

The field of the poor may yield much food, but it is swept away through injustice.
~ Proverbs 13:23

The Rural Life Committee of the North Carolina Council of Churches has lifted up the voices of rural North Carolinians for decades. United in an ecumenical spirit and driven by a hunger for justice, we the members of the Rural Life Committee celebrate God's gifts of rich land and clean water. We celebrate the good stewardship of that gift by generations of farmers. We support just and fair options for farmers, and we recognize that our actions affect people across the globe. We are living in an age that has seen dramatic increases in the demand for cheap energy, but we are reminded that many rural communities and their lands still bear the scars of exploitation from this increased demand. Any solution to society's energy needs must honor rural communities, for there simply is no future without clean water and productive soil. We are committed to promoting thriving rural communities, and we stand in a long tradition of working for peace and justice across the state.

Concerns over Shale Exploration and Hydraulic Fracturing

Hydraulic fracturing, or "fracking", is a natural gas extraction process using high-pressure fluids to open up fractures in gas-bearing rock formations.¹ This unconventional extraction method involves first drilling a gas well vertically and then drilling horizontally for up to a mile through a layer of gas-bearing shale rock to access natural gas. Millions of gallons of water mixed with sand and chemicals are then pumped at high pressure into the rock, causing it to break apart releasing the methane gas that is trapped in tiny pockets in the shale.²

Hydraulic fracturing has been used extensively in the midwest and northeast United States and has had detrimental impacts on rural communities. Out-of-state gas industry landmen are now coming to North Carolina as recently studied shale basins are believed to contain natural gas deposits.³ These salesmen are going door-to-door giving a one-sided story of the potential impacts of gas drilling and offering unfair contracts to landowners. Rural landowners are the target of these industry activities and based on the geography of the shale basins in North Carolina, rural landowners and farmers are most likely to be negatively impacted by gas drilling in North Carolina.

There are countless stories across the country of rural residents' quality of life being impacted from natural gas exploration, such as the Parr family:

"Bob, Lisa and Emma Parr live in Wise County Texas surrounded by 21 gas wells. Shortly after moving to the area, Lisa's excellent health began to

¹ Cornell University Cooperative Extension. 2008. [*Gas Exploration and Leasing On Private Land: Tips and Guidance for New York Landowners.*](#)

² King, Brandon, and Feitshans, Theodore A. 2010. [*Frequently Asked Questions about Oil & Gas Leasing and Production in North Carolina: What Every Landowner Should Know*](#) (draft). North Carolina Cooperative Extension Service.

³ Reid, Jeffrey C. and Taylor, Kenneth B. 2009. [*Shale Gas Potential in Triassic Strata of the Deep River Basin, Lee and Chatham Counties, North Carolina with pipeline and infrastructure data.*](#) North Carolina Geological Survey, open-file report 2009-01.

deteriorate. She began having breathing difficulties, nausea and headaches. She had violent rashes from the top of her head to the bottoms of her feet that have left her body scarred with pockmarks. Six doctors could not find anything physically wrong. She even had a biopsy of the oozing welts on her scalp and the four ping pong size lumps on her neck. When Lisa started having balance and other neurological problems her doctor recommended she see an environmental specialist whose tests detected chemicals in her blood and lungs...After receiving Lisa's test results, her doctor advised them to leave their home within 48 hours. They are now living at in Bob's office space where there is no drilling nearby. Their health is greatly improved.”⁴

Natural Gas Drilling in North Carolina

Natural gas deposits have been found under fourteen counties in central North Carolina.⁵ These areas have rich agricultural history, but since March 2010 natural gas companies have started targeting rural landowners in an attempt to lease mineral rights for future natural gas exploration and drilling. The largest basin, the Deep River Basin, runs from Granville to Moore County. Natural gas resources are believed to be most extensive and easily accessible in northwestern Lee County along the Deep River where the shale rock runs all the way to the surface.

Potential Impacts

The experiences of farmers and landowners affected by hydraulic fracturing in other parts of the country raise a number of concerns over the impacts of this controversial extraction method:

Impacts on farmland and rural infrastructure- Although drilling is underground, well pad development and gas exploration would dramatically change rural landscapes. Natural gas exploration requires infrastructure development such as access roads, well pads and compression stations.⁶ These developments would fragment agricultural fields, timber resources, and hunting areas. Significant increases in around-the-clock truck traffic on rural roads also pose concerns over the impacts on rural infrastructure.

Few economic benefits- Despite claims by the natural gas industry that gas production creates local jobs and benefits the local economy, there is little research supporting these arguments. The Institute for Public Policy & Economic Development reported “There were some pockets of manufacturing growth, but the counties in the study area (Midwest and Northeast U.S.) did not appear to have expansive job or industry growth...[t]he drilling industry uses both its own

⁴ EarthWorks: <http://earthworksaction.org/TXOGAP-CaseStudy-Parr.cfm>

⁵ Reid, Jeffrey C. and Taylor, Kenneth B. 2009. *Shale Gas Potential in Triassic Strata of the Deep River Basin, Lee and Chatham Counties, North Carolina with pipeline and infrastructure data*. North Carolina Geological Survey, open-file report 2009-01.

⁶ Cornell University. 2010. [Natural Gas Development: Frequently Asked Questions: Local Government and Community Impacts](#).

employees and sub-contractors.”⁷ This supports landowner accounts that drilling companies bring in non-local workers for gas development rather than hiring and training local workers. A recent study from Cornell University also questions the claim of long-term economic benefits from mineral extractive industry such as the gas and oil industries:

“[T]he experience of many economies based on extractive industries is a warning that their short-term gains frequently fail to translate into lasting, community-wide economic development. Most alarmingly, in recent decades credible research evidence has grown showing that resource dependent communities can and often do end up worse off than they would have been without exploiting their extractive sector reserves.”⁸

Water contamination- Countless stories of methane gas migrating into family wells and fracking fluid spills impacting rivers and streams have been documented by rural landowners across the county. Hydraulic fracturing technology currently uses a combination of over six hundred possible toxic chemicals to fracture rock formations. These cases of water contamination are rarely acknowledged by natural gas companies but raise concerns over the potential impacts of fracking on water resources.

Water use- There are significant concerns over where the water needed gas drilling will come from and how it will impact other water dependent industries such as agriculture. Drought is common in North Carolina and hydraulic fracturing is a water-intensive process requiring 3-5 million gallons of water to frack a well the first time.⁹ Wells can be fracked up to 8 times, requiring additional water resources.

Impacts on health- Spilled fracking fluid, exposure to methane in drinking water,¹⁰ air pollution from increased truck activity, and toxic fumes from gas compression stations are all ways that natural gas exploration can potentially impact public health. Leaked fracking fluid impacting family water supplies is a significant concern, especially because not all of the chemicals (and their health impacts) used in fracking fluid have been disclosed by gas companies to the public. The Endocrine Disruption Exchange, founded by Dr. Theo Colborn, has done extensive research on 362 known fracking fluid chemicals (out of the 649 chemicals that are believed to be used but have not been disclosed to the public) and published the following information:

⁷ Economic & Workforce Development Study – Marcellus Shale:
<http://www.institutepa.org/PDF/Marcellus/edwfd032011.pdf>

⁸ The Economic Impact of Marcellus Shale Gas Drilling: What Have We Learned? What are the Limitations?: http://www.greenchoices.cornell.edu/downloads/development/marcellus/Marcellus_Kay.pdf

⁹ Rogers, Michele, et al. 2010. [Marcellus Shale: What Local Government Officials Need to Know](#). Penn State

¹⁰ Osborn, Vengosh. 2011 Methane contamination of drinking water accompanying gas-well drilling and hydraulic fracturing. <http://www.pnas.org/content/108/20/8172.full>

“Over 78% of the chemicals are associated with skin, eye or sensory organ effects, respiratory effects and gastrointestinal or liver effects. The brain and nervous system can be harmed by 55% of the chemicals. Other effects including cancer, organ damage, and harm to the endocrine system, may not appear for months or years later. Between 22% and 47% of the chemicals were associated with these possibly longer-term health effects. 48% percent of the chemicals...[cited] the ability of the chemical to cause death.”¹¹

Other environmental impacts-Development for natural gas extraction requires building access roads, well pads, compression stations and other infrastructure through wildlife areas, leading to habitat fragmentation and increased erosion.¹²

Fraud and Predatory Leases

Mineral rights leases negotiated between gas companies and landowners determine the extent of drilling impacts on land and water resources as well as payment terms, how long drilling activities will take place, and compensation to landowners for any damages to their property. The lease contracts currently offered by several companies in North Carolina do not adequately compensate landowners for their resources and provide few standard property protections for citizens.¹³ These predatory mineral rights leases put financial liabilities, such as the costs for well pad development, the water needed for drilling, and environmental restoration on the landowner rather than the gas company.¹⁴

There are also concerns that several gas companies are not registered to do business in North Carolina and are not properly filing lease paperwork. These predatory business practices are exploiting North Carolina citizens' lack of experience working with gas companies and ultimately are putting landowners at financial risk.

Protecting Personal Property and Rural Communities

Hydraulic fracturing is a controversial unconventional gas extraction method that prolongs our country's dependence on fossil fuels. Furthermore, this industry poses risks to farmland, water resources, and the environment while the economic benefits for communities are inconclusive. The cost of protecting land and water resources and personal property is the responsibility of the gas company drilling for natural gas and should not be placed on landowners. Rural landowners and farmers in North Carolina shale-bearing counties are not well informed of the potential risks of hydraulic fracturing to their land, and gas companies are not providing objective information about these

¹¹ Summery statement for “Natural Gas Operations from a Public Health Perspective 2010.

<http://www.endocrinedisruption.com/files/Multistatesummary1-27-11Final.pdf>

¹² King, Brandon, and Feitshans, Theodore A. 2010. [Frequently Asked Questions about Oil & Gas Leasing and Production in North Carolina: What Every Landowner Should Know](#) (draft). North Carolina Cooperative

¹³ 2008. [Gas Leasing Scams and Rip-Offs: Ways to Separate You from Your Property Rights and Money](#). Penn State College of Agricultural Sciences Agricultural Extension.

¹⁴ King, Brandon, and Feitshans, Theodore A. 2010. [Frequently Asked Questions about Oil & Gas Leasing and Production in North Carolina: What Every Landowner Should Know](#) (draft). North Carolina Cooperative

potential risks. Natural gas exploration and extraction should not be developed at the expense of putting rural landowners and farmers in North Carolina in financial risk. Farmers and rural landowners should have access to objective information on the potential impacts of natural gas exploration and extraction so that citizens can make informed decisions about the future of their property.

Conclusion

The experiences of landowners in other states indicate that hydraulic fracturing can have profound negative impacts on rural communities. The Rural Life Committee of the North Carolina Council of Churches supports the current ban on hydraulic fracturing in North Carolina. The above concerns need to be addressed with careful attention to landowners' property, landowners' rights, and the care for creation's gifts. Furthermore, we call on our member bodies and faith leaders to share reliable information about hydraulic fracturing with their communities. We believe that we are called by God to be good stewards of the good gifts of community, health, water and soil. Trusting in God, we refuse to trade this bountiful inheritance for the empty promises of energy that may be cheap in terms of dollars but which we know will be costly in terms of our livelihoods.