

2023 Nebraska Nitrate and Drinking Water Mid-Year Report

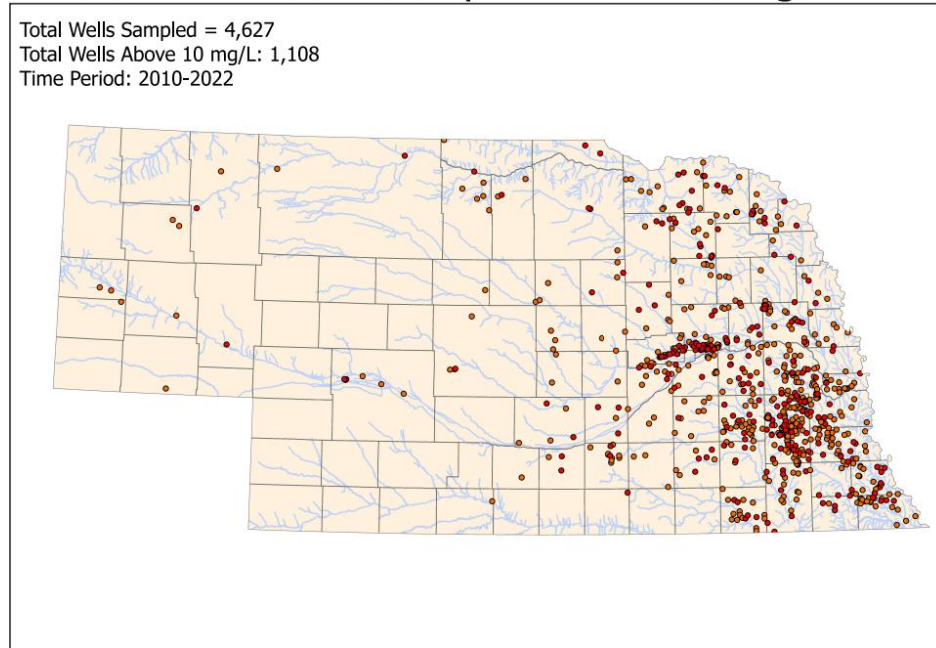
Purpose:

To give a brief update regarding the Nebraska Department of Environment and Energy's (NDEE) work and to provide updated data regarding drinking water and nitrate levels in private wells.

Report Findings:

- **Most Nebraskans are protected from harmful nitrate exposure.** The Safe Drinking Water Act (SDWA) regulates Public Water Systems (PWS) that serve 25 or more people or have 15 or more service connections for 60 days a year.
 - [The SDWA](#) was passed by Congress to protect the quality of drinking water in the U.S. This federal law focuses on waters actually or potentially designed for drinking use.
 - The SDWA establishes minimum standards to protect tap water and requires all owners and operators of public water systems to comply with these standards.
 - Drinking water covered under the SDWA is required to serve water with nitrate levels at or below 10 mg/L, known as the maximum contaminant level (MCL). Nitrate levels above 10 mg/L in drinking water are considered harmful. Nitrate levels above the drinking water MCL are generally not considered hazardous to humans when used for purposes other than drinking and cooking (irrigation or recreation for example).
 - There are over 1300 Public Water Systems covered under the SDWA in Nebraska serving about 1.65 million Nebraskans out of our state's 1.975 million residents. This leaves about 300,000 Nebraskans who obtain water from a private source; and therefore, are not covered under the SDWA.
- **Testing shows that most private wells have low nitrate levels.** Updated 2010-2022 data, from the testing of private wells, shows the majority have low nitrate levels. Of the 4,627 private wells tested statewide, 1,108 or 24% have shown nitrate levels over 10 mg/L. Overall, there are 33,754 domestic wells that are registered in the state.

Private Well Nitrate Samples Above 10 mg/L



- **Nebraska drinking water quality remains high.** All public water systems monitor for nitrate. A system is out of compliance when it fails to properly test for or keep contaminants below their MCL. Through 2022, 98% of Nebraska public water systems were in full compliance. Systems that fall out of compliance must provide alternate water to sensitive populations.
- **Protecting all Nebraskans from high nitrate level requires public-private partnerships.** In most cases, the state of Nebraska does not have statutory authority to require private well owners to test their private wells. However, well owners may request a water sample test kit [here](#).
- **Resources are available to help address high nitrate levels.** NDEE has \$1.2 million in grant money set aside to reimburse private well owners who install a reverse osmosis system to protect their drinking water. Private well owners with wells that exceed 10 mg/L nitrate are eligible for up to \$4,000 in reimbursement for the cost of qualifying reverse osmosis systems. Applying for a reverse osmosis system grant can be done [here](#).
- **NDEE continues to work to improve Nebraska's drinking water quality.** The Legislature appropriated funds this past session to create a state-wide plan using available data and input from various experts to identify areas of currently impacted or potentially impacted nitrate contaminated drinking

water wells along with potential short and long-term solutions, with a focus on improving the safety of drinking water for all Nebraska residents.

- More data and information regarding Nebraska's groundwater can be found [here](#) in NDEE's 2022 Nebraska Groundwater Quality Monitoring Report. The updated data will be included in the 2023 Nebraska Groundwater Quality Monitoring Report.