

Hydraulic Fracturing Talking Points

All fossil fuels pose risks to Michiganders' health, natural resources like the Great Lakes, and our economic well-being, so developing the cleanest, safest and most sustainable sources of energy should be our state's top energy priority.

- Our energy policy should first and foremost maximize energy efficiency and clean renewable energy sources, such as wind and solar.
- All fossil fuel energy sources like natural gas, coal and oil are fundamentally unsustainable.

High Volume Hydraulic Fracturing (fracking) is a controversial process used to extract natural gas that has caused water and air pollution in other states. It diverts clean ground water out of productive uses and is causing land use conflicts throughout Michigan's lower peninsula.

- In High Volume Hydraulic Fracking, water that has been mixed with sand and chemicals is forcibly pumped down a well to blast open rock fissures to access gas deposits. In Michigan, water use for a single frack job ranges from 3 million to 35 million gallons.
- Shallow fracking has been done in Michigan for several decades and many assurances have been made about its safety, but testing and documentation has been virtually non-existent. A 2001 Lake Michigan Federation report¹ studied 36 oil and gas drilling contamination sites. They found many sites had been contaminated for as long as 35 years without being cleaned up, and eight sites had documented contamination of drinking water.
- New natural gas wells drill much deeper than before (as much as 10,000 feet) and also drill horizontally. This uses a much larger quantity of water (millions of gallons) and chemicals. Once used for Fracking, water is permanently removed from the hydrologic cycle and not able to be recovered.
- To date, over 50 of these wells have been permitted in Michigan, mostly in the northern Lower Peninsula. In the past year, the DNR has leased oil and gas rights on thousands of acres of public lands in Michigan, while the companies have also acquired hundreds of thousands of acres of private mineral rights.
- We should be considering the impact not just of the wells drilled so far in Michigan, but also the impact of drilling on the scale seen in Pennsylvania and Ohio, where thousands of these wells have been drilled.
- The DEQ has not been able to adequately enforce the regulations it already has in place. A 2013 Michigan Auditor General's report² inspecting 187 oil and gas wells from 2009-2012 found the Office of Oil, Gas, and Minerals failed to inspect 13.3% of wells being drilled and 68.5% of producing wells at proper frequencies. The DEQ took from 10 to 48 days to contact responsible parties of violations, averaged 563 days to issue stipulation and consent decrees, and did not enforce and/or routinely extended deadlines. They assessed only 5% of fines and penalties due from documented violations.
- There is clear evidence that natural gas and oil extracted by fracking are major greenhouse gas contributors. Methane released via extraction and transport is 86 times more potent as a greenhouse gas than CO₂. The climate-disruption impacts from methane and carbon dioxide emitted by extraction, transport and burning clearly point to the urgent need of keeping fossil fuels in the ground.

Michigan can't afford to get the fracking issue wrong.

- There have been numerous fracking-related disasters in other states. An 18-month study by Propublica³ found more than 1000 cases of water supply contamination from fracking fluid mishandling during its lifecycle, including spills, well casing failures, transportation accidents, and methane gas migration.
- Half of Michigan residents get their drinking water from groundwater wells, meaning their household's drinking water is at risk of being contaminated by fracking. Michigan has more private water wells than any other state.

¹ Lake Michigan Federation, "The Case Against New Great Lakes Oil & Gas Drilling: Michigan Fails to Clean Up Oil and Gas Pollution," September 2001.

² Michigan Office of the Auditor General, "Performance Audit of the Office of Oil, Gas, and Minerals, Department of Environmental Quality," September 2013.

³ Abraham Lustgarten, "Buried Secrets: Is Natural Gas Drilling Endangering US Water Supplies," Propublica, November 19, 2008.

- Tens of billions of dollars a year are pumped into the economy by water-dependent industries like fishing, boating, and tourism. Countless jobs would be lost if our water was contaminated.
- Michigan is the steward of one-fifth of the world's fresh surface water (the Great Lakes), and we must protect it.

Problems with fracking in Michigan

Lack of Full Disclosure

- The types/amounts of chemicals used in fracking operations are not always shared publicly because companies claim their formulas are trade secrets. The public's right to know what could contaminate our water and harm us should outweigh corporate interests, especially since many fracking chemicals are known carcinogens (cancer-causing).
- Sierra Club calls on the legislature to require oil and gas companies to fully disclose to the public the chemicals used in the fracking process.

Water Issues

- Michigan's water withdrawal law currently exempts oil and gas drillers from complying with rules designed to protect waterways and groundwater sources from depletion.
- Current DEQ rules requiring the use of the Water Withdrawal Assessment Tool as part of the permitting process do not compile the data from these assessments to allow study of the cumulative impacts. The tool was designed to evaluate ongoing or seasonal withdrawals such as agriculture, new municipal wells, or golf courses, but not the large, short-term withdrawals used for fracking.
- The groundwater, once it is mixed with chemicals and sand, is too contaminated to return to the hydrological cycle and is permanently lost. Each frack job can destroy up to 35 million gallons of water.
- Comprehensive baseline testing of nearby ground and surface water sources must take place both prior to drilling and after well completion, whereas current DEQ rules only require testing prior to fracking.
- Sierra Club calls on the legislature to require oil and gas companies to play by the same rules as all others, and remove the exemption to the groundwater withdrawal law. We also call on the DEQ to evaluate and update their tool for determining the impact of proposed water withdrawals on local ground and surface water.

Other Issues

- The permitting process for individual hydraulic fracturing wells does not include public participation or any public notification requirements.
- Counties and townships are currently prohibited from regulating oil/gas wells. This means our communities have no say in the zoning, drilling location, or abandonment of wells.
- The fracking process should require stronger monitoring and controls on flaring, air quality emissions from wells, compressor stations, storage tanks, trucks and generators and silica dust.
- Oil/gas projects release methane which is a major greenhouse gas contributing to climate disasters.
- Fracking operations should have a 1 mile setback distance from schools, hospitals, public parks, day-care facilities and residences.
- Disposal of fracking waste is currently allowed in Michigan landfills, deep injection wells, and aquifers all of which have major environmental implications. In particular, evidence from other states indicates that putting fracking waste in deep injection wells can exacerbate seismic activity.
- Fracking companies should be presumed liable in the event of contamination.

Bottom Line

- The best way to protect public health and natural resources now is to stop fracking and implement safeguards.
- **Sierra Club urges the Legislature to ban fracking in Michigan and to implement strong protections for our water, air and communities.**

Questions for Lawmakers

- Would you support legislation to put a ban on fracking?
- Would you support legislation to establish safeguards on the fracking process?
- What other protections on fracking would you support?