

## LATEST ANALYSIS

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## New Study Finds that Hydraulic Fracturing is Safe

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People who are concerned about the safety of hydraulic fracturing should rejoice that a new study confirms that there is (<http://reason.com/blog/2012/02/17/fracking-doesnt-harm-drinking-water-stud>) “no direct evidence that fracking itself has contaminated groundwater.” Hydraulic fracturing is not perfect, but it obviously has a very safe track record when we consider that hydraulic fracturing has been used over 1.2 million times, for over 60 years, and there is no direct evidence that it has contaminated groundwater.

According to *Science Now* (<http://news.sciencemag.org/sciencenow/2012/02/mixed-verdict-on-fracking.html?ref=hp>), here’s what the study found:

As part of the review, 16 researchers at UT Austin in a variety of fields including air quality and hydrology reviewed the scientific literature and regulatory documents for three major areas of fracking in Texas, Louisiana, and Pennsylvania and New York. They could not find evidence of drilling fluids leaking deep underground, and methane in water wells in some areas is probably due to natural sources. The team did not see a need for new regulations specific to fracking, but for better enforcement of existing regulations of drilling in general—such as those covering well casing and disposal of wastewater from drilling.

The UT study’s findings are significant for the energy sector, because hydraulic fracturing is driving an oil and natural gas boom in the United States. For example, the rapid increase in [oil production in North Dakota](http://instituteeforenergyresearch.org/2012/02/11/north-dakotas-oil-production-increases-by-55-in-one-year/) (<http://instituteeforenergyresearch.org/2012/02/11/north-dakotas-oil-production-increases-by-55-in-one-year/>) is a direct result of the use of hydraulic fracturing in underground shale

formations. When the latest oil production numbers come in, they will likely show that North Dakota has surpassed California as the third largest oil producing state in the U.S.

That was not the case a few years ago. In 1995 the U.S. Geological Survey (USGS) estimated that the Bakken formation held 151 million barrels of technically recoverable oil. But in 2008, after the impact of hydraulic fracturing and direction drilling were included in the USGS's assessment, the estimate of recoverable oil in the Bakken jumped 25 fold (<http://www.usgs.gov/newsroom/article.asp?ID=1911>).

While the new study on hydraulic fracturing did not find any direct evidence of contamination from hydraulic fracturing, the researcher did not give oil and gas drilling a 100% clean bill of health. The researchers found that some contamination has occurred near the surface when gases and drilling fluids escape from poorly lined wells or storage ponds. As noted above, the researcher saw this contamination as a reason to have better enforcement of regulations currently on the books instead of new regulations concerning hydraulic fracturing.

In sum, as the lead researcher, Charles Groat, told reporters (<http://www.foxnews.com/scitech/2012/02/20/frackings-effects-on-groundwater-may-be-overblown-study-shows/>):

"Shale gas has lots of stories to tell," Groat said. "It's a great resource for this country and many other parts of the world. It's a game-changer in terms of the energy balance. We think it can be regulated effectively and is being done so largely, but certainly there are evolving issues that need more serious attention paid to them."

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