

PAVILLION AND THE EPA THE FACTS

The town of Pavillion, Wyo., has become a flashpoint in the debate over hydraulic fracturing, premised chiefly on a single draft Environmental Protection Agency (EPA) report from December 2011. The report theorized a link between hydraulic fracturing and water contamination, but criticism of EPA's work from state and federal officials, as well as subsequent testing, suggest EPA's original theory was inaccurate.

FACT: Since at least the 1960s, the U.S. Geological Survey (USGS) has documented poor water quality in the Wind River Formation, over which Pavillion sits. The reasons vary from naturally-occurring compounds to pesticide and agriculture runoff.

- USGS, 1991: "Dissolved-solids concentrations in all water samples ... were 2 to 14 times greater than the Secondary Maximum Contaminant Level of 500 mg/L set by the EPA." ([page 103](#))
- USGS, 1989: "The ground water in Fremont County was **ranked the fourth most vulnerable to pesticide contamination in Wyoming**. ... Six of the 18 focal pesticides and 1 non-focal pesticide were detected in Fremont County. At least one pesticide was detected in 13 of the 20 wells sampled in Fremont County." ([USGS fact sheet](#); emphasis added)

FACT: EPA's report on water quality in Pavillion has been criticized by Wyoming state regulators and the U.S. Bureau of Land Management (BLM), and subsequent USGS testing uncovered different results.

- Don Simpson, a high ranking official for BLM, suggested EPA's testing could have introduced "[bias in the samples](#)," adding that the data "should **not be prematurely used as a line of evidence** that supports EPA's suggestion that gas has migrated into the shallow subsurface due to hydraulic fracturing or improper well completion until more data is collected and analyzed."

FACT: Due to concerns over EPA's methods, the agency agreed to retest the wells, and the U.S. Geological Survey was brought in to do its own sampling.

- Upon release of USGS's results, EPA prematurely declared that the findings were "generally consistent" with its own. In reality, more than 50 separate measurements from the USGS [differed from EPA's results](#). The USGS also effectively disqualified one of only two monitoring wells used by EPA, due to low flow rates and poor construction.

FACT: Pavillion's drinking water wells are typically less than 300 feet deep, because state officials know drilling deeper could result in striking one of the area's shallow hydrocarbon deposits. But EPA officials drilled its two monitoring wells to almost 1,000 feet.

- EPA's theory absolutely hinges upon the detection of hydrocarbons in those monitoring wells, but you would expect to find hydrocarbons in a monitoring well that was **drilled below the aquifer and into a hydrocarbon reservoir**. Fittingly, the test results from the area's shallow drinking water wells [don't match](#) what the EPA claims it found in the deep monitoring wells.

FACT: In late 2011, after the Pavillion data had been collected and analyzed -- but not yet made public -- then-EPA Administrator Lisa Jackson [said](#): "We have **absolutely no indication right now that drinking water is at risk**." After the report was released, Jackson [told reporters](#), "In no case have we made a definitive determination that the fracking process has caused chemicals to enter groundwater."

FACT: In June 2013, after multiple regulatory officials at the state and federal level had criticized the agency's findings, the EPA announced it was [dropping its plan](#) to have independent scientists review its findings. EPA turned over the work to state regulators in Wyoming.