

The Rivertown Coalition for Clean Air and Clean Water



Upper Susquehanna Lutherans (ELCA) Pass “Fracking” Resolution

The Evangelical Lutheran Church in America’s Upper Susquehanna Synod at their Synod Assembly on June 16 passed two resolutions and a memorial to their national church body concerning horizontal slickwater hydraulic fracturing by the natural gas industry, commonly known as “fracking.” One resolution involved the formation of a task force to assess public health and safety, justice issues, ecological and environmental situations, including air and water pollution, impacts on local communities as to crime, violence against women, housing problems, etc. The second resolution calls for a moratorium against issuing further permits till these problems are addressed. A memorial, the third move taken, requests that the ELCA, the national church, also establish a task force to study the issue of hydraulic fracturing.

EXPLAINING DEEP INJECTION WELLS' LINK TO EARTHQUAKES

Natural gas drilling is causing earthquakes.

It's not hydraulic fracturing – or fracking – that's causing the tremors, but rather the deep injection wells that deposit used fracking fluid, brine and chemicals deep underground. How does this happen? As NPR explains, the fluid can act as a catalyst when it comes into contact with a fault. These waste wells are filled with water, and seismologist Cliff Frohlich at the University of Texas says that water affects a fault the way air does a puck in an air hockey game.

“The minute you put air on, it floats — the puck still weighs the same, but there's no friction to keep it from going horizontally,” Frohlich says.

“The same thing can happen on a fault. “The high water pressure basically separates a fault that has locked in place; the fault moves and creates a quake.

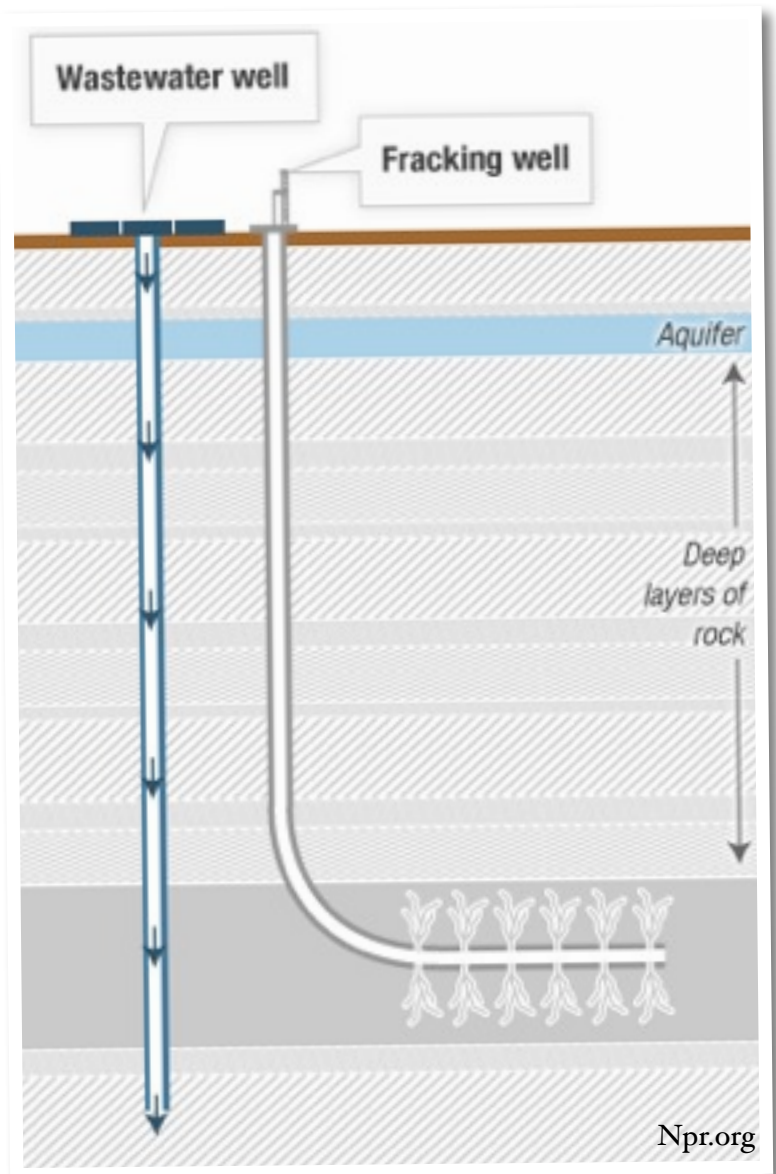
The more scientists study these induced quakes, the more they find. Frohlich has studied a “swarm” of 183 small quakes near Dallas that took place in 2008 and 2009. That's right next to one of the largest oil and gas plays in the country.

The United States Geological Survey is confident injection wells are tied to the recent uptick in tremors experienced by the Midwest.

Pennsylvania, of course, is in the midst of a natural gas drilling boom. But while the number of shale wells continues to rise here, there aren't that many deep injection wells in the Keystone State. That's because Pennsylvania doesn't have the porous geology to support wells. :

Where does Pennsylvania frack water go, then? More and more is being shipped to Ohio, which hosts 177 injection wells. Since 2009, Ohio has taken in more than 150 million gallons of Pennsylvania waste. (Ohio makes money off of this – it netted \$1.5 million in fees last year.)

A deep injection well near Youngstown has been linked to 12 quakes, including a 4.0 tremor December 31, 2011.



THE SUSQUEHANNA RIVER

Due to the black spots and lesions on small mouth bass, the Fish and Boat Commission and a large part of the populace desire to have the river declared impaired in order to find out what is causing the problem and find some way to do something about it. The quality of the water in the Susquehanna River has been brought into question. Some sources have even listed the river as endangered.

How many people realize that the Susquehanna is one of the three oldest rivers in the world? It, along with the New River in West Virginia and the Fink River in Australia, was flowing before the continents began their continental drift from the land mass Pangaea. For that reason alone it deserves to be protected.

NPR RADIO REPORT (TUESDAY, MAY 22, 2012)

Two drinking water wells on private property near Bradford, PA., are to be vented because of a build up of methane gas in

the water. Also, the wetlands in the area are contaminated with methane. Chesapeake said that they would check their 2,500 wells to see if any of them might be responsible for the problem.

DID YOU KNOW?

Methane as a greenhouse gas is between 60 and 200 times worse than CO₂ (carbon dioxide). Yes, natural gas is clean burning, but getting it through hydraulic fracturing releases methane into air and water, which greatly undermines any benefit achieved from eliminating the CO₂.

GOOD FOR YOUR ENJOYMENT AND HEALTH

The new rails to trails walkway/bikeway between Lewisburg and Mifflinburg is being utilized by many people this summer. Come ! ENJOY!

THE HIGHTOWER LOWDOWN

The Hightower Lowdown, published monthly by Public Intelligence, Inc., in their July, 2012, issue highlighted hydraulic fracturing as their main 4-page article entitled “Oil and gas marauders are destroying our land, water, and communities all over America.” In the article “fracking” is explained, the

Halliburton loophole is discussed (how Dick Cheney had fracking exempted from the Safe Drinking Water Act as part of the 2005 Bush-Cheney energy policy bill), and mentions that fracking is now in 34 states, and how it is touted as the “magic bullet” for our energy problems. They decry the amount of water

used (up to 7 million gallons per well) in a time of drought and water shortages, and getting it from distances with pipelines or trucks, which “create their own sets of environmental, public nuisance, and other costs.” The article deals with the problems of wastewater, and the *cont.*

“radioactive mess,” the leaks and spills, and mentions that some “is actually sprayed on roads as a de-icer—and half is merrily trucked to municipal sewage plants that are ill-equipped to purify it, meaning the nasties are discharged into our rivers and lakes.” The chemicals may be a mere ½ of one percent of the mix but that equals 20 tons of chemicals per million gallons of fracking fluid, the article notes. Twenty-five percent of the 632 chemicals that are used can cause cancer; 37% can disrupt the endocrine system; more than 40% can affect the brain (as well as nervous, immune, and cardiovascular systems); and more than 75% can impair the eyes, intestines, and respiratory systems.

“How Fracking Affects Women.”

Sara Jerving, writer/researcher for the Center for Media and Democracy, writes in Science, Energy:

In her article, Jerving delineates the ways in which fracking may have unique impacts on women. Chemicals used in fracking have been linked to breast cancer and reproductive health problems, and there have been reports of rises in crimes against women in some fracking “boom” towns, which have attracted itinerant workers with few ties to the community.

Not only has the chemical cocktail inserted into the ground been shown to contaminate groundwater and drinking water, but fracking fluid also picks up toxins on its trip down to the bedrock and back up again that had previously been safely locked away underground, such as radioactive elements, like radium. The New York DEC found that the resulting water contained levels of radium-226, some as high as 267 times the limit for safe discharge into the environment and more than 3000 times the limit safe for people to drink.

25% of the chemicals used in natural gas operations have been linked to cancer or mutations

Benzene, which the U.S. EPA has classified as a Group A, human carcinogen, is released in the fracking process through air pollution and in the water contaminated by the drilling process. The

Institute of Medicine released a report in December 2011 that links breast cancer to exposure to benzene.

Up to 37% percent of chemicals are endocrine-disruptors -- chemicals that have potential adverse developmental and reproductive effects. According to the U.S. EPA, exposure to these types of chemicals has also been implicated in breast cancer.

Toxins linked to Spontaneous Abortion and Birth Defects. Certain compounds, such as toluene, that are released as gas at the wellhead and also found in water contaminated by fracking have the potential to harm pregnant women or women wishing to become pregnant. According to the U.S. EPA, studies have shown that exposure to toluene can cause an assortment of developmental disorders in children born to pregnant women, including an increased risk of spontaneous abortion.

Sandra Steingraber, an acclaimed ecologist and author of “Raising Elijah” – notes that if a woman plans “a pregnancy and someone else’s chemicals sabotage that -- it’s a violation of your rights as a woman to have agency over your own reproductive destiny,” and states this is an issue that both pro-life and pro-choice women can support. Crimes Against Women on the Rise in Some Energy Boom Towns. Beyond concerns about cancer and toxins are other societal ills related to fracking that disproportionately impact women. Some areas across the country where fracking has boomed have noted an increase in crime -- including domestic violence and sexual assault. In Dickinson, North Dakota, there has been at least a 300% increase in assault and sex crimes over the past year, which the mayor attributed to the gas boom. The Executive Director of the Abuse & Rape Crisis Center in Bradford County, Pennsylvania, Amy Miller, confirmed that there has been an increase in unknown assailant rapes since the gas industry moved into the region
