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

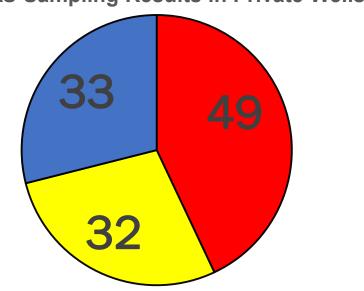
114 private wells have been sampled for PFAS

- 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:

Owner Applying to Replace	a Private Well						
Claimant Last Name	First	First MI		Well Address (if different from mailing	County		
Mailing Address		*		City	State	ZIP Code	
City	State	ZIP Code		Landowner Last Name (if not claimant)	First		MI
Claimant Phone Number (inclu	ide area code)	County	•	Landowner Phone Number (include are	a code)		-
Claimant Email Address			Landowner Signature (if not claimant) Date sign			ned	
				Note: A letter of consent from the attached instead of a signature of			

Filling out next sections:

Section II. Description of Problem	
The well is contaminated with the followin	g: (check all that apply)
□ 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 res	sults for 2 water samples collected at least 2 weeks apart, but not more than 2 years.)
	risory)

Select alternative and add justification:

Section V. Evaluation of Proposed Action(s)

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

	dered	Feasib	10		
 Construction of a new well 		Yes	O No		
Reconstruction of existing v	vell	○ Yes	No		
			_		
Claimant Name	Claim Number	ARPA Wel		ensation Grant Applica	ation Claim
		Form 8700-392	R 04/23)		Page 2 of 3
Connection to an existing s	ystem	Form 8700-392	R 04/23) No	O Public O Private	Page 2 of 3
Connection to an existing s Alternate water supply (e.g.	하다 일반하다면 한다면 보이 되었다면 하셨다.	1	⊙ No	O Public O Private	Page 2 of 3
	, bottled, trucked)	○ Yes	⊙ No	O Public O Private	Page 2 of 3

- 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

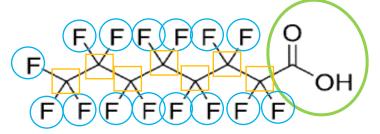
Treatment

 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

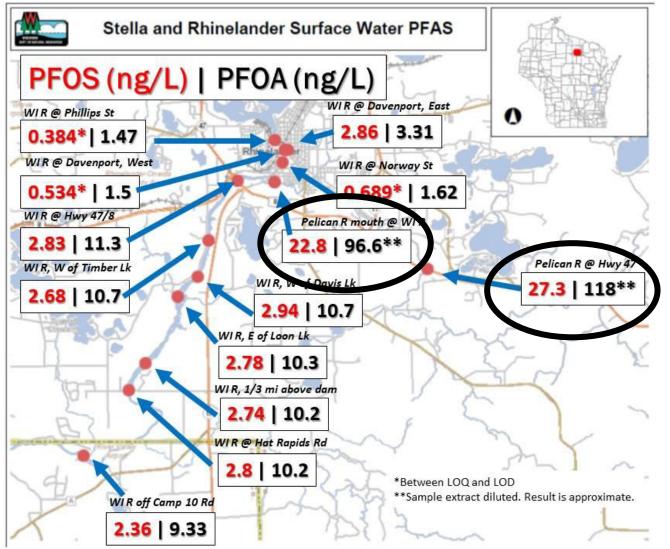


- Brief overview of water quality criteria
 - Criteria describe conditions in a waterbody that protect the ways that people and animals use that waterbody
 - Criteria can be numbers...
 - "Substance X must be below 10 parts per million"
 - ...or narrative statements
 - "Waterbody shall be free from objectionable 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)

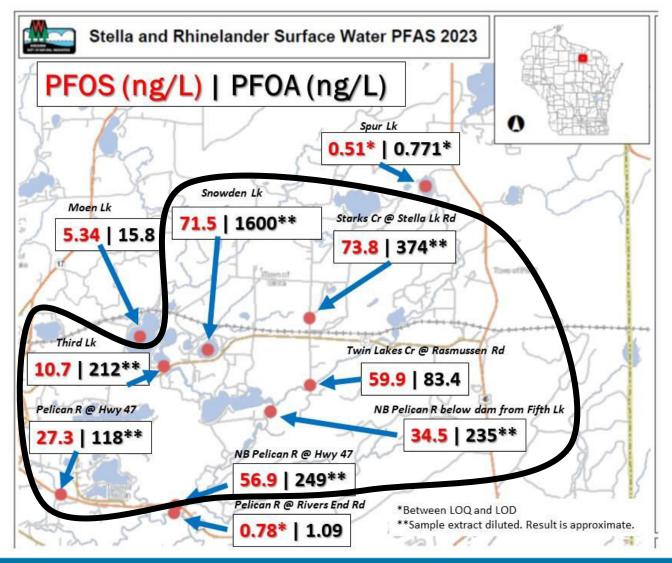
- General Sampling Approach:
 - Groundwater is connected to Surface Water
 - Trying to define extent of area based on groundwater results
 - Choose sites surrounding or near potential sources
 - Not able to sample every waterbody
 - Can get information on several waterbodies, if connected
 - Start downstream 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

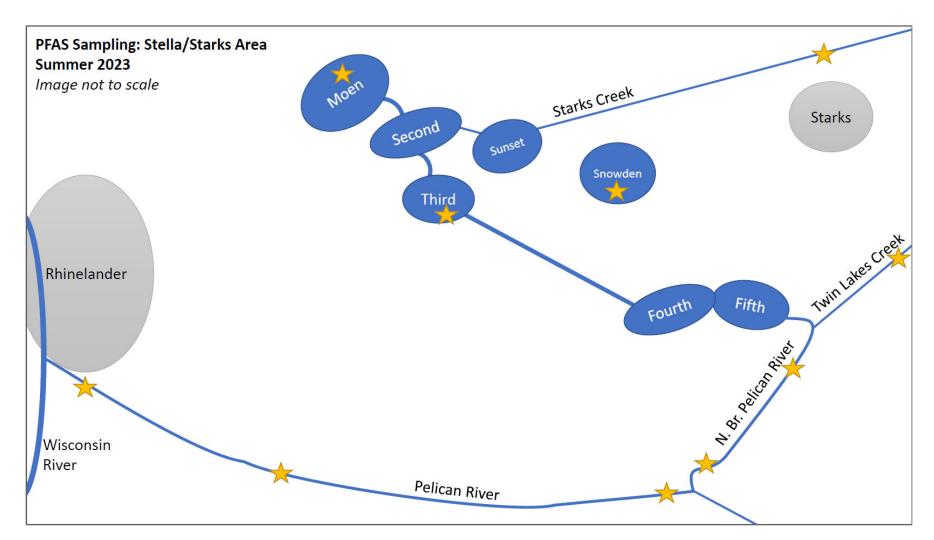


- Pelican River had higher concentrations than the Wisconsin River
- Wisconsin River concentrations higher downstream of the mouth the Pelican River
- Sites within the Wisconsin River were similar to each other and below the surface water PFAS standards
- Camp 10 site downstream of Crescent Creek

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		

Do not eat

Musky

Statewide guidelines

AND

1 serving per

month

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"		

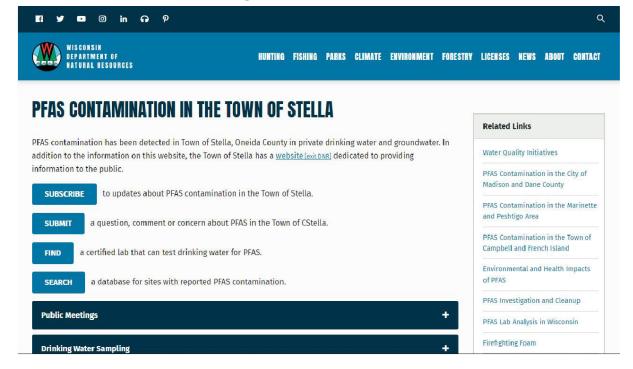
PFAS: to be determined

 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



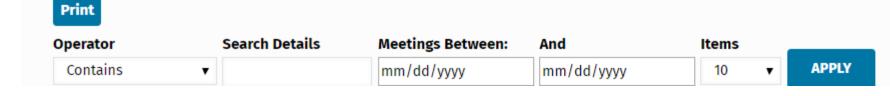


Upcoming Opportunities

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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