A fracking waste pit at a natural gas drilling site in the Marcellus Shale region of Pennsylvania.

Accidents Waiting to Happen

Fracking Waste Pits

Toxic wastewater left over from fracking operations, often stored in pits that can leak or overflow, threatens America's rivers, lakes and streams.

Fracking Operations Store Toxic Wastewater

As of 2016, approximately 670,000 fracking wells had been drilled across the U.S. Fracking, the combination of hydraulic fracturing and horizontal drilling, requires pumping as much as millions of gallons of water mixed with sand and chemicals underground. When fracking waste flows back to the surface, it can contain not only fracking fluid chemicals linked to reproductive and developmental disease, but also toxic and even radioactive substances picked up underground.

Fracking Waste Puts Water at Risk

Fracking wastewater is sometimes stored in simple pits near the fracking wells, putting nearby waterways at risk. Between 2005 and 2014, nearly half of fracking spills took place less than 750 feet from water. Nevertheless, fracking wastewater is exempt from many of the nation's water protection laws, instead covered by a patchwork of often ineffective state regulations. As a result, many fracking pits are uncovered or unlined, and especially prone to spills and leaks.

As of 2016 there were 670,000 fracking wells drilled across the U.S.

Fracking Wastewater Pit Spills Are Common

Available evidence suggests that fracking wastewater spills occur often. A 2017 study found 6,648 reported fracking spills in Colorado, New Mexico, North Dakota and Pennsylvania between 2005 and 2014, of which more than 400 were likely wastewater pit spills.

- When wastewater spills reach water, they can result in severe harm to ecosystems and wildlife. In 2007, a fracking waste pit overflowed into Acorn Fork Creek in Kentucky. According to the U.S. Fish and Wildlife Service, the spill "killed virtually all aquatic wildlife in a significant portion of the fork, including fish and invertebrates."
- In late 2015, a pipe carrying fracking wastewater ruptured, spilling 3 million gallons of wastewater into the Blacktail Creek north of Williston, North Dakota. Samples later revealed unsafe levels of benzene, thallium and barium, and the next spring residents reported diminished wildlife in the area.

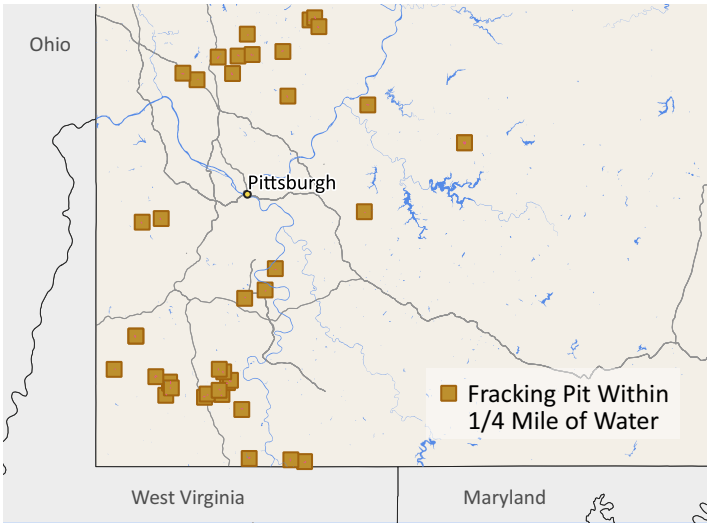
Protect American Waterways from Damaging Spills

Fracking wastewater pits put America's streams and rivers at risk, but it doesn't have to be that way. Policymakers have a number of options to protect our waterways from all types of catastrophic accidents, including:

Limit or end operations that pose severe threats to water. The best way to prevent toxic spills is to limit activities that create the potential for spills in the first place, including by banning fracking and transitioning to clean, renewable energy.

Keep risky facilities away from water. As long as we continue to frack for gas, policymakers should ensure that operations are kept far enough from waterways to eliminate the risk of contamination.

Set and enforce strict standards for existing risky facilities that operate near waterways. Strict standards should apply to any facilities that store or transport hazardous material near water.



Among fracking wastewater pits in Pennsylvania identified in 2015, 69 were within a quarter-mile of a waterway, including many in the southwest of the state.

Spotlight: Wastewater Pits in Pennsylvania

The state with the most comprehensive wastewater pit information is Pennsylvania, thanks to satellite imagery analyses conducted over the last decade by the organization SkyTruth. Although many of the pits identified in past years are no longer in use, their placement is illustrative of the risks wastewater pits can pose to rivers and streams. In Pennsylvania, most wastewater pits were banned in October 2016, although some centralized waste pits are allowed to continue in use if they are permitted.

Among 254 fracking wastewater pits identified by SkyTruth in 2015, more than one in four – 69 total – were located within a quarter-mile of a stream or river.

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