Researchers: North Carolina Should Weigh Drilling, Fracking Risks
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Lawmakers in North Carolina should consider several health and environmental measures as they weigh the legalization of horizontal drilling and hydraulic fracturing (fracking) in their state, researchers at Duke University said in a new report.

In 2009 the North Carolina Geologic Survey said there is shale gas underlying the Deep and Dan river basins in 12 counties, including Lee, Chatham and Moore, the researchers noted. Following mineral rights leasing by several "small companies," Gov. Beverly Perdue signed into law a measure directing the state’s Department of Environment and Natural Resources to hold public hearings on horizontal drilling and fracking. A report is due to lawmakers by May.

"North Carolina has no active oil and gas production and no comprehensive regulatory framework for this industry," the Duke researchers said in their report. "North Carolina law has long prohibited both horizontal drilling and underground injection of waste products. While these laws were implemented before the use of hydraulic fracturing to produce natural gas, the current law creates a de facto ban on hydraulic fracturing in the state."

The report, "Considering Shale Gas Extraction in North Carolina: Lessons Learned in Other States," which has been accepted for publication in the Duke Environmental Law and Policy Forum journal, looks at potential environmental hazards and how lawmakers in other states are factoring health and environmental risks into regulatory approaches.

"If North Carolina legalizes shale gas extraction, we need to consider what's worked best in other states and avoid what hasn't," said Rob Jackson, Nicholas professor of global environmental change at Duke's Nicholas School of the Environment. "That's the only way to get it right."

Duke researchers said if legislators allow hydraulic fracturing, they should consider seven measures:

- Securing baseline data on groundwater prior to shale gas production and at each stage of the drilling process;
- Funding for regulatory programs and an agency to carry them out;
- Planning for withdrawals from area water supplies related to gas production;
- Minimizing the risks of spills and contamination caused by equipment failure and human error by implementing safety requirements;
- Thinking through options for the disposal and treatment of wastewater resulting from fracking;
- Assessing the impacts on air quality and assuring attainment of federal ground-level ozone standards; and
- Requiring some degree of disclosure of the chemicals used in fracking fluids.

"Lawmakers have the unique opportunity to decide whether or not hydraulic fracturing is appropriate for the state," said Jonas Monast, director of the climate and energy program for the Nicholas Institute for Environmental Policy Solutions. "Before making a decision, we need to understand the full range of potential economic, environmental and health impacts."

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