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The **SCIENCE** on Fracking and **WATER**

GET THE **FACTS**

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"[H]ydraulic fracturing activities have not led to widespread, systemic impacts to drinking water resources." U.S. Environmental Protection Agency Study, 2015

"We found no documented instances of hydraulic fracturing or acid stimulations directly causing groundwater contamination in California." California Council on Science and Technology Study, 2015

"This new study is important in terms of finding no significant effects on groundwater quality from shale gas development within the area of sampling." U.S. Geological Survey Study, 2013

"We found no evidence for direct communication with shallow drinking water wells due to upward migration form shale horizons." Proceedings of the National Academy of Sciences, 2015

"Our results show that even among baseline groundwater samples collected near existing gas wells, there is no evidence of systematic increased dissolved methane concentrations closer to oil/gas wells...Combined, the results of all four statistical approaches yield a defensible, compelling argument that there is no significant correlation between dissolved methane concentrations in groundwater and proximity to nearby oil/gas wells." Syracuse University Study, 2015

"Testing of 1701 water wells in northeastern Pennsylvania shows that methane is ubiquitous in groundwater indicating that, on a regional scale, methane concentrations are not correlated to shale-gas extraction." National Ground Water Association Groundwater Study, 2013

"Before-and-after monitoring of groundwater quality in monitor wells did not show impacts from high-volume hydraulic fracturing and high-rate gravel packing." Inglewood (CA) Oil Field Study, 2012

"A supporting study for this Draft Supplemental Generic Environmental Impact Statement (dSGEIS) concludes that it is highly unlikely that groundwater contamination would occur by fluids escaping from the wellbore for hydraulic fracturing. The 2009 dSGEIS further observes that regulatory officials from 15 states recently testified that groundwater contamination as a result of the hydraulic fracturing process in the tight formation itself has not occurred."
N.Y. Revised Draft Supplemental Generic Environmental Impact Statement (dSGEIS) Study, 2011

"In the studies surveyed, no incidents are reported which conclusively demonstrate contamination of shallow water zones with fracture fluids." Massachusetts Institute of Technology Study, 2010

"[B]ased on over sixty years of practical application and a lack of evidence to the contrary, there is nothing to indicate that when coupled with appropriate well construction; the practice of hydraulic fracturing in deep formations endangers ground water. There is also a lack of demonstrated evidence that hydraulic fracturing conducted in many shallower formations presents a substantial risk of endangerment to ground water." U.S. Dept. of Energy and Ground Water Protection Council Study, 2009

"Current findings are: 1) no evidence of gas migration from the Marcellus Shale; and 2) no evidence of brine migration from the Marcellus Shale...Conclusions of this study are: 1) the impact of hydraulic fracturing on the rock mass did not extend to the Upper Devonian/Lower Mississippian gas field; and 2) there has been no detectable migration of gas or aqueous fluids to the Upper Devonian/Lower Mississippian gas field during the monitored period after hydraulic fracturing."
U.S. Department of Energy Study, 2014

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WHAT THEY ARE SAYING

"To my knowledge, I still have not seen any evidence of fracking per se contaminating groundwater."

- Dr. Ernest Moniz, Secretary of U.S. Dept. of Energy, 2013

"In no case have we made a definitive determination that [hydraulic fracturing] has caused chemicals to enter groundwater."

- Lisa Jackson, former Administrator, Environmental Protection Agency, 2012

"I have been working in hydraulic fracturing for 40+ years and there is absolutely no evidence hydraulic fractures can grow from miles below the surface to the fresh water aquifers."

- Dr. Stephen Holditch, Dept. of Petroleum Engineering, Texas A&M University; member of DOE's SEAB Shale Gas Production Subcommittee, 2011

"Fracturing fluids have not contaminated any water supply and with that much distance to an aquifer, it is very unlikely they could."

- Dr. Mark Zoback, Stanford University, 2011