

Study finds communities need to be proactive about fracking

July 29 2016

What are communities doing to address the potential adverse effects of fracking? Not a lot, according to the results of a new study.

Fracking, horizontal high-volume [hydraulic fracturing](#) is a process that forces a mixture of water, sand and chemicals under high pressure deep into the ground to extract oil and natural gas in shale rock formations. Fracking has allowed the United States to become a net energy exporter, but has created substantial problems for local communities hosting fracking operations.

Authors Carolyn G. Loh, associate professor at Wayne State University, and Anna C. Osland, founder and principal of Anna C. Osland Consulting, surveyed 140 local governments in four states with very active fracking: Colorado, Louisiana, North Dakota and Pennsylvania. The authors set out to determine the kinds of policies these local governments adopted to address the negative impacts of fracking and the role organizational capacity had on how local governments deal with fracking.

In "Local Land Use Planning Responses to Hydraulic Fracturing," Loh and Osland found that the most common local government response was no response at all. Fifty-four of the communities surveyed had not adopted any regulations to address any of the problems caused locally by fracking activities.

Of survey respondents that have adopted regulations, the five most

common local policies were:

1. Restricting the location of industrial activities;
2. Mandating fencing and landscaping around fracking sites;
3. Preventing vehicles used in fracking operations from traveling on certain roadways;
4. Requiring special use permits for drilling sites; and
5. Establishing setbacks for the compressor stations associated with fracking options.

While the environmental impacts of fracking are hotly debated, fracking can also have a positive impact on local economies. Pros and cons aside, fracking operations can create substantial management problems for local governments and expose local residents to serious health, safety, and environmental hazards. This leaves local communities that might or do host such operations "scrambling" to address fracking, not trusting the state or federal government to protect them.

The authors found that communities could use existing land use, noise and zoning restrictions to regulate fracking operations to some degree, even though survey respondents reported concern there was little they could do to address local fracking impacts.

Communities with more capacity—more knowledge and experienced technical staff—as well as those that had experienced a fracking-related industrial accident were more likely to have adopted some regulations to either prevent or address fracking issues.

Loh and Osland conclude that [local governments](#) do have some room to regulate local fracking operations. They recommend that states invest in providing capacity building at the local level, offering technical assistance and training to local planners and administrators. The authors stress that communities should be proactive and not wait for an industrial

accident or the cumulatively greater environmental, health or economic costs that fracking imposes on [local communities](#) to add up.

More information: Carolyn G. Loh et al. Local Land Use Planning Responses to Hydraulic Fracturing, *Journal of the American Planning Association* (2016). [DOI: 10.1080/01944363.2016.1176535](https://doi.org/10.1080/01944363.2016.1176535)

Provided by Taylor & Francis

Citation: Study finds communities need to be proactive about fracking (2016, July 29) retrieved 26 April 2024 from <https://phys.org/news/2016-07-proactive-fracking.html>

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