

# DNR – Drinking Water and Groundwater Study Group Meeting

October 15, 2020





# DNR PFAS Updates & Office of Emerging Contaminants

Jason Lowery, P.G.  
Emerging Contaminants Technical Operations Coordinator

Mimi Johnson  
Emerging Contaminants Director





## Wisconsin PFAS Updates

- Office of Emerging Contaminants
- Great Lakes PFAS Task Force
- WisPAC
- Other Activities



# Office of Emerging Contaminants

- Policy director - Johnson
- Tech ops coordinator - Lowery
- Risk communicator - Kruger
- Program coordinator - Murdock



# Great Lakes Region 5 PFAS Task Force

Region 5 + Great Lakes States & Provinces

## Group 1 Members

NY	PA	WI	MN	IL	IN	OH	MI	ON	QC
Vacant	Vacant	Cole Foss	Koudelka Kessler	Kim Retig	Pigott Rockensuess	Factor Stevenson	Clark Keatley Sliver	Vacant	Vacant

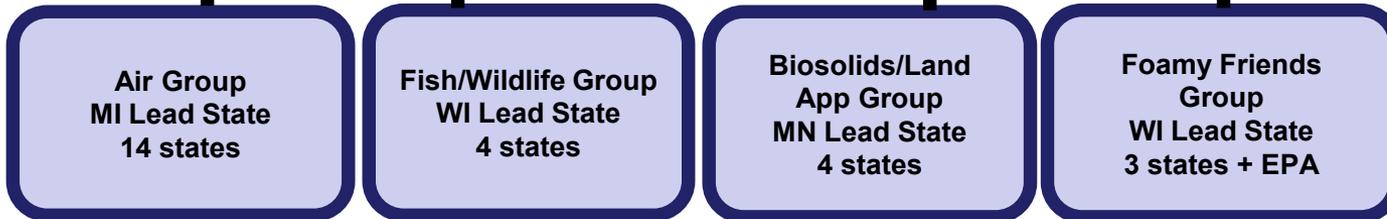
**GROUP 1 DIRECTORS**

## Group 2 Members (collaborate on ~15 issues including from Group 3)

NY	PA	WI	MN	IL	IN	OH	MI	ON	QC
Edwards Hausmann	Vacant	Lowery Johnson	Neuschler Wallerstedt Green	Hawbakerr	Pigott	White	Petersen Waselevich	Fletcher	Vacant

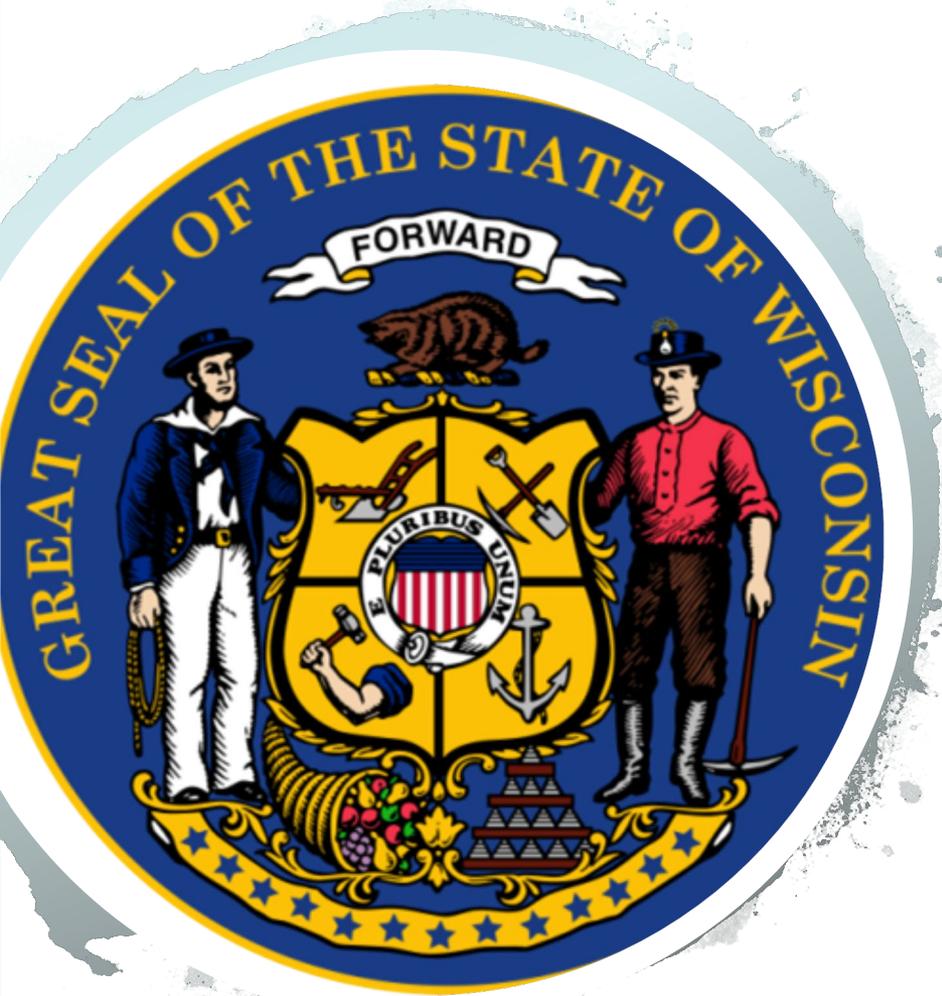
**GROUP 2 EXPERTS**

inform on specific issues



**GROUP 3 ISSUES**





# Executive Order 40

"Create the **PFAS Coordinating Council** pursuant to Section 13.019 of the Wisconsin Statutes. The Council shall be staffed by the Department of Natural Resources, with assistance provided by other agencies. Membership of the Council shall include a representative from each agency seeking to participate."

- Wisconsin PFAS Action Council (WisPAC)
- First Step → PFAS Action plan
- Ongoing role to make sure we keep moving forward





# PFAS Action Plan

...create a **roadmap** for how Wisconsin will address these emerging chemicals.



# PFAS Action Plan Development

-  WisPAC Meeting
-  Advisory Group Meeting
-  Listening Session
-  Comment Period



Wisconsin PFAS Action Council (WisPac)



# PFAS Action Plan Contents

- Background on PFAS and WisPAC
- Review of the process
- Eight themes → 25 Action Items

PFAS Action Plan available online for review:

<https://dnr.wisconsin.gov/topic/Contaminants/ActionPlan.html>

Theme 1: Standard Setting

### 1.1 Establish Science-Based Environmental Standards for PFAS

#### Background

As part of the state's groundwater law, the Wisconsin Department of Natural Resources (DNR) is required to maintain a list of substances that have been discovered in groundwater or have a reasonable probability of entering groundwater, and to routinely provide those lists to the Wisconsin Department of Health Services (DHS) for groundwater standard recommendations. In March 2018, DNR requested that DHS provide a groundwater enforcement standard for two of approximately 4,000 PFAS substances: PFOA and PFOS. In April of 2019, the DNR requested groundwater enforcement standards for an additional 34 PFAS substances.

Having clear, consistent and science-based environmental standards is a DNR priority for the protection of public health safety, welfare, and the environment for the citizens of the State of Wisconsin. The DNR establishes science-based environmental standards as part of its mission, including standards for:

- Safe drinking water in NR 809
- Groundwater in NR 140
- Water quality, and possibly biosolids, in NR 102-211
- Soil standards in NR 720
- Development of emission standards for hazardous air contaminants in the NR 400 rule series
- Site-specific sediment standards in NR 722

Consistent action towards standards should be... of emerging concern in... would be implemented on... are DNR requests for PFAS... recommendations from... health-based... other media-specific...

...ns to DHS, consistent with... g the groundwater... naneously begin... water, and drinking water... ct and soil-to-... s through rule or... work with the U.S... Development, academia... y a model for calculating a... ctive of groundwater... mplementation of a federally... cal information to consider... lopment of federal air... or biosolids, solid waste... ardous constituents under... derway. The Rulemaking... PFOS for groundwater...

...d Development) academia, (Department of Defense)

...des the regulated... ar benchmark on what level... ctive or actionable under... munity and brownfields... dress the contaminated... Establishing standards for... for municipalities,

...and staff for rule writing... economic analyses are... implementation of this action

...is action were forwarded

Time to initiate: surface water and drinking water with approximately 30 months to complete.

- "The WisPAC Action Plan should include expedited state action, such as emergency rule development or executive order, to develop interim statewide clean-up standards for soil and groundwater."





# DG- Applicable Proposals

- 1.1 – Establish Science-Based Environmental Standards for PFAS
- 2.1 – Expanding PFAS Site Identification Using GIS Mapping
- 2.2 – Facilitate Timely Collection of Environmental PFAS Data
- 2.3 – Standardize PFAS Sampling Methods and Support Statewide Implementation
- **2.4 – Test Public Water Systems for PFAS**
- 4.5 – Enhance Collaboration Between Wisconsin and Federal Agencies on PFAS Relating to Military Installations
- 5.1 – Collaborate on and Implement Research
- 5.2 – Monitor Background Levels of PFAS in the Environment
- **5.3 – Collect Data on Drinking Water Treatment and Costs**
- **7.3 – Provide Financial Tools for Local Governments**
- **8.1 – Improve Efficiency in Development of Long-Term Water Supply Solutions**





# DG- Applicable Proposals

- **2.4 – Test Public Water Systems for PFAS (DNR Lead)**
  - State conducts statewide drinking water testing – all municipal systems plus other priority community & non-community systems – helpful in development of standards
- **5.3 – Collect Data on Drinking Water Treatment and Costs (PSC Lead)**
  - Collect data on PFAS treatment options & costs & disseminate information
- **7.3 – Provide Financial Tools for Local Governments (DNR/SLH Lead)**
  - Municipal grant program – for investigation, sampling, treatment, providing alternative water, or remediation
  - Municipal loan program – for infrastructure upgrades or new systems (water systems, WWTPs, solid waste facilities, firefighting equipment)
  - Utilize DOA’s Community Block Grant Program for public facilities
  - Lab discounts for municipalities
- **8.1 – Improve Efficiency in Development of Long-Term Water Supply Solutions (PSC Lead)**
  - Ensure that delivery of clean public water to PFAS-impacted areas can be implemented without undue delay – streamline processes



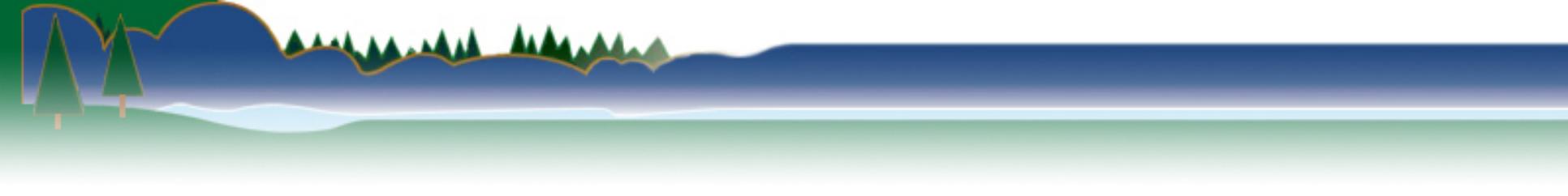
# Action Plan - Next Steps

PFAS Action Plan available online for review:  
<https://dnr.wisconsin.gov/topic/Contaminants/ActionPlan.html>



- Written submissions via online form:  
<https://www.surveymonkey.com/r/WisPFASPlan>
- Comments due: October 31<sup>st</sup>, 2020
- WisPAC reviews + considers public input & finalizes plan
- Late 2020 – WisPAC PFAS Action Plan shared with Governor





## Other DNR PFAS Activities

FY2019-2021 Budget provided \$200,000 in environmental management SEG for 2019-2020 to the DNR

- \$150,000 to develop a departmentwide model to identify and prioritize sites with likely PFAS
- \$50,000 to conduct a survey of local and state emergency responders to determine the amount PFAS-containing firefighting foam in the community



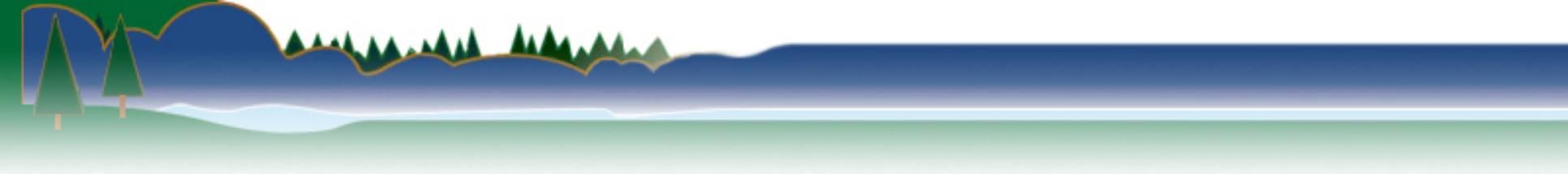


# Prioritization Protocol

## *Analysis of Potential Sources of Per- and Polyfluorinated Alkyl Substances (PFAS) in Wisconsin*

1. Development of a “Source Evaluation Program” that would help guide the evaluation of potential sources and prioritization of sampling
2. Secondary analysis of sources in a 1.0 mile buffer around the pre-identified wells
3. Development and population of a geospatial database of the potential sources with the evaluation and ranking criteria
4. Development of an “Extended Analysis Framework” that could be used to expand the results to help identify and screen sites for sampling beyond the target wells





## **DNR Office of Emerging Contaminants**

### **Contacts:**

#### **Mimi Johnson, Director**

mimi.johnson@wisconsin.gov

Tel. 608 590 7287

#### **Jason Lowery, Technical Operations Coordinator**

jason.lowery@wisconsin.gov

Tel. 608 228 4737





# PFAS Sampling Plan

Steve Elmore – DG Program Director





# PFAS Sampling Plan

## **Why Sample for PFAS Now?**

- Gather information, including on economic impact of proposed maximum contaminant levels (MCLs)
- Public health impacts
- Wisconsin's PFAS Action Council recommended testing of municipal systems





# PFAS Sampling Plan

## **What sampling will be done?**

- DNR will analyze data on where PFAS was used or possibly discharged in the state
  - Nearby wells will be selected for sampling
- Samples will be analyzed for 36 PFAS that are part of the DNR lab accreditation
- Communications and help – DNR will engage with systems that exceed health advisory levels to deliver public notices and conduct follow-up action





# PFAS Sampling Plan

## **How will the sampling and analysis be completed?**

- Municipal system staff will take the samples with training from DNR
- DNR will use federal funds to pay for the analysis of the samples





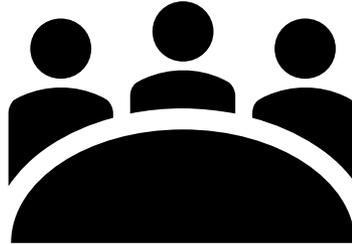
# PFAS Sampling Plan

## Questions?





# Member Roundtable



Scott Laeser, Clean Wisconsin

Chris Groh, Wisconsin Rural Water Association

David Webb, Wisconsin State Laboratory of Hygiene

David Kelter, American Water Works Association (AWWA) - Wisconsin Chapter – Not present

Lawrie Kobza, Municipal Environmental Group

Paul Junio, Northern Lake Service

Jeff Kramer, Wisconsin Water Well Association – Not present

Roy Irving, Department of Health Services

Rick Wietersen, Wisconsin Association of Local Health Departments and Boards





# NR114 and 146 Updates

Cathy Wunderlich – Public Water Engineering Section Chief



# Continuing Education

Certification Expiration: March 12 – May 11, 2020

- ✓ Renewal Deadline is November 1, 2020
- ✓ 2023 Renewal deadline is based on the original anniversary date
- ✓ All other expiration dates remain in effect

No change in required credits for continuing education

Search:  
Operator Training

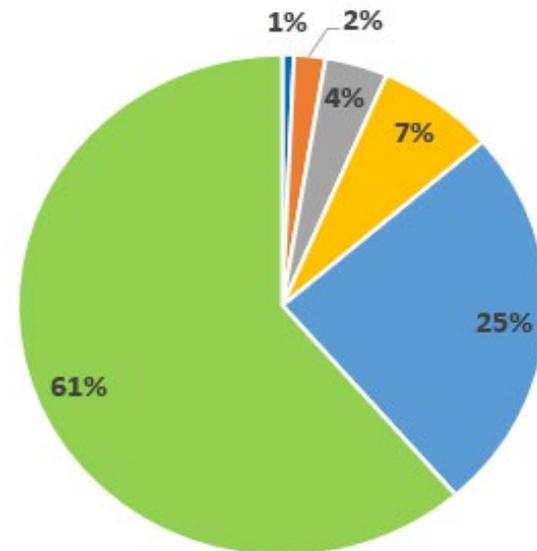
Date	Location	Title	Contact	Details
10/15/2020	Virtual, WI	WRWA/RM Regional Clerk Virtual Training <a href="#">More Info</a>	Wisconsin Rural Water Association, Phone: (715)344-7778, Email: <a href="mailto:wrwa@wrwa.org">wrwa@wrwa.org</a> , Website: <a href="http://www.wrwa.org">http://www.wrwa.org</a> [exit DNR]	Multiday event, Municipal Waterworks hours: 3
10/16/2020	, WI	Turbidity Process Instrument Verification <a href="#">More Info</a>	Hach Company, Phone: (970)290-1319, Email: <a href="mailto:hachtraining@hach.com">hachtraining@hach.com</a> , Website: <a href="https://www.hach.com/events?eventType=ONLINE%2FWEB">https://www.hach.com/events?eventType=ONLINE%2FWEB</a> [exit DNR]	Municipal Waterworks hours: 1.5, Wastewater hours: 1.5
10/20/2020	virtual, WI	Environment 2020 <a href="#">More Info</a>	FET, Inc., Phone: (262)437-1700, Website: <a href="http://www.fetinc.org">http://www.fetinc.org</a> [exit DNR]	Multiday event, Municipal Waterworks hours: 12, Wastewater hours: 12
10/20/2020	Online, WI	Distribution Infrastructure Water Quality <a href="#">More Info</a>	GLCAP, RCAP, Website: <a href="http://tiny.cc/npvxsz">http://tiny.cc/npvxsz</a> [exit DNR]	Municipal Waterworks hours: 1.5
10/20/2020	Virtual, WI	Emerging Contaminants in Water and Wastewater <a href="#">More Info</a>	Marquette University, Website: <a href="https://www.marquette.edu/civil-construction-environmental-engineering/emerging-contaminants.php">https://www.marquette.edu/civil-construction-environmental-engineering/emerging-contaminants.php</a> [exit DNR]	Municipal Waterworks hours: 6, Wastewater hours: 6
10/20/2020	Online, WI	Return to Service-Building Water Quality <a href="#">More Info</a>	RCAP, GLCAP, Website: <a href="http://tiny.cc/xwvxsz">http://tiny.cc/xwvxsz</a> [exit DNR]	Municipal Waterworks hours: 1.5
10/21/2020	Virtual, WI	Water Affordability <a href="#">More Info</a>	University of Wisconsin - Madison - Wisconsin Public Utility Institute, Email: <a href="mailto:sakk@wisc.edu">sakk@wisc.edu</a> , Website: <a href="https://wpui.wisc.edu/programs/2020-programs/water-affordability/">https://wpui.wisc.edu/programs/2020-programs/water-affordability/</a> [exit DNR]	Municipal Waterworks hours: 4.5



# Annual Exam Administration

Exam Categories	May-19	August-19	November-19	February-20	Annual Total
Landfill	35	6	18	1	60
Pump Installer	37	21	40	22	120
Well Driller	5	2	9	6	22
Municipal Waterworks	325	57	270	65	717
Small Water System	29	6	21	3	59
Wastewater	910	142	712	157	1921
Septage Hauler	80	20	100	26	226
<b>TOTAL</b>	<b>1421</b>	<b>254</b>	<b>1170</b>	<b>280</b>	<b>3125</b>

Wastewater: 61%  
 Drinking Water: 25%  
 Septage: 7%  
 Pump Installer: 4%  
 Landfill: 2%  
 Well Driller: 1%



# Breakout of Exams Types

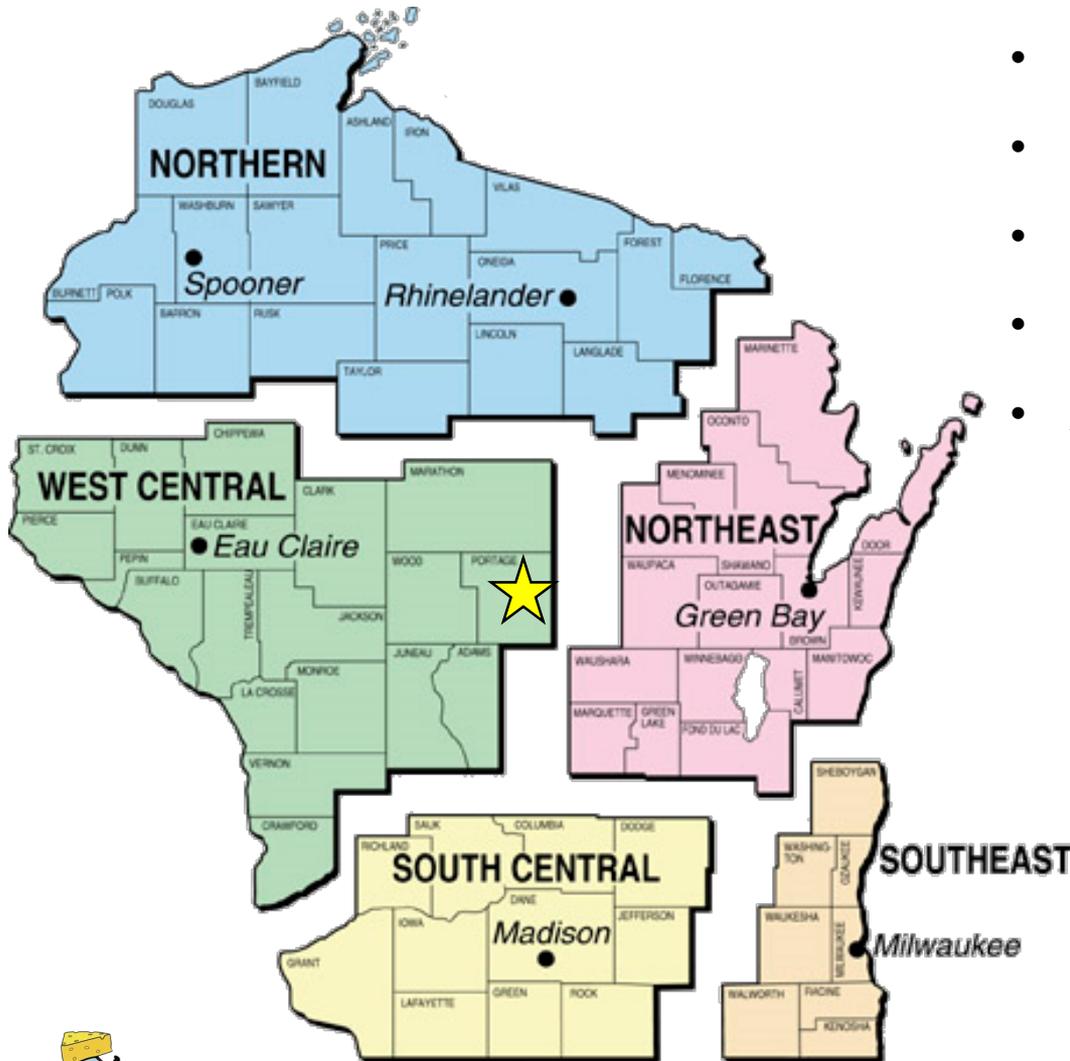
Exam Categories	Number of Exams with Multiple Choice Questions (Q)						Total
	25 Q	40 Q	50 Q	60 Q	80 Q	100 Q	
Wastewater	2		11			1	14
Municipal Waterworks		6			1		7
Small Water System		1					1
Septage Haulers	1	3					4
Incinerator				1		1	2
Landfill			2				2
Well Drillers/Pump Installer						3	3
<b>TOTAL</b>	<b>3</b>	<b>10</b>	<b>13</b>	<b>1</b>	<b>1</b>	<b>5</b>	<b>33</b>

Short Term Solution: *Meets critical needs; protective of health and safety; no cost increase*

Long Term Solution: *Meets all needs; protective of health and safety; program costs are covered*



# Proposed Short Term Solution



- Face-to-Face
- Limited Size Groups
- Bi-Monthly
- WI Rural Water Facility in Plover, WI
- Approved Urgent Exam Requests

**Urgent Exam Request Form**  
**Chapters NR 114 and NR 146, Wis. Adm. Code**

\*This is an urgent request to take an exam outside of a scheduled exam period.

1. Examinee Name:
2. Operator Certification or License #:
3. Urgent Need or Reason to Take Exam:  
\*\*The following are examples of an urgent need: utility, facility or organization would result in non-compliance or violations without the exam(s); utility, facility or organization would be unable to fill a position without the exam(s); OR passing an exam is needed to accept, begin or maintain a job. \*\*
4. Examinee's Preferred Testing Location—please circle only one of the following state regions:
  - a. Southeast
  - b. South Central
  - c. West Central
  - d. Northern
  - e. Northeast
5. Exam(s) Needed:
6. Name of Utility, Facility or Organization Where Employed (if applicable):
7. Direct Supervisor's Contact Information—name, phone, and email required (if applicable):

Please send a copy of this form either via:

- 1) email ([DNRQCert@wisconsin.gov](mailto:DNRQCert@wisconsin.gov)) with this form completed and attached; OR
- 2) post mail to: WI DNR  
 PO Box 7921, EA/7  
 Madison WI 53707-7921





# Proposed Long Term Solution

## 3<sup>rd</sup> Party Exam Contractor

- Utilize existing DNR exam questions and answers (*start up fee*)
- Formats
  - Contracted computer labs with live proctor (*\$80-\$125/ea*)
  - Remote location with remote proctor (*\$65-\$90/ea + start up fee*)
  - Paper based with live proctor- limited exceptions (*\$45/ea*)
- Unlimited scheduling through contractor's portal

## Requirements:

- Emergency NR 114 and NR 146 Rule (*locations, frequency and costs*)
- Revised NR 114 and NR 146 Rule

**\$45-\$120/ea**





# Internal Updates



**Kyle Burton**—Director of Field Operations





# COVID Update

The agency remains operating under Phase II of the DNR Bounce Back Plan.

- Those of us that can work from home are continuing to do so
- DG field activities continue following agency *safety protocols* and *DG Return to Work Plan*
  - *All field inspections include:*
    - » *Completing as much virtually as possible*
    - » *Pre-Inspection COVID safety questions*
    - » *Protective measures onsite*
      - *Masks and social distancing required for DNR staff*

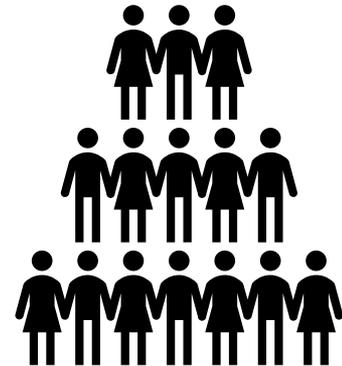




# NR 140 Groundwater Quality Rule

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- Cycle 10 Rulemaking in progress for 26 substances (including PFOA and PFAS)
- Information on past & upcoming meetings available on the NR 140 update website.
  - [NR140 rule webpage](#)



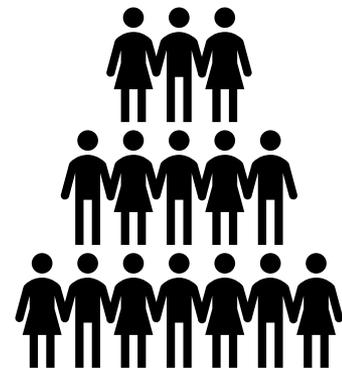




# NR 140 Groundwater Quality Rule

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- Cycle 11 for 40 substances (including 34 PFAS and 6 pesticides)
- DHS currently working on recommendations (Expected Oct – Dec 2020)



<http://www.biocycle.net/wp-content/uploads/2018/07/20b.jpg>



# Groundwater Coordinating Council

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- Annual Report to Legislature (Aug 31, 2020)
- Three key recommendations:
  - Protecting groundwater from nitrate and other agricultural contaminants;
  - Addressing public health and environmental concerns regarding perfluoroalkyl and polyfluoroalkyl (PFAS) chemicals; and
  - Evaluating groundwater for viruses and other microbial pathogens.
- Also highlighted the need for increased support of applied groundwater research



<http://www.biocycle.net/wp-content/uploads/2018/07/20b.jpg>



# 2020: High Capacity Wells



Josh Kaul  
Wisconsin Attorney General

P.O. Box 7857  
Madison, WI 53707-7857

## NEWS FOR IMMEDIATE RELEASE

May 1, 2020

### AG Kaul Issues Letter Withdrawing 2016 AG Opinion on High-Capacity Well Permitting

MADISON, Wis. –Wisconsin Attorney General Josh Kaul issued [a letter](#) today informing Wisconsin Department of Natural Resources (DNR) Secretary Preston Cole that Kaul is withdrawing a 2016 Attorney General Opinion about high-capacity well permitting. Kaul's letter was in response to an inquiry from Secretary Cole about the ongoing validity of the 2016 Attorney General Opinion after certain court orders questioned aspects of the opinion.

In his letter to Secretary Cole, Attorney General Kaul explained that, in light of two courts' orders that undermine the legal analysis in the 2016 opinion, that opinion is no longer valid. Kaul explained that he is therefore withdrawing the 2016 opinion in its entirety.

The 2016 opinion related to a 2011 Wisconsin Supreme Court decision recognizing that DNR has "broad authority and a general duty . . . to manage, protect, and maintain waters of the state," including "the authority and a general duty to consider the environmental impact of a proposed high capacity well on waters of the state." *Lake Beulah Management District v. DNR*, 2011 WI 54, ¶¶ 39, 63, 355 Wis. 2d 47, 799 N.W.2d 73. The 2016 Attorney General Opinion concluded that other statutes had changed the high-capacity well permitting framework, so that the 2011 supreme court decision was "no longer controlling."

However, since 2016 two Wisconsin courts have rejected the reasoning of the Attorney General Opinion, stating that courts are instead bound to apply the 2011 supreme

Page 1 of 2

DOJ Communications Office [DOJCommunications@doj.state.wi.us](mailto:DOJCommunications@doj.state.wi.us) (608) 266-1220

- Attorney General Kaul orders withdrawal of 2016 AG Opinion on May 1, 2020
  - ✓ Water Use Section implemented change beginning June 2, 2020
  - ✓ Review of high capacity well applications now considers navigable waters as well as impacts from existing high capacity wells
- As of July 1, 2020 Water Use took the responsibility of issuing decisions for all potable and non-potable high capacity well applications governed under NR 812



# 2020: Central Sands Lakes Study

## Central Sands Lakes Study

BY THE NUMBERS

BELOW THE GROUND

**57,000**

Well Construction Logs



**~150**

Geophysical Measurements

FISH AND PLANT SURVEYS

**9,585**

Fish Counted

**186**

Plant Species Identified



New Bathymetry Maps

**3**

Study Lakes



Pleasant Lake



Plainfield Lake



Long Lake

**30+**  
Scientists

WATER LEVELS AND PUMPING

**2,800**

High Capacity Wells in the Modeling Area

**>100,000**

Water Levels from

**~4,000**

Locations



Continuous Monitoring of Lake Levels

WATER QUALITY

**~6,000**

Results

**50**

Sampling Dates

**34**

Parameters



- Findings due to legislature by June 3, 2021
- Oct. 2020 - Release of technical presentations & 30-day public comment period



# Leveraging IT to Improve Customer Service

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- Creating new online study guides to provide improved exam preparation materials for license applicants – Online renewals begin Nov. 1
- New approval tracking system that allows staff to more efficiently review and approve variances.
- Providing online training modules for the NR 812 code revision



## Other Hot Topics and Priority Work

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- County Contract – COVID Impacts
- Field Inspections
- Creating guidance documents designed to create consistency statewide
- PB/CU MSP Updating Efforts
- Manganese
- Ongoing Corrosion Control Study Review
- WIIN Small Systems Grant Work
- AWIA





# Wrap-up and adjourn

Next Meeting Date: January 14, 2021

Location: Zoom

Meeting recording will be posted on the  
Drinking Water & Groundwater Study Group  
website

