

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLORADO
Judge William J. Martínez**

Civil Action No. 08-cv-1624-WJM-MJW

COLORADO ENVIRONMENTAL COALITION,
INFORMATION NETWORK FOR RESPONSIBLE MINING,
CENTER FOR NATIVE ECOSYSTEMS,
CENTER FOR BIOLOGICAL DIVERSITY, and
SHEEP MOUNTAIN ALLIANCE,

Plaintiffs,

v.

OFFICE OF LEGACY MANAGEMENT, and
UNITED STATES DEPARTMENT OF ENERGY,

Defendants.

ORDER DENYING MOTION TO DISSOLVE INJUNCTION WITHOUT PREJUDICE

This case involves a uranium mining program in southwestern Colorado overseen by the United States Department of Energy's Office of Legacy Management (for purposes of this order, "DOE"). That program is known as the Uranium Lease Management Program ("ULMP"). In 2007 and 2008, DOE approved additional uranium mining under the ULMP. Plaintiffs then sued under the Administrative Procedure Act ("APA"), 5 U.S.C. §§ 701 *et seq.*, to have DOE's actions declared unlawful under the National Environmental Policy Act ("NEPA"), 42 U.S.C. §§ 4231 *et seq.*, and the Endangered Species Act ("ESA"), 16 U.S.C. §§ 1531 *et seq.*

In 2011, this Court partially agreed with Plaintiffs' challenge. *See Colorado Env'tl. Coal. v. Office of Legacy Mgmt.*, 819 F. Supp. 2d 1193 (D. Colo. 2011) ("CEC"). As a consequence, the Court vacated DOE's environmental review documents, stayed all

existing ULMP leases, and enjoined DOE from approving additional leases or other ULMP-related activities on the lease tracts. *Id.* at 1224. The Court then invited DOE to “move . . . to dissolve this injunction” after it had “conduct[ed] an environmental analysis on remand that complies with NEPA, ESA, all other governing statutes and regulations, and this Order.” *Id.*

Currently before the Court is DOE’s Motion to Dissolve the Injunction. (ECF No. 147.) DOE puts forward new environmental review documents that, it says, remedy the violations the Court previously found. For the reasons explained below, the Court concludes that DOE’s new documents mostly pass muster. There is, however, one remaining flaw regarding estimates of potential water depletion as they relate to DOE’s duty to ensure that its actions do not jeopardize endangered species or their critical habitat (see Part V.C.3, below). As to that issue, the Court will order a limited remand. In the meantime, the injunction will remain in place. Therefore, DOE’s motion is denied without prejudice.

I. PROCEDURAL POSTURE

DOE previously moved to dissolve the injunction on an abbreviated record. (ECF No. 124.) DOE’s argument was, in essence, that it had generated all of the needed environmental review documents and touched upon all of the subjects missing from its previous round of documents; therefore the injunction should be lifted. (See ECF No. 124-1 at 9–14.)¹ The Court held, however, that its injunction could not be dissolved on

¹ All ECF page citations are to the page number in the ECF header, which does not always match the document’s internal pagination.

an abbreviated record. (ECF No. 132 at 2–3.) The Court required submission of a new administrative record and new briefing, but with the burden of persuasion placed on DOE rather than on Plaintiffs. (*Id.* at 3.)

In its current briefing, DOE invokes Federal Rule of Civil Procedure 60(b)(5), which permits the Court to relieve a party from a final judgment or other order when “the judgment has been satisfied, released or discharged . . . or applying it prospectively would no longer be equitable.” (See ECF No. 147 at 18–19.) Plaintiffs, for their part, argue from case law specifically about dissolving injunctions, particularly case law stating that DOE should bear a heavy burden to show that circumstances have changed. (See ECF No. 148 at 10–11.)

The Court disagrees with both sides’ proposed approaches. Plaintiffs’ cited case law relates to injunctions that were meant to last indefinitely. Here, however, the Court specifically contemplated lifting its injunction after DOE completed the necessary environmental review. *CEC*, 819 F. Supp. 2d at 1224. But the Court likewise disagrees with DOE’s position that the current proceeding is limited solely to the question of whether the injunction should be lifted, leaving the question of actual compliance with NEPA, the ESA, etc., for a separate lawsuit. (See ECF No. 149 at 34.) Again, the Court stated that it would lift the injunction conditioned on DOE’s compliance “with NEPA, ESA, all other governing statutes and regulations, and this Order.” *CEC*, 819 F. Supp. 2d at 1224. That is why the Court ordered the parties to submit “a new Administrative Record and new briefing.” (ECF No. 132 at 3.) This proceeding is, in other words, a new administrative review proceeding, and will be judged accordingly.

II. GENERAL NEPA & APA REQUIREMENTS

NEPA “require[s] agencies to consider environmentally significant aspects of a proposed action.” *Utahns for Better Transp. v. U.S. Dep’t of Transp.*, 305 F.3d 1152, 1162 (10th Cir. 2002). “NEPA does not, however, require agencies to elevate environmental concerns over other appropriate considerations; it requires only that the agency take a ‘hard look’ at the environmental consequences before taking a major action.” *Citizens’ Comm. to Save Our Canyons v. Krueger*, 513 F.3d 1169, 1178 (10th Cir. 2008) (citation and internal quotation marks omitted). Also, “NEPA dictates the process by which federal agencies must examine environmental impacts, but does not impose substantive limits on agency conduct.” *Utah Env’tl. Cong. v. Russell*, 518 F.3d 817, 821 (10th Cir. 2008). NEPA merely guards against “uninformed—rather than unwise—agency action.” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 351 (1989).

In conducting this analysis [under NEPA], the [agency] must prepare one of the following: (1) an environmental impact statement, (2) an environmental assessment, or (3) a categorical exclusion. An environmental impact statement involves the most rigorous analysis, and is required if a proposed action will “significantly affect[] the quality of the human environment.” 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4.

If an agency is uncertain whether the proposed action will significantly affect the environment, it may prepare a considerably less detailed environmental assessment. 40 C.F.R. § 1508.9. An environmental assessment provides “sufficient evidence and analysis” to determine whether a proposed project will create a significant effect on the environment. *Id.* If so, the agency must then develop an environmental impact statement; if not, the environmental assessment results in a “Finding of No Significant Impact,”

and no further agency action is required. *Id.*

Utah Env'tl. Cong. v. Bosworth, 443 F.3d 732, 736 (10th Cir. 2006).

NEPA contains no private right of action, but is enforceable through the APA, which empowers a reviewing court to set aside agency action if it is, *inter alia*, “arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.” 5 U.S.C.

§ 706(2)(A). Generally, an agency decision will be considered arbitrary and capricious

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

Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43 (1983). A reviewing court should engage in a “thorough, probing, in-depth review,” *Wyoming v. United States*, 279 F.3d 1214, 1238 (10th Cir. 2002) (citation omitted), with its review of the merits “generally limited to . . . the administrative record,” *Custer Cnty. Action Assoc. v. Garvey*, 256 F.3d 1024, 1027 n.1 (10th Cir. 2001).²

However, “[t]he scope of review under the ‘arbitrary and capricious’ standard is narrow and a court is not to substitute its judgment for that of the agency.” *Motor Vehicle Mfrs. Ass'n*, 463 U.S. at 43; *see also Davis v. Mineta*, 302 F.3d 1104, 1111 (10th Cir. 2002) (stating that the court’s review is “highly deferential”). The Court

² Plaintiffs submit numerous extra-record documents that they believe the Court should consider as part of the record. (See ECF No. 148 at 7, 12–13, 16 & n.4, 17, 18, 21, 23 & n.8, 27–28.) DOE objects to some but not all of these documents. (See ECF No. 149 at 32–33.) The Court need not decide whether Plaintiffs’ extra-record documents are appropriate for inclusion in the record. As will become clear below, even if the Court considers these documents, it finds that none of them would change the outcome.

confines its review “to ascertaining whether the agency examined the relevant data and articulated a satisfactory explanation for its decision, including a rational connection between the facts found and the decision made.” *Colo. Wild v. U.S. Forest Serv.*, 435 F.3d 1204, 1213 (10th Cir. 2006).

In the NEPA context in particular, the district court’s objective “is not to ‘fly speck’ the environmental impact statement, but rather, to make a pragmatic judgment whether the environmental impact statement’s form, content and preparation foster both informed decision-making and informed public participation.” *Custer Cnty.*, 256 F.3d at 1035. The Court is to apply “a rule of reason standard (essentially an abuse of discretion standard) in deciding whether claimed deficiencies in [environmental review documents] are merely flyspecks, or are significant enough to defeat [NEPA’s] goals of informed decision making and informed public comment.” *Fuel Safe Washington v. F.E.R.C.*, 389 F.3d 1313, 1323 (10th Cir. 2004).

III. BACKGROUND & PROCEDURAL HISTORY³

A. Events Leading to the 2007 EA & FONSI

The Court repeats the following background information from its previous order:

This case involves potential uranium and vanadium mining on approximately 27,000 acres of land in the Uravan Mineral Belt in Mesa, Montrose, and San Miguel Counties in southwestern Colorado. The Office of Legacy Management, a division of the United States Department of Energy

³ Since this case’s inception in 2008, there have been multiple administrative records compiled. Throughout this Order, the Court will use the citation “R.” to refer the administrative record filed conventionally on April 1, 2016 (as noted at ECF No. 137; see *also* ECF No. 135). This is the administrative record compiled specifically for the current proceedings regarding whether the Court should lift the injunction.

(collectively, “DOE”), manages the land under the ULMP.

This area in southwestern Colorado has been mined for uranium and vanadium under government programs in the past. Following World War II, in order to develop a domestic supply of uranium to meet the nation’s defense needs, Congress authorized DOE’s predecessor, the Atomic Energy Commission (“AEC”), to withdraw federal lands from public use and lease them to uranium mining companies. By 1949, approximately 25,000 acres of land had been withdrawn for uranium mining. The first leasing program, conducted between 1949 and 1962, produced more than 1.2 million pounds of uranium and 6.8 million pounds of vanadium, and generated \$5.9 million in royalties to the federal government.

In 1974, AEC initiated a second leasing program, the ULMP, involving 38 lease tracts on the same land at issue in this action, and five lease tracts in Utah and New Mexico. In 1984, lease agreements were renewed (for a second 10-year term) for 33 of these 43 lease tracts. . . .

In 1994, the 30 remaining leases were allowed to expire, and DOE conducted an environmental assessment to determine whether to continue leasing under the ULMP. In 1995, DOE issued a Final Environmental Assessment and Finding of No Significant Impact, resolving to continue the ULMP. In 1996 and 1997, DOE entered into new lease agreements with 15 leaseholders. After two more leaseholders relinquished their leases in the year 2000, there were 13 active lease tracts and 25 inactive lease tracts on ULMP land.

In June 2005, with the 13 active leases nearing expiration, DOE decided to conduct another environmental assessment of the ULMP At that time, DOE noted that “[a] recent increase in the demand for uranium and vanadium has prompted DOE to consider extending the program, and increasing the number of leases [back] to 38 for exploration and production.”

* * *

In July 2007, DOE released its Final Programmatic Environmental Assessment (“EA”). The EA evaluated three alternatives: (1) the Expanded Program Alternative (DOE’s

preferred alternative), in which the leasing program would be expanded to include 38 leases on all DOE-managed lands in the Uravan Mineral Belt; (2) the Existing Program Alternative, in which only the 13 active leases would be extended; and (3) the No Action Alternative, in which the current leases would be allowed to expire, and either DOE would continue to manage the 27,000 acres of land without leasing, or the land would be returned to the public domain under BLM's administrative control. The EA described the environmental setting on and near DOE's lease tracts, and evaluated the likely environmental impacts of each of the three alternatives. . . .

As a result of the analysis in the EA, DOE issued a Finding of No Significant Impact ("FONSI"), determining to proceed with DOE's preferred alternative of expanding the ULMP to lease all 38 lease tracts. The FONSI concluded that "the proposed action does not constitute a major Federal action significantly affecting the quality of the human environment. Therefore, preparation of an environmental impact statement is not required."

In late 2007, DOE reconfigured the lease tracts (mostly by combining certain lease tracts) so that there were a total of 31 lease tracts. During 2008, DOE issued leases for those 31 tracts to six different companies: Cotter Corporation (10 lease tracts), Golden Eagle Uranium, LLC (8), Energy Fuels Resources (6), Gold Eagle Mining, Inc. (3), U.S. Uranium Corporation (2), and Zenith Minerals, LLC (2).

During 2009, DOE approved exploration plans on five different lease tracts, and also approved a mine re-entry plan on one of those lease tracts. DOE also approved Reclamation in-lieu-of Royalties ("RILOR") plans on 13 different lease tracts.

CEC, 819 F. Supp. 2d at 1198–1201 (citations omitted).

B. The Injunction

Plaintiffs filed this lawsuit in July 2008. (ECF No. 1.) Substantive proceedings were severely delayed due related lawsuits proceeding under the Freedom of

Information Act (see *INFORM v. BLM*, Case No. 06-cv-2269 (D. Colo., filed Nov. 13, 2006); *INFORM v. DOE*, Case No. 06-cv-2271 (D. Colo., filed Nov. 13, 2006)), and due to certain discovery the Court allowed in this lawsuit (see ECF No. 41). Plaintiffs finally filed their opening merits brief in May 3, 2011. (ECF No. 78.) One of Plaintiffs' main arguments was that DOE unlawfully chose to prepare an EA, rather than an EIS. (*Id.* at 23–26.)

On June 15, 2011, DOE announced to the public that it would prepare a programmatic EIS (“PEIS”) for the ULMP. (ECF No. 82-1.) It did not, however, formally withdraw the 2007 EA or FONSI.

On June 20, 2011, DOE filed its response brief on the merits, arguing that any challenge to the EA/FONSI was now prudentially moot and any challenge to the forthcoming EIS was unripe. (ECF No. 82 at 13–21.) DOE also responded to Plaintiffs' substantive attacks on the EA/FONSI. (*Id.* at 21–43.)

This Court issued its order on October 18, 2011. (ECF No. 94.) The Court exercised its discretion not to dismiss Plaintiffs' challenge as prudentially moot, and the Court found that Plaintiffs' challenge remained ripe as to the EA/FONSI because, among other reasons, the EA/FONSI were still legally operative documents and there was no guarantee that DOE would complete the announced EIS. *CEC*, 819 F. Supp. 2d at 1203–06.

On the merits, the Court accepted some, but not all, of Plaintiffs' arguments. Those arguments are summarized in the various Analysis sections, below, to the extent they remain relevant to current proceedings. The upshot, however, was that the Court

issued an injunction (“Injunction”) vacating the EA/FONSI, staying the existing leases on ULMP tracts, and prohibiting DOE from issuing new leases or approving lease-related activities on ULMP tracts.⁴ *Id.* at 1224. The Injunction concluded: “After Defendants conduct an environmental analysis on remand that complies with NEPA, ESA, all other governing statutes and regulations, and this Order, Defendants may move the Court to dissolve this injunction.” *Id.*

C. Post-Injunction Proceedings

DOE completed the PEIS on March 21, 2014. (R. at 101170 (press release); R. at 101274–103269 (PEIS itself).) “At the time that the ULMP PEIS was being prepared, 29 of the 31 lease tracts were actively held under lease, and the remaining 2 tracts had not been leased.” (R. at 101363.)

The PEIS evaluates five alternatives, as follows:

- Alternative 1 proposed terminating all existing leases, conducting reclamation as needed, and then doing nothing further save for whatever maintenance might be necessary to maintain the safety of the lease tracts. (R. at 101402, 101404.)
- Alternative 2 likewise proposed terminating all existing leases and conducting reclamation as needed, but also contemplated DOE relinquishing its management of the lease tracts and turning them over to BLM. (R. at 101405–06.) Under Alternative 2, DOE would formally

⁴ The Court later modified this last portion of the injunction slightly, for reasons not relevant here. See 2012 WL 628547 (D. Colo. Feb. 27, 2012) (ECF No. 102).

terminate the ULMP. (*Id.*)

- Alternative 3 proposed continued exploration, mining, and reclamation on the thirteen lease tracts for which leases existed prior to July 2007 (which is when DOE issued the EA that this Court invalidated in October 2011). (R. at 101406, 101409.)
- Alternative 4 proposed maintaining all thirty-one lease tracts “available for potential exploration and mining of uranium,” and maintaining the leases currently existing for twenty-nine of those tracts—*i.e.*, the leases DOE executed in 2008—“for the next 10 years or for another reasonable period, as appropriate.” (R. at 101411.) Alternative 4 was considered the preferred alternative. (R. at 101277.)
- Alternative 5 was similar to Alternative 4 except that the existing leases “would continue exactly as they were executed in 2008” and would last for precisely ten years, adjusted for the time needed to prepare the PEIS. (R. at 101415.) Thus, the mining companies would likely have an incentive to operate larger mines as compared to Alternative 4, due to the shorter lease term and a consequent desire to extract as much ore as possible during that time. (*Id.*) Alternative 5 was the “No Action Alternative,” given that it would preserve the status quo as it existed when DOE began developing the PEIS in June 2011. (*Id.*)

On May 6, 2014, DOE issued a Record of Decision (“ROD”) adopting Alternative 4. (R. at 103860–76.) The ROD was published in the Federal Register on May 12,

2014. See 79 Fed. Reg. 26956.

IV. NEPA ANALYSIS

A. Matters No Longer in Dispute

The Court's previous order noted a number of deficiencies in the 2007 EA and FONSI. One of those deficiencies was DOE's failure to analyze combined and cumulative impacts caused by ULMP lessees' off-site activities (*i.e.*, activities on lands not governed by DOE, such as on access roads through land controlled by other agencies). *CEC*, 819 F. Supp. 2d at 1213. Another deficiency was DOE's failure to request the participation of the Environmental Protection Agency ("EPA") in the NEPA process. *Id.* at 1216. Plaintiffs make no argument that DOE has failed to remedy either of these deficiencies. The Court therefore deems it conceded that these matters would no longer justify the Injunction.

The Court also notes the previous dispute over the Piñon Ridge Mill, a yet-to-be-built uranium mill long planned for Colorado's Paradox Valley, near many of the ULMP lease tracts. *Id.* at 1211. Plaintiffs argued that the 2007 EA and FONSI were deficient because they failed to account for the proposed mill. *Id.* The Court rejected this argument because, at the time DOE was preparing the EA and FONSI, the plans for the mill were far too preliminary to merit DOE's consideration. *Id.* "However," the Court added,

because the Court by this Order is remanding to DOE to conduct a NEPA-compliant analysis of the ULMP . . . it makes sense to point out that it appears that the Piñon Ridge Mill is in a much more advanced stage as of the date of this decision. . . . Thus, it does not appear that DOE's argument that the Piñon Ridge Mill was too speculative at

the time of the EA will be applicable to DOE's NEPA analysis on remand.

Id. at 1211–12.

In current proceedings, there is some dispute regarding whether DOE fully accounted for all effects of the proposed Piñon Ridge Mill (see Part V.C.3, below), but Plaintiffs do not argue that DOE entirely failed to consider the mill. Thus, the concern raised in the Court's previous order has been addressed.

B. Site-Specific Analysis

As noted above (Part III.B), one of Plaintiffs' original arguments was that DOE unlawfully chose to prepare an EA and FONSI, rather than an EIS. (ECF No. 78 at 23–26.) Among Plaintiffs' sub-arguments in that regard was that DOE had intentionally “excluded the site-specific impacts of leasing, exploration, and mining activities from the programmatic NEPA analysis. Although these impacts have accumulated for decades, [DOE] dismissed past impacts as irrelevant.” (*Id.* at 25 (citations omitted); see also *id.* at 13 (noting DOE's refusal to examine site-specific impacts).) The relevance of site-specific impacts—how deeply DOE must investigate them, and the ways it must incorporate what it learns into its analysis—remains the main point of contention between the parties. It is essentially a dispute over the degree to which DOE may “tier” its environmental investigation.

1. NEPA “Tiering”

“The requirements of [NEPA] have been augmented by longstanding regulations issued by the Council on Environmental Quality (‘CEQ’), to which [the Court] owe[s] substantial deference.” *New Mexico ex rel. Richardson v. BLM*, 565 F.3d 683, 703

(10th Cir. 2009) (“*Richardson*”). Those CEQ regulations “encourage[] [agencies] to tier their environmental impact statements 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. “Tiering” means

coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basinwide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared. Tiering is appropriate when the sequence of statements or analyses is:

(a) From a program, plan, or policy environmental impact statement to a program, plan, or policy statement or analysis of lesser scope or to a site-specific statement or analysis.

(b) From an environmental impact statement on a specific action at an early stage (such as need and site selection) to a supplement (which is preferred) or a subsequent statement or analysis at a later stage (such as environmental mitigation). Tiering in such cases is appropriate when it helps the lead agency to focus on the issues which are ripe for decision and exclude from consideration issues already decided or not yet ripe.

Id. § 1508.28; *see also id.* § 1502.4(d) (“Agencies shall as appropriate employ . . . tiering . . . to relate broad and narrow actions and to avoid duplication and delay.”); *id.* § 1502.20 (“the subsequent [environmental impact] statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action”).

2. Pre-Injunction Arguments & Resolution

In DOE's pre-Injunction briefing, it did not directly invoke the concept of tiering or quote the foregoing regulations. Rather, it relied case law about tiering, particularly case law that emphasized "irreversible and irretrievable commitment of resources" as the trigger for site-specific analysis. (See ECF No. 82 at 22–23 (citing *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466 (D.C. Cir. 2009); *Friends of Southeast's Future v. Morrison*, 153 F.3d 1059 (9th Cir. 1998)).) Because DOE had not irreversibly or irretrievably committed any resources (e.g., its ULMP leases did not divest DOE of authority to control activities on leased tracts), it argued that it had no obligation to conduct site-specific analyses. (*Id.*)

The Court resolved this argument with particular reliance on *Richardson, supra*. *Richardson* involved BLM's management of leases for oil and gas resources lying beneath an ecologically sensitive grassland. 565 F.3d at 688–89. One of the many questions *Richardson* addressed was whether BLM had a duty, while evaluating the entire leasing program, to evaluate any site-specific impacts. See *id.* at 716. Synthesizing previous Tenth Circuit cases on similar issues, *Richardson* held that "the inquiry is necessarily contextual. Looking to the standards set out by regulation and by statute, assessment of all 'reasonably foreseeable' impacts must occur at the earliest practicable point, and must take place before an 'irretrievable commitment of resources' is made." *Id.* at 718. Because BLM had planned to issue certain oil and gas leases in a manner that would have given lessees a legal right, enforceable against the government, to drill on the leased land, *Richardson* found that an irretrievable

commitment of resources was at issue. *Id.* at 718. And, as to a particular gas field, *Richardson* found that the environmental impacts were already reasonably foreseeable because considerable exploration had already occurred on adjacent parcels, a natural gas supply was known to exist in the relevant area, production figures from nearby wells were known, and the proposed lessee's plans for wells and pipelines were known. *Id.* Thus, as to the lease for that particular gas field, site-specific analysis was required "and BLM acted arbitrarily and capriciously by failing to conduct one." *Id.* at 718–19.

Applying *Richardson* to the EA/FONSI, the Court rejected DOE's implication that irretrievable commitment of resources was a necessary element in deciding whether a programmatic analysis must delve more deeply into site-specific impacts. Rather, "the assessment *must absolutely* take place before an irretrievable commitment of resources occurs, thus making [it] a relevant factor to consider, [but] an agency still must conduct the assessment at the earliest practicable point [regardless of whether it faces an irretrievable commitment of resources]." *CEC*, 819 F. Supp. 2d at 1210 n.24 (emphasis in original; internal quotation marks omitted). Analyzing both factors, the Court acknowledged that DOE's ULMP leases had not created an irretrievable commitment of resources, in contrast to the oil and gas leases in *Richardson*. *Id.* at 1209–10.⁵ But that

⁵ Neither before the Injunction nor since has the Court received an explanation of DOE's precise authority to modify or cancel existing ULMP leases, or to control lessees' activities on ULMP tracts. However, as is evident above (Part III.C), DOE's Alternatives 1 and 2 in the PEIS involved canceling leases, and there is no discussion of those Alternatives being infeasible due to lessees' contractual rights. DOE also frequently mentions its ability to modify leases. (See, e.g., R. at 102180, 103872.) And the leases themselves require DOE pre-approval for any surface-disturbing exploration and any actual mine development—a pre-approval process that itself requires NEPA analysis. (R. at 10285–86.) Finally, Plaintiffs nowhere challenge DOE's ability to cancel or modify leases, or to control lessees' activities on ULMP tracts. The Court

factor was “not dispositive, given the compelling facts as to the other relevant factor, that environmental impacts were reasonably foreseeable when DOE issued its EA.” *Id.* at 1210. The Court described those compelling facts as follows:

Presumably based on [the] history of 60+ years of mining and exploration on these very same lands, not only does DOE know that uranium continues to exist under the ULMP lands, but DOE has precise estimates for the amount of uranium that exists and the rate that it can be extracted. The EA also precisely estimated the number and size of mines that will exist under the expanded ULMP, and estimated total surface disturbance at 750 acres.

The EA also indicates that DOE has learned to set precise limitations on where the mine sites can and cannot be located. Further, the EA describes in detail the specific activities that would take place on the lands, such as surface exploration, mine-site preparation, surface-plant area construction and operations, mine development and operation, and interim and permanent shutdown activities. Thus, although DOE had not received any specific exploration or mining proposals at the time of the issuance of the EA, DOE had enough specific information regarding the lease tracts, the environmental setting, and the likely number and size of mines such that site-specific environmental impacts of expanding the ULMP were reasonably foreseeable when DOE issued the EA.

* * *

Here, the Court holds that the administrative record contains sufficient evidence upon which to conclude that extensive uranium mining would have been likely to occur under the expanded ULMP, and the specifics of which were sufficiently foreseeable at the leasing stage (*e.g.*, in terms of the number and size of mines, the acreage that will be disturbed, etc.).

therefore continues to deem it undisputed, as it did in its prior *Richardson* analysis, that issuance of a ULMP lease has far less legal significance than issuance of the sort of lease evaluated in *Richardson*. DOE appears to retain near-total control over ULMP leases.

Id. at 1209 (citations omitted). Thus, DOE had acted arbitrarily and capriciously when it categorically ignored available site-specific information.

3. The PEIS

The 2014 PEIS attempts to fill in the gaps the Court noted in its prior order. The PEIS contains a lengthy description of known site-specific information regarding the various lease tracts. (R. at 101333–362.) Informing these descriptions were mine permit amendment applications submitted by lessee Cotter Corp. to the Colorado Division of Reclamation, Mining, and Safety (“CDRMS”). (R. at 101333; *see also* ECF No. 147 at 8 n.2.) Cotter’s CDRMS documents “contain site-specific information on climate, soils, and wildlife; wildlife mitigation measures; chemical evaluations; maps; monitoring data; stormwater management plans; environmental protection plans (EPPs); reclamation plans; emergency response plans; and geotechnical stability reports.” (R. at 101333.)

CDRMS inspection reports were also reviewed for the ULMP PEIS evaluation. The inspection reports include information on the conditions and characteristics of the mine sites. For example, inspection reports for several mines located within Lease Tract 13 contain information on observations for contaminants and noxious weeds, the presence and condition of mine facilities and stockpiles, potential erosion and stormwater runoff concerns, and so forth.

(Id.)

Based on this information and DOE’s own historical information, DOE developed assumptions about, for example, how mining would likely be done under Alternatives 3–5 (mostly underground, as opposed to open pit mining or other techniques); the physical structures likely to be built for, and equipment housed at, the various mining sites; and

how reclamation would likely be performed. (R. at 101388–99.)

Working from these and other assumptions, DOE evaluated the five alternatives, estimating (as applicable): the amount of exploration that would need to take place to locate ore deposits; the number of lease tracts where actual mining would take place, and for how long; the size of the various mines (in terms of personnel, equipment needed, and area disturbed); the type of mining (underground versus otherwise); how quickly a lessee could reach a “peak year” (maximum mining output); the amount of water likely needed at the various lease tracts; the amount of other consumables needed (*e.g.*, fuel); how waste would be disposed of; operational costs; and the length of time and number of workers required for reclamation. (R. at 101402–417; *see also* R. at 102244–271 (supporting data).)⁶

Using all of these estimates, DOE then evaluated the various Alternatives for their expected effects on air quality, noise levels, soil, water, human health, vegetation, wildlife, aquatic biota, land use, socioeconomic factors, environmental justice, transportation, cultural resources, visual resources (*e.g.*, whether the mines would be an eyesore), and waste management. (R. at 101418–439; *see also* R. at 101718–102054 (providing same analysis in greater detail).)

4. Whether DOE Employed the Proper Approach

DOE defends this analysis as the appropriate method of considering potential site-specific impacts at the programmatic tier of the NEPA process. (ECF No. 147 at 9–

⁶ DOE made estimates about some of these same factors in the 2007 EA, but with much less precision. (See 2007 Administrative Record (ECF No. 137) at 2627.)

10; ECF No. 149 at 2–3.) This is particularly true, says DOE, because it had no actual exploration, mining, or reclamation proposals before it when it developed the PEIS. (*Id.* at 3.)⁷

Plaintiffs disagree that DOE could lawfully use site-specific data to develop assumptions and estimates about likely mining activities. Plaintiffs argue that NEPA, as interpreted in the Court’s prior ruling, requires DOE to affirmatively inspect all lease tracts and thereby develop information on potential site-specific impacts of mining on each particular lease tract. (ECF No. 148 at 8.) More specifically,

a) for lease tracts with existing mining impacts, Defendants should have carried out site inspections of sufficient detail in conjunction with approved and pending environmental protection plans, reclamation plans, and existing mining plans, to identify and disclose the extent of the current on the ground impacts to site-specific resources, and also to calculate surety bonds to ensure the lessee, not the federal taxpayer, shoulders remediation and reclamation costs

b) for new mining on as-yet undisturbed lease tracts, Defendants should have carried out site inspections and analysis of site-specific resources (e.g. river corridors, listed species, cultural resources) sufficient to determine whether to offer leases at all and what, if any, conditions require site-specific lease stipulations or mitigation measures. For the as-yet developed lease tracts, NEPA “tiering” may be appropriate for exploration proposals and mining plans, but only if such plans (approved or proposed) do not currently exist.

⁷ Plaintiffs cite the declaration of Russel Edge, a DOE employee who oversees the ULMP, for the proposition “that in 2014, *prior to the completion of the PEIS*, Gold Eagle [one of the ULMP lessees] submitted [a reclamation plan to DOE] for approval, but . . . DOE has refused to even review those plans.” (ECF No. 148 at 5 (emphasis added).) To the contrary, Edge’s declaration states that DOE received Gold Eagle’s reclamation plan on June 30, 2014. (ECF No. 147-1 ¶ 13.) DOE signed the ROD on May 6, 2014—nearly two months earlier. DOE therefore did not ignore the Gold Eagle reclamation plan when formulating the PEIS or ROD.

(*Id.* at 9–10 (citations omitted).)⁸

This amounts to an argument that DOE acted arbitrarily and capriciously in the basic choice to engage in tiering—*i.e.*, to develop a programmatic EIS before developing narrower environmental analyses, as necessary. If this truly is Plaintiffs’ argument, it was equally available when they filed this lawsuit against the 2007 EA, which was also explicitly programmatic. But Plaintiffs did not make any such argument. To the contrary, they emphasized their own comments submitted during the administrative process leading up to the 2007 EA, in which they demanded a full EIS and advised that decisions regarding “exploration, mining, [and] milling of uranium should be conducted after completion of the EIS. These decisions should be tiered to the EIS.” (ECF No. 78 at 12.) DOE has now followed the procedure Plaintiffs demanded: it prepared a programmatic EIS from which narrower NEPA analyses may be tiered. Plaintiffs have by now forfeited any argument that a programmatic approach was improper.

Nor can the Court see how a programmatic approach could be deemed arbitrary and capricious in these circumstances. The question facing DOE was whether it should continue the ULMP at all (Alternatives 1–2), and if so, on what scale (Alternatives 3–5). Such a question appears to fit neatly within the CEQ regulations encouraging tiered analysis. Accordingly, to the extent Plaintiffs have not forfeited an argument that the programmatic approach was arbitrary and capricious, the Court rejects it.

⁸ The foregoing block quote is Plaintiffs’ response to a question the Court specifically posed: “To the extent Plaintiffs believe Defendants did not properly consider site-specific information, what specifically should Defendants have done differently?” (ECF No. 134 at 2.)

Plaintiffs also appear to be reading far too much into this Court's prior opinion. DOE had presented to this Court an essentially categorical argument that it could defer *all* site-specific analysis until it was about to irretrievably commit its resources. (See ECF No. 82 at 22–25.) In light of *Richardson*, that argument was incorrect: “the inquiry is necessarily contextual,” not categorical. 565 F.3d at 718. Moreover, *Richardson* also showed that information in an agency's possession (particularly historical information about similar activities in the same or nearby locations) can, in certain circumstances, give rise to a NEPA obligation to evaluate at least some site-specific impacts earlier than one might normally expect given the tiering approach. *Id.* at 718–19. The Court found that information in DOE's possession (particularly historical information about ULMP mining activities) gave rise to a NEPA obligation to evaluate that information, not to ignore it. *CEC*, 819 F. Supp. 2d at 1208–09. But, as the Court stated, “DOE had not received any specific exploration or mining proposals at the time of the issuance of the EA.” *Id.* at 1209. The degree to which DOE needed to account for and analyze site-specific factors was necessarily subject to that reality—a reality which remained true through the publication of the PEIS and ROD, and remains true today.

NEPA analysis must take place “at the earliest *practicable* point.” *Richardson*, 565 F.3d at 718 (emphasis added). Nothing in the record demonstrates that it would be practicable for DOE to, *e.g.*, “calculate surety bonds to ensure the lessee, not the federal taxpayer, shoulders remediation and reclamation costs” or “determine . . . what, if any, conditions require site-specific lease stipulations or mitigation measures” (ECF No. 148 at 9) without knowing what lessees plan to do on their lease tracts. This

appears to be precisely the sort of “not yet ripe” issue that CEQ’s tiering regulations postpone for later stages, 40 C.F.R. § 1502.28(b), “to avoid duplication and delay,” *id.* § 1502.4(d).

Plaintiffs’ argument that DOE should examine the various lease tracts’ individual circumstances “to determine whether to offer leases at all” (ECF No. 148 at 9) presents a more interesting question. For two reasons, however, the Court finds that this argument is not a basis on which to vacate to the PEIS and ROD.

First, although Plaintiffs do not characterize it as such, this is ultimately an attack on the scope of the PEIS and whether DOE considered a reasonable range of alternatives. Plaintiffs argue, in essence, that DOE should have considered alternatives other than allowing exploration and/or mining on thirteen lease tracts (Alternative 3) or all thirty-one lease tracts (Alternatives 2 & 3), because detailed site-specific analysis could have revealed that something between thirteen and thirty-one, or perhaps less than thirteen, was more appropriate. But Plaintiffs already raised a reasonable-range-of-alternatives argument in their pre-Injunction briefing (an argument the Court rejected, see *CEC*, 819 F. Supp. 2d at 1214–15), yet they did not raise this particular argument and it is far too late to do so now.

Second, even if it were not too late, the argument ultimately fails. Again, CEQ regulations encourage tiering. At the *programmatic* phase, then, the question of whether or not *each individual tract* is suitable for leasing would likely only be relevant in extreme cases. “[T]he inquiry,” as always, “is necessarily contextual.” *Richardson*, 565 F.3d at 718. For example, if DOE knew from previous mining operations that the

topography and soil composition of certain lease tracts routinely thwarted measures designed to prevent runoff and groundwater contamination, it *might* create a NEPA duty to gather information about all lease tracts—so that DOE could know whether the same topography exists on other lease tracts. That would be useful information at the *programmatic* phase in deciding whether to maintain the program at all, or to calculate the likely environmental damage from further leasing. *Cf. New York v. Nuclear Regulatory Comm’n*, 681 F.3d 471, 481 (D.C. Cir. 2012) (in the context of extending the length of time that spent nuclear fuel rods could be stored in on-site cooling pools, holding that the Nuclear Regulatory Commission was required to “examin[e] past leaks [from cooling pools] in a manner that would allow the Commission to rule out the possibility that those leaks were only harmless because of site-specific factors or even sheer luck”). Plaintiffs point to nothing of the sort here. Their lone example of anything even arguably approaching this extremity is one instance in September 2013—an “extraordinar[il]y rainy month”—when the outfall at one of Cotter’s mine waste dump sites (left over from previous mining operations) registered in excess of Colorado water safety standards for radium-226. (ECF No. 148-1 at 5; see *also* ECF No. 148 and 16–17.) At the programmatic phase, this is far from the sort of event necessary to trigger a site-by-site investigation “at all lease tracts,” as Plaintiffs demand. (*Id.* at 17.)⁹

⁹ Plaintiffs claim that “[a] similar emergency spill and response occurred” at another lease tract in November 2014. (*Id.*) However, the declaration to which they cite actually describes rain-washed soil that filled a rainwater diversion channel, causing rainwater to “flow across [a] reclaimed mine shaft,” which in turn caused subsidence in “the soil that had been used to backfill the shaft area.” (ECF No. 113-1 ¶ 8.) There is no suggestion that anything of a toxic or radioactive nature was released.

Finally, the Court emphasizes that although an irretrievable commitment of resources is not required to trigger site-specific analyses at the programmatic phase, it is nonetheless “a relevant factor to consider.” *CEC*, 819 F. Supp. 2d at 1210 n.24. The Court holds that, given the circumstances with which DOE was presented, DOE’s use of site-specific information to create estimates and assumptions, and thereby to evaluate the alternatives, was a reasonable approach to its programmatic analysis given that DOE still retains essentially total control of lessees’ ability to explore or mine on their leased tracts (see n.5, above). DOE’s approach was, moreover, in compliance with this Court’s remand instructions.

C. Additional Arguments Related to Site-Specific Analysis

Having established that DOE did not approach its task on remand improperly, the Court now turns to Plaintiffs’ arguments that specific matters required more site-specific analysis.

1. Radioactive Contamination

Plaintiffs argue that DOE has impermissibly neglected to analyze “the storage, disposal, and leak impacts of radioactive mining wastes created by its decision to continue the [ULMP] and (re)issue leases.” (ECF No. 148 at 16.) This refers to the incident just discussed (Part IV.B.4), in which heavy rain caused one of Cotter’s outfalls to register over the state limit for radium-226. The Court finds this insufficient to render the PEIS and ROD arbitrary and capricious. “Perfection is not required by the NEPA process.” *Citizens for Alternatives to Radioactive Dumping v. U.S. Dep’t of Energy*, 485 F.3d 1091, 1098 (10th Cir. 2007). “Deficiencies in an EIS that are mere ‘flyspecks’ and

do not defeat NEPA's goals of informed decisionmaking and informed public comment will not lead to reversal." *Richardson*, 565 F.3d at 704.

Plaintiffs also point to CDRMS records from February and June 2013, reporting the results of radiologic surveys at certain ULMP mine sites and along certain nearby roads. (*Id.* at 27–28.) Plaintiff's fault DOE for not factoring the test results into the PEIS's analysis. (*Id.*) The radiologic surveys are extra-record evidence (ECF Nos. 148-7, 148-8), but DOE asserts no specific objection to them as such. In any event, Plaintiffs misrepresent these records. Plaintiffs say that these records show measurements of "600 mrem/hour on Lease Tract 18 and on Tract 7 . . . 300 mrem/hr" (ECF No. 148 at 28), referring to millirems per hour.¹⁰ But the documents Plaintiffs cite actually show measurements in "uR/hr" (ECF No. 148-7 at 9–10; ECF No. 148-8 at 5–6), which is a typographically simpler way of invoking μ R/hour (see *id.* at 3 (using "uR/hr" and " μ R/hr" interchangeably)). This refers to microroentgens, not millirems, a distinction Plaintiffs fail to raise. Plaintiffs do not explain the significance of these microroentgen measurements or how they might have affected DOE's analysis. At best, then, Plaintiffs raise another "flyspeck" that "do[es] not defeat NEPA's goals of informed decisionmaking and informed public comment." *Richardson*, 565 F.3d at 704.

2. Reclamation Bonds

DOE requires lessees to post a reclamation bond to ensure, at a minimum, that

¹⁰ The PEIS notes that DOE has established a "dose limit for protection of the general public [at] 100 mrem/yr from all exposure pathways." (R. at 101425.) Thus, if the radiologic surveys truly showed areas where one could receive 300–600 mrem/hr, it would be an extremely dangerous dose.

money will be available to reclaim a mining site when the lessee ends mining operations. (R. at 102187.) Each of the twenty-nine existing leases includes this bonding requirement. (See ECF No. 148 at 20.) Plaintiffs point out that the PEIS identifies several of the lease tracts as currently in need of reclamation, and Plaintiffs challenge the PEIS for failing to include site-specific information about the amount of reclamation needed for each site, thereby failing to justify the existing bond amounts. (*Id.* at 19–21.)

The Court does not perceive the relevance of such information at the programmatic phase. The performance bond is not due until DOE approves site-specific exploration or mining plans. (R. at 101332, 102187.) DOE sets the performance bond “based on an evaluation of the lessees’ proposed activities, including site-specific access routes, exploration drill-hole locations, mine-site support facility locations, and proposed methods of reclamation.” (R. at 101331.) But DOE does not have before it any exploration or mining proposals. Requiring it to estimate, at this phase, the likely reclamation bond for each lease tract would border on the futile. Thus, DOE did not behave arbitrarily and capriciously in failing to offer the estimates that Plaintiffs demand.¹¹

¹¹ Plaintiffs elaborate on their reclamation argument by asking the Court to consider extra-record materials that DOE generated with respect to what is known as the “Defense-Related Uranium Mines” project, or “DRUM.” (ECF No. 148 at 18–19, 21; see also ECF Nos. 148-3 through 148-6.) DRUM, as its full name suggests, addresses mines that were “developed to extract uranium ore for atomic energy defense-related activities of the United States,” and more specifically, abandoned mines that operated from 1947 to 1970. (ECF No. 148-3 at 11.) In 2013, Congress charged DOE with investigating these abandoned mines. (*Id.*) DOE objects to considering DRUM-related materials, given their extra-record character. (ECF No. 149 at 32–33.) However, even if the Court were to consider them as if part of the record, the Court finds

3. Compliance with Colorado Law

Plaintiffs make a strange argument that DOE committed both a NEPA and an ESA violation “because it failed to consider Colorado’s mandate that an ‘environmental protection plan [“EPP”] shall be required for all designated mining operations.” (ECF No. 148 at 22 (quoting Colo. Rev. Stat. § 34-32-116.5(1)(a)).) Plaintiffs seem to base this argument in the Injunction’s provision that DOE may file a motion to dissolve after “conduct[ing] and environmental analysis on remand that complies with NEPA, ESA, *all other governing statutes and regulations*, and this Order.” *CEC*, 819 F. Supp. 2d at 1224 (emphasis added). (See also ECF No. 148 at 23 (quoting this language).) But Plaintiffs make no argument that the cited Colorado statute applies to DOE or any other federal agency, as opposed to the mine operators themselves. Nor have Plaintiffs made any attempt to show that a federal agency’s failure to abide by a state law is reviewable in an APA lawsuit.

Plaintiffs also point to a Memorandum of Understanding between DOE and CDRMS, and Plaintiffs accuse DOE of “not [meeting] its commitment to cooperate with CDRMS to ensure the ULMP lease tracts comply with Colorado mining laws that apply to these federal public lands.” (*Id.* at 34–35.) Again, Plaintiffs point to no authority that an alleged violation of a memorandum of understanding between a federal and state

that they do not bolster Plaintiffs’ case. The portions of the DRUM documents that Plaintiffs cite show that actual reclamation measures needed for the abandoned mines can only be evaluated on a site-by-site basis. (ECF No. 148 at 18–19, 21.) To the extent these abandoned mines are comparable to the ULMP mines, the DRUM documents ultimately add nothing. It is beyond question that DOE cannot determine the reclamation measures needed for a specific tract without a site-specific inquiry. But no site-specific inquiry of such granular detail is required at the current tier of the NEPA process.

agency is redressable (by Plaintiffs, particularly) in an APA lawsuit.

In any event, the bulk of this Colorado-law argument actually focuses on EPPs (environmental protection plans required under state law) that have supposedly been generated by ULMP lessees and filed with CDRMS, but which DOE never considered in evaluating site-specific impacts. (See ECF No. 148 at 23–25, 35.) In other words, Plaintiffs' Colorado-law argument appears to be another angle from which to attack the PEIS as deficient with respect to site-specific analysis, because the EPPs contain site-specific information but the PEIS allegedly does not account for that information.

However, the Administrative Record contains all of the EPPs available at the time the PEIS was finalized. (See R. at 25818–28498 (cited in the PEIS as “Cotter Corp. 2011, 2012a–g”).) DOE specifically considered these documents as it developed its estimates and assumptions regarding likely future mining activities and their effects. (See, e.g., R. at 101396, 101398, 101425.) For instance, it drew from these documents certain data that allowed it to estimate the risk of radiation-caused cancer in humans. (R. at 101425–27.) Consequently, it is plain from the record that DOE did not fail to account for the EPPs. There is no basis to hold that it acted arbitrarily and capriciously in this respect.

4. Mitigation

“[A]n EIS *must* include a discussion of mitigation measures.” *WildEarth Guardians v. U.S. Fish & Wildlife Serv.*, 784 F.3d 677, 698 (10th Cir. 2015) (emphasis in original). A “mere listing” of mitigation measures is not enough. *Colorado Env'tl. Coal. v. Dombeck*, 185 F.3d 1162, 1173 (10th Cir. 1999). Even so,

NEPA does not contain a substantive requirement that a complete mitigation plan be actually formulated and adopted. An EIS's discussion of mitigation measures need be only reasonably complete. It need not present a mitigation plan that is legally enforceable, funded or even in final form to comply with NEPA's procedural requirements.

The line between an EIS that contains an adequate discussion of mitigation measures and one that contains a mere listing is not well defined. The essential test is reasonableness. And the detail that reasonableness requires can depend on the stage of the approval process at which the EIS is prepared.

Detailed quantitative assessments of possible mitigation measures are generally necessary when a federal agency prepares an EIS to assess the impacts of a relatively contained, site-specific proposal. But requiring such detail would often not be appropriate when the EIS concerns a large-scale, multi-step project and the risks to be mitigated cannot be accurately assessed until final site-specific proposals are presented. For the EIS to analyze in detail every possible site proposal could take enormous time and resources, much of which would be wasted on potential proposals that would never materialize. Thus, NEPA regulations allow for tiering

San Juan Citizens All. v. Stiles, 654 F.3d 1038, 1054 (10th Cir. 2011) (internal quotation marks and citations omitted; alterations incorporated).

Plaintiffs contend that DOE's discussion of mitigation measures is a "mere listing." (ECF No. 148 at 26.) It is true that DOE's mitigation discussion is formatted as a bullet-point list (see R. at 101979–90), but the Court finds that it is not *merely* a list. It is, rather, an eleven-page, small-font explanation of dozens upon dozens of mitigation practices organized into twelve subject-matter categories ("Reduce dust emissions; reduce air emissions," "Identify and protect paleontological resources," etc.). (*Id.*) Each mitigation measure is discussed with an appropriate level of detail considering that DOE

has no specific exploration or mining plans before it. The Court finds that this documentation of DOE's mitigation measures analysis is reasonable under the circumstances. *Cf. Okanogan Highlands All. v. Williams*, 236 F.3d 468, 476 (9th Cir. 2000) ("The [mitigation] procedures are in 'bullet' form and are stated in somewhat general terms, but this format is not deficient in the circumstances: The exact environmental problems that will have to be mitigated are not yet known because the Project does not exist. The EIS also requires [the mining company] to post a security deposit to ensure compliance with environmental standards.").

Plaintiffs cite *Wyoming Outdoor Council v. U.S. Army Corps of Engineers*, 351 F. Supp. 2d 1232 (D. Wyo. 2005), for the proposition that the discussion of mitigation measures must necessarily include an analysis of their effectiveness. (ECF No. 148 at 26–27.) In *Wyoming Outdoor Counsel*, however, commenters during the draft process specifically challenged the agency on an apparently untested wetlands replacement tactic. 351 F. Supp. 2d at 1251 n.8. And the agency "fail[ed] to point to a shred of scientific evidence in the record to demonstrate that wetland replacement is a successful mitigation measure." *Id.* at 1251. Plaintiffs have pointed to nothing similar in the record here, nor any case law establishing that an agency must, in all circumstances, include in the EIS an assessment of the effectiveness of every proposed mitigation measure—particularly when assessing matters at the programmatic level.

The Court finds that DOE's mitigation analysis was reasonable under the circumstances, and therefore not a basis to vacate the PEIS and ROD.

V. ESA § 7 ANALYSIS

A. DOE's Efforts on Remand

Under ESA § 7, a federal agency is required to “insure that any action authorized, funded, or carried out by such agency . . . is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species” 16 U.S.C. § 1536(a)(2); *see also Rio Grande Silvery Minnow v. Bureau of Reclamation*, 601 F.3d 1096, 1104 (10th Cir. 2010) (“*Silvery Minnow*”). To meet this obligation, the agency must “review its actions at the earliest possible time to determine whether any action may affect listed species or critical habitat.” 50 C.F.R. § 402.14. If the agency determines that an action may affect listed species or critical habitat, it must formally consult with the United States Fish & Wildlife Service (“FWS”). 50 C.F.R. § 402.14. “During consultation, the FWS evaluates the effects of the proposed action on the survival of the species and any potential destruction or adverse modification of critical habitat” *Silvery Minnow*, 601 F.3d at 1105.

The Court previously held that DOE violated the ESA when, while developing the 2007 EA, it failed to consult with FWS. *CEC*, 819 F. Supp. 2d at 1220–23. On remand, DOE developed a Biological Assessment (“BA”). (R. at 102338–433.) The purpose of a BA is to “evaluate the potential effects of the action on listed and proposed species and designated and proposed critical habitat,” and to “determine whether any such species or habitat are likely to be adversely affected by the action”; a BA “is used in determining whether formal consultation or a conference is necessary.” 50 C.F.R. § 402.12(a). The

actual content of a BA is

at the discretion of the Federal agency and will depend on the nature of the Federal action. The following may be considered for inclusion:

- (1) The results of an on-site inspection of the area affected by the action to determine if listed or proposed species are present or occur seasonally.
- (2) The views of recognized experts on the species at issue.
- (3) A review of the literature and other information.
- (4) An analysis of the effects of the action on the species and habitat, including consideration of cumulative effects, and the results of any related studies.
- (5) An analysis of alternate actions considered by the Federal agency for the proposed action.

Id. § 402.12(f).

DOE's BA contains a summary of its assumptions about the number and size of mines it expects to operate under the continued ULMP, estimates regarding water use under those assumptions, potential mitigation measures, and so forth. (R. at 102357–102377) The BA concludes, among other things, “that ULMP activities may affect, and are likely to adversely affect” certain Colorado River endangered fish species, namely, the Colorado pikeminnow, humpback chub, razorback sucker, and bonytail. (R. at 102348 (emphasis removed).) This is primarily because the Dolores and San Miguel Rivers run through or near some of the ULMP lease tracts. (R. at 102358.) The San Miguel River is a tributary of the Dolores River, and the Dolores River is a tributary of the Colorado River. (R. at 102387.) Thus, to the extent ULMP mining affects those rivers (through, e.g., water withdrawals, or sediment-contaminated runoff), those effects

could eventually reach the Colorado River and disrupt critical fish habitat. (R. at 102358–59, 102385–392.)

DOE transmitted its BA to FWS. (R. at 102328.) It then became FWS’s duty to review all relevant information transmitted by the requesting agency, and all relevant information “otherwise available.” 50 C.F.R. § 402.14(g)(1). FWS may also ask the requesting agency to “obtain additional data.” *Id.* § 402.14(f).

In this case, FWS did not ask DOE to obtain additional data, but instead relied on the BA, on FWS’s own previous work regarding Colorado River fish, and on various scholarly sources, to issue a Biological Opinion (“BiOp”) concluding that there existed no likelihood that the continued ULMP would jeopardize any threatened or endangered species. (R. at 102330–36.)

B. Whether Plaintiffs May Challenge the BA

Plaintiffs argue that this process was not enough to satisfy DOE’s ESA § 7 obligation because the BiOp relied principally on representations in the BA, and the BA itself was deficient. (ECF No. 148 at 29–34.) Citing *Oregon Natural Desert Association v. Tidwell*, 716 F. Supp. 2d 982, 995 (D. Or. 2010) (“*ONDA*”), DOE counters that a BA is not a final agency action and therefore not directly challengeable under the APA. (ECF No. 149 at 21.)¹² However, the same District of Oregon case also holds that it is arbitrary and capricious for a federal agency to rely on a BiOp that the agency knows is “based on inaccurate information.” *ONDA*, 716 F. Supp. 2d at 1004. The Court

¹² A BiOp is a final agency action that may be challenged through the APA, see *Bennett v. Spear*, 520 U.S. 154, 177–78 (1997), but Plaintiffs have not done so.

understands Plaintiffs to be making this sort of argument. (See ECF No. 148 at 32 (“As with any poison tree, the Section 7 consultation that grew out of an relied on the inadequate BA is unlawful”).)

The viability of this argument is unclear. *ONDA*, obviously, rules in Plaintiffs’ favor, but DOE emphasizes (see ECF No. 149 at 21) that the contents of a BA are “at the discretion of the Federal agency.” 50 C.F.R. § 402.12(f). DOE seems to imply that an explicit grant of discretion somehow shields the agency from administrative review—even though the Court’s current task is to determine if DOE’s actions were “arbitrary, capricious, *an abuse of discretion*, or otherwise not in accordance with law.” 5 U.S.C. § 706(2)(A) (emphasis added). Nonetheless, at least one district court seems to agree with DOE’s position. See *Def. of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 126 n.4 (D.D.C. 2001) (emphasizing § 402.12(f)’s discretionary character and finding that “the consulting agencies do not have the duty to evaluate the cumulative effects in the BAs they prepare”).

The Ninth Circuit, on the other hand, has stated that a BA is reviewable under the normal standard: “We will find a biological assessment inadequate only if the agency entirely failed to consider an important aspect of the problem or to consider the relevant factors and articulate a rational connection between the facts found and the choice made.” *City of Sausalito v. O’Neill*, 386 F.3d 1186, 1216 (9th Cir. 2004) (internal quotation marks omitted); see also *Medina Cnty. Env’tl. Action Ass’n v. Surface Transp. Bd.*, 602 F.3d 687, 699–704 (5th Cir. 2010) (noting that § 402.12(f) vests an agency with discretion regarding what “may be considered,” and going on to analyze the

plaintiff's arguments that the agency's BA should have included some of those "may be considered" factors; FWS was also a defendant). But the Ninth Circuit has also suggested that failure to include one of § 402.12(f)'s "may be considered" factors will rarely, if ever, justify a finding against the agency. *Conservation Cong. v. U.S. Forest Serv.*, 720 F.3d 1048, 1056 (9th Cir. 2013) ("[U]nder the plain meaning of 50 C.F.R. § 402.12(f), consideration of cumulative effects is permissive, not mandatory. The district court correctly determined that the Forest Service did not abuse its discretion in failing to consider a factor that it was not required to consider in the first place.").

No party has pointed to any Tenth Circuit precedent directly on point. Given this, the Court essentially agrees with the District of Oregon's *ONDA* decision. *ONDA* addressed circumstances in which the consulting agency knew it had given inaccurate information to FWS, which is not the case here. However, the animating principle of *ONDA* remains valid—"garbage in, garbage out"—and this principle applies equally well to circumstances in which an agency has simply failed to provide FWS with information in the agency's possession necessary for FWS to reach a sound conclusion. Indeed, "the discretionary nature of the contents of the biological assessment should not detract from the fact that it is prepared in fulfillment of section 7(a)(2) of the ESA." *Water Keeper All. v. U.S. Dep't of Def.*, 271 F.3d 21, 33 (1st Cir. 2001). An agency acts "not in accordance with law," 5 U.S.C. § 706(2)(A), when it fails to convey material information in its possession to FWS, and the agency behaves arbitrary and capriciously when it relies on a BiOp resulting from a materially defective consultation.

DOE counters that the Tenth Circuit already foreclosed such a theory in the

Silvery Minnow case. (ECF No. 149 at 21.) In *Silvery Minnow*, the plaintiffs sought a declaratory judgment about two BiOps that had since been superseded. 601 F.3d at 1111–12. The plaintiffs argued that their challenge was not moot because the court was “situated to provide *some* relief, especially declaratory relief regarding the scope of [the agency’s] discretion in consultation.” *Id.* at 1112 (emphasis in original). In this context, the Tenth Circuit stated that “the duty to consult is not itself an ongoing agency action subject to challenge. In other words, the [plaintiffs] cannot challenge the scope of consultation untethered from the federal agencies’ efforts to develop a biological opinion. The consultation process culminates in the issuance of a biological opinion.” *Id.* In other words, the Tenth Circuit rejected a challenge in the abstract to an agency’s consultation obligations.

Here, Plaintiffs’ challenge is not in the abstract. A consultation took place, a BiOp resulted, and the agency then relied on that BiOp. The Court holds that the decision to rely on the BiOp may be challenged as arbitrary and capricious if FWS itself principally relied on the BA to perform its analysis, and if it can be demonstrated that the consulting agency withheld from the BA material information in its possession. In this case, FWS specifically stated that its determination regarding Colorado River endangered fish was “based on the information provided by the DOE.” (R. at 102331.) A review of the BiOp’s analysis leading up to that determination further confirms that FWS relied principally, if not entirely, on what it learned from the BA. (R. at 102330–31.) Thus, the question is whether DOE withheld material information within its possession. The Court turns to that inquiry next.

C. Specific Challenges to the BA

1. Age of Population Data

Plaintiffs attack the BA for relying on fish population data last gathered in 2002. (ECF No. 148 at 32.) However, ESA § 7 requires only that the consulting agency “use the best scientific and commercial data *available*.” 16 U.S.C. § 1536(a)(2) (emphasis added). Plaintiffs have pointed to no better or more recent study available to DOE regarding fish populations.

In the context of the ESA’s mandate that decisions whether to list a species as threatened and endangered be made “on the basis of the best scientific and commercial data available,” 16 U.S.C. § 1533(b)(1)(A), the D.C. Circuit has held that “[t]he best available data requirement makes it clear that [FWS] has no obligation to conduct independent studies. . . . [Instead, it] merely prohibits [FWS] from disregarding available scientific evidence that is in some way better than the evidence [it] relies on.” *Sw. Ctr. for Biological Diversity v. Babbitt*, 215 F.3d 58, 60 (D.C. Cir. 2000) (internal quotation marks omitted). The Court can see no reason why “best scientific and commercial data available” should receive a different interpretation in the context of preparing a BA. Consequently, DOE’s reliance on fish population studies from 2002 was not arbitrary and capricious. DOE withheld nothing from FWS material to this challenge.

2. “Expert Panels”

Plaintiffs make an offhand reference to the fact that the BA “identif[ies] no expert panels” who have endorsed mitigation methods. (ECF No. 148 at 32.) Plaintiffs cite nothing to support such a requirement. To the extent they are alluding to the fact that

“[t]he views of recognized experts on the species at issue” are among the factors that “may be considered” when developing a BA, 50 C.F.R. § 402.12(f)(2), Plaintiffs do not identify any information from expert panels in DOE’s possession, nor do Plaintiffs attempt to explain why it may have been an abuse of discretion for DOE not to solicit experts’ views. Plaintiffs have not shown that DOE behaved arbitrarily or capriciously in this regard.

3. Water Depletions

Plaintiffs further contend that DOE failed to inform FWS of the true scope of potential water depletion. (ECF No. 148 at 33–34.) Uranium mining generally requires potable water to be transported in for showers and for drinking water, and as a dust suppressant. (R. at 101410, 102359.) “Water depletions associated with uranium mining may contribute to the destruction or adverse modification of designated critical habitat for the Colorado pikeminnow and could also affect all other Colorado River endangered fish.” (R. at 102386.) DOE estimated that ULMP mines would consume up to 19 acre-feet of water per year, and further assumed that all of this water would be “drawn from within the Dolores River Basin.” (R. at 102360.)

Plaintiffs point out, however, that no similar calculations were made for other mining operations expected to coincide with renewed mining on ULMP lease tracts. Plaintiffs refer to the cumulative effects section of the BA, which contains a subsection regarding reasonably foreseeable future actions, regardless of which party (federal or nonfederal) may take those actions. (R. at 102408.) The first reasonably foreseeable future action discussed is construction of the Piñon Ridge Mill. (R. at 102411–12; see

a/so Part IV.A, above.) Among the many things DOE says about this mill, DOE predicts “[a] surge in uranium exploration, mining, and permitting . . . if the mill is constructed” (R. at 102411), referring to mining on BLM land rather than ULMP lease tracts (see R. at 102415–16). DOE notes that the Piñon Ridge Mill would require water as part of its milling operations. (R. at 102411.) DOE does not, however, estimate the mill’s water requirements, nor the water requirements of the non-ULMP uranium mines it predicts will come into existence. Plaintiffs contend that the BA thus deprived FWS of information it should have received before issuing a BiOp about endangered Colorado River fish. (ECF No. 148 at 33–34.)

DOE’s only counterargument is that it does not have to include this sort of information because other agencies will be in charge of permitting the mill and non-ULMP uranium mines. (ECF No. 149 at 27–28.) This response simply dodges the important point: that FWS could not make a reasoned decision regarding the effect of water depletion on Colorado River endangered fish without understanding the full scope of such potential depletion.

Notably, DOE does *not* claim that it lacks information from which it can reasonably estimate the amount of water the Piñon Ridge Mill will likely consume, or the amount of water non-ULMP uranium mines will likely consume. The Court is therefore compelled to presume that DOE possesses the necessary information.

To be clear, the Court is not passing judgment on DOE’s choice to include a cumulative effects analysis in the BA, or the scope of that analysis. See 50 C.F.R. § 402.12(f)(4). The Court is saying only that the ESA § 7 duty to consult is substantially

thwarted—*i.e.*, the consulting agency acts “not in accordance with law,” 5 U.S.C.

§ 706(2)(A)—if the agency fails to convey information material to FWS’s analysis. Here, the likely total water depletion caused by renewed uranium mining (ULMP and non-ULMP) and milling is precisely that sort of material information. And DOE’s choice to rely on the resulting BiOp—knowing it was based on information bereft of key data pertaining to the water requirements of likely future uranium mills—was therefore arbitrary and capricious.

Fortunately, the remedy in this circumstance does not require total vacatur of the PEIS and ROD. Instead, the Court will leave the existing injunction in place, for the time being, and order DOE to reinitiate consultation with FWS based on a supplemental BA. The supplemental BA may be limited solely to the question of water depletion based on DOE’s estimates of the likely combined annual water usage of ULMP mines, non-ULMP mines likely to become operational, and the Piñon Ridge Mill.¹³ Upon receiving FWS’s response (presumably an additional or supplemental BiOp), DOE may then issue an updated or supplemental ROD and move once again to dissolve the injunction. Such a motion need only address whether DOE fulfilled its ESA § 7 consultation duties with respect to water depletion that may affect Colorado River endangered fish.

VI. CONCLUSION

For the reasons set forth above, the Court ORDERS as follows:

1. DOE’s Motion to Dissolve the Injunction (ECF No. 147) is DENIED WITHOUT

¹³ Given the narrow scope of the supplemental BA, the Court presumes that it can be completed in far less time than the usual 180 days. See 50 C.F.R. § 402.12(i).

PREJUDICE; and

2. On or before **February 12, 2018**, DOE shall submit a status report informing the Court of the date by which it believes it can submit a supplemental BA to FWS, **not to exceed 90 days** from the date of this Order. After receiving the status report, the Court will issue a supplemental order establishing a date certain by which DOE must submit the supplemental BA to FWS.

Dated this 2nd day of February, 2018.

BY THE COURT:



William J. Martinez
United States District Judge