

# **DNR Drinking Water and Groundwater Study Group**

April 13, 2023

# Private Water Update

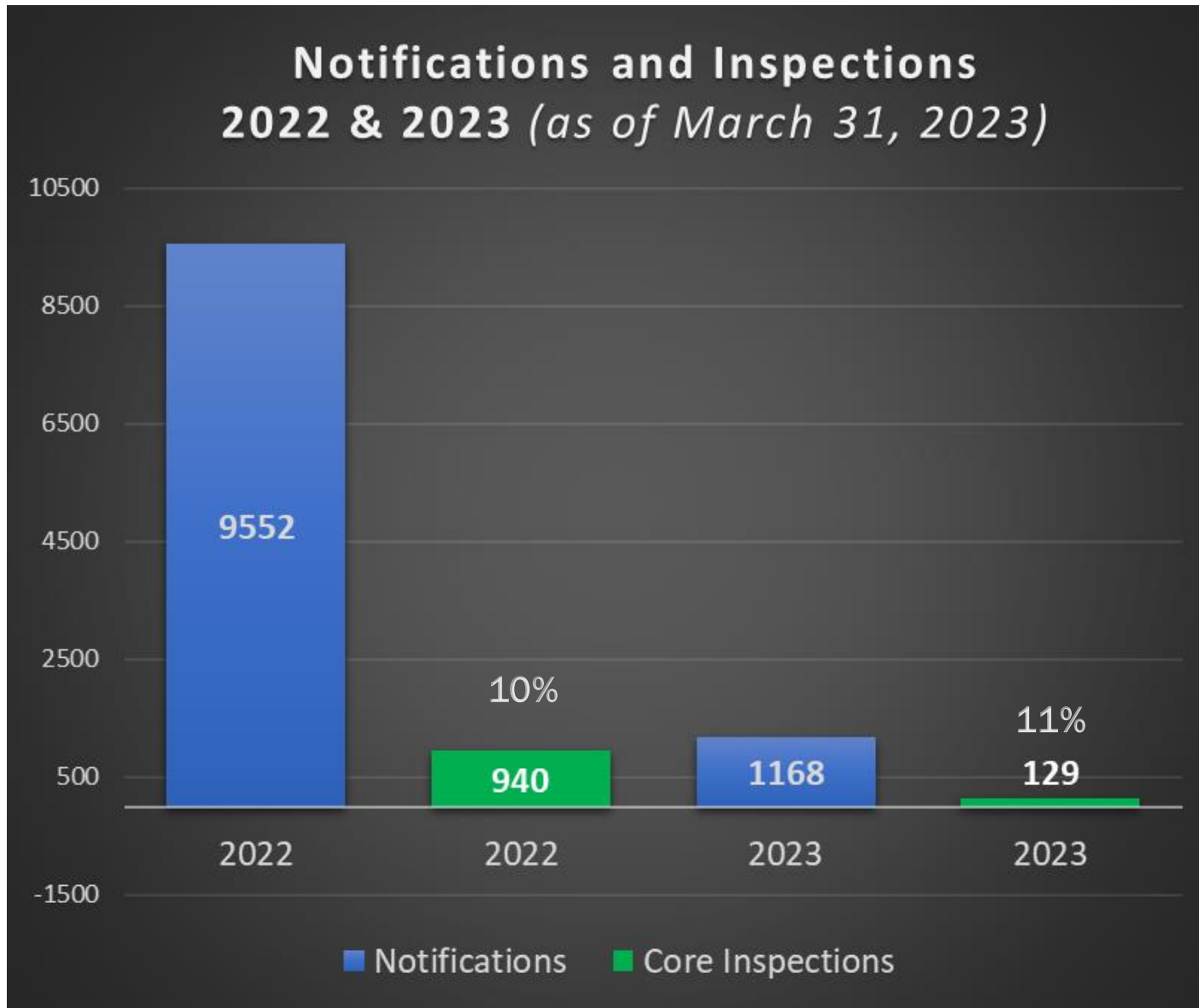
Marty Nessman & Stacy Steinke

# Compliance & Enforcement

## Compliance Inspections



# Compliance Inspection Data



## 2022

January - December

## 2023

January - March 31, 2023

### Notifications

Purchased state well permits

### Core Inspections

Wells during construction  
(*notifications*)

Pump installation

(*quarterly notices*)

Well filling and sealing

# Private Water Variances

## 2022 Variances Issued = 325

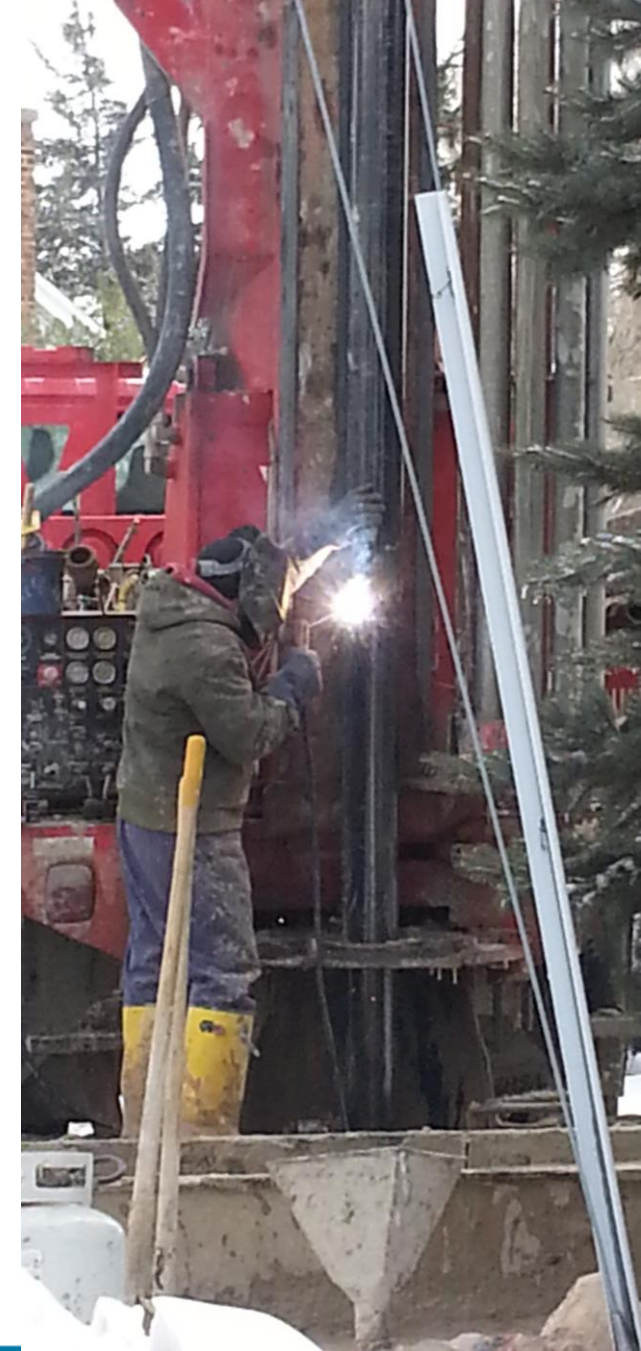
- Landfill Variances: 169
- Other Variances (setbacks, construction, etc.): 156

## 2023 Variances Issued = 33

- Landfill Variances: 19
- Other Variances (setbacks, construction, etc.): 14

## Most Common “Other” Variances:

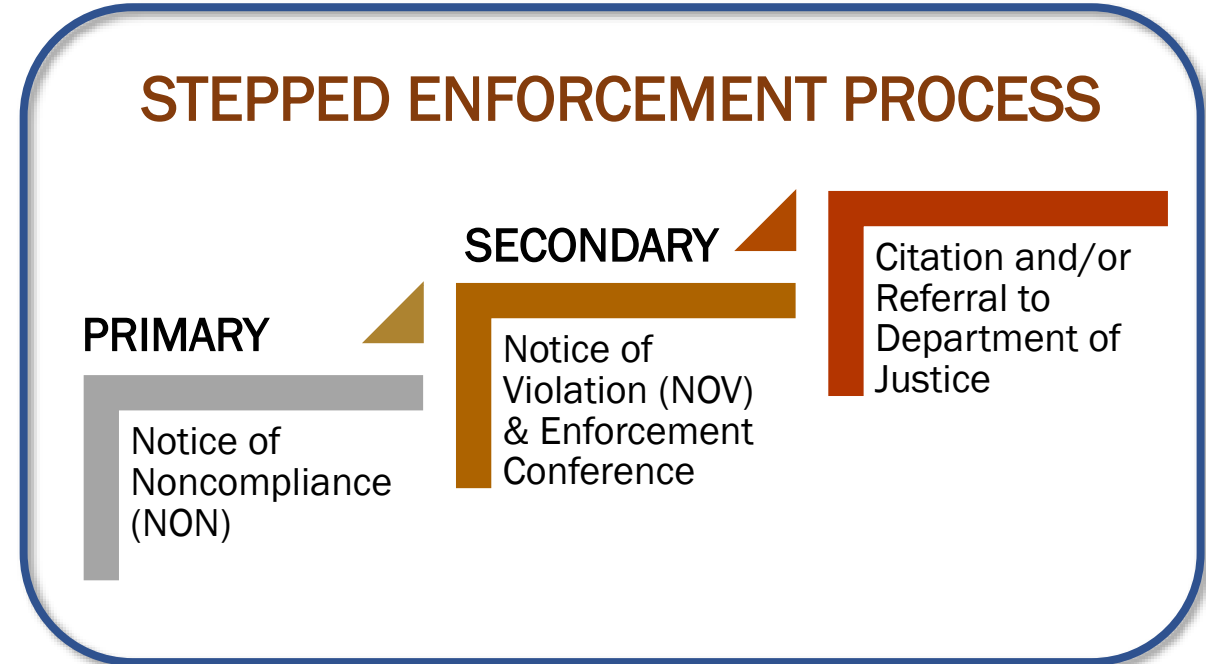
- Location/Separation Distance
- Special Well Casing Depth Areas
- Well Construction/Casing Depth



# Compliance & Enforcement

## 2022 Primary Enforcement:

- Total NONs issued in 2022: 47
- NONs since October 27, 2022: 2
- Most Common Violations:
  - Location/Separation Distance
  - Unlicensed Work (mostly PI)
  - Noncompliant Electrical Conduit
  - Reporting (various)



# Compliance & Enforcement

- Secondary enforcement:
  - NOV's issued in 2022:
    - WDs Noncompliant Grouting/Construction/Reporting
  - Citations issued 2022 = 2
  - Citations issued 2023 = 7
  - Active cases: 2
  - Pending Cases: 5
    - WDs - non-compliant grouting & reporting
    - PIs - Unlicensed PI/Inspection work/work on non-complying system (3 Cases)
- Referrals to DOJ:
  - 1 current DOJ referral (2017)
  - STILL awaiting legislative closure



# ARPA Grants Update

## Well compensation grants:

- 176 applications received
- 96 grant awards issued
  - 88 nitrate
  - 10 other contaminant
  - 8 arsenic
  - 1 PFAS

## Well abandonment grants

- 54 grant awards issued

**\$1.7 Million+ awarded thus far**





# Program Guidance

Total Coliform/*E. coli* Contamination at  
Municipal Drinking Water Systems Without Continuous Disinfection

DNR Drinking Water & Groundwater

April 2023

# Overview & Next Steps

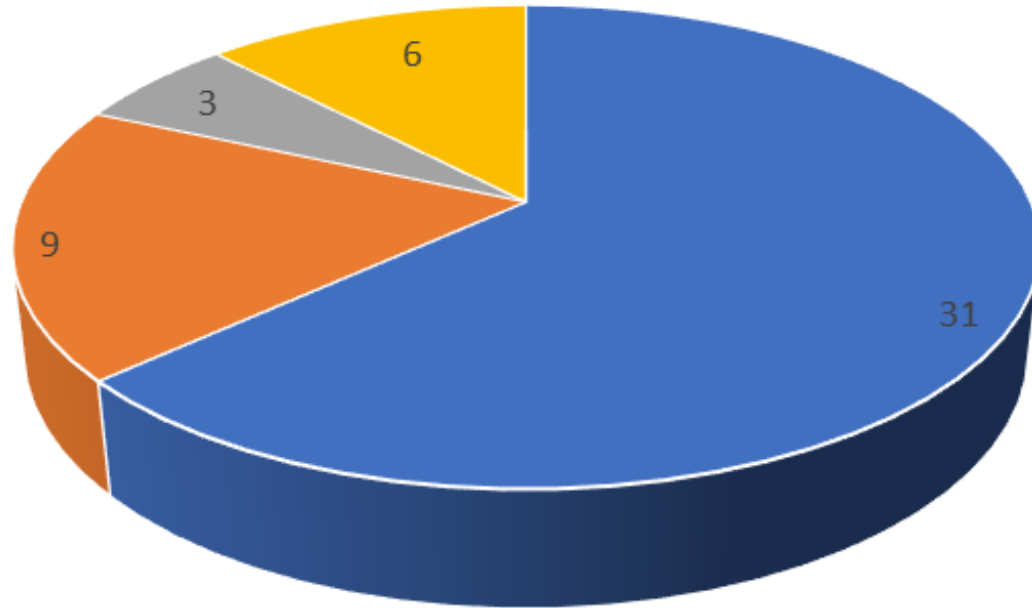
- Guidance available for public comment
- Who is potentially affected by the guidance
- Purpose of Guidance: Consistent implementation of Revised Total Coliform Rule at municipal systems that do not continuously disinfect
  - “Find and fix” may require continuous disinfection to address potential health hazard
  - Potentially affects 49 municipal systems, 42 have recent history of contamination
  - Funding is available if equipment upgrades are needed
- Next Steps

# Open for Public Comment

Guidance was posted on April 5, 2023 at

- [Guidance Concerning Total Coliform/E.Coli Contamination at Municipal Public Water Systems Without Year-Round Continuous Disinfection](#)
- [Guidance for Sanitary Survey Review and Documentation at Municipal Public Water Systems without Year-Round Continuous Disinfection](#)
- Now available for review and comment on the DNR Program Guidance web page.  
<https://dnr.wisconsin.gov/topic/DrinkingWater/Guidance.html>
- You are invited to provide input on these guidance documents through **April 21, 2023**. [dnrdgguidancecomment@wisconsin.gov](mailto:dnrdgguidancecomment@wisconsin.gov)

# Municipal Drinking Water Systems Without Continuous Disinfection, Total Population = 56,195



■ NOR ■ SCR ■ SER ■ WCR

Region	# of MCs
NOR	31
SCR	9
SER	3
WCR	6
Total	49

# Municipal Drinking Water Systems Without Continuous Disinfection

Total Population = 56,195



# Examples: Total Coliform Contamination

After Revised Total Coliform Rule Effective Date 4/1/16

PWS_NAME	TCP Count	Population	L1+L2 Count	L2 Count
RICE LAKE WATERWORKS	63	8300	5	2
RADISSON WATERWORKS	44	241	9	6
SHELL LAKE WATERWORKS	24	950	1	0
STAR PRAIRIE WATERWORKS	23	553	3	0
GLEN FLORA WATERWORKS	22	93	6	4
DRESSER WATERWORKS	19	897	5	2
KEWASKUM WATERWORKS	18	4000	2	1
CUMBERLAND WATERWORKS	18	2311	1	0
HOLLANDALE WATERWORKS	16	283	2	1

# Background

In 2013, EPA promulgated the Revised Total Coliform Rule which establishes requirements for assessments and corrective action when monitoring results show that public water systems may be vulnerable to contamination. In 2016, DNR adopted these requirements within ch. NR 809, Wis. Adm. Code.

The intent of the assessment and corrective action portions of the Revised Total Coliform Rule is to “find and fix” the problem. Section NR 809.313 describes the requirements, process, and corrective actions for a Level 2 assessment.

# Guidance Applicability

This guidance is for situations where all the following apply:

- A Level 2 assessment is triggered at a municipal community drinking water system that does not continuously disinfect on a year-round basis,
- The Level 2 assessment identifies no likely cause of the Level 2 trigger, and
- Water quality data for the system document a history of total coliforms or E. coli in the drinking water, indicating a potential health hazard.



# Level 2 Assessment Triggers

A Level 2 assessment can be triggered by the following Level 2 treatment technique triggers, as established in s. NR 809.313(1)(b), Wis. Adm. Code:

1. An E. coli MCL violation, as specified in s. NR 809.30.
2. A second Level 1 trigger as defined in par. (a) within a rolling 12-month period, unless the department has determined a likely reason that the samples that caused the first Level 1 treatment technique trigger were total coliform-positive and has established that the water supplier has corrected the problem.

# Level 1 Assessment Triggers

A Level 1 assessment can be triggered by the following Level 1 treatment technique triggers, as established in s. NR 809.313(1)(a), Wis. Adm. Code:

1. For public water systems taking 40 or more samples per month, the public water system exceeds 5.0% total coliform–positive samples for the month.
2. For public water systems taking fewer than 40 samples per month, the public water system has two or more total coliform–positive samples in the same month.
3. The water supplier fails to take every required repeat sample after any single total coliform–positive sample.

# DNR Process

- Review water quality data history, prior assessments and corrective actions
- Conduct assessment site visit
- In some situations, the Level 2 assessment will not identify a likely cause of the Level 2 trigger. The DNR Rep should consider identifying the persistent total coliform-positive or *E. coli* samples as a sanitary defect that indicates a failure in a barrier to contamination. After considering the water system's historic data and the information gathered during the Level 2 assessment, the DNR Rep identifies continuous disinfection as the required corrective action to address a potential health hazard.
- Document findings, issue letter with corrective action schedule and notice of appeal rights
- Provide information about DNR funding if equipment upgrades are needed

# DNR Sanitary Survey Guidance

- Recommend continuous disinfection
- Verify monitoring site locations and rotation
- Verify and document the adequacy of emergency chlorination plan and chlorination infrastructure
- Verify main break follow-up sampling

# Why now?

- Total coliform contamination events continue
- Research demonstrates public health risk

[Viruses in Nondisinfected Drinking Water from Municipal Wells and Community Incidence of Acute Gastrointestinal Illness](#) (Sept 2012. Borchardt et al.)

- Since 2016, strong and explicit code authority supports action protective of public health
- Funding is available if equipment upgrades are needed

# Funding for Equipment Upgrades

- Safe Drinking Water Loan Program (SDWLP)
  - 2.145% is the current interest rate for a 20-year SDWLP loan (55% of market rate).
  - 1.287% is the current interest rate for a disadvantaged community (33% of market rate).
- Principal Forgiveness is available for disadvantaged communities.
- Intent to apply due in October, full application due in June.
- Projects to upgrade equipment to support continuous disinfection are SDWLP eligible, per s. NR 166.06(1), Wis. Adm. Code.

# Other states?

- Illinois requires continuous disinfection at all community systems, with strict criteria for exemptions including voter approval.
- Ohio requires continuous disinfection at all community and non-community systems with population > 1000. On a case-by-case basis, continuous disinfection is required at smaller non-community systems in response to RTCR triggers.
- Similar to Wisconsin, Minnesota, Michigan and Indiana do not require all community systems to disinfect. Instead, they require disinfection on a case-by-case basis in response to RTCR triggers.

# Next Steps

- Posted program guidance for public comment on April 5
  - Conducted outreach to systems and partners
  - Review and respond to comments
  - Finalize and implement guidance
- 
- You are invited to provide input on these guidance documents through **April 21, 2023**.
  - [dnrdgguidancecomment@wisconsin.gov](mailto:dnrdgguidancecomment@wisconsin.gov)



**Break**

# Member Roundtable

*Scott Laeser* | Clean Wisconsin

*Chris Groh* | Wisconsin Rural Water Association

*Camille Danielson* | Wisconsin State Lab of Hygiene

*Lawrie Kobza* | Municipal Environmental Group

*Paul Junio* | Pace Labs

*Jeff Kramer* | Wisconsin Well Water Association

*John Richmond* | Wisconsin Section – American Waterworks Association

*Sarah Yang* | Department of Health Services

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

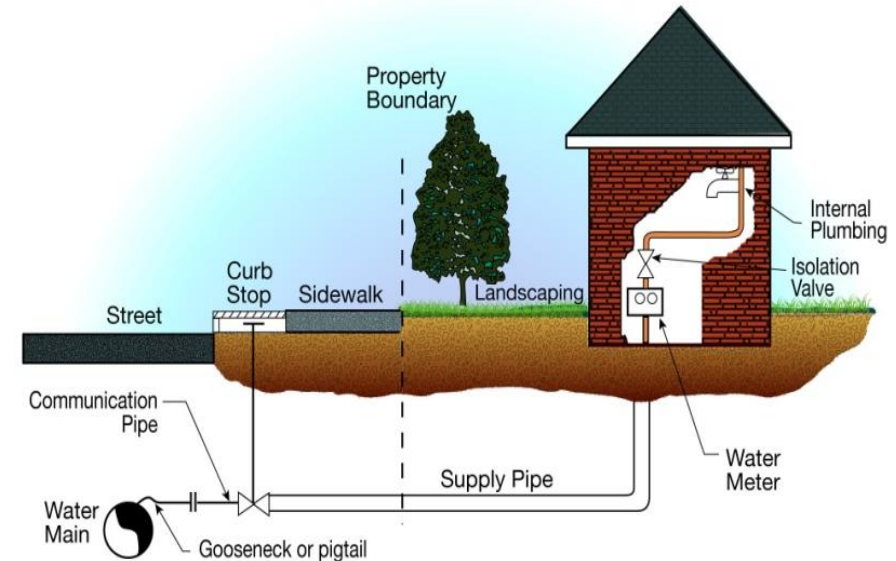
*Craig Summerfield* | Wisconsin Manufacturers & Commerce

# Internal Updates

# Lead & Copper Rule Updates

# Federal Lead & Copper Rule Revisions (LCRR)

- Went into effect on December 16, 2021.
- Compliance date is October 16, 2024.
- EPA intends to propose “Lead and Copper Rule Improvements” (LCRI) in 2023
- Must complete Materials Inventory by October 16, 2024
  - DNR is working on a technical assistance contract to help small systems with this requirement.
  - Template and instructions for the materials inventory are available



# Lead Service Line Replacement Accelerator

December 2022

## Lead Service Line Replacement Accelerators Community Initiative



### Wisconsin included as a pilot state

1. **Community Engagement Plans** that invite community input, provide educational resources, and meaningfully engage affected community members while identifying and replacing LSLs;
2. **LSL Inventories** that are necessary to identify funding and public notification needs and meet requirements in the 2021 Lead and Copper Rule Revisions (LCRR) for a complete inventory by October 2024.
3. **Lead Service Line Replacement Plans** that provide communities with a roadmap for identification, prioritization, and replacement of all LSLs, including public and private portions; and/or
4. **SRF Funding Applications** that help communities receive DWSRF funding for LSL replacement projects.

# Federal Lead & Copper Rule Revisions

- **Complete your service line materials inventory by October 16, 2024**
- **Expect more information from EPA regarding Lead and Copper Rule Improvements (LCRI) this fall (2023)**
- **LCRI expected to expand lead service line replacement requirements**
- **Federal funding now available for lead service line replacements**

# PFAS Updates



# NR 809 – MCL Requirements for PFOS & PFOA

- MCL - 70 ng/L (parts per trillion) for total “PFOS and PFOA”
- Per s. NR 809.20 (1)
  - MCL exceedance will result in public notice and corrective action schedule
- **DNR may require public notice if state health-based recommended standard is exceeded**
  - [WI DHS Information for PFAS Recommended Standards](#)
- Best Available Treatment Techniques for PFOS and PFOA are granular activated carbon, powdered activated carbon, ion exchange resins, nanofiltration, and reverse osmosis.

# PFAS Monitoring Requirements – NR 809

- Initial Monitoring – Quarterly, may be reduced with potential waivers.
- Routine Monitoring – Annual or Every three years.
- Increased Monitoring – Quarterly with PFAS detections.
- Waivers – Criteria includes no PFAS detections, no potential contaminant sources, well vulnerability.

# Initial Monitoring Waivers - Summary

- If no detect is found in the first sample **AND** your system currently has an SOC waiver, remaining initial monitoring samples will be waived.
- Systems with low level detects may also be considered for waivers through our standard waiver process.

# PFAS Updates

- NR 809 Compliance Sampling
  - Systems >50k completed first quarter of sampling in 2022
    - 12 systems
  - Systems >10k<49,999 sampling Jan-March 2023
    - ~70 systems
  - Remaining systems (~2000) will sample April-December 2023
  - No MCL or Hazard Index exceedances as of March, 2023
- FY23 BIL EC Funding Application Deadline
  - January 31, 2023
  - All utilities that submitted Intents to Apply submitted applications
- Years 2-5 of the BIL EC funding rolled into standard SDWLP timelines
  - **Applications due June 30, 2023**

# PFAS Federal Updates

- EPA Proposed a Draft MCL in March, 2023
  - PFOS – 4 ppt, PFOA – 4 ppt
  - Mixture of 4 other PFAS compounds
    - GenX – 10 ppt
    - PFBS – 2000 ppt
    - PFNA – 10 ppt
    - PFHxS – 9 ppt
  - Comment period on the proposed rule is now open
  - When finalized, DNR will update rule to match the federal standard

# Sunsetting Continuing Operation Allowance Transient Systems with Nitrate >10ppm

# Continuing Operation Changes – Transient Systems

- Allowance for to serve water with nitrate >10ppm <20ppm
  - Limited after April 1, 2023
  - Still allowed on temporary basis
- Systems currently with this allowance
  - Can continue for 3 years
  - Prioritized for phasing out after that
- This affects ~200 systems
- New MCL violations
  - 3 year allowance in consent orders

# Why is this allowance changing?

- NR 809.11(3) allows non-community systems to continue to serve water at department's discretion
  - Never intended to be permanent allowance
  - New health risks for general population information – can't meet 809.11(3)
    - The Wisconsin Department of Health Services recommends people of all ages avoid long-term consumption of water that has a nitrate level greater than 10 mg/L.
- US EPA requested Wisconsin address these ongoing MCLs at TNs
- WI is an outlier
  - Other region 5 states are not as permissive
- ARPA funding and expanded well grant program available to help TN owners



# Cybersecurity

# Cybersecurity Resilience

## New EPA requirements

- Drinking water systems with SCADA or other online (web connected) control system must be regularly assessed to ensure proper security is in place. Options include:
  - Self-Assessment
  - Third-Party Assessment
  - DNR sanitary survey inspection (modification to include cyber assessment)
  - Alternative assessment program
- Identified deficiencies must be addressed
- More information is on the EPA website:  
<https://www.epa.gov/waterriskassessment/epa-cybersecurity-water-sector#CSS>

# Consumer Confidence Reports

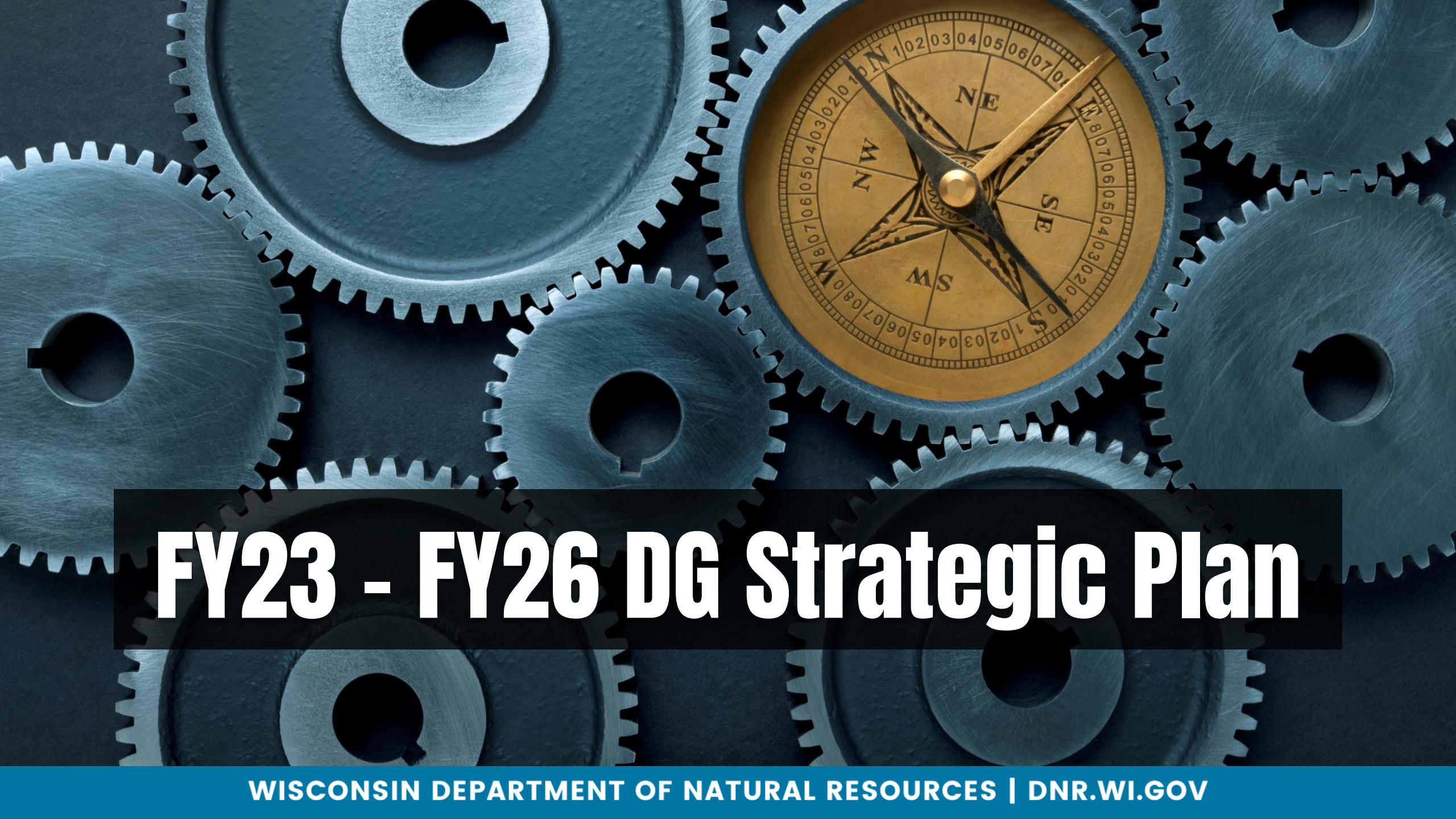
# Consumer Confidence Report changes

- Consumer Confidence Reports (CCRs) are the Annual Drinking Water Report required to be delivered annually to community water system customers
- The proposed changes focus on the following items:
  - Improving the readability, understandability, and clarity of the report
  - Improving accuracy of information and risk communication
  - Systems serving 10,000 or more people – **CCR must be delivered two times a year**
- Also proposed: DNR to provide EPA with all drinking water compliance monitoring data annually
- Compliance date, if rule is finalized on schedule: 2025
- Webinar and public comment opportunities on the EPA website:  
<https://www.epa.gov/ccr/consumer-confidence-report-rule-revisions>

# CCR Reminder

- *Consumer Confidence Reports for Community Water Systems are required to be completed and delivered by July 1, 2023 per NR 809.83(2)(a)*





# FY23 - FY26 DG Strategic Plan

# Updates for FY23-FY26

**Strengthen focus on core mission**

**Clearer articulation of DEI, EJ and Climate priorities**

**Address changes in IT**

**Reflect growth of program communications**

**Other refinements to factor in current landscape**

## **Long-Term Outcome**

**Everyone in Wisconsin has Access to Safe and Sustainable Water Supplies and the State's Water Resources are Protected**

## **Role**

**We Ensure the Safety and Availability of Wisconsin's Drinking Water Supplies and Protect the Health of its Water Resources**



## **Goal 1**

**Protect Wisconsin's Drinking Water and Groundwater**



## **Goal 2**

**Uphold a Workplace Culture that is Inclusive and Supportive of Staff Success**

## **Goal 3**

**Provide Excellent Customer Service, Internally and Externally**

## **Goal 4**

**Collaborate with and Learn from Partners with Shared Missions**



## **Goal 5**

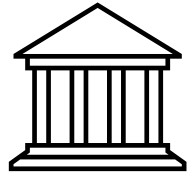
**Maintain Efficient, Effective and Sustainable Program Operations**

## **Goal 6**

**Use Proactive and Transparent Communication to Address Priorities**

# Administrative Rules Updates

# Drinking Water and Groundwater Administrative Rules Update



## NR 811 – Community Water System Design and Operation

- DG staff continue to finalize updates to design of community water systems
- Final approval was granted at the Natural Resources Board meeting April 12, 2023

## NR 140 – Groundwater Standards

- Natural Resources Board (NRB) approved bacteria changes in February 2023
- Continued work on PFAS changes under an open scope statement

# Drinking Water and Groundwater Administrative Rules Update



NR 854 and NR 851

Great Lakes Diversions and Water Supply Service Area Planning

- Preparing rule language and conducting stakeholder outreach under an open scope statement
- Water Supply Service Area Planning is required for systems serving over 10,000. Approval by DNR is only necessary for diversion applicants and withdrawal permits.

# Drinking Water and Groundwater Administrative Rules Update



## NR 812 – Well and Pump Code

- Revision to allow limestone cement is nearing completion
- Final approval expected at the Natural Resources Board meeting  
May 24, 2023
- Drafting scope statement for changes to pump installation requirements

## NR 146 – Driller and Pump Installer Licensing Code

- Drafting scope statement for changes related to licensing requirements and continuing education

# CONNECT WITH US

## Next Meeting | August 3, 2023

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



/WIDNR



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"WILD WISCONSIN:  
OFF THE RECORD"