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***Via Electronic Submission***

Carly Summers  
Project Manager  
BLM Bakersfield Field Office  
Attn: Bakersfield Hydraulic Fracturing Analysis  
3801 Pegasus Drive  
Bakersfield, CA 93308

**RE: Comments on the Bureau of Land Management, Bakersfield Field Office Hydraulic Fracturing Draft Supplemental Environmental Impact Statement, DOI-BLM-CA-C060-2018-0082-EIS**

Dear Ms. Summers:

On behalf the Attorney General of California, Xavier Becerra,<sup>1</sup> we submit these comments on the Draft Supplemental Environmental Impact Statement (“Draft Supplemental EIS”) issued by the U.S. Bureau of Land Management’s (“BLM”) Bakersfield Field Office to address the environmental consequences of hydraulic fracturing on 400,000 acres of public lands and 1.2 million acres of federal mineral estate in eight central California counties. Although the Draft Supplemental EIS was allegedly prepared to address the deficiencies in its prior review as found by a federal district court, BLM’s analysis fails to take a “hard look” at many of the significant impacts associated with hydraulic fracturing, or provide sufficient evidence regarding its conclusions, in violation of the National Environmental Policy Act (“NEPA”).

In particular, the Draft Supplemental EIS relies on the unfounded assumption that only “zero to four” hydraulic fracturing events will occur in the Planning Area each year, distorting its consideration of environmental impacts and its findings of significance. The Draft Supplemental

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<sup>1</sup> The California Attorney General submits these comments pursuant to his independent power and duty to protect the environment and natural resources of the State. *See* Cal. Const., art. V, § 13; Cal. Gov. Code, §§ 12511, 12600-12612; *D’Amico. v. Bd. of Medical Examiners* (1974) 11 Cal.3d 1, 1415.

EIS also fails to consider reasonable alternatives to the proposed action, including alternatives that could limit or mitigate the adverse impacts of hydraulic fracturing on the environment and nearby communities. Furthermore, the Draft Supplemental EIS fails to properly consider many issues, including potential groundwater contamination from hydraulic fracturing fluids, increased seismic activity, other types of well stimulation treatments and enhanced oil recovery techniques, and the use of hydraulic fracturing to extend the life of wells with declining production. BLM's analysis of impacts to disadvantaged communities living near federal oil and gas operations is particularly deficient, including the effects of increased air pollution and groundwater contamination. The Draft Supplemental EIS fails to consider conflicts with state plans and policies, including efforts by California to reduce greenhouse gas emissions and fossil fuel consumption to mitigate the devastating consequences of global climate change. Finally, BLM has failed to provide the public with a meaningful opportunity to participate in and comment on the preparation of this Draft Supplemental EIS.

For these reasons, Attorney General Becerra recommends that BLM withdraw its Draft Supplemental EIS and prepare a new analysis that fully considers the environmental impacts of opening over one million acres of public lands in California to oil and gas leasing.

## **STATUTORY BACKGROUND**

NEPA "is our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). NEPA has two fundamental purposes: (1) to guarantee that agencies take a "hard look" at the consequences of their actions before the actions occur by ensuring that "the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impacts," and (2) to ensure that "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, 349-50 (1989).

NEPA requires the preparation of a detailed EIS for any "major federal action significantly affecting the quality of the human environment." 42 U.S.C. § 4332(2)(C). In taking a "hard look," NEPA requires federal agencies to consider the direct, indirect, and cumulative impacts of its proposed action. *Idaho Sporting Cong. v. Rittenhouse*, 305 F.3d 957, 973 (9th Cir. 2002); 40 C.F.R. §§ 1508.7, 1508.8(a), (b). Moreover, "an agency may not rely on incorrect assumptions or data." *Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) (citing 40 C.F.R. § 1500.1(b)). "The information must be of high quality. Accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." 40 C.F.R. § 1500.1(b).

To determine whether a proposed project may significantly affect the environment, NEPA requires that both the context and the intensity of an action be considered. *Id.* § 1508.27. In evaluating the context, "[s]ignificance varies with the setting of the proposed action" and includes an examination of "the affected region, the affected interests, and the locality." *Id.* § 1508.27(a). Intensity "refers to the severity of impact," and NEPA's implementing regulations

list ten factors to be considered in evaluating intensity, including “[u]nique characteristics of the geographic area such as proximity to ... ecologically critical areas,” “[t]he degree to which the effects on the quality of the human environment are likely to be highly controversial,” “[t]he degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks,” and “[t]he degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.” *Id.* § 1508.27(b). The presence of just “one of these factors may be sufficient to require the preparation of an EIS in appropriate circumstances.” *Ocean Advocates v. U.S. Army Corps of Eng’rs*, 402 F.3d 846, 865 (9th Cir. 2005).

Pursuant to the Federal Land Policy and Management Act (“FLPMA”), 43 U.S.C. § 1701 *et seq.*, BLM develops resource management plans (“RMPs”) to guide the management of public lands within BLM’s jurisdiction. In particular, FLPMA requires that BLM “develop, maintain, and when appropriate, revise land use plans” to ensure that land management be conducted “on the basis of multiple use and sustained yield.” 43 U.S.C. §§ 1701(a)(7), 1712(a), 1732. FLPMA also requires that public lands be managed “in a manner that will protect the quality of scientific, scenic, historical, ecological, environmental, air and atmospheric, water resource, and archeological values.” *Id.* § 1701(a)(8). Resource management plans are subject to environmental review under NEPA.

## **FACTUAL BACKGROUND**

### ***Hydraulic Fracturing on Public Lands***

In recent years, the United States has experienced a boom in oil and gas production through the use of well stimulation treatments such as hydraulic fracturing combined with horizontal drilling. Hydraulic fracturing is a procedure by which oil and gas producers inject water, sand, and certain chemicals at high pressure into tight-rock formations (typically shale) to create fissures in the rock and allow oil and gas to escape for collection in a well. While most of the fluid is water, an assortment of chemicals, some of which are known carcinogens or other types of toxins, are added for different purposes such as lubrication of the fracture and minimization of corrosion. Much of the fracturing fluid, along with subsurface fluids, flows back to the surface and is often stored in open, unlined pits and typically disposed of by subsequent injection into underground wells.

This technology has not been without controversy, given a growing body of science connecting hydraulic fracturing with water and air pollution, increased seismic activity, and a prolonged dependence on fossil fuels. For example, inadequate well casings that run through groundwater zones can break during hydraulic fracturing operations and allow hydraulic fracturing fluids to escape. Air pollution concerns arise from the handling of the flow back fluids, which if stored in open pits may allow for the evaporation of toxic chemicals. Lastly, some areas of heavy hydraulic fracturing operations, such as Oklahoma, have seen a pronounced increase in the frequency of low-level seismic events.

BLM is the agency responsible for overseeing oil and gas development on over 245 million acres of public lands and 700 million acres of subsurface mineral estate across the United States, including 15 million acres of public lands and 47 million acres of subsurface mineral estate in California. Nearly 100,000 producing onshore oil and gas wells are located on these public lands nationwide. The vast majority of hydraulic fracturing on federal lands occurs in just nine states, including California, which has the sixth largest number of fracked wells. BLM has estimated that ninety percent of new wells drilled on federal lands are now being stimulated using hydraulic fracturing. *See* 81 Fed. Reg. 16,128, 16,131, 16,190 (Mar. 26, 2015).

***BLM's NEPA Review for the Bakersfield Resource Management Plan***

The BLM Bakersfield Field Office manages 400,000 acres of public lands and an additional 1.2 million acres of federal mineral estate in the counties of Fresno, Kern, Kings, Madera, San Luis Obispo, Santa Barbara, Tulare, and Ventura Counties (the "Planning Area"). In 2012, BLM issued a Final EIS evaluating the environmental impacts of its proposed resource management plan for the Planning Area. This planning effort sought to update two existing plans that were finalized in 1984 and 1997. Under the preferred alternative (Alternative B), 1,011,470 acres of federal mineral estate, or about 85 percent of the Planning Area, would be open to oil and gas leasing. BLM also completed a Reasonably Foreseeable Development Scenario that projected the exploration, drilling, and production activity that would likely occur in the next 10 years. This activity was estimated to be 100-400 wells drilled on federal mineral estate each year, including 90-360 wells on existing leases and 10-40 wells on new leases. BLM estimated that 25% of these wells would be hydraulically fractured. BLM approved the resource management plan in 2014.

In 2015, the Center for Biological Diversity and Los Padres ForestWatch challenged this final approval in the U.S. District Court for the Central District of California. On September 6, 2016, the District Court ruled on the parties' cross-motions for summary judgment, finding that BLM violated NEPA by failing to analyze the impacts of hydraulic fracturing in the Planning Area and required BLM to supplement its analysis. *Los Padres ForestWatch v. U.S. Bureau of Land Mgmt.*, 2016 WL 5172009, \*10-13 (C.D. Cal. Sept. 6, 2016). The District Court also held that the Final EIS analyzed a reasonable range of alternatives, finding that BLM provided an adequate explanation of why it did not consider an alternative that would have closed substantially more acres of land to oil and gas drilling. *Id.* at \*13-15. On May 3, 2017, the District Court approved a settlement agreement in which BLM agreed to prepare appropriate NEPA documentation to address the deficiencies identified by the District Court, and issue a new decision document that would amend or supersede the 2014 resource management plan, if appropriate.

On August 8, 2018, BLM issued a notice of intent to prepare a Draft Supplemental EIS and potential resource management plan amendment for the Planning Area and requested scoping comments. 83 Fed. Reg. 39,116. Among other commenters, six California state agencies – the Department of Conservation, Department of Fish and Wildlife, Department of

Water Resources, Department of Parks and Recreation, Air Resources Board, and State Water Resources Control Board – submitted a joint letter expressing concerns with the potential significant adverse effects of this activity and its impact on the state’s ability to meet its fossil fuel and greenhouse gas emissions reduction goals. In a cover letter, then-Governor Jerry Brown wrote that BLM “should abandon this effort and not pursue opening any new areas for oil and gas leases in this state,” given that such an approach is “contrary to the course California has set to combat climate change and to meet its share of the goals outlined in the Paris Agreement.”

On April 26, 2019, BLM issued the Draft Supplemental EIS that is the subject of this comment letter. 84 Fed. Reg. 17,885. The purpose of the Draft Supplemental EIS, as described by BLM, is “to analyze the environmental effects of the use of hydraulic fracturing technology in oil and gas development on new leases within the Planning Area and to determine whether changes are needed to the fluid minerals decisions in the 2014 RMP.” Draft Supplemental EIS at 2. Based on the District Court’s ruling on alternatives, BLM “carried-forward” the prior alternatives into its Draft Supplemental EIS, including Alternative B, which would open 1,011,470 acres of federal mineral estate to oil and gas leasing (the “Proposed Action”). Draft Supplemental EIS at 13-15. For its updated analysis, BLM assumed that 40 wells on new leases would be drilled each year, and that “zero to four” of these wells would be hydraulically fractured. Draft Supplemental EIS at 44. Given this low estimate, BLM concluded that no significant impacts would result, including impacts related to greenhouse gas emissions, air quality, water resources, biological resources, and induced seismic events. Draft Supplemental EIS at Chapter 4. Because BLM did not find any “notable increase in total impacts” resulting from the Proposed Action, it also determined that an amendment to the 2014 resource management plan was “unnecessary.” Draft Supplemental EIS at 15.

## **THE DRAFT SUPPLEMENTAL EIS FAILS TO TAKE A HARD LOOK AT THE IMPACTS OF HYDRAULIC FRACTURING IN THE PLANNING AREA**

### **I. The Draft Supplemental EIS Relies Upon an Incorrect Assumption Regarding the Number of Hydraulic Fracturing Operations.**

NEPA requires agencies to take a “hard look” at the environmental consequences of proposed agency actions before those actions are undertaken. *Klamath-Siskiyou Wildlands Ctr. v. Bureau of Land Mgmt.*, 387 F.3d 989, 993 (9th Cir. 2004); *see* 42 U.S.C. § 4332. “To take the required ‘hard look’ at a proposed project’s effects, an agency may not rely on incorrect assumptions or data.” *Native Ecosystems Council*, 418 F.3d at 964 (citing 40 C.F.R. § 1500.1(b)). Here, rather than providing the sufficient analysis or evidence required by NEPA to take a “hard look” at its Proposed Action, BLM’s findings in the Draft Supplemental EIS are based on an unfounded assumption that only “zero to four” hydraulic fracturing events will occur in the Planning Area each year. Draft Supplemental EIS at 6, 44. This assumption is not backed by any underlying data or analysis, and it is contrary to BLM’s own prior estimates.

For example, in the 2012 Bakersfield Proposed Resource Management Plan, BLM estimated that *25 percent* of new wells in the Planning Area are expected to use hydraulic

fracturing. *Los Padres ForestWatch*, 2016 WL 5172009 at \*1, 11 (“the prominent role fracking is expected to play in the future is undisputed in the record”). Moreover, BLM has previously stated that about 90 percent of new wells drilled on public lands are hydraulically fractured. 80 Fed. Reg. at 16,190 (“BLM estimates that 90 percent of the wells drilled on Federal and Indian land are hydraulically fractured”). While BLM now cites to a report by the California Council on Science and Technology (“CCST”) regarding this “low rate” of hydraulic fracturing, the CCST found that “[a]bout one hundred and fifty wells per month undergo hydraulic fracturing primarily in the southwestern San Joaquin Valley,” including oil fields within the Planning Area. Cf. CCST, *An Independent Scientific Assessment of Well Stimulation in California; Summary Report* (July 2015) (“CCST Report”) at 11-13, with Draft Supplemental EIS, ES-5, Figure ES.1.

Moreover, in a May 2019 Final EIS released by BLM’s Central Coast Field Office for another RMP, BLM noted that “hydraulic fracturing has been used as a production stimulation method in California since the late 1960s and is considered a standard technique for production.” BLM, Proposed Resource Management Plan Amendment and Final Environmental Impact Statement for Oil and Gas Leasing and Development (May 2019) at 1-1 n.3 (hereinafter, “Central Coast Final EIS”).<sup>2</sup> For its analysis in the Central Coast Final EIS, BLM assumed that well stimulation technologies and enhanced oil recovery techniques would “be used on *any or all*” new exploratory and development wells drilled on federal oil and gas leases over the next 15 to 20 years. *Id.* at ES-4, 2-3, 4.17-1, 4.20-2.

Perhaps not surprisingly, the Central Coast Final EIS was issued after a district court invalidated a previous BLM environmental assessment for the region that relied on unfounded assumptions about the frequency of hydraulic fracturing. See *Ctr. for Biological Diversity v. Bureau of Land Mgmt.*, 937 F. Supp. 2d 1140, 1148, 1155 (N.D. Cal. 2013) (“*CBD v. BLM*”) (finding that BLM’s projection of a single exploratory well “fails to take into account all ‘reasonably foreseeable’ possibilities as required by NEPA,” as evidenced by the record and the defendants’ own acknowledgment “that fracking activity in the United States has increased dramatically in recent years.”). In *CBD v. BLM*, plaintiffs challenged an EA regarding four oil and gas leases on approximately 2,700 acres in Monterey and Fresno counties. 937 F. Supp. 2d at 1144. Despite the growing use of fracking nationwide, BLM had assumed for purposes of the EA, based on data from 2006, that “no more than one exploratory well would be drilled in total on the land within the leases.” *Id.* at 1148. The court found that “this projection fails to take into account all ‘reasonably foreseeable’ possibilities as required by NEPA,” as evidenced by the record and the defendants’ own acknowledgment “that fracking activity in the United States has

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<sup>2</sup> The Central Coast Final EIS is *available at*: [https://eplanning.blm.gov/epl-front-office/projects/lup/67003/172408/209581/Central\\_Coast\\_Field\\_Office\\_Proposed\\_RMPA\\_Final\\_EIS.pdf](https://eplanning.blm.gov/epl-front-office/projects/lup/67003/172408/209581/Central_Coast_Field_Office_Proposed_RMPA_Final_EIS.pdf). Any comparisons of the Draft Supplemental EIS to the Central Coast Final EIS are solely for the purpose of identifying particular flaws in the Draft Supplemental EIS, and are not a concession that the Central Coast Final EIS complies with NEPA in part or in whole; that is a subject outside the scope of these comments. For the avoidance of doubt, the Attorney General reserves all rights to challenge the Central Coast Final EIS.

increased dramatically in recent years.” *Id.* at 1155. Thus, the court concluded that “it was not reasonable for BLM to consider only a single exploratory well scenario based on past data.” *Id.* at 1156.

The court then determined that “[t]his unreasonable lack of consideration of how fracking could impact the development of the disputed parcels went on to unreasonably distort BLM’s assessment of at least three of the ‘intensity’ factors in its FONSI.” *Id.* at 1157. First, “BLM erroneously held that the leases were not highly controversial,” even though “[t]here was clearly a controversy here regarding the nature of the drilling to occur on the leases and the potential impacts drilling would impose on the nearby communities.” *Id.* at 1157-58. “Second, BLM erroneously analyzed the potential effect of the leases on public health and safety” by ignoring the risks posed by fracking. *Id.* at 1158. “Third, BLM erroneously discounted the uncertainty from fracking that may be resolved by further data collection” by “instead opting to summarize general data about fracking (much of it raising substantial concerns about the impact of fracking) before dismissing the issues as outside of its jurisdiction.” *Id.* at 1159.

Similarly here, BLM’s assumption that only “zero to four” hydraulic fracturing events will occur in the Planning Area each year distorted its consideration of several environmental impacts and significance factors. For example, in analyzing the greenhouse gas and other air pollution that will result from the Proposed Action, the calculated emissions are based on the development of just 40 wells over the 10-year life of the 2014 RMP. *See* Draft Supplemental EIS at 54-64. Similarly, with regard to water resources, BLM finds that this amount of hydraulic fracturing would consume just 8.0 million gallons (25 acre-feet) of water during the 10-year planning period, and that “[t]he risk of impacts to groundwater due to spills of fracturing fluids from the completion of an average of zero to four wells per year would be negligible.” *Id.* at 85-87. And because of the small number of anticipated hydraulic fracturing events and related wastewater disposal, BLM summarily concludes that “negligible impacts related to earthquake potential from oil and gas disposal wells associated with hydraulic fracturing alone would be expected.” *Id.* at 92.

Given that BLM’s quantification regarding the number of wells which may be hydraulically fractured is significantly underestimated, there is serious potential that the Proposed Action would result in exceedances of the applicable significance thresholds. For example, as quantified in the Draft Supplemental EIS, anticipated emissions increases associated with the Proposed Action approach the applicable general conformity *de minimis* thresholds for certain pollutants in the San Joaquin Valley air basin, including nitrogen oxides (“NO<sub>x</sub>”) and reactive organic gases (“ROG”), two critical contributors to ozone formation. Draft Supplemental EIS at 62. The San Joaquin Valley is already classified as extreme nonattainment for 8-hour ozone. If the number of wells that would be hydraulically fractured is even slightly underrepresented, then one or both of these thresholds would likely be exceeded, resulting in significant air quality impacts. A revised analysis may also show that the Proposed Action’s greenhouse gas emissions would exceed the 25,000 metric tons of carbon dioxide equivalent (“MTCO<sub>2e</sub>”) annual threshold for mandatory reporting of greenhouse gas in the U.S. Environmental Protection Agency’s mandatory reporting program for greenhouse gases, which

the Draft Supplemental EIS appears to use as a greenhouse gas significance threshold. Draft Supplemental EIS at 57. When the Draft Supplemental EIS is revised as requested in this letter, the analysis must accurately quantify and mitigate any significant air quality and greenhouse gas impacts.

In sum, BLM's assumption that only "zero to four" hydraulic fracturing events will occur in the Planning Area each year is unsupported by the evidence before the agency. This assumption has resulted in a misleading discussion of environmental impacts in the Draft Supplemental EIS, rather than the "hard look" required by NEPA.

## **II. The Draft Supplemental EIS Fails to Consider Reasonable Alternatives to the Proposed Action.**

The Draft Supplemental EIS also fails to consider a reasonable range of alternatives to the Proposed Action. NEPA requires that Defendants provide a "detailed statement" regarding the "alternatives to the proposed action." 42 U.S.C. § 4332(2)(C)(iii); *see* 40 C.F.R. §§ 1502.14(a), 1508.9(b). Agencies should "[r]igorously explore and objectively evaluate all reasonable alternatives" that relate to the purposes of the project, and briefly discuss the reasons for eliminating any alternatives from detailed study. 40 C.F.R. § 1502.14. The requirement to consider reasonable alternatives "lies at the heart of any NEPA analysis." *California ex rel. Lockyer v. U.S. Dept. of Agric.*, 459 F. Supp. 2d 874, 905 (N.D. Cal. 2006). "The existence of a viable but unexamined alternative renders" an EIS inadequate. *Western Watersheds Project v. Abbey*, 719 F.3d 1035, 1050 (9th Cir. 2013) (internal quotations and citations omitted).

In the Draft Supplemental EIS, BLM "brings forward" the same alternatives that it previously considered in the 2012 Final EIS, claiming that the district court "upheld the range of alternatives" in that document. Draft Supplemental EIS at 13. These alternatives include "No Action" (Alternative A), the Proposed Action to open 1,011,470 acres to fluid mineral leasing (Alternative B), as well as 3 additional alternatives (Alternatives C-E) that are similar to the Proposed Action but differ slightly in terms of their emphasis on conservation, livestock grazing, or the production of natural resources. *Id.* at 13-34. However, given that the purpose of the Draft Supplemental EIS is to analyze the environmental impacts of hydraulic fracturing, Supplemental Draft Supplemental EIS at 2, BLM must consider additional alternatives that relate to this purpose and which could potentially reduce the significant impacts of such operations. *See* 40 C.F.R. § 1500.2(e) (agencies shall "[u]se the NEPA process to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment"); *id.* § 1502.14 ("agencies shall ... [r]igorously explore and objectively evaluate all reasonable alternatives").

BLM's reliance on the same alternatives that were included in the 2012 Final EIS based on the district court's decision in *Los Padres ForestWatch* misses the mark. In that decision, the district court found that BLM had provided a reasonable justification for excluding "an alternative that would have closed substantially more lands" to oil and gas leasing, given that "nearly all anticipated development is expected to occur on existing leases" and BLM had



“properly considered the mix of tools available in its arsenal to balance the competing priorities of developing federal lands and protecting the environment.” *Los Padres ForestWatch*, 2016 WL 5172009 at \*14.

However, as the district court also stated, “[c]onsideration of reasonable alternatives is necessary to ensure that the Bureau has before it and takes into account all possible approaches to, and potential environmental impacts of, a particular project.” *Id.* at \*13; *see id.* at \*14 (BLM is “obligated to examine reasonable alternatives to mitigate or reduce the overall *environmental impact* and not specifically the overall oil and gas activity on federal lands”) (emphasis in original). Given that court found that BLM must conduct this supplemental EIS to take a “hard look” at the environmental impacts of hydraulic fracturing, simply “bringing forward” the same alternatives from an environmental review that entirely failed to consider such operations precludes BLM from considering approaches that could actually reduce the overall environmental impact of fracking activities, in direct violation of NEPA.

Additional alternatives that BLM should consider to mitigate or reduce the environmental impacts of hydraulic fracturing include:

- (1) Closing more public lands to mineral leasing;
- (2) Placing ecologically sensitive areas off limits to hydraulic fracturing;
- (3) Prohibiting leasing in areas with low or no potential for oil and gas development.  
This is an alternative that BLM itself recently evaluated in its recent Final EIS for the Central Coast Oil and Gas RMP amendment. *See* Central Coast Final EIS at 2-16 – 2-17.
- (4) Limiting oil and gas development near communities; and
- (5) Limiting the number of hydraulic fracturing operations in a given year.

Without a consideration of alternatives that are actually related to the environmental consequences of hydraulic fracturing, BLM’s alternatives fail to allow for “informed decision-making and informed public participation,” in violation of NEPA. *See California v. Block*, 690 F.2d 753, 767 (9th Cir. 1982)

### **III. The Draft Supplemental EIS Fails to Consider Recent Science and Data Regarding the Significant Environmental Impacts Related to Hydraulic Fracturing Operations.**

To fulfill NEPA’s “hard look” requirement, an agency must consider all foreseeable direct, indirect, and cumulative impacts of its proposed action. *See N. Alaska Envtl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006); *Ctr. For Biological Diversity v. Salazar*, 695 F.3d 893, 916–17 (9th Cir. 2012). An agency must provide sufficient evidence and analysis to support its conclusions. *See* 40 C.F.R. § 1502.1 (EIS “shall be supported by evidence that the

agency has made the necessary environmental analyses”). As the Ninth Circuit has stated, “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.” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1213 (9th Cir. 1998). Here, BLM has failed to consider several environmental impacts related to its Proposed Action, or to support its conclusions with adequate analysis.

For example, with regard to impacts to groundwater from the management and disposal of flowback fluids, the Draft Supplemental EIS notes that produced water is stored in “tanks or in lined impoundments” prior to disposal, reinjection, or recycling, but summarily concludes that “[i]mpacts to groundwater from the completion of an average of zero to four wells in any given year ... would be negligible.” Draft Supplemental EIS at 89-90. Yet nowhere does BLM discuss data collected by the State Water Resources Control Board, which produces a report every six months on the regulation of oil field produced water ponds within each region.<sup>3</sup> According to the most recent report dated January 31, 2019, the Central Valley region had 561 active ponds, 501 of which were permitted and 60 unpermitted.<sup>4</sup> Moreover, most of the active ponds (530 of 560) were unlined.<sup>5</sup> The report also identified additional inactive ponds (507 of which were unlined), and noted that 161 ponds were under active enforcement actions.<sup>6</sup> Moreover, recent testing of these ponds, as required by the Central Valley Regional Water Quality Control Board, has identified numerous hazardous compounds that could pose a threat to groundwater for municipal and agricultural uses.<sup>7</sup> The CCST also expressed concern about the regular use of unlined pits for the disposal of produced water, finding that such practices could “introduce contaminants into the food web and expose human populations to known and potentially unknown toxic substances.” CCST Report, Vol. II at 403.

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<sup>3</sup> State Water Resources Control Board, Water Quality in Areas of Oil and Gas Production - Produced Water Ponds, *available at*:

[https://www.waterboards.ca.gov/water\\_issues/programs/groundwater/sb4/oil\\_field\\_produced/produced\\_water\\_ponds/index.html](https://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/oil_field_produced/produced_water_ponds/index.html).

<sup>4</sup> State Water Resources Control Board, Produced Water Ponds Status Report: January 31, 2019, attached hereto as Exhibit 1, *available at*:

[https://www.waterboards.ca.gov/water\\_issues/programs/groundwater/sb4/docs/pwpondsreport\\_january2019.pdf](https://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/docs/pwpondsreport_january2019.pdf).

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

<sup>7</sup> *See, e.g.*, Central Valley Regional Water Quality Control Board, Oil Field Pond 13267 Order Responses, Information Requested by 13267 Order, Lost Hills Oil Field, attached hereto as Exhibit 2, *available at*:

[https://www.waterboards.ca.gov/centralvalley/water\\_issues/oil\\_fields/information/disposal\\_ponds/aera\\_energy/2015\\_0616\\_com\\_lost\\_hills.pdf](https://www.waterboards.ca.gov/centralvalley/water_issues/oil_fields/information/disposal_ponds/aera_energy/2015_0616_com_lost_hills.pdf).

The Draft Supplemental EIS also fails to adequately consider recent science connecting the underground injection of hydraulic fracturing waste fluids, as well as hydraulic fracturing itself, to increased seismic activity. For example, BLM dismisses the notion that the Proposed Action could result in impacts related to hydraulic fracturing-induced earthquakes, stating that “[t]hree cases of hydraulic fracturing–induced earthquakes in the United States have been reported” and “only a few more worldwide.” Draft Supplemental EIS at 91-92. However, recent science has connected hundreds of earthquakes in Oklahoma, Ohio, and other areas to hydraulic fracturing events.<sup>8</sup> BLM also finds “negligible impacts related to earthquake potential from oil and gas disposal wells associated with hydraulic fracturing,” stating that there have been “no reported cases” of such induced seismicity, citing to the CCST Report. Draft Supplemental EIS at 92. However, more recent studies have in fact drawn such connections.<sup>9</sup> Moreover, while the CCST stated that “hydraulic fracturing as currently carried out in California is not considered to pose a high seismic risk,” CCST Report, Vol. II. at 267, it also warned that “it can be very difficult to distinguish California’s frequent natural earthquakes from those possibly caused by water injection into the subsurface” and recommended further analysis of this issue. *Id.* at 30-32. This is especially warranted given California’s many active earthquake faults and the fact that over 1,000 wastewater disposal wells are located within 1.5 miles of a mapped active fault in central and southern California. *Id.* at 277-293.

Although not specifically required by the District Court, it is arbitrary for BLM to ignore the environmental impacts of other types of well stimulation treatments and enhanced oil recovery techniques in the Planning Area given their likely utilization in the future. These techniques include acidizing, water flooding, steam flooding, cyclic steam injection, and a dual type that alternates between steam and water flooding. NEPA requires that an agency consider the full scope of activities encompassed by its Proposed Action. *See* 40 C.F.R. § 1508.25; *N. Alaska Env'tl. Ctr. v. Kempthorne*, 457 F.3d 969, 975 (9th Cir. 2006) (finding that the “hard look” requirement of NEPA includes “considering all foreseeable direct and indirect impacts.”). For the Proposed Action, this should include not only hydraulic fracturing activities, but also other types of well stimulation treatments that will be foreseeable used in the Planning Area. In the

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<sup>8</sup> Skoumal, R. J., *et al.* (2018). Earthquakes induced by hydraulic fracturing are pervasive in Oklahoma. *Journal of Geophysical Research: SolidEarth*, 123, *available at*: <https://doi.org/10.1029/2018JB016790>; Skoumal, R.J., *et al.*, Earthquakes Induced by Hydraulic Fracturing in Poland Township, Ohio. *Bulletin of the Seismological Society of America* (2015) 105 (1): 189-197, *available at*: <https://doi.org/10.1785/0120140168>; Xuewei Bao and David W. Eaton (2016). Fault activation by hydraulic fracturing in western Canada. *Science* 354 (6318), 1406-1409, attached hereto as Exhibit 3, *available at*: <https://science.sciencemag.org/content/354/6318/1406>.

<sup>9</sup> Goebel, T. H. W., *et al.* (2016). Wastewater disposal and earthquake swarm activity at the southern end of the Central Valley, California, *Geophys. Res. Lett.*, 43, 1092–1099, attached hereto as Exhibit 4, *available at*: <https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2015GL066948>.

Central Coast Final EIS, BLM assumed that “[w]ell stimulation technologies (e.g., hydraulic fracturing, acid matrix stimulation, acid fracturing) and enhanced oil recovery techniques (e.g., cyclic steam, steam flood, water flood) may be used on any or all” wells drilled on federal mineral estate. *See, e.g.*, Central Coast Final EIS at 4-17.1. The Draft Supplemental EIS contains no analysis of such issues.

In addition to limiting its impacts analysis to “zero to four” hydraulic fracturing events on *new* wells each year, BLM ignores that fact that hydraulic fracturing is commonly used to extend the life of existing oil wells with declining production and related infrastructure, resulting in additional significant impacts from the continued production of fossil fuels in these areas. As BLM itself states in the Draft Supplemental EIS, “hydraulic fracturing usually occurs in oil fields on existing leases, many of which have been continuously developed over the last 100 years.” Draft Supplemental EIS at 6. Yet nowhere does BLM consider the environmental impacts of using hydraulic fracturing or other well stimulation treatments on existing wells within the Planning Area.

As noted previously, and despite BLM’s statements to the contrary, there is substantial potential that the Proposed Action may significantly increase air pollution. In addition to that likely impact, the Draft Supplemental EIS fails to adequately analyze and disclose the cumulative impacts related to this issue. As BLM is well aware, the agency is also currently proposing the Resource Management Plan Amendment and Final EIS for Oil and Gas Leasing and Development in the Central Coast region. That proposal itself involves considerable new well development, including a BLM-estimated 37 new wells that would involve hydraulically fracturing. Central Coast Final EIS at 47-48. Yet, inexplicably, the Draft Supplemental EIS fails to mention that other major BLM planning effort, which would involve the development of new hydraulically-fractured wells during the same timeframe as the Proposed Action. Moreover, most or all of these wells are expected to be developed in the San Joaquin Valley. *Id.* at 27, 48. Indeed, the regional air basin regulated by the local California Air District – the San Joaquin Valley Air Pollution Control District – includes portions of four counties covered by the Central Coast Final EIS (San Joaquin, Stanislaus, Merced, and Fresno) and five counties covered by the Draft Supplemental EIS (Fresno, Kern, Kings, Madera, and Tulare).

Not only does this raise improper project segmentation issues given the similarities in nature and geography between these two proposals, but it also raises serious cumulative impact concerns. A cumulative impact is defined as “the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions... . Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.” 40 C.F.R. § 1501.7(a)(2). The San Joaquin Valley is in extreme ozone nonattainment status, and smog is very much a cumulative air pollution concern (NO<sub>x</sub> and ROG emissions are both ozone precursors which generate smog by reacting in the atmosphere across the entire air basin). Despite these facts, BLM fails to consider the cumulative NO<sub>x</sub> and ROG related effects of two major planning efforts – both undertaken by BLM, and both of which involve approving new hydraulic

fracturing and other well development activities which would occur during the same timeframe and in the same extreme nonattainment air basin.

#### **IV. The Draft Supplemental EIS Fails to Consider Environmental and Public Health Impacts, Including Cumulative Impacts, to Low Income Communities and Communities of Color.**

The Draft Supplemental EIS also fails to consider how the Proposed Action will impact low-income communities and communities of color in the Planning Area, whether resulting from increased air pollution or groundwater contamination. While the 2012 Final EIS acknowledges that the Planning Area contains minority populations and low-income populations (2012 Final EIS at 388), the Draft Supplemental EIS fails to consider the disproportionate impacts of the Proposed Action on these populations. It also fails to consider the extent of existing air and water pollution and corresponding public health concerns to which the Proposed Action will add.

NEPA requires an analysis of the cumulative effects of a federal action, defined as “the impact on the environment which results from the incremental impact of the action when added with other past, present, and reasonably foreseeable future actions, regardless of what agency . . . or person undertakes such other action.” 40 C.F.R. 1508.7. To do so, BLM must consider the impact of its Proposed Action on the existing baseline condition of the communities and environment in the Planning Area. *See* Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act, 1997*. Federal agencies are also obligated to consider the environmental and human health impacts of their actions on low-income communities and communities of color in their NEPA analyses. Executive Order 12898, 59 Fed. Reg. 7,629 (Feb. 16, 1994); Council on Environmental Quality, *Environmental Justice Guidance under the National Environmental Policy Act, 1997*.

Large parts of the Planning Area are home to communities that are disproportionately exposed to pollution and who are most vulnerable to pollution’s effects, called “disadvantaged communities” under California law.<sup>10</sup> To designate disadvantaged communities, the California Environmental Protection Agency uses the California Office of Environmental Health Hazard Assessment (“OEHHA”) CalEnviroScreen 3.0 Tool to rank all census tracts in the state using 21 “indicators” that measure the communities’ exposure to pollution and the communities’ vulnerability to the effects of pollution.<sup>11</sup> Many census tracts in the Planning Area meet the state’s definition of disadvantaged community, most notably in Kern, Tulare, Kings, and Fresno counties, with pockets in Ventura and Santa Barbara counties.<sup>12</sup> This means that communities in

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<sup>10</sup> Cal. Health & Safety Code § 39711; SB 535 Disadvantaged Communities Webpage, <https://oehha.ca.gov/calenviroscreen/sb535> (last visited 6/5/2019).

<sup>11</sup> OEHHA, CalEnviroScreen 3.0 Report, January 2017.

<sup>12</sup> *See* CalEnviroScreen 3.0 Overall Percentile Score for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 5. Source data for this map is from the OEHHA

these counties already are exposed to significantly more air and water pollution than other parts of the state, and they are more vulnerable to that exposure.

With regard to air quality, seven of the eight counties in the Planning Area are already in non-attainment with particulate matter, ozone, or both air quality standards. Indeed, ozone is among the most widespread and significant air pollution health threats in California, including in the Planning Area.<sup>13</sup> The Central Valley in particular experiences some of the worst particulate matter pollution in the state.<sup>14</sup> Any additional emissions of volatile organic compounds, nitrogen oxides, and other air pollutants in these areas from expanded oil and gas production are therefore significant and should be mitigated. Furthermore, the public health risk exposure to toxic air contaminants is greatest near active oil and gas sites. CCST Report, Vol. II at 407-412. As discussed further below, since many residents in the Planning Area live near oil and gas activity, any new oil and gas production activity must take into account the health impacts to nearby sensitive receptors.

With regard to drinking water supply and quality, parts of Planning Area already suffer from some of the worst drinking water contamination problems in the state. According to CalEnviroScreen 3.0's Drinking Water Indicator, which combines drinking water quality data for public and non-public drinking water systems, residents in the vast majority of the Planning Area already drink water that contains contamination from chemicals or bacteria.<sup>15</sup> The majority of

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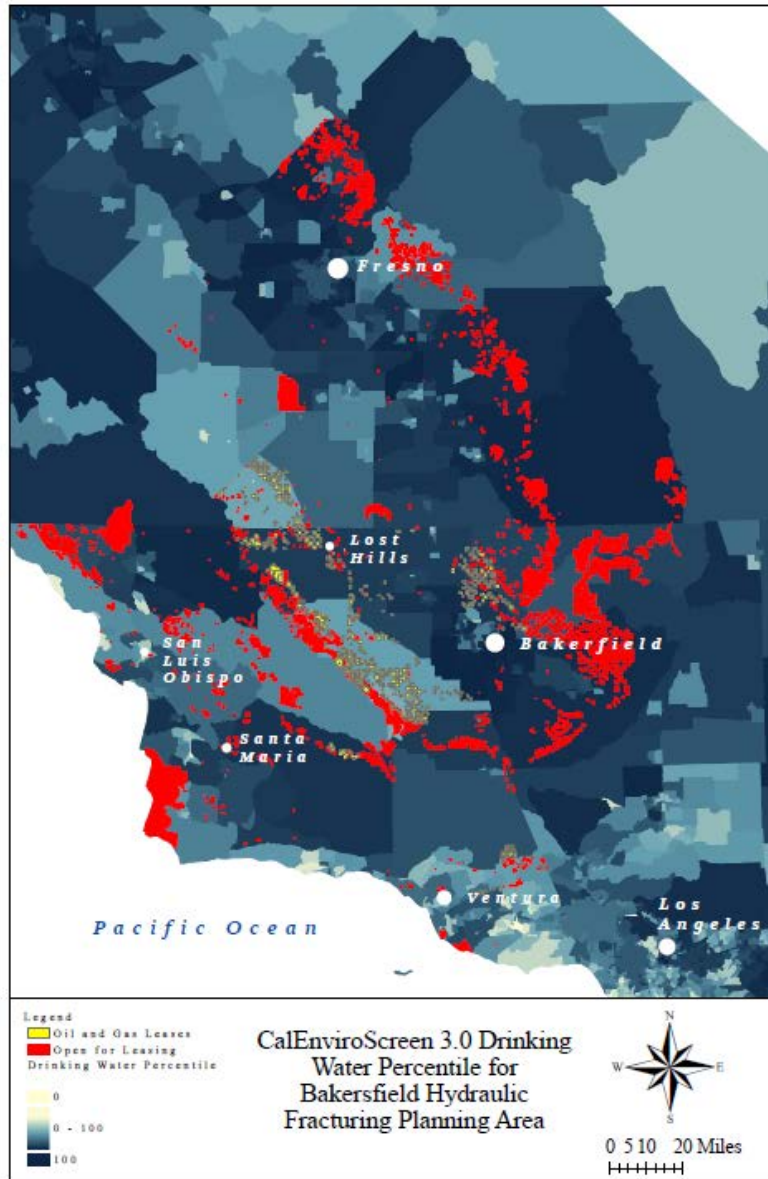
CalEnviroScreen 3.0 Tool, <https://oehha.ca.gov/calenviroscreen>. See also OEHHA, SB 535 Disadvantaged Communities Webpage, <https://oehha.ca.gov/calenviroscreen/sb535> (last visited 6/5/2019). Census tracts that are in the top 25 percentile overall in CalEnviroScreen 3.0 are “disadvantaged communities.” See California Environmental Protection Agency, Designation of Disadvantaged Communities Pursuant to Senate Bill 535 (De Leon), April 2017, attached hereto as Exhibit 36, available at: <https://calepa.ca.gov/wp-content/uploads/sites/6/2017/04/SB-535-Designation-Final.pdf>.

<sup>13</sup> See CalEnviroScreen 3.0 Ozone Percentile for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 6. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Air Quality: Ozone Indicator, available at: <https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone>. Ozone causes lung irritation and worsening of chronic health conditions, increases asthma emergency room visits, and can increase mortality. Children are most sensitive to the effects of ozone exposure.

<sup>14</sup> See CalEnviroScreen 3.0 PM 2.5 Percentile for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 7. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Air Quality: PM 2.5 Indicator, available at: <https://oehha.ca.gov/calenviroscreen/indicator/air-quality-pm25>. Particulate matter that is 2.5 micrometers or less in diameter (PM 2.5) causes many serious health effects, including heart and lung disease.

<sup>15</sup> See Figure 1, CalEnviroScreen 3.0 Drinking Water Percentile for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 8. Source data for this map is from the

Figure 1. CalEnviroScreen 3.0 Drinking Water Percentile for Bakersfield Hydraulic Fracturing Planning Area



OEHHA CalEnviroScreen 3.0 Tool, Drinking Water Indicator, *available at:* <https://oehha.ca.gov/calenviroscreen/indicator/drinking-water-contaminants>. See also OEHHA, Methodology for a Statewide Drinking Water Contaminant Indicator, January 2017, attached hereto as Exhibit 9, *available at:* <https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3dwm methodology.pdf>.



public water systems in California rely on groundwater, and more than 25 percent of those systems rely on a contaminated groundwater source.<sup>16</sup> Kern County in particular has the second highest number of community water systems that rely on contaminated groundwater.<sup>17</sup> Small community water systems, which serve residents in parts of the Planning Area, typically lack the infrastructure and economies of scale of larger water systems to afford necessary treatment or identification of alternative water supplies for a contaminated groundwater source.<sup>18</sup>

Furthermore, many residents in the Planning Area rely on private, domestic (unregulated) wells for drinking water, and data available for private wells indicates significant contamination issues in the Planning Area.<sup>19</sup> Given the scope of the existing drinking water contamination in the Planning Area, any additional impacts from hydraulic fracturing should be identified and mitigated.

The Draft Supplemental EIS fails to account for the close proximity of oil and gas activities to residents. A 2014 analysis of oil and gas development in California shows that approximately 5.4 million people live within a mile of an existing oil or gas well, and more than a third of these people live in areas most burdened by environmental pollution.<sup>20</sup> In Kern County alone, 35% of the county's residents (290,000) live within a mile of at least one oil or gas well, and nearly 58% of those residents living within a mile of a well are people of color. Studies increasingly show links between exposure to oil and gas operations and public health

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<sup>16</sup> State Water Resources Control Board, Report to the Legislature: Communities That Rely on a Contaminated Groundwater Source for Drinking Water, January 2013, attached hereto as Exhibit 10, available at: <https://www.waterboards.ca.gov/gama/ab2222/docs/ab2222.pdf>.

<sup>17</sup> *Id.*

<sup>18</sup> *Id.*

<sup>19</sup> See CalEnviroScreen 3.0 Drinking Water Percentile for Bakersfield Hydrologic Fracturing Planning Area attached hereto as Exhibit 8. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Drinking Water Indicator, available at: <https://oehha.ca.gov/calenviroscreen/indicator/drinking-water-contaminants>. OEHHA, Drinking Water Results by Contaminant Spreadsheet (Excel), accessed June 6, 2019, attached hereto as Exhibit 11, available at: <https://oehha.ca.gov/calenviroscreen/indicator/drinking-water-contaminants>.

<sup>20</sup> Natural Resources Defense Council, Drilling in California: Who's at Risk?, October 2014, attached hereto as Exhibit 12.



impacts,<sup>21</sup> including cancer,<sup>22</sup> adverse birth outcomes,<sup>23</sup> and preterm births.<sup>24</sup> Residents living near oil and gas operations can experience acute respiratory, neurological, and gastrointestinal symptoms from exposure to the operations, such as headaches, fatigue, burning eyes and throats, nausea, and nosebleeds.<sup>25</sup> Residents also experience sleep disturbance from noise levels from oil and gas activity.<sup>26</sup> The increasing evidence of public health effects for residents exposed to oil and gas activity is particularly concerning in the Planning Area, where many residents already

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<sup>21</sup> Intrinsic Environmental Sciences Inc. Phase 2- Human Health Risk Assessment of Oil and Gas Activity in Northeastern British Columbia: Task 3 – Literature Review. Prepared for British Columbia Ministry of Health, April 2013, attached hereto as Exhibit 13.

<sup>22</sup> See, e.g., McKenzie, Lisa M., *et al.*, Childhood Hematologic Cancer and Residential Proximity to Oil and Gas Development, PLoS ONE 12(2): e0170423 (2017), attached hereto as Exhibit 14.

<sup>23</sup> Balise, *et al.*, Systematic Review of the Association between Oil and Natural Gas Extraction Processes and Human Reproduction, 106 Fertility & Sterility 4, 795-819 (September 2016), attached hereto as Exhibit 15; McKenzie, Lisa M., *et al.*, Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado, 122 Environmental Health Perspectives 412-417 (2014), attached hereto as Exhibit 16; Lupo, P.J., *et al.* Maternal Exposure to Ambient Levels of Benzene and Neural Tube Defects Among Offspring: Texas, 1999–2004, 119 Environmental Health Perspectives 397-402 (2011), attached hereto as Exhibit 17.

<sup>24</sup> Casey, *et al.*, Unconventional Natural Gas Development and Birth Outcomes in Pennsylvania, 27 Epidemiology 163-172 (2016), attached hereto as Exhibit 18; Li, X., *et al.*, Association between Ambient Fine Particulate Matter and Preterm Birth or Low Birth Weight: An Updated Systematic Review and Meta-Analysis, 227 Environmental Pollution 596-605 (2017), attached hereto as Exhibit 19.

<sup>25</sup> Webb, *et al.*, Potential Hazards of Air Pollutant Emissions from Unconventional Oil and Natural Gas Operations on the Respiratory Health of Children and Infants, 31 Reviews on Environmental Health 225-243 (2016), attached hereto as Exhibit 20; Tustin, *et al.*, Associations between Unconventional Natural Gas Development and Nasal and Sinus, Migraine Headache, and Fatigue Symptoms in Pennsylvania, 125 Environmental Health Perspectives 189-197 (2016), attached hereto as Exhibit 21; Liberty Hill Foundation, Drilling Down: The Community Consequences of Expanded Oil Development in L.A. (2015), attached hereto as Exhibit 22, available at:

[https://www.libertyhill.org/sites/libertyhillfoundation/files/Drilling%20Down%20Report\\_1.pdf](https://www.libertyhill.org/sites/libertyhillfoundation/files/Drilling%20Down%20Report_1.pdf);

Los Angeles County Department of Public Health, Public Health and Safety Risks of Oil and Gas Facilities in Los Angeles County, February 2018, attached hereto as Exhibit 23, available at: [http://publichealth.lacounty.gov/eh/docs/PH\\_OilGasFacilitiesPHSafetyRisks.pdf](http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf).

<sup>26</sup> Hays, *et al.*, Public Health Implications of Environmental Noise Associated with Unconventional Oil and Gas Development, 580 Science of the Total Environment 448-456 (2017), attached hereto as Exhibit 24.

experience the highest rates of cardiovascular disease<sup>27</sup> and low birth weights<sup>28</sup> in the state, in addition to the existing significant levels of air and water pollution and high poverty levels.

## **V. The Draft Supplemental EIS Fails to Consider Conflicts with State Policies.**

The Draft Supplemental EIS fails to properly consider conflicts between the Proposed Action and State policies. NEPA requires an agency to include a discussion of “[p]ossible conflicts between the proposed action and the objectives of” state plans and policies. 40 C.F.R. § 1502.16(c). An EIS must also “[d]iscuss any inconsistency of a proposed action with any approved State or local plan and laws.” *Id.* § 1506.2(d). Furthermore, BLM’s resource management plans are required to be consistent with state and local government plans, policies and programs. 43 C.F.R. § 1610.3-2.

As discussed above, the use of hydraulic fracturing would open up previously unproductive hydrocarbon formations and extend the life of existing formations, with resulting significant impacts. California has a statutory target of reducing greenhouse gas emissions by 40 percent below 1990 levels by 2030, Cal. Health & Safety Code § 38566, and a plan to reduce fossil fuel consumption by 45 percent by 2030 to meet this target.<sup>29</sup> Increasing oil and gas operations and opening new lands to leasing is contrary to and inconsistent with these plans.

California has enacted several statutes to protect the state’s most disadvantaged communities from air and water pollution, and the expansion of oil and gas activity on federal lands would have significant adverse impact on the state’s ability to meet these goals. California State Assembly Bill 617 (2017) created a California Air Resources Board (“CARB”) Community Air Protection Program that is focused on reducing exposure in communities most impacted by

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<sup>27</sup> See CalEnviroScreen 3.0 Cardiovascular Rate Percentile for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 25. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Cardiovascular Disease Indicator, *available at*: <https://oehha.ca.gov/calenviroscreen/indicator/cardiovascular-disease>. Cardiovascular disease is linked to exposure to pollution, and the effects of pollution may be greater for people with cardiovascular disease or previous heart attack.

<sup>28</sup> See CalEnviroScreen 3.0 Low Birth Rate Percentile for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 26. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Low Birth Weight Infant Indicator, *available at*: <https://oehha.ca.gov/calenviroscreen/indicator/low-birth-weight-infants>. Low birth weights are linked to exposure to pollution, and low birth weight babies are more likely to die as infants or develop asthma or other chronic diseases later in life when compared to babies who weigh more.

<sup>29</sup> California Air Resources Board, California’s 2017 Climate Change Scoping Plan (Nov. 2017), *available at*: <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.

air pollution.<sup>30</sup> CARB has selected its initial ten communities for focused emissions reduction and air monitoring, two of which are located in the Planning Area: Shafter and South Central Fresno.<sup>31</sup> The San Joaquin Valley Air Pollution Control District will be adopting emissions reduction programs for both of those communities in October 2019.<sup>32</sup> CARB will select additional communities for focused air emissions reduction later this year and annually thereafter, and it will consider communities that regional air districts initially recommended, including communities located in the Planning Area such as North Bakersfield and Oxnard.<sup>33</sup> The ability of the state to meet emissions reduction program goals in the Planning Area will be inhibited by and is inconsistent with BLM's Proposed Action.

CARB also has created a Study of Neighborhood Air near Petroleum Sources (SNAPS) to better understand air quality in communities near oil and gas operations.<sup>34</sup> This project will inform the Community Air Protection Program and state policy around air emissions in these communities. OEHHA will analyze all SNAPS data and compare it to current health protective standards. The first community selected by CARB for intensive air monitoring study, Lost Hills, is in the Planning Area, and monitoring commenced in May 2019.<sup>35</sup> Other communities expected to receive air monitoring under the SNAPS program include McKittrick and Derby

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<sup>30</sup> California Air Resources Board, Community Air Protection Blueprint, October 2018 (hereafter, "CARB Blueprint"), attached hereto as Exhibit 27, *available at*: [https://ww2.arb.ca.gov/sites/default/files/2018-10/final\\_community\\_air\\_protection\\_blueprint\\_october\\_2018.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018.pdf).

<sup>31</sup> California Air Resources Board, Community Air Protection Program, 2018 Community Recommendations Staff Report, Sept. 11, 2018, at 7, attached hereto as Exhibit 28, *available at*: [https://ww2.arb.ca.gov/sites/default/files/2018-09/2018\\_community\\_recommendations\\_staff\\_report\\_revised\\_september\\_11.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-09/2018_community_recommendations_staff_report_revised_september_11.pdf).

<sup>32</sup> See CARB Blueprint at 9.

<sup>33</sup> *Id.* at 7; San Joaquin Valley Air Pollution Control District AB 617 Final Community Recommendations, July 31, 2018, attached hereto as Exhibit 29, *available at*: <https://ww2.arb.ca.gov/sites/default/files/2018-08/SJVAPCD%20AB%20617%20Final%20Community%20Recommendations.pdf>; Ventura County Air Pollution Control District, Prioritized AB 617 Community Recommendations for Ventura County, July 31, 2018, attached hereto as Exhibit 30, *available at*: [https://ww2.arb.ca.gov/sites/default/files/2018-08/VCAPCD\\_AB617\\_Submittal.pdf](https://ww2.arb.ca.gov/sites/default/files/2018-08/VCAPCD_AB617_Submittal.pdf).

<sup>34</sup> California Air Resources Board, Study of Neighborhood Air near Petroleum Sources (SNAPS) Fact Sheet, February 2019, attached hereto as Exhibit 31, *available at*: [https://ww2.arb.ca.gov/sites/default/files/2019-02/SNAPS\\_QA\\_2-6-19.pdf](https://ww2.arb.ca.gov/sites/default/files/2019-02/SNAPS_QA_2-6-19.pdf).

<sup>35</sup> California Air Resources Board, Lost Hills Air Monitoring Plan (SNAPS), May 2019, attached hereto as Exhibit 32, *available at*: <https://ww2.arb.ca.gov/resources/documents/lost-hills-air-monitoring-plan-snaps>.

Acres, which are near the McKittrick Oil Field and Midway-Sunset Oil Field in Kern County.<sup>36</sup> The Draft Supplemental EIS and any future BLM decision-making should consider results from these studies as they become available.

In 2012, California enacted Water Code section 106.3, making California the first state in the nation to recognize the human right to water.<sup>37</sup> Water Code section 106.3 established the state's policy that every person has the right to safe, clean, affordable, and accessible water adequate for drinking, cooking, and sanitary purposes.<sup>38</sup> Thus, preventing and addressing discharges that could threaten human health by contributing to contamination of drinking water sources are among the state's highest priorities. As discussed above, many of the disadvantaged and marginalized communities residing in the Planning Area do not have access to clean, safe, and affordable water.<sup>39</sup> Thus, any risk of additional contamination or reduction in water supplies resulting from hydraulic fracturing on BLM lands is significant and would be inconsistent with the state's human right to water policy.

## **VI. BLM Failed to Provide An Adequate Opportunity for Public Comment.**

The public is entitled to meaningful opportunities to participate in and comment on the preparation of BLM's planning activities. 43 C.F.R. § 1610.2(e). Accordingly, BLM is required to provide a 90-day public comment period for a draft EIS relating to a resource management plan, and it is expected to circulate a supplemental EIS in the same fashion as a draft EIS. 43 C.F.R. § 1610.2(e); 40 C.F.R. § 1502.9; BLM NEPA Handbook H-1790-1 at 102. Furthermore, BLM must make diligent efforts to involve the affected public in the NEPA process. 40 C.F.R. § 1506.6. Thus, whenever practicable and appropriate, BLM should provide translation or interpretation services to enable the affected public to have access to information and to participate in the process. Executive Order 12898; *see also* Executive Order 13166; Council on Environmental Quality, Environmental Justice Guidance under the National Environmental Policy Act, 1997, at 13. BLM should therefore account for limited English proficiency in the

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<sup>36</sup> California Air Resources Board, Communities Selected for First Round of Air Monitoring, September 2018, attached hereto as Exhibit 33, *available at*:

<https://ww2.arb.ca.gov/resources/documents/snaps-first-round-communities>.

<sup>37</sup> California State Assembly Bill 685 (2012).

<sup>38</sup> California State Water Resources Control Board, Resolution No. 2016-0010; California Regional Water Quality Control Board, Central Valley Region, Resolution R5-20161-0018.

<sup>39</sup> *See also* University of California, Berkeley School of Law, International Human Rights Law Clinic, The Human Right to Water Bill in California: An Implementation Framework for State Agencies, May 2013, attached hereto as Exhibit 34.

Planning Area by providing opportunities for multiple forms of communication (written and oral) and interpretation services as appropriate.<sup>40</sup>

BLM provided the public with just 45 days to comment on the Draft Supplemental EIS, not the full 90 days required by Council on Environmental Quality regulations and BLM's own NEPA handbook. While BLM held three public meetings relating to the Draft Supplemental EIS, it refused to accept oral comments into the record at those hearings.<sup>41</sup> Finally, despite community requests for interpretation services and BLM's knowledge of significant Hispanic populations in the Planning Area (2012 Final EIS at 371),<sup>42</sup> BLM did not provide interpretation services at its hearings. Thus, BLM should extend the comment period and provide meaningful opportunities for the affected public to comment on the Draft Supplemental EIS.

## CONCLUSION

Given that serious deficiencies in the Draft Supplemental EIS, BLM should withdraw its current proposal and prepare a new analysis that fully considers the environmental impacts of opening over one million acres of public lands in California to oil and gas leasing.

Sincerely,



GEORGE TORGUN

Deputy Attorney General

CHRISTIE VOSBURG

Supervising Deputy Attorney General

For XAVIER BECERRA  
California Attorney General

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<sup>40</sup> See Report of the Federal Interagency Working Group on Environmental Justice & NEPA Committee, Promising Practices for EJ Methodologies in NEPA Reviews, March 2016, attached hereto as Exhibit 35.

<sup>41</sup> Ferranti, Anthony, BLM Stifles Comments on Fracking Plan, The Sun Gazette, May 29, 2019, available at: <http://www.thesungazette.com/article/news/2019/05/29/blm-stifles-comments-on-fracking-plan/>.

<sup>42</sup> The Planning Area contains significant linguistically-isolated populations. See CalEnviroScreen 3.0 Linguistic Isolation Indicator for Bakersfield Hydraulic Fracturing Planning Area, attached hereto as Exhibit 37. Source data for this map is from the OEHHA CalEnviroScreen 3.0 Tool, Linguistic Isolation Indicator, available at: <https://oehha.ca.gov/calenviroscreen/indicator/linguistic-isolation>.