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

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

Plaintiffs,)

v.)

RYAN ZINKE, in his official capacity)
as Secretary of the United States)
Department of the Interior, *et al.*,)

Federal Defendants.)

and)

WPX ENERGY PRODUCTION,)
LLC, *et al.* and AMERICAN PETROLEUM)
INSTITUTE,)

Defendant-Intervenors.)
_____)

Case No. 1:15-cv-00209-JB-LF

**FEDERAL DEFENDANTS’
OPPOSITION TO PLAINTIFFS’
OPENING MERITS BRIEF**

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EXHIBITS

- Exhibit A Affidavit of Matthew A. Dorsey with Map of Challenged APDs
- Exhibit B Affidavit of David J. Mankiewicz with Spreadsheet of Federal Wells Drilled in Farmington Field Office Planning Area Since September 29, 2003
- Exhibit C Affidavit of Sarah Scott with Spreadsheet of APDs Covered by Challenged EAs

INTRODUCTION

At the merits stage, Plaintiffs continue to present development in the Mancos Shale, in oil and gas fields that have been plumbed for over 60 years, as causing unique environmental impacts that have gone entirely unanalyzed by the Bureau of Land Management (“BLM”). But, as this Court predicted in its order denying Plaintiffs’ motion for a preliminary injunction, the evidence in the administrative record indicates otherwise. ECF No. 63 (“Order”) at 78 n.18. For every one of the 382 applications for permit to drill (“APDs”) challenged by Plaintiffs, BLM developed a thorough environmental assessment tiered to the 2003 Proposed Resource Management Plan and Final Environmental Impact Statement (“RMP/EIS”). It hosted on-site meetings at the location of every prospective well to seek public input. It conducted field surveys and consulted with New Mexico’s State Historic Preservation Office to avoid impacts to cultural resources. In short, BLM fully complied with the National Environmental Policy Act (“NEPA”) and the National Historic Preservation Act (“NHPA”).

It is clear from their motion that Plaintiffs are far more concerned about full-field Mancos Shale development than the 382 APDs at issue in this lawsuit. But this case is not the place for such a challenge. BLM is currently developing an RMP Amendment (“RMPA”) to address anticipated development in the Mancos Shale. Plaintiffs will have the opportunity to comment on the draft RMPA and protest the final document. Once BLM issues the RMPA, Plaintiffs can challenge the agency’s analysis of the impacts of full-field Mancos Shale development, if so desired. But until then, they should not be permitted to use this lawsuit to circumvent the agency’s decisionmaking process.

FACTUAL BACKGROUND

I. Oil and Gas Development in the San Juan Basin

The San Juan Basin in northwestern New Mexico is one of the nation's largest oil and gas fields, and has been in production for over 60 years.¹ AR0001945; *see also* AR0000912-13 (map of wells in Basin as of 2003). During that time, over 30,000 oil and gas wells have been drilled in the Basin, and approximately 23,000 wells are currently producing. AR0232032. BLM manages 2,765 active oil and gas leases in the San Juan Basin consisting of 2.1 million acres of federal mineral estate. *Id.* Since 1949, nearly every well in the Basin has been stimulated via hydraulic fracturing. *Id.* Hydraulic fracturing or "fracking" is the process of injecting fluids into a formation at high pressure to create or enlarge fractures through which oil and gas can flow to the wellbore. AR0001207; AR0149866.

The Mancos Shale/Gallup Sandstone formation (hereinafter "Mancos Shale") is a geologic layer within the San Juan Basin that contains oil and gas. AR0000908. It is an unconventional reservoir that is commonly accessed using horizontal drilling and multistage hydraulic fracturing. AR0155551-52. When a well is drilled horizontally, the wellbore runs down to the targeted formation and then turns and runs horizontally through it, allowing the wellbore "to encounter as much of the reservoir as possible." AR0155549-50. Multistage fracking is used in horizontal wells due to their length, and refers to repeating the process of fracking multiple times "to cover the entire horizontal distance of the wellbore." AR0155550; AR0149866.

¹ While the San Juan Basin extends into southern Colorado, Federal Defendants use the term to refer to the portion of the Basin in northwestern New Mexico.

II. The 2003 RMP/EIS and Challenged APDs

Oil and gas development on federal lands follows a three-stage decisionmaking process. First, BLM develops an RMP that guides future oil and gas development in a broad region by determining which lands should be open or closed to leasing and prescribing stipulations to attach to leases. 43 U.S.C. § 1712. In the second stage, BLM decides which particular parcels of land will be offered for lease through competitive lease sales. 43 C.F.R. Subpart 3120. At the third stage of the development process, and the stage at issue in this case, BLM determines whether, and under what conditions, it will approve APDs for wells on existing leases. *Id.* § 3162.3-1; 30 U.S.C. § 226(g).

In 2000, BLM began the process of revising the RMP for the San Juan Basin. AR0000809. As part of this process, in 2001, BLM issued a Reasonably Foreseeable Development Scenario (“RFD”) that forecast the scope of oil and gas development in the Basin over the next 20 years. AR0000001. The RFD noted that “there is considerable interest in developing the Mancos Shale as a gas reservoir over a large part of the basin where it has not been previously developed,” AR0000080, and predicted that during the 20-year development window, 6,846 Dakota/Mancos gas wells and 300 Mancos oil wells would be drilled on federal lands in the Basin. AR0000114.

In 2003, BLM issued the RMP/EIS. AR0000773. After evaluating four alternatives for oil and gas development, the RMP/EIS proposed selection of an alternative (Alternative D) that would allow for the development of 9,942 new oil and gas wells. AR0001015. The RMP, published in December 2003, adopted the proposed alternative. AR0001931. Since the RMP was issued, 3,945 wells have been drilled in the planning area, or about 39 percent of the 9,942 wells

predicted and analyzed in the RMP/EIS. Ex. B.

Plaintiffs challenge 382 APDs submitted by operators seeking to drill horizontal wells into the Mancos Shale. Each of these APDs covers a single well or prospective well. For each APD, BLM prepared an environmental assessment (“EA”) analyzing the direct, indirect, and cumulative impacts of the proposed project. The EAs tier to the RMP/EIS. Of the 382 challenged APDs, 177 have been drilled or abandoned and 177 are approved and pending drilling or completion. For 28, BLM has not yet issued a final decision approving or denying the APD.

III. The RMP Amendment

On February 25, 2014, BLM began scoping for an amendment to the RMP/EIS to analyze full-field development of the Mancos Shale. AR0173818. Developments in horizontal drilling and multistage fracking had made accessing the Mancos Shale formation more economically feasible. *Id.* At the time, industry projected that full-field development of the Mancos Shale could result in 20,000 new oil and gas wells, substantially exceeding the 9,942 wells analyzed in the RMP/EIS. AR0174802. Recognizing that such development would require new NEPA analysis, in 2014, BLM undertook the first step in amending the RMP: preparation of a new RFD to better understand potential Mancos Shale development. AR0173821.

The findings of the 2014 RFD did not bear out industry’s predictions. It forecast the development of 3,960 wells in the Mancos Shale (1,960 oil wells and 2,000 gas wells), most of which would be horizontally drilled. AR0173823-24. Nonetheless, BLM decided to press forward with the RMPA, with a particular focus on the development of unleased lands and lands with wilderness characteristics. ECF No. 52-1 at 3.

In October 2016, the Bureau of Indian Affairs (“BIA”) joined the NEPA process for the

RMPA as a joint lead agency. 81 Fed. Reg. 72,820 (Oct. 21, 2016). Thereafter, the agencies began a second scoping process seeking public input on issues related to BIA mineral leasing. *Id.* This scoping process ended on February 20, 2017, and the agencies are now preparing the draft RMPA.

STATUTORY BACKGROUND

I. National Environmental Policy Act

NEPA serves the dual purpose of informing agency decisionmakers of the environmental effects of proposed major federal actions and ensuring that relevant information is made available to the public. 42 U.S.C. § 4321; 40 C.F.R. § 1501.1; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The statute achieves its objectives by imposing procedural rather than substantive requirements. *Hillsdale Env'tl. Loss Prevention, Inc. v. U.S. Army Corps of Eng'rs*, 702 F.3d 1156, 1166 (10th Cir. 2012) (“NEPA merely prohibits uninformed—rather than unwise—agency action.” (quoting *Robertson*, 490 U.S. at 351)). Thus, NEPA does not require an agency to follow the most environmentally sound course of action, but rather to take a “hard look” at the environmental consequences of proposed actions. *Robertson*, 490 U.S. at 350; *Kleppe v. Sierra Club*, 427 U.S. 390, 410 n.21 (1976).

NEPA requires that an agency prepare an EIS for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C). However, “[a]gencies need not prepare a full EIS . . . if they initially prepare the less detailed environmental assessment (‘EA’) and, based on the EA, issue a finding of no significant impact (‘FONSI’), concluding that the proposed action will not significantly affect the environment.” *Silverton Snowmobile Club v. U.S. Forest Serv.*, 433 F.3d 772, 780 (10th Cir. 2006) (quoting *Lee v. U.S.*

Air Force, 354 F.3d 1229, 1237 (10th Cir. 2004)); *see also* 40 C.F.R. § 1501.4(b)-(c). An EA is “a concise public document” that serves to “(1) [b]riefly provide sufficient evidence and analysis for determining whether to prepare” an EIS or a FONSI. 40 C.F.R. § 1508.9(a). An EA should include “brief discussions of the need for the proposal, of [reasonable] alternatives as required by [NEPA], and of the environmental impacts of the proposed action and alternatives.” *Id.* § 1508.9(b).

II. The National Historic Preservation Act

Section 106 of the NHPA requires federal agencies to consider the potential effects of “undertakings” on historic properties. 54 U.S.C. § 306108 (formerly 16 U.S.C. § 470f). “Like NEPA, the NHPA is a procedural statute rather than a substantive law.” *San Juan Citizens All. v. Norton*, 586 F. Supp. 2d 1270, 1280 (D.N.M. 2008). Section 106 “requires that a federal agency take into account any adverse effects on historical or culturally significant sites before taking action that might harm such sites.” *Id.*; *see also Muckleshoot Indian Tribe v. U.S. Forest Serv.*, 177 F.3d 800, 805 (9th Cir. 1999).

Under Section 106, agencies must first determine whether a project qualifies as an “undertaking” that “has the potential to cause effects on historic properties.” 36 C.F.R. § 800.3(a). If so, the agency must consult with the state historic preservation officer (“SHPO”) to define the “area of potential effects.” *Id.* §§ 800.4(a)(1), 800.16(d). An agency must then “make a reasonable and good faith effort” to identify historic properties within the undertaking’s area of potential effects. *Id.* § 800.4(b)(1). Historic properties are “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places.” *Id.* § 800.16(I)(1). If the agency finds that historic properties may be affected

by the undertaking, it must apply the criteria of the regulations to determine if the effect is adverse, *id.* § 800.5(a), and if so, engage in further consultation regarding the adverse effects, *id.* § 800.6.

To make compliance with Section 106 more efficient when an agency program involves multiple undertakings, the regulations allow an agency to enter into a “programmatic agreement” with the Advisory Council on Historic Preservation (“ACHP”). *Id.* § 800.14(b). Compliance with a programmatic agreement satisfies an agency’s Section 106 responsibilities. *Id.* § 800.14(2)(iii). BLM has entered into a programmatic agreement with the ACHP. AR0169217. Per that agreement, BLM’s New Mexico State Office and the New Mexico SHPO have developed a protocol for NHPA compliance. During BLM’s consideration of the APDs at issue in this case, two protocols were in effect. The first was entered into in June 2004 and remained in effect until it was superseded by the second protocol on December 17, 2014. AR0169038 (2004 Protocol); AR0169213 (2014 Protocol).

STANDARD OF REVIEW

Because NEPA does not provide a private right of action for judicial review, Plaintiffs’ claims must be reviewed under the Administrative Procedure Act (“APA”). *See* 5 U.S.C. § 706(2)(A); *Lujan v. Nat’l Wildlife Fed’n*, 497 U.S. 871, 882-83 (1990). Under the APA, a court affords an agency’s decision “a presumption of regularity,” *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 415 (1971), *abrogated on other grounds by Califano v. Sanders*, 430 U.S. 99 (1977), and may not set aside the decision unless the court finds it to be “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A). A court's role is solely to determine whether “the decision was based on

consideration of the relevant factors and whether there has been a clear error of judgment.” *Overton Park*, 401 U.S. at 416. In making this determination, “a court is not to substitute its judgment for that of the agency,” *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), and must uphold an administrative action if the agency has “considered the relevant factors and articulated a rational connection between the facts found and the choice made,” *Balt. Gas & Elec. Co. v. Nat. Res. Def. Council*, 462 U.S. 87, 105 (1983).

“Deference to the agency is especially strong where the challenged decisions involve technical or scientific matters within the agency’s area of expertise.” *Utah Envtl. Cong. v. Bosworth*, 443 F.3d 732, 739 (10th Cir. 2006); *see also Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989). Deficiencies in an EA “that are mere ‘flyspecks’ and do not defeat NEPA’s goals of informed decisionmaking and informed public comment will not lead to reversal.” *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 704 (10th Cir. 2009). The party challenging an agency’s decision bears the burden of proof. *Id.*

ARGUMENT

I. Plaintiffs Lack Standing to Challenge the APDs

Whether a party has standing under Article III of the Constitution is a “threshold jurisdictional question” that a court must decide before it may consider the merits. *Steel Co. v. Citizens for a Better Env’t*, 523 U.S. 83, 102 (1998). A party’s standing to sue “constitutes the core of Article III’s case-or-controversy requirement, and the party invoking federal jurisdiction bears the burden of establishing its existence.” *Id.* at 103–04. In order to demonstrate standing under Article III, a party must establish, at an “irreducible constitutional minimum,” three requirements:

First, the plaintiff must have suffered an “injury in fact”—an invasion of a legally protected interest which is (a) concrete and particularized and (b) “actual or imminent, not “conjectural” or “hypothetical.” Second, there must be a causal connection between the injury and the conduct complained of—the injury has to be “fairly . . . trace[able] to the challenged action of the defendant, and not . . . th[e] result [of] the independent action of some third party not before the court.” Third, it must be “likely,” as opposed to merely “speculative,” that the injury will be “redressed by a favorable decision.”

Lujan v. Defenders of Wildlife, 504 U.S. 555, 560-61 (1992) (citations omitted). Because Plaintiffs have failed to establish an injury-in-fact tied to BLM’s approval of the challenged APDs and have not shown that their alleged injuries are fairly traceable to the challenged APDs or redressable by this Court, they have not established standing.

A. Plaintiffs Have Not Demonstrated Injury-in-Fact Because They Have Not Shown a Nexus Between Their Injuries and the Challenged APDs

“[D]eprivation of a procedural right without some concrete interest that is affected by the deprivation—a procedural right in vacuo—is insufficient to create Article III standing.”

Summers v. Earth Island Inst., 129 S. Ct. 1142, 1151 (2009). Thus, “[i]n cases alleging environmental harm due to an agency’s improper decision-making, the Tenth Circuit has broken down the injury-in-fact prong of the Article III standing analysis into two parts: ‘(1) the litigant must show that in making its decision without following [proper procedure], the agency created an increased risk of actual, threatened, or imminent environmental harm; and (2) the litigant must show that the increased risk of environmental harm injures its concrete interests by demonstrating either its geographical nexus to, or actual use of the site of the agency action.’”

Amigos Bravos v. BLM, 816 F. Supp. 2d 1118, 1127 (D.N.M. 2011) (quoting *Comm. to Save the Rio Hondo v. Lucero*, 102 F.3d 445, 449 (1996)).

The Supreme Court’s decision in *Summers* confirms that a plaintiff must establish a geographical nexus to the challenged agency action to establish injury-in-fact. There, the Court held that a declaration of an environmental group’s member failed to establish an injury-in-fact because it did not identify any project that would “impede a specific and concrete plan of [that individual] to enjoy the National Forests” that the plaintiffs had claimed were being harmed. 129 S. Ct. at 1150. Because National Forests are large areas, “[a]ccepting an intention to visit the National Forests as adequate to confer standing to challenge any Government action affecting any portion of those forests would be tantamount to eliminating the requirement of concrete, particularized injury in fact.” *Id.* The declaration at issue in *Summers* did not demonstrate injury-in-fact because “to establish standing plaintiffs must show that they ‘use the area affected by the challenged activity and not an area roughly in the vicinity of’ a project site.” *Id.* at 1152 (quoting *Lujan*, 504 U.S. at 566).

Plaintiffs’ declarations² fail to pass muster under *Summers*. Not one of the declarants has indicated that he or she visits a location impacted by a challenged APD. In fact, the declarations

²This Court should not consider the portions of Plaintiffs’ declarations that address the merits of this case. *See, e.g.*, Eisenfeld Decl., ECF No. 112-1 ¶¶ 6-11; Nichols Decl., ECF No. 112-2 ¶ 11. Under the APA, judicial review of an agency action is based on the administrative record before the agency rather than on a factual record created *de novo* in the reviewing court. 5 U.S.C. § 706; *Camp v. Pitts*, 411 U.S. 138, 141-42 (1973). Plaintiffs’ declarations are admissible only to support standing; their commentary on the merits of this case—the adequacy of BLM’s NEPA and NHPA analysis—is extra-record and not properly before this Court. *Asarco, Inc. v. EPA*, 616 F.2d 1153, 1160 (9th Cir. 1980) (“Consideration of [extra-record] evidence to determine the correctness or wisdom of the agency’s decision is not permitted.”); *Lee*, 354 F.3d at 1242 (affirming district court’s strike of “expert” affidavit as extra-record evidence); *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 2009 WL 3740732, at *1 n.1 (D. Ariz. Nov. 5, 2009) (striking “non-standing averments” in declarations filed to support standing).

do not name any of the APDs at issue in this lawsuit.³ Rather, the declarants all state vaguely that they visit an undefined “Chaco region” or “greater Chaco area.” See Eisenfeld Decl. ¶¶ 5, 14; Nichols Decl. ¶¶ 5, 6; Green Decl., ECF No. 112-3 ¶¶ 4-7; Miura Decl., ECF No. 112-4 ¶ 3. As there are archaeological sites tied to the Chaco culture throughout the San Juan Basin, AR0000973-77; AR0000991-92, any “greater Chaco area” would likely include, at minimum, all of 8,274,100 acres within the Farmington Field Office’s planning area, and could expand into Colorado and Arizona. AR0000791; AR0000974. Plaintiffs’ vague references to a large and undefined “Chaco region” are plainly insufficient to establish a geographical nexus to any of the 382 APDs challenged in this lawsuit.

The only specific locations that declarants identify as places they have visited and intend to return to in the future are the Chaco Culture National Historic Park and Pueblo Pintado, a Chaco cultural outlier site managed by the National Park Service. Eisenfeld Decl. ¶ 5; Nichols Decl. ¶ 5; Green Decl. ¶¶ 4-6; Miura Decl. ¶¶ 3-5. However, all of the wells covered by the challenged APDs are located at least eight miles away from the Park and Pueblo Pintado. Ex. A. Indeed, the declarants have not identified how *any* of the 382 challenged APDs impact their enjoyment of the Park, the Chaco outlier sites, or any other specific location within the “greater Chaco region.”

To establish injury-in-fact, it is not enough for Plaintiffs’ declarants to “generally allege that they recreate on BLM lands in New Mexico or live in the vicinity of BLM land where there are oil and gas wells.” *Amigos Bravos*, 816 F. Supp. 2d at 1132. Because “none of the Declarants

³ The only oil and gas project specifically identified in the declarations is a pipeline that is not subject to this litigation. Eisenfeld Decl. ¶ 13.

specifically identify that they use any of the lands, or the near vicinity, where BLM approved” the challenged APDs, they have failed to demonstrate injury-in-fact. *Id.*

B. Plaintiffs Have Failed to Establish that Their Injuries Are Fairly Traceable to the Challenged APDs and Redressable by This Court

Even if Plaintiffs’ declarations satisfy the injury-in-fact requirement, they do not demonstrate “a causal connection” between their alleged injuries and the challenged APDs, or that it is “‘likely,’ as opposed to merely ‘speculative,’ that the injury will be ‘redressed by a favorable decision.’” *Lujan*, 504 U.S. at 560-61. To satisfy the causation prong of the standing analysis, Plaintiffs must show that their alleged injuries are “fairly traceable” to the 382 challenged APDs rather than the approximately 23,000 active oil and gas wells in the San Juan Basin that are not the subject of this lawsuit. *Id.* at 560. To establish redressability, they must show that the relief sought—the vacatur of BLM’s decisions approving these 382 APDs—will remedy their alleged injuries. *Steel*, 523 U.S. at 107 (“Relief that does not remedy the injury suffered cannot bootstrap a plaintiff into federal court; that is the very essence of the redressability requirement.”).

Plaintiffs have not met these burdens because their declarations do not tie their alleged injuries to the 382 APDs at issue in this lawsuit. *See DaimlerChrysler Corp. v. Cuno*, 547 U.S. 332, 335 (2006) (“[A] plaintiff must demonstrate standing for each claim he seeks to press” and “must demonstrate standing separately for each form of relief sought.”). Rather, Plaintiffs’ declarations allege injuries caused by “oil and gas development” in the “greater Chaco region.” *See, e.g.*, Nichols Decl. ¶ 7 (referring generally to “extensive oil and gas well facilities and infrastructure in the area”); Green Decl. ¶ 7 (referring generally to “[o]il and gas leasing and development in the Chaco Canyon area/region and Chaco Culture National Historical Park”);

Miura Decl. ¶ 6 (same); Eisenfeld Decl. ¶ 12 (stating vaguely that he has visited “hundreds of well sites” in the “greater Chaco area”). But generic references to oil and gas development in an area where there are 23,000 active wells that are not the subject of this lawsuit are insufficient to demonstrate that Plaintiffs’ alleged injuries are fairly traceable to the challenged APDs.

This Court’s decision in *Amigos Bravos v. BLM* provides a helpful analogue. There, plaintiffs challenging 92 oil and gas leases in New Mexico alleged that their climate change injuries were fairly traceable to the leases because development on the leases generated greenhouse gases. 816 F. Supp. 2d at 1135-36. The court found that, when a challenged source of emissions is one of many, a plaintiff may establish causation by showing that a defendant’s emissions “meaningfully contribute” to climate change. *Id.* at 1135. Because the 92 leases were dwarfed by the many other sources of emissions, they did not meaningfully contribute to Plaintiffs’ injuries. *Id.* at 1136. The same analysis applies here. The 382 challenged APDs are a miniscule portion of the total oil and gas development in the San Juan Basin, which has been in development—and fracture stimulated—for over 60 years. AR0232032. Where Plaintiffs allege that their injuries—including injuries from climate change—are caused by “oil and gas development” generally, they have failed to show that the challenged APDs “meaningfully contribute” to their alleged injuries. And because their injuries are not fairly traceable to the challenged APDs, they cannot be redressed by this Court’s vacatur of BLM’s decisions approving the APDs.

II. Plaintiffs’ Claims Challenging Future APD Approvals Do Not Challenge Final Agency Actions

This Court lacks jurisdiction over Plaintiffs’ claims challenging APDs that have not yet been approved because those claims do not challenge final agency actions. The APA provides

for judicial review of “final agency actions.” 5 U.S.C. § 704; *Lujan*, 497 U.S. at 882. An agency action is “final” if it “mark[s] the ‘consummation’ of the agency’s decisionmaking process” and is an action “by which ‘rights or obligations have been determined’ or from which ‘legal consequences will flow.’” *Bennett v. Spear*, 520 U.S. 154, 177-78 (1997). The prohibition on judicial review of non-final agency actions “let[s] the administrative process run its course before binding parties to a judicial decision” and thereby “prevents courts from ‘entangling themselves in abstract disagreements over administrative policies, and . . . protect[s] the agencies from judicial interference’ in an ongoing decision-making process.” *Am. Petroleum Inst. v. EPA*, 683 F.3d 382, 386 (D.C. Cir. 2012) (quoting *Abbott Labs. v. Gardner*, 387 U.S. 136, 148 (1967)). Thus, “absent a final action by the relevant agency, the case is not ripe for consideration by the Court.” *Nat’l Wildlife Fed’n v. EPA*, 945 F. Supp. 2d 39, 47 (D.D.C. 2013) (citing *Am. Petroleum Inst.*, 683 F.3d at 386).

Until BLM issues a record of decision for an APD, there is no final agency action for this Court to review. Plaintiffs’ presumption that BLM will fail to comply with NEPA in its future APD approvals is pure speculation and cannot be the basis for a claim. *Lujan*, 497 U.S. at 894 (“[W]e intervene in the administration of the laws only when, and to the extent that, a specific ‘final agency action’ has an actual or immediately threatened effect.”); *Colo. Farm Bureau Fed’n v. U.S. Forest Serv.*, 220 F.3d 1171, 1174 (10th Cir. 2000) (“An agency’s intent to take action if requested does not constitute final agency action under section 551(13)” of the APA.). Accordingly, Plaintiffs’ preemptive challenge to the 28 APDs for which no decision has been issued by BLM—that is, APDs marked as “unapproved,” “no APD package,” “withdrawn,” “rescinded,” and “cancelled” in Exhibit C—fails for lack of final agency action.

III. Plaintiffs' Claims Challenging APDs for Completed Wells are Moot

This Court lacks jurisdiction over APDs for wells which have already been drilled and fracked, or which have been abandoned, because those claims are moot. “[W]hen actions complained of have been completed or terminated, declaratory judgment and injunctive actions are precluded by the doctrine of mootness.” *Nevada ex rel. Nev. State Bd. of Agric. v. United States*, 699 F.2d 486, 487 (9th Cir. 1983). This is because an approved project, once completed, “cannot be effectively remedied under section 706(2) because a court cannot undo a completed program.” *Benzman v. Whitman*, 523 F.3d 119, 132 (2d Cir. 2008); *see also Fund for Animals, Inc. v. BLM*, 460 F.3d 13, 22 (D.C. Cir. 2006) (finding request to enjoin wild horse gathers moot because gathers had been completed). The environmental harms that Plaintiffs allege here are caused by the drilling and fracking of the wells and associated ground disturbance. ECF No. 112 (“Opening Br.”) at 14, 16, 19-24; 3d Am. Compl., ECF No. 98 ¶¶ 2-3, 130-31, 164. Once a well has been drilled and fracked, those alleged harms have occurred and are no longer redressable by this Court. *Park Cty. Res. Council, Inc. v. U.S. Dep’t of Agric.*, 817 F.2d 609, 614-15 (10th Cir. 1987), *overruled on other grounds by Vill. of Los Ranchos de Albuquerque v. Marsh*, 956 F.2d 970, 973 (10th Cir. 1992) (finding APD challenge moot when well drilled and abandoned); *Jackson v. Denver Producing & Refining*, 96 F.2d 457, 461 (10th Cir. 1938) (“It may be conceded that all questions touching the drilling of those wells are moot” when the drilling has already occurred.); *Ouachita Watch League v. U.S. Forest Serv.*, 2016 WL 3511691, at *3 (E.D. Ark. Mar. 16, 2016) (finding challenge to APD approval moot once well drilled). Accordingly, Plaintiffs’ claims challenging the 177 APDs identified in Exhibit C as “producing,” “abandoned,” and “shut-in” are moot.

IV. BLM Complied with NEPA in Approving the Challenged APDs

The record demonstrates that BLM fully complied with NEPA for the challenged APDs. It took a hard look at the impacts of proposed wells in the EA for each APD, including the impacts of horizontal drilling and multistage fracking. It properly tiered those EAs to the RMP/EIS, as that document remains in effect and provides accurate and relevant analysis for drilling in the Mancos Shale. It invited the public, including Plaintiffs, to pre-disturbance on-site meetings for every APD, and it posted notice of proposed wells and final NEPA documents in its public reading room and on its website. Where Plaintiffs have failed to point to any record evidence to support their allegations, they cannot overcome the deference due to BLM's reasoned decisionmaking.

A. BLM Took a Hard Look at the Impacts of the Challenged APDs

Plaintiffs allege that BLM failed to take a hard look at the impacts of the challenged APDs. But, critically, Plaintiffs have presented no additional evidence beyond the documents that were available at the preliminary injunction stage, when the Court rejected these arguments. Order 78 & n.18 (At the preliminary injunction stage, "Plaintiffs should already have available to them all the evidence that they will ever need" to support their claims.). Thus, the Court's original analysis continues to apply: because the addition of the 3,960 predicted Mancos wells—let alone the 382 wells actually challenged in this case—to the 3,945 wells drilled in the San Juan Basin on federal lands since the 2003 RMP/EIS was issued will not exceed the impacts analyzed by the RMP/EIS, the APD EAs properly tier to that document for its analysis of the broad impacts of oil and gas development. To the extent that the RMP/EIS did not fully consider the effects of horizontal drilling and multistage fracking, the APD EAs analyze the impacts of those

technologies. Taken together, then, the RMP/EIS and APD EAs provide complete NEPA analysis for the challenged APDs.

1. The 382 Challenged APDs, and the 3,960 Total Predicted Mancos Wells, Fall Within the 9,942 Wells Anticipated and Analyzed by the RMP/EIS

Since the RMP went into effect in 2003, 3,945 oil and gas wells have been drilled in federal mineral estate in the San Juan Basin. Ex. B. That leaves 5,997 more wells that can be drilled under the 2003 RMP/EIS. Because the 382 wells challenged in this action, and even the 3,960 total predicted Mancos wells, fall well within 5,997, the RMP/EIS's analysis of the impacts of oil and gas development in the San Juan Basin remains valid.

To get around these clear numbers, Plaintiffs argue that because the RMP/EIS did not foresee development of the Mancos Shale using horizontal drilling, its analysis of the impacts of 9,942 wells did not include the impacts of any Mancos wells. Thus, they claim, the 3,960 Mancos wells must be considered additional to the 9,942 wells analyzed in the RMP/EIS, leading to a total of 13,902 now-foreseeable wells. Opening Br. 14. Because foreseeable development now exceeds the development analyzed in the RMP/EIS, the APD EAs cannot tier to that document.

This argument is refuted by the record, which demonstrates that the RMP/EIS considered the development of wells in the Mancos and foresaw the use of horizontal drilling within the lifetime of the RMP. In 2001, the RFD found that the "Mancos Shale may have significant potential as a shale gas candidate" and that "all discreet [sic] reservoir zones" in the Mancos Shale "may not have been recognized" yet. AR0000083. It acknowledged that "there is excellent potential for the Mancos to be further evaluated" as other formations are drilled, and that "[i]t is possible a multi-Tcf reserve might be realized in the next 20 years." *Id.* The RFD also anticipated

the refinement of horizontal drilling and multistage fracturing technologies that would make it easier and more profitable to access unconventional reservoirs, such as the Mancos Shale.

AR0000112-13. Ultimately, the RFD projected the construction of a substantial number of Mancos wells: 300 Mancos oil wells and 6,846 Dakota/Mancos gas wells. AR0000114.

The RMP/EIS, in turn, noted that the Mancos Shale was a source of both oil and gas. AR0000851; AR0000911; AR0000914. Though it did not consider development in the Mancos Shale in particular, that approach is consistent with how it treated every other formation. The RMP/EIS did not address development in any specific strata in detail because its goal was to analyze the impacts of all foreseeable oil and gas development on federal lands in the San Juan Basin, regardless of geological formations targeted or technologies used. *See, e.g.*, AR0001015 (Alternative D provides for 9,942 well sites with no limitations on where or how those wells are drilled); AR0001115 (same); AR0001117 (considering impacts of foreseeable oil and gas development to water resources, regardless of formations and technologies). Nevertheless, the RMP/EIS did anticipate the use of fracking and directional drilling, as well as “other innovative drilling techniques.”⁴ AR0001014; *see also* AR0000998 (including fracturing in list of possible production costs); AR0001012 (46% of new well bores “would be located on existing sites through re-completion or directional drilling”); AR0001013 (minerals in a no surface occupancy area “can be accessed from a surface location within 1,500 feet of the restricted boundary” using “directional drilling”). Where BLM felt that it could not adequately analyze the impacts of a

⁴ Plaintiffs cite to the Declaration of Susan Harvey, which they submitted in support of their preliminary injunction motion, as support for their claim that the RMP/EIS “focused on the impacts of *vertical* drilling.” Opening Br. 19. As discussed *infra*, the Harvey declaration is inadmissible at the merits stage because it is not part of the administrative record. *Infra* § IV.A.2.

specific technology in the RMP/EIS, it said so outright. AR0001012 (noting that RMP/EIS does not consider the impacts of coalbed methane wells drilled using coiled tubing because the RFD “provided no basis for predicting the number of wells that could be completed” using that technology). The RMP/EIS did not exclude horizontal drilling and multistage fracking from its analysis because both were widely used in similar formations elsewhere in the United States by 2003, and foreseeable in the Mancos Shale as soon as the market made them economically feasible. AR0000112-13; AR0149867. Accordingly, it is clear from the record that the RMP/EIS foresaw the development of both oil and gas wells in the Mancos Shale, as well as the use of horizontal drilling and multistage fracking, and accounted for them in its analysis of the total impacts of oil and gas development in the San Juan Basin.

Plaintiffs’ suggestion that an RMP’s analysis of future development is cabined by the predictions of the RFD, down to the number of wells anticipated in each formation and the technology used to develop each well, ignores the purpose of both an RFD and an RMP. An RFD is used to develop a broad prediction of foreseeable development to assist in the preparation of an RMP “that achieves a balance between environmental impact and economic development.” AR0000009. It is necessarily inexact because it is predicting future development, up to 20 years away, based on current trends. *See* AR0000012 (RFD: “Uncertainty is inherent in the estimated well development. . . . It is certain that advanced technologies will support development, but the impact is difficult to estimate.”); AR0001013 (RMP: “The actual number of wells to be drilled is subject to economic and technological considerations, but the numbers presented under each alternative [were] used for analysis and comparison.”). An RMP does not adopt an RFD’s predictions wholesale because an RMP’s purpose is not to analyze the effects of every individual

well predicted by the RFD. Rather, its purpose is to broadly determine which lands are open and closed to future oil and gas leasing, and what constraints should be imposed on leases, based on an analysis of the total impacts of anticipated oil and gas development. 43 U.S.C. § 1712; AR000089; AR0172972. Indeed, if an RMP were to be held to the precise predictions of the RFD, it would prove useless as future development will undoubtedly fail to align perfectly with the RFD's predictions.

Plaintiffs' contention that the development of 9,942 vertical wells within the 20-year life of the RMP "remains foreseeable" is similarly without support. *See* Opening Br. 17. The contention's premise—that the RMP/EIS foresaw 9,942 vertical wells—is contradicted by the document itself which expressly contemplated directional drilling and the use of other innovative techniques. Moreover, the record plainly shows that 9,942 vertical wells are not foreseeable. As BLM explained in 2014, due to technological changes and market shifts since 2003, "most of the oil and gas drilling" in the Basin between 2015 and 2030 "will be within the Mancos Shale formation" and will use "horizontal rather than vertical wells."⁵ AR0154436.

In short, the RMP/EIS foresaw development in the Mancos Shale, as well as the use of horizontal drilling and multistage fracking. Thus, the 382 APDs at issue in this lawsuit, and the 3,960 wells predicted to be drilled in the Mancos in total, cannot be excluded from the RMP/EIS's anticipated 9,942 wells on the grounds that Mancos wells were not foreseen in 2003.

⁵The 2014 RFD did not provide a "downward projection of development" for non-Mancos formations because it did not consider non-Mancos development. Opening Br. 17. It was prepared for the purpose of determining "the potential subsurface development of the Gallup/Mancos play" for use in preparation of an RMP amendment addressing Mancos Shale development, as that formation has become the "major target for future exploration and development." AR0173823.

Rather, they are part of the total oil and gas development anticipated and analyzed by the RMP/EIS.

2. The APD EAs Properly Tier to the 2003 RMP/EIS

Plaintiffs next argue that the APD EAs cannot tier to the RMP/EIS because the RMP/EIS did not analyze the impacts of horizontal drilling and multistage fracking. This argument fails first because, as discussed above, the RMP/EIS foresaw the use of those technologies and took them into account in its analysis. But, even if the RMP/EIS did not focus on the impacts of horizontal drilling and multistage fracking in particular, its analysis of oil and gas development remains relevant because the impacts of horizontally drilled wells are qualitatively no different than the impacts of vertically drilled wells.

NEPA encourages the tiering of site-specific EAs to broader programmatic EISs. 40 C.F.R. §§ 1502.20, 1508.28(a). Tiering allows BLM to utilize the RMP/EIS's consideration of impacts where appropriate, and thereby avoid "unnecessarily expending resources" at the APD-stage on redundant analysis. *Amigos Bravos*, 2011 WL 7701433, at *15 (D.N.M. Aug. 3, 2011); *see also San Juan Citizens All. v. Stiles*, 654 F.3d 1038, 1054 (10th Cir. 2011); 40 C.F.R. § 1500.4. Because horizontal drilling and multistage fracking result in the same types of impacts as any other type of oil and gas development, including impacts to air, water, wildlife, and cultural resources, BLM properly tiers to that analysis in the RMP/EIS. *Compare* AR0001115-30 (RMP/EIS's analysis of impacts of preferred alternative) *with* AR0148191-206 (APD EA's analysis of impacts of a Mancos well). This allows BLM to focus the APD EAs on impacts not discussed in the RMP/EIS. *See Amigos Bravos*, 2011 WL 7701433, at *15 (upholding tiering of oil and gas leases to San Juan Basin RMP).

Plaintiffs provide no record evidence whatsoever to support their contention that the impacts of horizontal drilling and multistage fracturing are so different from the technologies expressly discussed in the RMP/EIS, such as vertical drilling, directional drilling, and dual completions, that the RMP/EIS's analysis is completely inapplicable. Instead, they rely entirely on the Declaration of Susan Harvey, a private consultant in Alaska, submitted with their preliminary injunction motion. This declaration is inadmissible at the merits stage where review is limited to the administrative record.⁶ 5 U.S.C. § 706; *Bar MK Ranches v. Yuetter*, 994 F.2d 735, 739 (10th Cir. 1993). In particular, the Court cannot use extra-record evidence to question an agency's technical or scientific conclusions. *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 993 (9th Cir. 2014); *see also Lee*, 354 F.3d at 1241 (affirming district court's strike of affidavit that, "[i]n essence, . . . simply presents an expert opinion conflicting with the U.S. Air Force's conclusion").

Even if the Court looks to the Harvey Declaration, it will find the Declaration cannot support the weight placed upon it by Plaintiffs. Rather than demonstrate that the impacts from horizontal drilling and multistage fracking are qualitatively different from those of other technologies, the declaration confirms what BLM has said in its EAs: that horizontal drilling and multistage fracking result in the same types of impacts as any other type of oil and gas development—for example, impacts to air, water, and cultural resources, surface disturbance at the site of the development, and noise. *Compare* Opening Br. 20; ECF No. 16-7 *with, e.g.*,

⁶ Plaintiffs misleadingly refer to the Harvey declaration as "record evidence" despite the fact that the declaration is not part of the record. Opening Br. 20. Because Plaintiffs did not challenge the scope of the record or seek to supplement the record with extra-record evidence by the deadline set by the Court, any such argument has been waived. ECF No. 79 at 2 (case management plan); ECF No. 84 (order adopting case management plan).

AR0001115-30; AR0148191-206. *See also* AR0155546 (explaining development of horizontal and multistage fracking from vertical drilling and fracking); AR0149861 (BLM Hydraulic Fracturing White Paper).

Nor is there any record evidence that the magnitude of the impacts caused by horizontal drilling are so much greater than the impacts of vertical drilling that, when added to the 3,945 wells already drilled, the 382 wells challenged in this lawsuit (or even the 3,960 total predicted Mancos wells) will exceed the impacts of the 9,942 wells analyzed in the RMP/EIS. Here again, Plaintiffs rely entirely on the inadmissible declaration of Ms. Harvey to support their allegations. Opening Br. 19-21. Even if this Court were to consider the Harvey declaration, record evidence contradicts her findings. For example, Harvey asserts that “[h]orizontal wells (5.2 acres) have double the surface impact of vertical wells (2 acres).” *Id.* at 20. The 2001 RFD and the APD EAs refute this statement. AR0000012 (“[D]irectional drilling, horizontal wells, and multi-laterals will reduce surface disturbance.”); *see also, e.g.*, AR0234975 (finding 4.57 acre well pad would support for four horizontal wells); AR0234976 (finding 5.79 acre well pad would support six horizontal wells). Indeed, the APD EAs rejected alternatives that used vertical wells because those alternatives would have resulted in greater surface disturbance. *See, e.g.*, AR0148190; AR0233526. One horizontal well can also replace multiple vertical wells, thereby reducing air emissions and water consumption in aggregate. *See* AR0149876 (“Use of horizontal wells and fracking of those wells is a direct means of mitigation to reduce impacts[.]”); AR0149882 (The use of water in fracking “does not represent long-term commitment of the resource. Through the practices of reuse and recycling, water resources can be preserved.”); *see also* AR0173848 (“At the anticipated peak of [Mancos Shale] development the total water volume used is within the

normal range operating range of previous years.”). Where an expert agency’s scientific determination conflicts with that of a single individual hired by Plaintiffs to provide an affidavit at the preliminary injunction stage, deference is owed to the agency. *Marsh*, 490 U.S. at 378 (“When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinion of its own qualified experts . . .”).

As this Court explained, the APD EAs may continue to tier to the RMP/EIS so long as it provides a useful programmatic analysis of the impacts of oil and gas development, and the total impacts caused by on-the-ground development do not exceed the total impacts anticipated and analyzed in the EIS. Order 87-89. Because the challenged APDs, combined with total development since 2003, fall well within the impacts of the 9,942 wells analyzed in the RMP/EIS, that document “still suffices as a NEPA-compliant analysis of the large-scale impacts of oil-and-gas drilling in the San Juan Basin.” *Id.* at 88. And because much of the RMP/EIS’s discussion of the impacts of oil and gas development in the San Juan Basin remains accurate for the impacts of Mancos wells, the APD EAs properly tier to that analysis.

3. Taken Together, the APD EAs and the 2003 RMP/EIS Fully Analyze the Impacts of the Challenged APDs

Plaintiffs argue that the APD EAs fail to analyze the cumulative impacts of the 3,960 predicted Mancos wells. First, they discount the analysis in the RMP/EIS because, they allege, the impacts of the 3,960 predicted Mancos wells were not accounted for in the analysis of the impacts of the 9,942 wells analyzed in the RMP/EIS. Then, they claim that the analysis in the APD EAs is insufficient under NEPA. The first half of their argument fails because, as discussed above, the impacts of 3,960 Mancos wells are well within the impacts of the 9,942 wells analyzed by the RMP/EIS. The second half of their argument also fails: taken together, the

RMP/EIS and APD EAs provide a thorough analysis of all foreseeable cumulative impacts of oil and gas development in the Mancos Shale.

The RMP/EIS analyzed the cumulative impacts of past, present, and reasonably foreseeable future oil and gas development, taking into account both the 18,000 wells active in the San Juan Basin in 2003 and 9,942 future wells, not limited to any particular formation or to the use of any particular technology. AR000001131-39. The APD EAs properly tier to that analysis but also supplement it with additional analysis of the impacts of horizontal drilling and multistage fracking. For example, the EAs explain that fracking in the Mancos Shale is not anticipated to impact groundwater because the Mancos Shale is separated from aquifers by a “continuous confining layer.” *See, e.g.*, AR0137645. They quantify the air quality impacts of a horizontal well and generally find that the cumulative impacts of foreseeable development are minimal given preexisting emissions sources in the Basin. *See, e.g.*, AR0137640-41. They consider the surface disturbance caused by the proposed horizontal wells, *see, e.g.*, AR0137631, and note that, for soil resources, “[t]he proposed action falls within the development assessed in the 2003 RMP EIS cumulative impacts analysis.”⁷ *See, e.g.*, AR0137643 (finding 8.3 acres of surface disturbance for two horizontal wells is within development analyzed in RMP/EIS). In addition, EAs prepared after the 2014 RFD was completed take into account that additional data in considering the cumulative impact of anticipated future development in the Mancos Shale. *See, e.g.*, AR0233562-63 (describing cumulative impacts methodology); AR0233570 (considering 2014 RFD predictions in assessing cumulative impacts to water resources).

⁷ Plaintiffs disparagingly refer to the EAs as “boilerplate.” Opening Br. 24. But, as this Court noted, “similarities among them are to be expected, given that the analyzed drilling technology is the same across all the EAs.” Order 89.

Plaintiffs list an array of impacts allegedly caused by the 3,960 predicted Mancos wells that they claim exceed the cumulative impacts considered by the RMP/EIS. Opening Br. 23. But they provide no source for these numbers, let alone a record citation to show how their numbers compare to the numbers considered in the RMP/EIS and APD EAs. At least some of these numbers are based on Ms. Harvey's declaration and are therefore inadmissible. *Supra* § IV.A.2. For example, the estimate of additional surface impacts of 20,592 acres appears to be the result of multiplying 3,960 predicted Mancos wells by 5.2 acres of disturbance per well. But, as discussed above, the assumption that every horizontal well will cause 5.2 acres of disturbance is thoroughly rebutted by the record. *See, e.g.*, AR0149876.

Even putting aside the legitimacy of the numbers, they are based on a false premise. As discussed above, impacts caused by Mancos Shale wells are not additional to the impacts of 9,942 other, non-Mancos wells and thus do not automatically exceed the impacts analyzed in the RMP/EIS. Plaintiffs' argument here also depends on too narrow a definition of cumulative impact. Per NEPA, 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." 40 C.F.R. § 1508.7. BLM's analysis of cumulative impacts, then, is not limited to quantifying the estimated impacts of foreseeable wells on federal land. Rather, as the RMP/EIS and EAs demonstrate, it considers those impacts against the larger backdrop of all of the many other sources of impacts in the San Juan Basin, such as non-federal oil and gas development, electricity production, vehicle travel, and grazing. *See, e.g.*, AR0001134; AR0226612; AR0226615.

Plaintiffs specifically allege that BLM failed to take a hard look at cumulative impacts in only one arena: climate change. Opening Br. 23-25. But the RMP/EIS and APD EAs indicate that BLM took a hard look at climate change. The RMP/EIS estimated the emissions, including greenhouse gas emissions, of 9,942 wells. AR0001520; AR0001521. While the RMP/EIS did not address the link between these emissions and climate change, *see* AR0001733, the APD EAs incorporate by reference the 2014 Air Resources Technical Report, *see, e.g.*, AR0137636, which was developed “to summarize technical information on air quality and climate change relative to all Environmental Assessments (EAs) for Application[s] for Permit to Drill (APD) and Lease sales.” AR0154407.

Plaintiffs attempt to discredit the Air Resources Technical Report by claiming that it based its emissions estimates on gas wells rather than oil wells and does not address Mancos Shale development. But the report not only expressly considered the emissions of both oil and gas wells, AR0154452, it also specifically discusses development in the Mancos Shale.⁸ The report states that “[b]etween 2015 and 2030, it is estimated that most of the oil and gas drilling in [the San Juan Basin] will be within the Mancos Shale formation. . . . Recent oil well drilling has used horizontal rather than vertical wells. New gas well drilling has essentially halted” in the Basin. AR0154436. The report also explains that its emissions estimates account for a range of variables specific to development in the Basin, including the fact that “future wells in the region will most likely be accomplished with hydraulic fracturing.” AR0154434-36. In its cumulative impacts discussion, the report accounts for, and quantifies, all major sources of emissions of

⁸ Plaintiffs cite to a 2013 draft of the Air Resources Technical Report rather than the final 2014 report. *Compare* AR0153176 *with* AR0154404.

greenhouse gases in New Mexico. AR0154442-53. It then discusses climate change at length, AR0154454-63, and concludes that, “while BLM actions may contribute to climate change, the specific effects of those actions on global or regional climate are not quantifiable.” AR0154456.

The APD EAs properly utilize the Air Resources Technical Report’s discussion of the cumulative impacts of oil and gas development in the San Juan Basin on climate change. *See* 40 C.F.R. §§ 1500.4(j), 1502.21 (encouraging agencies to incorporate material by reference). But they also include their own analysis of climate change. Each EA has an estimate of the greenhouse gas emissions of a horizontally drilled and fracked well and notes that the CO₂-equivalent emissions from one horizontal well represent a .0008% increase in New Mexico statewide emissions.⁹ *See, e.g.*, AR0137640-41. BLM determined that horizontal wells drilled in the Mancos Shale could result in “very small direct and indirect increases” in greenhouse gases, but that, cumulatively, these emissions are “not [] expected to exceed the NAAQS for any criteria pollutants in the project area.” *See, e.g.*, AR0137642; AR0225490. It concluded that

“The 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” because the “incremental contribution to global GHGs from the action alternatives cannot be translated into effects on climate change globally or in the area of this site-specific action.”

See, e.g., AR0137642; *see also Amigos Bravos*, 816 F. Supp. 2d at 1135-36 (finding 92 oil and gas leases will not “meaningfully contribute” to climate change).

⁹ Plaintiffs note a discrepancy in the CO₂-equivalent emissions numbers in the EAs. Opening Br. 35 n.9. The narrative description of greenhouse gases states that one horizontal well produces approximately 609.2 metric tons of CO₂-equivalent emissions, but the Criteria Pollutant and VOC Emissions table lists the amount of CO₂ emissions as 671.54 and methane emissions as .01. *See, e.g.*, AR0234990-91. The discrepancy is due to a difference in units of measurement: the amount in the narrative description is in metric tons and the amount in the table is in US tons. BLM will clarify the units of measurement in future EAs.

Taken together, then, the RMP/EIS and APD EAs thoroughly address the impacts of Mancos Shale development, including cumulative impacts on climate change. *See Wild Earth Guardians v. U.S. Forest Serv.*, 120 F. Supp. 3d 1237, 1269-73 (D. Wyo. 2015) (upholding agency analysis of impacts of coal leases on climate change).

B. BLM Had No Duty to Complete a New EIS Prior To Approving the Challenged APDs

NEPA requires agencies to prepare an EIS for “major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C). In the oil and gas context, BLM prepares an EIS at the RMP stage that considers the impacts of all anticipated oil and gas development over the life of the RMP. *New Mexico ex rel. Richardson*, 565 F.3d at 716-17. At the APD stage, BLM generally prepares an EA to determine whether the proposed well(s) will significantly affect the environment, and, thus, whether an EIS is required. 40 C.F.R. §§ 1501.4(b), 1508.9(a). Whether an impact is significant turns on its context and intensity. *Id.* § 1508.27. “Context refers to the scope of a proposed action, including the interests affected.” *San Luis Valley Ecosystem Council v. U.S. Fish & Wildlife Serv.*, 657 F. Supp. 2d 1233, 1243 (D. Colo. 2009) (citing 40 C.F.R. § 1508.27(a)). Intensity “refers to the severity of the impact” and requires consideration of a variety of factors listed in § 1508.27(b). If the agency concludes that the action will not significantly impact the environment, it may issue a FONSI. *Id.* §§ 1501.4(c), (e), 1508.13. The decision whether to prepare an EIS or issue a FONSI “is a factual determination which implicates agency expertise and accordingly, is reviewed under the deferential arbitrary and capricious standard of review.” *Comm. to Pres. Boomer Lake Park v. Dep’t of Transp.*, 4 F.3d 1543, 1555 (10th Cir. 1993).

To the extent Plaintiffs' argument that BLM must prepare a new EIS for the Mancos wells hinges on BLM's alleged "concession" in its Notice of Intent for the RMPA that a new EIS is required, Opening Br. 27, it must fail because BLM never made such a concession. The Notice of Intent was prepared in reaction to industry predictions of over 20,000 new Mancos wells. AR0174802. Those predictions proved significantly overblown. *See* Order 85 & n.19. Moreover, the notice states that "[a]s *full-field development* occurs . . . additional impacts *may* occur that previously were not anticipated in the RFD or analyzed in the current 2003 RMP/EIS." AR0173818 (emphasis added). As full-field development remains far away and there is no evidence of impacts not analyzed in the RMP/EIS, the notice is far from a "concession" that the agency cannot continue to approve APDs for Mancos wells under the 2003 RMP/EIS.

Plaintiffs also challenge the FONSIIs for each APD. But their sweeping and conclusory allegations—without a single citation to an actual FONSI—are far from sufficient to overcome the deference owed to BLM's expert determination that an EIS is not required. Indeed, Plaintiffs do not explain why the relevant factors at 40 C.F.R. § 1508.27 necessitate preparation of an EIS, or why BLM's consideration of those factors in its FONSIIs is lacking. When contrasted with BLM's thorough analysis of the significance factors in its FONSIIs, Plaintiffs' allegations clearly fall short. *See, e.g.*, AR0147427; AR0225549.

In sum, BLM fully complied with NEPA by preparing an EA for each APD that addresses the impacts of horizontal drilling and tiering that EA to the RMP/EIS, which remains in effect and provides relevant and accurate analysis for the impacts of oil and gas development in the Mancos Shale.

C. BLM Complied with NEPA's Public Involvement Requirements

NEPA requires that agencies involve the public in the preparation of an EA “to the extent practicable.” 40 C.F.R. § 1501.4(b). “An agency is afforded ‘considerable discretion to decide the extent to which such public involvement is practicable.’” *Cure Land, LLC v. USDA*, 833 F.3d 1223, 1236 (10th Cir. 2016) (quotation omitted). “Publication of a ‘draft’ environmental assessment is not required.” 43 C.F.R. § 46.305(b). However, BLM must notify the public of the final EA and FONSI. *Id.* § 43.305(c); 40 C.F.R. §§ 1501.4(e)(1), 1506.6.

BLM complied with these requirements for each of the challenged APDs. Before making a decision on an APD, BLM provided notice of it to the public in a variety of ways. First, BLM maintains a NEPA log that is available on its website and updated as the status of pending actions changes and as new actions arise. *See* AR0150140-151809; AR0214259-90; *see also* AR0147359 (EA explaining NEPA log); AR0178210 (letter to Plaintiffs explaining NEPA log). Second, BLM posts Notices of Staking for proposed wells in its public reading room. AR0178209; AR0178704. Third, BLM hosts public meetings at the site of each proposed well with company representatives and an environmental consultant prior to its preparation of the EA.¹⁰ *See, e.g.*, AR0147359; AR0178704.

In light of these opportunities for public involvement, BLM decided not to post for comment draft EAs for “routine APDs, whose analysis is similar to comparable past actions.” AR0178207. The agency did post for comment draft EAs for APDs that raised special concerns

¹⁰ Though Plaintiffs were invited to the on-site meetings for the challenged APDs, *see, e.g.*, AR0147359; AR0178207; AR0178209; AR0178249; AR0213021, they did not attend the vast majority of them, *see, e.g.*, AR0213069-70; AR0132847; AR0143794; AR0202818; AR0233595.

due to, for example, the location, size, or scale of the proposed action. *Id.* The decision not to solicit comments on draft EAs for routine APDs when the agency had already posted notice and hosted public on-site meetings was a reasonable exercise of BLM's discretion to decide how to involve the public in its decisionmaking process "to the extent practicable." 43 C.F.R. § 46.305(a) ("[T]he methods for providing public notification and opportunities for public involvement" in the preparation of an EA "are at the discretion of" BLM.); *see also Greater Yellowstone Coal. v. Flowers*, 359 F.3d 1257, 1279 (10th Cir. 2004) (finding BLM complied with NEPA when it issued public scoping notice of proposed project but did not seek comments on draft EA); *Amigos Bravos*, 2011 WL 7701433, at *27 (finding BLM complied with NEPA when it did not solicit comments on draft EA).

Plaintiffs argue that their concern regarding horizontal drilling in the Mancos Shale, as expressed in correspondence with BLM, rendered the APDs non-routine and thus properly subject to additional public comment. But some public concern about oil and gas development in the San Juan Basin does not render any individual APD "non-routine." Oil and gas development, and the use of horizontal drilling and multistage fracking, are routine in the San Juan Basin. *See* AR0154436; AR0233534 (FONSI finding APD does not involve uncertain or unique risks because fracking "has occurred on nearly every well in the San Juan Basin since the 1950s" and thus BLM "has decades of experience and is knowledgeable about the impacts and risks associated" with it."). Moreover, nowhere do NEPA or its regulations require that BLM seek comments on a draft EA when the public expresses concern about a project; rather, BLM must involve the public "to the extent practicable." Plaintiffs cannot credibly claim that they were shut

out of BLM's decisionmaking process when they were alerted to on-site meetings for every challenged APD where they could have expressed their concerns.

BLM also complied with its obligation to make its final EAs and FONSI's available to the public. Once a decision record was issued for each APD, BLM marked the APD as approved in the online NEPA log. *See, e.g.*, AR0150140-151809. BLM also placed the final EAs, FONSI's, and Decision Records in its public reading room and on its website.¹¹ *See, e.g.*, AR0178209, AR0149469; AR0149706; AR0178185, AR0178210. When Plaintiffs notified BLM that certain NEPA documents were missing from the reading room, BLM took steps to rectify the problem and provide the missing documents. *See* AR0178204, AR0178209, AR0149464. While there was admittedly some delay in the posting of certain EAs and FONSI's in the reading room and online due to resource constraints (AR0178204), NEPA does not contain a deadline for providing notice, and it does not require the use of a particular method of notification. *See* 40 C.F.R. §§ 1501.4(e)(1), 1506.6; 43 C.F.R. § 43.305(c). Thus, BLM satisfied NEPA's requirements by indicating the approval of APDs on its NEPA log and making diligent efforts to post final NEPA documents in its reading room and on its website. *See Amigos Bravos*, 2011 WL 7701433, at *27 (finding BLM complied with NEPA when it published notice of lease sales, made copies of EA available at the field office, and listed the EAs on its website).

¹¹ In 2015, BLM launched an ePlanning website that tracks all proposed NEPA projects nationwide in a single location. *See* https://eplanning.blm.gov/epl-front-office/eplanning/nepa/nepa_register.do. Declarant Mike Eisenfeld states that the ePlanning website "fails to provide oil and gas project information." Eisenfeld Decl. ¶ 11. In fact, the website includes all relevant NEPA documentation for oil and gas projects in the San Juan Basin, including the challenged APDs.

Plaintiffs rely on two cases, both titled *WildEarth Guardians v. OSMRE*, to support their claim that BLM violated NEPA's public involvement requirements. But those cases, by comparison, serve only to highlight the greater opportunities for public involvement in BLM's decisionmaking process here. In both of those cases, OSMRE "gave no public notice and sought no public input" while drafting EAs for permit revisions to coal mining leases. 104 F. Supp. 3d 1208, 1218 (D. Colo. 2015), *vacated, appeal dismissed*, 652 F. App'x 717 (10th Cir. 2016); *see also* 2015 WL 6442724, at *7 (D. Mont. Oct. 23, 2015), *adopted in part, rejected in part*, 2016 WL 259285 (D. Mont. Jan. 21, 2016). The agency then placed the EAs and FONSI's "in its public reading room . . . without providing notice that it had done so," and the plaintiffs "remained unaware of the EAs and FONSI's *for years*." 104 F. Supp. 3d 1208, 1224 & n.9, 128 (D. Colo. 2015) (emphasis added); *see also* 2015 WL 6442724, at *7. In both cases, the courts found OSMRE's complete failure to notify the public of the proposed actions and its final decisions violated NEPA. 104 F. Supp. 3d at 1224; 2015 WL 6442724, at *7. In contrast, the record here demonstrates that Plaintiffs were well aware of BLM's permitting activities. They received invitations to on-site meetings for every APD, and they knew enough about specific APDs to ask BLM for more information about them. *See, e.g.*, AR0178183; AR0178186. There is no indication in the record that Plaintiffs' receipt of a specific NEPA document was delayed by more than a few weeks. *See, e.g.*, AR0178183-85; AR0178188-89; AR0178296-97. This is far from the "complete lack of notice" for a period of years found to violate NEPA in the *WildEarth Guardians* cases.

Finally, even if BLM failed to provide adequate notice of the final EAs and FONSI's, that error is harmless because there is no evidence that it prejudiced Plaintiffs. "The harmless error

rule applies to judicial review of administrative proceedings, and errors in such administrative proceedings will not require reversal unless Plaintiffs can show they were prejudiced.” *Bar MK Ranches*, 994 F.2d at 740; *see also* 5 U.S.C. § 706. “[I]f the party challenging an agency’s failure to provide public notice of an EA otherwise knew of and had access to the EA, there can be no prejudice.” *WildEarth Guardians*, 104 F. Supp. 3d at 1224 n.9; *see also Friends of Ompompanoosuc v. FERC*, 968 F.2d 1549, 1557-58 (2d Cir. 1992) (finding agency’s failure to notify plaintiff of EA harmless where plaintiff obtained EA from a FOIA request). Here, the correspondence between BLM and Plaintiffs demonstrates that BLM worked with Plaintiffs to rectify errors in its posting process and to provide the relevant documents. *See* AR0178204, AR0178209. It also demonstrates that Plaintiffs were able to submit comments on APDs. *See, e.g.*, AR0178666; AR0178398; AR0193516; AR0220986; AR0222369. Plaintiffs have not identified a single APD for which they did not eventually receive the relevant NEPA documents, and have not explained how any delay in the provision of those documents has prejudiced them.¹² Where there is no evidence that BLM’s delay in publicly posting the final EAs and FONSIIs prejudiced Plaintiffs, the error is harmless.¹³ *See Drakes Bay Oyster Co. v. Jewell*, 747 F.3d 1073, 1090-91 (9th Cir. 2014) (finding Secretary of Interior’s failure to provide fully 30-

¹² Individuals may seek administrative review of BLM’s approval of an APD no later than 20 days after *receipt* of the Decision Record. 43 C.F.R. § 3165.3(b); *Black Hills Plateau Prod., LLC*, 188 IBLA 368, 371 (2016). Thus, Plaintiffs did not lose their opportunity to administratively challenge BLM’s decisions due to its delay in posting the NEPA documents. Plaintiffs have not sought administrative review for any of the challenged APDs. *See* AR0178211.

¹³ To the extent Plaintiffs allege that they failed to timely receive access to final NEPA documents for wells that have already been drilled, those claims are moot because any alleged harms have already occurred. *Supra* § II.

day comment period on EIS and use of incorrect decision document harmless errors where plaintiff showed no prejudice).

V. BLM Complied with the NHPA in Approving the Challenged APDs

Plaintiffs' contention that BLM failed to consider the "landscape-level" indirect and cumulative effects of the challenged APDs on historic properties misunderstands the requirements of the NHPA. Unlike NEPA, the NHPA does not require that BLM analyze the effects of an APD on every possible resource. Rather, it requires only that BLM assess adverse effects to "historic properties." 36 C.F.R. § 800.5(a). A "historic property" is "any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior." *Id.* § 800.16. A property is eligible for the National Register if it "possess[es] integrity of location, design, setting, materials, workmanship, feeling, and association" and meets at least one of the following four criteria:

- (a) it is "associated with events that have made a significant contribution to the broad patterns of our history; or"
- (b) it is "associated with the lives of persons significant in our past; or"
- (c) it "embod[ies] the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or"
- (d) it has "yielded, or may be likely to yield, information important in prehistory or history."

Id. § 60.4.

Per the NHPA, BLM must assess "adverse effects" to historic properties within a project's area of potential effect ("APE"). An adverse effect is not any possible harm that could be caused to a historic property by a project. Rather,

An adverse effect is found when an undertaking may alter, directly or indirectly, *any of the characteristics of a historic property that qualify the property for inclusion in the National Register* in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Id. § 800.5(a)(1) (emphasis added).

Because adverse effects depend on a property's listing criteria, an agency defines the APE for a project in light of those criteria: APE "means the geographic area or areas within which an undertaking may directly or indirectly cause alterations *in the character or use of historic properties*, if any such properties exist." *Id.* § 800.16(d) (emphasis added). The 2014 Protocol between BLM and New Mexico's SHPO recognizes this: "In defining the APE, the BLM will consider potential direct, indirect, and cumulative effects to historic properties and their associated settings *when setting is an important aspect of integrity, as applicable.*" AR0169233 (emphasis added). Compliance with the Protocol satisfies BLM's responsibilities under the NHPA. 36 C.F.R. § 800.14(b)(2)(iii).

Here, BLM complied with the NHPA by defining the APE for each challenged APD based on the location of the proposed well and the types of known and suspected historic properties in the area, and assessing the adverse effects to historic properties both within and without the APE. For every APD, BLM commissioned a cultural investigation that described the project, delineated the APE, indicated if known historic properties were located near the project, and surveyed an area commensurate with or larger than the APE for any additional cultural

sites.¹⁴ *See, e.g.*, AR0167411; AR0168215; AR0188770. As encouraged by the NHPA, BLM coordinated its NHPA and NEPA review and considered foreseeable direct and indirect adverse effects to cultural resources in the EA for each APD. 36 C.F.R. § 800.8; *see, e.g.*, AR0188769-71; AR0233583-86. It also analyzed cumulative adverse effects to cultural resources within the Cumulative Impacts Analysis Area, which includes both the project footprint as well as surrounding sub-watersheds. *See, e.g.*, AR0233585. Based on its investigation and analysis, BLM developed a Cultural Resource Record of Review that indicated whether the proposed project should proceed and whether the agency was attaching any stipulations to protect cultural sites. *See, e.g.*, AR0168219; AR0216880.

Plaintiffs' argument that BLM failed to define an APE for indirect effects that accounted for "landscape-level" properties misstates the law. First, neither the NHPA, its implementing regulations, nor the 2004 or 2014 Protocols require that BLM define separate APEs for direct and indirect effects. BLM complies with the NHPA when it takes foreseeable indirect effects into account in defining the APE, and the APE for direct and indirect effects can be the same. AR0169233 (consistently referring to "the APE"); 36 C.F.R. §§ 800.4(a)(1), 800.16(d).

Second, the 2014 Protocol does not require BLM to consult with SHPO every time BLM defines an APE that accounts for indirect effects. Indeed, such a reading would require SHPO consultation for every project, which would undermine the efficiencies intended by the Protocol. *See* AR0169220. Rather, in the case of an APD, for which there is a standard APE (AR169265), BLM need only consult with SHPO if it uses a smaller APE or where "defining the APE is

¹⁴ Many of these cultural reports were withheld from the record because they contain information concerning the location of protected cultural resources. However, BLM offered to provide access to the withheld reports to Plaintiffs upon request. ECF Nos. 77, 93, 105.

complicated or controversial (e.g. undertakings involving multiple agencies, multiple states, multiple applicants, and/or multiple Indian tribes).” AR0169233. Because BLM used either the standard APE or a larger APE for each challenged APD, *see, e.g.*, AR0168176, AR0168140, and none of the challenged APDs were complicated or controversial, BLM was not required to consult with SHPO.

Plaintiffs also ignore the fact that the vast majority of historic properties near the challenged APDs are not “landscape-level” properties but rather archeological sites listed or eligible for listing under criterion d. *See, e.g.*, AR0167255; AR0168247; AR0168260; AR0216712. Adverse effects to such sites are those that would harm the site’s ability to provide information important to prehistory or history. 36 C.F.R. § 60.4(d). Because an archaeological site can yield important historic information regardless of whether it is in a pristine location or surrounded by development, so long as the site itself remains undisturbed, setting is not an important aspect of its integrity. Thus, indirect and cumulative effects like air pollution, noise, and visual disturbances are generally not adverse effects for such properties. *See, e.g.*, AR0213507. BLM’s reasonable determination of an APE for each APD that accounted for the fact that adverse indirect effects to known and suspected historic properties in the area—namely, discrete archaeological sites—are not reasonably foreseeable “is due a substantial amount of discretion” as “[e]stablishing an area of potential effects requires a high level of agency expertise.” *Valley Cmty. Pres. Comm’n v. Mineta*, 373 F.3d 1078, 1091 (10th Cir. 2004); *see also S. Utah Wilderness All. v. Norton*, 277 F. Supp. 2d 1169, 1195-96 (D. Utah 2003), *vacated as moot*, 116 F. App’x 200 (10th Cir. 2004) (upholding BLM’s determination of APE).

Plaintiffs' claim that the challenged APDs will adversely affect "landscape-level" historic properties such as the Chaco Culture National Historical Park ("Park") and Chacoan outlier sites is unsupported. First, while the Park and outlier sites identified by Plaintiffs—Twin Angels, Halfway House, Pierre's Site, Aztec Pueblo, Kin Nizhoni, and Casamero—are either listed in the National Register or eligible for listing, the "greater Chaco landscape" is not listed and has not been found eligible for listing.¹⁵ Thus, the "Chaco landscape" is not subject to Section 106's requirements. 36 C.F.R. § 800.5(a). Nor is "landscape-level property" a term of art with any accepted meaning under the NHPA.

Second, under the NHPA, a historic property is adversely affected by a project only if the project adversely affects "the characteristics of a historic property that qualify the property for inclusion in the National Register." *Id.* § 800.5(a)(1). Plaintiffs have not even attempted to explain how air pollution, noise, and visual disturbances adversely affect the characteristics of the sites that qualify those properties for listing. *See Te-Moak Tribe of W. Shoshone of Nevada v. U.S. Dep't of Interior*, 608 F.3d 592, 611 (9th Cir. 2010) ("Although it is understandable that the Tribe values the landscape of the project area as a whole, the NHPA requires that the BLM protect only against adverse effects on the features of these areas that make them eligible for the National Register."). As discussed above, these sorts of indirect effects generally have no impact on an archaeological site's ability to yield information under criterion d.

Third, even if air pollution, noise, and visual disturbances could, in theory, adversely affect the characteristics of the Park and outlier sites that qualified them for listing, there is no

¹⁵ The National Register of Historic Places can be searched online at <https://www.nps.gov/nr/research/>.

evidence that adverse effects are foreseeable. Because every site identified by Plaintiffs is miles from the challenged APDs, *see* Ex. A; AR0002201, BLM reasonably determined that the APDs would not adversely affect the Park and outlier sites. *See, e.g.*, AR0233587-89 (Impact on night skies as seen from the Park would be “imperceptible” given the location of the APD, and cumulative impacts of foreseeable development minimal because APD is located in existing oil and gas field); AR0228414 (determining well would not be visible from Park or outlier sites); *see also* AR0169242 (2014 Protocol: Even if setting is an aspect of integrity for a property and an undertaking is visible from the property, an adverse effect determination is not warranted unless “the project elements dominate the setting.”). And BLM was not alone in this determination—per the Protocol, the agency submits samples of its eligibility and adverse effect determinations to SHPO. *See, e.g.*, AR0168755; AR0169300. At no point has SHPO disagreed with BLM’s determinations. *Coal. of Concerned Citizens To Make Art Smart v. FTA*, 843 F.3d 886, 907 (10th Cir. 2016) (finding SHPO concurrence “carries [] weight” when reviewing agency determinations under NHPA).

Fourth and finally, Plaintiffs have ignored the many steps that BLM has taken to avoid and mitigate adverse effects to historic properties in compliance not only with the NHPA but also with the Chacoan Outliers Protection Act (“COPA”), 16 U.S.C. § 410ii *et seq.* *See* 36 C.F.R. § 800.6 (agency may resolve adverse effects by avoiding, minimizing, or mitigating them). The COPA established the Park and designated 39 outlying sites, including the sites identified by Plaintiffs, as “Chaco Culture Archaeological Protection Sites.” 16 U.S.C. § 410ii-1. The Act requires that BLM “protect, preserve, maintain, and administer” the sites “in a manner that will preserve the Chaco cultural resource and provide for its interpretation and research. *Id.* § 410ii-

5(b). However, Congress expressly recognized the importance of oil and gas development in the Basin, *id.* § 410ii(a), and provided that “[n]othing in this subchapter shall be deemed to prevent the exploration and development of subsurface oil and gas . . . from without the sites which does not infringe upon the upper surface of the sites,” *id.* § 410ii-5(c); *see also id.* § 410ii(a)(3) (“[D]evelopment of the San Juan Basin's important natural resources and the valid existing rights of private property owners will not be adversely affected by the preservation of the archeological integrity of the area.”).

BLM has complied with the NHPA and COPA by designating the Chacoan outlier sites as ACECs for which no surface occupancy stipulations are required for existing leases and which may be closed to future oil and gas leasing. AR0002200; AR0002205; AR0002207; *see also* AR0000837-43 (RMP discussion of cultural resource management). The EAs for each APD discuss best practices for avoiding adverse effects to cultural resources, including “design features such as but not limited to reduction of construction areas, temporary barriers, and site monitoring.” AR0213507-08; AR0148206. In addition, the EAs discuss ways to minimize and mitigate visual impacts and noise impacts. *See, e.g.*, AR0188771-74; AR0188784-85; AR0233585. The FONSI's delineate the distance of the APD from nearby ACECs and incorporate conditions of approval to protect cultural resources. *See, e.g.*, AR0144311-12; AR0233534.

“[T]he NHPA only requires that an agency take procedural steps to identify cultural resources; it does not impose a substantive mandate on the agency to protect the resources.” *San Juan Citizens All.*, 586 F. Supp. 2d at 1294 (citing *Valley Cmty. Pres.*, 373 F.3d at 1085). BLM

has met this obligation by defining a reasonable APE for each APD, identifying historic properties within it, and assessing and mitigating potential adverse effects.

CONCLUSION

For the foregoing reasons, the Court should find that BLM fully complied with NEPA and the NHPA.

Respectfully submitted this 9th day of June, 2017.

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CERTIFICATE OF COMPLIANCE WITH FED. R. APP. P. 32

I hereby certify that this brief complies with the type-volume limitation in Fed. R. App. P. 32(a)(7)(B). This brief contains 12,955 words, excluding the parts of the brief exempted by Fed. R. App. P. 32(f).

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CERTIFICATE OF SERVICE

I hereby certify that on this 9th day of June, 2017, a copy of the foregoing was filed via the Court's electronic case filing (ECF) system, which will send notice to all counsel of record.

/s/ Clare M. Boronow
CLARE M. BORONOW