# Wisconsin PFAS Update

## Drinking Water and Groundwater Program

September 27, 2022

2022 Cross-Program PFAS Workshop
Hosted by ASTSWMO, ACWA, & ASDWA
Washington, DC

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# Statewide Voluntary Municipal PFAS Project

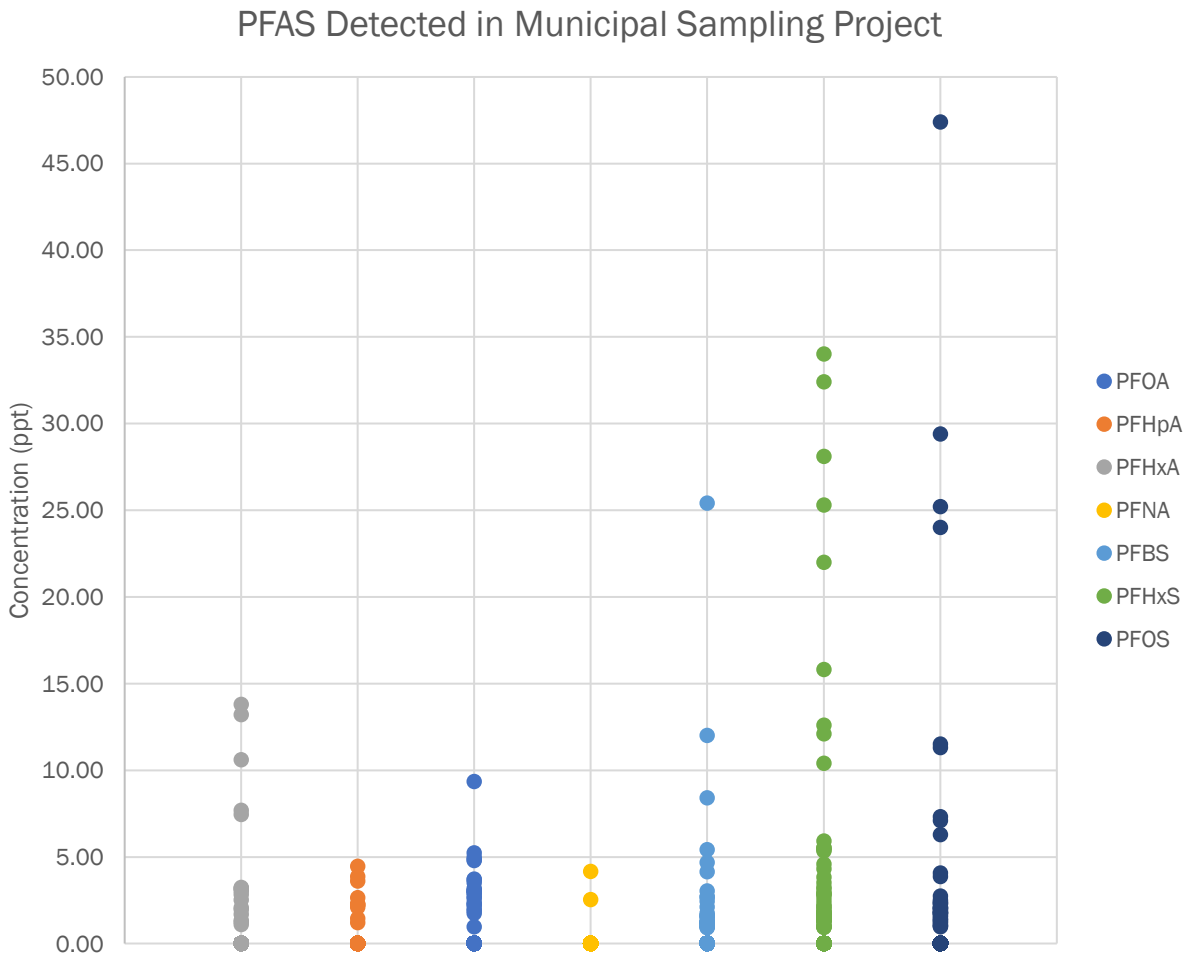
- **Purpose of Project**
  - Meet goals laid out by Wisconsin PFAS Action Council (WISPAC)
    - Sampling at municipal systems
  - Provide communities and customers with information about water quality related to PFAS

# Statewide Voluntary Municipal PFAS Project

- WI DNR offered PFAS sampling to **ALL** municipal systems statewide
- Participation in the project was **voluntary** and **cost free** for systems
- 141 communities participated
- https://dnr.wisconsin.gov/topic/PFAS/PWSampling

# PFAS Detections from Municipal Project

- No detects
  - 282 samples/82 systems
- Any PFAS Compound
  - Found in 81 samples/43 systems
- PFOS and/or PFOA
  - Found in 52 samples/30 systems
- PFAS compounds detected
  - PFHxA, PFHpA, PFOS, PFOA, PFBS, PFHxS, PFNA
  - *PFPeA, PFBA, 6:2 FTSA, PFHpS*



# Wisconsin state MCL Requirements for PFOS & PFOA

## Ch. NR 809, Wisconsin Administrative Code

- Maximum Contaminant Level (MCL) 70 ng/L (parts per trillion) for “PFOS and PFOA”
  - MCL exceedance (individual or combined) will result in public notice and corrective action schedule
  - DNR may require public notice if state or federal health advisory or recommendations are exceeded
    - WI DHS Information About PFAS: https://www.dhs.wisconsin.gov/chemical/pfas.htm

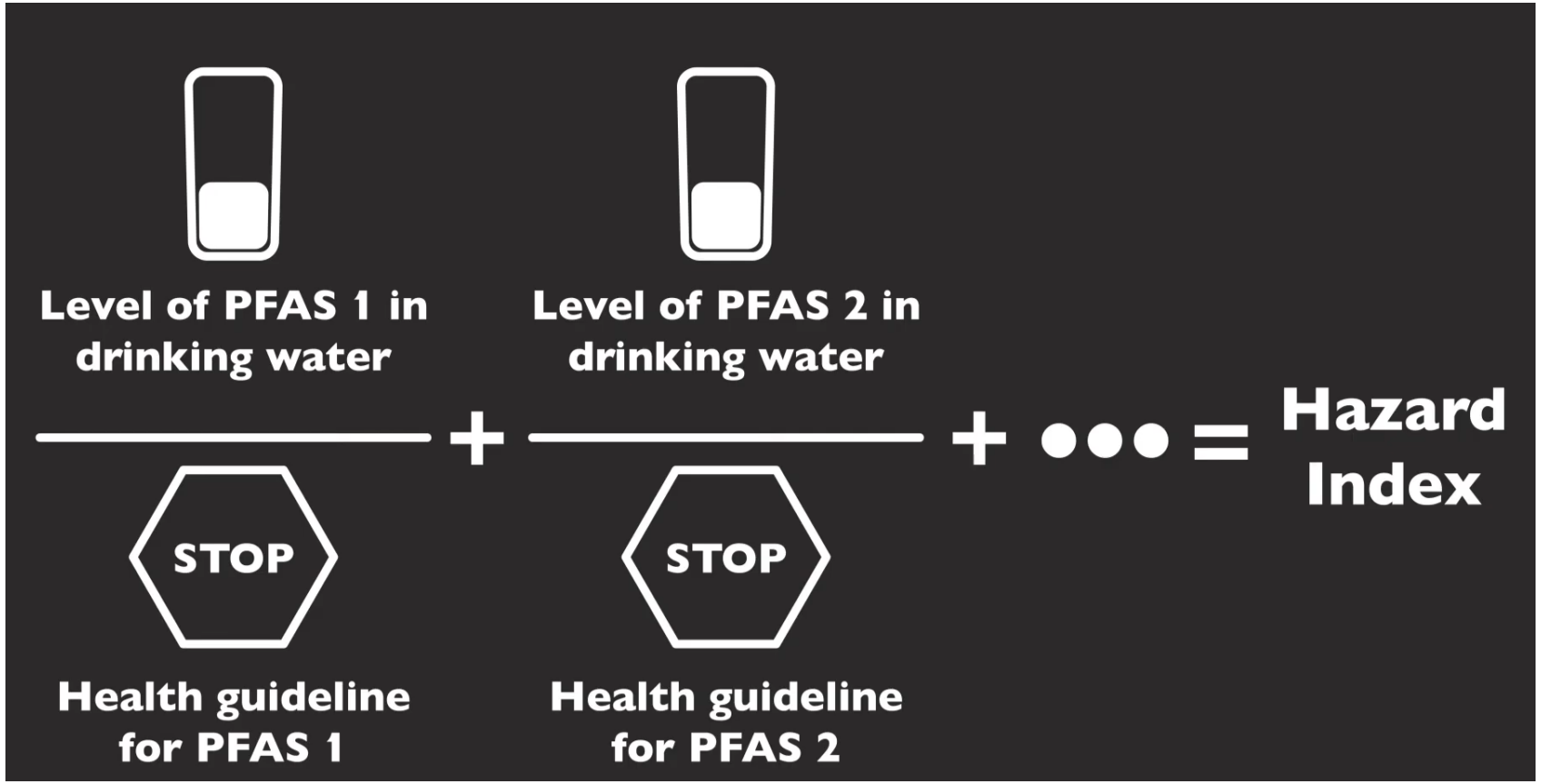
- Initial Monitoring Requirement Schedule for Public Water Systems
  - ➢October 2022 – December 2023
  - ➢Will try to match up with UCMR5 requirements, not duplicate

# Wisconsin Groundwater Standards for PFAS

- Recommendations from WI DHS for setting Groundwater Standards for 18 PFAS
  - ➢ Previous rule failed Feb, 2022
- Permission granted by by Governor Evers to begin rule writing
  - ➢ September 8, 2022
  - ➢ Need approval from the Natural Resources Board
- New attempt includes four PFAS compounds included in EPA 6/15/2022 Health Advisory Level announcement
  - PFOA, PFOS, PFBS, GenX (HFPO-DA)
- Groundwater standards apply to remediation and private well advisories

# PFAS Hazard Index

## Wisconsin Department of Health Services (WI DHS)




Hazard Index > 1 = Public Notice Requirement in Wisconsin

# PFAS Levels of Concern in Wisconsin

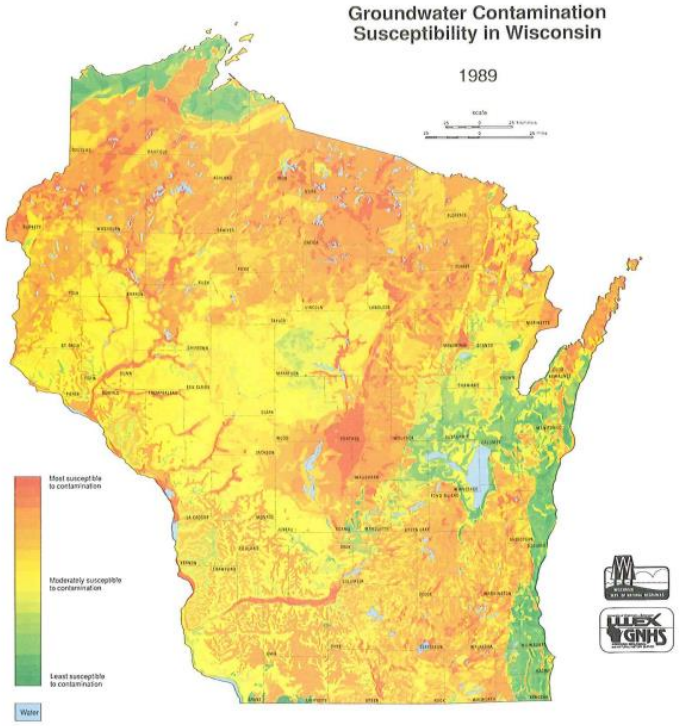
- 70 ppt PFOA & PFOS Maximum Contaminant Level (Feb, 2022)
  - Required corrective action and public notice
  - Applies to community and non-transient noncommunity (NN) public water systems
- 20 ppt PFOA & PFOS WI DHS Recommended Groundwater Standard (2019)
  - Required public notice using existing authority
  - Applies to community and NN public water systems
  - Guidance for private wells
- WI DHS Hazard Index for mixtures of PFAS (2020)
  - Method to evaluate risk from 18 different PFAS
  - Hazard index > 1 = Public Notice Required for community and NN systems
  - Guidance for private wells
- EPA Health Advisory Levels (June, 2022)
  - Under health department review and further consideration

# Groundwater Sampling Project

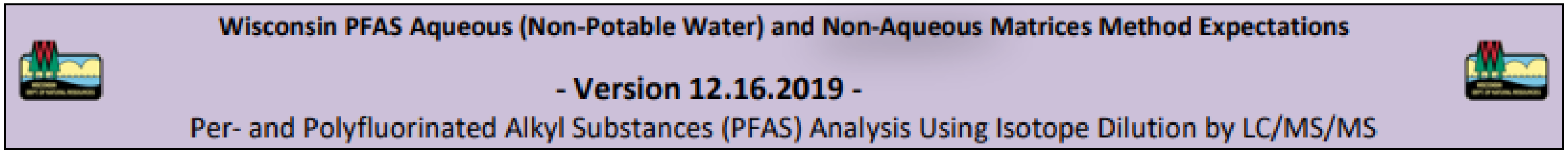
- Characterize the prevalence of PFAS in groundwater and perform source tracing where PFAS are found at higher levels
  - Sample 450 private wells distributed across the state
  - Partnering with the UW Stevens Point Center for Watershed Science and Education

- Sampling completed by September 2022

- Samples Analyzed to date – 71
  - Samples are being frozen due to lab capacity issues
  - Expect most to be analyzed by early November
  - Samples with PFAS 0.5 ≤ HI < 1.0 = 3
  - Samples with PFAS HI > 1 = 1



# PFAS Lab Methods




- Wisconsin 33 PFAS
  - Wisconsin State Lab of Hygiene (and private labs)
  - Research method
  - https://dnr.wisconsin.gov/topic/PFAS/Labs.html
- EPA 537.1
- EPA 533

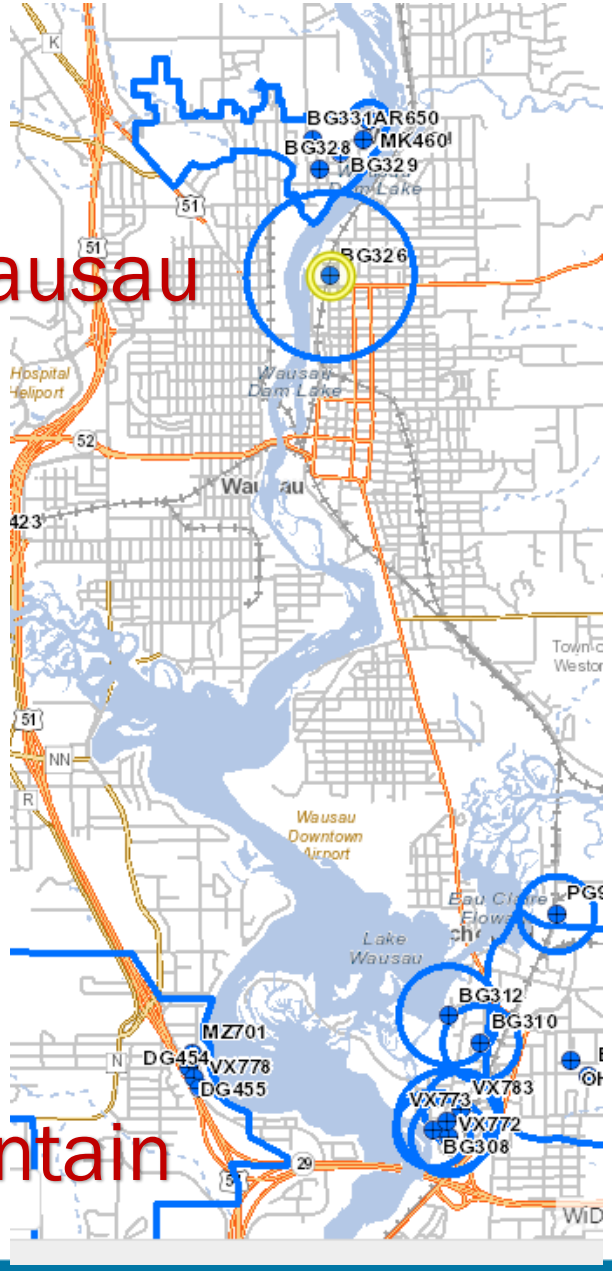
# Wisconsin Case Studies

## Wausau

- Sampled for PFAS (2020) in preparation for designing a new treatment plant
- PFOS/PFOA > 20 ppt
- Treatment pilot study approved – Summer 2022

## Rib Mountain

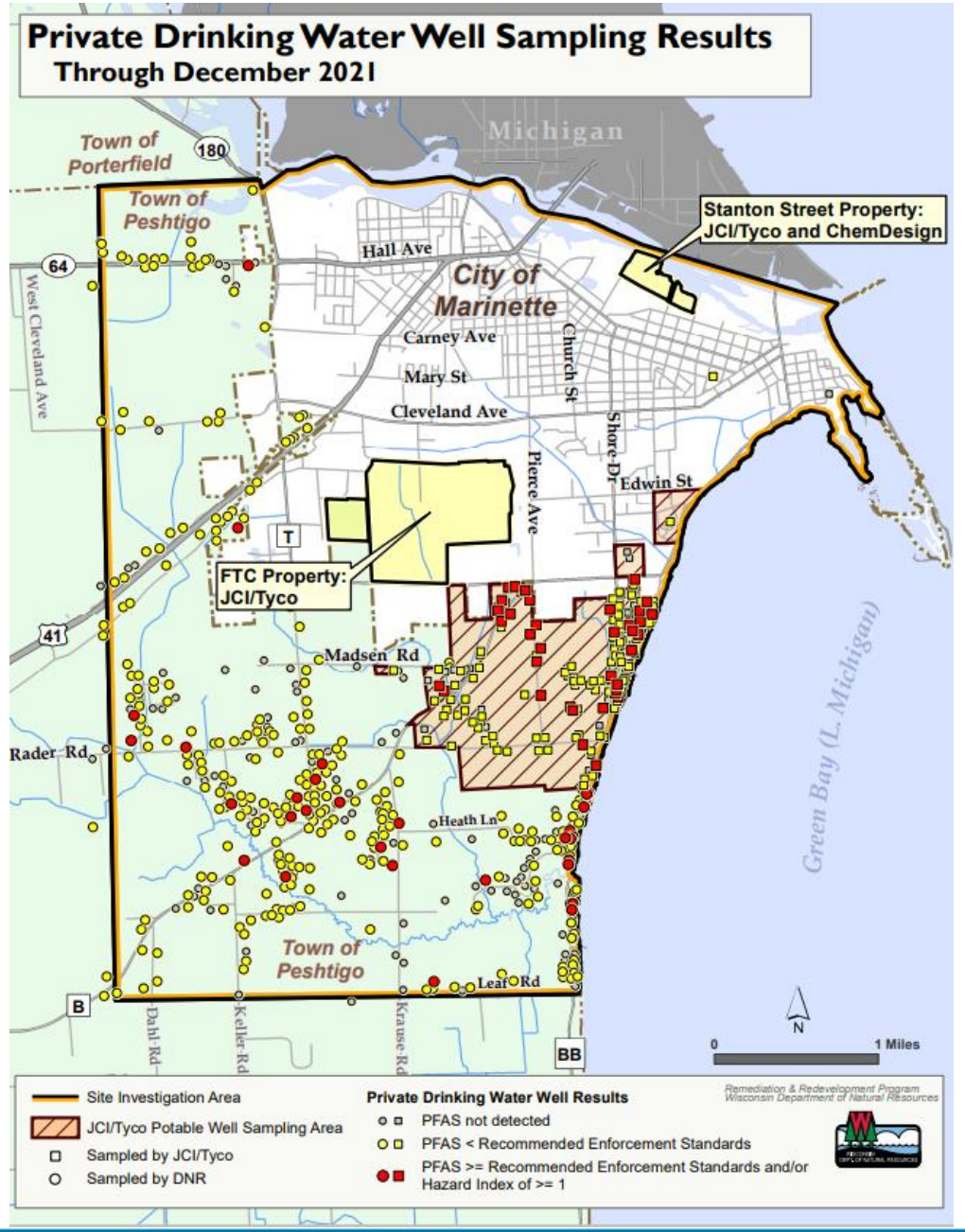
- Voluntarily sampled for PFAS – 2021
  PFOS/PFOA > 20 ppt
- Interim GAC treatment installed
- Treatment pilot study approved – Summer 2022



# Wisconsin Case Studies

## Town of Peshtigo

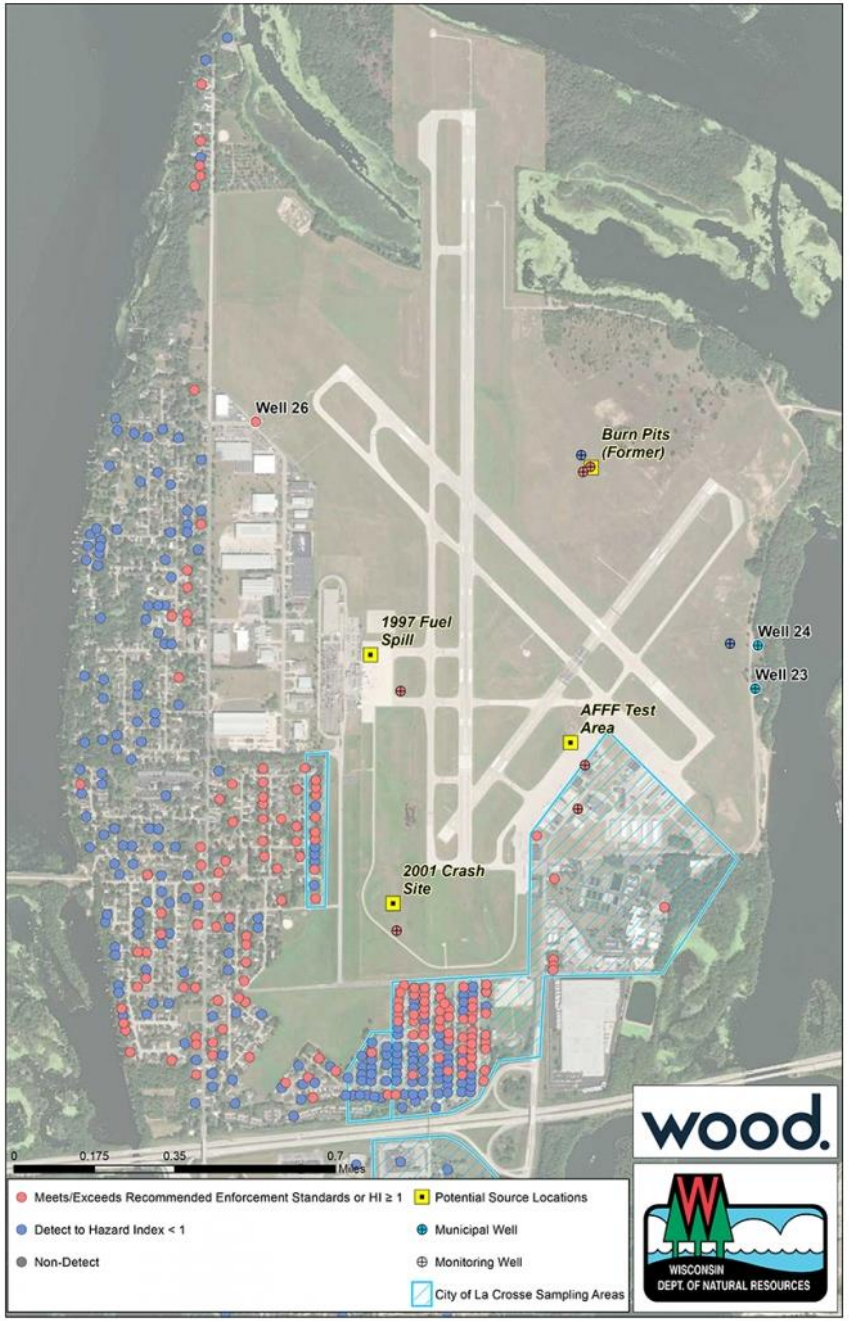
- Contamination of groundwater by AFFF manufacturer
- Working on solution to private well contamination
  - Temporary bottled water
  - Long-term solution – annexation by Marinette and deep private wells
- https://dnr.wisconsin.gov/topic/PFAS/Marinette.html



# Wisconsin Case Studies

## Town of Campbell

- French Island in Mississippi River, hundreds of private wells
- Contamination near the La Crosse airport and outside the study area
- DHS issued a drinking water advisory for the entire island
- Looking for a public water supply solution
  - Interim bottled water is provided by DNR



# CONNECT WITH US

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OFF THE RECORD"