration of environmental impacts before major projects go forward" are in the public interest. *Alliance for the Wild Rockies v. Cottrell*, 632 F.3d 1127, 1138 (9th Cir. 2011) (quote omitted). Moreover, "[t]here is an overriding public interest in the preservation of biological integrity and the undeveloped character of the Project area that outweighs public or private economic loss in this case." *Colorado Wild v. U.S. Forest Serv.,* 299 F. Supp. 2d 1184, 1190-91 (D. Colo. 2004). And the "protection of human health, safety and the affected communities also serves the

public interest." *San Luis & Delta-Mendota Water Auth. v. Locke*, No. 1:09-cv-01053, 2010 WL 500455, at *8 (E.D. Cal. 2010). Absent a grant of vacatur, an injunction in this case is vital to protecting the public interest by preventing ongoing harm to human health, cultural sites, and the environment from further Mancos Shale development.

CONCLUSION

For the foregoing reasons, Citizen Groups respectfully request that this Court declare that BLM's approval of 370 Mancos Shale drilling permits violate NEPA and its implementing regulations, vacate and remand BLM's EAs and APDs, and suspend and enjoin BLM from any further drilling authorizations pending BLM's full compliance with NEPA.

STATEMENT REGARDING ORAL ARGUMENT

Because this case involves complex issues under NEPA and a large administrative record, Citizen Groups believe that oral argument would be beneficial.

Respectfully submitted this 16th day of December, 2021.

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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 12,952 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f) and 10th Cir. R. 32(B).

Dated this 16th day of December, 2021.

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

I hereby certify that on December 16, 2021, I electronically filed the foregoing APPELLANTS' UNCITED PRELIMINARY OPENING 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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