

# NITRATE IN OUR WATER

Nitrate pollution is linked to diabetes, birth defects, cancer, and infant death.<sup>1</sup>



Nitrate is one of Wisconsin's most widespread groundwater contaminants.<sup>2</sup> As massive industrial-scale farms proliferate across the state, the volume of manure and fertilizer being spread on our land is having a significant impact on our groundwater, which supplies drinking water for 66 percent of us.

This dangerous pollution is reaching our faucets and water glasses at an alarming rate and scope. Nitrate pollution exists in every county, and carries with it significant risk to our health. Nitrate pollution is linked to:

- Blue Baby Syndrome, an emergency health situation in which infants are not getting enough oxygen in their blood and can die;
- adverse pregnancy outcomes, including very low birth weight, very pre-term birth, and incurable brain and spinal cord defects like spina bifida;
- cancers, including colorectal, bladder, ovarian, thyroid, and kidney;
- and diabetes, especially in children.<sup>4</sup>

There are other costs, too – from environmental destruction to financial hardship to taxpayers on the hook for repairing municipal well systems. They include:

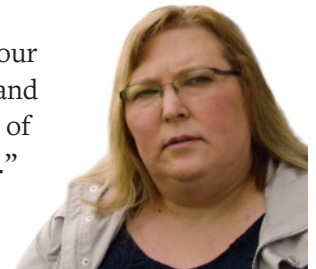
- serious wildlife health issues that can lead to death in fish and other aquatic animals;

# 66%

of the state's residents depend on groundwater for their drinking water.<sup>3</sup>

"It's in our shower and our faucets. It's disgusting, and it's affecting thousands of families just like mine."

**Erika Balza**  
**Kewaunee County**



## Erika's story

Erika Balza's Kewaunee County home is everything to her and her husband, Rob. When they woke to liquid manure streaming from their faucets, their dream home turned into a nightmare. They had to replace a well and buy new appliances, but still can't drink their water. Erika, disgusted by the situation, spoke up on local television and through Wisconsin Conservation Voters. Her willingness to share her family's story helped bring the reality of the state's drinking water crisis to the forefront.



“As a researcher of groundwater for 25 years now, I continue to be amazed by the level of fecal contamination in Wisconsin groundwater.”

-Dr. Mark Borchardt

Lead USDA researcher on groundwater studies in southwest Wisconsin and Kewaunee County

## Testing your water

- Test at least annually for bacteria and nitrate
- Test whenever there is a change in odor, appearance, or taste
- Test if you suspect your well has been compromised by flooding
- Test whenever the well is modified in any way

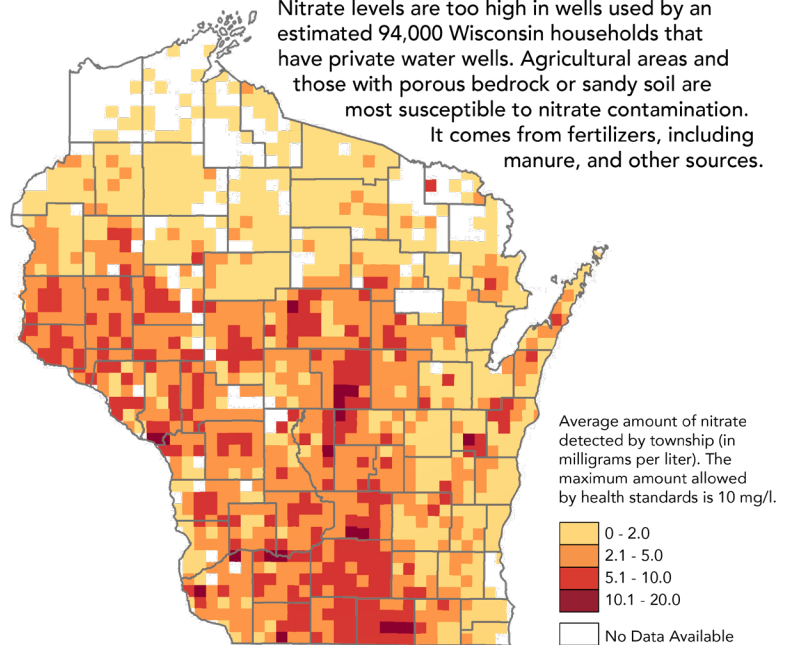
For more information visit [conservationvoters.org/testing](http://conservationvoters.org/testing)

# 90%

of nitrogen inputs into groundwater can be traced to agricultural sources, including manure spreading and fertilizer application.<sup>7</sup>

## How high are the nitrate levels where you live?

Nitrate levels are too high in wells used by an estimated 94,000 Wisconsin households that have private water wells. Agricultural areas and those with porous bedrock or sandy soil are most susceptible to nitrate contamination. It comes from fertilizers, including manure, and other sources.



CREDIT: Katie Kowalsky/Wisconsin Center for Investigative Journalism

SOURCE: Well Water Quality Viewer, University of Wisconsin-Stevens Point's Center for Watershed Science and Education. Private Drinking Water Quality in Rural Wisconsin, Journal of Environmental Health, 2013.

- nitrate discharges from the Upper Midwest are largely responsible for a vast dead zone in the Gulf of Mexico, now the size of New Jersey, as well as our own dead zone in Green Bay<sup>5</sup>;
- \$37 million has been spent by public water systems to deal with nitrate.<sup>6</sup>

There are solutions. In 2018, the Department of Natural Resources Board approved strengthened manure spreading rules in eastern Wisconsin called NR 151. Now, it's time to **extend those rules to all parts of the state we know are most sensitive to nitrate pollution.**

NR 151 should also be **strengthened in the next 10 years to include enforcement mechanisms** so that polluters can be held accountable.

We also need to help people whose water is already contaminated. The state's well compensation program, which provides grants for well replacement, only replaces wells that provide water for farm animals – not humans! Also, the household income limits haven't been changed since 1984.

**It's time to modernize income requirements and make wells that human beings use eligible for replacement, too.**

SOURCES: 1. <https://dnr.wi.gov/topic/groundwater/documents/gcc/gwquality/nitrate.pdf>; 2. <https://www.dhs.wisconsin.gov/water/nitrate.htm>; 3. <https://dnr.wi.gov/topic/Groundwater/>; 4. <https://dnr.wi.gov/topic/groundwater/documents/gcc/gwquality/nitrate.pdf>; 5. <https://dnr.wi.gov/topic/groundwater/documents/gcc/gwquality/nitrate.pdf>; 6. <https://dnr.wi.gov/topic/groundwater/documents/gcc/gwquality/nitrate.pdf>; 7. <https://dnr.wi.gov/topic/groundwater/documents/gcc/gwquality/nitrate.pdf>