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## FRACKING STUDY CLEARS WAY FOR OIL, GAS LEASES

Report shows limited environmental impacts; permits to resume for federal lands in state

By U-T staff & wire services Aug. 30, 2014

The U.S. Bureau of Land Management has announced that it will resume issuing oil and gas leases next year for federal lands in California after a new study found limited environmental impacts from fracking and other enhanced drilling techniques.

The report, the first step in an environmental review of the oil extraction process known as fracking, acknowledges that it lacks data to fully evaluate the risks of the procedure. It did note the potential for environmental and public health problems, such as the use of toxic chemicals in the extraction technique, the chance that certain byproducts could infiltrate groundwater and the possibility that contaminated wastewater could be mixed with irrigation water.

"In California, hydraulic fracturing is occurring at relatively shallow depths and presents an inherent risk for fractures to intersect nearby aquifers if they contain usable water," the report's authors wrote. The California Council on Science and Technology, a nonpartisan research group created by the Legislature, conducted the analysis for the BLM.

Currently, energy companies are interested in using fracking to unleash reserves along the state's Central Coast and the San Joaquin Valley.

But the numerous risks cited in the new study require more evaluation, said Kassie Siegel, director of the Climate Law Institute of the Center for Biological Diversity, which sued the bureau for failing to scrutinize the environmental effects of fracking.

"To release this report, which actually finds very grave risks for fracking, and for the BLM director to announce that it's the basis for resuming fracking is really quite outrageous," Siegel said.

The Western States Petroleum Association said it was still reviewing the study, but generally described the document as a useful reference in the debate over fracking.

"Public discussion on all aspects of well stimulation in California helps ensure the debate on hydraulic fracturing is fully informed, properly balanced and inclusive," the association said in a statement.

The BLM announcement could end a halt that has stood since a federal judge ruled last year that the federal agency failed to follow environmental laws in allowing fracking on public land in Monterey County.

Siegel said resumption of leases would be premature, and that under the court decision, the agency cannot resume authorization for fracking until it completes a full environmental impact statement.

The petroleum association's statement did not address that point of contention.

In the study, released Thursday, researchers concluded that the current level of fracking and other so-called well-stimulation techniques used by drillers to get more oil out of rock formations did not seem to be poisoning water supplies or increasing earthquake risks in the state.

That's partly because these methods in California differ from those in some other states, the researchers wrote.

Fracking involves extracting oil and gas from rock by injecting high-pressure mixtures of water, sand or gravel and chemicals. Drilling in California typically uses less water and a greater concentration of chemicals in fracking, and it's shallower, the researchers said. California's distinctive geology also limits some impacts of fracking, they concluded.

But the scientists also noted that those differences in technology and geology make it difficult to apply safety studies conducted in other states to extraction scenarios in California.

Jane Long, who led the steering committee that oversaw the study, acknowledged in a phone call with journalists that researchers had drawn their conclusions while lacking some key information.

The oil and gas industry, for example, is not required to disclose all the chemicals, including toxic ones, used in fracking, although a California law that will go into effect next year mandates such disclosure.

"The conclusions we reached are based on the data available," Long said. "We recognize the data is incomplete."

Researchers also cast doubt on projections by the U.S. Energy Information Administration on potential oil reserves in California's Monterey Shale, a geological formation that's drawn much interest from oil and gas companies. Early projections of massive amounts of oil in the shell were highly skewed, and more examination is needed before reaching any conclusion, the study said.