



## Fracking White Paper (Georgia HB 205)

Fracking is problematic due to the environmental impacts that affect water, air and land. The issue is deeper than the environment though as the environment is directly linked to human health and this ultimately leads to economic problems as well. Fracking pollutes our air and drinking water, poisons land, hurts communities, worsens climate change and is linked to earthquakes. It is unacceptable that the oil and gas industry profits off of fracking at the US citizens expense.

In the case of fracking for natural gas, one study from Duke University found that 250 billion gallons of water was used to extract unconventional shale gas and oil from hydraulically fractured wells in the United States between 2005 and 2014. During the same period, the fracked wells generated about 210 billion gallons of wastewater. Injecting such vast amounts of water into the earth can also cause minor earthquakes, but greater magnitude ones could occur if there is a pre-stressed fault in the same location.

Another environmental impact is the risk of “slickwater” (a blend of water and added chemicals to improve viscosity) containing harmful chemicals and contaminating water under the ground or migrating upwards through aquifers. This contamination at the development and production stages is extremely dangerous - deep groundwater has a much higher salinity than shallow groundwater, which is fresh, and the two do not mix naturally. In the process of drilling one must be aware of the various aquifers present so the fresh groundwater does not become contaminated by the deeper saline water. The construction of wells in the development stage is the most common method for groundwater and ecosystem contamination when poorly built. A poorly constructed dam gives large potential for fluids to contaminate groundwater and the surrounding environment through fractures in the rock. These are just a few of many plausible negative environmental consequences of extracting shale gas, but some of the most significant environmental impacts even arise from the construction of wells, including accidental spills of oils, drilling muds, and potentially toxic “slickwater”.

Surface mining of oil shale deposits causes the usual environmental impacts of open-pit mining. In addition, the combustion and thermal processing generate waste material, which must be disposed of, and harmful atmospheric emissions, including carbon dioxide, a major greenhouse gas.

Information obtained from the following sources

- Forbes
- Food & Water Watch