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BAN THIS INSANE POISONING OF OUR WATER, AIR, AND SOIL.

The entire nontidal Delaware River is protected by the Delaware River Basin Commission's Special Protection Waters regulations that do not allow water quality to be degraded. We are dependent on that protection to keep our water safe. Fracking and the discharge of wastewater produced by fracking will degrade the water quality of the river as pollutants are released. Toxic, hazardous and radioactive materials will build up over time in the water, sediments, and aquatic life and spills, leaks, and catastrophic events will add pollution, degrading water quality, habitats, and downstream water supplies.

The natural gas and oil industry has received unprecedented exemptions from our nation's most important environmental and public health laws, including portions of: Clean Air Act; Clean Water Act; Safe Drinking Water Act; Resource Conservation and Recovery Act, Comprehensive Environmental Response, Compensation and Liability Act (the Superfund Law); and Emergency Planning and Community Right-to-Know Act. These exemptions allow pollution to occur through loopholes and reduce the controls of how hazardous materials from fracking must be disposed of. This exposes the Delaware River Watershed to adverse impacts that would degrade water quality and contaminate water supplies of up to 17 million people.

Fracking pollutes water, even when the operations are regulated. If allowed in the Delaware River Watershed, up to 17 million people's water would be at risk. Pennsylvania Department of Environmental Protection (PADEP) has determined that there are 302 cases of private water well contamination caused by oil and gas operations in the Commonwealth; over 4,400 water complaints related to oil and gas have been filed by the public with PADEP. Between 2004 and 11.2016, PADEP lists 9,443 public complaints about environmental problems in shale gas drilling areas.

Fracking fluids can migrate from the fracked well to aquifers, contaminating water. This would harm the water resources of the Delaware River Watershed because people draw well water from aquifers and because the river is dependent on high quality groundwater to supply healthy base flow to its streams that feed downstream water supplies. "The process of injecting fluids into and fracturing the shale causes the potential pollution problem." Contaminated fluids from the fracking process can move from the deep shale to water resources through various pathways including fractures and natural vertical flow, in thousands of years or in less than ten years, polluting groundwater.

Natural gas development and fracking degrade streams and would harm the tributaries of the river where it would occur. Scientists have documented water quality degradation of streams by drilling sites. A publication of the Proceedings of the National Academy of Sciences found streams adjacent to gas wells are negatively impacted by runoff and sedimentation, harming benthic life, fish and wildlife and causing streams to be eroded and destabilized.

Fracking has negative impacts on public health, especially for those who live in the area. Air emissions and water pollution from gas wells have greater adverse health impacts on those who reside, work, go to school, or frequent the zone within approximately 2 miles from the gas operation. Studies show that those closest have greater exposure and are more likely to develop disease and health problems.

Fracking uses enormous volumes of water, approximately 5-10 million gallons per well, and

increases of 10-20 million gallons are becoming more frequent. The old estimates of 4-5 million gallons, used by DRBC, are no longer valid as well bores lengthen and more water is needed to frack each well. Technology used today can lengthen horizontal well bores up to 4 miles.