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UNITED STATES DISTRICT COURT
FOR THE CENTRAL DISTRICT OF CALIFORNIA
WESTERN DIVISION

CENTER FOR BIOLOGICAL DIVERSITY, *et al.*, Plaintiffs, v. U.S. BUREAU OF LAND MANAGEMENT, *et al.*, Defendants.	Civ. No. 2:20-cv-00371-DSF-(ASx) **MEMORANDUM IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT** Filed: January 14, 2020 Requested Hearing: June 28, 2021 at 1:30 p.m. Judge: Hon. Dale S. Fischer Courtroom: 7D

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INTRODUCTION

This case challenges the U.S. Bureau of Land Management's ("the Bureau's") rushed decision to open vast areas of public land in California to expansive oil and gas drilling without taking a hard look at the harmful impacts that drilling will have on air quality, climate, the health of local communities, and precious groundwater resources in the area, as the law requires.

In 2014, the Bureau's Bakersfield Field Office issued a resource management plan that opened over one million acres of public land and mineral estate across eight counties in California's southern Central Coast and Central Valley region to extensive oil and gas leasing and development. The plan also authorized the environmentally harmful practice of hydraulic fracturing (or "fracking"), a risky oil and gas stimulation technique whereby large volumes of hydraulic fracturing fluid—a mix of water, sand, and sometimes toxic chemicals—is injected down an oil or gas well under pressure great enough to fracture the surrounding rock formation.

In 2016, the Central District of California held in *ForestWatch v. U.S. Bureau of Land Management*, No. CV-15-4378-MWF, 2016 WL 5172009, at *11–12 (C.D. Cal. Sept. 6, 2016), that the Bureau had failed to adequately analyze the impacts of fracking before opening this land to development, in violation of the National Environmental Policy Act ("NEPA"). In accordance with the court's order, the Bureau agreed to take a "hard look" at the impacts of fracking before authorizing any oil and gas activity.

But rather than take the required hard look, the Bureau rushed through a hasty environmental review that ignored thousands of public comments from community members and expert government agencies, drastically undercounted the number of wells likely to be fracked, ignored the health risks of fracking to the surrounding communities, and failed to grapple with evidence that fracking will further pollute already scarce groundwater resources in the area.

Plaintiffs—a diverse coalition of environmental justice, conservation, and business groups that will be harmed by the Bureau's careless expansion of oil and gas development and the resulting pollution it will cause—accordingly respectfully request that the Court again step in and require the Bureau to take the legally required hard look at the impacts of fracking before opening California's public lands to additional oil and gas activity.

LEGAL BACKGROUND

I. Federal Land Policy and Management Act

The Federal Land Policy and Management Act of 1976 ("FLPMA") governs the management, protection, development, and enhancement of federal property under the Bureau's jurisdiction. FLPMA requires that the Bureau manage land "in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values; that, where appropriate, will preserve and protect certain public lands in their natural condition; . . . and that will provide for outdoor recreation and human occupancy and use." 43 U.S.C. § 1701(a)(8). At its core, FLPMA requires the Bureau "to prevent unnecessary or undue degradation" of public lands in its jurisdiction. *Id.* § 1732(b).

Pursuant to FLPMA, the Bureau manages oil and gas drilling on public lands using a three-stage process. *N.M. ex rel. Richardson v. Bureau of Land Mgmt.*, 565 F.3d 683, 689 n.1 (10th Cir. 2009) (describing process). In the first stage, FLPMA requires the Bureau to prepare, with public involvement, a "resource management plan" for each unit of public land within its jurisdiction. 43 U.S.C. § 1712(a). A resource management plan operates like a zoning plan, defining the allowable uses of public lands within the plan area. At the resource management plan stage, the Bureau determines what areas to make available for oil and gas leasing and under what conditions. *See Richardson*, 565 F.3d at 692 n.1. In developing a management plan, the Bureau must, among other things, "consider present and potential uses of the public lands; . . . consider the relative scarcity of the values involved[;] . . . weigh

long-term benefits to the public against short-term benefits; . . . [and] provide for compliance with applicable pollution control laws." 43 U.S.C. § 1712(c).

In the second stage, oil and gas operators submit an "expression of interest" to nominate specific sites within the plan area for oil and gas leasing. 43 C.F.R. § 3120.1-1(e). The Bureau then decides whether those lands are eligible and, if so, makes them available through a competitive leasing process, subject to the requirements of the resource management plan. 43 U.S.C. § 1712(e); 43 C.F.R. § 1610.5-3(a); 43 C.F.R. Part 3120. In the third and final phase, which occurs after the Bureau holds the lease sale and issues the leases, lessees submit applications for permits to drill to the Bureau. 43 C.F.R. § 3162.3-1(c).

The resource management plan stage represents a critical first step in this process because it opens specific areas to oil and gas development and identifies where possible leasing and drilling may occur. "All future resource management authorizations and actions" undertaken by the Bureau, as well as "subsequent more detailed or specific planning" during the leasing and drilling stages, must conform to the relevant plan. *Id.* § 1610.5-3(a). Resource management plans thus establish best management practices, standard operating procedures, and implementation guidelines for all "site-specific" activities that occur on the land in question, effectively outlining the Bureau's approach to future management decisions over the next ten to fifteen years. AR 1696, 1900–21, 2997.[1] Once a plan is approved, these practices, procedures, and guidelines apply to all new wells authorized on both new and existing leases in the plan area. 43 C.F.R. § 1610.5-3(a)–(b).

II. National Environmental Policy Act

NEPA is "our basic national charter for protection of the environment." *Ctr. for Biological Diversity v. U.S. Forest Serv.*, 349 F.3d 1157, 1166 (9th Cir. 2003) (citation and quotation marks omitted). NEPA's goals are to (1) "prevent or eliminate

[1] Citations to the administrative record are cited herein as "AR" followed by the Bates number.

damage to the environment and biosphere," (2) "stimulate the health and welfare" of all people, and (3) "encourage productive and enjoyable harmony between [hu]man[kind] and [the] environment." 42 U.S.C. § 4321. NEPA recognizes that "each person should enjoy a healthful environment" and requires that the federal government use all practicable means to "assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings," and to "attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences." *Id.* § 4331(b)–(c).

To fulfill these purposes, NEPA requires that: (1) agencies take a "hard look" at the environmental impacts of their actions before the actions occur, thereby ensuring "that the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts," and (2) "the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989). "General statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided." *Neighbors of Cuddy Mountain v. U.S. Forest Serv.*, 137 F.3d 1372, 1380 (9th Cir. 1998). Furthermore, the "'hard look' 'must be taken objectively and in good faith, not as an exercise in form over substance, and not as a subterfuge designed to rationalize a decision already made.'" *W. Watersheds Project v. Kraayenbrink*, 632 F.3d 472, 491 (9th Cir. 2011).

NEPA requires federal agencies to prepare an environmental impact statement ("EIS") for all "major Federal actions significantly affecting the quality of the human environment." 42 U.S.C. § 4332(C). The EIS must, among other things, describe the "environmental impacts of the proposal," including direct, indirect, and cumulative

impacts, and "all reasonable alternatives" to the action. 40 C.F.R. §§ 1502.14(a) (1978),[2] 1508.7 (1978), 1508.8 (1978); 42 U.S.C. § 4332(C)(i), (iii).

The Bureau has determined that preparation of a resource management plan "is considered a major Federal action" and therefore requires the preparation of an EIS. 43 C.F.R. § 1601.0-6. All environmental analyses required by NEPA must be conducted at "the earliest possible time." 40 C.F.R. § 1501.2 (1978); *see also Kern v. U.S. Bureau of Land Mgmt.*, 284 F.3d 1062, 1072 (9th Cir. 2002) ("NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done."). For this reason, and because "[a]ll future resource management authorizations and actions" and "subsequent more detailed or specific planning" during the leasing and drilling stages must conform to the resource management plan, the Bureau must conduct a robust NEPA analysis at the initial resource management plan stage. 43 C.F.R. § 1610.5-3(a). An agency may not "avoid" analysis of foreseeable environmental consequences from a resource management plan "merely by saying that the consequences are unclear or will be analyzed later . . . ." *Kern*, 284 F.3d at 1072. If a plan "is based on an incomplete NEPA analysis of the consequences . . . over both the short and long term, there will be a gap in planning that cannot be closed." *Seattle Audubon Soc'y v. Espy*, 998 F.2d 699, 704 (9th Cir. 1993).

NEPA also requires that federal agencies "shall assess and consider" public comments on an EIS "both individually and collectively" and "shall respond" to public comments. 40 C.F.R. § 1503.4(a) (1978). In its responses to comments, an agency may: (1) "[m]odify alternatives including the proposed action"; (2) "[d]evelop

[2] The Council on Environmental Quality amended its 1978 regulations implementing NEPA, effective September 14, 2020. Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act, 85 Fed. Reg. 43,304, 43,304 (July 16, 2020). The new regulations do not apply to the agency actions challenged here because the actions were initiated prior to September 14, 2020, and applied the previous 1978 regulations.

and evaluate alternatives not previously given serious consideration by the agency"; (3) "[s]upplement, improve, or modify its analyses"; (4) "[m]ake factual corrections"; or (5) "[e]xplain why the comments do not warrant further agency response, citing the sources, authorities, or reasons which support the agency's position and, if appropriate, indicate those circumstances which would trigger agency reappraisal or further response." *Id.* § 1503.4(a)(1)–(5) (1978).

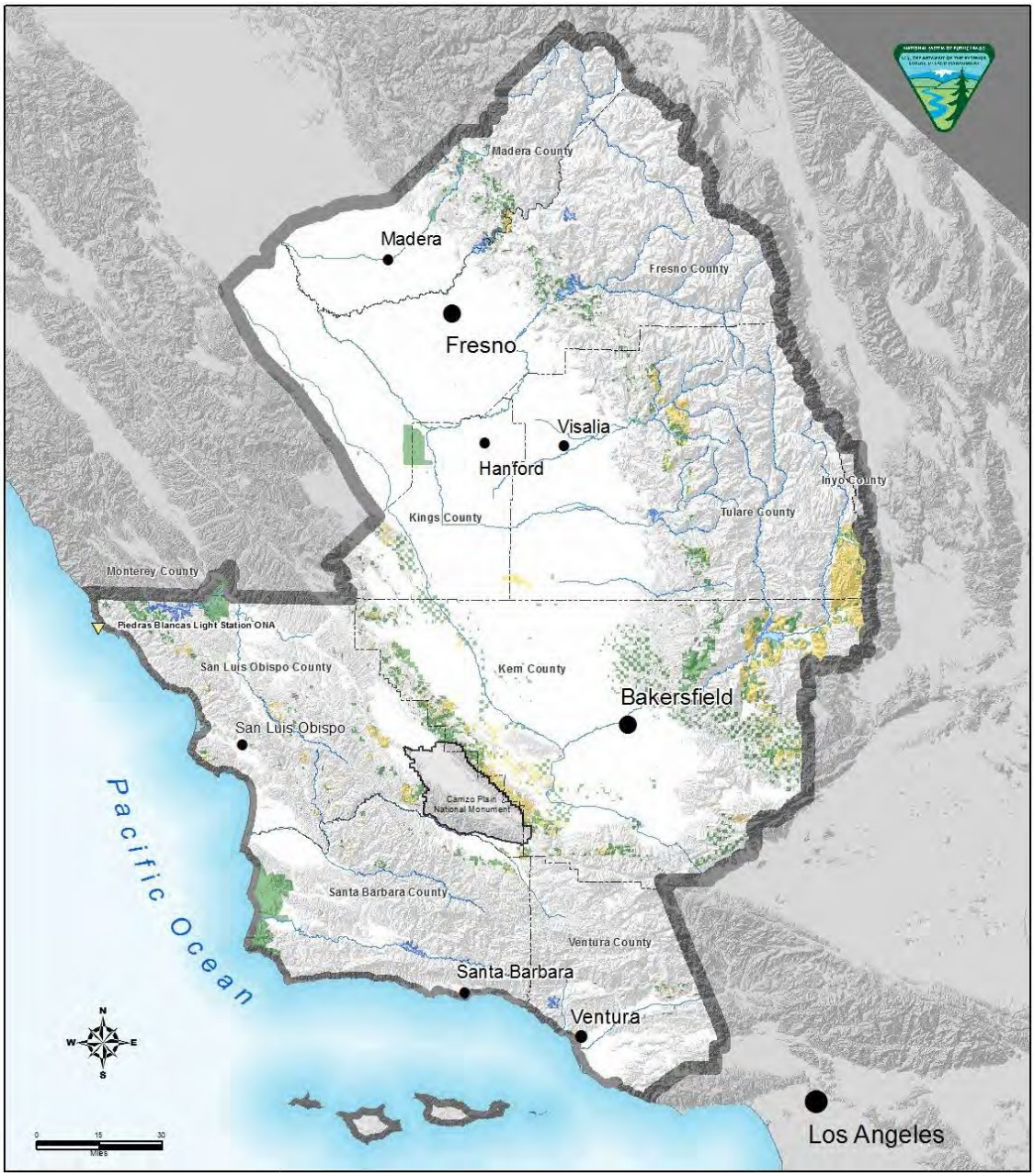
Federal agencies must prepare a supplemental EIS ("SEIS") whenever they are presented with "significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." *Id.* § 1502.9(c)(1)(ii) (1978). An SEIS must similarly take a "hard look" at the environmental impacts of proposed agency actions. *Or. Nat. Res. Council v. Lowe*, 109 F.3d 521, 528 (9th Cir. 1997).

FACTUAL BACKGROUND

I. The Bakersfield Field Office Planning Area

The Bureau's Bakersfield Field Office administers federal land and mineral estate within the Bakersfield Field Office's "planning area"—an administrative geographic region of approximately 17 million acres of land stretching from the coastal islands in the Pacific Ocean across the Central Valley to the crest of the Sierra Nevada Range. AR 1652. Within this planning area, the Bakersfield Field Office is directly responsible for the management of approximately 400,000 acres of public land and 1.2 million acres of subsurface mineral estate (the "decision area"). AR 1680. The planning area ranges in character from coastal urban areas near Los Padres National Forest, to dry expanses in the San Joaquin Valley, to rugged hills in the Sierra bioregion. AR 2220. The Bureau acknowledges the area offers rich public and private recreation sites for outdoor enthusiasts who enjoy the natural habitats and "extraordinary biodiversity." AR 1681, 1775–76, 2221. The area also includes numerous national parks and monuments, including Yosemite, Sequoia, and Kings Canyon National Parks; Sierra, Sequoia, Inyo, and Los Padres National Forests; Giant

Sequoia, Carrizo Plain, and Cesar Chavez National Monuments; Santa Monica Mountains National Recreation Area; and several private ecological or wildlife preserves. AR 10280. The map below depicts the overall planning area (the entire region within the dark grey boundary) as well as the decision area (the areas shown in yellow and green scattered throughout the planning area, with the yellow designating public lands and the green designating mineral estate).



AR 1684.

The planning area is also at the epicenter of oil and gas drilling, including fracking, in California. AR 2384. California is one of the top oil-producing states in the United States, with much of this production occurring in Kern County, the San Joaquin Valley, and Ventura County in the planning area, including on land overseen by the Bakersfield Field Office. AR 60995, 1858. Kern County alone is the source of eighty percent of all oil and gas produced in the state. AR 39267. Several of the largest oil fields in the country are also located in Kern County. AR 2321, 80849.

Within one of the largest oil- and gas-producing regions in California, residents in the planning area suffer from serious air quality problems. The cities of Bakersfield, Fresno, and Visalia in the San Joaquin Valley have the worst air quality in the nation. AR 47711. Oil and gas facilities emit significant air pollution, including thirty percent of all sulfur oxides, over seventy percent of hydrogen sulfide, and eight percent of anthropogenic volatile organic compounds in the Valley, which in turn react with nitrogen oxides to create ozone. AR 16144. The San Joaquin Valley is currently classified as an "extreme" nonattainment area for ozone and a "serious" nonattainment area for fine particulate matter under Clean Air Act standards. AR 10245. Overall, seven of the eight counties in the planning area are in nonattainment with particulate matter, ozone, or both air quality standards. AR 9019. Sulfur oxides cause breathing difficulties, and particulate matter can contribute to heart problems, lung cancer, respiratory illness, and premature death. AR 19269, 9724. Ozone can lead to asthma, lung and pulmonary diseases, and premature death. AR 79893, 79846, 80080.

The national park units and wilderness areas in and around the planning area also experience significant air quality problems. Sequoia, Kings Canyon, and Yosemite National Parks as well as Ansel Adams Wilderness, Kaiser Wilderness, John Muir Wilderness, Domeland Wilderness, and San Rafael Wilderness are all designated as areas under the Clean Air Act that are granted special federal air quality protections. AR 10281, 8154–55 (known as "Class I" areas). Yet these park units regularly experience levels of air pollution that are unhealthy for most visitors and

employees. The elevated level of ozone in the region "warrants significant concern," according to the U.S. National Park Service, endangering human health, resulting in vegetative and ecosystem damage, and reducing visibility. AR 10281–82. Visitors typically cannot enjoy the stunning vistas in the area because poor air quality has reduced the average natural visual range in the parks from about 150 miles to about 65 miles, and to below 30 miles on high pollution days. AR 10282.

Water scarcity is also an ever-present concern in the planning area. The state's groundwater is essential to agriculture and other sectors of the economy and provides about seventy-five percent of Californians with at least some drinking water. AR 19746. Approximately seventy percent of the planning area is underlain by distinct groundwater systems. AR 2292–93. Groundwater quality throughout the area is generally suitable for most urban and agricultural uses and is valuable for that reason. AR 2294. Due to historic, multiyear drought conditions and surface water scarcity in California, reliance on groundwater has increased, consequently reducing groundwater availability. AR 69549, 79, 2294. The Bureau acknowledges that extensive withdrawal of groundwater has even caused "widespread" subsidence of land in the planning area. AR 2294, 51. Groundwater overdraft is expected to continue to worsen into the future. AR 2294, 11959, 19746–47.

Climate change has long shaped the planning area, and its effects are poised to intensify in the coming years and decades. According to the Bureau, oil and gas production and combustion "dominate" as significant sources of greenhouse gas emissions and are primary drivers of climate change. AR 78. The planning area now includes six of the ten most carbon-intensive oil fields in California. AR 11669, 15547. Increased greenhouse gas emissions will further exacerbate the severity and frequency of drought, which contributes to devastating wildfires in the area. AR 10251–52, 79. The climate crisis also increases formation of ground-level ozone, which can lead to a host of serious health consequences. AR 79893, 79846, 80080.

Many counties in the planning area have significant minority and low-income populations that are disproportionately impacted by pollution from industrial agriculture, heavy diesel truck traffic, and intensive oil and gas development in the region. AR 2391, 11965. Nearly half of the residents in the planning area speak a language other than English at home, and around one in ten lives in a linguistically isolated household where no one speaks English well, or at all. AR 11974–75. According to California's Environmental Protection Agency and the Office of Environmental Health Hazard Assessment, these "environmental justice" communities are statistically the "most affected by pollution" in the state, meaning they experience the most asthma emergency room visits, heart attacks, and low birth-weight infants, and have the highest levels of poverty and unemployment. AR 8335–36. The counties in the San Joaquin Valley in particular have the highest asthma rates for children in the entire state. AR 15606, 20364–68.

II. The Impacts of Fracking in the Planning Area

In recent years, California's oil and gas industry has increasingly turned to unconventional and dangerous drilling methods like fracking both to expand the productivity of existing wells and to maximize production from new wells.[3] AR 48, 50, 1663. As reserves in virtually all oil fields in the state rapidly dwindle, the Bureau acknowledges that techniques like fracking "can significantly increase the percentage of oil recovered profitably." AR 2321. About twenty percent of oil production in California depends on fracking. AR 15659. Fracking is also widely used in the planning area; ninety-five percent of all fracking in the state occurs in the San Joaquin Valley. AR 10244. The Bureau has stated it expects twenty-five percent of new wells in the planning area will be fracked, but elsewhere has estimated that ninety percent of new wells drilled on federal lands are fracked. AR 1631; 80 Fed. Reg. 16,128, 16,131

[3] Fracking is referenced in the administrative record as "unconventional oil and gas development," an "enhanced oil recovery" technique, or a "well stimulation" technique. *See, e.g.*, AR 58540–41, 1662.

(Mar. 26, 2015). The Bureau also acknowledges that, due to techniques like fracking, oil fields "will have many more years of useful life." AR 2321.

Fracking on public lands produces significant air pollution emissions including nitrogen oxides, sulfur dioxide, fine particulate matter, volatile organic compounds, silica dust, and toxic air contaminants like the potent carcinogen benzene. AR 61433, 10243. Fracking in California occurs in areas already facing severe air quality problems, like the San Joaquin Valley Air Basin in the planning area. AR 10244–45. Additional fracking in the area will make it even more difficult to meet Clean Air Act requirements. AR 10245–47. The additional pollution from fracking also threatens to worsen already degraded air quality and visibility in the national parks and recreation areas in and near the planning area. AR 10247.

Fracking, and the fossil fuels produced as a result, also generate greenhouse gas emissions, such as carbon dioxide and methane, that cause global warming and climate change. AR 15546–47, 21844–45. California's oil is already some of the most climate-damaging in the world. AR 15547. Fracking, which is an extremely energy-intensive technique, is increasingly necessary to extract oil out of the ground in the planning area because much of the state's remaining oil in the largest fields is very heavy and waterlogged. *Id.* As a result, six of the ten largest producing fields in the area produce oil with greenhouse gas emissions and climate impacts that rival Canada's dirtiest tar sands crude. *Id.*

Fracking also threatens to contaminate the groundwater that communities in the planning area will increasingly rely on for drinking and agriculture. Underground drinking water aquifers are often separated from the oil and gas formation being fractured by thousands of vertical feet of subsurface rock. AR 74808. In California, however, fracking occurs at much shallower depths than other parts of the United States; about seventy-five percent of fracking in the state is conducted at shallow depths less than 2000 feet deep—the *same* depth as groundwater. AR 16136, 8323. In the San Joaquin Valley region of the planning area, hundreds of fracked wells range at

ultra-shallow depths between 150 to 2000 feet. AR 75064. Where such "shallow fracturing" occurs, the formation being fractured is dangerously close to the drinking water aquifer—sometimes they are even the same formation. AR 74808. The less separation distance between an oil and gas production zone and a drinking water aquifer, the more likely fracking is to contaminate drinking water by injecting toxic chemicals into formations that flow into groundwater. AR 74807. Indeed, according to the Bureau, fracking in California uses toxic fracturing fluids "with more concentrated chemicals than [fracking] in other states." AR 1662, 10353–54. Fracking in the state also tends to occur in mature reservoirs with many existing boreholes that make leaks more likely, further increasing the risk of contamination. AR 16136. Once groundwater is contaminated, it is virtually impossible to clean up. AR 12084.

Finally, fracking threatens the health of the already disproportionately pollution-burdened communities in the area. The toxic chemicals known to be used in the fracking process are associated with adverse human health impacts. The wide array of air pollutants released during fracking are linked to a range of illnesses, including damage to the brain and nervous system, increased asthma attacks and other respiratory issues, birth defects, and cancer. AR 11942–45, 10301–02. In addition, the hundreds of chemicals found in fracking fluids and water produced from fracked wells are associated with cancer, reproductive harms, and cardiovascular and nervous system issues. AR 11947–49, 10308. Residents in the planning area bear the brunt of pollution and experience the highest rates of cardiovascular disease and low birth weights in the state. AR 9021–23, 10284. Residents in the vast majority of the planning area drink water that is also contaminated by chemicals or bacteria. AR 9019–21. In Kern County alone, thirty-five percent of the county's residents live within a mile of at least one oil or gas well, and nearly fifty-eight percent of those residents living within a mile of a well are people of color. AR 9021.

PROCEDURAL BACKGROUND

In December 2014, the Bureau issued its record of decision adopting a revised resource management plan ("2014 Plan") for the Bakersfield Field Office decision area. AR 1644, 1648. The 2014 Plan opened up 1,011,470 acres of land to oil and gas leasing and development, encompassing nearly eighty-five percent of the decision area. AR 1754.

In June 2015, two of the Plaintiffs in this case, Center for Biological Diversity and Los Padres ForestWatch, challenged the Bureau's decision for, among other things, failing to analyze the environmental impacts of fracking authorized by the 2014 Plan. AR 1608, 1614. In September 2016, the Central District held that the Bureau failed to adequately analyze the impacts of fracking, set aside the Bureau's environmental review, and ordered it to prepare an SEIS "to examine the cumulative environmental impacts" of fracking "in a comprehensive manner." *ForestWatch*, 2016 WL 5172009, at *7, *12–13. In May 2017, the court approved a settlement agreement in which the parties agreed to partial remand without vacatur of the record of decision adopting the 2014 Plan. AR 1609. The Bureau agreed that pending its issuance of the new environmental review document considering the impacts of fracking, it would not hold any oil or gas lease sales within the decision area. *Id.*

In April 2019, the Bureau issued a draft SEIS. AR 4006–07. The draft predicted that 100 to 400 new wells would be drilled in the decision area per year over the next ten years. AR 1468. Of the 100 to 400 new wells projected to be drilled, the SEIS predicted that only 10 to 40 of those new wells will be on new leases. *Id.* The Bureau further predicted that zero to four of these new wells on new leases will be fracked, though the draft did not provide the data or documents supporting this assumption. AR 1510. In addition, despite acknowledging that most fracking throughout the overall planning area occurs on existing leases, the Bureau did not project the number of wells on existing leases that may be fracked or analyze their impacts. AR 50. The

agency concluded that fracking zero to four wells per year—the amount projected on new leases—would not cause significant environmental impacts. AR 1454.

The Bureau provided a 45-day public comment period on the draft SEIS—only half the full 90-day period required by its regulations. AR 4006–07; 43 C.F.R. § 1610.2(e). The Bureau nonetheless received over 16,000 written comments on the draft SEIS, including detailed technical comments from expert government agencies like the U.S. Environmental Protection Agency. AR 155, 10347. The comments covered approximately thirty different topics and identified critical flaws in the Bureau's analysis of the impacts of fracking, including on air quality, climate, water resources, public health and safety, and environmental justice communities in the planning area. AR 154, 157–58.

Approximately 600 people attended the three public meetings the Bureau held to gather comments on the draft SEIS. AR 153, 3472. The agency refused to record any of these meetings and therefore did not enter the extensive oral comments into the record. AR 56689–90, 22197–99. Community groups ultimately paid for recordings of the meetings and sent the transcripts to the Bureau for the record. AR 22198, 10461–517, 10409–60, 10359–408. The Bureau also did not provide interpreters at these meetings, despite its knowledge of significant Hispanic and minority communities in the planning area and despite community members' requests for translation services. AR 56689–90, 22197–99, 2391, 12553, 9026.

In November 2019, the Bureau announced the availability of the final SEIS. AR 3472–73. The final SEIS is substantively identical to the draft. The Bureau did not directly respond to all commenters' concerns and, where it did respond, used repetitive, non-responsive boilerplate statements in its responses to comments in the final SEIS. *See, e.g.*, AR 417, 489–90. The Bureau also refused to provide an index identifying who submitted comments, which prevented the public from knowing which agencies and experts raised concerns. AR 3040–41.

In December 2019, the Bureau issued its record of decision adopting the final SEIS and reaffirming the portions of the 2014 record of decision set aside by the court in *ForestWatch*, 2016 WL 5172009. AR 1–7. Because the SEIS concluded that the impacts from fracking would be negligible, the Bureau did not alter or amend the 2014 Plan or propose alternatives or mitigation measures to lessen the impacts from fracking. AR 6–7. Because of this decision, approximately 1,011,470 acres of public land in the decision area are now open to oil and gas development, including fracking. AR 61. The Bureau held its first oil and gas lease sale in the decision area in eight years on December 10, 2020, auctioning off 4133.58 acres. *See* U.S. Bureau of Land Mgmt., *Oil & Gas Lease Sale* (Dec. 10, 2020), https://eplanning.blm.gov/eplanning-ui/project/2000634/510.

STANDARD OF REVIEW

A party is entitled to summary judgment if "there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Courts review claims under NEPA pursuant to the Administrative Procedure Act, which provides that courts "shall . . . hold unlawful and set aside agency action . . . found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law" or adopted "without observance of procedure required by law." 5 U.S.C. § 706(2); *see Ctr. for Biological Diversity*, 349 F.3d at 1165. An action is 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).

ARGUMENT

The Bureau violated NEPA by failing to respond to extensive public comments on the significant impacts of fracking and by failing to take a hard look at these

impacts, including on local communities and precious groundwater resources. The Court should set aside the Bureau's SEIS and enjoin it from authorizing oil and gas development in the decision area until it complies with NEPA.

I. The Bureau Failed to Properly Respond to Comments on the Supplemental Environmental Impact Statement.

At the outset, the Bureau's response to public comments violated NEPA. The public lands at issue in the SEIS are of great concern to the public. Indeed, the massive response to the SEIS reflects the public's investment in the planning process and in ensuring the decision area is properly protected from the dangerous impacts of fracking. Yet in the Administration's rush to expand oil and gas development in the western United States at any cost, and despite the court's order directing it to take a hard look at the impacts of fracking, the Bureau improperly ignored the many serious concerns raised and unlawfully failed to meaningfully respond to public comments.

NEPA requires that federal agencies "shall assess and consider" public comments on an EIS "both individually and collectively" and "shall respond" to those comments. 40 C.F.R. § 1503.4(a) (1978). An agency's responses to comments must be made "objectively and in good faith, not as an exercise in form over substance." *Kraayenbrink*, 632 F.3d at 491 (quoting *Metcalf v. Daley*, 214 F.3d 1135, 1142 (9th Cir. 2000)). Because public comments "are at the heart of the NEPA review process," a final EIS must "internalize opposing viewpoints" in order "to ensure that an agency is cognizant of all the environmental trade-offs that are implicit in a decision." *State of Cal. v. Block*, 690 F.2d 753, 770–71 (9th Cir. 1982). Particularly "where comments from responsible experts or sister agencies disclose new or conflicting data or opinions that cause concern that the agency may not have fully evaluated the project and its alternatives, these comments may not simply be ignored." *Silva v. Lynn*, 482 F.2d 1282, 1285 (1st Cir. 1973). A failure to adequately respond ultimately may deprive the public of the "full and fair discussion" of an issue that NEPA requires. *Or.*

Nat. Desert Ass'n v. Bureau of Land Mgmt., 625 F.3d 1092, 1122 (9th Cir. 2010) (citing 40 C.F.R. §§ 1502.1 (1978), 1503.4 (1978)).

The Bureau utterly failed to meet any of these requirements in the SEIS. In response to 16,000 public comments—ranging from individuals and local residents, neighboring tribes, counties and cities in the decision area deeply concerned about fracking in their communities, and expert federal and state agencies that submitted detailed technical comments identifying critical flaws in the Bureau's analysis—the agency, where it responded at all, indiscriminately deployed repetitive, boilerplate non-responses that failed to address the substance of commenters' concerns, "internalize opposing viewpoints," or otherwise rise above "an exercise in form over substance." *Block*, 690 F.2d at 770–71; *Kraayenbrink*, 632 F.3d at 491; AR 220–637 (Bureau's response to comments). The agency provided no response whatsoever to some public comments. Plaintiff Patagonia's comment letter, for example, which contained extensive discussion of impacts to recreation and water resources in the decision area, is not included or addressed in the SEIS at all. AR 12092–109. The Bureau's actual attempts to respond overwhelmingly consist of about six short (one to three paragraph long) stock statements, generally describing the basic approach of the SEIS and stages of the Bureau's NEPA review, that the agency copied hundreds of times throughout the Public Comments Appendix, no matter the issue raised, the technical analysis provided, or the expert agency submitting the comment.

Collectively, the Bureau repeated these six stock statements approximately 900 times in the SEIS. Excerpted summaries of each statement are listed here:

- Staff determined "zero to four of these new wells on new leases would be hydraulically fractured in any given year, or 0 to 40 over the 10-year life of the 2014 [Plan]." *See, e.g.*, AR 626. The Bureau used this stock response 44 times.
- "Oil and gas leasing and development on federal mineral estate requires multiple stages of [Bureau] environmental analysis and authorization.

[Describing the analysis that occurs at the later leasing and drilling stages.]" *See, e.g.*, AR 424. The Bureau used this stock response 237 times.

- "Based on summary finding by the U.S. District Court, Central District of California, the focus of this supplemental analysis addresses only the potential impacts of hydraulic fracturing as a result of future leasing and development decisions consistent with the 2014 RMP fluid mineral management decisions." *See, e.g.*, AR 408. The Bureau used this stock response 60 times.
- "[T]hroughout this Draft Supplemental EIS, the most conservative impact assumptions were selected to integrate into the supplemental impact analyses." *See, e.g.*, *id.* The Bureau used this stock response 96 times.
- "The Draft SEIS consistently references additional locations in the oil and gas lease development process where environmental review would occur . . . ." *See, e.g.*, AR 456. The Bureau used this stock response 41 times.
- "Potential leasing and development would be conducted through subsequent processes and site-specific NEPA analysis." *See, e.g.*, AR 410. The Bureau used this stock response an astounding 424 times.

To illustrate the sheer range of topics for which the Bureau indiscriminately copied these statements, the agency used the last statement in the list, as one example, in response to comments regarding environmental justice (AR 624), the number of wells predicted to be fracked (AR 404), public health and safety (AR 410), water consumption (AR 577), seismic activity (*id.*), groundwater contamination (AR 634), surface water impacts (AR 529), and impacts to wildlife and their habitat (AR 604).

Because the Bureau copied these stock statements repeatedly instead of specifically responding to comments, it "completely fail[ed] to address or refute the concern[s] presented" and therefore failed to satisfy its NEPA obligations. *Ctr. for Biological Diversity*, 349 F.3d at 1168. Each of the six responses are nothing more than boilerplate language, consisting of conclusory statements and general recitations of vague principles that "afford[] no basis for a comparison of the problems involved

with the proposed project and the difficulties involved in the alternatives." *Silva*, 482 F.2d at 1285 (citation and quotation marks omitted). In many cases, the Bureau used blatantly irrelevant responses. For example, it responded to a comment that it failed to comply with the Endangered Species Act and adequately consider effects on imperiled steelhead trout with a non sequitur stock statement explaining its basic obligations under NEPA. AR 492, 512. Similarly, it responded to an assertion that the SEIS violates the FLPMA with a stock statement explaining the basic impacts evaluated by the SEIS. AR 479–80. These non-responses are the opposite of a "good faith, reasoned analysis." *Silva*, 482 F.2d at 1285.

The Bureau also used stock responses even for highly technical and thoughtful comments from expert agencies that should have been given special weight. *See White Tanks Concerned Citizens, Inc. v. Strock*, 563 F.3d 1033, 1042 (9th Cir. 2009) (concerns raised by other federal agencies about scope of NEPA analysis given special weight). For example, the U.S. Environmental Protection Agency ("EPA") and U.S. National Park Service ("NPS") pointed out that the emissions inventory in the SEIS critically omits emissions from fracking on existing leases in the decision area. AR 10608, 10349–51. EPA further highlighted that the inventory lacked the detail necessary to determine how the Bureau prepared the emissions estimates and, importantly, did not appear to include emissions from the equipment, transportation, or fluids used during fracking. AR 10349. The Bureau's omissions thereby prevented the reviewing agencies from determining the reductions needed to meet critical state and national air quality and visibility standards in the nearby parks and recreation areas. AR 10608, 10349–51. In response, the Bureau failed to update its analysis or offer a reasoned discussion of the concerns raised, instead using its stock statements that the SEIS necessitated "the most conservative impact assumptions" and required "subsequent processes and site-specific NEPA analysis." AR 446–47, 531–34.

As another example, many commenters, in addition to EPA and NPS, repeatedly raised concerns that the Bureau underestimated impacts by arbitrarily

limiting its analysis to new wells fracked on new leases, and entirely ignoring any fracking on existing leases in the decision area. The Bureau employed the same non-responsive stock statement to these concerns over forty times, without ever rationally explaining why the SEIS excludes fracking on existing leases or otherwise providing a factual or legal basis for such a significant omission in its analysis. *See* Section II.A, *infra*; *see, e.g.*, AR 409 (the Bureau states only that staff determined "zero to four of these new wells on new leases would be hydraulically fractured in any given year"). The Bureau similarly used non-responsive stock answers to dismiss expert comments from other agencies including the U.S. Geological Survey (AR 521), the California EPA and Air Resources Board (AR 408–13), the State Lands Commission (AR 574–77), and the California Department of Fish and Wildlife (AR 578–601). By "never seriously consider[ing] the concerns raised" by expert agencies and others, and "offer[ing] no reasoned analysis" in response, *Kraayenbrink*, 632 F.3d at 492, the Bureau's responses fail to rise above "an exercise in form over substance." *Id.* at 491; *see also Ctr. for Biological Diversity*, 349 F.3d at 1168–69 (U.S. Forest Service failed to properly respond to comments where commenters directly challenged the scientific evidence and opinions central to a final EIS's conclusions, but agency only generally responded that conclusions were derived from the best science available without explaining how that evidence actually supported its conclusions); *City of S. Pasadena v. Slater*, 56 F. Supp. 2d 1106, 1127 (C.D. Cal. 1999) (The "court may properly be skeptical as to whether an EIS's conclusions have a substantial basis in fact if the responsible agency has apparently ignored the conflicting views of other agencies having pertinent expertise.") (citation and quotation marks omitted).

Importantly, in three of its six stock responses, the Bureau's boilerplate language improperly delayed substantive analysis until the later leasing or drilling stages. The Bureau used these kick-the-can-down-the-road responses over 700 times for a wide range of comment topics including environmental justice impacts (*see, e.g.*, AR 401), air quality (*see, e.g.*, AR 414–15), public health and safety (*see, e.g.*, AR

398), cumulative impacts (*see, e.g.*, AR 421), seismic activity (*see, e.g.*, 628), groundwater contamination (*see, e.g.*, AR 412), the NEPA process (*see, e.g.*, AR 524), and areas of cultural significance for tribes (*see, e.g.*, AR 545). But the Bureau cannot "avoid" analysis of foreseeable impacts from a resource management plan "merely by saying that the consequences are unclear or will be analyzed later when an [environmental review document] is prepared for a site-specific program proposed pursuant to the [management plan]." *Kern*, 284 F.3d at 1072; *see also* 40 C.F.R. § 1501.2 (1978) (NEPA analysis must be conducted at "the earliest possible time").

For example, the State of California highlighted that the SEIS concluded there would be no significant impacts to groundwater, but wrongly assumed wastewater produced during fracking is stored in "lined" pits that prevent groundwater contamination. AR 9015. California pointed out that in fact 530 out of 560 active pits in the Central Valley region alone are unlined, recent reports demonstrate that pits are often unpermitted or under active enforcement actions, and therefore wastewater pits pose serious threats to groundwater in the decision area. *Id.* California asked the Bureau to evaluate this data that undermined the Bureau's assumption and, indeed, demonstrated that unlined pits may cause significant impacts. *Id.* In response, as it did in hundreds of other instances, the Bureau deferred further review, offering its stock statement that "[p]otential leasing and development would be conducted through subsequent processes and site-specific NEPA analysis" and otherwise failing to update the SEIS. AR 629. Improperly deferring analysis until "later site-specific projects" risks defeating entirely the purpose of completing an EIS at the management plan stage. *Kern*, 284 F.3d at 1072.

In sum, the Bureau's overall failure to properly respond to comments robbed the public of a "full and fair discussion" of the impacts of fracking, and therefore violates NEPA. *Or. Nat. Desert Ass'n*, 625 F.3d at 1122 (citation and quotation marks omitted). The Court should invalidate the Bureau's decision and require the agency to

produce the "good faith" response to comments that NEPA demands. *Kraayenbrink*, 632 F.3d at 491 (citation and quotation marks omitted).

II. The Bureau Failed to Take a Hard Look at the Significant Impacts of Fracking.

The Bureau's failure to engage with public comments resulted in an SEIS that was flawed throughout. In particular, the agency substantively violated NEPA's "hard look" requirement by drastically undercounting the number of wells it predicted will be fracked, failing to analyze the cumulative impacts of fracking, entirely ignoring the public health and safety impacts of fracking on local communities, and seriously underestimating the impacts of fracking on groundwater resources in the area. The Bureau's consequent failure to take a proper hard look at the unique and heightened impacts of fracking endangers the communities, precious public lands, outdoor recreation, and environment in the region.

A. The Bureau Unlawfully Underestimated the Risks from Fracking by Arbitrarily Limiting Its Analysis to a Small Subset of the Wells It Predicted Would Be Fracked.

In 2016, the court ordered the Bureau to take a "comprehensive" hard look at the fracking authorized under its 2014 Plan due to the "undisputed" and "prominent role fracking is expected to play in the future" of the decision area. *ForestWatch*, 2016 WL 5172009, at *10–11, *13. Rather than complete the comprehensive analysis of fracking that the court ordered, the Bureau instead limited its review in the SEIS to only a small subset of fracking it predicts will occur, ignoring the vast majority of new fracked wells allowed by the 2014 Plan. AR 45–46. This violated NEPA.

NEPA requires agencies to take a hard look at the impacts of actions they authorize without improperly minimizing them. *N. Alaska Env't Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006) ("[A] 'hard look' should involve a discussion of adverse impacts that does not improperly minimize negative side effects.") (citing *Native Ecosystems Council v. U.S. Forest Serv.*, 428 F.3d 1233, 1241 (9th Cir. 2005)). This requires the agency "to present *complete and accurate* information to decision

makers and to the public to allow an informed comparison of the alternatives considered." *Nat. Res. Def. Council v. U.S. Forest Serv.*, 421 F.3d 797, 811–13 (9th Cir. 2005) (emphasis added) (holding that an EIS violated NEPA when analysis was based on mistaken economic projections that discounted environmental impacts).

Here, the Bureau failed to present such complete and accurate information. In the SEIS, the Bureau predicted zero to four wells out of the 10 to 40 new wells on *new* leases will be fracked per year. It limited its entire analysis of the severity of the impacts of fracking to these wells and concluded the impacts in the decision area will accordingly be negligible.[4] AR 87, 5. But this analysis entirely ignored up to 360 new wells each year that the Bureau predicts will be drilled on *existing* federal leases in the decision area, under the control and guidance of the 2014 Plan. AR 45. The Bureau did not predict how many of these wells would be fracked, but the agency acknowledges that most fracking in the overall planning area occurs on existing leases (AR 50), and has estimated about twenty-five percent of new wells in the planning area will be fracked. AR 1631. The Bureau elsewhere has suggested as high as ninety percent of new wells drilled on federal lands are fracked. 80 Fed. Reg. at 16,131. The implication of these estimates is obvious: at least some number of the 360 new wells that the Bureau anticipates on existing leases will be fracked. Nevertheless, the Bureau provided no analysis of whether fracking of these wells will cause significant environmental impacts. And because the Bureau found that there would be no significant impacts from fracking, it conducted no analysis of whether there were alternatives or best management practices that could limit or mitigate environmental harms from fracking these wells.

The Bureau claims it excluded an analysis of fracking on new wells on existing leases from the SEIS because "[e]xisting oil and gas leases are recognized as valid

[4] The Bureau's prediction that only zero to four wells will be fracked on new leases per year is also likely an underestimate, for the reasons explained in the State of California's motion for summary judgment brief in its consolidated case.

existing rights and are not subject to fluid mineral decisions in the 2014 [Plan] unless the lease expires and is reissued under the [Plan]." AR 26; *see also* AR 1696 ("[n]o decisions generated by the [2014 Plan] would change existing rights"). But just because existing oil and gas leases may constitute valid existing rights, it does not follow that they "are not subject to fluid mineral decisions in the 2014 [Plan]." AR 26. To the contrary, the Bureau's regulations explain that "[a]ll future resource management authorizations and actions . . . shall conform to the approved plan" and require the Bureau Field Manager to "take appropriate measures, subject to valid existing rights, to make operations and activities under existing permits . . . conform to the approved plan or amendment within a reasonable period of time." 43 C.F.R. § 1610.5-3(a)–(b). Furthermore, an oil and gas lessee's rights are explicitly limited by "such reasonable measures as may be required by the authorized officer to minimize adverse impacts to other resource values, land uses or users not addressed in the lease stipulations at the time operations are proposed." *Id.* § 3101.1-2. After the leasing stage, lessees must also submit applications for permits to drill, when the agency can impose additional conditions. *Id.* § 3162.3-1(c), (h). These regulations thus provide the Bureau with the ability to prescribe operating conditions and other protections on new wells on existing leases, consistent with proscriptions in the 2014 Plan.

The plain language of the 2014 Plan reflects this conclusion. It confirms that the standard operating procedures (SOPs), conditions of approval (COAs), and implementation guidelines developed in the Plan apply to new wells on new *and* existing leases. It explains that "SOPs and implementation guidelines [outlined in the 2014 Plan] will be employed on all existing federal leases and private mineral developments, subject to the limits of [Bureau] authority and the right of the owners/lessees to have reasonable access and development." AR 1931 (emphasis added); *see also* AR 1933 ("The following describes the SOPs and COAs applicable to each of the oil and gas development phases on existing federal oil and gas leases."). On the specific subject of air quality, the 2014 Plan further acknowledges that

"[w]hile the [Bureau] has limited ability to alter the conditions of existing leases, it can require specific actions and measures necessary to protect air quality in response to identified or anticipated adverse impacts at the project level stage" using the Plan's air resources management plan. AR 1863.

The Bureau's standard lease terms also expressly give it continuing authority to impose operating conditions outlined in the 2014 Plan on new wells on existing leases. The lease form states lessees are required to "take reasonable measures *deemed necessary by lessor*" to minimize impacts to land, air, water, and other resources. *See* U.S. Bureau of Land Mgmt., *Offer to Lease and Lease for Oil and Gas* 3 (Oct. 2008), https://www.blm.gov/sites/blm.gov/files/uploads/Services_National-Operations-Center_Eforms_Fluid-and-Solid-Minerals_3100-011.pdf (emphasis added). This is further confirmation that the Bureau can prescribe operating conditions and other protections on new wells on existing leases, consistent with the 2014 Plan.

In these circumstances, NEPA does not permit the Bureau to omit analysis of the impacts of fracking on existing leases. Under NEPA, an agency may refuse to consider the effects of an action only when the agency has no power to act on whatever information might be contained in an EIS. *Dep't of Transp. v. Pub. Citizen*, 541 U.S. 752, 770 (2004) (holding that an agency need not consider the effects of an action under NEPA only when the agency cannot be considered a legally relevant cause of the effect); *see, e.g.*, *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1213–14 (9th Cir. 2008). Here, the Bureau has ample regulatory authority over fracking on new wells on existing leases, and it has provided no rational explanation for excluding them from its NEPA analysis. Because the 2014 Plan could reasonably limit the environmental impacts of fracking from new wells on existing leases, the Bureau acted arbitrarily and capriciously in ignoring the environmental impacts from fracking on these wells. *See Nat'l Highway Traffic Safety Admin.*, 538 F.3d at 1213; *see also, e.g.*, *Nat. Res. Def. Council*, 421 F.3d at 811–13; *Anderson v. Evans*, 371 F.3d 475, 492 (9th Cir. 2004) (agency could not support its

finding that impacts of resource management plan were not significant, where its failure to consider local impacts was deemed a "major analytical lapse" whereby a "critical question" was never analyzed).

This violation had significant practical impacts on the affected environment and local communities in the Bakersfield decision area. By turning a blind eye to new wells on existing leases and therefore drastically undercounting the number of wells predicted to be fracked in the decision area, the SEIS unlawfully skewed the NEPA analysis for all issues and underestimated the significant impacts to air quality, climate, public health and safety, local environmental justice communities, and water resources. This error, in turn, subverted the resulting management decisions in the 2014 Plan, including selection of SOPs and implementation guidelines that are applied to the area. For example, the State of California suggested that the Bureau should consider an alternative limiting the number of fracking operations in a given year. AR 9014. The SEIS could have considered this alternative in the 2014 Plan on both new and existing leases, without restricting valid existing rights. *See* 43 C.F.R. § 3101.1-2 (explaining "reasonable measures" the Bureau may require to minimize adverse impacts on existing leases "may include, but are not limited to, . . . timing of operations"). Public commenters also suggested specific well casing and water quality testing procedures that would have protected local drinking water from the risks of fracking. These could have been included in the 2014 Plan as SOPs or implementation guidelines. *See* AR 10271–72. By curtailing its analysis of impacts only to wells on new leases and accordingly finding no significant impacts, however, the Bureau never evaluated these proposed alternatives and operating conditions that it could have applied to wells on both new and existing leases. The agency thus violated NEPA.

B. The Bureau Failed to Analyze Cumulative Impacts from Fracking in the Planning Area.

The Bureau also failed to undertake an analysis of the cumulative impacts of fracking required by NEPA. Independent of whether the Bureau has regulatory

authority over the impacts of fracking on new wells on existing leases (which it does), it was still required to evaluate these impacts on existing leases as a cumulative impact, along with fracking on private and state land in the overall planning area, and any fracking authorized by the Bureau's nearby Central Coast Field Office Resource Management Plan Amendment. 40 C.F.R. §§ 1508.7 (1978), 1508.25(a), (c) (1978), 1508.27(b)(7) (1978). In its rush to expand fracking in the region, the agency skipped this critical analysis and again failed to satisfy its NEPA obligations.

Under the applicable NEPA regulations, the Bureau was required to consider the cumulative impacts of fracking in the SEIS, "added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions." 40 C.F.R. §§ 1508.7 (1978), 1508.25(a), (c) (1978), 1508.27(b)(7) (1978). The SEIS must therefore include sufficient detail in its analysis to assist the "decisionmaker in deciding whether, or how, to alter the program to lessen cumulative [environmental] impacts." *Churchill Cnty. v. Norton*, 276 F.3d 1060, 1080 (9th Cir. 2001) (quoting *City of Carmel-by-the-Sea v. U.S. Dep't of Transp.*, 123 F.3d 1142, 1160 (9th Cir. 1997)).

Here, the SEIS hardly mentions—let alone takes the requisite hard look at—the cumulative impacts of fracking in and around the planning area, particularly on air quality, climate, water quality, public health, and environmental justice communities. Plaintiffs and other public commenters extensively detailed the cumulative impacts the Bureau effectively ignored by limiting its analysis to just zero to four new wells on new leases. For example, the Bureau ignored the vast majority of air emissions due to fracking from existing leases, private and state land in the planning area, and the Bureau's Central Coast Field Office Resource Management Plan Amendment. In fact, the Central Coast Plan Amendment opened *another* several hundred thousand acres of federal land and mineral estate to oil and gas development and fracking adjacent to the Bakersfield Field Office decision area. 84 Fed. Reg. 53,470, 53,470 (Oct. 7, 2019). The Bureau also adopted the Central Coast Plan Amendment in October 2019,

meaning the agency considered it during the same time period as it finalized the challenged SEIS, yet it still ignored the cumulative impacts of both actions in the region. *Id.*; *see also Hall v. Norton*, 266 F.3d 969, 978–79 (9th Cir. 2001) (rejecting the Bureau's cumulative impact analysis that ignored emissions from other Bureau-managed projects in the region). By failing to address the cumulative emissions from other recent, concurrent, and reasonably foreseeable fracking in the area, the SEIS ignored expanding pollution impacts in a region where seven of eight counties are already in nonattainment with state and federal requirements for dangerous air pollutants like ozone, fine particulate matter, or both. AR 9019.

Commenters further explained that the Bureau's failure to take a hard look at cumulative impacts also threatens to worsen already degraded air quality and visibility in Clean Air Act nonattainment areas as well as nearby national parks and wilderness areas granted special federal air quality protections. For example, both EPA and NPS flagged critical gaps in the emissions inventory in the SEIS, which omitted emissions from fracking on existing leases, emissions from equipment and transportation used during fracking, and other significant emissions sources in the area. AR 10608, 10349–51. Sequoia, Kings Canyon, and Yosemite National Parks, as well as numerous wilderness areas with federal air quality protections, are located directly adjacent to the planning area. AR 10281, 8154–55. These park units are among the most polluted in the country and regularly experience hazardous levels of air pollution and significantly decreased visibility. Despite these severe air quality problems, and despite the Bureau's obligation to analyze cumulative impacts on these areas, the agency failed to consider how cumulative air emissions from fracking in and around the planning area might further degrade these areas. AR 98–99.

The Bureau similarly failed to take a hard look at the cumulative impacts of greenhouse gas emissions from fracking. Because climate change results from the aggregate contributions of numerous sources, "[t]he impact of greenhouse gas emissions on climate change is precisely the kind of cumulative impacts analysis that

NEPA requires agencies to conduct." *Nat'l Highway Traffic Safety Admin.*, 538 F.3d at 1217. Yet the Bureau calculated the tons of carbon dioxide equivalent expected to be emitted from only zero to four fracked wells in the planning area. AR 100–02, 146. It ignored the greenhouse gas emissions expected from other Bureau actions in the region, including wells on existing leases, wells on private and state land, and wells authorized by its Central Coast Plan Amendment. Such an artificially narrowed analysis inaccurately portrays the impacts of fracking in the planning area as isolated and de minimis. AR 146. Given the "cumulative nature of climate change, considering each individual drilling project in a vacuum deprives the agency and the public of the context necessary to evaluate oil and gas drilling on federal land before irretrievably committing to that drilling." *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 83 (D.D.C. 2019) (citation omitted); *see also Indigenous Env't Network v. U.S. Dep't of State*, 347 F. Supp. 3d 561, 578 (D. Mont. 2018) (failure to consider greenhouse gas emissions from Keystone pipeline in context of emissions from Clipper pipeline expansion violates NEPA).

By not giving a cumulative accounting of the impacts of recent, concurrent, and foreseeable future fracking on federal mineral estate in the area, the Bureau improperly concluded that the impacts of fracking only zero to four new wells on new leases are "individually minor," without confronting the question, mandated by NEPA, of whether those impacts, when considered cumulatively, are "collectively significant." *Nat'l Highway Traffic Safety Admin.*, 538 F.3d at 1217 (quoting 40 C.F.R. § 1508.7 (1978)). The agency's failure to consider the complete context in which fracking in the SEIS will take place violated NEPA.

C. The Bureau Entirely Ignored Public Health and Safety Impacts, Particularly on Local Environmental Justice Communities.

By completely failing to analyze or even mention public health and safety impacts, the Bureau violated its duty under NEPA to take a hard look at whether the already overburdened communities in the planning area face increased public health

and safety risks from fracking. Plaintiffs and other public commenters provided extensive comments to the Bureau about the serious health and safety impacts associated with increased air pollution from fracking, and from toxic chemicals present in fracking fluid and wastewater produced in the fracking process that threaten water resources. The agency improperly ignored these impacts.

"[U]nder NEPA, [the Bureau] must not only disclose . . . that certain communities and localities are at greater risk, but must also fully assess these risks." *California v. Bernhardt*, 472 F. Supp. 3d 573, 620 (N.D. Cal. 2020). NEPA does not allow "for an abdication of an analysis, especially where increased harm on certain populations living near active oil and gas development on federal and tribal lands is acknowledged and the potential for alternative approaches exists." *Id.* at 619. The agency also "cannot discount the localized impacts to people for whom the public health impacts are of clear significance." *Id.* at 622. Where the Bureau was presented with the potential impacts of its action that it then fails to adequately consider, the agency fails to take the hard look required by NEPA. *Or. Wild v. Bureau of Land Mgmt.*, No. 6:14-CV-0110-AA, 2015 WL 1190131, at *12 (D. Or. Mar. 14, 2015).

Here, the Bureau improperly abdicated its duty to conduct a public health and safety analysis. The administrative record demonstrates that commenters presented the Bureau with extensive information about the increased public health and safety impacts of fracking on local communities. The agency neither updated the analysis in the SEIS to reflect these comments, nor meaningfully responded, instead using its stock statements in many cases to punt analysis to a later stage. *Kern*, 284 F.3d at 1072 ("If it is reasonably possible to analyze the environmental consequences in an EIS for [a resource management plan], the agency is required to perform that analysis."). For example, commenters requested that the Bureau fully analyze all potential sources of air emissions and impacts from those emissions due to fracking, as well as air emissions of individual chemicals found in fracking fluids. AR 11941–47, 8065. The California Air Resources Board also requested that the Bureau consider

impacts from diesel particulate matter emissions, which are a significant and dangerous source of emissions associated with fracking. AR 12033–34. The Bureau failed to conduct either analysis or explain its refusal to do so. *See, e.g.*, AR 408 (dismissing the Air Board's request with a non-responsive stock statement), 441 (dismissing request to analyze air emissions with a stock statement).

In other instances, the agency appears to have outright excluded from the SEIS record evidence of "localized impacts to people for whom the public health impacts are of clear significance." *Bernhardt*, 472 F. Supp. 3d at 622. For example, commenters raised serious concerns regarding health impacts from the hundreds of chemicals found in fracking fluid and water produced during fracking. They submitted studies showing that high concentrations of the carcinogen benzene have been detected in produced water in Kern County, and that produced water from ninety-five percent of 630 fracked wells in the state contained measurable, and sometimes elevated, concentrations of toxic compounds. AR 20150–51, 20369. Particularly alarming, they submitted evidence that Kern County has the second highest number of community water systems in California that rely on contaminated groundwater. AR 9019–21. The Bureau was also informed of the location of particular census tracts in the planning area that are more vulnerable to the health and safety impacts of fracking because they are already exposed to significantly more air and water pollution than other parts of the state, most notably in Kern, Tulare, Kings, Fresno, Ventura, and Santa Barbara counties. AR 9018–19.

These comments are not listed in the Public Comment Report in Appendix B of the SEIS, and the SEIS itself does not analyze these issues other than to minimize the risk of leaks and spills. *See, e.g.*, AR 128, 130–33. "In effect, [the Bureau] leaves the issue wholly unstudied and violative of NEPA's fundamental purpose, and thus fails to satisfy the hard look required under NEPA." *Bernhardt*, 472 F. Supp. 3d at 620. It is therefore arbitrary and capricious, and a violation of NEPA, for an agency to fail to conduct an analysis and develop stipulations at the management plan stage that might

address the serious issues raised by commenters. *Or. Wild*, 2015 WL 1190131, at *12. The Bureau even ignored reasonable requests from commenters, including EPA, to conduct a review of the harmful effects of all chemicals used in the fracking process, limit use of hazardous and poorly understood chemicals, and require measures to minimize leaks and spills of fracking fluids and wastewater. *See, e.g.*, AR 489 (punting analysis to a later stage with a non-responsive stock statement), 443 (same), 538 (ignoring commenter's requests). The Bureau's decision to entirely omit a public health and safety analysis is arbitrary and capricious and violated NEPA.

Further compounding the Bureau's failure, the agency also chose not to address how the public health and safety impacts of fracking will disproportionately affect the environmental justice communities in the SEIS, despite acknowledging that these communities live and work in many counties throughout the planning area, and despite many comments on the SEIS discussing this exact concern. AR 2391, 9018, 11965–66, 30, 15606, 20364–68, 21207–08; *see Bernhardt*, 472 F. Supp. 3d at 619. In fact, the State of California even provided a census map of the disadvantaged communities in the planning area overlaid with current oil and gas activity and the areas open for leasing, demonstrating that these communities live closest to oil wells. AR 9018, 9158. The State also provided a drinking water quality map of the planning area overlaid with current oil and gas activity and the areas open for leasing, further demonstrating that residents in the vast majority of the area also drink water that contains contamination from chemicals or bacteria. AR 9019–20.

Despite its knowledge of the presence and exact locations of environmental justice communities in the planning area relative to oil and gas activity and fracking, the Bureau did not include these maps or comments in its analysis and did not respond to the concerns raised. *See, e.g.*, AR 422, 479, 624. Commenters once again raised a serious issue that the agency failed to analyze or address by developing responsive stipulations at the management plan stage. Contrary to the Bureau's stock statements, the unaddressed record evidence demonstrates impacts to environmental justice

communities in the decision area that would not be negligible. *See Kern*, 284 F.3d at 1072; *see also Bernhardt*, 472 F. Supp. 3d at 621 (Bureau violated NEPA by failing to take a hard look at public health impacts where evidence showed these impacts disproportionately affected Native Americans living near wells and where this issue was raised in comments but ignored in the analysis). The agency's complete omission of a public health and safety analysis of the impacts of fracking, and its failure to consider those impacts in the context of the significant environmental justice communities in the planning area, is arbitrary and capricious and violated NEPA.

D. The Bureau Underestimated the Serious Impacts of Fracking on Groundwater.

Finally, the Bureau also failed to take a hard look at the impacts of fracking on groundwater in the decision area, disregarding substantial public comments and record evidence that fracking practices in California endanger drinking water supplies due to the close proximity of fracking to groundwater.

The record shows that fracking in California occurs at much shallower depths and dangerously close to drinking water aquifers than other parts of the United States and is therefore much more likely to contaminate drinking water. AR 10354, 1662, 74807. Shallow fracking in a water-stressed region like the decision area, which according to the California State Lands Commission is "experiencing frequent periods of drought and seasonal heat events along with a rapidly growing population and high levels of irrigated agriculture," only exacerbates the risks to groundwater. AR 12025. Here, Plaintiffs and other public commenters explained what information the Bureau needed to collect at the resource management plan stage to fully assess the risks to groundwater from shallow fracturing. For example, EPA recommended the SEIS include a map of drinking water sources, aquifer exemptions, and existing and proposed wells so that the Bureau may identify needed stipulations at the resource management plan stage to protect groundwater. AR 10352–54.

Commenters also provided detailed information on what drinking water sources are specifically at risk, including explaining that fracking could occur near or in the boundaries of Santa Barbara County's groundwater aquifers (AR 8259), near groundwater wells that supply the California Army National Guard with its domestic water (AR 8412–13), near the Ojai Valley Basin's groundwater supply (AR 8431), and in the immediate vicinity of the City of Lompoc's drinking water well field (AR 11887–88), as just a few examples.

Finally, public commenters provided specific suggestions for stipulations at the resource management plan stage that could mitigate the risks from shallow fracturing. These included a suggestion from EPA that the Bureau require a stipulation "that identified fresh water zones are to be sampled and analyzed so that pre-fracking background levels of those fresh water zones (drinking water supply) can establish whether any existing contamination exists before fracking has been introduced in the vicinity" (AR 10352), as well as a suggestion that the 2014 Plan require operators to prove that the geologic confining zone is sufficient to prevent migration of fracking fluids into usable water (AR 425), to name a few.

To satisfy its "hard look" requirements, the Bureau should have acknowledged this information, analyzed which areas the SEIS opened to fracking posed the highest risk from shallow fracturing, and identified measures to avoid or mitigate the risk to usable water. Instead of taking a hard look at the risks of shallow fracturing, however, the Bureau simply concluded that fracking has a negligible risk to groundwater, while also acknowledging that more information is needed to assess the problem. AR 503. But "[g]eneral statements about 'possible' effects and 'some risk' do not constitute a 'hard look' absent a justification regarding why more definitive information could not be provided." *Neighbors of Cuddy Mountain*, 137 F.3d at 1380; *see also, e.g.*, *Wildearth Guardians v. U.S. Bureau of Land Mgmt.*, 457 F. Supp. 3d 880, 886–87 (D. Mont. 2020) (holding that the Bureau violated NEPA in discussing groundwater impacts from oil and gas drilling when it "largely fail[ed] to inform the reader whether

groundwater would be unchanged, improved, or degraded and . . . certainly fail[ed] to explain what data would lead to these conclusions"). The Bureau also dismissed the public and expert agencies' concerns by providing a stock response that site-specific impacts would be evaluated later. *See, e.g.*, AR 539. But "NEPA is not designed to postpone analysis of an environmental consequence to the last possible moment. Rather, it is designed to require such analysis as soon as it can reasonably be done." *Kern*, 284 F.3d at 1072; *see also* 40 C.F.R. § 1501.2 (1978) (Bureau must conduct environmental analysis "at the earliest possible time"). When the Bureau prepares an EIS for a resource management plan, "[i]f it is reasonably possible to analyze the environmental consequences in an EIS for [the plan], the agency is required to perform that analysis." *Kern*, 284 F.3d at 1072. In this case, it was reasonably possible for the Bureau to analyze the environmental consequences of shallow fracturing authorized by the 2014 Plan, and it should have done so.

The Bureau's conclusion that impacts to groundwater from injection of fracking fluids would be negligible was therefore arbitrary and capricious. *Sierra Club v. Bosworth*, 510 F.3d 1016, 1023 (9th Cir. 2007) (to withstand review "the agency must articulate a rational connection between the facts found and the conclusions reached") (internal alterations, quotation marks, and citation omitted). The agency's refusal to evaluate information demonstrating the risks of shallow fracturing constituted a failure to take a hard look at the impacts of fracking, in violation of NEPA.

CONCLUSION

For the reasons set forth above, the Bureau has violated NEPA. The Court should thus grant summary judgment in favor of Plaintiffs, set aside the SEIS and 2019 record of decision, and enjoin the Bureau from authorizing or otherwise proceeding with oil and gas leasing or other oil and gas activities pursuant to the 2014 Plan until the Bureau has complied with its NEPA obligations.

Respectfully submitted,

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