

## Is Our Water Safe?

Yes, it is! Manitowoc Public Utilities Water Department produces some of the highest quality drinking water in the nation. Last year, and in years past, your tap water met and exceeded every federal and state drinking water health standard. With our commitment to providing you with useful information, this report summarizes the quality of the water provided to our customers in 2023. As mandated by the Safe Drinking Water Act (SDWA), this "Consumer Confidence Report" details our water sources, the results of our water tests, and how they compare to regulatory standards.

## Sources of Water

Source	Depth	Name
Groundwater	66 ft	Ranney Well #1- Collector A
Groundwater	84 ft	Ranney Well #3- Collector C
Surface Water		Lake Michigan

To obtain a summary of the source water assessment, please call Robert Michaelson at 920-686-4354.

## Turbidity Monitoring

In accordance with s. NR 810.29 Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm the filtered water is less than 0.1 NTU/0.3 NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is good indicator of the effectiveness of our filtration system. During the year, the highest single entry point turbidity measurement was 0.04 NTU.

## Health Information

Drinking water, including bottled water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. Some may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, those with immune systems disorders, or some elderly, and infants, can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the EPA's safe drinking water hotline (800-426-4791) as well as information about contaminants and potential health effects.

For more information on Lead Awareness, visit:  
[www.mpu.org/lead-awareness](http://www.mpu.org/lead-awareness)

## Additional Health Info

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. MPU is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 3 to 5 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

## Educational Information

The sources of drinking water, both tap water and bottled water, include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water, which shall provide the same protection for public health.

## Water System Information

If you would like to know more about the information contained in this report, please contact Robert Michaelson at 920-686-4354. You may also attend monthly MPU Commission meetings, scheduled on the 2nd and 4th Mondays at 4PM.

**Manitowoc Public Utilities**  
**Main Office**  
**1303 South 8th Street**  
**Manitowoc, WI 54220**

## 2024 Planned Activities

- Watermain will be replaced on Franklin Street, Bentwood Lane, Barkwood Lane, and Fleetwood Drive as part of the City's street reconstruction.
- As part of the EPA's Lead Service Line Accelerator Program, MPU was awarded funding to assist in private LSL replacements with seven census tracts in the City of Manitowoc with a focus on disadvantaged neighborhoods. MPU will be responsibly facilitating the use of the replacement funds through customer notice, contractor bids, and project oversight. MPU intends to apply for future funding to further assist our community in the future.
- Utilizing the Water Treatment Plant's Master Plan, MPU will be working with an Engineering firm to create a preliminary design and report for additional Water Treatment Plant capacity.

## Spanish

Este informe contiene información importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hable con alguien que lo entienda.

## Hmong

Dlaim ntawv tshaabzu nuav muaj lug tseemceeb heev nyob rua huv kws has txug cov dlej mej haus. Kuas ib tug paab txhais rua koj, los nrug ib tug kws paub lug thaam.

# 2023

# Drinking Water Quality Report



## Detected Contaminants

Your water was tested for many contaminants last year. We are allowed to monitor for some contaminants less frequently than once a year. The following table lists only those contaminants which were detected in your water. If a contaminant was detected last year, it will appear in the following tables without a sample date. If the contaminant was not monitored last year, but was detected within the last 5 years, it will appear in the tables along with the sample date.

## Unregulated Contaminants

Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. EPA required us to participate in this monitoring.

## Contaminants with a Secondary Maximum Contaminant Level

There are no violations for detections of contaminants that exceed Health Advisory Levels or Secondary Maximum Contaminant Levels (SMCL). SMCL are levels that do not present health concerns but may pose aesthetic problems such as objectionable taste, odor, or color. Public Health Groundwater Standards and Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

## PFAS Contaminants with a Recommended Health Advisory Level

Perfluoroalkyl and polyfluoroalkyl substances (PFAS) are a large group of human-made chemicals that have been used in industry and consumer products worldwide since the 1950s. The table lists PFAS contaminants which were detected in your water and that have a Recommended Public Health Groundwater Standard (RPHGS) or Health Advisory Level (HAL). There are no violations for detections of contaminants that exceed the RPHGS or HAL. The RPHGS are levels at which concentrations of the contaminant present a health risk and are based on guidance provided by the Wisconsin Department of Health Services. Drinking water is one way people can be exposed to PFAS. In WI, two thirds of people use groundwater as their drinking water source.

## Data Table Definitions

**Health Advisory Level:** A concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

**Maximum Containment Level:** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**Maximum Containment Level Goal:** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

pCi/l-: picocuries per liter (a measure of radioactivity)

ppm: parts per million, or milligrams per liter (mg/l)

ppb: parts per billion, or micrograms per liter (ug/l)

NTU: Nephelometric Turbidity Units

**Recommended Public Health Groundwater Standards:** The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.

Contaminant	Test Year	Unit	MCL	MCLG	SMCL	Detected Level	Range	Major Sources	Violation
<b>Disinfection By-Products</b>									
HAA5, D-26	2023	ppb	60	60	n/a	22	12 - 37	By-product of drinking water chlorination	No
HAA5, D-18	2023	ppb	60	60	n/a	19	12 - 19	By-product of drinking water chlorination	No
TTHM, D-26	2023	ppb	80	0	n/a	41.7	27.1 - 49.1	By-product of drinking water chlorination	No
TTHM, D-18	2023	ppb	80	0	n/a	41.4	25.5 - 50.0	By-product of drinking water chlorination	No
<b>Inorganic</b>									
Barium	2023	ppm	2	2	n/a	0.066	0.022 - 0.066	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Copper	2023	ppm	AL=1.3	1.3	n/a	0.16 (90th perc.)	0 of 60 results were above action level	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	No
Fluoride	2023	ppm	4	4	n/a	0.87	0.2 - 0.87	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	No
Lead	2023	ppb	AL=15	0	n/a	7.70(90th perc)	1 of 60 results were above action level	Corrosion of household plumbing systems; erosion of natural deposits	No
Nickel	2023	ppb	100	n/a	n/a	0.004	0.0022 - 0.004	Naturally occurring in soils, ground & surface waters and is often used in electroplating, stainless steel and alloy products	No
Nitrite (NO3 + NO2)	2023	ppm	10	10	n/a	0.96	0.33 - 0.96	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No
Nitrate (NO3-N)	2022	ppm	10	10	n/a	1.50	0.31 - 1.50	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No
<b>PFAS Contaminants with a Recommended Health Advisory Level</b>									
PFBS (450000 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	3.20	0.37 - 3.20	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
PFHXS (40 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	0.87	0.37 - 0.87	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
PFHXA (150000 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	1.30	0.98 - 1.30	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
PFOS (20 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	0.87	0.43 - 1.20	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
PFOA (20 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	2.30	0.95 - 2.30	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
PFOA & PFOS Total (20 RPHGS or HAL)	2023	ppt	n/a	n/a	n/a	2.73	1.64 - 3.20	PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.	No
<b>Radioactive</b>									
Gross Alpha, Incl. R&U	2023	n/a	n/a	n/a	n/a	0.8	0.8	Erosion of natural deposits	No
Radium, (226 + 228)	2023	pCi/l	5	0	n/a	0.9	0.9	Erosion of natural deposits	No
Combined Uranium	2023	ug/l	30	0	n/a	1.5	1.5	Erosion of natural deposits	No
<b>Synthetic Organic Contaminants including Pesticides and Herbicides</b>									
Atrazine	2023	ppb	3	3	n/a	0.03	0.025 - 0.03	Runoff from herbicide used on row crops	No
Methoxychlor	2023	ppb	40	40	n/a	0.012	0.012	Runoff/leaching from insecticide used on fruits, veggies, alfalfa, livestock	No
<b>Secondary Maximum Level</b>									
Chloride	2023	ppm	n/a	n/a	250	16.00	15.00–16.00	Runoff/leaching from natural deposits, road salt, water softeners	No
Sulfate	2023	ppm	n/a	n/a	250	95.00	21.00 - 95.00	Runoff/leaching from natural deposits, industrial wastes	No
Manganese (0.3 PHGS or HAL)	2023	ppm	n/a	n/a	.05	0.0034	0.0034	Leaching from natural deposits	No
<b>Unregulated</b>									
Bromodichloromethane	2023	ppb	n/a	n/a	n/a	13	0.29 - 13	Disinfectant byproducts that are formed when disinfectants are used to treat water and react with naturally occurring organic and inorganic matter present	No
Chloroform	2023	ppb	n/a	n/a	n/a	34	0.57 - 34	Disinfectant byproducts that are formed when disinfectants are used to treat water and react with naturally occurring organic and inorganic matter present	No
Metolachlor (Dual)	2023	ppb	n/a	n/a	n/a	0.01	0.01		No
Sodium	2023	ppm	n/a	n/a	n/a	100	7.60 - 100		No