

Insight

'Fracking' Essential To Future

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Mora County Commissioner John Olivas wants a ban on oil and gas drilling in Mora County because he is concerned with the environmental impact of a drilling process named hydraulic fracturing – or "fracking," as it is colloquially called.

Mora County is not alone in its concern about fracking. Santa Fe, Rio Arriba and San Miguel counties have halted or discouraged drilling and fracking with ordinances and moratoriums.

Fracking involves a process wherein, once a well has been drilled to hydrocarbon-bearing rock (usually shale), the rock is blasted by a mixture of water, sand and chemicals. Fractures in the rock then allow the trapped gas or liquids to make their exit.

Why are county commissioners in New Mexico jumping on the "ban wagon"?

Maybe they have been watching too many Michael Moore-like documentaries on Netflix. An Oscar-nominated documentary, "Gasland," says that fracking contaminates our water supply with chemicals. In the movie, some homeowners set their tap water on fire. Industry experts maintained that the film was fraught with errors and misinformation, but nevertheless it dealt fracking something of a blow.

The movie got a lot of attention (maybe Commissioner Olivas'?), but the movie's arguments against fracking turn out to be deceitful.

Apparently, the dramatic tap water blaze had little to do with fracking. In many parts of America, there is enough methane in the ground to leak into people's well water. The best fire scene in the movie was shot in Colorado, where the filmmaker is in the kitchen of a man who lights his faucet.

But Colorado investigators went to the man's house, checked out his well and found that fracking had nothing to do with his water catching fire. His well-digger had drilled into a naturally occurring methane pocket.

It's not overstating the case to say that unconventional hydrocarbons have shifted the world's energy balance of power. The "shale gale" has spread the wealth around. Vast volumes of hydrocarbons are not just Middle Eastern plays anymore.

This shift has been enabled by new technology, revolutionary, really. Across the world, we've seen vast, stunning improvements in applied mathematics and computational abilities. Just on that basis along, today's energy industry works with much-better exploration tools than in the past, better seismic and geochemistry.

Then there are new dramatically improved capabilities in directional drilling, with better drill bits and better fluids. After the holes are drilled, there's fracking. The modern energy industry has more powerful pumps, more control of down-hole pressures and even better nanomaterials for holding the cracks open in the fractured shale and other tight rocks. What's more, there are better post-completion treatments.

Here, in the U.S., the shale gale has eliminated the need for liquefied natural gas imports, likely for several decades and perhaps longer. In addition, the shale gale has the potential to significantly reduce Russia's influence over the European natural gas market. At the same time, the shale gale will dramatically diminish the "petro power" of other major OPEC players, such as Iran and Venezuela.

Fracking plays a very important role in energy production nationally and in New Mexico.

A recent report from the American Petroleum Institute concluded that if Congress were to place additional federal regulations that govern the oil and gas industry practice of fracking, the number of new U.S. wells drilled would plummet 20.5 percent over a five-year period.

The oil and gas industry provides significant revenues to the state of New Mexico and local municipalities. For fiscal 2010, oil and gas revenue payments in the form of taxes, royalties and other revenues totaled nearly \$2.2 billion – that represents a 27 percent contribution to the state's general fund.

Natural gas is not risk-free, but no energy source is. Perfect is not one of the choices, Commissioner Olivas.

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