

# City of Two Rivers

## 2023 Water Quality Report



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

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.

## Introduction

The employees of Two Rivers Utilities (TRU) Water Department are pleased to provide you with this year's Water Quality Report. The Water Department routinely monitors Two Rivers' drinking water for contaminants to ensure that it meets all health and safety standards. The purpose of this report is to inform our customers of the findings from our ongoing water quality monitoring. We want you to understand the efforts we continuously make to improve water quality and protect our water resources. We are committed to ensuring the quality of your drinking water remains at the highest possible level.

If you would like to know more information contained in this report, please contact Andrew Sukowaty, Water Director at 920-793-5558, or email [customerservice@two-rivers.org](mailto:customerservice@two-rivers.org). There is opportunity for input on decisions affecting your water quality at Two Rivers City Council Meetings located at City Hall, 1717 E. Park Street, Two Rivers, WI 54241 on the first and third Mondays each month at 6:00pm.

## Water System Overview

2 Water Towers

1 Reservoir

72 Miles of Water Main

5,600 Water Services

667 Hydrants

3 Million Gallons of Storage



## About TRU

Two Rivers Water Works was first commissioned in 1902 with two shallow wells along Lake Michigan where today Memorial Drive is located. It was formed along with the first electric utility in the city to be known as Two Rivers Water and Light. With water demands growing the decision was made to filter water from Lake Michigan to meet the demands of the city. In 1932, construction began on a 3-million gallon per day surface water treatment facility. Sand filtration beds were used to filter the water until 2000 when the filtration plant upgraded to ultra membrane filtration. Two Rivers Water and Light continued to serve the community until it recently transformed into what we see today as Two Rivers Utilities.

TRU water comes from Lake Michigan through an intake pipe that extends 6,180-feet into Lake Michigan and is 24-inches in diameter. The water is then filtered in a 3-million gallon per day (mgd) Ultrafiltration Membrane Treatment Facility. Water is then treated with Chlorine and Fluoride as it leaves the treatment facility into the distribution system. The distribution system is comprised of 72 miles of water main that connect all the customers, fire hydrants, and water storage facilities in the city. The storage facilities are comprised of two water towers which hold a combined total of 1-million gallons of water and one reservoir that holds 2-million gallons of water. In 2022, TRU pumped a total of 341,396,000 gallons of water, which equals a daily average of 0.94 mgd or just less than one million gallons a day.



## Hydrant Flushing Frequently Asked Questions

1. **Why does the city perform hydrant flushing?** Hydrant flushing is a controlled procedure that is vital for the general maintenance of the water distribution system. It ensures adequate water flow and water quality.
2. **What are the effects of hydrant flushing?** Sediment can collect in the water mains. Flushing removes collected sediment from fire hydrants. This can result in discolored water during the flushing process and possibly shortly afterwards.
3. **Can I use my water during hydrant flushing?** It is recommended if TRU is in your area flushing to wait until flushing has subsided.
4. **What should I do if my water is discolored?** If you experience discolored water, run your cold water tap for 3-5 minutes or until it runs clear. Faucet aerators may need to be removed and cleaned.
5. **Is the water safe?** Water is safe to consume during hydrant flushing, but if discoloration does occur refrain from consuming until you have flushed your cold tap.
6. **I live several blocks away from where flushing is occurring. Why is my water discolored?** Sometimes residents who live further away from where flushing is occurring can experience discolored water. This occurs when flushing a hydrant because the water can flow in opposite directions than normal. Certain techniques are used by TRU to minimize these impacts.
7. **How often does hydrant flushing occur?** TRU flushes many parts of the distribution system annually. Various hydrants may be flushed more frequently dependent on water quality.



## Information from the EPA

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's safe drinking water hotline (800-426-4791).

Some people 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, people with HIV/AIDS or other immune systems disorders, 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 Environmental Protection Agency's safe drinking water hotline (800-426-4791).



## 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. The City of Two Rivers' source of water is Surface Water, Lake Michigan.

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.

For additional information on lead visit our website [www.two-rivers.org/trwl/water-utility](http://www.two-rivers.org/trwl/water-utility).

## Water Quality Testing and Results

Two Rivers Utilities routinely monitors constituents in your drinking water in accordance with state and federal laws and regulations. All sources of drinking water, including bottled water, are subject to potential contamination by constituents that are naturally occurring or man-made. Those constituents can be microbes, organic or inorganic chemicals, or radioactive materials.

The following table shows the results of our monitoring from the period of January 1, 2023 through December 31, 2023 (unless otherwise noted).

Contaminant (units)	MCL	MCLG	Detected Level	Range	Major Sources	Violation
<b>Disinfection Byproducts</b>						
HAA5, D21 (ppb)	60	60	21	15 - 22	By-product of drinking water chlorination	No
TTHM, D21 (ppb)	80	0	49.8	33.3 – 51.1	By-product of drinking water chlorination	No
HAA5, D3A (ppb)	60	60	24	13 – 52	By-product of drinking water chlorination	No
TTHM, D3A (ppb)	80	0	53.2	29.9 – 74.3	By-product of drinking water chlorination	No
HAA5, D41 (ppb)	60	60	22	14 – 21	By-product of drinking water chlorination	No
TTHM, D41 (ppb)	80	0	60.2	32.7 – 59.7	By-product of drinking water chlorination	No
HAA5, D1/D5 (ppb)	60	60	18	13 – 21	By-product of drinking water chlorination	No
TTHM, D1/D5 (ppb)	80	0	49.4	32.8 – 45.0	By-product of drinking water chlorination	No
<b>Inorganics Contaminants</b>						
Barium (ppm)	2	2	0.21	0.21	Discharge of drilling wastes, metal refineries; Erosion of natural deposits	No
Fluoride (ppm)	4	4	0.6	0.6	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer & aluminum factories	No
Nitrate (N03-N) (ppm)	10	10	0.34	0.34	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits	No
Sodium (ppm)	n/a	n/a	13	13	n/a	No
Copper (ppm) Sample date 09/17/2019	AL=1.3	1.3	0.18 (90 <sup>th</sup> perc)	0 of 30 results were above action level	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives	No
Lead (ppb) Sample date 08/28/2019	AL=15	0	15 (90 <sup>th</sup> perc)	1 of 30 results were above action level	Corrosion of household plumbing systems; Erosion of natural deposits	No
<b>Radioactive Contaminants</b>						
Gross Alpha, Excl. R&U (pCi/l) Sample date 04/21/2020	15	0	0.8	0.8	Erosion of natural deposits	No
Combine Uranium (ug/l) Sample date 04/21/2020	30	0	0.3	0.3	Erosion of natural deposits	No
<b>Unregulated</b>						
Metoachlor (dual) (ppb) Sample date 08/25/2020			0.00	0.00-0.01		No
<b>Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS)</b>						
PFBS (ppt)	RPHGS or HAL (PPT)		Detected Level	Range		
	450000		0.37	0.35 – 0.38		
PFHXS (ppt)	40		0.67	0.65 – 0.70		
PFHXA (ppt)	150000		1.33	1.20 – 1.40		
PFOS (ppt)	20		2.27	1.90 – 2.70		
PFOA (ppt)	20		2.10	2.00 – 2.20		
PFOA & PFOS TOTAL (ppt)	20		4.37	3.90 – 4.90		

UCMR5 testing was completed in 2023. No contamination detected. Information available upon request.

## Contaminants with a Public Health Groundwater Standard, Health Advisory Level, or a Secondary Maximum Contaminant Level

The following table lists contaminants which were detected in your water and that have either a Public Health Groundwater Standard (PHGS), Health Advisory Level (HAL), or a Secondary Maximum Contaminant Level (SMCL), or both. There are no violations or detections of contaminants that exceed Health Advisory Levels, Public Health Groundwater Standards or Secondary Maximum Contaminant Levels. Secondary Maximum Contaminant levels 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 at which concentrations of the contaminant present a health risk.

Contaminant (units)	SMCL	Detected Level	Range	Major Sources	Violation
Contaminant					
Sulfate (ppm)	250	21	21	Runoff/leaching from natural deposits and industrial wastes	No

### Additional Health Information

Some people who drink water containing **trihalomethanes** in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.

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. Two Rivers Waterworks 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 with cold water for 30 seconds to 2 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 (800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

### Other Compliance

#### Uncorrected Significant Deficiencies

Deficiency Description & Progress to Date	Date System Notified	Scheduled Correction Date
SD2 – The overflow of the Northside ground reservoir does not terminate in a downward opening with free air break 12 to 14 inches above a splash pad or rip rap as required in s. NR 811.64, Wis. Adm. Code. In addition, there is concern that the area surrounding the discharge pipe above the outlet elevation of 608.25 and water could back up into the pipe if the storm sewer drain is clogged with debris.	10/09/2020	12/31/2026

### Actions Taken

Per WDNR representatives an extension for corrective action was granted until 2026 when the reservoir will be scheduled for a drained inspection. The site will be monitored for safety until corrective action is taken.

### Turbidity Monitoring

In accordance with s. NR 810.29, Wisconsin Administrative Code, the treated surface water is monitored for turbidity to confirm that the filtered water is less than 0.1 NTU. Turbidity is a measure of the cloudiness of water. We monitor for it because it is a good indicator of the effectiveness of our filtration system. During the year, the highest single point turbidity measurement was 0.080 NTU.

## **Definitions**

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

HAL – Health Advisory Level is a concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice. Health Advisories are determined by US EPA.

MCL – Maximum Contaminant 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.

MCLG – Maximum Contaminant 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.

mrem/year – millirems per year (a measure of radiation absorbed by the body).

NTU – Nephelometric Turbidity Units

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)

RPHGS – Recommended Public Health Groundwater Standards: Ground water standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminate which, if exceeded, poses a health risk and may require a system to post a public notice.

SMCL – Secondary Maximum Contaminant Levels: Contaminants that affect taste, odor, or appearance of the drinking water. The SMCLs do not represent health standards.