DG Study Group Meeting

Nov. 6, 2025

2024 Drinking Water Annual Report—Highlights

Beth Goldowitz

Drinking Water & Groundwater Study Group / November 6, 2025

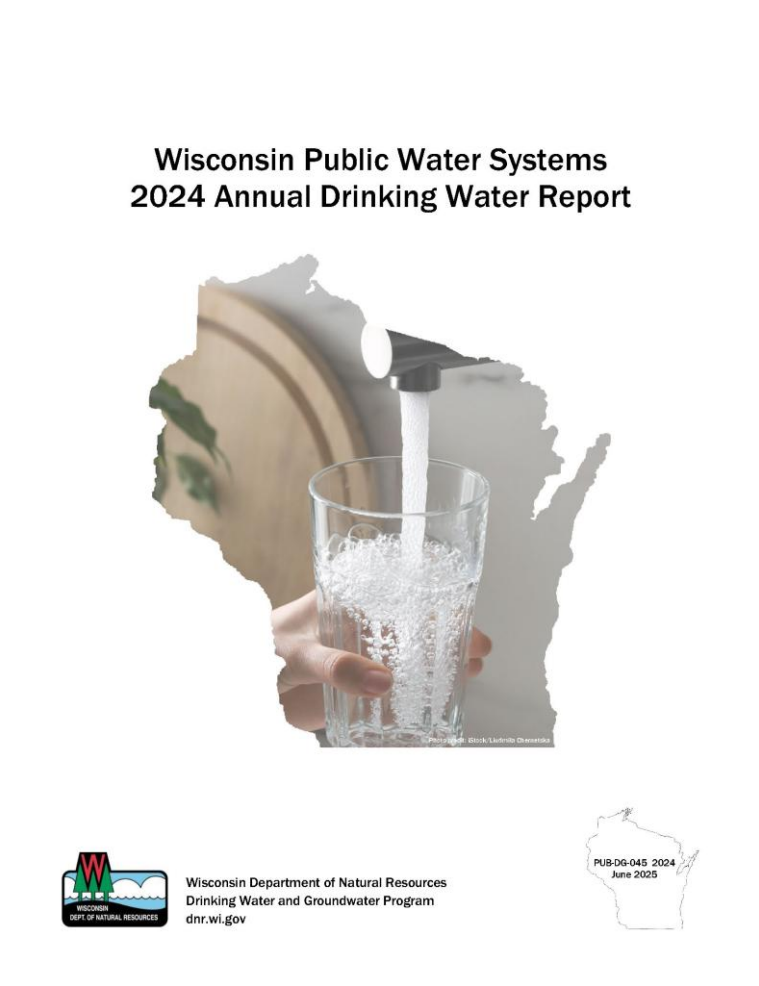
WISCONSIN DEPARTMENT OF NATURAL RESOURCES

DRINKING WATER & GROUNDWATER PROGRAM

Topics

- Report background
- Public water in Wisconsin
- How contaminants are regulated
- New LCRR requirements in 2024
- Wisconsin’s most common contaminants
- Compliance in Wisconsin
- Financial assistance
- Valued partnerships

What's this report?



- Safe Drinking Water Act, 1996 amendments

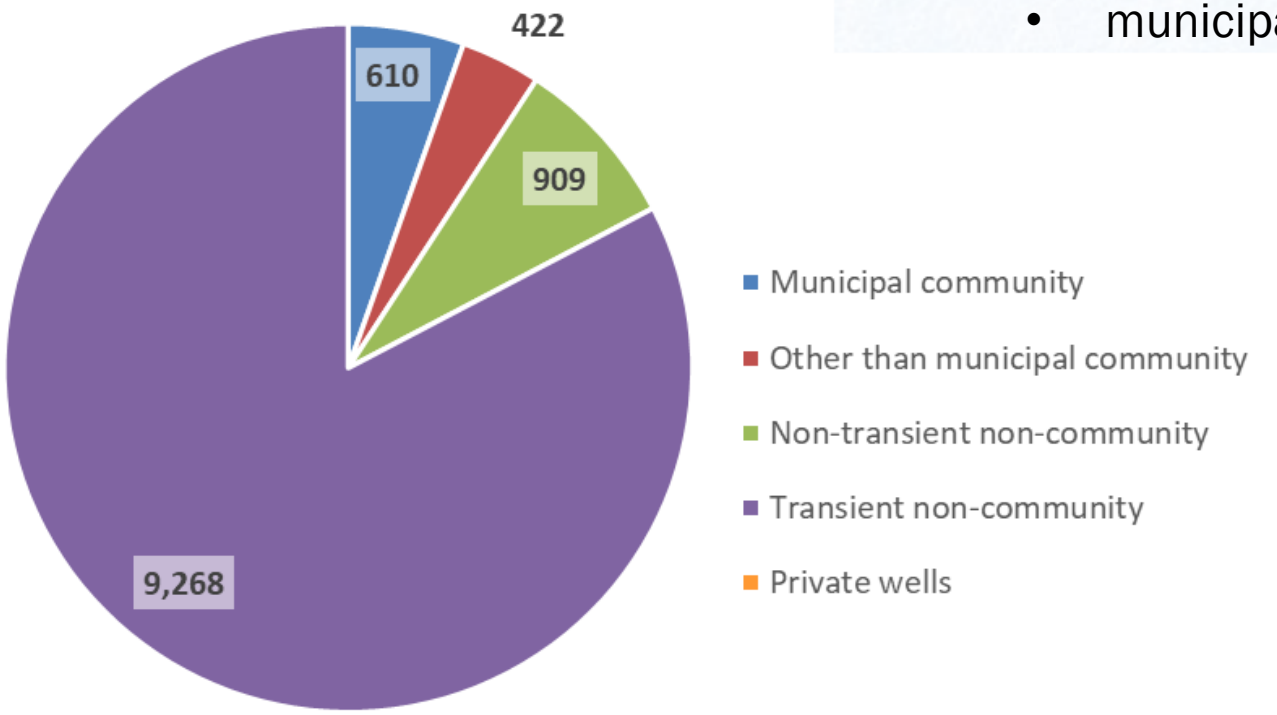
  "State…shall prepare, make readily available to the public, and submit to the Administrator an annual report on violations of national primary drinking water regulations by public water systems…"

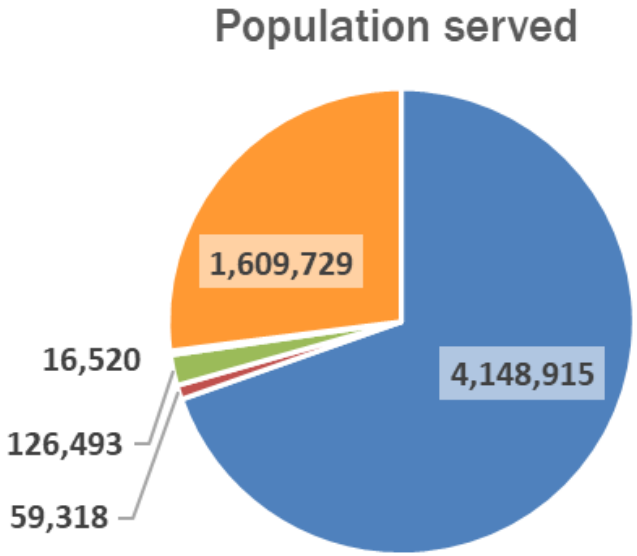
- "Annual Compliance Report" = ACR
- due by July 1 each year
- compliance reporting

Annual Drinking Water reports on DNR web site

Public water in Wisconsin

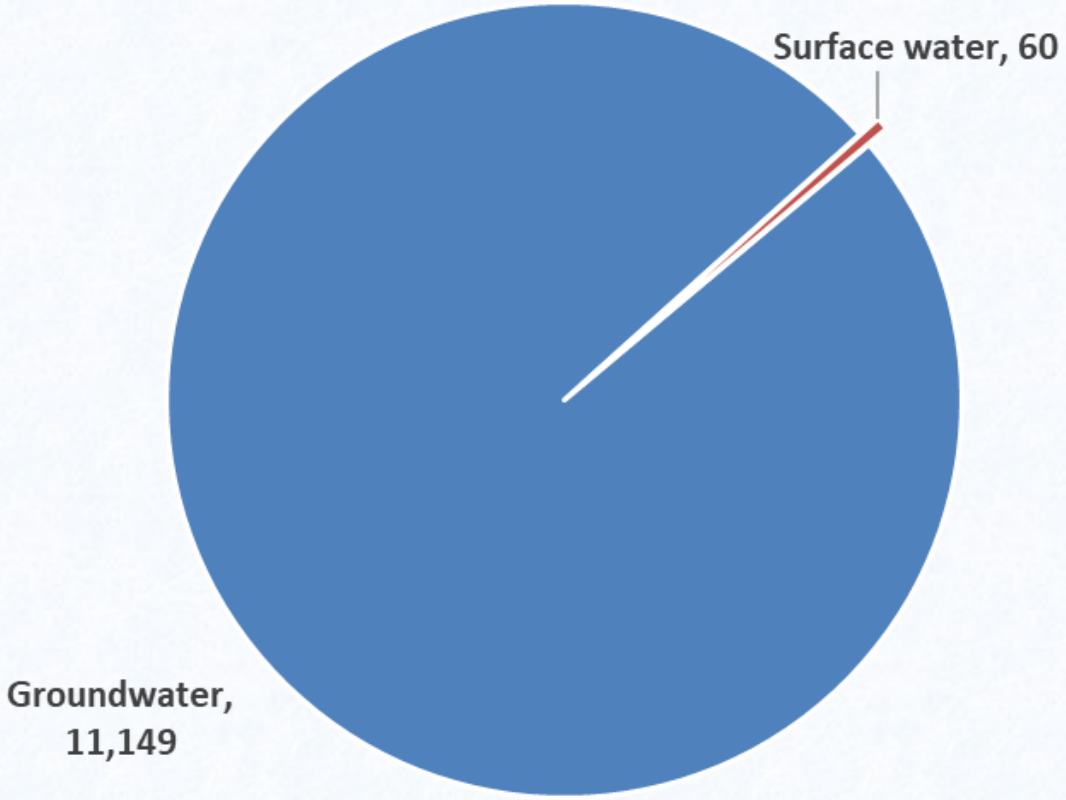
- 11,209 public water systems in 2024
  - Wisconsin is #1 nationwide
- DG program in 2024 = 136 staff
- most systems very small
- municipal systems serve largest population

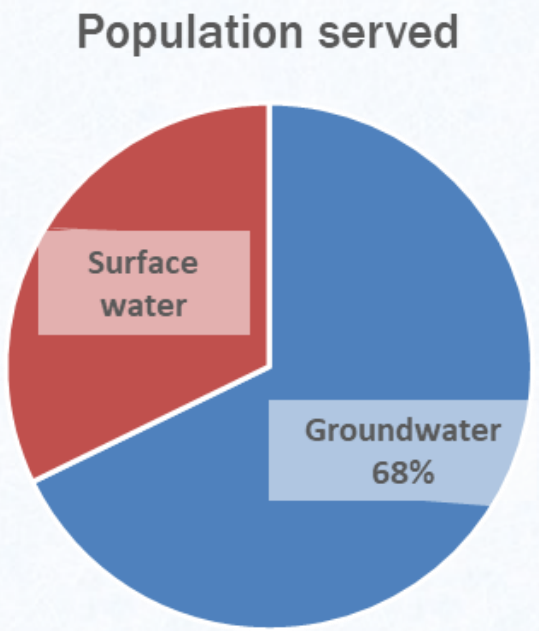




Water sources for public water systems

- ~ 1/3 of population served by private domestic wells





How contaminants are regulated

- Public health protection depends on monitoring drinking water supplies and testing for contaminants — required for all public water systems
- Wisconsin has both federal and state requirements

	**Maximum contaminant levels** (MCL)	maximum allowable levels of contaminants in drinking water
	**Treatment techniques**	actions required to control or reduce levels of contaminants (e.g., correcting significant deficiencies and sanitary defects)
	**Action levels**	concentration of lead or copper that requires water systems to conduct additional monitoring and take steps to control contaminant levels in the water supply

New Lead and Copper Rule requirements

- Revisions to federal Lead and Copper Rule
- October 2024 deadline for water systems


Photo credit: iStock/Vitalii Barida

- Lead service line inventory and information
- Communication about health effects of lead exposure
- Public notice requirements when lead action level is exceeded

Wisconsin's most common contaminants

- nitrate contamination — can occur statewide
- bacterial contamination — occurs statewide
- arsenic and radium — naturally occurring in Wisconsin
- lead and copper — usually not from source water

Compliance in Wisconsin

- 99.5% of public water systems met Maximum Contaminant Level standards for contaminants in 2024
- 95.6% of public water systems met treatment technique requirements
- 99.2% met action levels for lead and copper
- Overall compliance with all types of requirements = 86.5%

Nitrate continuing operation provision: 212 TN water systems operated with nitrate levels above the MCL during 2024


Photo Credit:
DNR

Financial assistance

- Safe Drinking Water Loan Program
- Lead Service Line Replacement Program
- ARPA Well Compensation and Well Abandonment Grant Program
- Underserved Water System Grant Program (OTM and nonprofit NN systems)

Valued partnerships make success possible

- partner contracts for compliance support
- training contracts
- technical assistance contracts
- water system owners and operators
- this study group — thank you!

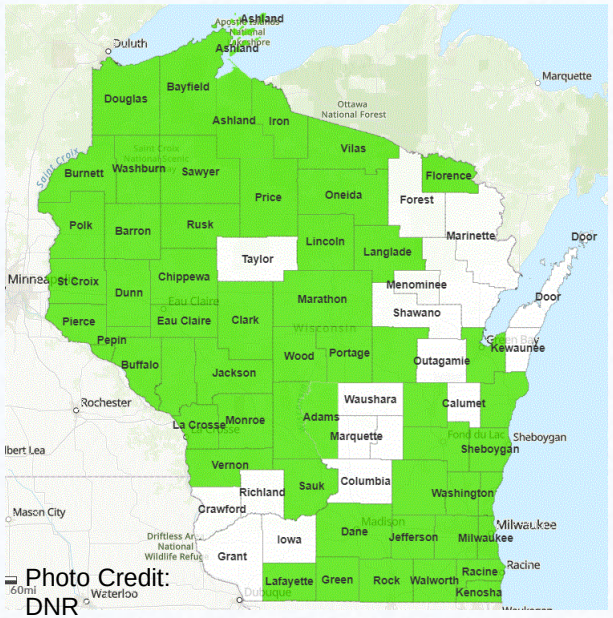


Photo Credit: DNR

WRWA Wisconsin Rural Water Association

MORAINE PARK TECHNICAL COLLEGE

WISCONSIN DEPARTMENT of HEALTH SERVICES

CONNECT WITH US

Beth Goldowitz

beth.goldowitz@Wisconsin.gov

608-212-3239 ph

@WIDNR

@WI_DNR

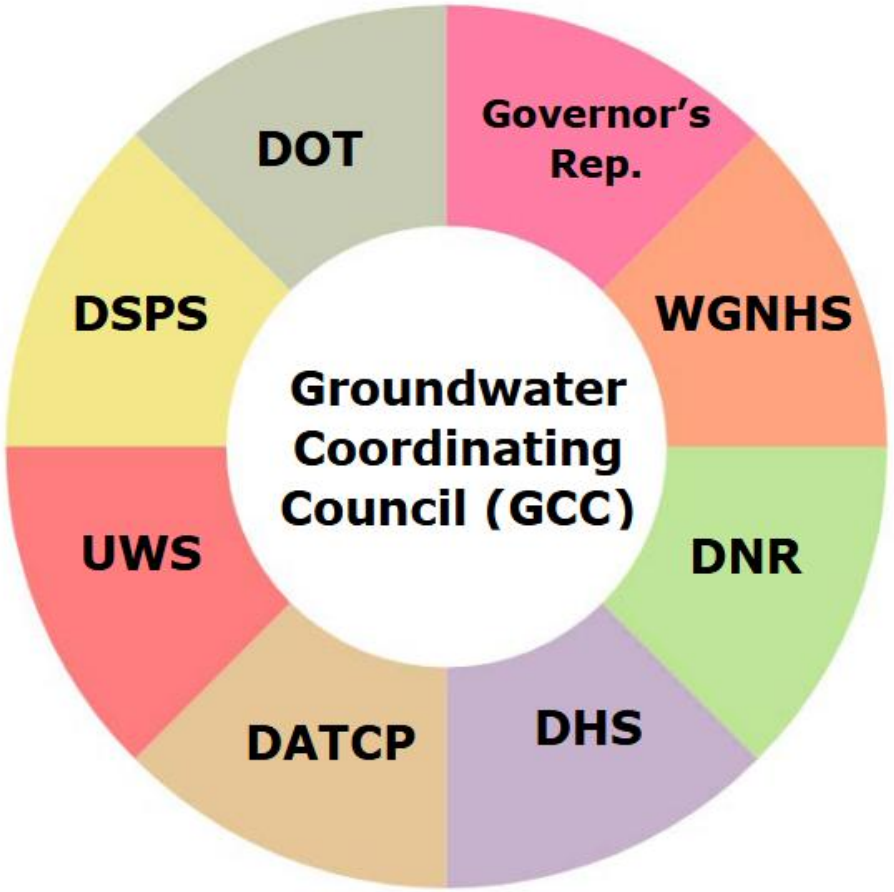
/WIDNRTV

"WILD WISCONSIN:
OFF THE RECORD"

2025 GCC Report To The Legislature Highlights

Dr. Carla Romano| Groundwater Section Manager, DNR

Scope of the GCC Report



- The Groundwater Coordinating Council (GCC) was established to enhance coordination and effectiveness of state groundwater management.
- The GCC is required to produce an annual report summarizing council activities, the state of groundwater resources, and recommendations for the legislature.

2025 Groundwater Management Highlights

- **DNR**: Replaced/treated 500+ wells via ARPA grants; initiated updates to NR 809 & NR 140 standards for PFAS.
- **DATCP**: Evaluated 101 atrazine prohibition areas to assess effectiveness in reducing groundwater concentrations.
- **DHS**: Updated the Private Well Toolkit for local health departments, including fact sheets, posters, and treatment guides.
- **DOT**: New brine application methods reduced salt use while maintaining road safety.
- **DSPS**: Suspended hydrograph method for POWTS siting due to erratic groundwater; Wisconsin Fund grant program set to end June 2025.
- **Governor's Representative** / WPVGA: Advanced nitrate reduction research, evapotranspiration measurement, Producer-Led Watershed Protection grants, and Nitrogen Optimization Pilot Program.
- **UW**: Supported 5 groundwater research projects, coordinated FY26 Joint Solicitation for 2 more, engaged 3 policy fellows and 35 undergraduate interns.
- **WGNHS**: Completed major study in Burnett County, launched new study in Rock County, conducted statewide monitoring and modeling.

Key findings and recommendations

Findings	Primary Recommendations
PFAS substances continue to be found in WI groundwater in both public and private wells, posing risks to public health and the environment.	• Set new and updated state NR809 drinking water and NR140 groundwater standards for PFAS. • Continue to identify PFAS sources and their potential impacts to groundwater and other environmental media. • Support continued monitoring and research.
Nitrate is the most common contaminant in Wisconsin groundwater. In several wells across the state, nitrate levels are worsening.	• Expand groundwater monitoring efforts. • Expand the eligibility criteria of the state's well compensation program to include wells with nitrate levels above 10 mg/L and non-community wells. • Implement agricultural practices that protect groundwater from nitrate contamination.
At least one pesticide substance is estimated to be present in over 40% of private potable wells in WI. Groundwater standards are not set for most of the pesticides, including neonicotinoids, detected in WI.	• Set new and updated NR140 groundwater standards for pesticides. • Implement agricultural practices and integrated pest management that reduce pesticide presence in WI groundwater.
Wisconsin has abundant water, but supplies are unevenly distributed, and in some areas, limited aquifers and high use lead to dry wells, reduced streamflow, and restrictions on new water withdrawals.	• Work with stakeholders to identify sustainable water sources. • Identify water conservation and efficiency measures in water stressed areas. • Develop a regional framework to manage water withdrawals

Address PFAS contamination in groundwater

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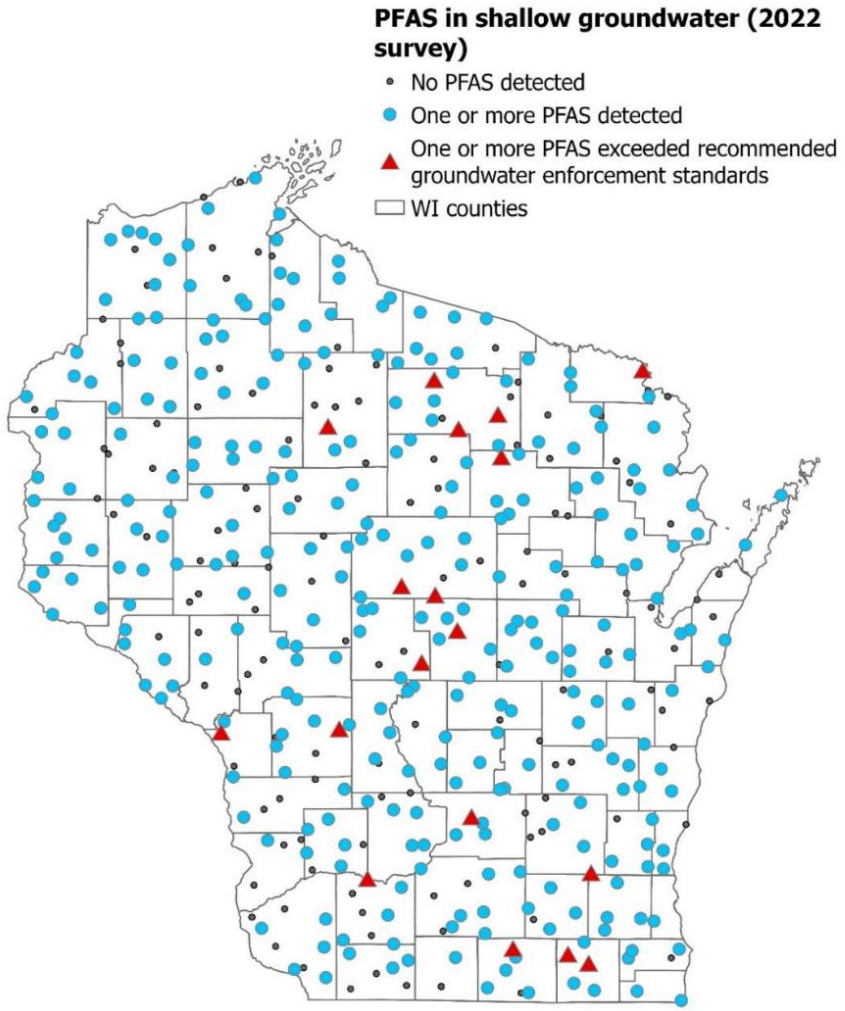

<u>Recommendations</u>

- Set new and updated state NR809 drinking water and NR140 groundwater standards for PFAS.
- Continue to identify PFAS sources and their potential impacts to groundwater and other environmental media.
- Support continued monitoring and research.

Address nitrate contamination in groundwater

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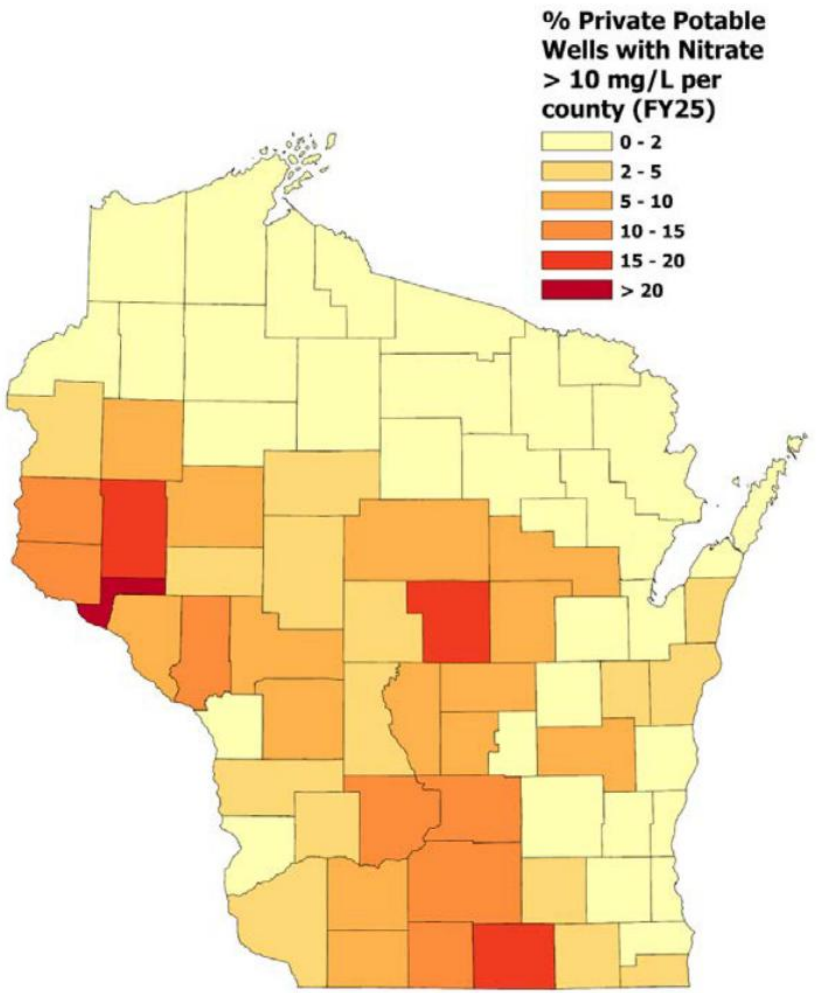

<u>Recommendations</u>

- Expand groundwater monitoring efforts.
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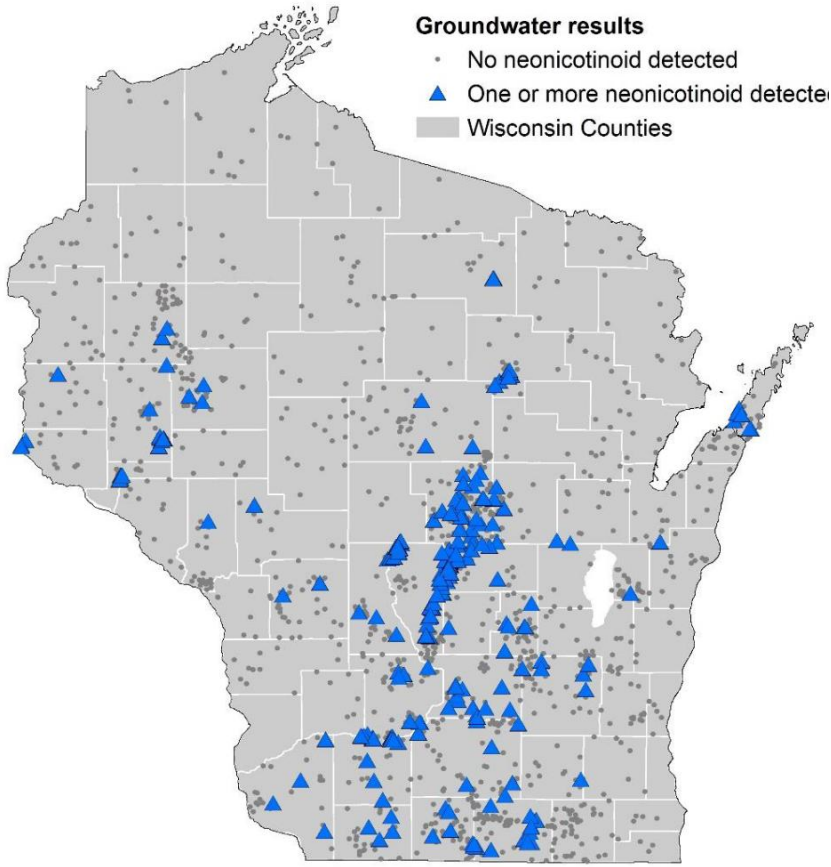


<u>Recommendations</u>

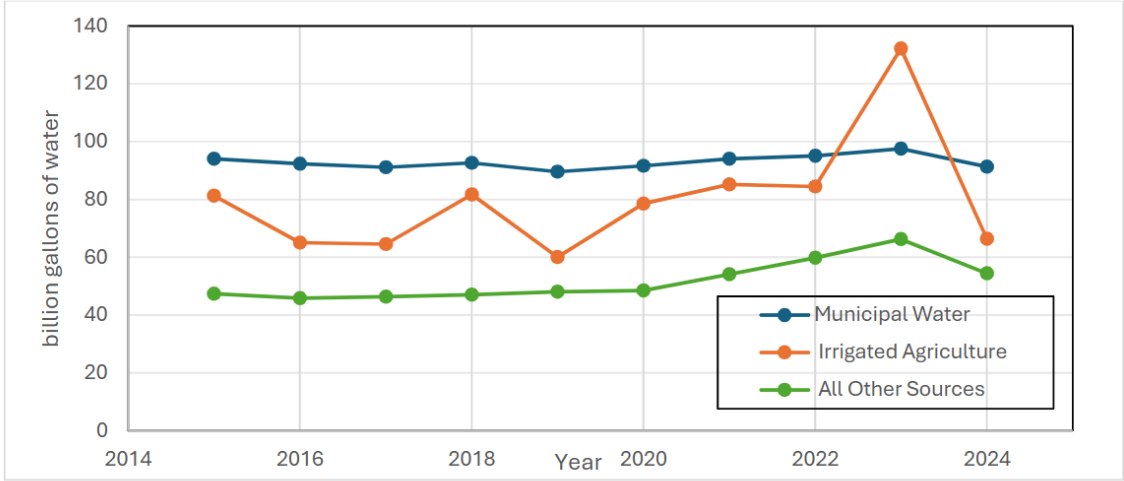
- Set new and updated NR140 groundwater standards for pesticides.
- Implement agricultural practices and integrated pest management that reduce pesticide presence in WI groundwater

Address groundwater quantity issues

Wisconsin has abundant water, but supplies are unevenly distributed, and in some areas, limited aquifers and high use lead to dry wells, reduced streamflow, and restrictions on new water withdrawals.

<u>Recommendations</u>

- Work with stakeholders to identify sustainable water sources.
- Identify water conservation and efficiency measures in water stressed areas.
- Develop a regional framework to manage water withdrawals.



Wisconsin annual groundwater withdrawals, 2015 – 2024.

Other recommendations

Findings	Additional Recommendations
Pathogen indicators like *E. coli* have been detected in municipal and private wells. Pathogens indicators are often linked to manure mismanagement and failing septic systems. This may indicate potential serious health risks and highlights the need for better prevention and waste management awareness.	• Continue monitoring pathogens in groundwater. • Partner to raise awareness on waste disposal, septic, and manure management. • Improve well construction and maintenance to reduce contamination exposure.
Emerging contaminants, VOCs, metals, and natural substances like arsenic, manganese, and radium are often found in wells, sometimes above health standards.	• Continue monitoring and provide financial resources for mitigation. • Establish new and revised health-based groundwater quality standards for contaminants.
Spring inventories, groundwater-level monitoring, and stream monitoring are key tools used to track water resources, understand groundwater-surface water connections, and manage withdrawals to protect Wisconsin's water supply.	• Maintain inventories of groundwater location, quantity, and use. • Support monitoring and modeling of groundwater withdrawal impacts. • Explore solutions for areas with limited groundwater. • Research how land-use changes affect groundwater use and recharge.
Effective groundwater management requires public, up-to-date data to support informed policy and business decisions.	• Continue collecting and sharing groundwater data in accessible formats through a unified platform. • Expand and promote the Groundwater Retrieval Network (GRN) as Wisconsin's main groundwater data system.
Climate change is driving more frequent and severe floods and droughts, impacting groundwater quality and quantity	• Study future climate variability in Wisconsin and its effects on groundwater. • Support research on climate-groundwater interactions to improve flood, drought, and management responses.
Wisconsin leads in groundwater research thanks to the GCC's Joint Solicitation process. However, state funding has dropped since the 1990s, now falling short of growing research demands.	• Increase state funding for DNR and UW groundwater research

Where to find the 2025 GCC report

REPORT TO THE LEGISLATURE

WISCONSIN GROUNDWATER COORDINATING COUNCIL (GCC)

The Groundwater Coordinating Council prepares an annual report each year that summarizes the operations and activities of the council, describes the state of the groundwater resource and its management and makes recommendations. The report is due each August for the preceding fiscal year. The latest report is for fiscal year 2025 (July 1, 2024 – June 30, 2025) and is contained on these webpages.

READ THE EXECUTIVE SUMMARY

READ THE FULL REPORT

2025 REPORT PRIMARY RECOMMENDATIONS

- Address PFAS contamination in groundwater.
- Address nitrate contamination in groundwater.
- Address pesticide contamination in groundwater.
- Find solutions for water-stressed areas affecting communities, economic activity and water resources.

View the GCC StoryMap: Wisconsin's Buried Treasure is Worth Protecting. Photo Credit: iStock/Lise Gagne.

View all the recommendations.

View the GCC StoryMap.

Scan this QR code or visit
https://dnr.wisconsin.gov/topic/Groundwater/GCC
for the report.

NR 146 & NR 812 Rule Implementation

Marty Nessman| Private Water Section Manager, DNR

NR 812 Biggest Changes

- No longer requires approval of pitless adapters and wellhead equipment
- NPSV approvals – only in certain cases
- Dielectric unions
- Dewatering well standards
- Existing 5” wells in limestone
- Variance application requirements
- Valve pits no longer mentioned

NR 146 Revisions

- Required online license renewal starting with 2028 renewals
- Continuing education completion grace period starting in 2028

NR 812 Rule Implementation

- Update Forms
- Update Exams – Driller, PI, HE driller, Delegated Counties
- Revise Fact Sheets
- Training at Wisconsin Water Well Conference in January
- Training for Delegated Counties
- Updated web content

NR 146 Implementation

- Updates to licensing database
- Updated licensing and continuing education web pages

Questions?

Break

Member Roundtable

Chris Groh | **Wisconsin Rural Water Association**

Kathleen Dax-Klister | **Wisconsin State Lab of Hygiene**

Lawrie Kobza | **Municipal Environmental Group**

Paul Junio | **Pace Labs**

Jeff Kramer | **Wisconsin Well Water Association**

Sydney Morgan | **Wisconsin Section – American Waterworks Association**

Jordan Murray | **Department of Health Services**

Rick Wietersen | **Wisconsin Association of Local Health Departments and Boards**

Sara Walling | **Clean Wisconsin**

Dale Broeckert | **American Council of Engineering Companies - Water Committee**

Adam Jordahl | **Wisconsin Manufacturers & Commerce**

Angela James | **Public Service Commission of Wisconsin**

Internal Updates

MyWisconsin ID

- Completed transition to MyWisconsin ID over the summer
  - Certified Operators
  - County Contract Staff
  - Well Drillers
  - Pump Installers
  - Laboratory Staff

- Final DG Group Transitioning to MyWisconsin ID – Dec. 2025
  - Dewatering Well Applicants
  - Online Water Withdrawal Reporters

- Water Use Section staff are ready to assist

ARPA Well Compensation Update

as of 11/05/25

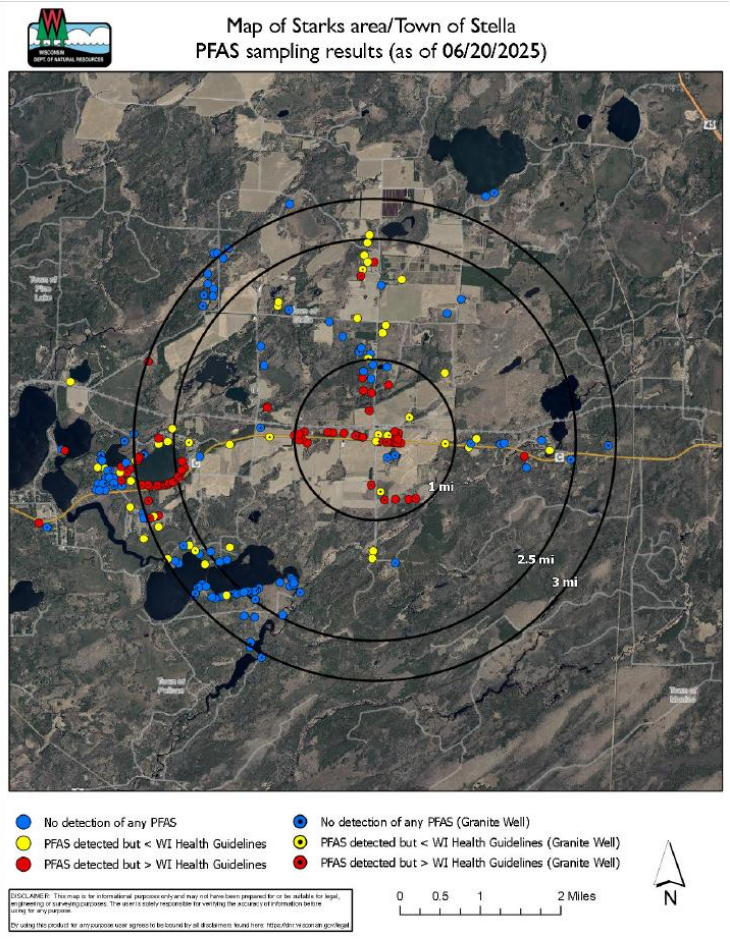
- Applications will no longer be accepted.
  - All funds will be distributed by end of 2026
- Awards Issued:
  - Well compensation - **715**
  - Well abandonment – **230**

- Of the 945 awards issued, 104 were for non-community applicants

Stella/Oneida Co. Update

[PFAS Contamination in the Town of Stella and Oneida County | | Wisconsin DNR]

- Expanded Sampling
- Investigations
- Consumption advisories
- October 1st Public Meeting



Association of Drinking Water Administrators Update

- New Executive Director – Anthony DeRosa
- Annual Conference held October 20-23, 2025
- Highlights:
  - Water Reuse – Orange County Groundwater Replenishing System talk and tour
  - Grand Rapids, MN legionella outbreak response
  - EPIC Lead Innovation Hub: https://www.leadinnovationhub.org/
  - Good presentation from WaterPIO
    - PFAS communications
    - Emergency communications
  - Mississippi has a good portal for water systems to submit regulatory documents to the state
  - EPA will launch the PFAS OUT technical assistance initiative
  - EPA colleagues were missed. Discussion about how to meet research needs after the closing of EPA Office of Research and Development

Administrative Rules Update

Drinking Water and Groundwater Administrative Rules Update

NR 809: LCRR/LCRI - Lead and Copper Rule

- Rule public comment period closed September 24, 2025
- Public Hearing held on Sept. 17, 2025
- More information
  - Lead and Copper
- Planning to ask for Natural Resource Board to adopt the rule on December 10, 2025
- Submit to the Governor in early 2026

Drinking Water and Groundwater Administrative Rules Update

NR 809: PFAS Standards & Technical Edits

- Economic Impact Analysis closed its public comment period on July 23, 2025
- Public hearing on the rule was held Oct. 2, 2025
- More information:
  - NR 809 Technical Edits
  - Federal PFAS Maximum Contaminant Levels
- State rules will become effective in Summer 2026
- Current federal compliance deadline for initial monitoring is in 2027 and MCL compliance is in 2029

Drinking Water and Groundwater Administrative Rules Update

NR 140 – Groundwater Standards

- Approved scope statement to incorporate new DHS recommendations for 6 PFAS groundwater standards

- Drafting rule language and Economic Impact Analysis

NR 140 Groundwater Quality Standards Update

CONNECT WITH US

Next Meeting | Feb. 5, 2026

The meeting recording will be posted on the Drinking Water and Groundwater Study Group webpage.

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