

Fracking Threatens Health of Los Angeles County Communities Already Overburdened with Pollution

New analysis reveals thousands of oil and gas wells concentrated near places already among the most vulnerable to pollution and predominantly communities of color

Los Angeles County is home to more than 6,000 of the state's 84,434 oil and gas wells,¹ and hundreds of them are located in the city of Los Angeles. This puts wells in close proximity to urban communities identified by the California Environmental Protection Agency as among the most polluted in the state.² These communities—the majority of which are communities of color—are already shouldering a disproportionately heavy burden from air, water, and soil pollution from existing industrial activity. Impacts include higher rates of illnesses that are linked to pollution, like asthma.³



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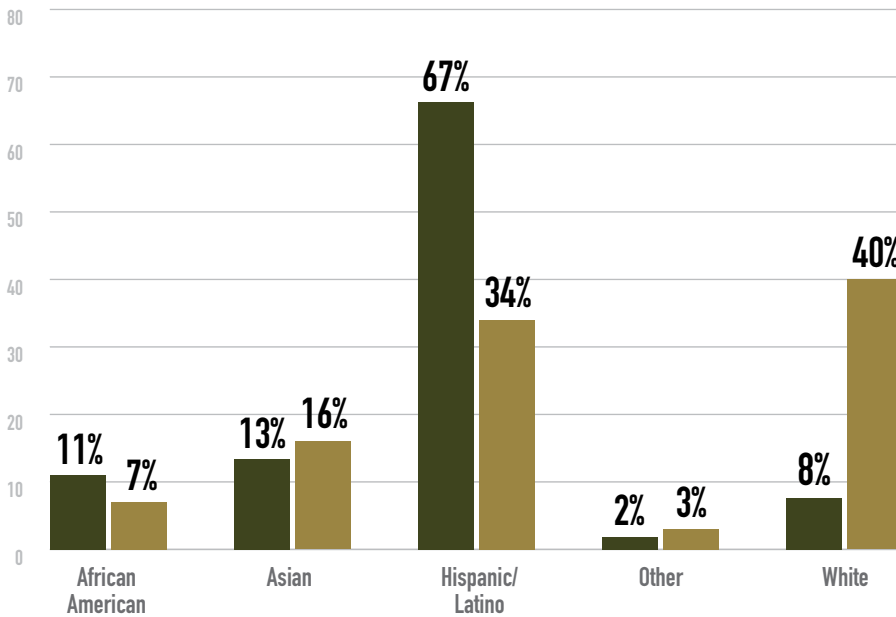
Oil well in Baldwin Hills, Los Angeles



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Figure 1: Demographics of Los Angeles County Residents Most Vulnerable to Pollution* and Within 1/4 Mile Distance to Oil and Gas Wells in Los Angeles County



67%

of people living within a quarter mile of oil and gas well(s) and in areas facing the worst environmental health threats are **HISPANIC/LATINO.**

- Most Vulnerable Communities With Oil and Gas Wells Within 1/4 Mile
- Less Vulnerable Communities Without Oil and Gas Wells Within 1/4 Mile

Note: Percentages may not add up to 100 percent due to rounding.

*California Office of Environmental Health Hazard Assessment (OEHHA), "CalEnviroScreen Version 2.0," <http://oehha.ca.gov/ej/ces2.html>.

As the oil and gas industry explores how to increase production using fracking and other controversial extraction techniques in California, these communities are at the greatest risk from the potential health impacts. This includes impacts from fracking-related pollution that has been linked to respiratory and neurological problems, birth defects, and cancer.⁴

An NRDC analysis of oil and gas wells and California Environmental Protection Agency data for Los Angeles County reveals:

- **One in three county residents lives within one mile of at least one oil or gas well.** That's about 3.5 million people, and nearly half of them are Hispanic/Latino.
- **Nearly half of the residents living within a quarter mile of a well⁵ also face some of the worst health threats from pollution in the state. The vast majority of them are people of color.** Specifically, 262,000 of the estimated 580,000 residents living within a quarter mile of oil and gas wells—91 percent of whom are people of color—are already grappling with health threats from air pollution, drinking water contamination, and toxic waste cleanup sites (see Figure 1).

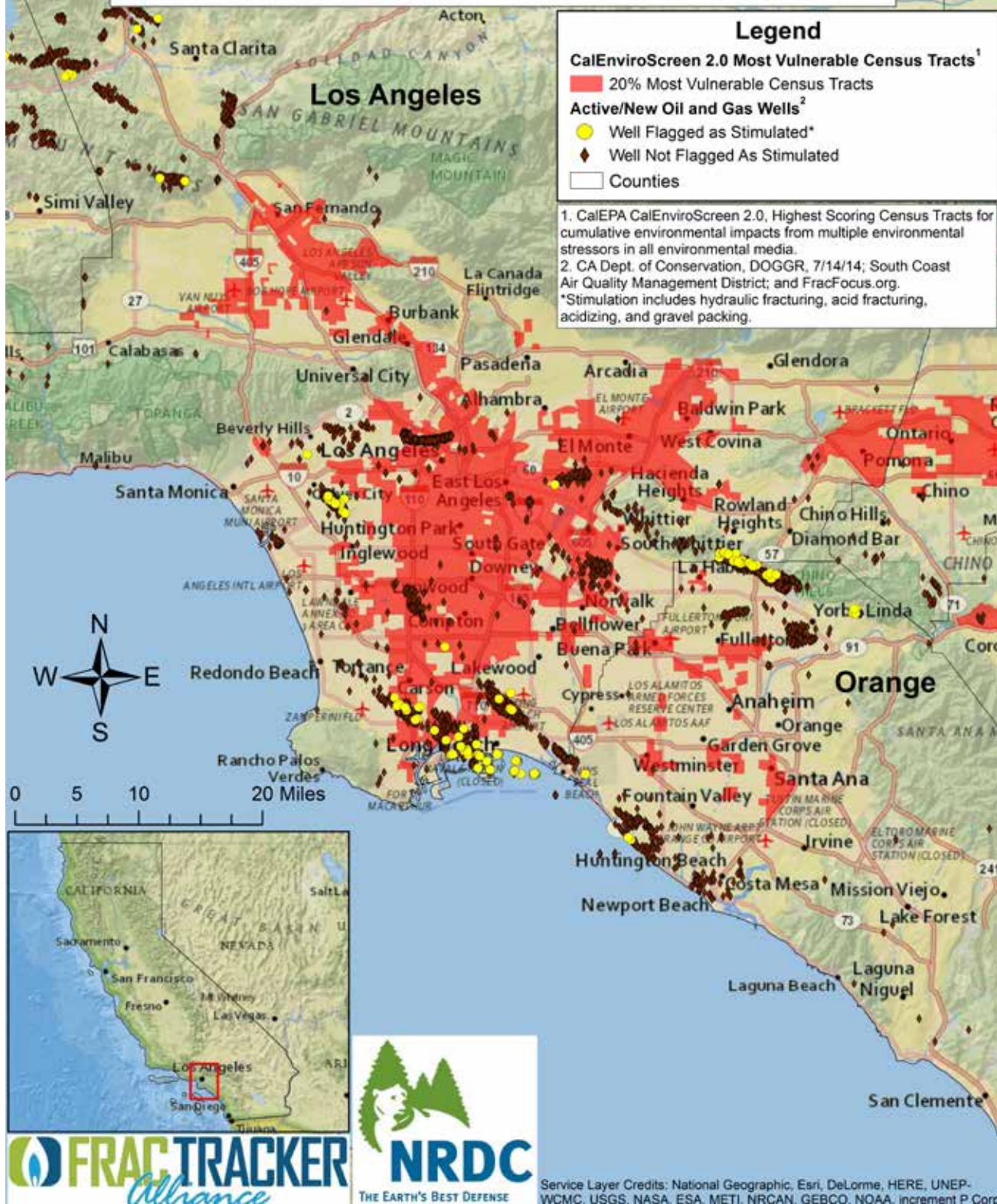
- **Los Angeles County currently has 6,065 active and new oil and gas wells.⁶** Of these wells, at least 350 have been newly permitted and another 124 have already been stimulated using fracking, acidizing, or other techniques. More are likely to be stimulated in the future. None of the stimulated wells are captured in the state's database, pointing to reporting and methodological discrepancies.
- **More than a quarter (1,723) of the county's 6,065 wells are in communities most vulnerable to pollution.**

Expanding oil production in densely populated Los Angeles County would exacerbate existing health threats from air and water pollution faced predominantly by communities of color. For many people already living with oil and gas wells, and at ground zero for new drilling activity, these threats are piled on top of an already heavy burden of environmental contamination.

NRDC's analysis underscores the need for a time-out on fracking and other dangerous oil and gas stimulation methods in California to allow for a full evaluation of their risks and determine how to protect against them. It also highlights the importance of defending a community's right to restrict or prohibit fracking within its own borders—rather than waiting for the state to act.

Greater Los Angeles area showing the density of active and new oil and gas wells as of July 2014 and the 20 percent most vulnerable census tracts according to the CalEnviroScreen 2.0 released in August 2014

California Communities Most Vulnerable to Pollution and Oil & Gas Development in Greater Los Angeles



This map was created using datasets generated by the California Division of Oil, Gas and Geothermal Resources (DOGGR), the South Coast Air Quality Management District (SCAQMD), FracFocus.org, and the California Environmental Protection Agency (CalEPA). The full report, along with a description of the methods and tables identifying the most impacted areas, are available here: www.nrdc.org/health/california-fracking-risks.asp.

Endnotes

- 1 CA Division of Oil, Gas and Geothermal Resources (DOGGR), GIS Mapping, "AllWells" database, <http://www.conservation.ca.gov/dog/maps/Pages/GISMapping2.aspx> (accessed July 14, 2014) and "Well Stimulation Treatment Notices Index," http://www.conservation.ca.gov/dog/Pages/IWST_disclaimer.aspx (accessed July, 2014). South Coast Air Quality Management District Rule 1148.2 "Oil and Gas Wells Activity Notification," <http://xappprod.aqmd.gov/r1148pubaccessportal/Home/Index> (accessed July, 2014). FracFocus Chemical Disclosure Registry, <http://fracfocus.org/> (accessed July, 2014). More details on data extraction can be found in Appendix I of the main report www.nrdc.org/health/california-fracking-risks.asp.
- 2 CalEPA, Office of Environmental Health Hazard Assessment, "CalEnviroScreen 2.0 data and report," <http://oehha.ca.gov/ej/ces2.html> (accessed August 18, 2014).
- 3 EPA, "Asthma Triggers: Gain Control," <http://www.epa.gov/asthma/triggers.html> (accessed 09/02/2014).
- 4 John L. Adgate, Bernard D. Goldstein, Lisa M. McKenzie, "Potential Public Health Hazards, Exposures and Health Effects from Unconventional Natural Gas Development," *Environmental Science & Technology*, February 2014, doi:10.1021/es404621d. Lisa M. McKenzie, et al., "Birth Outcomes and Maternal Residential Proximity to Natural Gas Development in Rural Colorado," *Environmental Health Perspectives*, 2014, doi:http://dx.doi.org/10.1289/ehp.1306722. Lisa M. McKenzie, et al., "Human Health Risk Assessment of Air Emissions from Development of Unconventional Natural Gas Resources," *Science of the Total Environment* 424 (2012): 79–87, doi:10.1016/j.scitotenv.2012.02.018.
- 5 We used a quarter mile distance in urban areas while for the statewide calculation we used a one mile distance to take into account the lower population density in rural areas. These distances were chosen to reflect common, and understandable, measures of proximity because there is a limited, and inconclusive, literature evaluating distances and health risks. Additionally, some pollution is regional and can impact populations not immediately proximal.
- 6 This includes wells classified in DOGGR's "AllWells" database as New and Active Oil and Gas wells. Active Oil and Gas wells include wells not plugged according to DOGGR's standards and therefore may be sites for new stimulation or act as conduits for pollution. The classification may differ from the *WellStatus* code in the same database.