

Talking Points: EPA Response Workplan

JANUARY 12, 2024

What's happening?

Some groundwater in southeast Minnesota has unsafe concentrations of nitrate; state agencies and local partners are working together to address this issue.

This is not a new issue. There are multiple efforts in place to address elevated nitrate concentrations, but it may be years until the issue is fully resolved. Right now, the main focus is on immediate steps that can reduce the risk for people who get their drinking water from private wells with nitrate contamination.

People who are on city water can be confident that their drinking water meets Safe Drinking Water Act standards, because public water systems regularly test and treat for nitrate.

The Minnesota Department of Health (MDH), the Minnesota Department of Agriculture (MDA) and the Minnesota Pollution Control Agency (MPCA) in January 2024 submitted to the U.S. Environmental Protection Agency (EPA) a workplan outlining next steps. [The work plan](#) responds to the 2023 [EPA Letter to Minnesota State Agencies Regarding Southeast Minnesota \(PDF\)](#).

What counties are included in activities in the workplan?

Olmsted, Goodhue, Dodge, Wabasha, Fillmore, Mower, Winona, and Houston

What's the timeline?

The work will be done in three phases:

1. Immediate Response (January 2024 – June 2024)
 - Conduct education and outreach encouraging well testing
 - Provide limited alternate water for vulnerable populations
2. Public health intervention – (July 2024 – Ongoing)
 - Identify impacted residences
 - Conduct education and outreach
 - Test private well drinking water
 - Provide mitigation
 - Provide public record of work
3. Long-Term Nitrate Strategies (Snapshot of key initiatives)
 - Taskforce to address nitrate

- Nitrogen Fertilizer Management Plan and Groundwater Protection Rule
- Feedlot permits and rules
- Revising Minnesota Nutrient Reduction Strategy
- Fish kill prevention
- Wastewater nitrogen reduction and karst protection strategies

Who will lead activities?

The Minnesota Department of Health (MDH) is the lead agency for Phase I: Immediate Response and Phase II: Public Health Intervention. The Minnesota Department of Agriculture (MDA) and Minnesota Pollution Control Agency (MPCA) are the lead agencies for Phase III: Long-Term Nitrate Strategies.

Agencies are working with partners to develop key measures and milestones and further refine the strategies and action steps.

What is being tested and treated for?

Per the EPA letter requests, Phase II of the work plan aims to offer free nitrate testing for private wells and mitigation for private well households with nitrate concentrations above 10 milligrams per liter. The goal is to have 10% (about 3,600) of private well households participate in the first year. Some funds have been identified for testing and mitigation for select populations; however, additional funding will be necessary.

MDA can provide necessary equipment, standard operating procedures, and support to local partners who can provide free water screening at the local office or locally organized events. MDA has multiple spectrophotometers (for nitrate analysis) on loan to partners in the southeast region and can support additional "walk-in" style water screening clinics with the goal of increasing public awareness of nitrate contamination.

What is the plan for alternate water in the first six months?

The EPA requests that the State of Minnesota “offer alternate drinking water as soon as practicable to each residence where water tests show an exceedance of the MCL (maximum contaminant level) for nitrate in the private well, with priority given to homes with infants or a pregnant person.”

At this point, state agencies are still exploring funding and distribution mechanisms for centralized or bottled water.

Additionally, MDA will identify wells with elevated nitrate and offer (and evaluate the effectiveness of) a reverse osmosis system to reduce the risk for vulnerable populations located in southeastern Minnesota. Due to limited available funding, participants in the Township Testing Program (approximately 1,300 households in southeast) will be included during Phase I while a larger population of residents could be included during Phase II.

What sources of funding are being considered?

Existing Clean Water Fund appropriations to MDH and MDA will help fund the work in Phase I. MDH has worked with MDA and MPCA to submit a supplemental budget request through the Clean Water Council. If approved these funds would help establish many of the activities listed in Phase II. These funds are not guaranteed. Long-term funding has yet to be determined.

Are there other programs that can help support this work?

MDH is currently offering eight grants for private well testing and mitigation that are open throughout the state of Minnesota. There are six Phase I grants and two Phase II grants open to eligible applicants. Each entity will have the opportunity to apply for up to \$100,000 to promote well testing for households that rely on private well water for drinking water and provide financial assistance to address high levels of arsenic, coliform bacteria, lead, manganese, and/or nitrate in the water for eligible households. Funding for these grants comes from the Clean Water Fund. More information can be found at: [Safe Drinking Water for Private Well Users Grant Clean Water Fund](http://www.health.state.mn.us/communities/environment/water/cwf/pwpgrant.html) (www.health.state.mn.us/communities/environment/water/cwf/pwpgrant.html).

How did this problem develop?

The geology and activities on the land surface in southeast Minnesota make it more likely for higher concentrations of nitrate in groundwater.

Public water systems regularly test and treat for nitrate in drinking water, but there are not the same protections for private well users.

Nitrate is a particular concern for those who get their drinking water from private wells in eight counties in southeast Minnesota. Those eight counties are: Olmsted, Goodhue, Dodge, Wabasha, Fillmore, Mower, Winona, and Houston.

Who's at risk?

Households that get their drinking water from private wells should get their water tested at an accredited lab annually.

Consuming too much nitrate can affect how blood carries oxygen and can cause methemoglobinemia (also known as blue baby syndrome).

Babies under 6 months old who are bottle-fed formula made with tap water that has nitrate above 10 mg/L are at the highest risk of getting methemoglobinemia.

There is more information about nitrate and health on the Minnesota Department of Health (MDH) website at [Nitrate in Drinking Water](http://www.health.state.mn.us/communities/environment/water/contaminants/nitrate.html) (www.health.state.mn.us/communities/environment/water/contaminants/nitrate.html).

How can people protect themselves and their families?

Residents on a city water system can be confident their water meets Safe Drinking Water Act standards.

You know you are on a city water system if you receive a monthly or quarterly utility bill for water.

Your public water system regularly tests for nitrate and ensures levels meet the EPA standard. You can find the level of nitrate detected in the system serving where you live by reading the system's Water Quality Report (also known as a Consumer Confidence Report [CCR]). Search for your Consumer Confidence Report (CCR) online or contact your public water system to get a paper copy. See [Search for your Consumer Confidence Report \(CCR\)](https://mncrr.web.health.state.mn.us/index.faces) (<https://mncrr.web.health.state.mn.us/index.faces>).

Your public water system will let you know if they detect nitrate at a level above the EPA standard.

Residents who rely on a private well for drinking water should test their well water.

You cannot taste, smell, or see most contaminants in groundwater, so testing is the only way to know the nitrate concentration in your drinking water.

See [Accredited Labs in Minnesota Accepting Drinking Water Samples from Private Well Users \(PDF\)](https://www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/labmap.pdf) (www.health.state.mn.us/communities/environment/water/docs/wells/waterquality/labmap.pdf).

There is more information on MDH's website about well testing, understanding your test results and treatment options. See [Well Testing, Results, and Options](https://www.health.state.mn.us/communities/environment/water/wells/waterquality/tips.html) (www.health.state.mn.us/communities/environment/water/wells/waterquality/tips.html).

Why did the state not take the actions in the EPA letter before now?

MDH, MDA and the MPCA have been working on this issue for many years, and most of the work that EPA is asking for in the letter is already underway. What's different now is that the EPA is asking that we accelerate progress for those activities and also expand in several areas.

MDH has offered two pilot grants to local partners to offer free testing and income-based financial support for remediation when needed. The intent of these grants was to develop ways to support private well owners and users in making sure their drinking water is safe. Lessons learned from those two pilots are being used to offer another set of grants and also formulate the plan that EPA requested.

In addition to meeting all of our statutory and rule compliance requirements under the Minnesota Well Code, MDH continues to offer robust communications and education supports for private well owners and users:

- Webpages and translated materials on numerous topics related to private wells.
- A continuing education module for real estate professionals on private wells.

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- A Private Well Forum for partners who work with private wells.

While some modest current funding can be used, significant additional funding will be needed to carry out the public health intervention plan sent to EPA in January 2024.

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