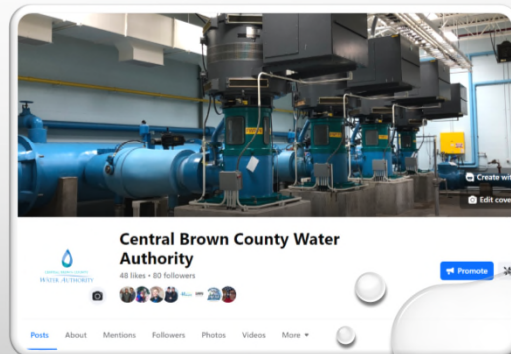


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2023 ACCOMPLISHMENTS



FACEBOOK.COM/CBCWAH2O

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

- A shared top priority
 - The Water Authority
 - Manitowoc Public Utilities
 - The Member Communities and their respective Water Utilities
- Our motivation
 - We are stewards of public health
 - We are stewards of our local economies
 - We are customers too

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Protecting water quality and safety means...

- Meeting and exceeding stringent state and federal drinking water standards
- Water Authority Members intentionally invested in having great water



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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Our Water Source: Lake Michigan

- Balanced water chemistry (Neither soft nor hard)
- Less interaction with pipe wall materials
- Historic issues solved (radium, arsenic, etc.)



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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ MPU's Treatment Process:

Microfiltration

- Removes particles larger than 0.2 microns (300 times smaller than thickness of human hair)
- Takes care of all pathogens

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Daily sampling by Manitowoc Public Utilities

- 30 tests per day on weekdays
- 26 per day on weekends
- State certified laboratory
- Data used to balance the chemistry of the water

➤ Additional confirmation by Members


- Minimum of 15 more tests monthly
- Continuous monitoring of chlorine levels

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Also participate in ongoing process for improving the safety of drinking water

- Additional sampling
- Unregulated Contaminant Monitoring Rule
- 2023 UCMR includes various forms of PFAS
- Other natural and manufactured substances that could be harmful (like herbicides, pesticides, metals, organics, microbes, pharmaceuticals etc.)



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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

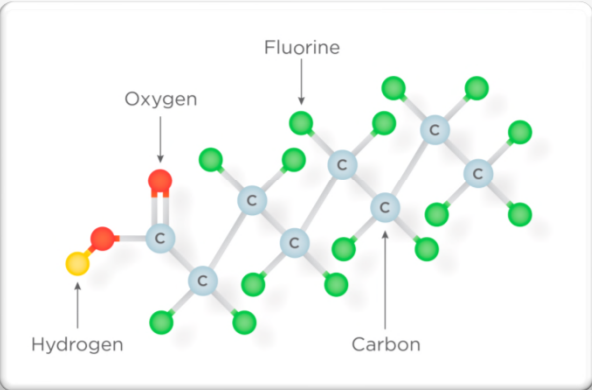
➤ What are PFAS?

- Per- and Poly-Fluoroalkyl Substances
- Manufactured since the 1940s
- Heat, water, oil, stain resistance
- Clothing, cookware, fire-fighting foam, furniture, carpet, food packaging, personal care products, etc.
- Persistent in the environment



Products that **may contain PFAS.**

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Concerns over PFAS

- Breaks down very slowly
- Move easily and found almost everywhere
- Studies have linked PFAS to harmful health effects
- More research needed

➤ We understand these concerns and are taking appropriate action

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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

➤ Actions: Sampling and Analysis


- Found very low levels
- Below Wisconsin limits
- Below the proposed federal limits

➤ Actions: Customer Communication


- Website PFAS resource
- Facebook page

➤ Actions: Ongoing Commitment

- Continued additional sampling
- Will continue to share information



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SOME PERSPECTIVE ON PFAS

- Proposed federal limit on PFOA and PFOS:
 - 4 parts per **trillion** each
- What is one part per **trillion**?
 - One drop out of all the water in 17 Olympic-sized swimming pools
 - Or one second out of every 32,000 years
- Levels found in our drinking water samples
 - PFOS: 1.0 part per **trillion**
 - PFOA: 1.9 parts per **trillion**

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SOME PERSPECTIVE ON PFAS

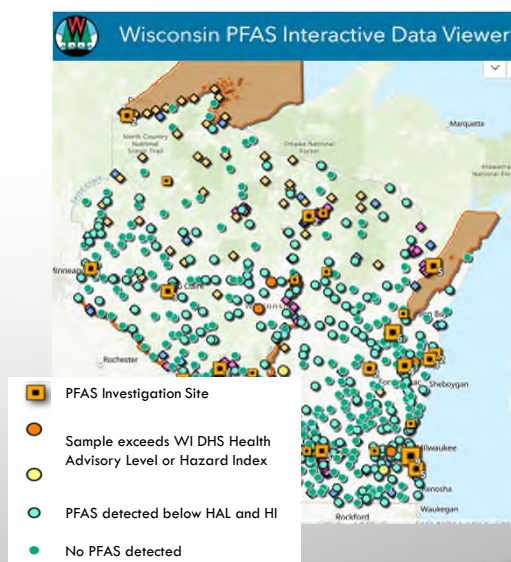
- A Consumer Reports study found PFAS in fast-food packaging
 - Commonly from 200 to 500 parts per **million**
- By comparison, what is one part per **million**?
 - Equals 10 cups out of all the water in one Olympic-sized swimming pool
 - Or 30 seconds out of every year
- Proposed federal drinking water standards very low



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SOME PERSPECTIVE ON PFAS

- Findings from more than 2,100 public water systems
 - One exceedance of Wisconsin state standards for PFOA or PFOS (70 ppt)
 - 1.2% of systems exceed Wisconsin advisory levels for PFOA or PFOS (20 ppt)
 - 8.6% of water systems would exceed proposed federal limits (4 ppt)
- Our drinking water supply meets State and proposed federal limits



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TOP PRIORITY: PROTECTING WATER QUALITY AND SAFETY

- What community leaders can do in response to PFAS
 - Have confidence in the safety and quality of our water supply
 - Point constituents to the Water Authority's resources
 - Forward any questions about PFAS

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OTHER NEWS AND UPDATES

- Sound financial health overall
 - Net investment in capital assets
 - About \$82M outstanding debt (of original \$135M)
 - Final year of repayment: 2035
 - Reduction in Charter Member water rate after 2035
- Charter Member wholesale rate stability continues



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OTHER NEWS AND UPDATES

- Tremendous capacity to support additional growth
 - Using about 40% of available capacity on average
 - Village of Denmark water service expected to begin in early 2024
 - Continuing to pursue additional Members

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