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

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| DINÉ CITIZENS AGAINST RUINING OUR ENVIRONMENT, *et al.*, | ) | |
| Plaintiffs, | ) | |
| v. | ) | |
| SALLY JEWELL, *et al.*, | ) | Case No. 1:15-cv-00209-JB-SCY |
| Federal Defendants, | ) | |
| and | ) | |
| WPX ENERGY PRODUCTION, LLC, *et al.*, | ) | |
| Defendant-Intervenors, | ) | |
| and | ) | |
| AMERICAN PETROLEUM INSTITUTE, | ) | |
| Applicant Defendant-Intervenor. | ) | |

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**PLAINTIFFS' REPLY TO FEDERAL DEFENDANTS, WPX ENERGY, *ET AL.*, AND AMERICAN PETROLEUM INSTITUTE'S OPPOSITION TO PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION**

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## INTRODUCTION

Federal Defendants, WPX Energy *et al.,* and American Petroleum Institute (collectively "Respondents") attempt to justify the unlawful approval of 239[2] Mancos Shale wells by trumpeting economic gain, but ignore the irreparable harm to the Greater Chaco Landscape and to health of peoples living in the shadow of the development. That ongoing harm to the land and the people is irreparable, and demands preliminary relief.

Plaintiffs (collectively "Citizen Groups") request a preliminary injunction to maintain the status quo pending this Court's decision on the merits and to preserve this Court's equitable power to impose an appropriate remedy if it rules for the Citizen Groups on the merits. Preliminary relief will also help to ensure the integrity of BLM's pending Mancos Shale Resource Management Plan Amendment and Environmental Impact Statement ("Mancos RMPA/EIS") and, specifically, BLM's ability to choose between a range of reasonable alternatives based on a hard look at drilling impacts before those impacts occur. Preliminary relief would cause no harm to BLM, and little if any long-term economic harm to oil and gas companies beyond a delay in their ability to drill for oil and gas resources that will still be available once the Mancos RMPA is complete.

## ARGUMENT

### I. Citizen Groups are Likely to Succeed on the Merits

BLM's admission that the agency's 2003 programmatic Environmental Impact Statement ("2003 EIS") does not analyze the impacts of horizontally drilled and hydraulically fractured Mancos Shale wells is fatal to the agency's attempt to tier the approval of 239 such wells to that

[2] In their Supplemental and Amended Petition for Review, Citizen Groups challenge 96 BLM decisions encompassing 239 individual well approvals. Dkt. 32, Apx. 1. BLM notes that it has approved 265 Mancos shale wells between 2010 and May 22, 2015. Dkt. 42 at 1. Not all of the wells BLM has approved are included in the Petition for Review.

2003 EIS. Dkt. 16-1 at 17. BLM's Environmental Assessments ("EAs") for individual well approvals do not change this conclusion. Those EAs, like the 2003 EIS, also do not analyze the direct, indirect, and cumulative environmental impacts of horizontally drilled and hydraulically fractured Mancos Shale wells. *Id*. at 25-26. Rather, the 2003 EIS only analyzed the drilling of natural gas wells in different geologic formations, using different drilling technology. Dkt. 42-4 at 4-1, 4-9.

BLM wrongly claims that it properly tiered the EAs to the cumulative impacts analysis in the 2003 EIS because horizontal drilling and multi-stage fracturing in the Mancos formation is not "substantially different from development in other formations" and has been used in the San Juan Basin for several decades. Dkt. 42 at 8. This is incorrect. BLM has never taken a hard look under NEPA at the impacts of horizontally drilled and multi-stage hydraulically fractured Mancos Shale wells, as it would need to do to support that conclusion. The record here shows that horizontal drilling and multi-stage hydraulic fracturing technology post-date the 2003 EIS; are different from the vertical drilling and fracturing assessed in the 2003 EIS; and has different impacts. Because BLM has not considered those impacts, Citizen Groups are likely to succeed on the merits.

### A. BLM Cannot Tier its APD EAs to the 2003 RMP/EIS Because the EIS Did Not Analyze the Impacts of Horizontal Drilling and Multi-Stage Fracturing.

BLM may not tier NEPA analyses for its approvals of new oil and gas wells that use horizontal drilling and multi-stage fracturing to the 2003 EIS for a simple reason: the 2003 EIS did not analyze the environmental impacts of this technology. By law, BLM may only tier a site-specific NEPA analysis to a programmatic EIS when the site-specific action and its impacts are addressed in the earlier EIS. 40 C.F.R. §§ 1502.20, 1508.28; *Pennaco Energy, Inc. v. U.S. Dep't of Interior*, 377 F.3d 1147, 1151 (10th Cir. 2004). Tiering allows agencies "to eliminate

repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review." 40 C.F.R. § 1502.20. Because the specific impacts of horizontal drilling and multi-stage fracturing were not addressed in earlier environmental reviews, there is no prior analysis to which BLM could tier.[3]

BLM's defense of its drilling approvals (Dkt. 42 at 11) is not only contrary to the law, but belied by the record. That record reflects: (1) BLM's public statements that the 2003 EIS did not analyze the "horizontal drilling technology and multi-stage hydraulic fracturing" used to develop Mancos Shale; (2) evidence that horizontal fracking is different from vertical fracking, with different impacts; and (3) BLM's description of horizontal fracking as a fairly new technology.

**1. BLM determined that a RMP Amendment analyzing horizontal drilling and multi-stage fracturing is required.**

BLM has specifically admitted that the 2003 EIS did not analyze the impacts of Mancos Shale development, stating in the Federal Register that:

> As full-field development occurs, especially in the shale oil play, additional impacts may occur that previously *were not anticipated* in the RFD *or analyzed* in the current 2003 RMP/EIS, which will require an EIS-level plan amendment and revision of the RFD for complete analysis of the Mancos Shale/Gallup Formation.

79 Fed. Reg. 10,548 (Feb. 25, 2014) (emphasis added). BLM has also admitted the need for an EIS-level RMP amendment: [4]

> The primary purpose of this planning effort is to amend the 2003 RMP with management decisions based on a more accurate assessment of the extent and impacts of oil and gas development *occurring in the planning area* … The existing 2003 RMP does not satisfactorily address the impacts of changing patterns of oil and gas development that have occurred since its publication. New

[3] *See S. Fork Band Council of W. Shoshone Of Nevada v. U.S. Dep't of Interior*, 588 F.3d 718, 726 (9th Cir. 2009) ("Though 'tiering' to a previous EIS is sometimes permissible, the previous document must actually discuss the impacts of the project at issue.").

[4] BLM's admission that an EIS-level RMP Amendment is needed to address previously unanalyzed impacts of horizontal drilling and multi-stage fracturing contradicts API's argument that a supplemental EIS to address these impacts is not required by NEPA. Dkt. 38-1 at 18.

> technology is allowing for additional development of what was previously considered a fully developed oil and gas play in the planning area. Development of this play, the Mancos/Gallup formation, was analyzed in a 2002 [RFD], but oil and gas development activity … since that time has occurred in different areas than projected in the RFD…. [*T]he impacts of development occurring now* and into the future must be reanalyzed and management for oil and gas development … reevaluated to ensure that efficient resource development adequately protects other resources.

Scoping Report for Mancos Shale RMP Amendment at 1-1 (Nov. 2014) (emphasis added) (Exhibit 16). Thus, before this litigation, BLM conceded that impacts of horizontal drilling and multi-stage hydraulic fracturing are occurring now, but were not analyzed in the 2003 EIS.[5] This concession contradicts BLM's argument that Citizen Groups' NEPA claims are based on a "fallacy" that "development in the Mancos Shale is substantially different from development in other formations … because it involves horizontal drilling and fracking." Dkt. 42 at 8.

To distract the Court from these admissions, BLM cites to general references in the 2003 EIS and its Record of Decision ("ROD") to "fracking," asserting that the 2003 EIS "did not discuss fracking at any length" because this stimulation technique was "so common that BLM did not see the need to specifically mention it." Dkt. 42 at 11. BLM's citations do nothing, however, to cure the legal deficiencies of its drilling approvals. The case before this Court is not about "fracking" in general, rather, it is about BLM's very specific failure to take a hard look at the impacts of *horizontal drilling and multi-stage hydraulic fracturing*—technology that BLM itself admits was not analyzed by the 2003 EIS and is causing impacts that must be addressed in

[5] BLM asserts for the first time in its Response Brief that the decision to amend the RMP was prompted by industry estimates of up to 20,000 Mancos Shale wells, and that when those estimates were not born out in the 2014 RFDS, BLM decided to proceed with the RMP Amendment anyway and focus on "development of unleased lands and lands with wilderness characteristics." Dkt. 42 at 4-5. BLM offers no record citation to support this statement nor is there any record evidence that the agency ever took this position as an explanation for undertaking the RMP Amendment. BLM's attempt to back away from its prior record statements is exactly the type of "[a]fter-the-fact rationalization by counsel in briefs" that the Tenth Circuit forbids. *Olenhouse v. Commodity Credit Corp*., 42 F.3d 1560, 1575 (10th Cir. 1994).

an RMP Amendment. BLM is wrong that the impacts from current drilling in the Mancos Shale are "are generally no different from" the impacts of conventional drilling contemplated in 2003. Dkt. 42 at 11; *cf.* Dkt. 42-6 at 8 (noting that interest in using horizontal drilling in the southern portion of the Mancos Basin increased significantly in 2013). Moreover, and as discussed in Section I.A.2 below, the type and magnitude of impacts for horizontal drilling and multi-stage fracturing differ from those associated with conventional drilling practices discussed in the 2003 EIS. Thus, BLM cannot tier the NEPA analyses for its APD drilling approvals to the 2003 EIS.

BLM is also wrong in contending that it need not stay APD approvals pending completion of the Mancos RMPA.[6] Because the APD approvals are not "within the scope of, and analyzed in" the 2003 EIS and because the EAs prepared for the APDs do not contain the required analysis, the APD approvals are not justified by "adequate NEPA documentation to support the individual action."[7] 43 C.F.R. § 46.160; Dkt. 42 at 14-15. Again, as admitted by the agency, the 2003 EIS does not analyze horizontal drilling and multi-stage fracturing. That failure was not cured by the piecemeal EAs completed for each APD approval, as discussed below. BLM is required to analyze the direct, indirect, and cumulative impacts of Mancos Shale development *before* approving individual wells. 42 U.S.C. § 4332(2)(C)(i). The agency failed to do so here in violation of NEPA.

**2. The environmental impacts of horizontal drilling and multi-stage fracturing differ from conventional drilling impacts.**

Horizontal drilling and multi-stage fracturing in the Mancos Shale is different from conventional, vertical drilling using a single hydraulic fracturing treatment. BLM has admitted

[6] *See* 30 U.S.C. § 226(p)(2)(A) (requiring BLM to defer APDs pending completion of NEPA).
[7] Although BLM provides a string cite of cases for the principle that the agency is not required to stay APD approvals during the pendency of the RMP/EIS, Dkt. 42 at 15, all of these cases are factually distinct from the current case.

this. 79 Fed. Reg. 10,548; *see also* Dkt. 42-1 ¶ 39 (noting that the distinction between past and current development is that "current wells are … horizontally drilled instead of vertically or directionally drilled."); Dkt. 39-3 ¶ 5 (noting that prior to 2011 hydraulic fracturing of *vertical* wells was the dominant practice) (emphasis added).[8]

Horizontal drilling and multi-stage fracturing of the Mancos Shale differs from conventional drilling in several ways that must be explicitly addressed through a hard look NEPA analysis—an analysis that neither the 2003 EIS nor the individual EAs for the decisions at issue here provided—including:

- Horizontal wells (5.2 acres) have double the surface impact of vertical wells (2 acres) (Dkt. 16-7 ¶ 36);
- 242%-333% increase in air pollutant emissions from drilling a horizontal vs. vertical well (*Id.* ¶ 47, Ex. D);
- Each horizontal Mancos Shale well produces 11.88 more tons of volatile organic compounds ("VOCs") and 1.13 more tons of hazardous area pollutants ("HAPs") than each vertical well (*Id.* ¶ 62);
- It takes 5-10 times more water to hydraulically fracture a horizontal well (*Id.* ¶ 66); and
- Increased noise impacts from a horizontally-drilled well because both drilling and multi-stage hydraulic fracture treatments take longer to complete (*Id.* ¶ 86).

Not only are these impacts associated with horizontal drilling and multi-stage fracturing different from the impacts of conventional, vertical, single-stage fracturing, these environmental impacts are well outside the range of impacts analyzed in the 2003 EIS. *Id.* ¶¶ 25-28. The Tenth Circuit addressed this issue in *Pennaco*. There, BLM issued three leases for coalbed methane

[8] Moreover, BLM's final hydraulic fracturing rule issued earlier this year described the rapid spread of hydraulic fracturing "coupled with relatively new horizontal drilling technology in larger scale operations" as "increasing access to shale oil and gas resources" not previously heavily developed. 80 Fed. Reg. 16,128 (March 25, 2015). BLM noted that new, horizontally-drilled wells are characterized by new "complexities" including "be[ing] significantly deeper and cover[ing] a larger horizontal area than the operations of the past." *Id.*

("CBM") extraction and relied on an existing programmatic EIS that did not directly address CBM extraction, as well as a project-level draft EIS that addressed CBM extraction but not in the geographic area of two of the challenged parcels. *Pennaco*, 377 F.3d at 1152. Environmental groups argued that because CBM extraction differed from conventional oil and gas extraction, and the former was not analyzed in the programmatic EIS, BLM was legally obliged to assess CBM's environmental impacts before issuing the leases. *Id*. at 1153. BLM argued, as it does here, that it had properly relied on existing NEPA documents because neither CBM production nor its impacts differed from conventional methane production. *Id*. There, as here, the record also included both an affidavit stating that CBM extraction was no different from conventional methane extraction[9] and a prior statement by BLM that existing NEPA analyses did not address the impacts of CBM extraction because the boom in CBM extraction was not anticipated at the time BLM issued the programmatic EIS. *Id*. at 1157-58. The Tenth Circuit rejected this argument, holding that the record showed CBM was different from conventional methane extraction and that because the programmatic EIS did not analyze those specific impacts, BLM's reliance on the EIS in lieu of doing an independent CBM analysis violated NEPA. *Id*. at 1158-59. The facts of this case demand a similar conclusion.

**3. BLM's reliance on the conventional well count from the 2003 EIS to approve Mancos Shale APDs is not justified.**

BLM erroneously argues that the effects analysis in the 2003 EIS remains valid because

[9] The Tenth Circuit found this affidavit did not demonstrate NEPA compliance because "no such conclusion was recorded in any NEPA document prior to the issuance of the leases[,]" and further held this was "a post hoc analysis" that did not satisfy NEPA's requirements. *Id*. at 1159. Here, the Barr Declaration is similarly a post hoc rationalization that does not reflect conclusions "recorded in any NEPA document" for individual APD approvals. *See* Dkt. 42-1 ¶ 59 (stating Mancos Shale impacts "not substantially different from" conventional development impacts). *But cf.* Dkt. 16-7 (Ms. Harvey, who is a petroleum and environmental engineer with 28 years of experience, supports her Declaration with citations to specific BLM documents on which she relied).

the EIS considered the impacts of drilling 9,942 new wells in the planning area, and the current well count of 3,612 wells is considerably below the predicted maximum. Dkt. 42 at 14; Dkt. 39 at 9. However, this "magic number" argument is unavailing here because Citizen Groups' claims are not premised on exceeding the number of wells predicted in 2003. Citizen Groups' claims are instead premised on BLM's ongoing approval of new wells in the Mancos Shale using horizontal drilling and multi-stage fracturing despite the fact that BLM has not yet completed its pending Mancos RMPA or otherwise analyzed the impacts of this *type* of development.

The 2003 EIS was explicit that its impacts analysis from drilling 9,942 wells was based on practices used in the planning area *at that time*—practices that did not include horizontal drilling and multi-stage fracturing now employed to exploit the Mancos Shale. Dkt. 42-4 at 4-1; *see also* Dkt. 42-3 at 5.24 (noting the Mancos Shale reservoirs "are approaching depletion and are marginally economic."). The focus of BLM's 2003 EIS analysis was not oil reserves—which is the target resource in the Mancos Shale—but *natural gas* reserves "because of their relative importance as compared to oil production." Dkt. 42-4 at 4-9; Dkt. 16-7 ¶¶ 27, 34-35. BLM also explicitly focused on the impacts of *vertical* drilling, and did not analyze different extraction methods in what it considered low-potential formations like the Mancos Shale.[10] Dkt. 16-7 ¶ 30. BLM is now analyzing—for the first time—the impacts of full-field Mancos Shale oil development using horizontal drilling and multi-stage fracturing technology. *See* Dkt. 16-7 ¶ 14 (estimating a draft of the Mancos RMPA/EIS by the end of 2015).

[10] Similar to BLM's misperception that this case is about "fracking," Operators frame this case as premised on oil and gas development in a specific formation—Mancos Shale—and argue that because the 2003 EIS analyzed the impacts of 9,942 new wells without regard to drilling technology or formation, BLM properly relied on the 2003 EIS analysis. Dkt. 39 at 9, 13. However, as discussed above, the 2003 EIS explicitly contradicts Operators' argument on this point.

### B. BLM Did Not Analyze the Cumulative Impacts of Mancos Shale Development Before Approving Individual Drilling Permits.

BLM's argument that it adequately analyzed the cumulative impacts of 239 individual Mancos Shale wells is contingent on the same mistaken assumptions regarding the sufficiency of the 2003 EIS' analysis of this development. BLM's individual, piecemeal drilling permit EAs do not cure these deficiencies.[11] These EAs focus solely on the impacts of drilling a single well or small group of wells; the EAs do not discuss the cumulative impacts of Mancos Shale development, except by attempting to tier to the 2003 EIS. *See* Dkt. 16-1 at 21-26, 16-17. This abrogation of duty renders the agency's APD approvals unlawful.[12]

BLM also contends that "[i]f the proposed action has no incremental impact, a cumulative impacts analysis is not required." Dkt. 42 at 19. However, this contention is unavailing here because Citizen Groups have plainly demonstrated that horizontal drilling and multi-stage fracturing have direct impacts not contemplated in the 2003 EIS, including dramatic effects on landscapes, the health of nearby communities, the availability of fresh water resources, and the experiences of visitors to cultural sites, among others. *See* Section I.A.2 above and Dkt. 16-1 at 9-10. These cumulative effects cannot be readily analyzed in an EA accompanying a permit for a single well or a small group of wells. *See Gold, et al*., 108 IBLA 231 (April 24, 1989) (holding where, as here, an initial well has been successfully drilled and "activities

[11] API's suggestion that BLM's Fracking Rule is a panacea to the harms of Mancos Shale development is similarly misguided. Dkt. 38-1 at 3. *See Diné CARE v. OSM,* 2015 WL 996605 at *9 (D. Colo. Mar. 2, 2015) (holding that analysis in a separate document but not included in the record of decision and that failed to analyze site-specific impacts of the project could not cure a deficient EA).

[12] BLM's argument that Citizen Groups are asking the agency to "arbitrarily limit its cumulative impacts analysis" to Mancos wells and "ignor[e] the thousands of other wells in the San Juan Basin" is a red herring. Dkt. 42 at 16. BLM has neither analyzed the cumulative impacts of Mancos Shale development itself, nor has the agency analyzed the cumulative effects of this development combined with the 40,000 existing wells in the San Juan Basin. Both are required.

proceeded from exploration to development," the agency "would be *required* to consider the cumulative and synergistic effects of not only the individual [APD] but the *entire field development*" through an EIS) (emphasis added).

BLM's argument also misreads NEPA's requirements. NEPA recognizes that a minor action viewed in isolation can still contribute to cumulative impacts: "Cumulative impacts can result from *individually minor but collectively significant* actions taking place over a period of time." 40 C.F.R. § 1508.7 (emphasis added).[13] Thus, even if the environmental impacts of an individual Mancos well would be minimal, these impacts may be significant when added to the widespread Mancos Shale development now underway, in particular when assessed in combination with the conventional drilling contemplated by the 2003 EIS.

Neither the 2003 EIS nor the individual EAs challenged here take a hard look at the cumulative impacts of Mancos Shale drilling to any resource, such as air quality, cultural resources, or the health of communities. BLM's argument regarding air quality is premised on the claim that Mancos wells "would not be expected to result in exceeding the NAAQS [National Ambient Air Quality Standard] for any criteria pollutants." Dkt. 42 at 18. NEPA, however, obligates BLM to take a look at *all* impacts, not just impacts that may exceed air quality standards. The District of Colorado recently rejected an identical argument that an agency may excuse itself from its NEPA hard look duty where a facility operates pursuant to a state permit under the Clean Air Act. *WildEarth Guardians v. OSM,* 2015 WL 2207834 at *13 (D. Colo. May 8, 2015) (in the NEPA context, recognizing the question is whether a project's emissions "will have a significant impact on the environment" regardless of compliance with Clean Air Act

[13] *See also Te-Moak Tribe v. Dep't of Interior*, 608 F.3d 592, 603-04 (9th Cir. 2010) (holding agency had to do cumulative impacts analysis even where it determined that the project would cause "no incremental effect.").

standards). Individual Mancos Shale EAs similarly rely on NAAQS to avoid actual cumulative analysis of air quality impacts. *See, e.g.,* Dkt. 16-12 at 28; 16-13 at 26; 16-14 at 23; 16-15 at 22. Such isolated and piecemeal analysis does not provide the hard look at cumulative impacts that NEPA compels. 40 C.F.R. §§ 1508.7, 1508.25(c)(3), 1508.27(b)(7).

BLM's argument that "horizontal drilling and fracking will not have any greater impact on cultural resources than the standard operating procedures" is also unsupported. Dkt. 42 at 18. BLM again cites to sections from the 2003 RMP/EIS, but those sections do not discuss impacts to cultural resources from oil and gas development.[14] Those documents only discuss protection of archaeological sites within drilling areas, and make no mention of the detrimental effects on landscape-level cultural properties such as Chaco Canyon National Historical Park ("the Park") from potentially significant noise and visual impacts.[15] Dkt. 42 at 19. By limiting its arguments to ground-disturbance impacts to archaeological sites within the well pad footprint, and ignoring off-wellpad impacts to landscape-level properties like the Park and Greater Chaco Landscape from noise and air pollution, BLM has "entirely failed to consider an important aspect of the problem." *Motor Vehicle Mfrs. Ass'n v. State Farm Mutual Auto. Ins.*, 463 U.S. 29, 43 (1983).

Finally, BLM's arguments regarding cumulative impacts to local communities focuses entirely on the economic benefits of drilling, while ignoring impacts such as degraded air quality, increased truck traffic, and noise. BLM asserts that the 2003 EIS analyzed these impacts, Dkt. 42 at 20, but, as discussed above, analysis was limited to the impacts of vertical drilling. BLM has

[14] *See*, *e.g.*, Dkt. 42-5 at 2-37 (discussion of archaeological inventory procedures and definition of "Areas of Critical Environmental Concern"; Dkt. 42-4 at 4-116 (affected archaeological sites), 4-128 (amount of ground disturbance to archaeological sites).

[15] Noise from increased truck traffic and drilling operations, along with visible flares and bright lighting from well pads negatively impact the visitor experience at the Park by detracting from the Park's fundamental values including its physical surroundings, solitude, natural sounds, sweeping vitas, night skies, and unpolluted air. NPS, *Chaco Culture National Historical Park: Foundation for Planning and Management* (Sept. 2007) (Exhibit 17).

never analyzed cumulative impacts to communities from Mancos Shale development using horizontal drilling and multi-stage fracturing.[16] BLM's 2014 Socioeconomic Baseline Assessment Report does fill this gap, as it provides information only on "current socioeconomic conditions and trends" in the study area and fails altogether to discuss cumulative effects to communities.[17] That BLM has integrated this baseline information into some of its EAs as background on area demographics does not relieve BLM of its obligation to analyze cumulative impacts. *See*, *e.g.*, Dkt. 42-9 at 34-39. NEPA regulations explicitly reject use of the "affected environment" discussion to fulfill NEPA's hard look requirement. 40 C.F.R. § 1502.15 ("Verbose descriptions of the affected environment are themselves no measure of the adequacy of the environmental [analysis].").

### C. Mancos Shale Development Will Prejudice and Limit the Choice of Alternatives in the Pending Mancos RMPA and EIS.

Where, as here, there is a pending programmatic revision to the 2003 RMP/EIS, NEPA establishes a duty "to stop actions that adversely impact the environment, that limit the choice of alternatives for the EIS, or that constitute an 'irreversible and irretrievable commitment of resources.'" *Conner v. Burford,* 848 F.2d 1441, 1446 (9th Cir. 1988). This duty is codified in 40 C.F.R. § 1506.1(c), recognizing that agencies *shall not* undertake action—such as the approval of drilling permits—when that action will cause prejudice or limit the choice of alternatives in the

[16] API invokes BLM's Fracking Rule as a basis for arguing that BLM's Findings of No Significant Impacts for challenged APDs are entitled to deference because hydraulic fracturing is "squarely within BLM's area of expertise." Dkt. 38-1 at 15-16. However, API overlooks the fact that BLM's findings must be supported by record evidence and not merely conclusory assertions purporting to rely on a programmatic EIS that does not analyze the impacts of horizontal drilling and multi-stage fracturing. Although the Court's review of an agency's NEPA analysis is deferential, the Court cannot "defer to a void." *High Country Conservation Advocates v. U.S. Forest Service,* 52 F. Supp. 3d 1174, 1186 (D. Colo. 2014) (quoting *ONDA v. BLM*, 625 F.3d 1092, 1121 (9th Cir. 2010)). Moreover, issuance of this rule does not relieve BLM of analyzing the cumulative impacts of this technology, as API suggests. Dkt. 38-1 at 15-16.

[17] Exhibit 18 at ES-1.

required EIS.[18] BLM's ongoing approval of Mancos Shale drilling permits violates this duty. *See Arlington Coalition on Transportation v. Volpe,* 458 F.2d 1323, 1330 (4th Cir.1972) (holding that an injunction against further construction was required until the agency completed final action on the EIS). BLM's claim that this Court lacks the jurisdiction to enjoin BLM's future approvals of Mancos Shale drilling permits pending completion of the RMP/EIS amendment is incorrect. Dkt. 42 at 10; *see Colo. Environmental Coalition v. Office of Legacy Management,* 819 F. Supp. 2d 1193, 1224 (D. Colo. 2011) (ordering that no new leases could be issued and no ground-disturbing activity could occur until the agency fully complied with NEPA).

## II. Citizen Groups Suffer Irreparable Harm from Environmental Destruction, Harm to Human Health, and BLM's Failure to Comply with NEPA

Citizen Groups will suffer irreparable harm from: (1) permanent environmental destruction caused by the horizontal drilling and multi-stage fracturing of Mancos Shale wells; (2) harm to pubic health as a result of Mancos Shale development; and (3) procedural harm from BLM's failure to comply with NEPA. Respondents offer no convincing argument in opposition.

Regarding destruction to the Greater Chaco landscape, BLM suggests that the impacts caused by the "174 wells [that] remain to be drilled [and] fracked" are somehow insufficient to demonstrate irreparable harm. Dkt. 42 at 26. This is incorrect. *Cf. San Luis Valley Ecosystem Council v. U.S. Fish & Wildlife Serv.,* 657 F. Supp. 2d 1233, 1240 (D. Colo. 2009) (finding irreparable harm from the proposed drilling of *two* exploratory wells). Indeed, it is hard to imagine environmental harm that is more concrete, and, with 91 wells already horizontally drilled and multi-stage fractured, more imminent. Dkt. 42 at 26; *see Heideman v. S. Salt Lake City,* 348 F.3d 1182, 1189 (10th Cir. 2003). BLM further claims that for such harm to be

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

irreparable, Citizen Groups must demonstrate that it exceeds impacts analyzed in the 2003 RMP/EIS (forgetting that the impacts of horizontally drilled and multi-stage fractured wells were not assessed). Dkt. 42 at 25; *cf.* Dkt. 16-7 ¶¶ 25-28. Operators argue that because such development is subject to mitigation measures and other requirements, drilling Mancos Shale wells is harmless. Dkt. 39 at 17-18. Neither BLM nor Operators offer any support or citation for these arguments, which on their face run counter to established standards for demonstrating irreparable harm. *Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7, 8 (2008) (holding that a preliminary injunction is appropriate when "irreparable injury is *likely* in the absence of an injunction.") (emphasis added).[19] Here, Citizen Groups have met that standard.

Respondents also marginalize the threat of irreparable harm to public health as a result of Mancos Shale development. For example, BLM claims the public should not be concerned about emissions from shale oil development because those emissions are "a minuscule fraction of total annual emissions for the region." Dkt. 42 at 26. Operators argue: "There is no rational basis to claim that about 200 wells in the Mancos Shale are the cause of any health effects." Dkt. 39 at 19. Those living in the area and suffering harm as a result of this development have a different perspective on the threat.[20] There is a growing body of science that links oil and gas development to adverse health effects. Dkt. 16-11 ¶ 6. The mere *threat* of such irreparable harm to public health is sufficient to support a preliminary injunction. *See Mountain Med. Equip., Inc. v.*

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[19] *See also Amoco Prod. Co. v. Vill. of Gambell,* 480 U.S. 531, 545 (1987) (recognizing that "[e]nvironmental injury, by its nature … [is] irreparable."); *Colorado Wild Inc. v. U.S. Forest Serv.*, 523 F. Supp. 2d 1213, 1220 (D. Colo. 2007) (finding irreparable harm due to "environmentally destructive road construction" and associated site development).

[20] *See, e.g.,* Dkt. 16-10 ¶¶ 2, 3 (identifying harm since fracking started, including an 11 year-old suffering a stroke, a sudden swollen abscess, asthma and respiratory infections, heart problems and immune deficiencies); Dkt. 16-9 ¶ 4 (identifying harm from poor air quality following flaring resulting in dizziness, eye irritation, headaches, and respiratory illness); Dkt. 16-8 ¶ 10 (describing dust from oil trucks triggering asthma).

*Healthdyne, Inc.*, 582 F. Supp. 846, 848 (D. Colo. 1984) (citing *Spiegel v. City of Houston,* 636 F.2d 997 (5th Cir.1981)). However, Citizen Groups have offered substantial evidence that this harm is already occurring.[21]

Respondents' arguments regarding the sufficiency of NEPA documentation are similarly unsupported. In particular, BLM's argument hinges on "tiering" to analysis that simply doesn't exist in the 2003 RMP/EIS. Dkt. 42 at 25. BLM recognizes an EIS-level plan amendment is required here precisely because "additional impacts may occur that previously were *not anticipated … or analyzed* [in the 2003 RMP/EIS]." 79 Fed. Reg. 10,548 (emphasis added).[22] When a plan level EIS fails to include the site-specific statement or analysis the agency is attempting to rely on, such tiering is unlawful. 40 C.F.R. § 1508.28. Here, BLM's "bureaucratic steamroller" is not just threatening to roll forward, it is doing so: BLM continues to approve drilling permits to horizontally drill and multi-stage fracture the Mancos Shale. *Sierra Club v. Marsh*, 872 F.2d 497, 504 (1st Cir. 1989). The agency's failure to comply with NEPA is sufficient to support a preliminary injunction. *See Colo. Wild,* 523 F. at 1221.[23]

Finally, BLM alleges that Citizen Groups delayed in seeking relief, thus undermining the irreparable injury in this case. Dkt. 42 at 25. But that alleged "delay" resulted from BLM's failure to make NEPA documentation for these APDs available to the public until only recently.[24] BLM cannot blame Citizen Groups for "delay" when it was BLM that withheld the

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[21] *See supra* n. 20.
[22] *See also Gold, et al*., 108 IBLA 231.
[23] *See also Comm. to Save the Rio Hondo v. Lucero*, 102 F.3d 445, 448–49 (10th Cir.1996) ("The injury of an increased risk of harm due to an agency's uninformed decision is precisely the type of injury the [NEPA] was designed to prevent.").
[24] *See* Dkt. 16-5 ¶ 11 (providing that NEPA documentation was not available online or in BLM's Reading Room); Dkt. 16-4 at 2 (providing that no public notice was given because "EAs for routine APDs do not generally require a public comment period…").

information that Citizen Groups needed to understand the actions BLM was approving and to document the irreparable harm that would result. *See King v. Innovation Books,* 976 F.2d 824, 831-32 (2d Cir. 1992) (delay in seeking preliminary relief excused where plaintiff sought information regarding the alleged unlawful conduct and objected to the conduct at issue).

## III. Environmental, Health, and Legal Harms Outweigh Purely Economic Harm

The environmental, health, and procedural harms faced by Citizen Groups strongly outweighs the purely economic injuries alleged by Respondents—which courts consistently recognize is not irreparable. *See Colo. Wild,* 523 F.Supp.2d at 1222.[25] These harms alone are sufficient to support a preliminary injunction. Respondents' generalized and speculative assertions in opposition are unpersuasive, claiming, for example, a preliminary injunction would threaten the availability of energy, jobs, taxes, and royalties. Dkt. 42 at 27-28; Dkt. 38-1 at 21-22. These overbroad claims do not undermine the urgent need for a preliminary injunction. All that is being requested here is a temporary suspension of the specific decisions at issue in this case so that this Court has time to reach the merits.

The claims of economic harm are also exaggerated. While Operators tout the economic benefits of oil and gas development, they ignore the uncertain, conditional nature of their drilling plans. *See, e.g.,* Dkt. 39 at 21 ("WPX *anticipates* drilling 27 wells in 2015," "*up to* seven wells planned for 2015" by Encana, and "four *currently planned* wells" by BP). API also recognizes that harm depends on "… assuming successful construction of an economically viable well."

[25] *See also Valley Cmty. Pres. Comm'n v. Mineta*, 373 F.3d 1078, 1086 (10th Cir. 2004) ("[F]inancial concerns alone generally do not outweigh environmental harm."); *San Luis Valley* 657 F.Supp.2d at 1242 (holding that "delay in drilling the exploratory wells, is not irreparable in that it can be compensated by money damages."); *Acierno v. New Castle Cnty.,* 40 F.3d 645, 653 (3d Cir. 1994) (recognizing that "[e]conomic loss does not constitute irreparable harm…"); *S. Fork Band*, 588 F.3d at 728 (holding temporary economic loss does not outweigh "the irreparable environmental harm threatened by this massive [mining] project.").

Dkt. 38-1 at 23. The number of wells that would actually be drilled is indeterminate, and the economic viability of such development remains unknown. Speculation about development activity is not a reasonable basis on which to deny preliminary relief.

Moreover, while Respondents trumpet the economic benefits of oil and gas development they fail to similarly acknowledge the economic costs to the environment and public health.[26] *See High Country*, 52 F. Supp. 3d at 1191 (holding BLM violated NEPA by considering only the economic benefits of coal mining without also considering social and environmental costs).[27]

Respondents also fail to recognize that the drilling authorizations at issue here are subject to compliance with NEPA and the protection of environmental resources.[28] Indeed, by statute, BLM is required to defer APD approval where it has not sufficiently completed the NEPA process. 30 U.S.C. § 226(p)(2)(A). Thus, any economic benefits that could ultimately be derived

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[26] For example, one such cost includes the contribution of Mancos Shale development to climate change. The *High Country* court identified the social cost of carbon protocol as a tool to quantify such contributions. 52 F. Supp. 3d at 1190. Applying this tool to production data from Mancos Shale wells already drilled, this results in annual environmental and health costs of $343,978 per well, or $82,210,742 in annual costs from the 239 wells challenged herein. Dkt. 42-6 at 8. Drilling activity would also emit methane, VOCs and particulates, all of which contribute to ozone and which the EPA estimates causes a number of health impacts, resulting in health costs of roughly $9,000,000. Respondents also fail to account for factors such as the direct economic value from the Park, which is $2,970,800 annually and which is threatened by Mancos Shale development.

[27] *See also* 43 Fed. Reg. 55,978, 55,984 (Nov. 29, 1978) (CEQ regulatory guidance requiring agencies to "analyze total energy costs, including possible hidden or indirect costs, and total energy benefits of proposed actions."); *Sierra Club v. Sigler,* 695 F.2d 957, 979 (5th Cir. 1983) (agency choosing to "trumpet" an action's benefits has a duty to disclose its costs).

[28] 43 C.F.R. § 3161.2 (requiring "all [oil and gas] operations be conducted in a manner which protects other natural resources and the environmental quality, protects life and property…"); 43 C.F.R. § 3162.1(a) ("The [oil and gas] operating rights owner or operator … shall comply with applicable laws and regulations;" including "conducting all operations in a manner … which protects other natural resources and environmental quality."). *See also Foundation on Economic Trends v. Heckler,* 756 F.2d 143, 155 (D.C. Cir.1985) (holding "it is well established that judicial power to enforce NEPA extends to private parties where non-federal action cannot lawfully begin or continue without the prior approval of a federal agency. Were such non-federal entities to act without the necessary federal approval, they obviously would be acting unlawfully and subject to injunction.").

from the challenged decisions are necessarily contingent upon BLM's NEPA compliance.[29] Here, any benefits from such approvals have resulted from BLM's unlawful decisionmaking processes. Congress intended for BLM to comply with NEPA *before* granting such approvals.

The balance strongly favors protection of the environment, public health, and compliance with federal law, not short-term economic benefits reaped only as a result of BLM's unlawful approvals. *See Amoco*, 480 U.S. at 545.

## IV. The Public's Interest in Protecting the Environment, Human Health, and in Lawful Decisionmaking Strongly Favors a Preliminary Injunction

The public interest in this case also strongly favors a preliminary injunction. *Colorado Wild v. U.S. Forest Serv.,* 299 F.Supp.2d 1184, 1190-91 (D. Colo. 2004). As above, Respondents choose to focus on broad national interests of energy independence and royalty payments, as well as hypothetical and unspecified "impairment that would be caused by a [project] disruption." Dkt. 39 at 22, Dkt. 42 at 28. However, courts have recognized that the nation's need for energy does not trump environmental protection. For example, in a case involving natural gas development on public lands, the District of Wyoming held:

> The Court is cognizant of the importance of mineral development to the economy of the State of Wyoming. Nevertheless, mineral resources should be developed responsibly, keeping in mind those other values that are so important to the people of Wyoming, such as preservation of Wyoming's unique natural heritage and lifestyle. The purpose of NEPA … is to require agencies … to take notice of these values as an integral part of the decisionmaking process.

*Wyo. Outdoor Council v. U.S. Army Corps of Eng'rs*, 351 F.Supp.2d 1232, 1260 (D.Wyo. 2005).

BLM also asks this Court to overlook the public's interest in having government officials act in accordance with the law, rationalizing that BLM's "non-compliance [with federal law]

[29] This is consistent with ultimate relief, where the presumed remedy in cases that violate NEPA is vacatur. *See* 5 U.S.C. § 706(2)(A) ("The reviewing court *shall* … hold unlawful and set aside [arbitrary] agency action…"); *High Country*, 52 F. Supp. 3d at 1200 (accord).

would be minimal." Dkt. 42 at 29.[30] Given the agency's approval 239 drilling permits in the absence of a required EIS-level plan amendment, Citizens Groups fail to see how such non-compliance is minimal. Here, the public interest in lawful decisionmaking weights heavily in favor of an injunction.

## V. Requiring Citizen Groups to Pay a Substantial Bond Would Chill or Preclude Access to the Courts and Frustrate NEPA's Purposes

Under Tenth Circuit precedent, "[o]rdinarily, where a party is seeking to vindicate the public interest served by NEPA, a minimal bond amount should be considered." *Davis v. Mineta*, 302 F.3d 1104, 1126 (10th Cir. 2002). Because Plaintiffs here are seeking to "vindicate the public interest served by NEPA," a nominal or no bond is appropriate. *Id.*; *Colo. Wild,* 523 F. Supp. 2d at 1230-31. BLM and API do not argue otherwise. Operators claim that Plaintiffs should be required to post a $10 million bond, but fail to even acknowledge this Circuit's settled precedent, and offer no reason to depart from that case law.

Plaintiffs are not-for-profit groups whose missions involve protection of the environment and public health and vindication of the public interest; none of the plaintiffs has any financial interest in the outcome of this case.[31] What Operators are seeking would preclude their litigation of cases like this. Operators' proposed bond is far larger than the entire annual budgets of three of the four plaintiffs, and exceeds the budget of the fourth plaintiff, NRDC, for this type of litigation.[32] If substantial bonds were regularly required from these groups in order to obtain preliminary relief, they would be precluded from seeking such relief—even when it would

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[30] *Cf. Seattle Audubon Society v. Evans,* 771 F. Supp. 1081, 1096 (W.D. Wash. 1991) (holding compliance with environmental laws "invokes public interest of the highest order); *Sierra Club v. U. S. Dep't Agriculture,* 841 F. Supp. 2d 349, 360 (D.D.C. 2012) (recognizing the "public has an undeniable interest in the [agency's] compliance with NEPA.").

[31] *See* Carol Davis Decl. ¶¶ 3, 5 (Exhibit 19); Daniel Olson Decl. ¶¶ 3, 5 (Exhibit 20); John Horning Decl. ¶ 8 (Exhibit 21); Sharon Buccino Decl. ¶¶ 4, 6, 14 (Exhibit 22).

[32] *See* Davis Decl. ¶ 6; Olson Decl. ¶6; Horning Decl. ¶¶ 3-5; Buccino Decl. ¶ 12.

otherwise be found appropriate by a court.[33] Because a preliminary injunction is often necessary to prevent the very harm that necessitated the suit, until a court can rule, denial of preliminary relief would deny Plaintiffs effective access to judicial review of illegal agency actions. As the Tenth Circuit implicitly recognized in *Davis*, such a result would defeat NEPA's purpose.

Operators have no standing to seek a bond to cover their possible injuries in any event. Rule 65(c) only permits a bond to cover "costs and damages sustained by a party found to have been wrongfully *enjoined or restrained*." Fed. R. Civ. P. 65(c) (emphasis added). Citizen Groups did not sue, and do not seek to enjoin, Operators. Rather, Citizen Groups request a preliminary injunction against BLM to temporarily suspend its unlawful approvals of drilling permits. Such an injunction might indirectly affect Operators, but they would not be parties enjoined and therefore have no right to seek a bond. *See Powelton Civic Home Owners' Ass'n v. Dep't of Hous. & Urban Dev.,* 284 F. Supp. 809, 840 (E.D. Pa. 1968) (holding that "[t]he protection of the bond" only extends to those entities actually enjoined by the court's order, even to the exclusion of another party that will be affected by the injunction.)[34]

## CONCLUSION

Based on the above, Citizen Groups respectfully request an order that will maintain the status quo until this Court can determine the merits of the case. Citizen Groups ask this Court to order BLM to temporarily suspend all APD approvals challenged in this case, and also to enjoin Federal Defendants from continuing to approve APDs for horizontal drilling and multi-stage hydraulic fracturing in the Mancos Shale. This injunction will preserve the status quo so that if Citizen Groups prevail on the merits, their victory will have meaning.

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[33] *See* Davis Decl. ¶¶ 5-8; Olson Decl. ¶¶ 5-8; Horning Decl. ¶¶ 8-10; Buccino Decl. ¶¶ 10-14.
[34] *See also Ungar v. Arafat*, 634 F.3d 46, 53 (1st Cir. 2011) (holding that a non-party that is not subject to the injunction lacked standing to seek a bond); *Cmwlth. of P.R. v. Price Comm'n,* 342 F. Supp. 1311, 1312-13 (D.P.R. 1972) (accord).

RESPECTFULLY SUBMITTED this 8th day of June, 2015.

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

I hereby certify that on June 8, 2015, I electronically filed the foregoing PLAINTIFFS' REPLY TO FEDERAL DEFENDANTS, WPX ENERGY, *ET AL*., AND AMERICAN PETROLEUM INSTITUTE'S OPPOSITION TO PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION with the Clerk of the Court via the CM/ECF system, which will send notification of such filing to all counsel of record.

/s/ Kyle Tisdel
Western Environmental Law Center
Counsel for Plaintiffs