Keeping the Gunk Out of Your Water Supply

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A few years back, I was leading a group hike along the Cranberry Creek. It was a hot day, and the water looked sparkling clean and cold.

Someone asked whether it was okay to drink from a creek. I debated for a minute, thinking how often I'd done just that. And then said, no, that's not a great idea. You never know when there's a dead deer in the creek upstream.

The ick-factor of a rotting carcass upstream from your water cup is pretty powerful. It's also an easy-to-understand example of what water scientists mean by "point source pollution."

Point source pollution comes from "any single identifiable source of pollution...such as a pipe, ditch, ship, or factory smokestack," according to the Environmental Protection Agency. You don't have to be a water scientist to recognize that kind of pollution.



Other reasons not to drink from creeks no matter how clean they look: parasites like giardia and bacteria like e.coli are more than just icky — they can make you really sick.

Non-point source pollution is a little trickier. The source isn't a clear "point," like a deer or a ditch. The source is diffuse — like oil, grease and toxic chemicals, fertilizers, insecticides and weedkillers; acid drainage from old mines; animal waste from livestock and pets; not to mention bad septic systems. It all gets picked up by stormwater and snow-melt, and spread far and wide over and through the ground.

Whether point-source or non-point source, eventually all those hazards end up in rivers, lakes, wetlands, ground water — maybe even your well — fouling drinking water and fisheries, harming wildlife and recreation.

The National Pollutant Discharge Elimination System (NPDES) aims to control any discharge to waterways, say from a sewage treatment plant or a construction site. An NPDES permit defines what the "acceptable" level of a pollutant is for the specific location. The goal is to make sure that Pennsylvania's mandatory standards for clean water (and federal minimum standards) are met.

There are also regulations — and NPDES permits — that address non-point source pollution which spreads over and through the ground by stormwater and snowmelt.

But none of these safeguards are foolproof. The best way to manage pollution is to avoid it in the first place

That's where you, as an individual, can make a difference. Never dump used motor oil — or any chemicals — "out behind the garage." Direct downspouts away from the driveway and other hard-packed or paved areas. Take your car to the car wash instead of washing it in the driveway. This fall, get your septic system inspected and pumped regularly. And pick up after your pet — letting it "wash into the ground" is the same as letting it "wash into your well."

One of the best ways you can help is to get involved with your township or borough. That's where local decisions are made that affect your water. Go to meetings. Ask questions. And keep asking, until you get answers that make sense.

It's your water, and your family's health. And no matter how refreshing that creek looks, remember what could be lurking upstream.

For more information

About non-point source (NPS) pollution https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution

For humans, fish, and every living thing, Brodhead Watershed Association protects water quality and quantity throughout our area. Get involved! Become a member today. https://www.brodheadwatershed.org.