Legislation Proposal

Preventing Hydraulic Fracturing



Abstract

Contaminated ground and surface areas, harmful air pollution, and large amounts of toxic waste contribute to environmental health issues. Future oil and gas production using horizontal hydraulic fracturing only creates more contaminants—many of which have been linked to respiratory and neurological problems, birth defects, and cancer. We need to limit hydraulic fracturing in the U.S. to ensure the safety of the public as well as of our natural wildlife.

Youth Perspective

- Wildfires exacerbated by poor infrastructure and climate change have continued to burn throughout California. We as a nation are called to ask ourselves what more we can do to protect our environment, and through it, ourselves.
- We have observed a cultural and governmental shift towards more environmentally friendly policies, including more regulations for fossil fuel usage. However, we are called to do more. It is clear where disregarding the environment has led us, so we need to advocate for change to avoid repeating the same mistakes.
- We are not advocating for the end of hydraulic fracturing altogether, but it is vital to practice responsible fracking. The consequences of reckless fracking lie on everyone's shoulders, as we will be the ones to face the environmental ramifications of contaminated water supplies and increased greenhouse gas emissions.
- Though climate change is often portrayed as fire and brimstone, it is not too late to change.
 Although phrases such as "past the point of return" saturate the climate change debate, the reality is that we are at the point right now. With effective policies and nationwide cooperation, climate change reversal is viable.

Catholic Perspective

"We need a conversation which includes everyone, since the environmental challenge we are undergoing, and its human roots, concern and affect us all."

—Pope Francis

- Landato Si, an encyclical published by Pope Francis, describes how all beings on this earth must care for each other and the resources we partake of; the Pope warns us that if we continue to recklessly waste and misuse resources, we soon will have nothing left to survive. He urges us to be more aware of the environmental degradation we are directly and indirectly responsible for and take concrete actions to remediate our natural environment.
- The Catholic Church brings a distinct perspective
 to the debate about climate change by lifting up the
 moral dimensions of this issue and the needs of the
 most vulnerable among us: that includes young
 people like us, as well as people who are already
 economically disadvantaged.



The Problem

- In California, approximately 5.4 million people (14% of the state's population) live within a mile of one or more oil and gas wells, putting them at risk of contamination. An epidemiological study of more than 400,000 patients of Pennsylvania's Geisinger clinic, done with Johns Hopkins School of Public Health, found a significant association between fracking and increases in mild, moderate and severe cases of asthma (odds ratios 4.4 to 1.5).
- Conventional pipes are often unable to withstand the high pressure of the fracking mixture being injected, with 6% of fracked wells drilled since 2000 showing problems. The Pennsylvania Department of Environmental Protection has confirmed more than 100 contaminated drinking water wells.
- According to the National Park Conservation Association, fracking causes habitat fragmentation, decreases water
 quality and quantity, and increases noise and air pollution. Habitat fragmentation can cause the loss of massive
 amounts of biodiversity due to the destruction of these species's very homes.
- Currently, there exist many opportunities for details regarding the establishment of fracking sites to be missed due to the government's tendency to expedite the review process. Typically, impact statements regarding ecologically sensitive and undeveloped land would take at least two to three years. Fracking is different, a prominent example being the Arctic National Wildlife drilling decision, which was compressed into just over one year.
- Furthermore, research data has at times been altered or disregarded to underplay the potential impact of oil and gas development on the coastal plain, inaccurately depicting the true situations around impacts to native communities, fish and water resources, and other wildlife. The DOI has decided it will undertake no new studies as part of the current review process, despite scientists' concerns that key data is years out of date or doesn't exist.

MAP's Solution

Before confirming future locations for hydraulic fracturing, companies should be screened by a two step vetting process based on underground methane content, proximity to groundwater and protected areas, and the likelihood of seismic activity.

- Companies should avoid areas that have a large probability of either causing ecological damage to protected parks or contaminating groundwater supply.
- 2. After the location is approved, companies should report:
 - a. The seismic and radar data collected while searching for oil
 - b. The probable amount of methane trapped underground
 - c. The likelihood of inducing an earthquake that could affect a certain demographic of people or wildlife

The required seismic data can be obtained from vibroseis trucks, which can recognize the presence of methane and the likelihood and effects of induced earthquakes. If the government approves of the location and the company agrees to such conditions, it can then produce an Environmental Impact Statement (EIS) and get the potential drilling site approved.