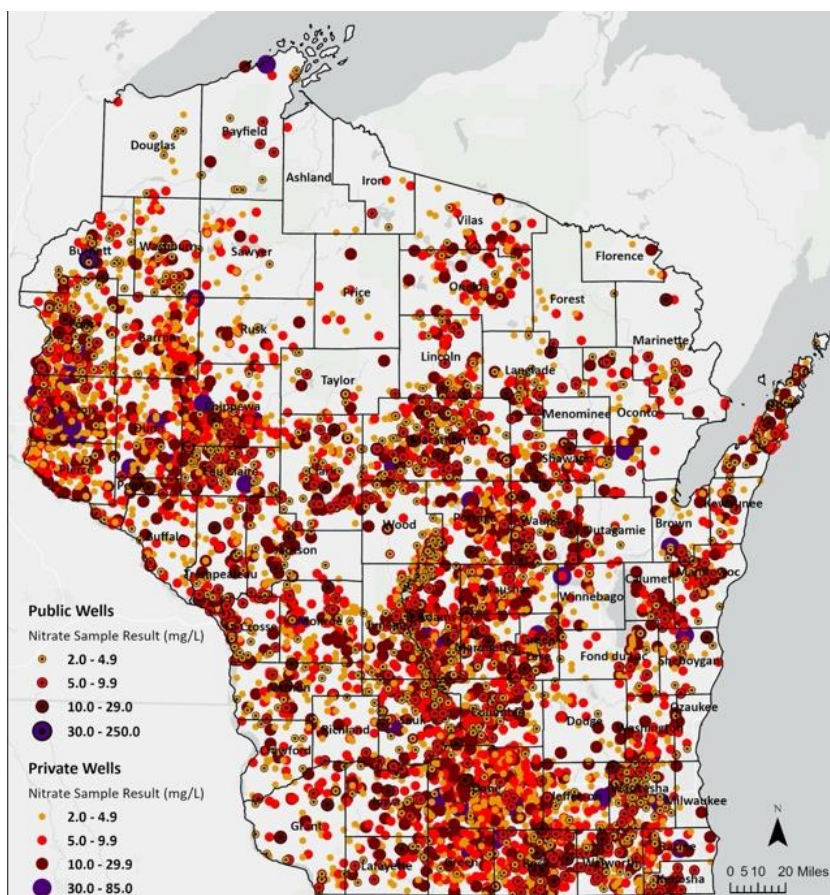


Nitrates on Tap: The Cost of Nitrate Contamination in Wisconsin's Drinking Water

Wisconsin is facing a public health and environmental crisis fueled by widespread nitrate contamination in drinking water. Thousands of households, particularly in rural areas and regions with karst geology or shallow bedrock, are confronting mounting financial burdens and health concerns made more complex by the need to manage nitrate contamination. Nitrate exposure has been linked to serious health effects, including cancer, pregnancy complications, and infant methemoglobinemia (blue baby syndrome). For both municipalities and private well owners, contamination drives up costs through increased reliance on water treatment infrastructure, bottled water, and well replacement — costs that are largely borne by ratepayers and homeowners, not the polluters responsible.

Figure 1: 2020-2025 State Nitrate Standards Exceedances in Wisconsin Wells¹



All wells are mapped to the Public Land Survey System section centroid (within ~0.5 mile of each well location).

Key Facts

- Nitrate contamination of Wisconsin's surface and groundwater is primarily caused by widespread use of nitrogen fertilizer and manure application.
- More than 90% of nitrate pollution is linked to agriculture. It is estimated that over 16 million pounds of nitrogen was applied beyond crop needs in 2022.
- Every county and watershed in the state is experiencing nitrate contamination of surface and groundwater at levels that impact public health.
- Health risks include a variety of cancers, pregnancy complications, and blue baby syndrome.
- Nitrate contamination contributes to eutrophication and toxicity of harmful algal blooms and threatens aquatic life.

¹ The standards include the Preventive Action Limit (2 mg/L) and Enforcement Standard (10 mg/L), as required by Wis. Stat. § 160. All data sourced from the Department of Natural Resources' Groundwater Retrieval Network (July 2020-July 2025). Public wells include municipal, other than municipal, transient, and non-transient. Private well data includes monitoring wells.

Costs of Inaction

- Four municipalities (Chippewa Falls, Plover, Janesville, and Trempealeau) have spent over \$45 million on nitrate mitigation.
- Including county-wide private well replacement estimates, total costs exceed \$116 million in the four municipalities.
- Private well owners face ongoing costs for nitrate treatment and may pay up to \$20,000 to replace a contaminated well, but continual treatment and well replacement isn't a long-term solution.
- Wisconsin's fragmented policy response has failed to address root causes.

Policy Recommendations

To reduce nitrate pollution and protect public health, Wisconsin should adopt a multitiered policy approach that includes short-, medium-, and long-term strategies.

SHORT-TERM

- Expand eligibility for and fully fund the Private Well Compensation Program.
- Expand funding for the Private Well Compensation Program using nitrogen fertilizer tonnage fees.

MEDIUM-TERM

- Standardize when large animal operations are required to implement on-farm groundwater monitoring.
- Obtain financial data from public water systems on the upfront and ongoing costs of remedying nitrate contamination.

LONG-TERM

- Revise outdated groundwater public health standards, set surface water standards, and establish stronger fertilizer and manure application rules in high-contamination areas.
- Initiate or resume rulemaking now that recent court decisions and changes to agency boards have removed key barriers to regulatory action.
- Condition cost-share payments for farmers on demonstrated nutrient management plan compliance.
- Create a statewide manure hauler registration and tracking system.

A coordinated, science-based policy response is urgently needed to address nitrate pollution at its source. Delaying action will only raise the financial and human costs, and put the safety of Wisconsin's water, ecosystems, and public health further at risk.

Read the full report at greatlakes.org/nitratesWI.