

Fracking

Environmental repercussions. Never taken into account until it's normally too late. Whenever a company or law action is passed the environmental repercussions should always be the first issue considered. This should include the actual environment or habitat in which the act is occurring and the surrounding ecosystems-this includes nature habitats and areas as well as the humans and other animals within the immediate area. When it comes to "Fracking", the government has reformed and increased regulations only after it has become a problem or has affected the environment adversely. "Fracking" as it is known to many is actually a shortened term for Hydraulic Fracturing and it is a very complex practice used by energy companies to "maximize the output of natural gas and oil wells".¹ How this normally works is after the well is drilled a high pressure water pump is put into the ground close to the well and it helps to create fractures in the rock so the gas and oil flow more freely without the pressure of the rock above and around it. The water used however, is not just fresh water and sand, it also contains small traces of other chemicals such as; Acid, Biocide, Surfactant, Friction reducer, etc.² These small traits of chemicals [according to the government and energy companies] is then to be collected in a flow back system, which is when all of the water is recovered by another pipe that has been put into the ground, which then must be put into specified, regulation steel tanks and transported to a proper waste management site.³

In recent year,s however, protocols have not been followed or the process of "fracking" was sold short on its true environmental impact. What has begun to happen is an increase in contaminated water levels, and places exposed to the waste that is either not properly taken care of or is carelessly even left in the ground for long periods of time so it contaminates the ground water. But why should we care? Here in the state of Michigan fracking is a newer concept and form of energy the Government is trying to work with, however in recent years it has been brought to their attention that fracking is in fact going to start to harm the state more than help. Although having a thriving energy industry would be great for the economy, if the fresh water lakes and water supplies become contaminated the tourism numbers to the Great Lakes will be affected and people will start to move out of the state in order to find an area where clean and contamination-free water is available. Along with the human population adversely affected, one must also consider natural environments and the plants and animals this will affect. These toxins could wipe entire species off the map in certain areas and lead to unpleasant mutations in others.

One place in Michigan that has the group Environment Michigan up in arms over fracking is in the Kalkaska County area, where just a "single fracking site contaminated 42

¹ Department of Environmental Quality. "Questions and answers about hydraulic fracturing in Michigan." Accessed February 15, 2014. http://www.michigan.gov/documents/deq/deq-FINAL-frack-QA_384089_7.pdf

² Department of Environmental Quality. "Hydraulic Fracturing of Oil and Gas Wells in Michigan." Accessed February 15, 2014. http://www.michigan.gov/documents/deq/Hydraulic_Fracturing_In_Michigan_423431_7.pdf

³ Department of Environmental Quality. "Hydraulic Fracturing."

million gallons of water.”⁴ This is a big deal because there are fracking sites all over the county and this is a county that is very close to the Grand Traverse Bay area, which means this process is occurring in places very close to the Great Lakes. With the threat of contamination ever present the state continues to add new regulations and rules according to Peter Whitfield’s article, but if previous rules and regulations are not being followed to begin with could this spell disaster for the natural beauty of Michigan and its fresh water lakes?⁵

What I propose to look at is how this process as either helped or harmed the state as a whole, how Kalkaska County has been affected as one of the largest fracking centers in the state, as well as the adverse effects of fracking as a whole.

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⁴ Environment Michigan. “Keep the Great Lakes Safe from Fracking.” Accessed February 15, 2014. <http://www.environmentmichigan.org/programs/mie/keep-great-lakes-safe-fracking>

⁵ Peter C Whitfield, “Michigan to Implement New Fracking Rules in 2014,” *Mondaq Business Briefing* (November 2, 2013): http://0-infotrac.galegroup.com.catalog.lib.cmich.edu/itw/infomark/99/535/20898185w16/purl=rc1_GBFM_0_A347959419&dyn=3!xrn_1_0_A347959419?sw_aep=lom_cmichu