IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO

Civil Action No. 1:19-cv-1920-RBJ

WILDEARTH GUARDIANS, *et al*.,

Petitioners,

v.

DAVID L. BERNHARDT, *et al*.,

Federal Respondents,

and

MOUNTAIN COAL COMPANY, LLC,

Intervenor.

CONSERVATION GROUPS' CONSOLIDATED REPLY BRIEF

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GLOSSARY

BLM	Bureau of Land Management
CEQ	Council on Environmental Quality
CO_2e	Carbon Dioxide Equivalent
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
MLA	Mineral Leasing Act
MSHA	Mine Safety and Health Administration
NEPA	National Environmental Policy Act
OSM	Office of Surface Mining Reclamation and Enforcement
ROD	Record of Decision
SMCRA	Surface Mining Control and Reclamation Act
SFEIS	Supplemental Final Environmental Impact Statement

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Exhibit A Federal Defendants' Opposition Brief, *High Country Conservation Advocates v. U.S. Forest Serv.*, 333 F. Supp. 3d 1107 (D. Colo. 2018) (1:17-cv-03025-PAB), 2018 WL 7635237

Exhibit B Mountain Coal Company's Brief on the Merits, *High Country Conservation Advocates v. U.S. Forest Serv.*, 333 F. Supp. 3d 1107 (D. Colo. 2018) (1:17-cv-03025-PAB), ECF No. 52

INTRODUCTION

In approving the Mining Plan that authorizes Arch Coal (Arch) to expand the West Elk Mine into the Sunset Roadless Area, the U.S. Office of Surface Mining Control Reclamation and Enforcement (OSM)[1] violated the National Environmental Policy Act (NEPA) by: (1) failing to consider a reasonable alternative that would reduce the mine's climate harms; (2) failing to disclose the cumulative climate impacts of the West Elk Mine along with other past, present, and foreseeable OSM coal mine approvals in the region; and (3) failing to address impacts to newly-identified perennial waters within the mining plan area. OSM's authorization allows road-building, methane drainage well construction, and coal mining activities in this largely undeveloped mountain forest, and will result in more than 57 million tons of carbon dioxide and methane emissions that will exacerbate the climate crisis. Op. Br. at 1.

First, although its decision authorized Arch to mine publicly owned coal beneath publicly owned lands, OSM failed to consider a reasonable alternative that would require Arch to mitigate the climate impacts of the largest industrial source of methane in Colorado by burning, or flaring, those emissions. In response, OSM concedes that its Record of Decision (ROD) misstated the findings of the Bureau of Land Management (BLM) and the Forest Service, on which OSM relied. OSM also offers a post-hoc rationale that this Court can easily reject, as OSM never raised this justification in its Record of Decision. OSM's improper dodge completes a long-running agency shell game in which each in a series of federal agencies punted consideration of a

[1] Federal Defendants are collectively referred to as OSM throughout this brief.

methane flaring alternative to a different agency at a different time. But OSM is the end of the line, and the shell game must end.

Second, OSM violated NEPA by refusing to consider the cumulative climate impact of the West Elk Mine when added to other past, present, and reasonably foreseeable OSM coal mine approvals in the region. In response, OSM does not challenge that other OSM approvals are foreseeable or that NEPA requires a cumulative climate analysis, and does not even attempt to distinguish recent judicial precedent that dictates where an agency's other actions in the region are foreseeable, the cumulative climate impacts of those projects must be discussed.

Third, OSM attempts to deflect its failure to take a 'hard look' at impacts to perennial water resources by mischaracterizing this claim as addressing a mere reclassification of streams. But prior agencies' reviews failed to study impacts to perennial streams within the project area based on the incorrect determination that there were none. Now that OSM has corrected that error, NEPA commands that OSM study these impacts. Because none of OSM's or Arch's arguments for excusing OSM's NEPA violations have merit, the decision must be set aside.

ARGUMENT

I. OSM'S AND ARCH'S RES JUDICATA, COLLATERAL ESTOPPEL, AND WAIVER ARGUMENTS LACK MERIT.

A. This Litigation Is Not a Collateral Attack on BLM's Leasing Decision.

OSM and Arch argue that two of Conservation Groups' claims are barred by res judicata (or claim preclusion), and collateral estoppel (or issue preclusion), but neither claim preclusion or issue preclusion are applicable here. Fundamentally, Conservation Groups do not seek to relitigate their ongoing challenge to BLM's leasing decision, currently on appeal to the Tenth

Circuit, but instead challenge *OSM*'s separate decision to approve the Mining Plan for the West Elk expansion. Complaint (ECF No. 1) at ¶¶ 132, 141.

While "[t]he doctrines of res judicata, or claim preclusion, and collateral estoppel, or issue preclusion, are closely related," *SIL-FLO, Inc. v. SFHC, Inc.*, 917 F.2d 1507, 1520 (10th Cir. 1990), they are distinct when it comes to the Court's evaluation of whether either has occurred to bar particular claims.[2] "Under res judicata, a final judgment on the merits of an action precludes the parties or their privies from relitigating issues that were or could have been raised in that action. Under collateral estoppel, once a court has decided an issue of fact or law necessary to its judgment, that decision may preclude relitigation of the issue in a suit on a different cause of action involving a party to the first case." *Id.*

Res judicata, or claim preclusion, requires "an identity of parties and of claims and a final judgment on the merits." *Id.* The party asserting claim preclusion "must carry the burden of establishing all necessary elements." *Taylor v. Sturgell*, 553 U.S. 880, 907 (2008). Here, there is neither "identity of the parties" or "identity of the cause of action." *MACTEC, Inc. v. Gorelick*, 427 F.3d 821, 831 (10th Cir. 2005). First, there is no identity of parties because BLM, the Forest Service, and their officials were defendants in the prior action, *High Country Conservation Advocates v. U.S. Forest Service*, 333 F. Supp. 3d 1107 (D. Colo. 2018) ("*High Country III"*), while OSM and its officials are defendants here. *See SIL-FLO, Inc.*, 917 F.2d at 1520

[2] OSM raises the doctrines of res judicata (claim preclusion) and issue preclusion with respect to Conservation Groups' methane flaring alternative and cumulative climate claims. OSM Resp. at 14–15 (ECF No. 30). OSM, however, offers no specific arguments related to the methane flaring alternative, *id*. at 15–22, and only specifically addresses claim preclusion for the cumulative climate argument. *Id*. at 22–23. Arch raises claim preclusion only with respect to Conservation Groups' cumulative climate claim. Arch Resp. at 23–24 (ECF No. 29).

(recognizing that claim preclusion requires "identity of parties"). Second, this suit and the prior litigation are based on different causes of action. "[A] cause of action includes all claims or legal theories of recovery that arise from the same transaction, event, or occurrence." *Nwosun v. Gen. Mills Rests., Inc*., 124 F.3d 1255, 1257 (10th Cir. 1997) (citations omitted). Conservation Groups' claims against OSM's Mining Plan approval do not arise from the BLM leasing decision, which was the transaction or event at issue in the leasing case. Specifically, the claims at issue here relate to *OSM's* failure to comply with NEPA's alternatives and hard look requirements before approving the *Mining Plan*, not to *BLM's* deficient NEPA analysis underlying its approval of the *leasing decision*. Moreover, Conservation Groups could not have brought the claims in this case in the prior leasing litigation because at that time, OSM had not yet approved the Mining Plan. *See Ohio Valley Envtl. Coal. v. Aracoma Coal Co*., 556 F.3d 177, 211 (4th Cir. 2009) ("[T]he fact that the two suits involve challenges to very similar courses of conduct does not matter; a prior judgment 'cannot be given the effect of extinguishing claims which did not even then exist.'" (quoting *Lawlor v. Nat'l Screen Serv. Corp*., 349 U.S. 322, 328 (1955)).

Similarly, issue preclusion is inapplicable because the issues in this case are not the same as those raised in the leasing case against BLM and the Forest Service. OSM argues that the underlying issue in both cases is the "inadequacy of the Leasing SFEIS." OSM Resp. at 15 (ECF No. 30). But while the issue of whether the Leasing SFEIS fully analyzed reasonable alternatives and the environmental impacts of *BLM's leasing decision* was at issue in the prior litigation, here the issue is whether *OSM* complied with NEPA when it failed to examine a range of reasonable alternatives and take a hard look at mining's environmental impacts before issuing *its* separate

decision to approve the *Mining Plan*. When the leasing case was being litigated in the District Court, OSM had not yet issued its Mining Plan decision. Thus, whether *OSM* needed to assess a methane flaring alternative or analyze the cumulative climate impacts of other actions before approving the Mining Plan was not at issue in the leasing litigation, which was predicated on BLM's decision to authorize the West Elk coal lease.

OSM's and Arch's assertion that Conservation Groups' methane alternative claim is barred by principles of res judicata, OSM Resp. at 14, 22–23; Arch Resp. at 23–24, mischaracterizes the nature of Conservation Groups' claim. Conservation Groups are challenging *OSM's* failure to comply with NEPA's requirement to consider all reasonable alternatives. Even if BLM and the Forest Service Leasing SFEIS excuses for not considering such an alternative at an earlier phase of the project were legally valid – and they are not – the *High Country III* decision issued by this Court in 2018 merely sanctioned a decision by BLM and the Forest Service to delay the required NEPA analysis until more information was available at the Mine Plan stage now at issue. 333 F. Supp. 3d at 1126 (upholding agencies' determination that "detailed consideration of whether methane flaring should be used in the West Elk Mine would be more appropriate at a later date because it 'requires detailed engineering and economic considerations' available at later stages in the process"); *accord* Op. Br. at 22–23 n.14 (ECF No. 26); OSM Resp. at 11. BLM specifically argued in the prior leasing litigation that "requiring a specific mitigation measure at the leasing stage would not be prudent due to underground mine safety issues that would only become known at the mining stage." Federal Defendants' Opposition Brief ("Fed. Leasing Br.") at 34, *High Country III*, 333 F. Supp. 3d 1107 (1:17-cv-

03025-PAB), 2018 WL 7635237 (internal citations omitted).[3] Similarly, Arch argued in the leasing litigation that "the Agencies included stipulations that will allow for methane flaring, require further study, and *permit Plaintiffs to challenge a future analysis regarding methane flaring at a later permitting stage*." Mountain Coal Company's Brief on the Merits ("Arch Leasing Br.") at 36, *High Country III*, 333 F. Supp. 3d 1107 (1:17-cv-03025-PAB), ECF No. 52 (emphasis added). The BLM and Forest Service Leasing SFEIS states that "[t]hese engineering designs would become part of the subsequent State or OSM[] mine permitting process and [Mine Safety Health Administration] ventilation plan process." Leasing SFEIS (AR 000264). The claim presented in this case is not, as OSM asserts, "directed at the adequacy of the Leasing SFEIS," OSM Resp. at 14, but instead at OSM's flawed Record of Decision and OSM's failure to evaluate the reasonable flaring alternative put forward by Conservation Groups in comments to OSM. Complaint at ¶¶ 127–32.

As to OSM's failure to take the necessary 'hard look' at cumulative climate impacts, Conservation Groups have identified specific OSM actions post-dating BLM's leasing decision that will cumulatively impact climate when added to the impacts of the West Elk expansion, and which NEPA required OSM to evaluate as part of its cumulative impact analysis for the Mining Plan. Op. Br. (ECF No. 26) at 31 n.18; Complaint (ECF No. 1) ¶ 111. Hence, neither claim preclusion nor issue preclusion are applicable. OSM has an independent obligation to comply with NEPA and cannot insulate its Mining Plan decision from judicial review simply by adopting BLM's Leasing SFEIS.

[3] For the Court's convenience, OSM's and Arch's briefs from the *High Country III* leasing litigation are attached as Exhibits 1 and 2, respectively.

B. Conservation Groups Did Not Waive Their NEPA Claims.

OSM and Arch argue that Conservation Groups waived their NEPA claims by not raising them with BLM at the leasing stage. OSM Resp. at 12–14, 22–23; Arch Resp. at 17–18, 22–23. This argument fails because: (1) no statutory exhaustion requirements apply to NEPA claims, (2) BLM's distinct leasing process was completed prior to OSM's Mining Plan review, and (3) OSM provided *no* opportunity for Conservation Groups to raise their concerns during OSM's internal NEPA process for the Mining Plan approval.

NEPA does not contain a statutory exhaustion requirement necessary to create a jurisdictional exhaustion requirement. *See Darby v. Cisneros*, 509 U.S. 137, 154 (1993). While several courts have recognized a judicially-created exhaustion doctrine for NEPA claims when the plaintiff did not participate in NEPA's administrative process, *see*, *e.g.*, *DOT v. Public Citizen*, 541 U.S. 752, 764 (2004), judicially-created exhaustion requirements for NEPA claims are prudential rather than jurisdictional, and subject to several exceptions. *Forest Guardians v. U.S. Forest Serv.*, 641 F.3d 423, 431–432 (10th Cir. 2011). Directly applicable here, these exceptions "include when the plaintiff was not properly notified of the administrative remedies available to it and/or was not provided a meaningful opportunity to participate in the administrative process." *Diné CARE v. Klein*, 676 F. Supp. 2d 1198, 1210–11 (D. Colo. 2009) (citations omitted). For example, the District of Colorado has held that administrative exhaustion was not required where environmental plaintiffs alleged that OSM failed to provide "adequate notice to the public of OSM's NEPA process and decisions" for a coal mining permit or "a meaningful opportunity for the public to participate in this process." *Id.* at 1211. Here, because there was no public process or opportunity to comment prior to OSM's Mining Plan decision,

this exception applies.

OSM and Arch argue that the "appropriate time" for Conservation Groups to have raised issues related to cumulative climate impacts was "during the public comment period on the draft supplemental EIS." OSM Resp. (ECF No. 30) at 23; *see also* Arch Resp. (ECF No. 29) at 22–23. Arch similarly argues that Conservation Groups waived their arguments regarding the definition of "economic feasibility" for a methane flaring alternative by not raising them during the lease modification process. Arch Resp. at 22–23. But neither OSM nor Arch provide support for their argument that a party may be required to raise issues to one agency regarding a particular agency action in order to preserve a subsequent challenge to a later, independent action by a different agency.

Moreover, Conservation Groups could not have raised these issues at the leasing stage because they depend on factors or information developed after BLM issued the leasing decision. For example, the methane alternative claim is premised on the notion that, as argued by BLM and the Forest Service in *High Country III*, the additional time between the leasing decision and the Mining Plan decision would allow OSM to develop more detailed information that was not available to BLM and the Forest Service. Fed. Leasing Br. at 34; Arch Leasing Br. at 36–37 & n.10. Similarly, the cumulative climate issue raised by Conservation Groups relates to OSM's failure to address the cumulative climate impact of *its* past, present, and reasonably future federal coal approvals, and Conservation Groups have pointed to at least two OSM decisions (in addition to the challenged action) that post-date BLM's leasing decision. Op. Br. at 31 n.18; Complaint ¶ 111.

Finally, Arch notes that Conservation Groups sent OSM an unsolicited letter after BLM issued its leasing decision and prior to OSM's decision to approve the Mining Plan. Arch Resp. at 25. But while Conservation Groups weighed in on several general issues related to OSM's NEPA process, Conservation Groups Letter to OSM (June 1, 2018) (AR003316), this letter was written without the benefit of any documents related to OSM's NEPA review or final decision because OSM made no such information public prior to finalizing its decision to approve the Mining Plan. Conservation Groups fully expected OSM to provide the public with draft NEPA documents and a formal opportunity to comment prior to finalizing its decision, as has been the agency's customary practice ever since this Court found a "clear violation of NEPA" when "OSM made no effort whatsoever to solicit public involvement" before approving a mining plan. *WildEarth Guardians v. OSMRE*, 104 F. Supp. 3d 1208, 1224 (D. Col. 2015), vacated as moot, 652 Fed. Appx. 717 (10th Cir. 2016); *see also* Op. Br. at 12 n.9. OSM, however, provided no formal public comment process prior to approving the Mining Plan. In similar circumstances, the District of Colorado has refused to dismiss claims as waived where plaintiffs had no notice or opportunity to comment on OSM's mining plan decisions. *Diné CARE*, 676 F. Supp. 2d at 1211; *see also WildEarth Guardians v. OSMRE*, Nos. CV 14-13-BLG-SPW, CV 14-103-BLG-SPW, 2016 WL 259285, at *2 (D. Mont. Jan. 21, 2016) (accord in the context of a mining plan challenge).

II. OSM FAILED TO CONSIDER A REASONABLE METHANE FLARING ALTERNATIVE.

OSM failed to comply with the "heart" of the NEPA process by refusing to analyze a mandatory methane flaring alternative that would reduce the climate impacts of the West Elk

Mine, which is Colorado's largest industrial source of methane. 40 C.F.R. § 1502.14; Conservation Groups Leasing EIS Comment Letter at 13 tbl. 1 (July 24, 2017) (FSLeasingII-0038931). Although OSM and Arch assert that the agency can satisfy NEPA's procedural obligations merely by "understanding" the benefit of the methane reduction available without ever quantifying what reduction is achievable, OSM Resp. at 18 n.4; Arch Resp. at 15–16, they ignore NEPA's clear mandate that federal agencies "[r]igorously explore and objectively evaluate *all* reasonable alternatives." 40 C.F.R. § 1502.14(a) (emphasis added).[4] Here, a mandatory methane flaring alternative meets the Tenth Circuit's framework for analyzing NEPA alternative claims because it: (1) falls within OSM's statutory authority to impose conditions as part of approving the mine plan; and (2) meets the purpose and need of the project by allowing Arch to mine the same amount of coal as authorized under OSM's preferred alternative while mitigating some of the climate harms the mine imposes on the public. Op. Br. at 20–21; *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 708–09 (10th Cir. 2009). Moreover, a mandatory flaring alternative does not fall under any of the recognized exceptions that might allow OSM to avoid consideration of an otherwise reasonable alternative: it is not too remote, speculative, impractical, or ineffective, and it is significantly distinguishable from other alternatives OSM considered. *Id.*

OSM's failure to consider a mandatory flaring alternative, which would require the state's largest industrial source of methane to reduce those emissions while mining the same amount of coal allowed under OSM's preferred alternative, violates NEPA. OSM's failure

[4] Arch's assertion that this is "fundamentally not a NEPA claim," Arch Resp. at 3, is baseless.

deprived the public and decisionmakers of the opportunity to compare two competing visions for use of public lands and how those lands impact the most pressing environmental issue of our time: climate change. NEPA requires agencies to "present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. As this Court previously explained, "[t]he existence of a viable but unexamined alternative renders an alternatives analysis, and the [NEPA review] which relies upon it, inadequate." *Diné Citizens Against Ruining our Env't v. Klein* (*Diné Citizens*), 747 F. Supp. 2d 1234, 1256 (D. Colo. 2010).

OSM and Arch fail to demonstrate that a mandatory methane flaring alternative is unreasonable under this Court's controlling framework. OSM's Record of Decision contained only a single paragraph on methane flaring, which is directly contradicted by evidence in the record. *Id.* In that paragraph, OSM *offered only one excuse* for not considering a methane flaring alternative, stating that OSM "agree[s] with the [Forest Service] and the BLM's determination that this alternative is not technically or economically feasible (SFEIS Section 2.3.7.5)." OSM ROD (AR 00034–35). But both OSM and Arch now admit that neither the Forest Service nor BLM in fact reached that conclusion. OSM Resp. at 21; Arch Resp. at 15. As OSM now concedes, "*[t]he Service and BLM did not make this finding.*" OSM Resp. at 21 (emphasis added). *See* Arch Resp. at 15 ("The Conservation Groups correctly state that SFEIS Section 2.3.7.5 *did not affirmatively state that flaring was infeasible*.") (emphasis added). OSM and Arch have thus disavowed OSM's only record justification for failing to consider a methane flaring alternative.

OSM's defense must rely on that record justification, not on post-hoc rationalizations of counsel. *Utahns for Better Transp. v. U.S. Dep't of Transp.*, 305 F.3d 1152, 1164–65 (10th Cir. 2002). But the SFEIS prepared by the Forest Service and BLM, and on which OSM relied, expressly made no such findings regarding the technical or economic feasibility of methane flaring. Neither Arch nor OSM square OSM's assertion that BLM and the Forest Service concluded methane flaring was infeasible or uneconomic with BLM and the Forest Service's explicitly contrary statement from the Leasing SFEIS that "*[w]e do not speculate whether [flaring] is infeasible or uneconomical.*" Leasing SFEIS (AR 001180) (emphasis added). The SFEIS explained that the "engineering designs" necessary to evaluate a methane flaring alternative "would become part of the subsequent State of OSM[] mine permitting process and MSHA ventilation plan process," Leasing SFEIS (AR 000264), and the Forest Service's Record of Decision stated that consideration of flaring "requires detailed engineering and economic considerations that *would occur later*." Forest Service ROD (AR 003390). Given that the statements in OSM's Record of Decision directly contradict those in BLM's and the Forest Service's SFEIS and Record of Decision, OSM's claim that it did not "misrepresent[] the conclusions of the Leasing SFEIS" rings hollow. As OSM specifically acknowledged, "it is true the agencies did not make the noted statement." OSM Resp. at 21. OSM's decision must be set aside because the agency has "offered an explanation for its decision that runs counter to the evidence before the agency." *Colo. Envtl. Coal. v. Dombeck*, 185 F.3d 1162, 1167 (10th Cir. 1999).

With little in the record to support its argument, OSM asserts for the first time in briefing that methane flaring would not "accomplish the purpose or objective" of the project. OSM Resp.

at 15. As an initial matter, this Court must reject this post-hoc argument, as OSM never asserted in the record that methane flaring would not accomplish the purpose of the project. "We consider only the agency's reasoning at the time of decisionmaking, excluding post-hoc rationalization concocted by counsel in briefs or argument." *Richardson*, 565 F.3d at 704; *accord Utahns for Better Transp.*, 305 F.3d at 1164–65; *High Country Conservation Advocates v. United States Forest Serv*. ("*High Country I*"), 52 F. Supp. 3d 1174, 1192 (D. Colo. 2014) ("Any post-hoc rationalizations provided by the agencies in this litigation are irrelevant to the question of whether the agencies complied with NEPA at the time they made their respective decisions."). Moreover, OSM's response tellingly fails to cite the project's stated purpose and need, the touchstone for any court review of alternatives. But OSM's Record of Decision states that "the purpose of the Proposed Action is to evaluate the environmental effects of coal mining" and that the "need for this action is to provide [Arch] the opportunity to mine the Federal coal obtained." OSM ROD (AR 000019); Op. Br. at 20. Both are satisfied by a mandatory flaring alternative. First, evaluation of a mandatory flaring alternative would fulfill the project purpose because it would provide the public and decision-makers with the missing comparison of greenhouse gas emissions between a mandatory flaring alternative and the preferred alternative, in which the State's largest industrial source of methane is free to vent that methane directly into the atmosphere.[5] Second, the alternative would meet the project's need by reducing climate harms

[5] While Arch asserts that OSM and federal agencies "know exactly the environmental impacts of flaring or not flaring [coal mine methane]," Arch Resp. at 16, this is not true. No federal agency has, for example, quantified the greenhouse gas emission differences between the preferred alternative and one in which the methane emitted from the mine's methane drainage wells is flared, nor provided any analysis as to what extent such a reduction would help lessen or avoid the damaging effects of climate change. The alternative would flare only a portion of the mine's

while still allowing Arch "the opportunity to mine the Federal coal obtained." *Id. Accord* Op. Br. at 20.

In its brief, OSM attempts to shoehorn "concerns" about safety and economics, and supposed "uncertainty" as to flaring's effectiveness, under OSM's post-hoc purpose and need argument. OSM Resp. at 15. But the record does not support this notion. Instead, the record confirms that BLM and the Forest Service expressly *did not* conclude methane flaring was unsafe, uneconomic, or ineffective. With regard to effectiveness, OSM notes that a flare "may need" to be supplemented with fuel to burn the methane, OSM Resp. at 16, but the record does not indicate that any additional fuel would negate the greenhouse gas reductions achieved via flaring, or suggest that the mitigation would be ineffective. The argument also ignores the fact that OSM elsewhere accepts that flaring reduces the global warming potential of methane up to 87 percent. OSM Resp. at 18 n.3; ROD at 22. Rather than questioning flaring's effectiveness, the

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methane – that emitted via the methane drainage wells – and for those emissions would reduce the global warming potential of that portion of the mine's methane by up to 87% on a global warming potential basis. But NEPA places the burden of such analysis on the agency in order to provide "accurate scientific analysis," 40 C.F.R. § 1500.1(b), and leaving it to the public to conduct such a comparison violates NEPA's mandates to "take a 'hard look' at how the choices before [the agency] affect the environment, and then to place [the agency's] conclusions before the public." *Oregon Natural Desert Ass'n v. Bureau of Land Mgmt*. ("*ONDA*"), 625 F.3d 1092, 1099 (9th Cir. 2010). *Accord Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 813 (9th Cir. 2005) (NEPA requires federal agencies to "present complete and accurate information to decision-makers and to the public to allow an informed comparison of the alternatives."); *Ill. Commerce Comm'n v. Interstate Commerce Comm'n*, 848 F.2d 1246, 1258 (D.C. Cir. 1988) ("The Commission may not delegate to parties and intervenors its own responsibility to independently investigate and assess the environmental impact of the proposal before it.")

Record of Decision asserts that OSM "understands the environmental benefit that would result from this mitigation." ROD at 22 (AR000035).[6]

As to safety, OSM's Record of Decision asserts that the agency need not even consider such an issue because it is "not environmental in scope and thus do[es] not require additional environmental analysis." *Id.* NEPA requires OSM to consider the "ecological . . . aesthetic, historic, cultural, economic, social, [and] health," effects of its actions, "whether direct, indirect, or cumulative." 40 C.F.R. § 1508.8. And while OSM notes in its response brief that mine safety is a key factor in removing methane from coal mines, as it no doubt is, OSM cites a 2016 Colorado Energy Office report that concluded that a "properly engineered, manufactured, and operated flare with redundant safety systems can fully address [safety] concerns." OSM Resp. at 7 n.1 (citing Colorado Energy Office, Methane Market Research Report (AR 003244–45)). OSM also ignores that as early as 2009 Arch concluded that "it may be feasible to design and implement a safe flaring system." Leasing SFEIS (AR 000528, 000543). Finally, the agency with expertise in mine safety, the Mine Safety Health Administration (MSHA), has *not* evaluated the safety of a flaring proposal because Arch has never submitted one to MSHA or the state for review. OSM ROD (AR 000035).[7]

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[6] Citing to Arch's brief instead of the record, OSM also now asserts that the overburden is not as deep for the proposed expansion area as over the existing mine, and that as such it may produce less methane. OSM Resp. at 16–17 (citing Arch Resp. at 11). OSM made no such finding in its Record of Decision, may not rely on a post-hoc argument of other counsel, and did not claim methane estimates in the Leasing SFEIS should be altered based on supposedly reduced overburden.

[7] Arch misreads Conservation Groups' explanation that under D.C. Circuit precedent MSHA has no authority to "unilaterally impose" flaring (or any other condition) in approving a ventilation plan, Op. Br. at 25, as stating that MSHA ventilation plans are "unenforceable." Arch Resp. at 19 n.5. Conservation Groups make no such point.

Although OSM asserted in its brief that there is "uncertainty" as to whether MSHA would approve a flaring proposal, OSM Resp. at 15, Arch Resp. at 19, neither OSM nor Arch cite any authority that allows OSM to refuse to consider a reasonable alternative based on Arch's self-serving decision not to submit a flaring plan to MSHA. *See* Op. Br. at 25. Unlike this Court's decision in *WildEarth Guardians v. U.S. Forest Serv.*, 828 F. Supp. 2d 1223 (D. Colo. 2011); OSM Resp. at 6–7, Arch Resp. at 7–8, here there has been no consultation with MSHA regarding whether it would approve a flare at West Elk. In the prior decision, the District Court declined to set aside the Forest Service's refusal to consider a methane flaring alternative at the West Elk Mine because the Forest Service actually consulted with MSHA, and MSHA concluded that, at that time, there were still "too many questions remaining" regarding mine safety. *WildEarth Guardians*, 828 F. Supp. 2d at 1237. The Court explained that its reasoning rested on that record justification – notably absent here – in which MSHA explained in a 2008 letter to the Forest Service that a flare would first need to be "tested in a coal mining methane flaring situation in which no miners are exposed." *Id.* at 1232. But the particular factor highlighted by MSHA in 2008 no longer exists, since the closed Elk Creek coal mine located across the highway from West Elk has been safely flaring methane since 2012. Colorado Energy Office, Methane Market Research Report (AR 003249). *See* Op. Br. at 18–19 (noting additional recent evidence demonstrating that flaring can be accomplished safely).

Finally, although OSM's Record of Decision references a 2018 economic analysis commissioned by Arch, that document was not prepared for OSM's analysis, was not made available for public or agency comment, and OSM neither cites the report's conclusion nor provides any information about the analysis. NEPA regulations explain that "[a]ccurate scientific

analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b). The analysis of impacts – including analysis and disclosure of the shortcomings of the assumptions relied upon by the agency – must be found in the NEPA document itself, not buried somewhere in the administrative record. As the Ninth Circuit has stated, "[w]e do not find adequate support for the Forest Service's decision in its argument that the 3,000 page administrative record contains supporting data. The EA contains virtually no references to any material in support of or in opposition to its conclusions. That is where the Forest Service's defense of its position must be found." *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1214 (9th Cir. 1998); *see also Massachusetts v. Watt*, 716 F.2d 946, 951 (1st Cir. 1983) ("[U]nless a document has been publicly circulated and available for public comment, it does not satisfy NEPA's EIS requirements."). Here, the record does not show when, if ever, OSM even reviewed the report in issuing its decision, or if the agency instead merely relied on BLM's summary of it. The Record of Decision notes that Arch's report was "submitted to BLM," and that BLM in turn "reviewed the report and provided OSMRE *the summary of that review which OSMRE has considered*." OSM ROD (AR 00035) (emphasis added).[8] The Record of Decision states that OSM "has independently reviewed," without providing any additional information as to whether that independent review was of the report itself or the issue generally; OSM's Record of Decision does not cite any pages in the report or provide any potentially relevant information, such as its methodology or scope, who prepared it, who reviewed it, nor

[8] Conservation Groups noted the record was unclear on whether OSM actually reviewed the report prior to issuing its Record of Decision, Op. Br., at 25 n.16, but neither Arch nor OSM addressed the issue and neither cite anywhere in the record where OSM actually reviewed the report itself as opposed to BLM's summary of the report's conclusions.

even basic information such as the report's title, date, or length. OSM ROD (AR 0035).[9] And although Arch's report uses different estimates of some of the relevant data from the separate economic report prepared by Raven Ridge, OSM Resp. at 19–20, OSM's Record of Decision does not note those differences and does not provide any critique of the Raven Ridge report. While OSM asserts Conservation Groups do not challenge the 2018 report prepared by Arch, OSM Resp. at 18 n.4, that report was not subject to public comment, nor even agency review of the draft report, and the Tenth Circuit has made clear that "[e]nvironmental study is for the agency to conduct in the field, not for the judiciary to construct in the courtroom." *Sierra Club v. Hodel*, 848 F.2d 1068, 1096 (10th Cir. 1988).

Finally, OSM is not due "especially strong" deference from this Court on matters of "technical and scientific expertise" on methane flaring, OSM Resp. at 3, 22, because OSM has not exercised any such expertise. Courts "cannot defer" to agency records, like OSM's Record of Decision here, that provide little more than "unanalyzed, conclusory assertion[s]." *Richardson*, 565 F.3d at 707. As noted above, OSM's Record of Decision asserts that the agency "agree[s]" with BLM and Forest Service's Leasing SFEIS that flaring is not "technically or economically feasible," OSM ROD (AR 000035) (citing the Leasing SFEIS), but that prior NEPA review did

[9] In email correspondence with OSM, Arch asserted that OSM should complete its review without even seeing the report or BLM's summary, stating that "the recent updated methane mitigation feasibility report *submitted to the BLM* was strictly to comply with the attached lease stipulations and was not intended to be required for mine plan approval . . . . In fact the first stipulation highlighted (see pages 19 & 20) states that we are not obligated or required to capture waste mine methane that would otherwise be vented . . . . we request that the mine plan documents be reviewed and submitted to DC as expeditiously as possible and *not be held-up awaiting the BLM's review of the report* required by stipulation." Email from Kathy Welt, Mountain Coal Company to OSM (Nov. 30, 2018) (AR 003090) (emphasis added).

not reach that conclusion. As to the technical and economic feasibility of flaring, OSM never addressed any of the potentially relevant economic factors, such as construction, operational, or maintenance costs; methane concentration levels in the mine; technologies in use at other facilities in the U.S. and abroad; the price of available carbon credits; the duration of the operation; and the standard by which the project would be deemed "economically feasible" or not.[10] And OSM never responded in any way to the expert report prepared by Raven Ridge that Conservation Groups submitted to OSM and which concluded that flaring was both technologically and economically feasible. Courts "cannot defer when there is no analysis to defer to . . . and cannot accept at face value an agency's unsupported conclusions." *Rocky Mountain Wild v. Vilsack*, No. 09-cv-01272-WJM, 2013 WL 3233573 at *3 n.3 (D. Colo. June 26, 2013); *see High Country I*, 52 F. Supp. 3d at 1186 ("[T]he court will not 'defer to a void'") (quoting *ONDA*, 625 F.3d at 1121). As the Tenth Circuit explained in declining to extend additional deference to BLM's consideration of economic analysis of two coal mine expansions, "there is nothing for the court to defer to here. BLM did not provide any reasoning or analysis for its conclusion." *WildEarth Guardians v. BLM*, 870 F.3d 1222, 1238 (10th Cir. 2017). The same is true here.

[10] Although Arch asserts OSM cannot change what Arch deems "contract terms" included in the Lease Stipulation issued by BLM, such as the blatantly self-serving definition of economic feasibility, Arch admits the term is "not specifically defined" in those stipulations. Arch Resp. at 17. OSM makes no attempt to defend the skewed definition of "economic feasibility," which comes from Arch's 2009 methane report, and would mean Arch would not be required to implement any methane mitigation measure unless implementing such mitigation was profitable for the company. Even BLM admitted that reliance on the 2009 report to provide terms was a flaw, noting that the 2009 report "defines economic feasibility from the company's perspective," and that such reliance "undermine[s] the economic analysis in the 2018 Report." BLM, Information Briefing/Memorandum to OSM, at 5 (Feb. 7, 2019) (AR 000049).

III. OSM FAILED TO TAKE A HARD LOOK AT CUMULATIVE CLIMATE IMPACTS.

Before approving the Mining Plan, OSM was required to take a hard look at the cumulative impacts on climate from expanding the West Elk Mine. Federal regulations define "cumulative impact" as:

> the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

40 C.F.R. § 1508.7. OSM, however, never assessed the cumulative impacts of greenhouse gas emissions from the West Elk Mine expansion when added to *any* other past, present, and reasonably foreseeable projects, including recent and currently pending federal coal mining projects in the region. With climate change fundamentally driven by the incremental impact of "individually minor but collectively significant actions taking place over a period of time," *id.*, courts have recognized that "[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that NEPA requires agencies to conduct." *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.* ("*CBD*"), 538 F.3d 1172, 1217 (9th Cir. 2008); *see also San Juan Citizens All. v. U.S. Bureau of Land Mgmt.*, 326 F. Supp. 3d 1227, 1248 (D.N.M. 2018). OSM thus "failed to consider an important aspect of the problem" when it refused to take a hard look at cumulative climate change impacts in its decision to authorize the expansion of the West Elk Mine. *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983).

OSM and Arch argue that OSM's cumulative climate analysis was adequate because it adopted the Forest Service's 2017 estimate of downstream emissions of coal combustion from the West Elk expansion and compared this estimate to total U.S. and global carbon dioxide emissions. OSM Resp. at 24; Arch Resp. at 24–26. As an initial matter, however, the Leasing SFEIS downplayed the magnitude of emissions from West Elk, characterizing them as "approximately 0.22% of the U.S. total relative to 2014, and 0.04% of the global greenhouse gas burden relative to 2013," despite acknowledging that on a more meaningful CO_2e[11] basis, taking into account the high potency of methane as a greenhouse gas, "[t]he rates are *roughly* an order of magnitude higher." Leasing SFEIS (AR000337) (emphasis added).

Moreover, the mere comparison of indirect downstream emissions from West Elk to national or global emission totals does not provide useful context for decision-makers because it does not account for the project emissions in tandem with other past, present, and reasonably foreseeable future OSM actions. *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 77 (D.D.C. 2019) (finding a cumulative greenhouse gas analysis did not provide adequate "context" for decision-makers where it lacked "a data-driven comparison [greenhouse gas] emissions" from the agency action to "regional and national" greenhouse gas emissions). The Leasing SFEIS assessed West Elk greenhouse gas emissions only in isolation, but expansion of the West Elk

[11] Agencies use "carbon dioxide equivalents" or "CO2e" to compare the warming influence of different greenhouse gases. Converting methane and other non-carbon dioxide greenhouse gases to CO2e is common practice in NEPA documents and allows for a unified comparison of methane and carbon dioxide from federal projects. Under this method, carbon dioxide is assigned a value of 1, and methane between 28 and 36, based on a 100-year timeframe. Leasing SFEIS (AR 000307). When measured over a 20-year period, methane has a global warming potential of 87. Raven Ridge Report (AR 003285).

Mine is not occurring in a vacuum. Instead, this project is part of the federal coal program, which alongside other OSM actions, collectively contributes a significant portion of national emissions. *See* Op. Br. at 31 n.18. For example, in 2016, the Department of the Interior concluded that life-cycle emissions from coal produced from public lands contributes about 10% of total U.S. greenhouse gas emissions.[12] OSM argues that it "defies logic" that an analysis of the cumulative impact of OSM actions and the federal coal program as a whole would be helpful to decision-makers and the public. OSM Resp. at 24. To the contrary, it is exactly this type of analysis that provides the necessary context for decision makers and the public to fully understand the magnitude of OSM's decision to permit the expansion of the West Elk Mine. *See CBD*, 538 F.3d at 1217 (requiring agency to "provide the necessary contextual information about the cumulative and incremental environmental impacts of" new fuel economy rule "in light of other [fuel economy] rulemakings and other past, present, and reasonably foreseeable future actions, regardless of what agency or person undertakes such other actions."); *see also WildEarth Guardians v. Zinke*, 368 F. Supp. 3d at 77 ("To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well."). As courts have articulated, a "cumulative impact analysis must be more than perfunctory; it must provide a *useful analysis* of the cumulative impacts of past, present, and future projects." *N. Plains Res. Council v. Surface Transp. Bd.*, 668 F.3d 1067, 1076 (9th Cir. 2011) (emphasis added) (internal quotations omitted).

[12] Bureau of Land Mgmt., *Notice of Intent To Prepare a Programmatic Environmental Impact Statement To Review the Federal Coal Program and To Conduct Public Scoping Meetings*, 81 Fed. Reg. 17,720, 17,724 (Mar. 30, 2016).

Further, climate change is a long-term problem that will be felt decades, if not centuries, into the future. Leasing SFEIS (AR000332–33). OSM's adopted analysis, however, takes only a single snapshot comparison of West Elk emissions, comparing West Elk emissions to national and global emissions totals from 2013 and 2014, providing little useful information to place the West Elk expansion into the relevant context of OSM's ongoing actions which cumulatively contribute to climate change. Although the Leasing SFEIS notes that federal coal has "continued to decline along with the total coal production nationally," OSM fails to acknowledge that BLM continues to issue new and modified coal leases and OSM continues to approve mining plans for coal mines throughout the region. *See* Op. Br. at 31 n.18; Complaint ¶ 111. These ongoing and reasonably foreseeable federal coal projects need to be taken into account for decision-makers and the public to have a full understanding of the cumulative impacts of OSM's approval of the West Elk expansion. 40 C.F.R. § 1508.7 (requiring cumulative impacts analysis to include assessment of "reasonably foreseeable future actions").

OSM and Arch focus on a single district court decision, *Citizens for a Healthy Community v. U.S. Bureau of Land Management*, 377 F. Supp. 3d 1223 (D. Colo. 2019), to support their assertion that other OSM and federal coal program actions need not be considered in the agency's cumulative impacts assessment. Arch Resp. at 24–25; OSM Resp. at 25. OSM and Arch, however, ignore critical factual distinctions between that case and this one. First, in *Citizens for a Healthy Community*, BLM took into account "statewide emissions levels from emitting coal-fired power plants in Colorado," and did a comparative assessment between these emissions and the proposed oil and gas activities, which provided additional context for assessing the significance of the permitted activity. 377 F. Supp. 3d at 1238. Here, OSM has only

provided an incomplete assessment of downstream greenhouse gas emissions, focusing only on national and global emissions. But this indirect impacts assessment is not what NEPA requires for cumulative impacts analysis, and inevitably makes any individual project appear to have minimal incremental impact. Second, the court in *Citizens for a Healthy Community* credited BLM with "perform[ing] a regional cumulative impacts analysis of the future mineral development in the region for ten years," as part of its climate analysis, ignoring that this was a regional *air quality*, not climate assessment. *Id*. at 1239. While Arch points to a similar "regional cumulative impacts analysis" of air quality in the Leasing SFEIS, such air quality analysis has no bearing on cumulative climate impacts. Arch Resp. at 25 (citing Leasing SFEIS (AR000322–30)).

OSM and Arch further point to withdrawn and draft Council on Environmental Quality (CEQ) guidance to support OSM's decision to only consider downstream emissions from West Elk in context of total national and global emissions. OSM Resp. at 25–26; Arch Resp. at 25–26. These guidance documents, however, specifically "do[] not change or substitute for any law, regulation, or other legally binding requirement." 81 Fed. Reg. 51866 (Aug. 5, 2016) (withdrawn 2016 CEQ Guidance); 84 Fed. Reg. 30097 (Proposed June 26, 2019) n.1 (draft 2019 CEQ Guidance). Instead, NEPA's cumulative impacts requirement is governed by the statutory language, regulations, and applicable case law, which require OSM to evaluate the emissions from West Elk when added to other past, present, and reasonably foreseeable future emissions.

Arch's attempt to distinguish two cases Conservation Groups rely on to support their argument is also unavailing.[13] Arch first argues that the court's decision in *WildEarth Guardians v. Zinke* hinged on the agencies' failure to quantify greenhouse gas emissions for the oil and gas leasing applications challenged in the case. Arch Resp. at 26. But Arch ignores the clear directive from the court that BLM consider greenhouse gas emissions from the proposed actions in the context of *regional* emissions and emissions from other BLM activities:

> BLM is correct that NEPA does not require the impossible. It does, however, require that BLM quantify the emissions from each leasing decision—past, present, or reasonably foreseeable—and compare those emissions to regional and national emissions, setting forth with reasonable specificity the cumulative effect of the leasing decision at issue. *To the extent other BLM actions in the region—such as other lease sales—are reasonably foreseeable when an EA is issued, BLM must discuss them as well.* Likewise, on remand, if BLM may reasonably quantify downstream [greenhouse gas] emissions, it must place those emissions in the context of local and regional oil and gas consumption. These quantitative analyses, combined with a robust qualitative discussion of local, regional, and national climate change, would satisfy NEPA's hard look requirement. Fed. Reg. 17,720, 17,724.

WildEarth Guardians v. Zinke, 368 F. Supp. at 77 (emphasis added). So too here. OSM's cumulative impacts analysis must discuss other reasonably foreseeable OSM coal-related activities in the region, such as the Bull Mountain mine plan modification approved by OSM in August 2018 and the pending OSM reviews of mine plan modifications for the Caballo and Dry Fork mines. Op. Br. at 31 n.18; Complaint ¶ 111. And finally, OSM needs to place the downstream combustion emissions from West Elk in context of emissions related to local and regional coal consumption, not simply compare them to national and global totals.

[13] OSM makes no attempt to distinguish either case or downplay the significance of these decisions.

Next, Arch argues that the court's holding in *Indigenous Environmental Network v. U.S. Dep't of State*, 347 F. Supp. 3d 561 (D. Mont. 2018), that the EIS for the Keystone pipeline project needed to consider the cumulative emissions of the Alberta Clipper pipeline, was driven by a determination that the two projects were "connected actions."[14] Arch Resp. at 27. To the contrary, the court plainly stated:

> The Court considers the Department's analysis of Keystone in the Alberta Clipper EIS as a cumulative action. *See* 40 C.F.R. § 1508.7. The Department similarly should have analyzed the Alberta Clipper pipeline's emissions in the Keystone SEIS.

347 F. Supp. 3d at 578. As the court explained, "environmental consequences must be considered together when several projects that may have cumulative environmental impacts are pending concurrently." *Id.* (citing *Kleppe v. Sierra Club*, 427 U.S. 390, 410 (1976)). Because the Keystone and Alberta Clipper pipeline projects were both pending concurrently, the court found that the agency's analysis of cumulative climate impacts must consider the greenhouse gas emissions of both projects "to assist 'the decisionmaker in deciding whether, or how, to alter the program to lessen cumulative impacts.'" *Id*. (quoting *Churchill Cnty. v. Norton*, 276 F.3d 1060, 1080 (9th Cir. 2001)). Similarly, OSM needs to, at a minimum, assess the cumulative impacts of other OSM coal program activities currently pending and recently approved by the agency.

[14] The Court did colloquially describe the two pipelines as "connected actions," but did not assess them as such. *Indigenous Environmental Network*, 347 F. Supp. 3d at 578. The court never cited the regulatory definition of connected action," 40 C.F.R. § 1508.25, but instead cited the regulatory definition of "cumulative impact" in describing the projects as "cumulative actions." *Indigenous Environmental Network*, 347 F. Supp. 3d at 578 (citing 40 C.F.R. § 1508.7). There is no indication that the two projects were inter-dependent or causally-related "connected actions" under the regulatory definition. *Id.*; 40 C.F.R. § 1508.25.

OSM's cumulative climate analysis needed to assess the "incremental impact of the action when added to other past, present, and reasonably foreseeable future actions." 40 C.F.R. § 1508.7. Yet OSM never assessed the cumulative impacts of greenhouse gas emissions from the West Elk Mine expansion when added to *any* other past, present, and reasonably foreseeable projects, including recent and currently pending federal coal mining projects in the region. Accordingly, OSM failed to take a hard look at cumulative climate impacts on a regional and national scale.

IV. OSM FAILED TO TAKE A HARD LOOK AT IMPACTS TO WATER RESOURCES.

Based on newly available hydrological information, OSM determined that the lease modification area contains perennial streams and springs – critical resources not previously identified as perennial nor evaluated in the Leasing SFEIS. But instead of assessing mining's potential impacts to these newly-identified resources, as NEPA requires, OSM instead simply edited sections of the Leasing SFEIS to change the description of these waters from ephemeral to perennial and to note an indeterminate risk of mining's potential to dewater them. OSM and Arch attempt to argue that these resources were previously identified in the Leasing SFEIS – albeit in an admittedly ambiguous manner – but provide no justification for OSM's failure to actually assess the likelihood or magnitude of the risk, or analyze environmental impacts of dewatering these perennial waters. OSM Resp. at 28; Arch Resp. at 28–30. OSM further argues that Conservation Groups failed to explain why potentially dewatering perennial springs and streams could have significant environmental impacts, OSM Resp. at 28–29, ignoring

Conservation Groups' citations to record evidence highlighting the risks that such dewatering poses to wildlife and fish in the area. Op. Br. at 36–38.

Based on its review of a 2016 Hydrology Report – which was not considered in the Leasing SFEIS[15] – OSM determined that the Leasing SFEIS incorrectly concluded that "South Prong Creek and Horse Creek … are ephemeral and flow only in response to spring runoff conditions and storm events," and that "[t]here are no known perennial springs for the lease modification areas." NEPA Adequacy Review Form (AR000043–44) (modifying Leasing SFEIS (AR 000364)). In fact, OSM has now concluded that there are perennial reaches of South Prong Creek and Horse Creek and that "it is likely that there are perennial springs" in the mine expansion area. *Id*. (AR000043). Yet OSM failed to analyze mining's impacts on these newly identified perennial waters in the project area.

Arch argues that the NEPA Adequacy Review Form merely corrected "some ambiguities in the text of the Leasing SFEIS," Arch Resp. at 28, but that these changes did not reflect any substantive change with respect to environmental impacts. Arch further argues that the Leasing SFEIS had, in fact, identified South Prong Creek and Horse Creek as perennial streams, relying on Leasing SFEIS Figure 3-20, which according to Arch "clearly shows that the referenced perennial segments are found on South Prong Creek and Horse Creek." *Id*. at 29 (citing AR000363). Admittedly, a close review of Figure 3-20 in isolation does appear to identify South Prong Creek as perennial, but the other perennial stream shown on the map (presumably Horse Creek) is unlabeled. Leasing SFEIS (AR000363). Moreover, the text of the Leasing SFEIS states

[15] OSM notes that the 2016 Hydrology Report "was the most recent annual report available post-dating the annual reports considered in the Leasing SFEIS." OSM Resp. at 27.

plainly: "South Prong Creek and Horse Creek, as reported by Arch data, *are ephemeral* and flow only in response to spring runoff conditions and storm events." *Id*. at AR000361 (emphasis added). Therefore, at best, the Leasing SFEIS's discussion of perennial and ephemeral waters was ambiguous and not readily understandable by decision-makers or the general public. *See* 40 C.F.R. § 1502.8 (requiring NEPA documents to be "written in plain language . . . so that decisionmakers and the public can readily understand them."); *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt*., 387 F.3d 989, 996 (9th Cir. 2004) (holding that NEPA documents "are unacceptable if they are indecipherable to the public"). OSM, however, needed to do more than simply clarify this ambiguity before approving the Mining Plan. To meet NEPA's hard look requirement, OSM needed to *analyze* the impacts to these waters. *See Nat'l Audubon Soc'y v. Dep't of Navy*, 422 F.3d 174, 185 (4th Cir. 2005) (NEPA hard look requirement "[a]t the least . . . encompasses a thorough investigation into the environmental impacts of an agency's action and a candid acknowledgment of the risks that those impacts entail.") (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 350 (1989) (agencies must assure that "the adverse environmental effects of the proposed action are adequately identified and evaluated")).

Ultimately, the classification of the springs and streams as perennial vs. ephemeral is not determinative of OSM's NEPA violation. Rather, OSM violated NEPA because the agency failed to analyze mining's impacts to perennial waters in the project area. BLM and the Forest Service did not analyze impacts to perennial waters in the expansion area because no such resources had been identified at that point. But perennial resources have now been identified, and impacts to these resources must be assessed under NEPA's 'hard look' mandate. Although OSM mischaracterizes Conservation Groups' NEPA claim as alleging that the "'[mere] renaming of

stream classifications' amounts to a NEPA violation," OSM Resp. at 28 (quoting Op. Br. at 33), Conservation Groups proffer just the opposite: "OSM's new findings require a new analysis of impacts, *not* merely a re-naming of stream classifications." Op. Br. at 33 (emphasis added). OSM's critical error was not that it reclassified various streams in light of the information in the 2016 Hydrology Report, but that it failed to do anything with that information – namely, it failed to *analyze* the potential environmental impacts to such perennial springs and streams.

The need for OSM to analyze mining's impacts to perennial springs and streams is critical because the Leasing SFEIS previously indicated that "no discernible loss of water from springs [was] anticipated" from the Mine expansion. Leasing SFEIS (AR000372). But at this final stage of mining authorization, OSM has now identified a significant error in the SFEIS and determined that "[p]otentially some of the springs and seeps in the lease modification area could see a reduction or loss of flow due to the proposed longwall mining based on hydrographs in the 2016 report." NEPA Adequacy Review Form (AR000043–44). Because there will be no further opportunities to analyze mining's environmental impacts or impose conditions on the Mining Plan to minimize potential impacts to perennial streams, OSM must analyze whether and to what degree mining in the expansion area risks impairing those previously unanalyzed resources.

OSM attempts to dismiss the need to analyze mining's impacts to perennial streams by asserting that Conservation Groups "make no attempt to demonstrate that the allegedly new information affects the environment 'in a significant manner or to a significant extent not already considered.'" OSM Resp. at 29. To the contrary, Conservation Groups identified potentially significant impacts to wildlife and fish that use these perennial waters, impacts that have never been assessed. *See* Op. Br. at 36–38. Conservation Groups cited record evidence that wildlife –

including elk, beaver, and bear – regularly use the perennial waters potentially impacted by mining. Op. Brief at 37 (citing AR001251, 1267, 1284, 1286, 1287, 1288, 1291, 1300). Neither OSM nor Arch provide any response to this evidence. Given the newly-identified presence of perennial streams and springs and risk that such waters could be dried up by mining activities, OSM needed to analyze potential impacts to wildlife associated with dewatering perennial waters. Neither OSM nor Arch identify record evidence that OSM performed this analysis because it has never been done.

Further, Conservation Groups highlight evidence that important native and rare fish species are found within 1/3 of a mile of the Mine expansion area, Op. Br. at 38 (citing CRR-0077567; AR001041), but OSM offers no evidence that fish populations in the impacted area have ever been surveyed. Further, OSM completely relied on the Leasing SFEIS to meet its NEPA obligations, but that document explained that impacts to fish were *not analyzed* because the agencies assumed that the area lacked suitable fish habitat, based on an incorrect assumption that the area lacked perennial waters. Leasing SFEIS (AR 000427) ("As there are only intermittent streams in the analysis area, there are no [Management Indicator Species] fish with suitable habitat present and therefore will not be discussed."). Since OSM has now determined that this assumption was incorrect and that there are, in fact, perennial springs and streams in the area, NEPA Adequacy Review Form (AR 000043), record evidence suggests that such perennial waters could provide suitable fish habitat that would be impaired by dewatering. These potential impacts were not assessed at the leasing stage, and OSM thus violated NEPA's hard look requirement by failing to analyze how mining in the expansion area could indirectly affect wildlife and fish through dewatering perennial springs and streams. Because OSM "entirely

failed to consider an important aspect of the problem," its Mining Plan approval is arbitrary. *Motor Vehicle Mfrs*., 463 U.S. at 43.

V. VACATUR IS THE APPROPRIATE REMEDY.

As explained in Conservation Groups' Opening Brief, Op. Br. at 39–41, this Court should vacate OSM's approval of the Mining Plan.[16] Although both OSM and Arch indicate that mining will not begin "until the first quarter of 2020," and thus there is a small window of opportunity for remand before harm to Conservation Groups' members would occur if mining is allowed to proceed, OSM Resp. at 31, Arch Resp. at 33, this means that OSM would have only 2.5 months between oral argument on the merits of Conservation Groups' challenge and a January 1, 2020 potential start date for mining. Even with an exceedingly fast merits order from this Court, OSM would likely have less than two months to prepare a draft environmental assessment or environmental impact statement, release it for public comment, review and respond to input from the public, revise and finalize the necessary analysis, and issue a Record of Decision or other formal decision document. And if the remand included consideration of a mandatory methane flaring alternative, additional time would need to be built in for design and study of the flare and submission to MSHA for its review.

Thus, Arch is incorrect when it asserts it "is not proposing to take any actions during the pendency of the supplemental NEPA review" that will cause harm to Conservation Groups'

[16] OSM asks for additional remedy briefing in the event this Court invalidates the agency's NEPA review. OSM Resp. at 31. Additional briefing is unnecessary. Conservation Groups fully briefed the appropriate remedy and controlling legal standards in their Opening Brief. Op. Br. at 39–41. OSM and Arch responded to these arguments without any applicable word limit curtailing the responses. OSM Resp. at 31; Arch Resp. at 32–35.

members, Arch Resp. at 34, unless Arch is willing to forego any road and well pad building, mining, methane venting, and any other ground disturbing activities until OSM completes the required review on remand, whenever that may occur. Absent such an enforceable commitment (as would be secured through vacatur), the eggs may indeed already be scrambled by the time OSM completes any necessary environmental review, as the environmental benefits offered by flaring disappear if the coal has been mined and the methane already vented into the atmosphere. Just as the benefit of flaring declines once mining begins, so too would the likelihood of OSM actually selecting a mandatory methane flaring alternative, since the greenhouse gas reductions achievable through a flaring project would diminish as mining progresses without a flare.

OSM suggests that equities favor remand without vacatur, but fails to explain its contradictory assertions that, on the one hand, remand without vacatur could be completed by January 2020, yet, on the other, "vacatur could disrupt mining activity for an extended period of time." OSM Resp. at 31. OSM offers no record or affidavit support for its assertion that vacatur could affect "employment" or "investment opportunities" in the North Fork Valley, or impact taxes and royalties. OSM Resp. at 31–32. OSM's reliance on this Court's 2015 decision on the Colowyo and Trapper mine plans, *WildEarth Guardians v. OSMRE*, 104 F. Supp. 3d 1208 (D. Colo. 2015), is also unavailing. There, this Court explained that "vacatur makes no sense" with regard to the Trapper mine because "the Federal coal covered by the revision has been mined." *Id.* at 1231. With respect to the Colowyo mine, the Court relied on affidavit evidence that the mine would have to lay off workers in the event of vacatur, *id.*, but neither OSM nor Arch offer such evidence here. In the absence of such factors, this Court should vacate OSM's Mine Plan

and Record of Decision in line with the remedy ordered previously in *High Country II*. *High Country Conservation Advocates v. U.S. Forest Serv*., 67 F. Supp. 3d 1262 (D. Colo. 2014).

CONCLUSION

For the reasons set forth above, this Court should find unlawful and set aside OSM's decision to approve the Mining Plan for the West Elk expansion, and grant Conservation Groups the further relief requested in their Opening Brief at 41.

Respectfully submitted on this 20th day of September 2019.

s/ Daniel L. Timmons
Daniel L. Timmons
WildEarth Guardians
301 N. Guadalupe St., Suite 201
Santa Fe, NM 87501
(505) 570-7014
dtimmons@wildearthguardians.org

s/ Samantha Ruscavage-Barz
Samantha Ruscavage-Barz
WildEarth Guardians
301 N. Guadalupe St., Suite 201
Santa Fe, NM 87501
(505) 401-4180
sruscavagebarz@wildearthguardians.org

Attorneys for Petitioner WildEarth Guardians

s/ Nathaniel Shoaff
Nathaniel Shoaff
Sierra Club
2101 Webster Street, Suite 1300
Oakland, CA 94612
(415) 977-5610
nathaniel.shoaff@sierraclub.org

Attorney for Petitioners High Country Conservation Advocates, Center for Biological Diversity, Sierra Club, and Wilderness Workshop

CERTIFICATE OF SERVICE

I hereby certify that a copy of the foregoing CONSERVATION GROUPS' CONSOLIDATED REPLY BRIEF was served on all counsel of record through the Court's ECF system on this 20th day of September 2019.

/s/ Daniel Timmons
Daniel Timmons
Attorney for Petitioner WildEarth Guardians