PFAS Contamination In Town Of Stella Community Information Session

Department of Natural Resources (DNR) and Department of Health Services (DHS)

Aug. 15, 2023





PFAS Contamination In Town Of Stella

- Department of Natural Resources
 - James Yach, NR Secretary's Director
 - Mark Pauli, Northern Region
 Drinking Water and Groundwater
 Supervisor
 - Marty Nessman, Private Water Section Manager
 - Michelle BalkLudwig, Northern Region Wastewater Supervisor
 - Patrick Gorski, PhD, Water Quality Research Scientist

- Department of Health Services
 - Roy Irving, Hazard Assessment Section Manager

Private Well Sampling Update

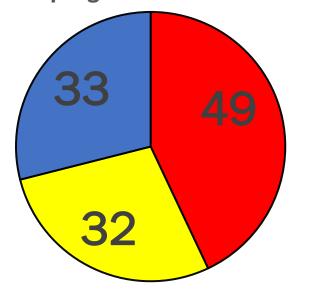
114 private wells have been sampled for PFAS

- DNR Sampling: 98 wells within 2.5 miles of Town of Stella Town Hall
- Private Sampling: 16 wells; 10 outside of DNR's 2.5-mile sampling area

Breakdown of results:

- PFAS detected above DHS recommended health guidelines: 49 private wells
 - 47 Health Advisory Letters issued
 - Eligible for in-home bottled water funded by the DNR
- PFAS detected below DHS recommended health guidelines: 32 private wells
- No detection for PFAS: 33 private wells





■ Above DHS guidelines ■ Below DHS guidelines ■ No Detection

Drinking Water

- Exposure to high levels of some PFAS can negatively impact health
- DHS continues to review private well sample results and has issued well-specific drinking water advisories for those with PFAS levels above our recommended groundwater standards



Interrupting PFAS exposure reduces PFAS levels in our body.

If the PFAS levels in your well water are above our recommended groundwater standards:

 Use an alternative water source for drinking, cooking or other consumptive purposes

 You can use water for showering, bathing and washing hands as PFAS do not easily enter the body through skin

Resources for Impacted Wells

ARPA Well Compensation

New Well Recommendation

Treatment Options

ARPA Well Compensation Eligibility

• Wisconsin income does not exceed \$100,000

Advisory letter from DNR/DHS

Awards up to \$16,000

Pays for new well or treatment

- Complete Application Form 8700-392
- Enclose:
 - Bid for new well or treatment
 - W-9 Form
 - WI Tax Return or one of the affidavits provided on website
 - Copy of well construction report for current well (if available)
 - PFAS laboratory results and advisory letter from DNR/DHS

• Use the correct form:

Section I. Claimant Information							
Applying to replace a private well.							
Business owner applying to replace a non-community public well.							
Owner Applying to Replace a Private Well.							
Claimant Last Name	First MI		MI	Well Address (if different from mailing address) Co			
							₩
Mailing Address				City	State	ZIP Code	
City	State	ZIP Code		Landowner Last Name (if not claimant)	First		MI
Claimant Phone Number (include area code) County Landowner Phone Number (include area code)							
Claimant Email Address				Landowner Signature (if not claimant)		Date sig	ned
Note: A letter of consent from the landowner may be							
attached instead of a signature on this form.							
Claimant must answer 'Yes' to the two following questions to be eligible:							
Yes, I am the landowner OR landowner's spouse, heir, assignee/legal representative, or renter.							
Yes, my family income did not exceed \$100,000 in the prior calendar year.							

• Filling out next sections:

Section II. Description of Problem	
The well is contaminated with the following: (check all that ap	ply)
☐ Bacteria	☐ Nitrate
☐ Arsenic	☐ Metals
☐ Petroleum	Chemicals
Other (describe)	
Section III. Proof of Contamination	
Proof of contamination Based On: (check all that apply)	
☐ Sample Results (Attach copies of Lab results for 2 water samp)	les collected at least 2 weeks apart, but not more than 2 years.)
□ DNR/DHS Advisory (Attach a copy of advisory)	
	·

Section V. Evaluation of Proposed Action(s)

Note: Please choose Yes or No for each alternative listed below.

Select alternative and add justification:

1. Construction of a new well 2. Reconstruction of existing well	Feasible ● Yes ○ No ○ Yes ● No		
Claimant Name Claim Number	ARPA Well Compen	sation Grant Applic	ation Claim Page 2 of 3
3. Connection to an existing system 4. Alternate water supply (e.g., bottled, trucked) ** Treatment (complete only if all others are not feasible) Chosen Alternative:	☐ Yes No ☐ Yes No ☐ Yes No	O Public O Private	
Justification (Please provide a brief explanation of why you well is helpful)	selected the option above. Info	rmation about condition, age	e, etc. of existing

recommendation.

- Each application is reviewed on case-by-case basis
- Review takes 4-6 weeks
 - · We will contact you if we need more information
- Work can't start until application is approved
 - Grant award letter
- Wells with concentrations of 200 ppt or more should consider a new well rather than treatment

New Well Recommendation

• Cement grouted casing at least 20 feet into bedrock

Developed based on sample results and known construction

Will be adjusted as new wells are drilled

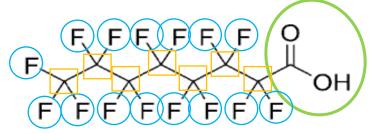
Treatment

 Most effective when PFAS concentrations are less than 200 ppt

- Point of use treatment
 - Reverse osmosis and granular activated carbon are most effective

PFOA/PFOS Water Quality Standards Rule (WY-23-19)

- Adopted PFOA and PFOS standards for all waters of the state
 - Based on critical exposure routes for each pollutant
 - Interpretation of Narrative Standard prohibiting toxics at levels of public health significance
- Established Implementation Plan
- Provide methods for calculating limits and determining when limits are necessary



Wastewater and Industrial Solids Update

- Interim strategy outlines management strategies for PFAS-containing industrial solids or biosolids
- Ahlstrom paper mill sludge sampled on July 25, 2023
 - Results forthcoming
- DNR will be requiring solids sampling at permit application

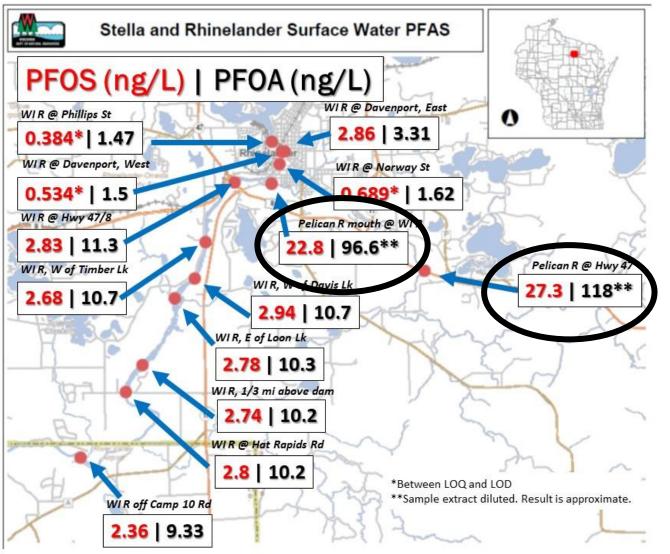


- Brief overview of water quality criteria
 - Criteria describe conditions in a waterbody that protect the ways that people and animals use that waterbody
 - Criteria can be numbers...
 - "Substance X must be below 10 parts per million"
 - ...or narrative statements
 - "Waterbody shall be free from objectionable tastes and odors"
 - Numeric criteria protect against harmful health effects from exposure over the course of a lifetime

- PFOA and PFOS surface water criteria
 - Incorporate information about toxicity of each compound, how people might be exposed to them, and the way they behave in the environment
 - PFOA: People are mostly exposed through swallowing water, either from drinking it on purpose or accidentally swallowing lake water during recreation
 - PFOS: People are mostly exposed to PFOS through eating freshwater fish
 - Current WI surface water standards for waterbodies not used as drinking water supplies:
 - PFOA = 95 ng/L (ppt) and PFOS = 8.0 ng/L (ppt)

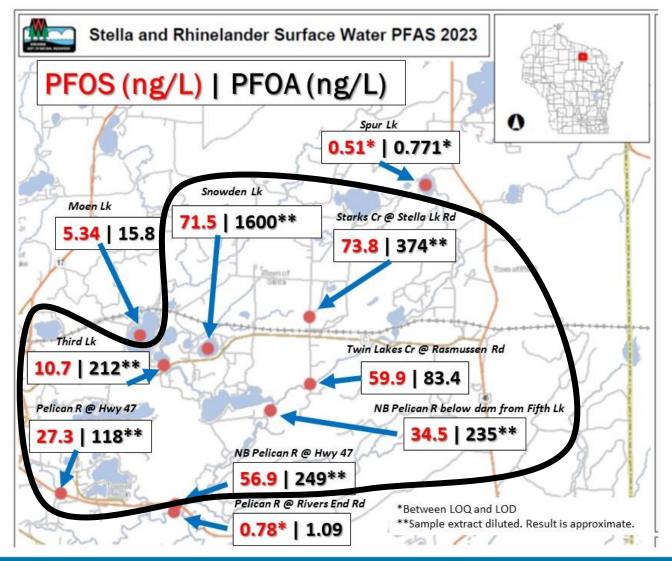
- General Sampling Approach:
 - Groundwater is connected to Surface Water
 - Trying to define extent of area based on groundwater results
 - Choose sites surrounding or near potential sources
 - Not able to sample every waterbody
 - Can get information on several waterbodies, if connected
 - · Start downstream and move upstream if sources noticed
- Sampling occurred June and July 2023
 - Areas: Rhinelander and WI River, Town of Stella, Snowden Lake

Rhinelander and WI River Sampling

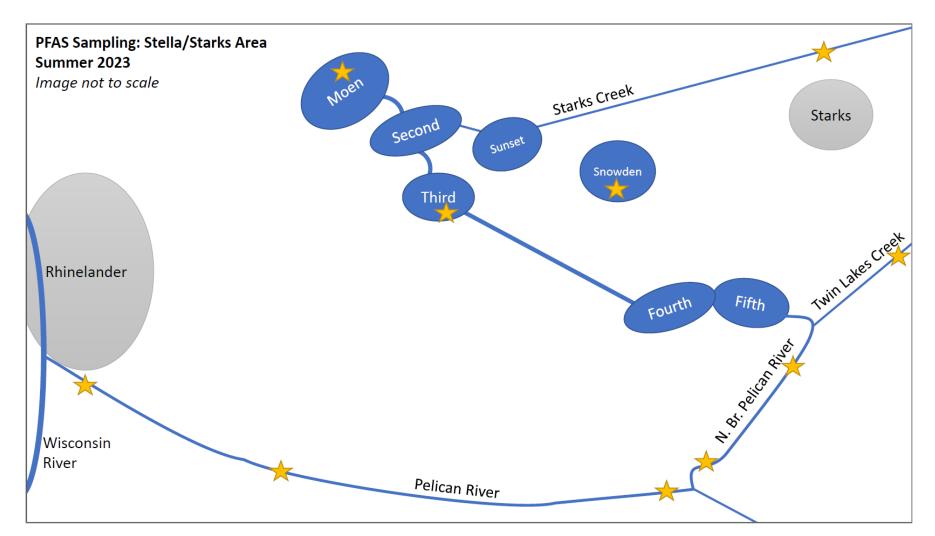


- Pelican River had higher concentrations than the Wisconsin River
- Wisconsin River concentrations higher downstream of the mouth the Pelican River
- Sites within the Wisconsin River were similar to each other and below the surface water PFAS standards
- Camp 10 site downstream of Crescent Creek

Town of Stella Area Sampling



- Spur Lake, Moen Lake and Pelican River @ Rivers End Rd were below surface water standards
- Other sites above standards
- Snowden Lake was highest and sampled @ Public Access (nearshore)



- Concentrations make sense from general surface water flow paths
- Moen does not get direct flow from Starks Creek
- Snowden Lake main source of water is groundwater seepage and not part of the chain
- Snowden resampled on July 27, 2023 at multiple sites to confirm results

Surface Water Sampling: Next Steps

- Follow-up sampling plan is being developed
- More surface water sites will be sampled in 2023 and 2024 to better define area.
 - Exact sites are currently being discussed
- Water Quality works directly with Fisheries to share results and strategize site selections
- Fish have already been collected from Fifth Lake and are at the lab being processed and analyzed
- More fish from more sites will be collected in 2024 and 2023
 TBD

You may swallow different amounts of lake water while doing different recreational activities

These activities can result in different levels of PFAS exposure:

Catch & release fishing

Boating

Canoeing

Kayaking

Paddleboarding

Swimming

Water skiing

Tubing

Fishing for food

Less Exposure

More Exposure

You can take steps to reduce your PFAS exposure



Rinse off after swimming and avoid contact with foam



Avoid swallowing lake water – watching children closely as they tend to swallow more



Follow Wisconsin's fish consumption guidelines

Wisconsin's Fish Consumption Guidelines

STATEWIDE SAFE-EATING GUIDELINES FOR MOST OF WISCONSIN'S INLAND (NON-GREAT LAKES) WATERS				
Species	Women under 50 and children under 15	Women over age 50 and men		
Bluegill, crappies, yellow perch, sunfish, rock bass, bullheads, inland trout	1 serving per week	Unrestricted		
	AND			
Walleye, pike, bass, catfish, all other species not listed here	1 serving per month	1 serving per week		
		AND		
Musky	Do not eat	1 serving per month		

Statewide guidelines

Wisconsin's Fish Consumption Guidelines

Site-specific advisories: Moen Lake Chain

Established: mercury

GUIDELINES FOR WOMEN UNDER 50 & CHILDREN UNDER 15 (MERCURY)			
	Up to 1 meal per month	Do not eat	
GUIDELINES FOR WOMEN OVER 50 & MEN (MERCURY)			
Waterbody	Up to 1 meal per week	Up to 1 meal per month	
Moen's Lake Chain (includes Moen's, Second, Third, Fourth, & Fifth Lakes)		Walleye over 19"	

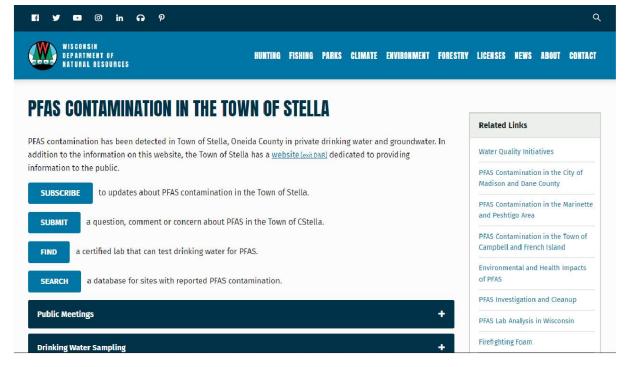
PFAS: to be determined

 Nearby Wisconsin River advisories are typically 1 meal per week for panfish (bluegill, crappies, perch, pumpkinseed, rock bass, etc.)

What's Next?

Website and E-mail Updates

https://dnr.wisconsin.gov/topic/PFAS/Stella.html





Upcoming Opportunities

HEARINGS AND MEETINGS CALENDAR

Pursuant to the Americans with Disabilities Act, reasonable accommodations, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request. Please call the contact person listed for the meeting or hearing with specific information on your request before the date of the scheduled hearing.

Note: Actual end times may be earlier or later than scheduled. Hearing dates and times are subject to change. Please verify meeting dates and times prior to attendance.



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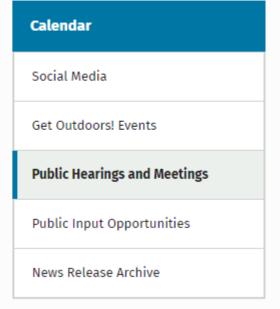
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Meetings Between: mm/dd/yyyy And mm/dd/yyyy

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APPLY

Items



CONNECT WITH US

DNR

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DHS
DHSEnvHealth@dhs.wisconsin.gov









