JOHN C. CRUDEN
Assistant Attorney General
CLARE M. BORONOW, Trial Attorney
clare.boronow@usdoj.gov
U.S. Department of Justice
Environment and Natural Resources Division
Natural Resources Section
P.O. Box 7611
Washington, DC 20044-7611
Tel: (202) 305-0492
Fax: (202) 305-0506

Counsel for Federal Defendants

UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA

CENTER FOR BIOLOGICAL DIVERSITY, et al., Plaintiffs, v. UNITED STATES BUREAU OF LAND MANAGEMENT, et al., Defendants.	Case No: 2:15-cv-04378-MWF/JEM **FEDERAL DEFENDANTS' MEMORANDUM OF POINTS AND AUTHORITIES IN SUPPORT OF CROSS-MOTION FOR SUMMARY JUDGMENT AND OPPOSITION TO PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT** Requested hearing date: June 27, 2016 Courtroom: 1600 Judge: Hon. Michael W. Fitzgerald

TABLE OF CONTENTS

TABLE OF AUTHORITIES

Cases

Statutes

Regulations

Other Authorities

INTRODUCTION

This case is not about an unforeseen and unanalyzed fracking boom; it is about the Bureau of Land Management's ("BLM") attempt to update two outdated resource management plans to better protect the environment while continuing to allow oil and gas development as authorized by statute. Plaintiffs' challenge to the Bakersfield Resource Management Plan ("RMP") misrepresents not only the nature and use of well stimulation technologies and enhanced oil recovery methods in central California, but also the effect of the RMP. Plaintiffs present hydraulic fracturing ("fracking") and steam injection as new technologies that threaten unanticipated environmental impacts. They suggest that the Bakersfield RMP allows oil and gas drilling on over one million acres of pristine federal lands and that these technologies will be used throughout that acreage.

In fact, fracking has been used to stimulate wells in the San Joaquin Valley since the 1950s; injection has been used to increase production in California for over 50 years. AR012083; AR012595; AR018961. The Bakersfield RMP does not authorize leasing or drilling on over one million acres; it makes these lands, most of which were already open to development under prior RMPs, available for future leasing. AR092375; AR089735. Any drilling on those lands is contingent on the developer obtaining a lease and permit, both of which require additional agency action and environmental review. AR092287. And while about 25% of new wells in the Bakersfield planning area are expected to be fracked, 98% of new wells on federal mineral estate in the planning area are projected to be drilled on existing leases that have been producing for over 30 years. AR089538; AR012429.

BLM fully complied with the National Environmental Policy Act ("NEPA") in developing the Bakersfield RMP. It properly relied on past practices, including the use of fracking and steam injection, to forecast future oil and gas development in the planning area. It developed a range of alternatives that reflected the fact that the vast majority of future development is likely to occur on lands already leased.

It then took a hard look at the impacts of anticipated oil and gas development in a 1,000-page environmental impact statement ("EIS"). Before issuing a final decision, BLM commissioned an independent review of well stimulation technologies in California to ensure that its EIS accurately reflected the potential impacts of fracking. When that report confirmed BLM's analysis, the agency reasonably determined that there was no need to supplement the EIS.

But the Court need not even reach the merits of this case. Plaintiffs lack standing to bring this suit because they have not and cannot allege a concrete injury stemming from BLM's approval of the RMP. Not only does the RMP make no irreversible commitments of resources as it approves no leases or permits, its designations of lands open and closed to leasing can be changed in the future by subsequent land use planning. For the same reason, this case is not ripe for adjudication. Review of the RMP before BLM has authorized any leasing or drilling that might affect Plaintiffs would be premature.

FACTUAL BACKGROUND

I. Oil and Gas Well Stimulation in California

Well stimulation technologies ("WST"), such as hydraulic fracturing, and enhanced oil recovery techniques ("EOR"), such as steam injection, have been used in California for over 50 years.[1] AR012083; AR018961. WST are used to increase the permeability of hydrocarbon-bearing formations by creating additional channels through which oil or gas can flow. AR012082-84. When stimulating a

[1] Plaintiffs refer to "unconventional drilling methods" throughout their Motion but do not define that term. *E.g.*, Pls.' Mot. 1, 2, 4. Unconventional drilling methods is not a term of art. *See* AR018916 ("An oil reservoir is typically classified as *unconventional* if well stimulation is required for economical production."). Federal Defendants assume that Plaintiffs are challenging hydraulic fracturing and steam injection since those are the technologies that they identify in their Motion, Pls.' Mot. 4, 5, 14, and will refer to those technologies together in this brief as well stimulation and enhanced oil recovery technologies or "WST/EOR."

well via fracking, the operator injects fluid at high pressure into the well to produce fractures in the surrounding rock. AR018919; AR095646. The fractures create additional pathways from the formation to the well, allowing the operator to extract more hydrocarbons. AR018919; AR095648. In contrast, EOR improves the flow of oil through the geologic formation. AR012083. When using steam injection, the operator injects steam into the formation either via the production well itself (cyclic steam injection) or a second injection well (steam flooding) to increase temperature and pressure, thereby encouraging oil to flow. AR012176; AR019235.

Both fracking and steam injection are used routinely in California. About 25% of wells in California are fracked and 75% of California's oil is produced utilizing EOR, including steam injection. AR093955; AR094526; AR012083; AR012595. The majority of oil production, and the majority of fracking, in California occurs in Kern County. AR012429. Roughly 85% of all fracking in California occurs in four oilfields in the southwestern portion of the San Joaquin Basin in Kern County. AR018895; AR012188. Between 2002 and 2013, approximately 33% of all wells in Kern County were fracked. AR012429.

II. The Bakersfield RMP

On March 4, 2008, BLM issued a Notice of Intent to revise the management plans for public lands and minerals managed by the Bakersfield Field Office. AR000148. The planning area—that is, all lands within the Bakersfield Field Office's administrative boundary—consisted of about 17 million acres in Kings, San Luis Obispo, Santa Barbara, Tulare, Ventura, Madera, eastern Fresno, and western Kern Counties. AR089223. The decision area—the lands managed by BLM within the planning area—consisted of about 400,000 acres of public lands (surface and minerals) and an additional 750,000 acres of federal mineral estate. AR089225. The revised RMP would replace the existing management plans for the planning area—the 1997 Caliente RMP and portions of the 1984 Hollister RMP—and would address lands acquired by BLM subsequent to the older RMPs, as well

as new data, laws, regulations, and policies. AR000130; AR089205.

Also in 2008, BLM began the public scoping process to identify issues relevant to the RMP revision. AR000148. The Plaintiff organizations in this case, Center for Biological Diversity ("CBD") and Los Padres ForestWatch ("LPFW"), along with a number of other environmental organizations, submitted joint scoping comments. AR001174. LPFW also submitted separate scoping comments. AR001125. While the comments urged BLM to "diminish[] resource extraction on public lands," they did not mention fracking or other WST/EOR. AR001196-98.

During its initial planning process, BLM drafted a Reasonably Foreseeable Development Scenario ("RFD") to better understand future mineral development in the planning area. *See* BLM Handbook[2] H-1624-1 Planning for Fluid Mineral Resources § III-7 (explaining RFD development). In preparing the RFD, BLM considered past development in the planning area, including the use of fracking. AR017708; AR094634. The RFD forecasted that 100-400 oil and gas wells would be drilled annually on federal mineral estate in the decision area over the next 10-15 years. AR090214. It also projected that 80-90% of oil and gas related surface disturbance would occur in the San Joaquin Valley portion of the planning area and that "the vast majority would be on lands that are already leased (not on new leases issued subsequent to this RMP)." AR090215. The RFD explained that BLM did not expect significantly more oil and gas activity in the next 10-15 years because "[n]o significant new fields have been discovered in the Bakersfield FO decision area in the last twenty years" and no discoveries had been made on federal mineral estate. *Id.*

On September 9, 2011, BLM published a Notice of Availability of the Draft Resource Management Plan and Draft Environmental Impact Statement ("DEIS")

---

[2] BLM Handbooks are available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/blm_handbooks.html.

and solicited comments on that document. AR000380; AR002351. LPFW provided comments on the DEIS; however, those comments concerned BLM's designation of Areas of Critical Environmental Concern ("ACEC") and did not mention the impacts of WST/EOR. AR003413. CBD did not submit comments on the DEIS.

On August 28, 2012, BLM published a Notice of Availability of the Proposed Resource Management Plan and Final Environmental Impact Statement ("FEIS"). AR000389. The FEIS analyzed five alternatives. AR089240. The no action alternative (Alternative A) would have brought forward the existing land and resource management schemes in the prior Caliente and Hollister RMPs. AR089241. Under that alternative, 304,080 acres would remain open to fluid mineral leasing subject to standard terms and conditions, while 707,280 acres would remain open subject to major constraints. AR089427. The proposed plan (Alternative B) would leave 1,011,470 acres open to leasing, all under major constraints. *Id.* The remaining three alternatives, Alternatives C, D, and E, provided for 966,160, 966,160, and 1,013,010 acres, respectively, to remain open to fluid mineral leasing, all subject to major constraints. *Id.*

Under Alternatives B, C, D, and E, the major constraints imposed by BLM on fluid mineral leasing were no surface occupancy and controlled surface use stipulations that give BLM the ability to prohibit surface disturbance or modify development proposals to protect environmental resources. AR090114. For example, BLM may require that a proposed project be relocated or modified if it falls within the range of a threatened or endangered species. AR089287; AR090115-16. BLM may also prohibit surface disturbing activities that jeopardize the existence or recovery of a species. *Id.* Similar stipulations protect ACECs, sensitive species, raptors, critical habitat, priority species, cultural resources, and existing development or uses that may be incompatible with fluid mineral development. AR089287-91; AR090111-25.

The FEIS went on to consider the impacts of oil and gas development under

the various alternatives. It noted that oil and gas development in the planning area does not significantly contribute to air emissions. AR089619; AR089449. BLM recognized the risk of oil and gas development to groundwater and explained that "[d]uring the BLM's project level engineering review of an APD, a proposed well is evaluated to ensure that subsurface resources are protected." AR089512. BLM also evaluated the impact of oil and gas development on biological resources, AR089631-33, cultural resources, AR089670-72, and others. BLM acknowledged that although "[v]irtually all oil fields in California are well past their peak production rates, . . . new technologies such as enhanced oil recovery techniques . . . can significantly increase the percentage of oil recovered profitably." AR089538.

Both LPFW and the CBD protested the FEIS. LPFW did not address fracking or other WST/EOR. AR004670. CBD's protest letter did discuss fracking and incorporated a prior letter sent to BLM's California State Director on August 29, 2012, giving BLM notice of CBD's intent to challenge prior leases and permit approvals under the Endangered Species Act ("ESA"). AR004660; AR093521.

In 2013, after issuing the FEIS but before issuing a Record of Decision, BLM commissioned an independent assessment of WST in California by the California Council on Science and Technology ("CCST"). AR017711. The purpose of the study was to "synthesize and assess the available published scientific and engineering information associated with [hydraulic fracturing] in California." *Id.* CCST requested references from the public as part of its efforts to survey all relevant information, AR012768; AR018890, and CBD submitted 154 references. AR012769; AR020665-704. CCST issued its report on August 28, 2014. AR018867. It concluded that the use and impacts of fracking in California are different than those in other states, any expanded use of WST is likely to occur in or near reservoirs already using such technologies, there are no publicly recorded instances of the subsurface release of well production fluids into potable groundwater in California, fugitive methane emissions from fracking are likely to

be small compared to the total releases caused by all oil and gas production in California, and current fracking in California is unlikely to pose a seismic hazard. AR018895-AR018913.

In December 2014, before issuing its Record of Decision, BLM responded to comments protesting the FEIS in a Protest Resolution Report that was sent to each protestor and posted online. AR092274; AR092583. BLM explained that its projections for oil and gas development over the next 10-15 years took into account technologies including steam injection, horizontal drilling, and fracking. AR092593. It also explained that projected oil and gas development does not vary substantially by alternative in the FEIS because it "is most likely to occur in existing oil fields on leases for which exploration and development rights have already been granted." AR092593-94.

On January 16, 2015, BLM published a Notice of Availability of the Record of Decision for the RMP. AR092680. The Record of Decision explained that BLM had reviewed the CCST's findings and conclusions but determined that they did not constitute significant new information that warranted a supplemental environmental impact statement ("SEIS") because they largely confirmed the analysis in the FEIS. AR092283-86. BLM ultimately selected the proposed plan, Alternative B, as described in the FEIS for the RMP. AR092273. The RMP leaves 1,011,470 acres of federal mineral estate open to leasing subject to major constraints (1,007,590 acres are subject to controlled surface use stipulations and 3,880 acres are subject to a no surface occupancy stipulation), while closing 149,600 acres to fluid mineral leasing. AR092375.

On April 8, 2015, CBD sent BLM a letter requesting that the agency prepare an SEIS for the RMP considering additional information on WST/EOR. AR012652. The letter included a 26-page list of references. AR012684. BLM reviewed the references, AR012710, and concluded that CBD failed to bring them to BLM's attention during the planning process, many were included in the CCST

report, and most were "not germane to the Bakersfield RMP in that they address issues that occur under different circumstances, in different geologic areas, and impact different species." AR012766-67.

STATUTORY BACKGROUND

I. Oil and Gas Development on Federal Lands

The Federal Land Policy and Management Act ("FLPMA") requires BLM to manage public lands "under principles of multiple use and sustained yield." 43 U.S.C. § 1732(a). One of the many uses that BLM must consider is mineral development. 43 U.S.C. §§ 1701(a)(12), 1702(c); 43 C.F.R. § 3100.0-3. The agency is tasked to "develop, maintain, and, when appropriate, revise land use plans" for lands it manages. 43 U.S.C. § 1712(a). These plans must reflect BLM's multiple use mandate. *Id.* §§ 1712(c)(1).

In the oil and gas context, land use plans—also known as RMPs—guide future leasing of federal mineral estate but generally do not authorize any specific projects. AR092286; BLM Handbook H-1601-1 Land Use Planning, App. C at 23-24. Rather, BLM conducts additional NEPA analysis at the leasing and permitting stages to decide whether a given parcel should be leased for oil and gas development, what resource protection stipulations should condition each lease, and whether and under what conditions to approve an application for permit to drill ("APD") for a proposed well. AR092286-87.

II. The National Environmental Policy Act

NEPA serves the dual purpose of informing agency decisionmakers of the environmental effects of proposed major federal actions and ensuring that relevant information is made available to the public. 42 U.S.C. § 4321; 40 C.F.R. § 1501.1; *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). The statute achieves its objectives by imposing procedural rather than substantive requirements. *Robertson,* 490 U.S. at 351 (NEPA "prohibits uninformed—rather than unwise—agency action."). Thus, NEPA does not require an agency to follow

the most environmentally sound course of action, but rather to take a "hard look" at the environmental consequences of proposed actions. *Id.* at 350. An EIS for a programmatic plan must provide "sufficient detail to foster informed decision-making," but "site-specific impacts need not be fully evaluated until a critical decision has been made to act on site development." *Friends of Yosemite Valley v. Norton*, 348 F.3d 789, 800 (9th Cir. 2003) (quoting *N. Alaska Envtl. Ctr. v. Lujan*, 961 F.2d 886, 890-91 (9th Cir. 1992)).

STANDARD OF REVIEW

Because NEPA does not provide a private right of action for judicial review, Plaintiffs' claims must be reviewed under the judicial review provisions of the Administrative Procedure Act ("APA"). *Lujan v. Nat'l Wildlife Fed'n*, 497 U.S. 871, 882-83 (1990). Under the APA, a court may set aside an agency action only if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). "[T]he ultimate standard of review is a narrow one. The court is not empowered to substitute its judgment for that of the agency." *Citizens to Pres. Overton Park, Inc. v. Volpe*, 401 U.S. 402, 416 (1971). Plaintiffs carry the burden of proof. *Kleppe v. Sierra Club*, 427 U.S. 390, 412 (1976).

Under the deferential "arbitrary and capricious standard," a court will overturn a decision only "if the agency relied on factors Congress did not intend it to consider," "entirely failed to consider an important aspect of the problem," or offered an explanation "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." *Lands Council v. McNair*, 537 F.3d 981, 987 (9th Cir. 2008) (en banc), *overruled on other grounds by Winter v. Natural Res. Def. Council, Inc.*, 555 U.S. 7 (2008) (quoting *Earth Island Inst. v. U.S. Forest Serv.*, 442 F.3d 1147, 1156 (9th Cir. 2006)). In other words, there must be "a clear error of judgment." *Marsh v. Or. Natural Res. Council*, 490 U.S. 360, 378 (1989).

A reviewing court is at its "most deferential" when assessing the agency's

consideration of technical matters. *Lands Council*, 537 F.3d at 993. In that role, the reviewing court is not "to act as a panel of scientists" but rather to defer to "an 'agency's predictive judgments about areas that are within the agency's field of discretion and expertise . . . as long as they are reasonable.'" *Id*. at 988, 993 (quoting *Earthlink, Inc. v. FCC*, 462 F.3d 1, 12 (D.C. Cir. 2006)).

ARGUMENT

This Court need not reach the merits of this case because Plaintiffs' claims fail at the threshold. Because the Bakersfield RMP does not approve any oil and gas development and makes no irreversible commitments, Plaintiffs cannot identify a concrete and particularized injury sufficient to support standing to challenge its approval. For the same reason, Plaintiffs' claims are not ripe. Not only does judicial review at this stage require the Court to improperly speculate as to BLM's future decisions, it is also unnecessary. Plaintiffs will have the opportunity to challenge future oil and gas development at the leasing and permitting stages before any drilling occurs, assuming they satisfy the applicable jurisdictional requirements.

Plaintiffs' claims also fail on the merits. BLM fully complied with NEPA: the agency took a hard look at the impacts of oil and gas development, including the use of WST/EOR; considered a reasonable range of alternatives in light of its statutory mandate and preexisting leases; and reasonably decided not to develop an SEIS when new information available after the issuance of the FEIS confirmed the FEIS's analysis.

I. Plaintiffs Lack Standing to Challenge the Bakersfield RMP

This case should be dismissed because Plaintiffs are unable to identify a concrete injury sufficient to support standing. To demonstrate standing, "a plaintiff must show that he is under threat of suffering 'injury in fact' that is concrete and particularized; the threat must be actual and imminent, not conjectural or hypothetical; it must be fairly traceable to the challenged action of the defendant;

and it must be likely that a favorable judicial decision will prevent or redress the injury." *Summers v. Earth Island Inst.*, 555 U.S. 488, 493 (2009). "[A] plaintiff asserting a procedural injury must show that the procedures in question are designed to protect some threatened concrete interest of his that is the ultimate basis of his standing." *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 485 (9th Cir. 2011) (quoting *Citizens for Better Forestry v. USDA*, 341 F.3d 961, 969 (9th Cir. 2003) (internal quotation marks omitted)).

Plaintiffs' declarants[3] allege that BLM's approval of the Bakersfield RMP injures them in two ways: (1) by failing to comply with NEPA and (2) by diminishing opportunities to visit and enjoy the decision area "as a result of continued or expanding oil and gas activities occurring in or adjacent to those areas," Anderson Decl. ¶¶ 21, 14-15; Kuyper Decl. ¶¶ 11, 17 (ECF Nos. 17-1 & 17-2). The first alleged injury is purely procedural and cannot support standing on its own. *Summers*, 555 U.S. at 496. To establish standing under the second alleged injury, Plaintiffs must show that additional RMP-stage NEPA analysis could protect their interest in visiting lands in the decision area that are unaffected by oil and gas development. *W. Watersheds Project*, 632 F.3d at 485. But even if BLM redid its NEPA analysis and decided to close additional lands to development,

---

[3] This Court should not consider the portions of the Declarations of Ilene Anderson and Jeff Kuyper that address the merits of this case. *See* Kuyper Decl. ¶¶ 12-17, 20; Anderson ¶¶ 16-20, 24. Under the APA, judicial review of an agency action is based on the administrative record before agency rather than on a factual record created *de novo* in the reviewing court. *Camp v. Pitts*, 411 U.S. 138, 141-42 (1973); *Friends of the Earth v. Hintz*, 800 F.2d 822, 829 (9th Cir. 1986). Plaintiffs' declarations are admissible only to support standing; their commentary on the merits of this case—the adequacy of BLM's NEPA analysis—is extra-record and not properly before this Court. *San Luis & Delta-Mendota Water Auth. v. Locke*, 776 F.3d 971, 992-93 (9th Cir. 2014) (finding that court may not use extra-record declarations "to determine the correctness or wisdom of the agency's decision" (quoting *Asarco, Inc. v. EPA*, 616 F.2d 1153, 1160 (9th Cir. 1980))).

there is no evidence that these closures would better protect Plaintiffs' interests than the current RMPs: 98% of future development is expected to occur on existing leases and it is unlikely that the remaining 2% will occur in the areas that Plaintiffs visit since most of these are designated Areas of Critical of Environmental Concern ("ACECs") subject to use stipulations.[4] AR089538; *cf. NRDC v. Jewell*, 749 F.3d 776, 783 (9th Cir. 2014) (finding plaintiffs have standing when adequate consultation under ESA could have better protected their interest in delta smelt).

More fundamentally, the RMP only identifies lands open and closed to future leasing; it does not authorize leasing or development. Rather, the Secretary of the Interior—and BLM by delegation—has absolute discretion to lease or not lease any given parcel of public lands within an area designated as open for leasing. *Udall v. Tallman*, 380 U.S. 1, 4 (1965); *Burglin v. Morton*, 527 F.2d 486, 488 (9th Cir. 1975). The RMP also does not constrain BLM's ability to open or close lands to leasing in the future through additional land use planning. Handbook H-1624-1 § V-3; BLM Instruction Mem. (I.M.) No. 2010-117 at 12-13.[5] Thus, until lands are actually leased, Plaintiffs can only speculate as to possible future injury. In sum, Plaintiffs' "some day" intention to visit an unidentified area within

---

[4] Plaintiffs identify Salinas River, Chimineas Ranch, East Temblor, Bitter Creek, Hopper Mountain, Atwell Island, Carrizo Plain, Cuyama Valley, and Sespe as areas they visit within the decision area. Anderson Decl. ¶¶ 11-13, 23; Kuyper Decl. ¶¶ 7-8, 10, 19. Of these, Bitter Creek, Hopper Mountain, Salinas River, Upper Cuyama Valley, and the Sand Ridge Unit of the Ancient Lakeshores on Atwell Island are ACECs subject to leasing restrictions. AR092425-35. Chimineas Ranch, which includes the Carrizo Plain Ecological Reserve, and the Temblor National Cooperative Land and Wildlife Management Area are also subject to use stipulations. AR092322; AR092385; AR092388-89. The Carrizo Plain National Monument, Los Padres National Forest, and Bitter Creek and Hopper Mountain National Wildlife Refuges are not within the decision area.

[5] Available at http://www.blm.gov/wo/st/en/info/regulations/Instruction_Memos_and_Bulletins/national_instruction/2010/IM_2010-117.html.

the over one million acres of the decision area that could be leased or drilled in the future if BLM so decides after subsequent NEPA analysis is too tenuous to support standing. *See Summers*, 555 U.S. at 496; *Wilderness Soc'y, Inc. v. Rey*, 622 F.3d 1251, 1256 (9th Cir. 2010) (finding general intention to return to national forests "too vague to confer standing because [plaintiff] has not shown that he is likely to encounter an *affected* area of the Umpqua National Forest in his future visits").

II. Plaintiffs' Claims Are Not Ripe

For reasons similar to those precluding standing, Plaintiffs' claims are not ripe. In deciding whether an agency's decision is ripe for judicial review, a court must consider: "(1) whether delayed review would cause hardship to the plaintiffs; (2) whether judicial intervention would inappropriately interfere with further administrative action; and (3) whether the courts would benefit from further factual development of the issues presented." *Ohio Forestry Ass'n, Inc. v. Sierra Club*, 523 U.S. 726, 733 (1998). First, postponing review in this case until a site-specific project threatens actual, imminent injury to Plaintiffs would not harm Plaintiffs—the RMP approves no development and Plaintiffs would have an opportunity to challenge any implementation decision at the leasing and permitting stages. *See id.* (finding no hardship to plaintiffs when forest management plan did not "give anyone a legal right to cut trees, nor [] abolish anyone's legal authority to object to trees being cut"); *Wyo. Outdoor Council v. U.S. Forest Serv.*, 165 F.3d 43, 49-50 (D.C. Cir. 1999) (holding NEPA challenge to land use plan designating lands open to oil and gas development premature because an irreversible and irretrievable commitment of resources does not occur until the lease stage); *cf. Ctr. for Biological Diversity v. BLM*, 937 F. Supp. 2d 1140, 1152-53 (N.D. Cal. 2013) (finding challenge to lease ripe because lease allowing surface occupancy is an irreversible and irretrievable commitment of resources). Second, judicial review here would interfere with BLM's planning process. BLM conducts additional NEPA review before it leases lands for development and approves permits to drill.

That review will determine the particular lands offered for lease, the stipulations or conditions of approval imposed on a given lease or permit, and the mitigation measures required. Plaintiffs' claims cannot be ripe when they "rest upon contingent future events that may not occur as anticipated, or indeed may not occur at all." *Texas v. United States*, 523 U.S. 296, 300 (1998). Third, courts would significantly benefit from further factual development of the issues presented. Plaintiffs are asking this court to review BLM's consideration of WST/EOR before BLM has actually issued a lease or approved its development. This is precisely the type of premature "abstract disagreement[] over administrative policy" that the ripeness doctrine is intended to prevent.[6] *Cf. Ohio Forestry*, 523 U.S. at 733, 736.

III. Plaintiffs Have Waived Their Right to Challenge the RMP

By failing to present their criticisms of BLM's proposed plan during the notice and comment period, Plaintiffs have waived their right to challenge the RMP. "Persons challenging an agency's compliance with NEPA must 'structure their participation so that it . . . alerts the agency to the [parties'] position and contentions,' in order to allow the agency to give the issue meaningful consideration." *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 764 (2004)

---

[6] In *Ohio Forestry*, the Supreme Court stated in dicta that "a person with standing who is injured by a failure to comply with the NEPA procedure may complain of that failure at the time the failure takes place, for the claim can never get riper." 523 U.S. at 737. This stray statement does not apply to every NEPA claim. In cases such as this where the challenged RMP has no real world effect unless and until BLM takes a subsequent action, and where Plaintiffs will have additional opportunities to challenge that action under NEPA, the claim is not ripe. Numerous courts have so held. *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 480-82 (D.C. Cir. 2009); *Citizens for Appropriate Rural Roads v. Foxx*, 2016 WL 828148, at *7-8 (7th Cir. Mar. 3, 2016); *New York v. U.S. Army Corps of Eng'rs*, 896 F. Supp. 2d 180, 196-97 (E.D.N.Y. 2012) ("[T]he court does not believe the Supreme Court would intend to attempt to abrogate its prudential ripeness case law as to NEPA claims in a few sentences of dicta."). *But see Kern v. BLM*, 284 F.3d 1062, 1070 (9th Cir. 2002) (finding NEPA challenge to RMP ripe).

(quoting *Vt. Yankee Nuclear Power Corp. v. Natural Res. Def. Council*, 435 U.S. 519, 553 (1978)). Here, neither CBD nor LPFW discussed fracking or other WST/EOR in any of their scoping or DEIS comments. AR001125, AR001174, AR003413. In fact, CBD did not submit any comments on the DEIS. Plaintiffs were clearly aware of the potential impacts of fracking and other WST/EOR before the FEIS was issued because CBD sued BLM in December of 2011, three months after the issuance of the DEIS, alleging that BLM failed to adequately consider the impacts of fracking when it leased federal mineral estate "in an area directly adjacent to the decision area."[7] Pls.' Mot. 16 (ECF No. 17); *Ctr. for Biological Diversity*, 937 F. Supp. 2d 1140 (N.D. Cal. 2013).

While CBD's protest of the FEIS does discuss fracking (but notably not steam injection or other WST/EOR), it had an obligation to raise those concerns prior to the issuance of the FEIS when BLM could meaningfully address them. *Havasupai Tribe v. Robertson*, 943 F.2d 32, 34 (9th Cir. 1991) (holding criticisms of project raised after issuance of FEIS "may not form a basis for reversal of an agency decision"). Nor does this situation fall into the exception to *Public Citizen*'s notice requirement wherein a plaintiff may challenge a deficiency in an agency's NEPA analysis without submitting prior comments when the flaw is "so obvious that there is no need for a commentator to point [it] out . . . in order to preserve its ability to challenge a proposed action." 541 U.S. at 765. The Ninth Circuit has interpreted this "so obvious" standard to mean a situation in which the agency had independent knowledge of the alleged flaws. *'Ilio'ulaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1092 (9th Cir. 2006). Here, although BLM was certainly aware of

---

[7] Plaintiffs filed the complaint in that case on December 8, 2011. Compl., *Ctr. for Biological Diversity*, 937 F. Supp. 2d 1140 (No. 11-06174), ECF No. 1. Comments on the Bakersfield DEIS were also due on December 8, 2011, 90 days after publication of the Notice of Availability of the DEIS in the *Federal Register* on September 9, 2011. AR000380.

the use of WST/EOR within the planning area, the agency is not prescient; it could not have been aware of Plaintiffs' particular criticisms—the particular impacts, alternatives, and studies it wished the agency to consider—until Plaintiffs articulated them. By failing to raise their specific concerns with regard to the land use planning decisions under consideration at a point in the administrative process when BLM could meaningfully consider them in its analysis, Plaintiffs have waived their right to challenge the FEIS and RMP.

IV. BLM Fully Complied with NEPA

For the reasons discussed above, this Court need not reach the merits of this case. But if it does, it will find that BLM fully complied with NEPA. Plaintiffs allege that BLM violated NEPA by failing to (1) take a hard look at the impacts of WST/EOR; (2) consider alternatives that would have closed additional lands to oil and gas development; and (3) prepare an SEIS addressing WST/EOR. Courts "review an EIS under a 'rule of reason' to determine whether it contains a reasonably thorough discussion of the significant aspects of the probable environmental consequences." *Okanogan Highlands All. v. Williams*, 236 F.3d 468, 473 (9th Cir. 2000). "In determining whether the EIS contains a 'reasonably thorough discussion,' [courts] may not 'fly-speck the document and hold it insufficient on the basis of inconsequential, technical deficiencies . . . .'" *Friends of Se.'s Future v. Morrison*, 153 F.3d 1059, 1063 (9th Cir. 1998) (quoting *Swanson v. U.S. Forest Serv.*, 87 F.3d 339, 343 (9th Cir. 1996)). Once the court is "satisfied that a proposing agency has taken a 'hard look' at a decision's environmental consequences, [its] review is at an end." *Id.* Because its analysis was reasonable in light of its statutory framework, preexisting conditions on the ground, and the fact that it was making a planning, rather than site-specific leasing or development, decision, BLM fully complied with NEPA.

A. BLM Took a Hard Look at the Impacts of Oil and Gas Development

Plaintiffs allege that BLM failed to take a hard look at the impacts of

WST/EOR in the FEIS. "A court's inquiry, when reviewing whether an agency complied with NEPA, is whether the agency adequately considered a project's potential impacts and whether the consideration given amounted to a 'hard look' at the environmental effects." *N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006). "A 'hard look' includes 'considering all foreseeable direct and indirect impacts.'" *Id.* (quoting *Idaho Sporting Congress, Inc. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002)). Here, BLM took a hard look at the impacts of WST/EOR to the extent those impacts could be analyzed at the RMP stage. The agency reasonably decided to consider the site-specific effects of WST/EOR at the leasing and permitting stages when it has the information necessary to do so.

BLM considered the impacts of WST/EOR throughout the FEIS in its analysis of the impacts of oil and gas development. For example, in its discussion of mineral management, BLM acknowledged that "enhanced oil recovery techniques" may "significantly increase the percentage of oil recovered profitably" from existing oilfields. AR089538; *see also* AR090215 (noting that higher oil and gas prices "may result in increased drilling in areas that were previously marginal, such as deep fractured shale and shallow diatomite zones"). BLM also explained that "steam injection is often required" in the San Joaquin Basin to allow heavy oil to flow. AR089538.

Even where the FEIS did not specifically call out WST/EOR, its analysis of the impacts of oil and gas development assumed that a proportion of that development would apply those technologies since all of them have been used in California for decades. Fracking has been used in the San Joaquin Basin since 1953; it has been applied intensively since the late 1970s and early 1980s. AR018957; AR018961; AR009182. Enhanced oil recovery techniques such as steam injection, cyclic steam injection, and water injection have also been used for over 50 years. AR012595; AR022837 (1995 California Department of Conservation oil and gas well injection report listing wells by stimulation and

recovery technologies used). In estimating future development in the RFD, BLM appropriately based its estimates on past development, much of which utilized WST/EOR.[8] AR017708-10; AR094634 (explaining how BLM estimated foreseeable future development in RFD); Handbook H-1624 § III-7 (instructing BLM to base projections of future development on past and present leasing, exploration, and development activities as well as geological, technological, and economic factors). As the record demonstrates, BLM collected and analyzed historical data to determine how many and which wells would likely be fracked in the future. *See, e.g.*, AR093683; AR093694; AR093704. Thus, BLM's discussion of the impacts of projected oil and gas development throughout the FEIS necessarily took into account the use of WST/EOR. *See, e.g.*, AR089615-22 (air); AR089623-24 (climate change); AR089631-34 (biological resources); AR089698-701 (water); AR089707 (wildfire ecology and management); AR089781-805 (economic and social resources); AR089815-16 (cumulative impacts); *see also* AR019675 (explaining that FEIS emission estimates took into account "variability in oil and gas development process including the type and size of equipment to be used" and for this reason "the estimation of emissions specific to WST was not segregated from the overall emissions estimates for oil and gas production").

BLM did not discuss the impacts of specific technologies in detail in the FEIS because the agency lacks the site-specific information needed for that analysis at the RMP-stage. The impacts of fracking and other WST/EOR vary depending on the geomorphology of the specific area drilled, the methods of

---

[8] In their attempt to paint an unrealistic picture of a burgeoning fracking boom in which new, untested technologies are "supplant[ing] traditional methods," Plaintiffs quote BLM's ROD which, in fact, confirms that these technologies are not new: the "most likely scenario for future oil recovery is expanded production in and near existing oil fields in the San Joaquin Basin *in a manner quite similar to the production practices of today, including well stimulation techniques*." AR092285 (emphasis added); Pls.' Mot. 15.

drilling and production, the precise technology used, etc. *See, e.g.*, AR009227-30 (explaining that the "extent and severity" of fracking impacts depends on "location- and process- specific factors, including the location and rate of development; geological characteristics, such as permeability, thickness, and porosity of the formations in the basin; climatic conditions; business practices; and regulatory and enforcement activities"); AR009186 ("Fracturing fluids are tailored to site specific conditions."); AR019111-12 (explaining that air impacts depend, in part, on whether oil, gas, water, and other fluids are transported to and from the well by pipeline or by truck). Without a specific location and proposal before it, BLM can only speculate as to the use and site-specific impacts of WST/EOR—something that NEPA does not require. *Northcoast Envtl. Ctr. v. Glickman*, 136 F.3d 660, 668 (9th Cir. 1998) ("NEPA does not require an agency to consider the environmental effects [of] speculative or hypothetical projects . . . .").

BLM's inability to predict and analyze the impacts of specific leases and drilling projects at the RMP stage is precisely why BLM manages oil and gas development in three stages with additional, site-specific NEPA analysis at the leasing and permitting stages. *See* AR092283, 86-87 (describing NEPA analysis at leasing and permitting stages); AR092594 ("[H]ydraulic fracturing production like all oil and gas production is highly uncertain."). This tiered approach complies with NEPA: while "NEPA requires that the evaluation of a project's environmental consequences take place at an early stage in the project's planning process, . . . [t]his requirement is tempered . . . by the statutory command that we focus upon a proposal's parameters as the agency defines them . . . [and] by the preference to defer detailed analysis until a concrete development proposal crystallizes the dimensions of a project's probable environmental consequences." *California v. Block*, 690 F.2d 753, 761 (9th Cir. 1982). For that reason, "NEPA requires a full evaluation of site-specific impacts *only when* a 'critical decision' has been made to act on site development—*i.e.*, when 'the agency proposes to make an irreversible

and irretrievable commitment of the availability of resources to [a] project at a particular site.'" *Friends of Yosemite Valley*, 348 F.3d at 801; *see also Kern*, 284 F.3d at 1072 (Where it is not "reasonably possible to analyze the environmental consequences in an EIS for an RMP," BLM is not required to perform that analysis.). In the case of oil and gas development, an irreversible and irretrievable commitment of resources does not occur until, at the earliest, a particular parcel is actually leased, at which point the lessee has a right in the mineral estate. *Wyo. Outdoor Council*, 165 F.3d at 49; *N. Alaska Envtl. Ctr.*, 457 F.3d at 975-76.

BLM's tiered approach to NEPA analysis does not undermine, but rather enhances, the public involvement aim of NEPA. Until BLM knows the specifics of a proposed project, it cannot provide the public with a fulsome discussion of potential impacts and the public cannot meaningfully contribute. *See* 40 C.F.R. § 1502.20 (instructing agencies to use tiering "to focus on the actual issues ripe for decision at each level of environmental review"). Because no irreversible and irretrievable commitments are made until the leasing stage, and because the public is fully involved in the NEPA analysis conducted at that time, the public is not prejudiced by BLM's consideration of site-specific impacts at later stages. *See* I.M. No. 2010-117 at 11-13 (requiring public comment period on NEPA for all lease sales as well as protest period after sale notice posted); *N. Alaska Envtl. Ctr.*, 457 F.3d at 977 (finding BLM not required to do site-specific analysis of impacts at the planning stage for oil and gas development because "Plaintiffs will have an opportunity to comment on any later EIS," additional permits may be required and conditions imposed before any activity occurs, and "the parcels likely to be affected are not yet known").

As the Ninth Circuit has explained, "the scope of [an agency's] analysis of environmental consequences in [an] EIS must be appropriate to the action in question." *Kern*, 284 F.3d at 1072. The purpose of an RMP in the mineral development context is to determine which lands within the decision area to open

to oil and gas leasing and which stipulations to impose on future leases to protect resources. Handbook H-1601-1, App. C at 23. BLM's analysis of the impacts of 100-400 wells drilled annually in the decision area, many on existing leases not affected by the new RMP and a proportion of which will utilize WST/EOR, was reasonable in light of this purpose.

B. BLM Considered a Reasonable Range of Alternatives

Plaintiffs next assert that BLM failed to analyze a reasonable range of alternatives because it did not consider an alternative that would "lower[] future oil and gas development below current levels" or otherwise "limit oil and gas drilling in the decision area." Pls.' Mot. 18-19. But an EIS must only evaluate "*reasonable*" alternatives. 40 C.F.R. § 1504.14(a) (emphasis added). An agency need not consider alternatives "whose implementation is deemed remote and speculative" or those that are "infeasible, ineffective, or inconsistent with the basic policy objectives for management of the area." *Headwaters, Inc. v. BLM*, 914 F.2d 1174, 1180 (9th Cir. 1990). Here, BLM considered in detail five alternatives that would have allowed between 974,560 (Alternatives C and D) and 1,016,270 (Alternative A) acres of federal mineral estate to remain open to oil and gas leasing subject to a range of constraints, including no surface occupancy and controlled use stipulations. AR089427. The number of acres closed to leasing by the alternatives ranged from 149,200 acres (Alternative E) to 196,050 acres (Alternatives C and D). *Id.* Plaintiffs argue that these ranges are not wide enough and that BLM should have considered an alternative that would have closed substantially more lands to leasing. The record demonstrates that BLM did consider alternatives that would have closed additional lands, or all lands, within the decision area to oil and gas development but rejected them as inconsistent with existing leases and its statutory mandate to allow energy development.

In its NEPA analysis for the RMP, BLM was not working on a clean slate. A substantial portion of federal mineral estate within the decision area had already

been leased prior to the RMP planning process. AR089421. As of 2010, there were about 540 leases covering more than 214,000 acres within the decision area. AR089540. Those existing leases convey rights and may be subject to modification by a later planning decision only if that decision is consistent with those rights. 43 C.F.R. § 3101.1-2; 43 C.F.R. § 1610.5-3(b); I.M. 2010-117 at 6; *S. Utah Wilderness All. v. Palma*, 707 F.3d 1143, 1159 (10th Cir. 2013). While a lease has a ten year term, if the lease is productive it continues indefinitely so long as oil or gas is produced in paying quantities. 30 U.S.C. § 226(e). As BLM explained in the FEIS, it would be "disingenuous" to consider an alternative that severely restricts oil and gas development within the decision area "since extensive valid lease rights exist that could be developed regardless of changes in management in this RMP revision." AR089421.

BLM also has a statutory duty to manage public lands for multiple uses, including energy development. 43 U.S.C. §§ 1712(c)(1), 1732(a); *see also id.* § 1701(a)(12) ("[T]he public lands [shall] be managed in a manner which recognizes the Nation's need for domestic sources of minerals . . . ."). For that reason, BLM concluded that "it would be arbitrary and inconsistent with existing laws to analyze closing the entire Decision Area to development." AR089421. As the Ninth Circuit has said, "[i]t would turn NEPA on its head to interpret the statute to require that [an agency] conduct in-depth analyses of . . . alternatives that are inconsistent with the [agency's] policy objectives." *Westlands Water Dist. v. U.S. Dep't of Interior*, 376 F.3d 853, 871 (9th Cir. 2004) (quoting *Kootenai Tribe v. Veneman*, 313 F.3d 1094, 1122 (9th Cir. 2002)).

BLM did consider closing additional lands to development but did not analyze that alternative in detail because it saw no need to affirmatively close lands with little or no oil or gas potential. AR089421; 40 C.F.R. § 1504.14(a) (noting that for alternatives eliminated from detailed study, the agency must "*briefly* discuss the reasons for their having been eliminated"

(emphasis added)). Given the unlikelihood that substantial development would occur on these lands, BLM determined that leasing constraints would adequately protect them. AR089421. This decision comports with BLM's Handbook which instructs the agency to close lands to mineral development only when "other land or resource values cannot be adequately protected with even the most restrictive lease stipulations." Handbook H-1601-1, App. C at 24. It also does not foreclose BLM from deciding in a later land use planning process that lands designated as open in the RMP should, in fact, be closed to leasing. Handbook H-1624-1 § V-3; I.M. 2010-117 at 3, 12-13.

Plaintiffs suggest that BLM improperly confined its alternatives analysis on the assumption that future oil and gas development would reflect historic development. Pls.' Mot. 20. It is true that the RFD's forecast was necessarily constrained by reality: because the vast majority of the development predicted by the RFD is on lands that are already leased, that development will continue regardless of which lands are opened or closed in the RMP. That is, even if BLM had closed all of the decision area to development except the areas already leased, the level of projected development would remain nearly the same. BLM explained this in both the RFD and its response to CBD's protest:

> The RFD does not vary by alternative as the foreseeable development is most likely to occur in existing oil fields on leases for which exploration and development rights have already been granted. Even given advancements in drilling and production technology, the BLM does not expect development to deviate from this historic pattern.

AR092593-94; *see also* AR090215-16. This is confirmed by the statistics: between 1995 and 2008, 98% of wells applied for and drilled in the planning area were on leases that were over 30 years old, in most cases, nearly 100 years old. AR089538; *see also* AR093920 (explaining that there is no data to suggest that wells will be drilled in undeveloped areas).

Plaintiffs also imply that BLM fudged the data underlying the RFD to achieve a "predetermined" result. In support, Plaintiffs cite a spreadsheet listing the total number of wells drilled in different areas between 1998 and 2008 and containing an annotation that "wells per year need to be adjusted so that RFD is 100-400 wells." AR035467. Rather than evidence bad faith, the annotation reflects BLM's determination that the RFD's forecast should be increased from 100-300 wells to 100-400 wells per year to accurately reflect the greater number of permits issued in 2010. AR012911.

In focusing solely on the total acreage opened and closed to development, Plaintiffs fail to see the other ways in which BLM protects the environment from oil and gas production. BLM imposes constraints on future leases at the RMP-stage in the form of stipulations to avoid or reduce impacts to resources identified as significant in the RMP. Handbook H-1601-1, App. C at 23-24. At the leasing stage, BLM can modify a proposed lease or refuse to lease lands altogether when proposed development would violate these constraints. *See* AR092375-90; *Udall*, 380 U.S. at 4 (The Secretary has "discretion to refuse to issue any lease at all on a given tract."). Of the five alternatives that BLM considered for the Bakersfield RMP, only the no action alternative would have left lands open to development subject to minimal constraints. AR089427. Each of the other alternatives imposed a different mix of major constraints on all lands open to drilling and a no surface occupancy restriction on a subset of those lands. *Id.*; AR089285-91 (constraints under Alternative B); AR089348-53 (constraints common to Alternatives C, D, and E); AR089372 (constraints specific to Alternative C); AR089391 (constraints specific to Alternative D); AR089408 (constraints specific to Alternative E). As the Ninth Circuit has explained, an alternative that opens most lands to leasing but imposes significant constraints on development is a "middle ground alternative" between "full development" and "full preservation." *N. Alaska Envtl. Ctr.*, 457 F.3d at 978. By considering alternatives with major constraints on lands open to

leasing, BLM fulfilled its duty under NEPA to consider environmentally protective alternatives that also comport with its statutory mandate under FLPMA to balance competing uses. *See Norton v. S. Utah Wilderness All.*, 542 U.S. 55, 58 (2004) ("'Multiple use management' is a deceptively simple term that describes the enormously complicated task of striking a balance among the many competing uses to which land can be put . . . ." (quoting 43 U.S.C. § 1702(c)).

C. BLM's Decision Not to Prepare a Supplemental EIS Was Reasonable

Plaintiffs allege that NEPA required BLM to prepare an SEIS to address the CCST report and other information brought to its attention by CBD. Pls.' Mot. 21-26. But "[a]n agency is not required to prepare a SEIS every time new information comes to light." *N. Idaho Cmty. Action Network v. U.S. Dep't of Transp.*, 545 F.3d 1147, 1157 (9th Cir. 2008). Rather, an agency must prepare an SEIS if "[t]here are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). The Ninth Circuit has explained that this means an SEIS is required "if a new proposal will have a significant impact on the environment in a manner not previously evaluated and considered." *Westlands Water Dist.*, 376 F.3d at 873 (internal quotation marks omitted). New information that confirms an agency's original conclusions does not require an SEIS. *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 558-59 (9th Cir. 2000) (Forest Service's decision not to prepare an SEIS reasonable when new information supported analysis in original EIS). BLM's decision not to prepare an SEIS was reasonable because neither the CCST report nor CBD's protest identified additional impacts of WST/EOR worthy of consideration at the RMP-stage that BLM failed to consider in its FEIS.

To begin with, information brought to BLM's attention after the agency issued its Record of Decision ("ROD") and approved the RMP in December 2014 cannot be the source of an SEIS claim. "[S]upplementation [of an EIS] is necessary only if 'there remains major federal action[n] to occur.'" *S. Utah Wilderness All.*,

542 U.S. at 73 (quoting *Marsh*, 490 U.S. at 374). Once a land use plan is approved, "there is no ongoing 'major federal action' that could require supplementation." *Id.; see also Cold Mountain v. Garber*, 375 F.3d 884, 894 (9th Cir. 2004). Thus, CBD's April 8, 2015 letter to BLM requesting that the agency develop an SEIS cannot be the source of new information upon which its SEIS claim is based.[9]

That leaves the CCST report and CBD's protest of the FEIS as possible sources of new information that could warrant an SEIS. The record demonstrates that BLM took a hard look at both documents and reasonably concluded that neither contained "significant new information" meriting an SEIS. As BLM explained in the ROD, the CCST report largely confirmed BLM's findings and conclusions in the FEIS. For example, the report "confirm[ed] the analysis in the PRMP/FEIS that the most likely scenario for future oil recovery is expanded production in and near existing oil fields in the San Joaquin Basin in a manner quite similar to the production practices of today, including well stimulation techniques . . . ." AR092285; AR018899; AR020330. The report also supports BLM's analysis of air impacts in the FEIS, finding that emissions from oil and gas production "would be low in relation to the overall activity in the region." AR092285; *cf.* AR018909 ("Estimated marginal emissions . . . directly from activities directly related to WST appear small compared to oil and gas production emissions in total in the San Joaquin Valley . . . ."); AR018910 ("Fugitive methane emissions from the direct application of WST to oil wells are likely to be small compared to the total greenhouse gas emissions from oil and gas production in California."). The report confirmed that WST, as currently used in California, "do not result in a significant increase in seismic hazard." AR092285; AR018911.

Plaintiffs allege that the CCST report identified groundwater impacts not

---

[9] BLM nevertheless reviewed the references and studies listed by CBD in that letter and explained in a response letter why the information presented did not merit an SEIS. AR012710; AR012720; AR012722; AR012742; AR012766.

considered in the FEIS. Pls.' Mot. 22. But the FEIS acknowledged potential groundwater impacts and described how BLM's oversight of operations minimizes those impacts.[10] AR089511-12; AR092285. In their effort to magnify the significance of the CCST's conclusions, Plaintiffs fail to provide necessary context for the information they cite. For example, the sentence they quote regarding the potential for a fracture to intersect a nearby aquifer is found in CCST's Conclusion 6, which begins by stating that "[t]here are no publicly recorded instances of subsurface release of contaminated fluids into potable groundwater in California." AR018906. While the report goes on to acknowledge possible risks, BLM did not ignore those risks in the FEIS. Instead, it explained that it will evaluate those risks in greater detail at the leasing and permitting stages when it knows the specific location of future development and can identify nearby water sources. AR089511-12; AR092286-87; AR093920. The CCST report supports this site-specific approach, explaining that "WST-enabled oil and gas production presents environmental, health and safety impacts that can be very different depending on the history of land use where it takes place." AR018903.

Importantly, many of the CCST's conclusions cited by Plaintiffs are not findings. Rather, they are acknowledgments that impacts may be possible but that there is insufficient data to support a finding one way or the other at this time. For example, the CCST report concluded that "[p]otential risks posed by chronic exposure to most chemicals used in WST are unknown at this time," AR018905, "a lack of studies, consistent and transparent data collection, and reporting makes it difficult to evaluate the extent to which [contamination of groundwater by WST]

---

[10] Plaintiffs allege that the CCST report "specifically calls out deficiencies in the Bureau's final EIS, stating that the 'deferral of groundwater protection to state, as the current FEIS does, is risky.'" Pls.' Mot. 22. This statement is not in the CCST report; nowhere does the CCST report refer to the FEIS. Plaintiffs appear to have extrapolated this statement from an internal BLM discussion. AR018739.

may have occurred," AR018906, and "[a] more detailed assessment of wastewater disposal practices is needed to determine their levels of risk to surface water, groundwater, or agriculture," AR018908. While these conclusions identify gaps in our understanding of the impacts of WST/EOR, they do not undermine BLM's analysis in the FEIS and thus do not warrant an SEIS.[11]

BLM also reasonably concluded that the information presented in CBD's protest did not merit an SEIS. Many of the points made in that document are contradicted by the CCST report. For example, Plaintiffs claim that fracking fluids contain dangerous chemicals and that fracking will cause air pollution, methane leakage, and surface and groundwater contamination. Pls.' Mot. 23. The CCST report, however, found that most chemicals used for WST treatments are non-toxic or of low toxicity (AR018905), that WST is unlikely to substantially contribute to air pollution or methane leaks (AR018909-10), and that there have been no reported instances of groundwater contamination in California (AR018906).

Likewise, in its protest CBD claimed an increase in the use of WST/EOR in the Monterey Shale relying on estimates discredited by the CCST report. For example, the CBD protest quotes the 2011 EIA report which estimated that the Monterey Shale contained over 13 billion barrels of recoverable oil. AR093528.

---

[11] Nor do these data gaps invalidate the FEIS itself. When relevant information "cannot be obtained because the overall costs of obtaining it are exorbitant or the means to obtain it are not known," an agency may proceed with its decision so long as it "make[s] clear that such information is lacking." 40 C.F.R. § 1502.22. BLM acknowledged that the CCST report identified "a number of data gaps and uncertainties related to the effects of well stimulation technologies as practiced in California" in the RMP and committed to "apply[ing] the best available and most current scientific information for leasing and development decisions as new information becomes available in the future." AR092286; *see also Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 498-99 (9th Cir. 2014) (finding EIS complied with NEPA despite missing certain unavailable information because that information was not necessary for a planning level decision).

EIA itself reduced that estimate in 2014 by 96% to 600 million barrels. AR019037; AR092284. As the CCST report explained, "[v]ery little empirical data is available to support [the 2011 EIA] analysis and the assumptions used to make this estimate appear to be consistently on the high side." AR018901; *see also* AR095501 (study finding EIA estimates "highly overstated"). The report went on to note that "[t]here has not been enough exploration to know how much of the Monterey source rock has retained oil, or if the oil has largely migrated away, but it is unlikely the entire source rock will be productive given the extreme heterogeneity in the Monterey Formation." *Id.* CBD's protest also relied on data from the Marcellus Shale in New York and Pennsylvania despite CCST's admonition that WST/EOR practices in California differ significantly from those in other states and the impacts of WST/EOR in other states are therefore not necessarily applicable to California. AR093522-30; AR018895. Other sources cited by CBD to support the claimed increase in fracking in the Monterey Shale included unscientific news articles and vague industry statements about exploratory drilling, which BLM reasonably found unpersuasive. AR093528-29.

Finally, Plaintiffs suggest that BLM failed to address "new information about indirect and cumulative impacts from unconventional drilling on over one million acres of the decision area." Pls.' Mot. 24. Not only do Plaintiffs fail to identify this new information, they also overstate projected development—98% of new wells in the decision area are expected to be drilled on 214,000 acres of existing leases—and overlook the FEIS's thorough analysis of direct, indirect, and cumulative impacts of anticipated oil and gas development, including the use of WST/EOR. *See supra* Section IV.A.

In sum, BLM's conclusion that the CCST report and CBD protest did not identify significant new information regarding the potential impacts of WST/EOR was reasonable and is supported by the record. Indeed, the CCST report itself concluded that "the direct impacts of WST appear to be relatively limited for

industry practice of today and will likely be limited in the future if proper management practices are followed." AR018912. While the report acknowledged that indirect impacts could increase if there is "significantly increased production enabled by WST," neither the report nor any other credible source found that such an increase was likely in California, let alone in the decision area. *Id.*; AR018899-901. As an agency with expertise in mineral development, BLM's decision that the CCST report and CBD protest did not warrant an SEIS deserves this Court's deference. *Lands Council*, 537 F.3d at 993.

V. The Proper Remedy is Remand to BLM

Should this Court find that BLM violated NEPA, the proper remedy is remand to the agency for further consideration in light of the court's opinion. *See Human Soc'y v. Locke*, 626 F.3d 1040, 1053 n.7 (9th Cir. 2010) (noting court may remand without vacatur). Vacatur of the Bakersfield RMP is inappropriate here because it would have "disruptive consequences": it would cause the preexisting RMPs—the 1997 Caliente RMP and the 1984 Hollister RMP—to come back into force. *CropLife Am. v. EPA*, 329 F.3d 876, 884-85 (9th Cir. 2003) (holding that consequence of vacatur of agency decision is that "the agency's previous practice . . . is reinstated"). Those RMPs are outdated and do not serve Plaintiffs' interests because they leave more acreage open to oil and gas development than the Bakersfield RMP with fewer constraints. AR089427. In the event that this Court considers vacatur of the Bakersfield RMP or an injunction against BLM, Federal Defendants request that the parties be permitted additional briefing on remedies.

CONCLUSION

For the reasons discussed above, BLM's decision to adopt the Bakersfield RMP, and its supporting NEPA analysis, were reasonable and should be upheld. This Court should deny Plaintiffs' claims and grant summary judgment in favor of Federal Defendants.

Respectfully submitted this 15th day of April, 2016.

JOHN C. CRUDEN
Assistant Attorney General
Environment and Natural Resources Division

/s/ *Clare M. Boronow*
CLARE M. BORONOW
Trial Attorney, Admitted to the Maryland Bar
U.S. Department of Justice
Environment and Natural Resources Division
Natural Resources Section
P.O. Box 7611
Washington, DC 20044-7611
Tel: (202) 305-0492
Fax: (202) 305-0506
clare.boronow@usdoj.gov