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California's Proposed Federal Oil and Gas Leases: What Lawmakers Should Know

The Bureau of Land Management (BLM) is moving forward with plans to resume oil and gas leasing on federal lands in California. **On October 1, 2026, BLM announced that it will proceed with a competitive oil and gas lease sale on December 1, 2026, offering 43 parcels totaling approximately 35,000 acres** across Kern, Kings, San Luis Obispo, and Fresno counties. This follows BLM's August Environmental Assessment, which evaluated 44 proposed parcels totaling approximately 36,000 acres. Several of the parcels included in the upcoming sale are located near or within areas containing important ecological resources, waterways, communities, and other sensitive sites.

Of particular concern is the proximity of proposed leasing areas to communities and health protection zones established around homes, schools, hospitals, and other sensitive receptors. **Approximately 3,800 acres across 21 proposed parcels overlap with designated Health Protection Zones associated with California's 3,200-foot oil and gas setback standard.** Communities including **Bakersfield, Santa Maria, Oxnard, and Porterville** are located near or overlap areas included in the proposed leasing footprint.

The potential impacts of oil and gas development extend beyond the boundaries of individual lease parcels. Development can involve the construction of roads, well pads, pipelines, and other infrastructure, as well as drilling, extraction, transportation, wastewater management, and eventual well abandonment. These activities can affect **land and wildlife habitat, groundwater and surface water, air quality, and the health and safety of nearby communities.**

With BLM now moving forward with the December 1 lease sale, understanding the potential implications of these leases is increasingly important. This information sheet summarizes the key environmental and public-health considerations associated with the proposed leases, with a focus on what development could mean for **California's land, water, air, and communities.** It is intended to provide lawmakers with information to better understand the potential local and regional implications of the December lease sale and the development that could follow.

View the map of proposed lease parcels: California proposed oil and gas lease map

Note: During the initial scoping process, several adjacent parcels were combined, resulting in 43 parcels rather than the 50 parcels referenced in earlier materials. The current EA analyzes the potential environmental impacts of leasing these 43 parcels, totaling approximately 35,000 acres.

Land

The proposed oil and gas leases include areas with important ecological, geological, cultural, and recreational resources. Several parcels overlap with or are located near areas designated for conservation because of their environmental significance.

- **Eight proposed parcels have identified resource conflicts.** Seven are located wholly or partially within Areas of Critical Environmental Concern (ACECs), while one overlaps the **Lokern Ecological Reserve**, managed by the California Department of Fish and Wildlife. ACECs are designated to protect areas with important environmental, cultural, or scientific values.
- Several parcels overlap or adjoin the **Chico Martinez, Kettleman Hills, Lokern-Buena Vista, and Panoche-Coalinga ACECs,** which contain a range of sensitive resources:
  - **Chico Martinez ACEC**: Contains significant paleontological resources and notable geological formations.
  - **Kettleman Hills ACEC**: Provides habitat for several federally and state-listed species, including the San Joaquin kit fox, blunt-nosed leopard lizard, giant kangaroo rat, San Joaquin antelope squirrel, LeConte's thrasher, and San Joaquin wooly-threads. The area also contains important paleontological resources and serves as habitat and a recovery area for native species.
  - **Lokern-Buena Vista ACEC**: Contains one of the larger remaining relatively undeveloped areas of San Joaquin Valley natural habitat and supports federally and state-listed species, including the San Joaquin kit fox, blunt-nosed leopard lizard, giant kangaroo rat, Tipton kangaroo rat, and San Joaquin antelope squirrel. It also provides habitat for the federally listed Kern mallow and other BLM-sensitive plant species.
  - **Lokern Ecological Reserve**: Contains marsh, valley sink scrub, and valley saltbush scrub habitats that support native plants and wildlife, including raptors.
  - **Panoche-Coalinga ACEC:** Contains habitat for rare, threatened, and endangered plants and wildlife, as well as historic and paleontological resources and areas with scenic and recreational value.
- **Fifteen additional parcels are located adjacent to or near ACECs and other sensitive areas.** Their proximity raises questions about potential impacts extending beyond the boundaries of the lease areas, including effects from air pollution, water pollution, noise, and increased human activity. Eleven of these parcels are adjacent to or within one mile of the **Carrizo Plain National Monument.**
- **The Carrizo Plain National Monument** contains one of California's largest concentrations of endangered and sensitive species, including the San Joaquin kit fox, blunt-nosed leopard lizard, giant kangaroo rat, burrowing owl, and California jewelflower. Oil and gas development near the monument could introduce additional industrial activity into or near habitat used by these species.
- **Oil and gas development also requires supporting infrastructure,** including roads, well pads, pipelines, and other facilities. Construction and operation of this infrastructure can alter or fragment habitat and increase human activity in previously undeveloped areas. In California, proposed leasing is occurring near sensitive landscapes and wildlife areas, including the **Tulare Basin Wildlife Management Area in Kern County and Montaña de Oro State Park in San Luis Obispo County.**
- **Well construction and maintenance are another consideration for land and groundwater resources.** Poorly designed or maintained wells can allow fluids or other substances to migrate into surrounding soil or groundwater. The potential for these impacts is particularly relevant where proposed development is located near sensitive ecological areas and other valuable natural resources.

Water

Groundwater and surface water are important sources of drinking water, agricultural water, and habitat throughout California. The location and operation of oil and gas wells can present potential risks to these resources, particularly where proposed leases are located near aquifers, waterways, and reservoirs.

- **Groundwater is an important source of drinking water for many California communities, particularly in rural areas.** The U.S. Environmental Protection Agency has noted that changes in climate and water use could affect the availability of drinking water resources and increase reliance on groundwater in some areas. Protecting both currently used drinking-water aquifers and groundwater resources that may be needed in the future is therefore an important consideration when evaluating new oil and gas development.
- **Oil and gas wells can extend thousands of feet below the surface and may pass through or near groundwater-bearing formations.** If wells are improperly constructed, maintained, or sealed, there is a potential for oil, gas, drilling fluids, or other substances to migrate into underground sources of water. Federal regulations require operators to protect and/or isolate usable water zones, but evidence cited in public comments and environmental reviews has raised questions about whether existing requirements are consistently sufficient to prevent groundwater impacts.
- **Several proposed leasing areas are located near waterways and reservoirs, including Lake Success, the Nacimiento River, and the Santa Margarita Reservoir.** Other nearby waterways, including the Sisquoc River, provide habitat for sensitive species such as Southern California steelhead. Development near these resources increases the importance of measures to prevent spills, leaks, runoff, and other pollutants from reaching surface waters.
- **Oil and gas production generates wastewater that requires management and, in some circumstances, treatment or disposal.** Improperly managed wastewater can introduce pollutants into surrounding soil or surface water and affect water quality. This is particularly relevant in areas connected to major agricultural and water-supply systems. For example, the San Joaquin River is an important source of water for California's agricultural economy and is connected to Millerton Lake, near areas proposed for leasing. Any contamination entering connected waterways could have implications for downstream water users and ecosystems.
- **Oil and gas production can also require water for drilling and extraction activities.** Additional development could increase demand for water in areas that already face competing demands from communities, agriculture, ecosystems, and other users. This consideration becomes particularly important during periods of drought or reduced water availability, when additional industrial water demand could place further pressure on local and regional supplies.

Air

Oil and gas development can release a range of air pollutants throughout the life of a well, including during construction, drilling, production, maintenance, well stimulation, and eventual plugging and abandonment. The proposed leases are located in areas where existing air-quality conditions and proximity to communities make potential emissions an important consideration.

- **Oil and gas operations can emit both criteria pollutants and hazardous air pollutants.** Emissions can occur during drilling and extraction, oil handling and storage, transportation through pipelines, well stimulation activities such as hydraulic fracturing and acidization, and the separation of oil and water. Pollutants can also be released through equipment such as valves, pumps, tanks, pipe fittings, and other components. Equipment leaks and accidental releases can contribute additional emissions.
- **Methane leaks have been documented at oil and gas sites in Kern County.** State and federal monitoring has identified methane leaks from oil and gas infrastructure in the Bakersfield area, including releases classified by the EPA as "super-emitter" events. Methane is a potent greenhouse gas, and these releases can also indicate the presence of other emissions associated with oil and gas production.
- **Ozone-forming pollutants are a particular consideration in the San Joaquin Valley.** Oil and gas operations can emit nitrogen oxides (NOx) and volatile organic compounds (VOCs), both of which contribute to the formation of ground-level ozone. NOx emissions can come from diesel- and natural-gas-powered equipment used for drilling, well workovers, hydraulic fracturing, transportation, and other operations. VOCs can be released during oil production, storage, processing, and equipment operation. The Bakersfield area is already subject to federal air-quality requirements related to ozone and fine particulate matter (PM2.5), making additional emissions an important consideration when evaluating new development.
- **Benzene and other hazardous air pollutants are also associated with oil and gas operations.** Benzene is a known carcinogen and can be released from oil and gas production equipment, storage, flaring, and leaks. Studies have also detected benzene and other pollutants associated with some abandoned or inactive wells, which can be located near homes and other buildings.
- **Venting, flaring, and equipment leaks are sources of methane and other air emissions.** Venting releases natural gas directly into the atmosphere, while flaring burns natural gas that would otherwise be captured. Both practices can release methane and other pollutants. Research has found that flaring does not always operate as intended, including instances in which flares malfunction or become unlit, potentially resulting in direct methane releases.
- **Venting and flaring can also have implications for nearby communities.** Research has associated exposure to emissions from oil and gas flaring with health outcomes including preterm birth, lower birthweight, and childhood asthma exacerbations. The potential impacts are particularly relevant when oil and gas infrastructure is located near homes, schools, hospitals, and other places where people spend significant amounts of time.
- **Air emissions can travel beyond the immediate footprint of a well site.** Depending on weather conditions, pollutant type, and the location and intensity of emissions, pollution from oil and gas operations can affect surrounding communities and ecosystems. This is especially relevant for proposed parcels located near populated areas and schools.
- **Several schools are located near proposed leasing areas, including Cate School in Carpinteria, The Thacher School in the Ojai Valley, and Los Osos Middle School in San Luis Obispo County.** Their proximity highlights the importance of evaluating potential air-quality impacts on children and school communities when considering development in these areas.

Public Health

Oil and gas development can affect public health through exposure to air pollution, proximity to industrial activity, increased truck traffic, and the potential for spills, leaks, fires, and other incidents. The location of several proposed parcels near communities and other sensitive receptors makes these potential impacts particularly relevant.

- **Twenty-one of the proposed parcels, covering nearly 4,000 acres, overlap wholly or partially with areas covered by California's 3,200-foot health protection standard established by Senate Bill 1137 (SB 1137).** The law was enacted in 2022 to establish a health-protective setback between new oil and gas development and sensitive receptors, including homes, schools, hospitals, and other community locations.
- **BLM's existing land-use plans include provisions intended to address conflicts between fluid mineral development and existing land uses.** The Bakersfield 2014 Resource Management Plan and Central Coast 2019 Resource Management Plan Amendment include an "Existing Surface Use/Management" stipulation intended to minimize or avoid conflicts between oil and gas development and existing uses, including considerations related to public health and safety. The Bakersfield plan also provides for environmental review at the leasing stage where proposed development may be incompatible with existing uses.
- **California's health protection standards are informed by research on the health effects associated with proximity to oil and gas development.** A 2024 report from CalGEM's Scientific Advisory Panel concluded, with a high level of certainty, that there is a causal relationship between close residential proximity to upstream oil and gas development and adverse respiratory and perinatal outcomes. The panel identified a minimum surface setback of approximately 3,281 feet (1 kilometer) as important for protecting public health.
- **The proposed parcels that overlap health protection zones include:** CA-2099-01-0149, CA-2099-01-0103, CA-2099-01-0081, CA-2099-01-0162, CA-2099-01-0167, CA-2099-01-0168, CA-2099-01-0123, CA-2099-01-0165, CA-2099-01-0173, CA-2099-01-0132, CA-2099-01-0135, CA-2099-01-0147, CA-2099-01-0143, CA-2099-01-0136, CA-2099-01-0177, CA-2099-01-0144, CA-2099-01-0175, CA-2099-01-0172, CA-2099-01-0188, CAP106818522, and CAP106820777.
- **Oil and gas emissions can include pollutants associated with respiratory and cardiovascular health effects.** Research has reported associations between exposure to oil and gas pollution and outcomes including asthma, respiratory difficulties, cardiovascular effects, and irritation of the eyes, skin, and throat. Studies have also examined potential associations with reproductive outcomes, including preterm birth and low birth weight, as well as certain cancers.
- **Venting, flaring, and methane leaks are additional sources of potential health impacts.** Research has linked proximity to oil and gas flaring with outcomes including shorter gestation, preterm birth, and lower birth weight. A 2024 study estimated that emissions from venting and flaring across the United States contribute to substantial health and economic costs, including premature deaths and childhood asthma exacerbations.
- **Oil and gas development can also introduce non-air-related health and safety considerations.** Increased industrial and truck traffic can contribute to roadway safety risks, while spills, leaks, fires, and explosions can create additional hazards for workers and nearby communities. Noise and increased industrial activity may also affect quality of life and community well-being.

Sources

Allen, D. T. (2016). Emissions from oil and gas operations in the United States and their air quality implications. Journal of the Air & Waste Management Association, 66(6). https://doi.org/10.1080/10962247.2016.1171263

BLM Central Coast Field Office. (2019). Proposed resource management plan amendment and final environmental impact statement for oil and gas leasing and development.

Buonocore, J. J., Reka, S., Yang, D., Chang, C., Roy, A., Thompson, T., Lyon, D., McVay, R., Michanowicz, D., & Arunachalam, S. (2023, May 8). Air pollution and health impacts of oil & gas production in the United States. Environmental Research: Health. https://iopscience.iop.org/article/10.1088/2752-5309/acc886

Bureau of Land Mgmt. [BLM]. (2014). Record of decision & approved resource management plan, I.
California Council on Science & Technology. (n.d.). An Independent Scientific Assessment of Well Stimulation in California.

Carrizo Plain National Monument Approved Resource Management Plan and Record of Decision (2010).

COX, J. (2023, June 1). State finds 27 oil wells leaking methane in Arvin-Lamont Area. The Bakersfield Californian. https://www.bakersfield.com/news/state-finds-37-oil-wells-leaking-methane-in-arvin-lamont-area/article_52120332-00da-11ee-b466-83e7f8b280c5.html

Cushing, L. J., Vavra-Musser, K., Chau, K., Franklin, M., & Johnston, J. E. (2020). Flaring from unconventional oil and gas development and birth outcomes in the eagle ford shale in South Texas. Environmental Health Perspectives, 128(7). https://doi.org/10.1289/ehp6394

Digiulio, D. C., Rossi, R. J., Lebel, E. D., Bilsback, K. R., Michanowicz, D. R., & Shonkoff, S. B. C. (2023, May 19). Chemical Characterization of natural gas leaking from abandoned oil and gas wells in Western Pennsylvania . ACS Publications. https://pubs.acs.org/doi/10.1021/acsomega.3c00676

Environmental Protection Agency. (2016, December). Hydraulic fracturing for oil and gas: Impacts from the hydraulic fracturing water cycle on drinking water resources in the United States (final report). EPA. https://cfpub.epa.gov/ncea/hfstudy/recordisplay.cfm?deid=332990

Environmental Protection Agency. (n.d.-a). Basic Information about Oil and Natural Gas Air Pollution Standards. EPA. https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-operations/basic-information-about-oil-and-natural

Environmental Protection Agency. (n.d.-b). Methane Super Emitter Data Explorer. EPA. https://echo.epa.gov/trends/methane-super-emitter-program/data-explorer

EPA Must List Oil and Gas Wells and Associated Equipment as an Area Source Category and Set National Air Toxics Standards to Protect Public Health. (2014b, May 13). Earthjustice.

Filling the void: The value of new technology to reduce air pollution and improve information at oil and gas sites in California. (2017).

Griot, O., Metz, L., Carlson, E., Litynski, J., & Hopkins, A. (2023). Onshore Oil and natural gas operations on federal and tribal lands in the United States analysis of emissions and lost revenue. https://blogs.edf.org/energyexchange/files/2023/01/EMBARGOED_EDF-TCS_Public_Lands_Analysis.pdf

Gross, L. (2023, June 9). Abandoned oil and gas wells emit carcinogens and other harmful pollutants, groundbreaking study shows. Inside Climate News. https://insideclimatenews.org/news/06062023/abandoned-oil-gas-wells-health/

Karras, G. (2020). Decommissioning California refineries climate and health paths in an oil state a communities for a better environment report . by decommissioning California refineries. https://www.cbecal.org/wp-content/uploads/2020/07/Decomm-CA-Refineries-July2020.pdf

List of Reports — Kern Report. (2026). Kernreport.Org. https://kernreport.org/report/list
Lokern Ecological Reserve. California Department of Fish and Wildlife. (n.d.). https://wildlife.ca.gov/Lands/Places-to-Visit/Lokern-ER

Los Padres Forest Watch. (n.d.). Map viewer. https://forestwatch.maps.arcgis.com/apps/mapviewer/index.html?webmap=a765a9349e094b0ab55a4e3f25f859c5&center=-119.305926%2C35.284318&scale=577790.554289&utm_source=chatgpt.com

McKenzie, L. M., Allshouse, W. B., Johnson, D. R., DeVoe, C. C., Cockburn, M., & Ghosh, D. (2025, May 2). Exposures from oil and gas development and childhood leukemia risk in Colorado: A population-based case-control study. Cancer epidemiology, biomarkers & prevention : a publication of the American Association for Cancer Research, cosponsored by the American Society of Preventive Oncology. https://pmc.ncbi.nlm.nih.gov/articles/PMC12046330/

Peltz, A., & Saunders, N. (2017, December 29). Six ways oil and gas development can contaminate land and water (and what to do about it). Environmental Defense Fund. https://blogs.edf.org/energyexchange/2017/12/29/six-ways-oil-and-gas-development-can-contaminate-land-and-water-and-what-to-do-about-it/
Pevec, W. (n.d.). Health effects of oil & gas drilling.

Proposed resource management plan & final environmental impact statement for the Bakersfield Field Office, vol. 1 (2012). BLM.

Proville, J., Roberts, K. A., Peltz, A., Watkins, L., Trask, E., & Wiersma, D. (2022). The demographic characteristics of populations living near oil and gas wells in the USA. Population and Environment, 44(1–2), 1–14. https://doi.org/10.1007/s11111-022-00403-2

Public health dimensions of upstream oil and gas development in California: Scientific analysis and synthesis to inform science-policy decision making (pp. ES–8–ES-9). (2024). Cal. Oil & Gas Pub. Health Rulemaking Sci. Advisory Panel.

Record of decision for the Central Coast Field Office resource management plan amendment for oil and gas leasing and development. (2019). BLM.

Shabazian, D., Casey, J., & Deziel, N. (2021). RE: Response to CalGEM questions for the California Oil and Gas Public Health Rulemaking Scientific Advisory Panel. https://www.conservation.ca.gov/calgem/Documents/public-health/Public%20Health%20Panel%20Responses_FINAL%20ADA.pdf

Stop Oil Drilling & Fracking. Los Padres ForestWatch. (2026, July 23). https://forestwatch.org/stop-oil/
Tran, H., Polka, E., Buonocore, J. J., Roy, A., Trask, B., Hull, H., & Arunachalam, S. (2024). Air Quality and health impacts of onshore oil and gas flaring and venting activities estimated using refined satellite-based emissions. GeoHealth, 8(3). https://doi.org/10.1029/2023gh000938

Vaidyanathan, G., & ClimateWire. (2016, April 4). Fracking can contaminate drinking water. Scientific American. https://www.scientificamerican.com/article/fracking-can-contaminate-drinking-water/

Wilson, J. (2021, March 22). Are California oil companies complying with the Law? even regulators often don’t know. ProPublica. https://www.propublica.org/article/are-california-oil-companies-complying-with-the-law-even-regulators-often-dont-know