

Drowning in Development,  
Thirsting for Water  
**by Tim Davis**  
**Executive Director**  
**Montana Smart Growth Coalition**

In our arid state, water has always been in short supply and has always determined where we can live, work, and play. So why are we letting out-of-control development poison and drain this precious resource?

“Poison” may seem a strong word for some people. But what else do you call the septic waste seeping into drinking-water wells on the outskirts of nearly every major town and in every fast-growing county in Montana?

From Billings to Bozeman, Great Falls to Helena, and Missoula County to Silver Bow County, high levels of nitrates are showing up in water wells. Nitrates can kill children and the elderly, and research shows they may be linked to cancer. But even more important, nitrates act as the “canary in the coal mine”: They tell us other poisons may be present, usually from septic waste that has polluted ground water.

We rarely know for sure what those other pollutants are because the state doesn’t test for them. But when nitrates are up, it’s possible that the contents of your neighbors’ toilets are finding their way to other neighbors’—maybe your own—drinking water, for instance in the form of fecal coliform bacteria.

A few examples of Montana’s rising groundwater contamination:

In 1973, the U.S. Geological Survey found a median nitrate concentration of 1.0 mg/l in the Helena Valley—a safe level. After nearly three decades of suburban sprawl, readings have jumped to between 7.89 and 20.10 mg/l—well above the 5.0 mg/l the state deems threatening enough to limit septic use.

In the Upper/Lower River Road area outside Great Falls, more than 700 homes, most with septic systems and wells, have been scattered over 3 sq. mi. in recent decades. After studying the area’s groundwater, state and local governments found the pollution so great that they recommended homeowners shell out for a community water and sewer system. The cost would run into the millions of dollars.

A 1996 study of septic systems and wells in the Missoula Valley found that between 9.4% and 15.3% of sampled wells had bacteria contamination from septic wastes. The contamination, warned the report, puts several parts of the valley at risk of waterborne disease outbreaks.

Other areas that have shown high levels of nitrates include the Summit Valley area in Silver Bow County, as has the Four Corners area in Gallatin County.

One septic system is no big deal, especially if the homeowner knows enough, cares enough, and has money enough to maintain it. However, with thousands of these systems ringing our towns, it doesn't matter how vigilant homeowners are. Our water gets poisoned, and then somebody has to pay for community sewer and water lines.

On Helena's west side, 840 homeowners with severely deteriorating water quality are learning this the hard way. It will cost them \$11 to \$14 million dollars—\$13,000 to \$17,000 per home—to install city water and sewer. And these homes are near town and relatively compact. Sewering truly sprawling neighborhoods could easily cost \$25,000 per home or more.

In addition to poisoning us, sprawl is also draining our precious aquifers, which causes wells to run dry, which forces homeowners to drill deeper wells, which isn't cheap. Then it happens all over again, a cycle without end. Wells have gone dry in Sypes Canyon on the west slope of the Bridger Mountains, in the North Hills of Helena Valley, in the Pine Hills area near Miles City, in the Larson Creek area in the Bitterroot, and in the Yellowstone Valley west of Billings.

Drought has played a role, but so has development. And anyway, in our arid state we should—but don't—plan for drought when deciding how many homes can go in an area. We should also—but don't—look at the cumulative effects of development on an aquifer instead of just approving individual subdivisions and pretending they don't impact water.

If we're willing, it's pretty easy to protect our water from the negative impacts of sprawl: Just direct most growth to areas served by city sewer and water. We could start by putting our limited dollars into infrastructure in or near towns, instead of scattering infrastructure inefficiently over sprawling areas. Such fiscal responsibility would have the added benefit of saving homeowners and taxpayers millions of dollars—money that could be spent on schools and affordable housing.

We could also fully fund state and local agencies to look at the cumulative effects of growth on our groundwater and to help communities create plans to protect water before problems arise. Finally, we could put growth moratoriums on areas with poisoned or depleted waters; once plans are established to clean and protect those waters, the moratoriums could be lifted. Doesn't our health—and our pocketbook—deserve as much?