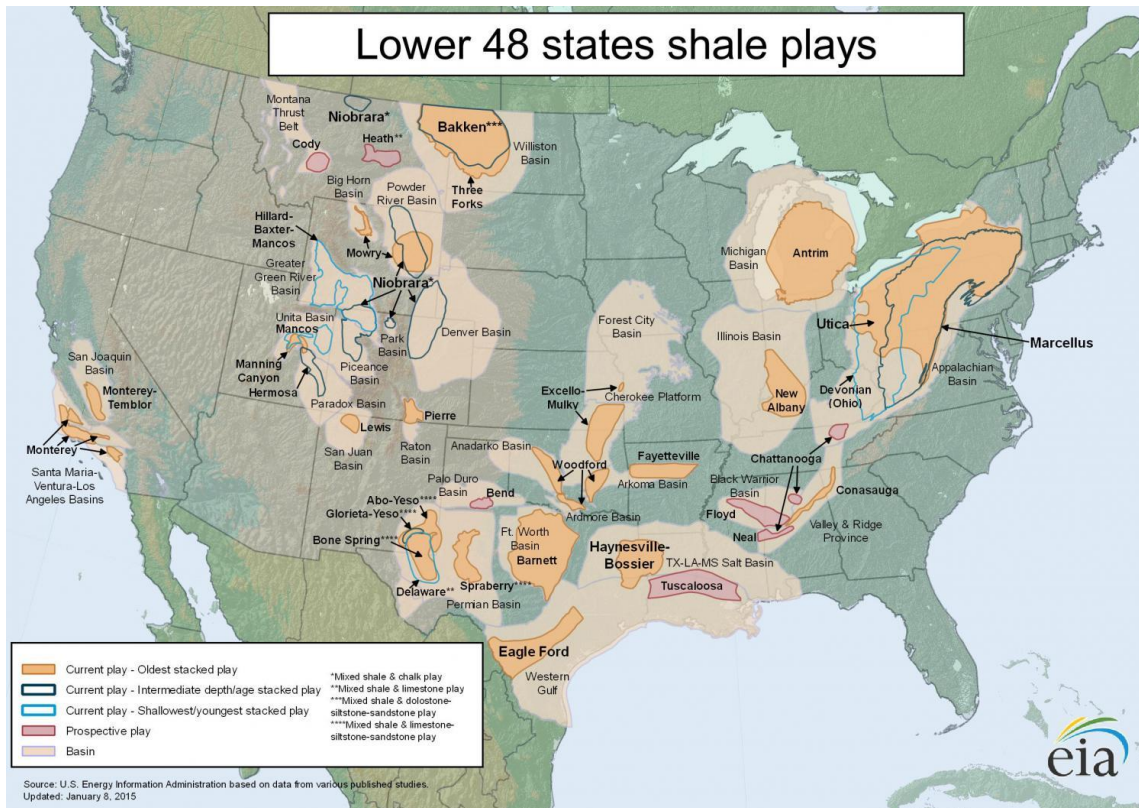


## Is shale gas the solution to our energy woes?

Shale gas is natural gas that is found trapped within shale formations and it has become an increasingly important source of natural gas in the United States. Shales are fine-grained sedimentary rocks that can be rich sources of petroleum and natural gas. Over the past decade, the combination of horizontal drilling and hydraulic fracturing has allowed access to large volumes of shale gas that were previously uneconomical to produce. Would shale gas be the solution to our energy woes? Consider this topic from different perspective (economic, social, environmental, etc.). Explain your answer.



Distribution of the shale plays (shale formations) in the lower 48 states. Created by the Energy Information Administration

Shale Fracking and its impact on the environment is one of the questions I asked when looking at whether this would be a good way to solve our energy woes. In reading two articles on the impact of shale fracking, one by Greenpeace "Fracking Environmental Impact: Water" and "The Environmental and Social Impacts of Natural Gas Fracking" from Forbes but originally on Quora. I really don't believe this is a way to go. Here is why: first the amount of water used to frack the shale is massive, plus the amount of chemicals used are unknown, how much is seeping into the drinking water, and what happens to the wastewater once the fracking process has been done.

In the article by Greenpeace, the amount of water used in this process “in 2010 the US EPA estimated 70 to 140 billion gallons of water were used to fractured just 35,000 wells in the United States more than was used by the city of Denver Colorado in the same period”. This is just a small portion of the wells being drilled every year. The fracking companies to save money use water close to the source of their drilling, thus impacting the environment around them, such as in Texas who at the time of the article was going through a drought, which caused the citizens to be restricted on water useage, the landscape was wilting and animals were dying.

The chemicals used are toxic even though individually they are not always known “A 2011 [report to Congress](#) estimated that from 2005 to 2009, 14 leading fracking companies used (before mixing with water) 780 million gallons of 750 different chemicals. (House Energy and Commerce Committee, Minority Staff Report, “Chemicals Used in Hydraulic Fracturing,” April, 2011)” Many of the chemicals used are not only toxic but also are a cause of cancer. To say nothing about how much of these seep into the groundwater we use for our water supplies.

An example of what happens when the companies dispose the wastewater stated in this article, the company spread the wastewater on a patch of West Virginia, the ground vegetation died within days, many of the trees died within two years. If this wastewater is doing this amount of damage to our ecosystem this makes the process totally not worth the cost.

According to the article by Quora, the cost to use Fracking to gain Natural Gas suggests it costs the taxpayers four times the amount of the benefits gained by this process.

Works Cited:

Fracking's Environmental Impacts: Water. (n.d.). Retrieved November 26, 2018, from <https://www.greenpeace.org/usa/global-warming/issues/fracking/environmental-impacts-water/>

Quora. (2017, April 17). The Environmental and Social Impacts of Natural Gas Fracking. Retrieved November 26, 2018, from <https://www.forbes.com/sites/quora/2017/04/17/the-environmental-and-social-impacts-of-natural-gas-fracking/#36b64ec71a76>