

PFAS in Drinking Water

Town of Stella Board Meeting
December 13, 2022



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PFAS are a family of human-made chemicals.

PFAS = per- and polyfluoroalkyl substances

PFAS are characterized by a

PFAS are characterized by a **carbon chain**

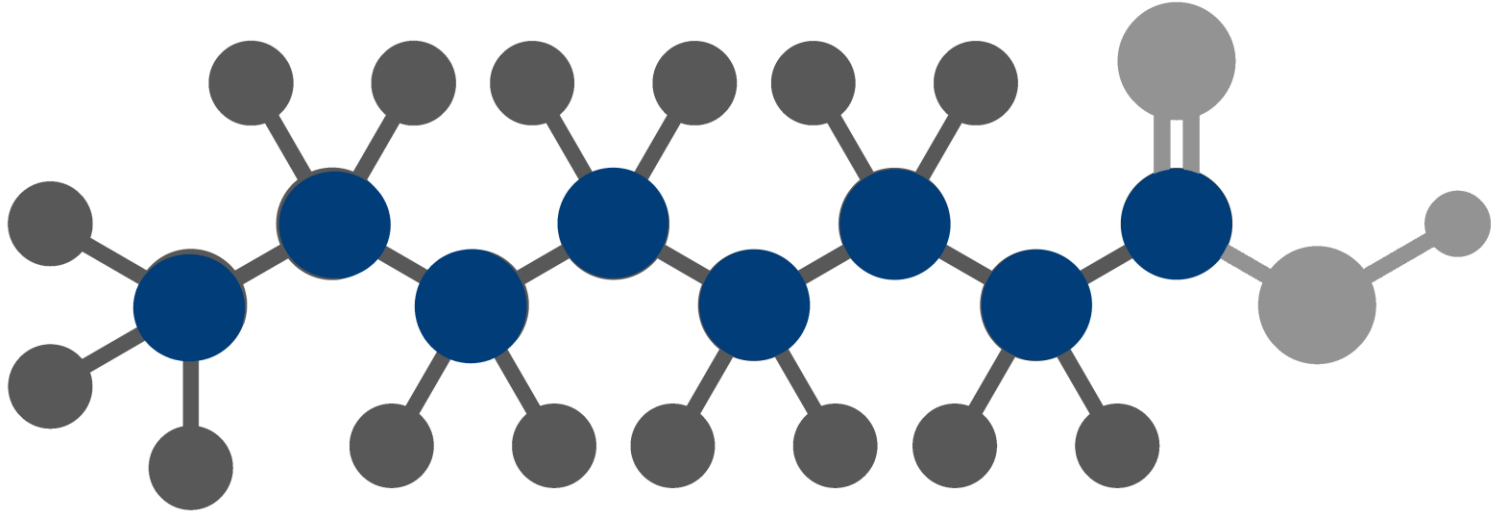


Diagram shows perfluorooctanoic acid (PFOA).

attached **fluorines**

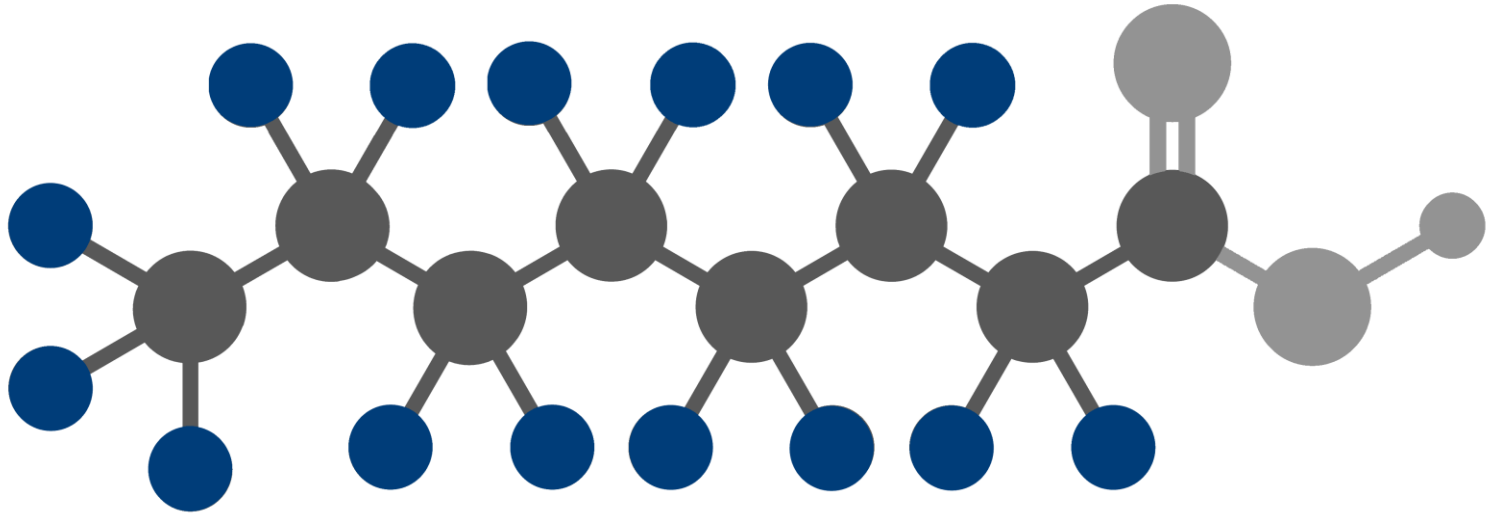
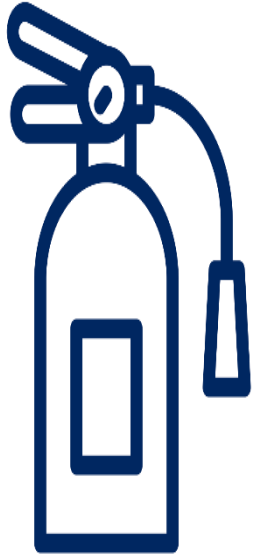


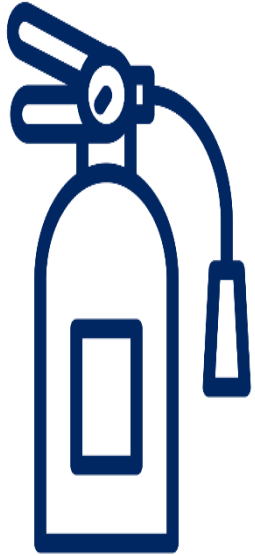
Diagram shows perfluorooctanoic acid (PFOA).



PFAS have been used in many products since the 1950s.



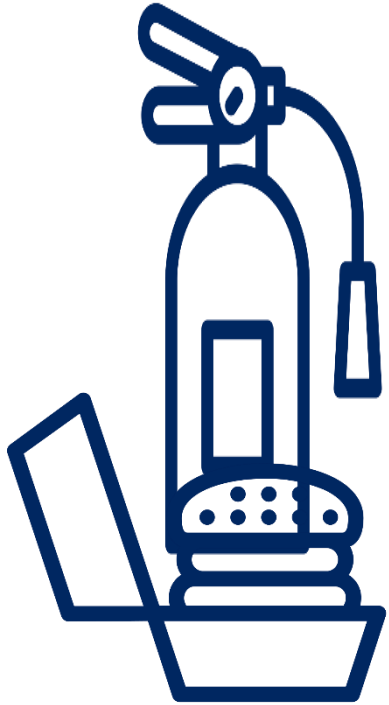
Firefighting
foam



Firefighting
foam



Non-stick
cookware

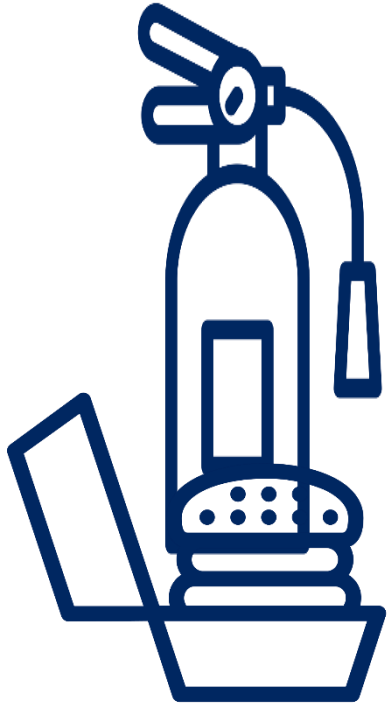


Firefighting
foam

Food
packaging



Non-stick
cookware



Firefighting
foam

Food
packaging



Non-stick
cookware



Water-
resistant
materials

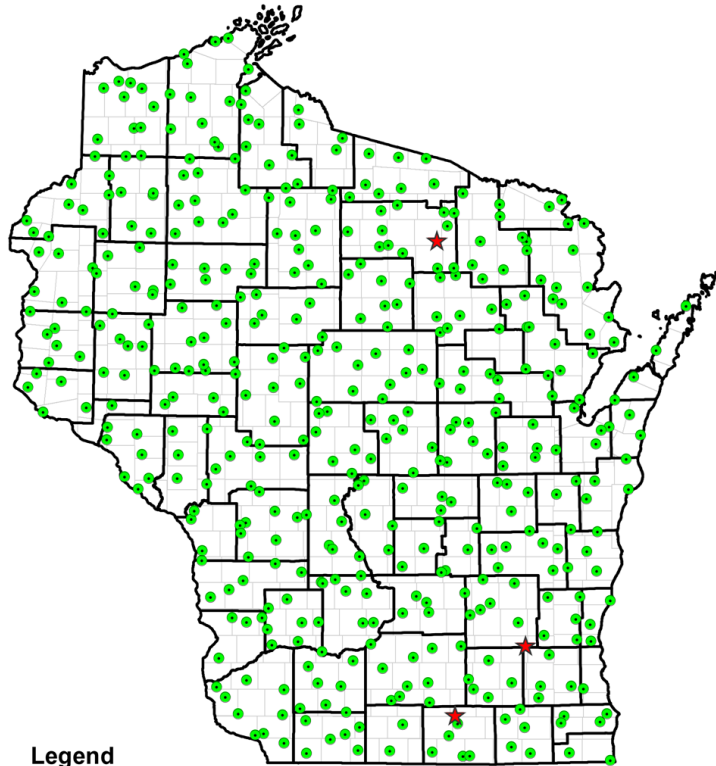
A doctor in a white lab coat and stethoscope is examining a patient's arm. The doctor is holding a clipboard and looking at the patient's arm. The patient is sitting on a table. The background is a clinical setting with a desk and a chair. The image has a blue tint.

High levels of some PFAS
can impact human
health.

DNR project to sample statewide for PFAS in residences with private water supply wells:

- **Goal to inform “ambient” PFAS occurrence in shallow groundwater**
- **State divided into 450 equal areas (124 square miles)**
- **Samples for PFAS testing collected summer/fall 2022**
- **Results to date show 3 samples above WI PFAS health guideline values**
- **Sample from Starks tested very high for PFAS**

PFAS Ambient Groundwater Private Well Project:
Locations Sampled



Legend

- Residence sampled
- ★ PFAS results over health guideline values (as of 12/2/2022)
- Grid cell

Starks area geology

- **approximately 40'-50' glacially deposited sand, gravel, clay, and silt**
- **"granite" bedrock below glacial deposits**

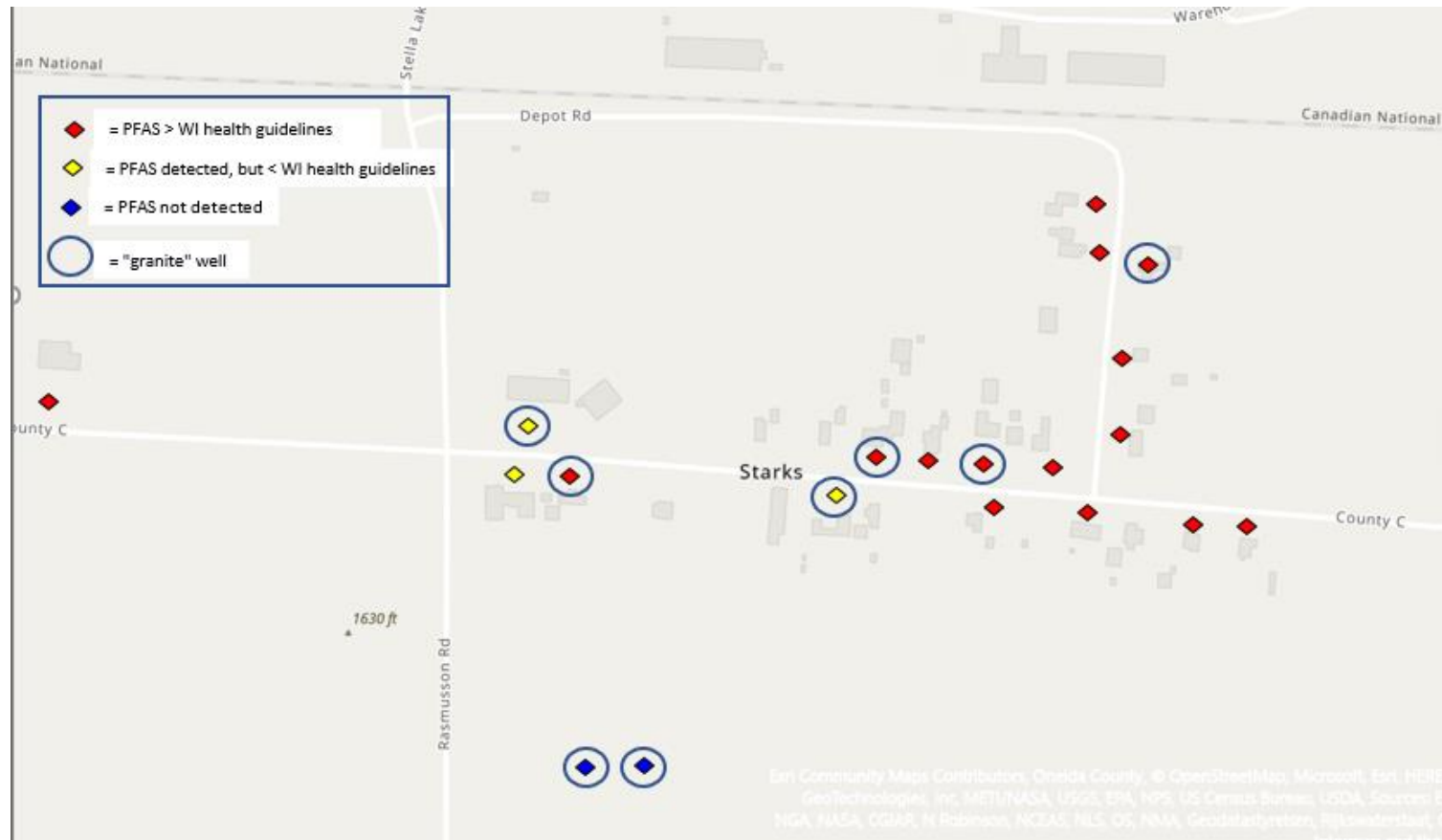
Starks area groundwater

- **water table at about 15'-25' below ground surface**
- **regional groundwater flow estimated to be to the southwest**

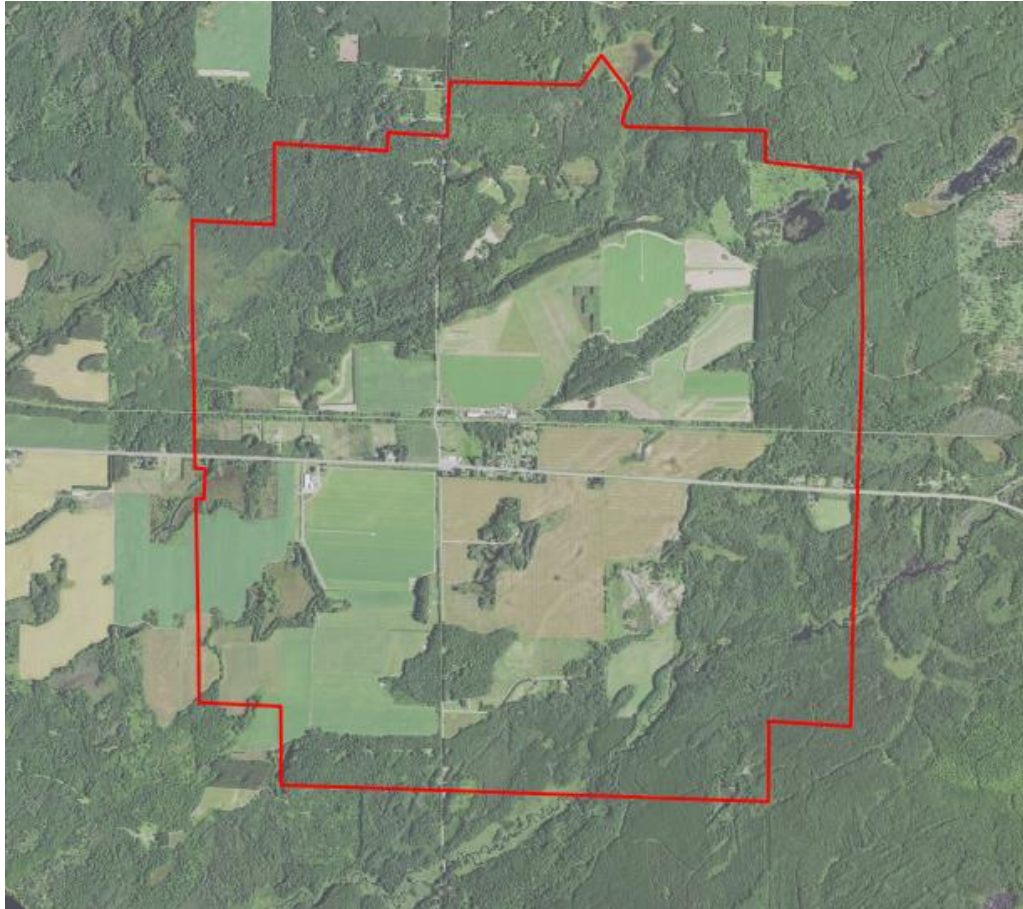
Starks area well construction

- **many wells constructed "shallow", in glacial deposits**
- **some wells constructed "deeper", into granite bedrock**

PFAS samples collected in Starks and close vicinity



Current PFAS sample collection in expanded area around Starks



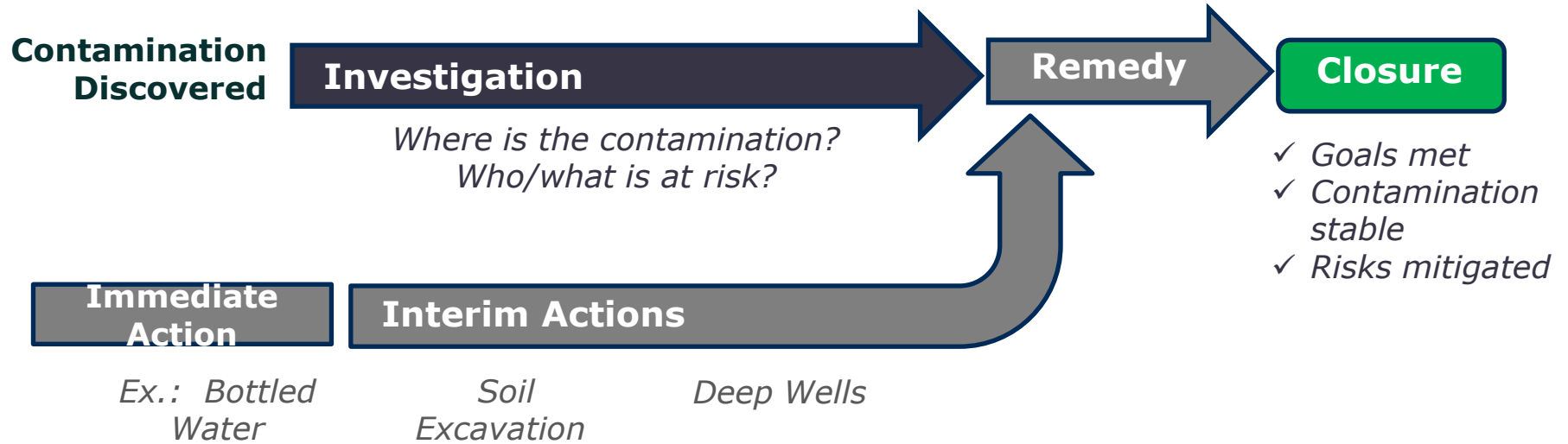
Well Compensation Grants

- Income limit of \$100,000
- Up to \$16,000 per grant
- Must get grant approval before work is done or equipment purchased
- More information is needed before we can recommend new well construction
- Search for 'Well Compensation' at dnr.wi.gov

Well Compensation Grants

- Treatment systems are eligible
- PFAS treatment equipment should be NSF/ANSI certified
- Treatment may not remove all contaminants
- Multi-stage treatment filters using granular activated carbon are effective
- The higher the concentration of PFAS, the more often the media will need to be replaced

General Site Investigation Process



Conceptual drawing for illustration purposes only.

Action Steps



Test your well for PFAS if DNR has contacted you.

Action Steps



Test your well for PFAS if DNR has contacted you.

If PFAS levels are above DHS' health thresholds, use an alternative source of water for drinking, preparing beverages, and foods that take up a lot of water.

Alternative water sources:



Bottled water that has been filtered or purified

Alternative water sources:



Bottled water that has been filtered or purified



Water from a source that has been tested for PFAS and levels are low

Alternative water sources:



Bottled water that has been filtered or purified



Water from a source that has been tested for PFAS and levels are low



Water from certified treatment device
if PFOA & PFOS are less than 1500 ng/L

Contact Information



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**Add appropriate
contact info here**