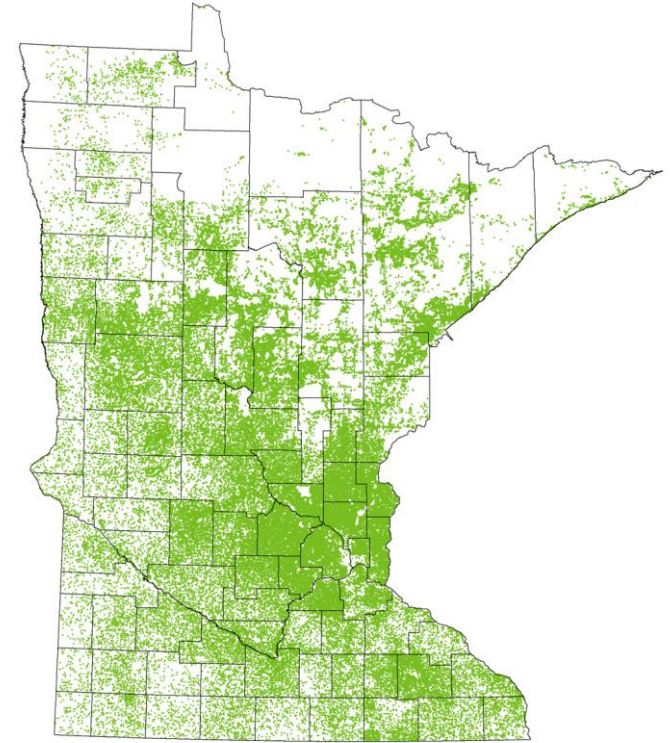




Addressing Nitrate in Private Wells in Southeast Minnesota: The Public Health Response

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At least 1.1 million private well users in Minnesota



Minnesota: 1 in 5 people depend on a private well (~20%)

Southeast Minnesota: about 1 in 4 people (~94,000)

What are we concerned about in private wells?

Protect your health!













Test your well water for:

- 
- Coliform Bacteria**
(Every year)
 - Nitrate**
(Every year)
 - Arsenic**
(At least once)
 - Lead**
(At least once)
 - Manganese**
(At least once)

Testing is even more important if young children drink the water.



Disparities in safeguards over the lifespan of a well

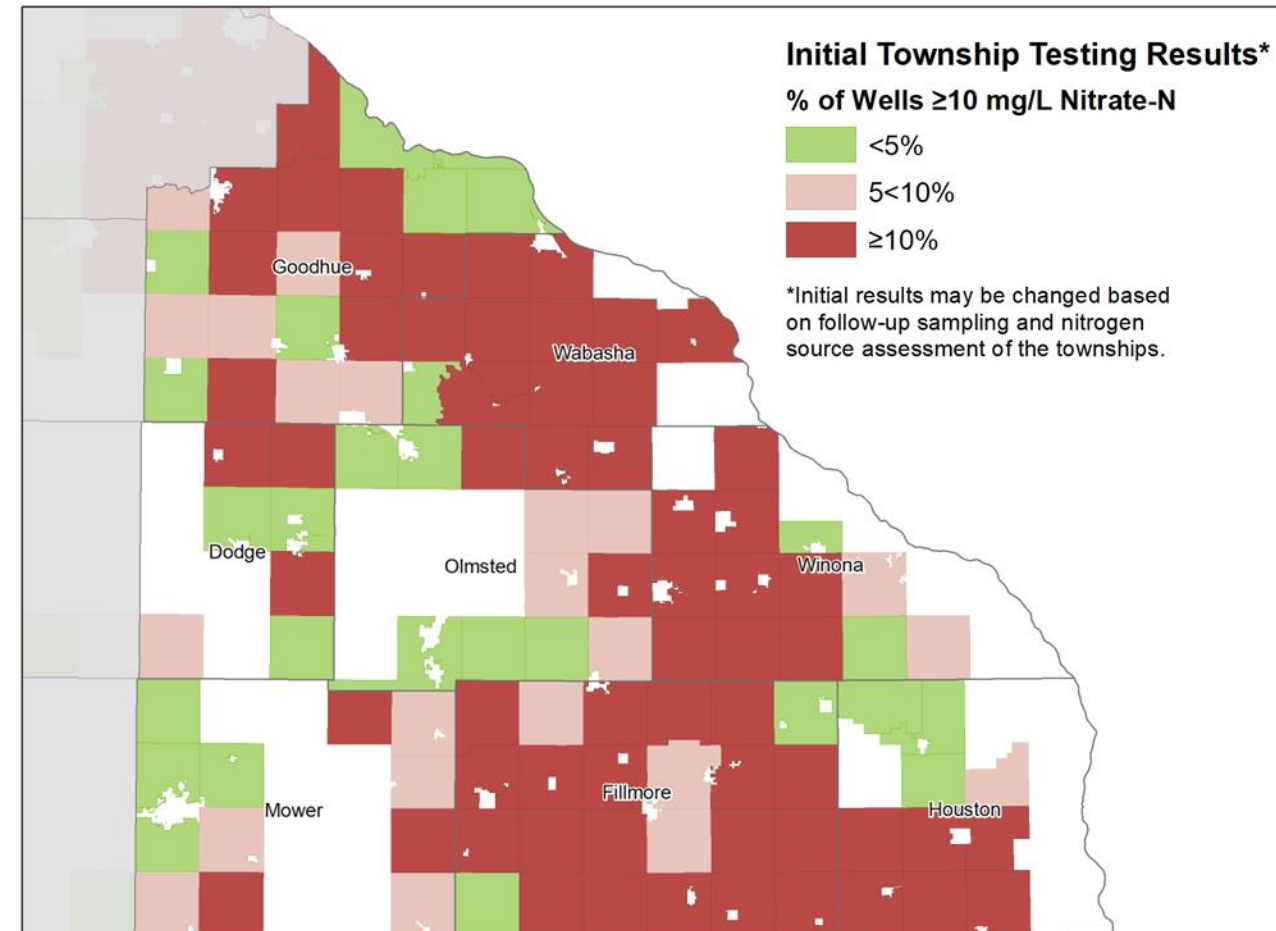
Phase	Construction	Regular testing to ensure safe drinking water	Mitigation to address contaminants	Protecting source waters	Funding for construction, treatment, repair, sealing	Well Sealing
Public Water System						
Private Well		Initial test 			Disparate & limited funds 	

Well users don't choose their geology or how land is used around them

EPA directives to Minnesota

1. Develop coordinated communication plan
2. Identify all private wells
3. Provide education and outreach:
 - Private wells owners/users
 - Community water system customers
4. Offer testing for all private wells
5. Offer mitigation for wells that exceed drinking water guidance
6. Establish public access to data and records
7. Report quarterly to EPA

Township Testing results for 8 county area



State Agencies Response Includes Three Phases

Phase I: Immediate Response Jan-Jun 2024

- Conduct education and outreach encouraging well testing
- Provide limited alternate water and testing for vulnerable populations

Work underway

Work underway

Phase II: Public Health Intervention Jul 2024 forward

- Identify impacted residences
- Conduct education and outreach
- Test private well drinking water
- Provide mitigation
- Provide public record of work

Participation is VOLUNTARY

Dependent on funding

Phase III: Long-Term Nitrate Strategies Long-term

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

Build on existing strategies
Led by MDA and MPCA

Estimated Cost

Category	Rounded Totals (thousands)	One-time	Ongoing	Description
Well Inventory	\$737	X		Estimated 12,000 private wells to inventory Student interns; printing and postage
Testing	\$180		X	Offer to all; plan to test 10% (3,600) per year at \$50 each
Alternate water	\$4,091		X	Based on Township Testing; 12% will have nitrate 10 ppm or higher. Mitigation ranges from reverse osmosis (\$2,600) to repairs/new wells (average \$28,000)
Education and outreach	\$162		X	Printing, postage, paid social media and streaming advertisements, billboards, local meetings
Funding local staff	\$949		X	Project & program management; mitigation navigator; lab support
MDH staff	\$762		X	Technical assistance; data management & reporting; communications; cost/benefit analysis; project manager
Total	\$6,881	\$737	\$6,144	87% for contracts to local partners for well inventory, testing, and mitigation 13% to MDH (staff and education and outreach)

Partnership with the TAP-IN Collaborative



TAP IN

SAFE DRINKING WATER FOR SE MN

Leverage and elevate the TAP-IN Collaborative

- Established through a MDH Clean Water Fund pilot grant to offer free well testing and income-based remediation
- Partnership between local public health and soil and water conservation districts in the 8 counties

Thank You

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