



**2017 Consumer Confidence
Report Data
TWO RIVERS
WATERWORKS, PWS ID:
43604363**

Water System Information

If you would like to know more about the information contained in this report, please contact Ross Blaha at (920) 793-5558.

Opportunity for input on decisions affecting your water quality

The Two Rivers city council meets on the first and third Monday of every month at 6:00 pm, at City Hall, 1717 East Park St.

Health Information

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. Immunocompromised 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).

Source(s) of Water

Source ID	Source	Depth (in feet)	Waterbody Name	Status
1	Surface Water		LAKE MICHIGAN	Active

To obtain a summary of the source water assessment please contact, Ross Blaha at (920) 973-8080.

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.

Definitions

Term Definition

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

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 tables list 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 below along with the sample date.

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Violation	Typical Source of Contaminant
HAA5 (ppb)	D21	60	60	30	18 - 31	No	By-product of drinking water chlorination
TTHM (ppb)	D21	80	0	77.6	40.9 - 82.9	No	By-product of drinking water chlorination
HAA5 (ppb)	D3	60	60	24	14 - 23	No	By-product of drinking water chlorination
TTHM (ppb)	D3	80	0	58.3	26.6 - 53.2	No	By-product of drinking water chlorination
HAA5 (ppb)	D41	60	60	31	20 - 35	No	By-product of drinking water chlorination
TTHM (ppb)	D41	80	0	76.8	40.4 - 79.5	No	By-product of drinking water chlorination
HAA5 (ppb)	D1/D5	60	60	28	17 - 27	No	By-product of drinking water chlorination
TTHM (ppb)	D1/D5	80	0	68.9	36.7 - 72.6	No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
ANTIMONY TOTAL (ppb)	6	6	0.2	0.2	4/23/2014	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder
ARSENIC (ppb)	10	n/a	1	1	4/23/2014	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)	2	2	0.020	0.020	4/23/2014	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
CYANIDE (ppb)	200	200	9	9	4/23/2014	No	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
FLUORIDE (ppm)	4	4	0.7	0.7	4/23/2014	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)	100		1.1000	1.1000	4/23/2014	No	Nickel occurs naturally in soils,

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
NITRATE (N03-N) (ppm)	10	10	0.46	0.46	2/16/2016	No	ground water and surface waters and is often used in electroplating, stainless steel and alloy products. Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)	n/a	n/a	12.00	12.00	2/16/2016	No	n/a

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.1500	0 of 30 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	21.00	6 of 30 results were above the action level.		No	Corrosion of household plumbing systems; Erosion of natural deposits

Radioactive Contaminants

Contaminant (units)	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2017)	Violation	Typical Source of Contaminant
RADIUM, (226 + 228) (pCi/l)	5	0	0.7	0.7	4/23/2014	No	Erosion of natural deposits

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.

Contaminant (units)	Level Found	Range	Sample Date (if prior to 2017)
SULFATE (ppm)	21.00	21.00	

Health effects for any contaminants with MCL violations/Action Level Exceedances

Contaminant Health Effects

LEAD Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

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 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 or at www.epa.gov/safewater/lead.

Information on Monitoring for Cryptosporidium

During a 2-year period, we are required to collect data to determine whether our treatment is adequate to prevent cryptosporidium from entering your drinking water. Last year cryptosporidium was detected 1 time(s) in the **untreated** water.

Health Information

Cryptosporidium is a microbial parasite naturally found in surface water throughout the world. If ingested, it can cause intense gastrointestinal distress in otherwise healthy people.

Other Compliance

Monitoring Violations

Description	Contaminant Group	Sample Location	Compliance Period Beginning	Compliance Period Ending
Chem M/R - Reg - No Regular samples	Volatile Organic Contaminants	81	1/1/2017	9/30/2017
Chem M/R - Reg - No Regular samples	Synthetic Organic Contaminants	81	1/1/2017	9/30/2017
Chem M/R - Reg - No Regular samples	Inorganic Contaminants	81	1/1/2017	9/30/2017
Chem M/R - Reg - No Regular samples	Synthetic Organic Contaminants	81	4/1/2017	6/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	81	6/1/2017	11/30/2017
WQP M/R Initial/Follow/Routine	Pbcu_Rule	Distribution System	6/1/2017	11/30/2017

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During the compliance period noted in the above table, we did not complete all monitoring or testing for the contaminant(s) noted, and therefore cannot be sure of the quality of your drinking water during that time.

Actions Taken

We experienced a communication failure between the utility and our contracted laboratory. We did not receive the sample kits, therefore no samples were submitted to WDNR. The sampling that was missed in 2017 was completed in early 2018. We now continuously monitor our sampling record on the WDNR website to fully comply with all requirements.

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 entry point turbidity measurement was 0.048 NTU.