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September 25, 2020

Via Electronic Submission

Karen Mouritsen
BLM California State Director
BLM Bakersfield Field Office
ATTN: Oil and Gas Lease Sale
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RE: Comments on the U.S. Department of the Interior, Bureau of Land Management, Bakersfield Field Office, December 2020 Oil and Gas Lease Sale Environmental Assessment, DOI-BLM-CA-C060-2020-0120-EA

Dear Ms. Mouritsen:

On behalf the Attorney General of California, Xavier Becerra¹ and the California Air Resources Board (“CARB”),² we submit these comments on the Draft Environmental Assessment (“Draft EA”) and Finding of No Significant Impact (“FONSI”) issued by the U.S. Bureau of Land Management’s (“BLM”) Bakersfield Field Office to address the environmental consequences of selling seven oil and gas leases totaling 4,333.58 acres in Kern County.

Kern County already experiences more than 95 percent of all federal oil and gas drilling in California, much of which is located close to communities that disproportionately bear the burdens of environmental pollution and its health effects. Oil and gas operations generate particulate matter, volatile organic compounds, methane (as an ozone precursor), and toxic air pollution that increase the rates and risks of asthma, heart disease, lung disease, and cancer. Oil

¹ 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. CARB is California’s lead agency for climate change programs and oversees all air pollution control efforts in California to attain and maintain health-based air quality standards.

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and gas development also generates greenhouse gas emissions and could deplete and contaminate groundwater.

The Draft EA purports to tier its environmental analysis to a prior programmatic environmental review (“Bakersfield EIS”) of the area’s resource management plan (“RMP”), and thus conducted minimal additional analysis regarding this lease sale. However, the Bakersfield EIS and RMP are themselves deficient because they rely on a flawed assumption about the amount of hydraulic fracturing in the RMP area, fail to consider available data and recent studies regarding the impacts of hydraulic fracturing, and fail to consider inconsistencies with California’s state law and policies. Because of these deficiencies, we have filed a legal challenge that is currently pending. BLM’s failure in this EA to provide supplemental analysis or correct for those deficiencies is in violation of the National Environmental Policy Act (“NEPA”), 42 U.S.C. § 4332(2)(C). Furthermore, the Draft EA fails to adequately consider the impacts of the proposed leasing to nearby environmental justice communities, fails to sufficiently consider and mitigate groundwater impacts, and insufficiently addresses impacts to climate. Finally, it is unacceptable that BLM finds insignificant, and fails to mitigate, the greenhouse gas emissions of the proposed leasing at a time when California is experiencing the devastating impacts of global climate change—with record temperatures and some of the worst wildfires and resulting air pollution in state history.

For these reasons, we urge BLM to withdraw its Draft EA and prepare a new analysis that adequately addresses these deficiencies.

BACKGROUND

I. The NEPA Review for the Bakersfield Resource Management Plan

BLM is the federal agency responsible for overseeing 15 million acres of federal public lands (about 15 percent of California’s total land mass) and 47 million acres of subsurface mineral estate in this state. Pursuant to the Federal Land Policy and Management Act, 43 U.S.C. § 1701 *et seq.*, BLM develops resource management plans to guide the management of public lands and mineral estate in its jurisdiction. These management plans provide standards and guidance for site-specific activities that occur on federal lands, such as oil and gas lease sales and drilling, and define BLM’s approach to management decisions for the next ten to fifteen years. Because developing a resource management plan is a major federal action significantly affecting the quality of the human environment, BLM is required to prepare a detailed EIS under NEPA to analyze and disclose to the public the direct, indirect, and cumulative impacts of the plan.

In 2014, BLM’s Bakersfield Field Office finalized the Bakersfield EIS, evaluating the environmental impacts of an RMP that would open more than one million acres of public lands in eight Central California counties, including Kern County, to oil and gas drilling. In that environmental analysis, BLM failed to address any impacts related to hydraulic fracturing, a controversial technique by which oil and gas producers inject water, sand, and chemicals at high pressure into tight-rock formations to create fissures in the rock and allow oil and gas to escape

for collection in a well. Some of the chemicals are known carcinogens, and growing scientific evidence has linked the technique with water pollution, air pollution, and earthquakes. BLM has estimated that hydraulic fracturing is used to stimulate 90 percent of new wells drilled on federal lands. *See* 80 Fed. Reg. 16,128, 16,131, 16,190 (Mar. 26, 2015). BLM's 2014 Bakersfield EIS was challenged by the Center for Biological Diversity and Los Padres ForestWatch in the U.S. District Court for the Central District of California, which held that BLM violated NEPA by failing to analyze the impacts of hydraulic fracturing in the area covered by the 2014 RMP 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). BLM finalized a supplemental EIS in December 2019.

Notwithstanding the supplemental analysis, the Bakersfield EIS remained deficient because it underestimated the number of wells that would annually be hydraulically fractured under the proposed RMP; failed to consider recent studies and best available science on impacts to air quality, water quality, greenhouse gas (“GHG”) emissions, earthquakes, and environmental justice communities; ignored the impacts of other well stimulation treatments that likely would be used; failed to consider reasonable alternatives to the proposed plan; and failed to consider the plan's consistency with California's state policies on the reduction of GHG emissions. For all of these reasons, the California Attorney General filed a lawsuit in January 2020 on behalf of Attorney General Becerra, Governor Gavin Newsom, CARB, the California Department of Fish and Wildlife, and the California Department of Water Resources to challenge the Bakersfield EIS in the U.S. District Court for the Central District of California. *See California v. Joe Stout*, 2:20-cv-00504 (C.D. Cal. Jan. 16, 2019) (ECF No. 1). This challenge was consolidated with a related action also filed in January 2020 by the Center for Biological Diversity, Sierra Club, Patagonia Works, Los Padres ForestWatch, Central California Environmental Justice Network, The Wilderness Society, National Parks Conservation Association, and Natural Resources Defense Council. *See Center for Biological Diversity v. U.S. Bureau of Land Mgmt.*, 2:20-cv-371 (C.D. Cal. Jan. 14, 2019) (ECF No. 1). Merits briefing is scheduled to begin in December 2020.

II. The Proposed December 2020 Lease Sale

On August 26, 2020, BLM proposed an oil and gas lease sale of seven parcels of land totaling 4,333.58 acres in Kern County in December 2020. These seven parcels range from 160 to 1,157 acres of public and split-estate lands located both within and outside of existing oil field boundaries. *See* Draft EA, Appendix A. Once a lease issues, the oil and gas operator has ten years to develop the parcel, with a possible extension of another 10 years if oil and gas can be produced in adequate quantities. *See* Draft EA at 1.

The Draft EA and FONSI rely on the flawed Bakersfield EIS and RMP for the analysis of the lease sale's environmental impacts. BLM concludes that the December 2020 lease sale will not have significant environmental impacts beyond those already analyzed in the Bakersfield EIS and RMP, that the lease sale is not a major federal action that will have significant effect on the

human environment, and that therefore no further environmental analysis is required under NEPA. FONSI at 1; Draft EA at 5. In so doing, BLM is “tiering” its EA to, or incorporating by reference, the broader Bakersfield EIS, which is flawed and the subject of ongoing litigation. *See* 40 C.F.R. § 1508.28;³ 43 C.F.R. § 46.140. Because the court is unlikely to resolve the merits of the Bakersfield EIS litigation until mid-2021, at the earliest, proceeding with the December 2020 lease sale means that oil and gas operators may begin drilling on these parcels based on an environmental review that ultimately may be invalidated.

More than 95 percent of federal drilling in California already occurs in Kern County, much of which is in nonattainment with the federal 8-hour ozone standard and federal fine particulate matter standards, as well as numerous state ambient air quality standards. Excess pollution in this part of California—including particulate matter, volatile organic compounds (VOCs), methane (as an ozone precursor), and toxic air pollution from oil and gas operations—significantly increases the rates and risks of asthma, heart disease, lung disease, and cancer. Much of federal oil and gas activities occur near California’s most vulnerable communities, who already are disproportionately exposed to pollution and its health effects. The seven parcels proposed for sale in Kern County are no exception—these parcels are located near communities that bear some of the highest environmental pollution burdens in California.

COMMENTS ON THE DRAFT EA

I. NEPA’s Requirements

NEPA is the “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

³ On July 16, 2020, the Council on Environmental Quality (“CEQ”) finalized an update to its 1978 regulations implementing NEPA, which took effect on September 14, 2020. 85 Fed. Reg. 43,304 (July 16, 2020). According to this rule, for NEPA reviews that have already begun “before the final rule’s effective date, agencies may choose whether to apply the revised regulations or proceed under the 1978 regulations and their existing agency NEPA procedures. Agencies should clearly indicate to interested and affected parties which procedures it is applying for each proposed action.” *Id.* at 43,340. In the Draft EA, BLM states that it “will process the environmental review under the prior regulations.” Draft EA at 5. Consequently, only the 1978 regulations are referenced here.

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 an EIS is necessary for a project, the agency may prepare an EA, which should provide sufficient evidence and analysis to justify the agency’s determination whether to prepare an EIS or make a finding of no significant impact (“FONSI”). 40 C.F.R. §§ 1501.4, 1508.9; *see also Bob Marshall All. v. Hodel*, 852 F.2d 1223, 1225 (9th Cir. 1988). An EA prepared to support an individual proposed action can be “tiered” to, or incorporate by reference, a broader or programmatic EIS. 43 C.F.R. § 46.140(c). However, an EA is appropriate and a FONSI may issue only if that programmatic EIS “fully analyzed” the proposed action’s significant effects, including the direct, indirect, or cumulative effects. *See id.* “Tiering to the programmatic or broader-scope environmental impact statement would allow the preparation of an environmental assessment and a finding of no significant impact for the individual proposed action, *so long as any previously unanalyzed effects are not significant.*” *Id.* (emphasis added). Where the relevant analysis in the EIS is not sufficiently comprehensive or adequate, the EA must explain this and provide the necessary analysis. *See id.* § 46.140(b).

II. The Draft EA Is Tiered to the Inadequate Bakersfield EIS that Did Not Fully Analyze the Significant Environmental Impacts of the Proposed Lease Sale, and the Draft EA Fails to Supplement That Analysis.

A. The Draft EA Fails to Correct for the Unsubstantiated Assumption Regarding the Amount of Hydraulic Fracturing on These Leases.

To take the “hard look” required by NEPA at a proposed action’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)). However, the Bakersfield EIS analyzed the impacts of hydraulic fracturing based on an unfounded assumption that only “zero to four” hydraulic fracturing events will occur in the Bakersfield RMP area. Bakersfield EIS at 6, 44. The Draft EA appears to adopt the same unfounded assumption, in violation of NEPA. The Draft EA, like the Bakersfield EIS, assumes that BLM would hold four lease sales per year in the RMP area, and that ten new wells would be developed as a result of each lease sale. Draft EA at 30. The EA goes on to state, citing the Bakersfield EIS, that “(up to) 40” new wells on new leases per year would be developed in the RMP area, and that “(up to) 4,” or 10 percent, of these new wells would be hydraulically fractured. Draft EA at 30. Under this assumption, only one new well per year, per lease sale, would be hydraulically fractured.

As articulated in California’s complaint in the ongoing legal challenge to the Bakersfield EIS and in the comments to the 2019 Bakersfield Draft EIS, this assumption is not backed by any

underlying data or analysis, and it is contrary to BLM's own prior estimates. 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"). BLM had estimated in the 2012 Bakersfield RMP that 25 percent of new wells would be hydraulically fractured. A 2019 EIS released by BLM's Central Coast Field Office for another RMP in California 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." In that EIS, BLM assumed that well stimulation technologies and enhanced oil recovery techniques like hydraulic fracturing 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. BLM's assumption, here, that 10 percent or less of the new wells in the Bakersfield RMP area would be hydraulically fractured is inconsistent with BLM's estimates from other recent analysis and environmental reviews.

This incorrect assumption undermines BLM's analysis of the environmental impacts of this lease sale. For example, with regard to water resources, this assumption leads BLM to calculate the groundwater consumed by hydraulically fracturing only one well in this Draft EA, and to conclude that the lease sale would result in the consumption of only "0.00003" percent of Kern County's annual water usage and have "at most, minor negative effects" on the area's water resources. Draft EA at 42, 46. Similarly, assuming that only one new well will be hydraulically fractured annually due to this lease sale, BLM concludes that the sale will have negligible impacts on threatened and sensitive species in the area. Draft EA at 53.

Accordingly, BLM must revise this EA with the proper assumption about the amount of hydraulic fracturing that is supported by the evidence before the agency, and analyze the environmental impacts of the lease sale based on that assumption.

B. The Draft EA Fails to Consider Recent Science and Data Regarding the Significant Environmental Impacts Linked to Hydraulic Fracturing.

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). BLM's Bakersfield EIS on which the Draft EA relies failed to consider several environmental impacts related to hydraulic fracturing, and the Draft EA fails to supplement that analysis.

For example, with regard to impacts to groundwater from the management and disposal of flowback fluids, the Bakersfield EIS noted that produced water from hydraulic fracturing is

stored in “tanks or in lined impoundments” (ponds) and concluded that “[i]mpacts to groundwater ... would be negligible.” Bakersfield EIS at 89-90. But the EIS failed to discuss data collected by the California State Water Resources Control Board, which produces a report every six months on the regulation of oil field produced water ponds within each region.⁴ According to the Board’s latest report dated January 31, 2019, the Central Valley region had 561 active ponds and 533 inactive ponds (which may become active), or 1,093 total.⁵ Most of these ponds (1037 of 1093) were unlined.⁶ The report also noted that 161 ponds were under active enforcement actions.⁷ 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.⁸ As with the Bakersfield EIS, the Draft EA failed to consider this data.

The Draft EA also fails to consider the recent science connecting the underground injection of hydraulic fracturing waste fluids, and hydraulic fracturing itself, to increased seismic activity. The Bakersfield EIS dismissed the notion that oil and gas development in the RMP 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.” Bakersfield EIS at 91-92. However, recent science has connected hundreds of earthquakes in Oklahoma, Ohio, and other areas to hydraulic fracturing events.⁹ The Bakersfield EIS also found “negligible impacts related to earthquake potential from oil and gas disposal wells associated with hydraulic fracturing.” Bakersfield EIS at 92.

⁴ State Water Resources Control Board, Water Quality in Areas of Oil and Gas Production - Produced Water Ponds, https://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/oil_field_produced/produced_water_ponds/index.html (last visited Sept. 25, 2020).

⁵ State Water Resources Control Board, Produced Water Ponds Status Report: January 31, 2019, https://www.waterboards.ca.gov/water_issues/programs/groundwater/sb4/docs/pwpondsreport_january2019.pdf.

⁶ *Id.*

⁷ *Id.*

⁸ 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, https://www.waterboards.ca.gov/centralvalley/water_issues/oil_fields/information/disposal_ponds/aera_energy/2015_0616_com_lost_hills.pdf.

⁹ Skoumal, R. J., *et al.* (2018). Earthquakes induced by hydraulic fracturing are pervasive in Oklahoma. *Journal of Geophysical Research: Solid Earth*, 123, <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, <https://doi.org/10.1785/0120140168>; Xuwei Bao and David W. Eaton (2016). Fault activation by hydraulic fracturing in western Canada. *Science* 354 (6318), 1406-1409, <https://science.sciencemag.org/content/354/6318/1406>.

However, more recent studies linked wastewater disposal wells to earthquake activities in the southern region of California's Central Valley.¹⁰ The California Council on Science and Technology ("CCST") recommended further analysis of the link between hydraulic fracturing and seismic activity, warning that, while hydraulic fracturing as currently carried out in California is not considered to pose a high seismic risk, "it can be very difficult to distinguish California's frequent natural earthquakes from those possibly caused by water injection into the subsurface."¹¹ Further analysis 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.¹²

Because the Bakersfield EIS failed to fully analyze the environmental impacts of hydraulic fracturing in the RMP area by disregarding available data and recent studies, and because the Draft EA fails to address that deficiency by considering those evidence, the Draft EA fails to take a "hard look" at the environmental impacts of the lease sale in violation of NEPA.

C. The Draft EA Fails to Consider Whether the Lease Sale Would Conflict with State Policies.

Under NEPA, an agency must include a discussion of "[p]ossible conflicts between the proposed action and the objectives of" state plans and policies in an EIS. 40 C.F.R. § 1502.16(c). The EIS must also "[d]iscuss any inconsistency of a proposed action with any approved State or local plan and laws." *Id.* § 1506.2(d). However, the Bakersfield EIS failed to sufficiently analyze the conflicts with California state plans and policies posed by new oil and gas development in the RMP area, and the Draft EA does not address that deficiency.

California has a statutory target of reducing GHG 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.¹³ On November 19, 2019, Governor Newsom announced a series of initiatives to safeguard public health and the environment from hydraulic fracturing and other well stimulation techniques to advance California's goal to become carbon-neutral by 2045.¹⁴ The Governor also imposed a moratorium on new extraction wells that use a

¹⁰ 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, <https://agupubs.onlinelibrary.wiley.com/doi/epdf/10.1002/2015GL066948>.

¹¹ CCST, *An Independent Scientific Assessment of Well Stimulation in California*, Volume II at 30-32, 267 (July 2015), <https://ccst.us/wp-content/uploads/160708-sb4-vol-II-7.pdf>.

¹² *Id.* at 277-295.

¹³ California Air Resources Board, *California's 2017 Climate Change Scoping Plan* (Nov. 2017), <https://www.arb.ca.gov/cc/scopingplan/scopingplan.htm>.

¹⁴ California Dep't of Conservation, *California Announces New Oil and Gas Initiatives* (Nov. 19, 2019), <https://www.conservation.ca.gov/index/Pages/News/California-Establishes-Moratorium-on-High-Pressure-Extraction.aspx>.

high-pressure cyclic steaming process to break oil formations below the ground to determine whether the process can be done safely and in compliance with state regulations.¹⁵ In addition, the Governor announced a process to strengthen public health and safety protections near oil and gas extraction facilities, including by evaluating a prohibition on oil and gas activities close to homes, schools, hospitals, and parks.¹⁶ On September 23, 2020, the Governor signed an Executive Order that will require all new cars and passenger trucks sold in California to be zero-emission vehicles by 2035.¹⁷ Increasing oil and gas operations and opening new lands to leasing is contrary to and inconsistent with these targets, plans, and policies.

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 Community Air Protection Program overseen by CARB that is focused on reducing exposure in communities most impacted by air pollution.¹⁸ CARB has selected the Shafter community—located within ten miles of the 160-acre Poso Unit (Parcel 5)—as one of its initial ten communities for focused emissions reduction and air monitoring.¹⁹ Draft EA at 21, 75. In September 2019, the San Joaquin Valley Air Pollution Control District adopted Shafter's Community Emissions Reduction Plan, which cites residents' proximity to oil and gas operations as a top source of concern in the community.²⁰ As part of the Plan, the Shafter community is evaluating how to fund emissions reductions from oil and gas production operations, noting the community's exposure to significant levels of existing air pollution.²¹ CARB will select additional communities for focused air emissions reduction annually, and it will consider communities that regional air districts initially recommended, including communities located close to the proposed parcels, such as North Bakersfield.²² The

¹⁵ *Id.*

¹⁶ *Id.*

¹⁷ Governor Gavin Newsom, Executive Order N-79-20 (Sept. 23, 2020), <https://www.gov.ca.gov/wp-content/uploads/2020/09/9.23.20-EO-N-79-20-text.pdf>.

¹⁸ California Air Resources Board, Community Air Protection Blueprint, October 2018 (hereafter, "CARB Blueprint"), https://ww2.arb.ca.gov/sites/default/files/2018-10/final_community_air_protection_blueprint_october_2018.pdf.

¹⁹ CARB, Community Air Protection Program, 2018 Community Recommendations Staff Report, Sept. 11, 2018, at 7, https://ww2.arb.ca.gov/sites/default/files/2018-09/2018_community_recommendations_staff_report_revised_september_11.pdf.

²⁰ Community Emissions Reduction Program – Shafter at 43 (Sept. 2019), <http://community.valleyair.org/media/1515/01-finalshaftercerp-9-19-19.pdf>.

²¹ *Id.* at 74-78.

²² CARB, *supra* note 18 at 7; San Joaquin Valley Air Pollution Control District AB 617 Final Community Recommendations (July 2018), <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

ability of the state to meet and implement emissions reduction program goals will be inhibited by and is inconsistent with the proposed lease sale.

CARB also has created a Study of Neighborhood Air near Petroleum Sources to better understand air quality in communities near oil and gas operations.²³ This project will inform the Community Air Protection Program and state policy around air emissions in these communities. The California Office of Environmental Health Hazard Assessment (“OEHHA”) will analyze all data from the Study and conduct a health risk assessment. Communities that are expected to receive air monitoring under the Study include McKittrick and Derby Acres, which are near the McKittrick Oil Field and Midway-Sunset Oil Field and within six miles of both the 538.6-acre Crocker Flat Unit (Parcel 6) and the 278.27-acre Buena Vista Unit (Parcel 7).²⁴ Draft EA at 23, 75. Any future BLM decisionmaking 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.²⁵ 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.²⁶ 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. Many of the disadvantaged and marginalized communities residing near the proposed leases do not have access to clean, safe, and affordable water.²⁷ Thus, any risk of additional contamination or reduction in water supplies resulting from hydraulic fracturing on these proposed leases is significant and inconsistent with the state’s human right to water policy. Finally, the California Sustainable Groundwater Management Act, Cal. Water Code § 10720 *et seq.*, provides for the conservation, development, and utilization of California’s water resources, including by prioritizing the management of basins that are subject to critical conditions of overdraft. Hydraulic fracturing on these leases has the potential to

Ventura County (July 31, 2018, https://ww2.arb.ca.gov/sites/default/files/2018-08/VCAPCD_AB617_Submittal.pdf).

²³ California Air Resources Board, Study of Neighborhood Air near Petroleum Sources (SNAPS) Fact Sheet (Feb. 2019), https://ww2.arb.ca.gov/sites/default/files/2019-02/SNAPS_QA_2-6-19.pdf.

²⁴ California Air Resources Board, Communities Selected for First Round of Air Monitoring (Sept. 2018), <https://ww2.arb.ca.gov/resources/documents/snaps-first-round-communities>.

²⁵ California State Assembly Bill 685 (2012).

²⁶ California State Water Resources Control Board, Resolution No. 2016-0010; California Regional Water Quality Control Board, Central Valley Region, Resolution R5-20161-0018.

²⁷ 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), https://www.law.berkeley.edu/files/Water_Report_2013_Interactive_FINAL.pdf.

produce water that may be connected to groundwater aquifers, causing an overdraft of the local basin, and thus conflicts with the protections of the Act.

Because the Bakersfield EIS failed to articulate these inconsistencies with California laws and policies, and because the Draft EA does not discuss them, the Draft EA must be revised to address these deficiencies.

III. The Draft EA Fails to Consider the Environmental and Public Health Impacts to Environmental Justice Communities Near the Proposed Leases.

The Draft EA fails to discuss the disproportionate impacts of oil and gas operations on communities nearby, which already are burdened by environmental pollution, stating that BLM would identify environmental justice communities at a later stage, and that any “site-specific impacts on environmental justice populations would be considered and mitigated as needed on a project basis at the development application stage.” Draft EA at 31. The Draft EA also lacks any analysis of how this lease sale would add to the existing air and water pollution, as well as the existing public health concerns in these communities, determining instead to analyze cumulative impacts on these communities “at the development application stage.” Draft EA at 58.

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 lease sale on the existing baseline condition of the communities and environment nearby. *See* Council on Environmental Quality, *Considering Cumulative Effects Under the National Environmental Policy Act*, 1997. Potential impacts to these communities should not be deferred to a later stage when a greater commitment of resources toward oil and gas development could undermine the reasoned analysis of impacts. In the Draft EA, BLM provides the concrete locations of the parcels for sale; therefore, the locations of the nearby affected communities are also known.

Several parcels proposed for sale are near “disadvantaged communities” (“DACs”) which are defined under California law as those that reside in areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effect, exposure, or environmental degradation. Cal. Health & Safety Code § 39711. To designate disadvantaged communities, the California Environmental Protection Agency uses the OEHHA CalEnviroScreen 3.0 Tool to rank all census tracts in the state using 21 environmental, socioeconomic, and health “indicators,” such as air and water quality, that measure the communities’ exposure to pollution and the communities’ vulnerability to the effects of pollution.²⁸ Census tracts that are in the most burdened quartile overall in CalEnviroScreen 3.0

²⁸ OEHHA, CalEnviroScreen 3.0 Report (Jan. 2017), <https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3report.pdf>.

are “disadvantaged communities” under California law.²⁹ Three proposed parcels are located within census tracts that are in the most burdened quartile overall on CalEnviroScreen, meaning that communities in these locations already are exposed to significantly more air and water pollution than other parts of the state, and they are more vulnerable to that exposure.³⁰

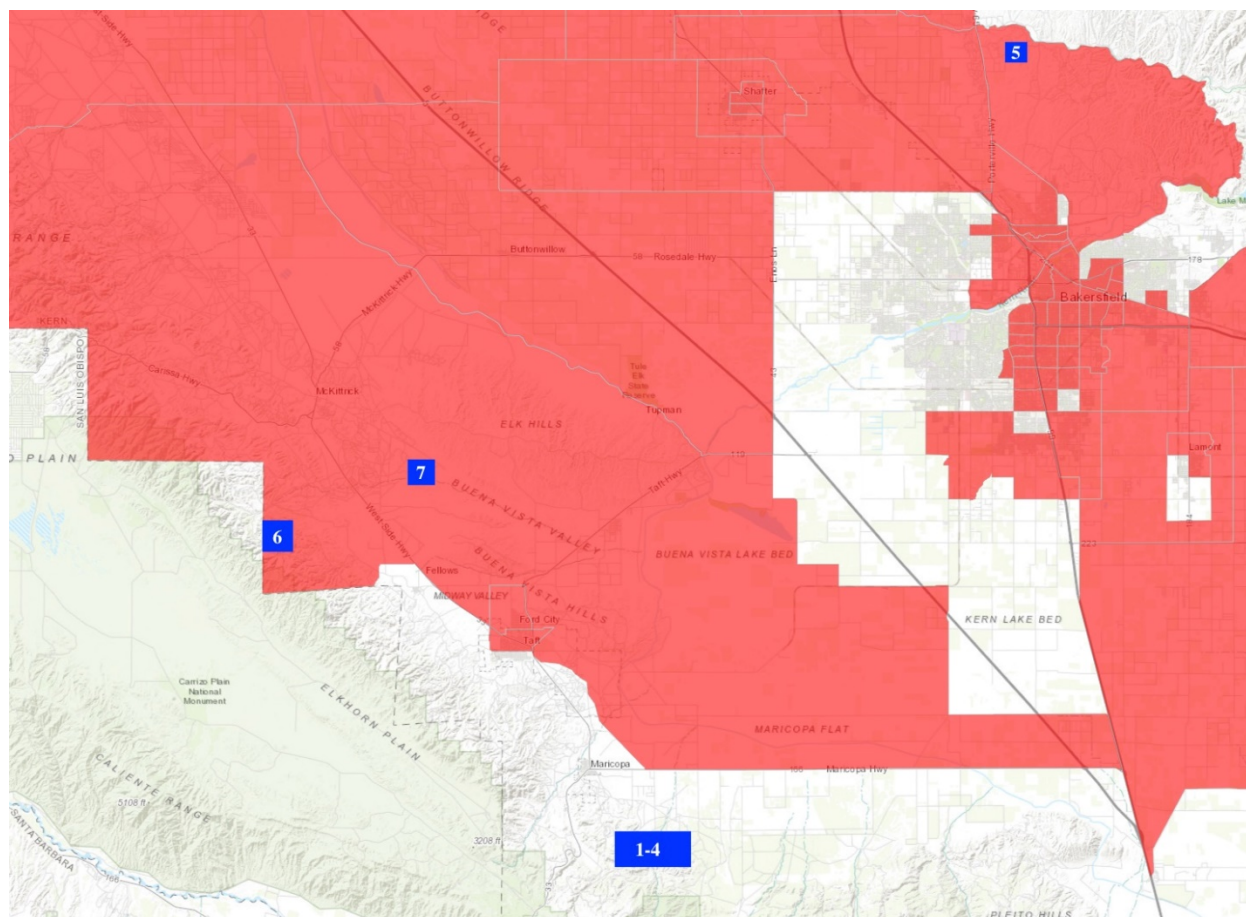


Figure 1 – Proposed parcels (blue) in context of DACs (red) as designated by the California Environmental Protection Agency for the purpose of SB 535. The red areas represent census tracts that are in the highest quartile for pollution burdens on CalEnviroScreen 3.0.³¹

²⁹ See California Environmental Protection Agency, Designation of Disadvantaged Communities Pursuant to Senate Bill 535 (De Leon) (Apr. 2017), <https://calepa.ca.gov/wp-content/uploads/sites/6/2017/04/SB-535-Designation-Final.pdf>.

³⁰ See OEHHA, CalEnviroScreen 3.0 Tool, <https://oehha.ca.gov/calenviroscreen> (last visited Sept. 24, 2020). See also OEHHA, SB 535 Disadvantaged Communities Webpage, <https://oehha.ca.gov/calenviroscreen/sb535> (last visited Sept. 21, 2020).

³¹ SB 535 Disadvantaged Communities (map) (June 2018 Update), <https://oehha.maps.arcgis.com/apps/View/index.html?appid=c3e4e4e1d115468390cf61d9db83efc4>.

Much of Kern County is already in nonattainment with fine particulate matter and ozone air quality standards. Ozone is among the most widespread and significant air pollution health threats in California, including in areas next to the proposed leases.³² Kern County also experiences some of the worst particulate matter pollution in the state.³³ Any additional emissions of volatile organic compounds, nitrogen oxides, and other air pollutants in these areas from expanded oil and gas production may be significant and should be mitigated. Furthermore, the public health risk exposure to toxic air contaminants is greatest near active oil and gas sites. Because many residents in Kern County already live near oil and gas activity, any new oil and gas development in the County must take into account the health impacts to nearby sensitive receptors.

In addition, Kern County already suffers from some of the worst groundwater threats and drinking water contamination problems in California. CalEnviroScreen's Groundwater Threat Indicator tracks the locations where groundwater may be threatened and contaminated by sources of pollution such as hazardous chemicals that are often stored in, and leak from, containers on land or underground storage tanks.³⁴ Contaminated groundwater can expose people to contaminated soil, air, and drinking water supplies.³⁵ All proposed parcels are located in census tracts that rank among the top 20 percent in threats to groundwater.³⁶ CalEnviroScreen's Drinking Water Indicator, which combines drinking water quality data for public and non-public drinking water systems, indicate that Kern County residents rely on drinking water that already contains significant contamination from chemicals or bacteria.³⁷ The small community water systems that serve the majority of the residents near the leasing area lack the infrastructure and economies of scale of larger water systems to afford necessary treatment or identification of

³² OEHHA, CalEnviroScreen 3.0 Tool, Air Quality: Ozone Indicator, <https://oehha.ca.gov/calenviroscreen/indicator/air-quality-ozone> (last visited Sept. 25, 2020).

³³ OEHHA, CalEnviroScreen 3.0 Tool, Air Quality: PM 2.5 Indicator, <https://oehha.ca.gov/calenviroscreen/indicator/air-quality-pm25> (last visited Sept. 25, 2020). Particulate matter that is 2.5 micrometers or less in diameter (PM 2.5) causes many serious health effects, including heart and lung disease.

³⁴ OEHHA, CalEnviroScreen 3.0 Tool, Groundwater Threats, <https://oehha.ca.gov/calenviroscreen/indicator/groundwater-threats> (last visited Sept. 24, 2020).

³⁵ *Id.*

³⁶ OEHHA, CalEnviroScreen 3.0 Tool, *supra* note 30 (Census Tract Nos. 6029003303, 6029003304, 6029003306, 6029005103).

³⁷ OEHHA, CalEnviroScreen 3.0 Tool, Drinking Water Indicator, <https://oehha.ca.gov/calenviroscreen/indicator/drinking-water-contaminants> (last visited Sept. 25, 2020); State Water Resources Control Board, Report to the Legislature: Communities That Rely on a Contaminated Groundwater Source for Drinking Water (Jan. 2013), <https://www.waterboards.ca.gov/gama/ab2222/docs/ab2222.pdf>. *See also* OEHHA, Methodology for a Statewide Drinking Water Contaminant Indicator (Jan. 2017), <https://oehha.ca.gov/media/downloads/calenviroscreen/report/ces3dwm methodology.pdf>.

alternative water supplies for a contaminated groundwater source.³⁸ Furthermore, many residents in Kern County rely on private, domestic (unregulated) wells for drinking water, and data available for these wells indicates significant contamination issues in areas surrounding the proposed leases.³⁹ According to CalEnviroScreen, four proposed parcels (Parcels 2-5) are located in census tracts that rank among the top 10 percent in the lack of access to clean drinking water.⁴⁰ Given the existing groundwater threats and drinking water contamination in these areas, any additional impacts from oil and gas development on these leases should be identified and mitigated.

The Draft EA fails to discuss the close proximity of the proposed leases to residents. In Kern County, 35 percent of the county's 290,000 residents already live within a mile of at least one oil or gas well. One of the proposed parcels—the Poso Unit (Parcel 5), at 160 acres—is within a mile of a disadvantaged community of at least 10 residences. Draft EA at 22-23. Residents near this parcel already experience more ozone pollution than 91 percent of California and the most fine particulate matter pollution in the state.⁴¹ A cluster of four parcels—the Cienega Unit (Parcels 1-4) totaling 3,357.24 acres and 75% of the total acreage proposed for lease sale—is within three miles of two schools and a community with more than 1,000 residents, who already experience more ozone pollution than 85 percent of California. Draft EA at 22-23. And Parcels 6 (Crocker Flat Unit) and 7 (Buena Vista Unit), at 816.34 acres combined, are within five miles of a disadvantaged community with over 300 residents who already experience more ozone pollution than 85 percent of California and more fine particulate matter pollution than 93 percent of the state.⁴² Draft EA at 23, 75. Studies increasingly show links between exposure to oil and gas operations and public health impacts,⁴³ including cancer,⁴⁴

³⁸ State Water Resources Control Board, *supra* note 36.

³⁹ OEHHA, CalEnviroScreen 3.0 Tool, Drinking Water Indicator, *supra* note 37. OEHHA, Drinking Water Results by Contaminant Spreadsheet (Excel), *accessible at*: <https://oehha.ca.gov/calenviroscreen/indicator/drinking-water-contaminants>.

⁴⁰ OEHHA CalEnviroScreen 3.0 Tool, *supra* note 30 (Census Tract Nos. 6029003306, 6029005103).

⁴¹ *See id.* (Census Tract No. 6029005103).

⁴² *See id.* (Census Tract No. 6029003304).

⁴³ 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 (Apr. 2013), <https://www.health.gov.bc.ca/library/publications/year/2013/health-risk-assessment-literature-review.pdf>.

⁴⁴ *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), <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0170423>.

adverse birth outcomes,⁴⁵ and preterm births.⁴⁶ Residents living near oil and gas operations, because of exposures to ozone and fine particulate matter, can experience acute respiratory, neurological, and gastrointestinal symptoms from exposure to the operations, such as headaches, fatigue, burning eyes and throats, nausea, and nosebleeds.⁴⁷ Residents also experience sleep disturbance from noise levels from oil and gas activity.⁴⁸ The health effects for residents exposed to oil and gas activity is particularly concerning in the leasing areas, particularly around Parcels 5-7, where many residents already experience the highest rates of cardiovascular disease⁴⁹ and low birth weights⁵⁰ in California, in addition to the existing significant levels of air and water pollution and high poverty levels.⁵¹ The community near Parcels 6 and 7 already experiences higher rates of low birth weight than 80 percent of the state.⁵² And the community next to Parcel 5 already experiences higher rates of asthma, low birth weight, and cardiovascular disease than 83, 98, and 84 percent of California, respectively.⁵³

⁴⁵ Balise, *et al.*, Systematic Review of the Association between Oil and Natural Gas Extraction Processes and Human Reproduction, 106 Fertility & Sterility 4, 795-819 (Sept. 2016), [https://www.fertstert.org/article/S0015-0282\(16\)62529-3/fulltext](https://www.fertstert.org/article/S0015-0282(16)62529-3/fulltext).

⁴⁶ Casey, *et al.*, Unconventional Natural Gas Development and Birth Outcomes in Pennsylvania, 27 Epidemiology 163-172 (2016), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4738074/>.

⁴⁷ Liberty Hill Foundation, Drilling Down: The Community Consequences of Expanded Oil Development in L.A. (2015), 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, http://publichealth.lacounty.gov/eh/docs/PH_OilGasFacilitiesPHSafetyRisks.pdf.

⁴⁸ 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), <http://www.hpaf.co.uk/wp-content/uploads/2018/06/Public-health-implications-of-environmental-noise-associated-with-unconventional-oil-and-gas-development.pdf>.

⁴⁹ See OEHHA, CalEnviroScreen 3.0 Tool, Cardiovascular Disease Indicator, <https://oehha.ca.gov/calenviroscreen/indicator/cardiovascular-disease> (last visited Sept. 25, 2020). 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.

⁵⁰ See OEHHA CalEnviroScreen 3.0 Tool, Low Birth Weight Infant Indicator, <https://oehha.ca.gov/calenviroscreen/indicator/low-birth-weight-infants> (last visited Sept. 25, 2020). 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.

⁵¹ OEHHA, CalEnviroScreen 3.0 Tool, *supra* note 30 (Census Tract Nos. 6029003304, 6029005103).

⁵² *Id.* (Census Tract No. 6029003304).

⁵³ *Id.* (Census Tract No. 6029005103).

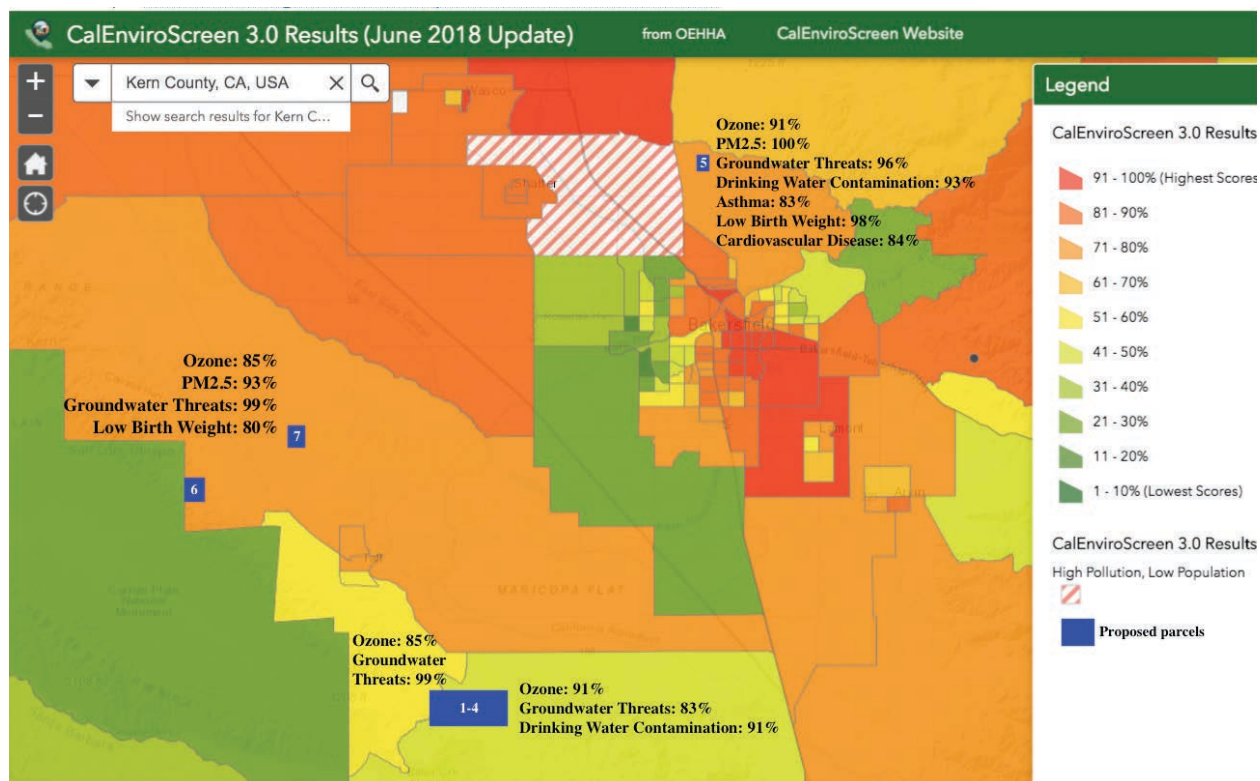


Figure 2 – Pollution indicators for the census tracts in which proposed parcels are located.⁵⁴

BLM can and should analyze and mitigate the potential impacts on these communities at the leasing stage. BLM therefore should supplement the analysis in the Draft EA to determine the air quality and water impacts to the communities next to these seven parcels, and implement measures that would mitigate any significant impacts.

IV. The Draft EA Fails to Adequately Consider Impacts to Groundwater.

The Draft EA fails to adequately consider the potential for local groundwater and drinking water to be contaminated by oil and gas activities on these proposed leases. As discussed in Part II.B, the Draft EA fails to consider the prevalent use of unlined ponds in the Central Valley to store produced water, or that water in these ponds can contain hazardous chemicals. The Draft EA does acknowledge that all but one of the proposed parcels are located along the western edge of the Kern Subbasin, which lacks an impermeable layer of Corcoran clay, thus allowing contaminated water to move from shallow aquifers to the deeper aquifers supplying local agricultural and drinking water. Draft EA at 21. However, there is no discussion of the increased risk to the water supply posed by the lack of the clay barrier and the unlined storage of produced water resulting from these proposed leases.

⁵⁴ See *id.*

The Draft EA also fails to adequately consider the impacts of produced water on groundwater use by failing to distinguish among the various sources of water. For example, the Draft EA notes that in the eastern and western sides of the Kern Subbasin, a substantial amount of the water used for operations of the oil wells comes from produced water. Draft EA at 43. The Draft EA assumes that every hydraulically fractured well would consume about 200,000 gallons, or approximately 0.00003 percent of Kern County’s annual water consumption. Draft EA at 43. However, the Draft EA does not differentiate whether that amount is associated with water production from a groundwater basin, out-of-basin areas, or all areas within Kern County. Water production that occurs outside of a groundwater basin may have a dramatic effect on that area’s water supply and adversely affect communities for which that is the sole source of water. The California Department of Water Resources has estimated that the total 2014 out-of-basin water production for the Tulare Lake hydrologic region is about 64,000 acre-feet. Bulletin 160, California Water Plan (2018). The Draft EA states that 8,358 acre-feet of well water was produced on the west side of the Kern County for oil and gas operations—that is 13 percent of the total out-of-basin water production for the entire hydrologic region, posing significant overdraft risks. Draft EA at 43. Therefore, for the Draft EA to adequately consider potential impacts of produced water on groundwater use, impacts must be considered with respect to the localized areas of the groundwater basin, as well as to the groundwater produced from areas located outside of the basin.

In addition, the Draft EA ignores other foreseeable adverse impacts from the increased extraction of “produced water” from developing the proposed leases. The Draft EA notes that Kern County encourages the reuse of produced water and suggests that this would reduce dependence on groundwater. Draft EA at 59. This reasoning erroneously assumes that “produced water” is different from groundwater and therefore mistakenly suggests that reusing produced water would decrease the reliance on aquifers that supply the area’s drinking water. The Draft EA’s analysis also neglects to discuss the effects of land subsidence caused by the produced water. The extraction of produced water, along with the extraction of oil and gas, lowers static confining pressures in the oil producing strata, potentially causing the consolidation of the formation materials and resulting in land subsidence. Re-injecting produced water back into the oil producing strata can partly mitigate that loss of volume and pressure, but a reduction in the amount of re-injected fluids would increase the effects of subsidence. California’s State Water Project infrastructure is located along the western edge of the Kern Subbasin where these leases are located.⁵⁵ Increased regional subsidence caused by increase oil and gas production (and associated extraction of “produced water”) would increase the risk of structural damage to that infrastructure.

⁵⁵ California Department of Water Resources, SWP Facilities, <https://water.ca.gov/Programs/State-Water-Project/SWP-Facilities> (last visited Sept. 24, 2020).

The Draft EA fails to discuss the potential for hydraulic fracturing and other extraction activities on these leases to deplete and contaminate groundwater and the drinking water supply. BLM should provide a technical analysis of the potential impacts of developing the proposed leases on the local aquifer systems, land uses, land subsidence, and conveyance, and clarify how and where additional water supply would be obtained to mitigate the depleted or contaminated water supply.

V. The Draft EA Fails to Adequately Consider Climate Impacts.

The Draft EA also fails to adequately consider or mitigate the significant climate impacts of opening up more than 4,000 acres of public lands to new oil and gas leasing. In the Draft EA, BLM estimates that the lifecycle GHG emissions resulting from the proposed leasing action, assuming the drilling of ten wells per year, would be 23,207 metric tons of carbon dioxide equivalent (“MTCO₂E”) per year.⁵⁶ Draft EA at 39. BLM then claims that because “[t]here are currently no established thresholds of significance for GHG,” and this action “would represent 0.05 percent of the 2017 statewide inventory,” such emissions “would not cause a substantial change to the cumulative impact of California’s GHG emissions on global climate.” Draft EA at 40.⁵⁷

There are several problems with these findings. As an initial matter, and contrary to BLM’s assertion, there are established thresholds of significance for greenhouse gas emissions in California. For example, in 2010, the Bay Area Air Quality Management District set a threshold of 1,100 MTCO₂E per year for land use projects other than stationary sources for the review of projects under the California Environmental Quality Act (“CEQA”),⁵⁸ a level that the proposed leasing exceeds more than 20 times. Several other air districts, including the South Coast Air Quality Management District,⁵⁹ the San Luis Obispo County Air Pollution Control District,⁶⁰ the

⁵⁶ To the extent that these calculations assume compliance with the U.S. Environmental Protection Agency’s “New Source Performance Standards” for the control of greenhouse gases, volatile organic compounds, and sulfur dioxide (40 C.F.R. 60 Subpart OOOOa), *see* Draft EA at 18, EPA has published a rescission rule that largely repeals those standards. *See* 85 Fed. Reg. 57,018 (Sept. 14, 2020) (Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review; Final Rule).

⁵⁷ BLM’s draft FONSI does not mention or discuss climate impacts.

⁵⁸ Bay Area Air Quality Management District, “California Environmental Quality Act Air Quality Guidelines” (May 2017) at 2-2, 2-4, https://www.baaqmd.gov/~media/files/planning-and-research/ceqa/ceqa_guidelines_may2017-pdf. For stationary source projects, the threshold is 10,000 MTCO₂E per year, which the proposed leasing also exceeds.

⁵⁹ South Coast Air Quality Management District, “South Coast AQMD Air Quality Significance Thresholds” (Apr. 2019), <http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf>.

⁶⁰ San Luis Obispo County Air Pollution Control District, “CEQA Air Quality Handbook: A Guide for Assessing the Air Quality Impacts for Projects Subject to CEQA

Santa Barbara County Air Pollution Control District,⁶¹ the Sacramento Metro Air Quality Management District,⁶² and the Monterey Bay Unified Air Pollution Control District,⁶³ have since established similar thresholds. Moreover, since 2017, CARB's Scoping Plan has recommended "achieving no net additional increase in GHG emissions, resulting in no contribution to GHG impacts" as an appropriate overall objective for new projects.⁶⁴

While the San Joaquin Valley Unified Air Pollution Control District does not yet have a numerical significance threshold for GHGs, its guidance for addressing GHG impacts provides that:

The effects of project specific GHG emissions are cumulative, and unless appropriately reduced or mitigated their incremental contribution to global climatic change could be considered significant. Valley land-use agencies adopting this guidance as policy for addressing GHG impacts under CEQA, as a lead agency will require all new projects with increased GHG emissions to implement performance based standards, or otherwise demonstrate that project specific GHG emissions have been reduced or mitigated by at least 29%.⁶⁵

In the Draft EA, BLM admits that it has not attempted to comply with this guidance, nor has it made any effort to reduce or mitigate the GHG impacts of this action. *See* Draft EA at 59.

Review" (updated Nov. 14, 2017) at 3-6, https://storage.googleapis.com/slocleanair-org/images/cms/upload/files/CEQA_Handbook_2012_v2%20%28Updated%20Map2019%29_LinkedwithMemo.pdf.

⁶¹ Santa Barbara County Air Pollution Control District, "Environmental Review Guidelines for the Santa Barbara County Air Pollution Control District" (Apr. 30, 2015), at 11-12, <https://www.ourair.org/wp-content/uploads/APCDCEQAGuidelinesApr2015.pdf>.

⁶² Sacramento Metro Air Quality Management District, "SMAQMD Thresholds of Significance Table" (Apr. 2020), <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable4-2020.pdf>.

⁶³ Monterey Bay Unified Air Pollution Control District, "Guidelines for Implementing the California Environmental Quality Act" (Feb. 2016) at 4-5, https://www.mbard.org/files/50d38962a/Attachment_Guidelines-for-Implementing-CEQA.pdf.

⁶⁴ CARB, *supra* note 13 at 101.

⁶⁵ San Joaquin Valley Unified Air Pollution Control District, "Guidance for Valley Land-use Agencies in Addressing GHG Emission Impacts for New Projects under CEQA" (Dec. 17, 2009), http://www.valleyair.org/Programs/CCAP/ghg/ghg_idx.htm.

There are also several inaccuracies and unexplained assumptions in BLM's estimated range of lifecycle GHG emissions resulting from the leasing action. *See* Draft EA at 39-40 and Table 10. First, BLM fails to explain how it calculated production figures separately for conventional and hydraulically fractured wells. The California Geologic Energy Management Division source cited for annual production per well only shows total wells and production for each county, and does not separate out conventional and hydraulically fractured wells. Second, it is unclear how BLM is calculating an annual total of GHG emissions, given that emissions under this proposal would differ significantly in Year 1 compared to Year 10. For example, BLM fails to explain how it is considering changes in production over a well's lifetime, given that wells tend to produce far more oil early in their lives than later on. If overall average per well production of existing fields is used to estimate the production rate of newly drilled wells, this would likely lead to an underestimate of the production rate, especially in Year 1. And given BLM's estimate that ten new wells would be drilled each year, emissions would likely increase significantly over time.

Third, the calculation of direct emissions using the average carbon intensity of crude oil production from the Midway-Sunset and Cienega Canyon fields is oversimplified, given that the carbon intensity (29.3 gCO₂e/MJ vs. 5.8 gCO₂e/MJ, respectively) and production (19.6 million bbl/yr vs. 12,100 bbl/yr) at these fields is vastly different. This analysis also fails to consider the carbon intensity values from other oilfields, such as Kern Front or Asphalito, where leasing will occur under this project. Fourth, BLM fails to adequately explain the "Year 10 Range" in its analysis. It is unclear if this figure represents emissions in year 10, cumulative emissions through year 10, or some kind of average. Since the Draft EA assumes 10 new wells are drilled on each lease each year, it is unclear why this figure is presented as a range instead of a single value and why that range starts at 0. Finally, BLM's calculation of indirect emissions erroneously excludes transport. This row of Table 10 is labeled "Indirect Emissions: Refining and Product Transport." However, the carbon intensity listed is extracted from CARB's CA-GREET 3.0 model for the refinery portion only; the transport portion from CA-GREET 3.0 should also be added.

Furthermore, there is no basis for disregarding the impacts of even a 0.05 percent increase in statewide greenhouse gas emissions. This "drop in the bucket" type approach to considering incremental greenhouse gas impacts is a dangerous and irresponsible way to consider a cumulative impact that exists precisely because of similar incremental GHG increases worldwide. CEQA rejects this approach, stating that "[a] project's incremental contribution may be cumulatively considerable even if it appears relatively small compared to statewide, national or global emissions."⁶⁶

⁶⁶ 14 Cal. Code Regs. § 15064.4(b).

California is already dealing with the adverse effects of climate change, including increased risk of wildfires, longer and more frequent droughts, a decline in the average annual snowpack that provides approximately 35 percent of the State's water supply, increased erosion of beaches and low-lying coastal properties from rising sea levels, and increased formation of ground-level ozone (or smog), which is linked to asthma, heart attacks, and pulmonary problems, especially in children and the elderly.⁶⁷ In the past few weeks alone, California has experienced: (1) multiple extreme heat events, causing record breaking temperatures throughout the State and potentially the highest temperature ever recorded on Earth, as well as the hottest month of August in history;⁶⁸ (2) hundreds of wildfires, including five of the ten largest fires in State history, and an already record number of acres burned statewide;⁶⁹ and (3) severe air pollution throughout the State resulting from these fires, including weeks at unhealthy and even hazardous air pollution levels.⁷⁰ These events have caused widespread evacuations, destroyed thousands of homes and other structures, resulted in power outages, and put a huge strain on California's firefighting resources and residents. Further increases in greenhouse gas emissions, especially those that exceed established significance thresholds, will only exacerbate these significant impacts.

Moreover, BLM is incorrect that "methods to correlate specific projects or emission sources to specific impacts have not been sufficiently developed to use in assessing administrative actions such as lease sales." Draft EA at 33. The Draft EA makes no attempt to use the social cost of carbon—or any other meaningful cost metric—to accurately assess the greenhouse gas impacts of this action. The social cost of carbon is a federally-developed tool to assist agencies in evaluating the social benefits of reducing greenhouse gas emissions when analyzing the costs and benefits of agency action. *See California v. Bernhardt*, -- F. Supp. 3d --, 2020 WL 4001480, *23 (N.D. Cal. July 15, 2020). BLM's refusal to even consider such a method to evaluate the impacts of its proposed leasing is arbitrary and capricious. *See id. at*

⁶⁷ State of California, "California's Fourth Climate Change Assessment: Statement Summary Report," (Jan. 16, 2019), https://www.energy.ca.gov/sites/default/files/2019-11/Statewide_Reports-SUM-CCCA4-2018-013_Statewide_Summary_Report_ADA.pdf.

⁶⁸ Hayley Smith, "A sizzling summer: Hottest August on record in California," Los Angeles Times (Sept. 10, 2020), <https://www.latimes.com/california/story/2020-09-10/a-sizzling-record-august-was-hottest-month-on-record-in-california>.

⁶⁹ Michael McGough, "5 of the 6 largest California wildfires in history started in the past 6 weeks," Sacramento Bee (Sept. 22, 2020), <https://www.sacbee.com/news/california/fires/article245917915.html>.

⁷⁰ Michael Cabanatuan, "Very unhealthy air blankets Bay Area as historic wildfires spread noxious smoke," San Francisco Chronicle (Sept. 11, 2020), <https://www.sfchronicle.com/california-wildfires/article/Very-unhealthy-air-blankets-Bay-Area-15559693.php>; Kellie Hwang, "Yes, the Bay Area just suffered some of its worst-ever air quality days: Charts show how bad," San Francisco Chronicle (Sept. 14, 2020), <https://www.sfchronicle.com/california-wildfires/article/Yes-the-Bay-Area-just-suffered-some-of-its-15567137.php>.

**24-28 (finding BLM's failure to utilize social cost method in rulemaking to be arbitrary and capricious); *Ctr. for Biological Diversity v. Nat'l Highway Traffic Safety Admin.*, 538 F.3d 1172, 1200 (9th Cir. 2008) (even where "there is a range of values, the value of carbon emissions reduction is certainly not zero"); *High Country Conservation Advocates v. U.S. Forest Serv.*, 52 F. Supp. 3d 1174, 1192 (D. Colo. 2014) (explaining that even with "a wide range of estimates about the social cost of GHG emissions," federal agencies acted arbitrarily in not quantifying the costs).

Finally, nowhere does BLM consider the cumulative climate impacts of this lease sale "when added to other past, present, and reasonably foreseeable future actions," such as other oil and gas leasing conducted by the Bakersfield Field Office or by BLM within the State of California. *See* 40 C.F.R. § 1508.7. While the Draft EA contains two paragraphs under the heading "Cumulative Impacts to Climate Change," BLM simply refers back to the emissions estimates for the proposed action and restates its conclusion there. Draft EA at 58.⁷¹ This is insufficient to satisfy the "hard look" required by NEPA. *See San Juan Citizens All. v. BLM*, 326 F. Supp. 3d 1227, 1247-48 (D.N.M. 2018) (finding that BLM violated NEPA by failing to take a hard look at the cumulative effects of oil and gas leases in connection with other past, present, and reasonably foreseeable future actions).

In sum, to restate the September 2018 scoping comments from then-Governor Jerry Brown, 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."

CONCLUSION

At minimum, BLM may not proceed without first remedying these serious deficiencies in the Draft EA. Given these deficiencies and the impacts of these leases, however, BLM should withdraw its current proposal to open 4,333.58 acres of public lands in California to new oil and gas leasing.

⁷¹ To the extent that BLM is relying upon its prior analysis in the Bakersfield EIS, *see* Draft EA at 59, this is insufficient for the reasons discussed above.

Sincerely,

A handwritten signature in black ink, appearing to read "George Torgun".

GEORGE TORGUN
Deputy Attorneys General
DAVID ZONANA
CHRISTIE VOSBURG
Supervising Deputy Attorneys General

For XAVIER BECERRA
Attorney General

A handwritten signature in blue ink, appearing to read "R. W. Corey".

RICHARD W. COREY
Executive Officer
CALIFORNIA AIR RESOURCES BOARD