



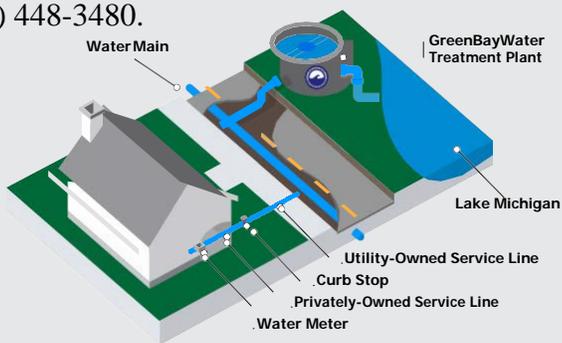
GREEN BAY WATER UTILITY 2019 ANNUAL DRINKING WATER REPORT

Each year, the Green Bay Water Utility provides its customers with an annual Water Quality Report to let you know how the Utility's drinking water quality stacks up against federal and state drinking water standards. The report reflects some of the 10,000+ tests we conducted on the drinking water in 2018 to ensure your drinking water's quality and safety.



WHERE DOES OUR WATER COME FROM?

The Green Bay Water Utility's main source of water is Lake Michigan. This source is known as surface water, and it is treated at a filtration facility. A Wisconsin Department of Natural Resources source water assessment summary is available. If you are interested, contact the Green Bay Water Utility at (920) 448-3480.



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.

WHAT MAY BE IN DRINKING WATER

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:

- A. Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- B. 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.
- C. Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- D. Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- E. 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, the Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The Utility's water quality surpasses all federal and state Safe Drinking Water Standards.

The Green Bay Water Utility has performed additional water quality monitoring on contaminants that are not regulated or do not have health effect advisories associated with them yet. Please see our website at gbwater.org or call (920) 448-3480 for additional information.



UNREGULATED CONTAMINANTS

The 1996 amendments to the Safe Drinking Water Act require that once every five years, the U.S. Environmental Protection Agency issue a new list of no more than 30 unregulated contaminants to be monitored by public water system. The unregulated contaminant monitoring rule provides EPA with scientifically valid data on the occurrence of unregulated contaminants in drinking water and the data is used to determine whether future regulation is warranted. US EPA requires this monitoring.

TURBIDITY MONITORING

In accordance with s.NR810.29, Wisconsin Administration Code, the treated surface water is monitored for turbidity to confirm that 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 a good indicator of the effectiveness of our filtration system. During the year, the highest single entry point turbidity measurement was 0.03 NTU. The lowest monthly percentage of samples meeting the turbidity limits was 100%.

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.

IMPORTANT INFORMATION

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 system 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/ Center for Disease Control 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).

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.

The Green Bay Water Utility is responsible for providing high quality drinking water, but cannot control the variety of materials used in the 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 (800-426-4791) or at www.epa.gov/safewater/lead.

WHAT ABOUT CRYPTOSPORIDIUM?

Cryptosporidium (Crypto) is a protozoan parasite found in lakes and rivers, typically when these waters contain animal or sewage waste. The Green Bay Water Utility continues to aggressively analyze for Crypto in Lake Michigan source water and treated water samples. The results indicate that no Crypto has been found. The Utility's ozonization process effectively eliminates any potential Crypto.

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 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 past 5 years, it will appear in the tables on the next page along with the sample date.

SUMMARY OF WATER QUALITY DATA

INORGANIC CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Fluoride	2018	ppm	4	4	0.75	0.68-0.79	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer or aluminum factories.
Nickel	2017	ppb	n/a	100	0.57	0.57	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
Nitrate	2018	ppm	10	10	0.55	0.55	Runoff from fertilizer use; leaching from septic tanks, sewerage; erosion of natural deposits.
Copper	2018	ppm	1.3	AL = 1.3	0.55	0 of 100*	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2018	ppb	0	AL = 15	11	4 of 100*	Corrosion of household plumbing systems; erosion of natural deposits.
Antimony	2017	ppb	6	6	0.20	0.20	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder.
Arsenic	2017	ppb	n/a	10	1.0	1.0	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2017	ppm	2	2	0.020	0.020	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
INORGANIC CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	# OF RESULTS	SOURCE OF CONTAMINANTS
Copper	2018	ppm	1.3	AL = 1.3	0.55	0 of 100*	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
Lead	2018	ppb	0	AL = 15	11	4 of 100*	Corrosion of household plumbing systems; erosion of natural deposits.
RADIOACTIVE CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Gross Alpha exc. R&U (pCi/l)	2014	pCi/L	0	15	7.1	0.0 – 7.1	Erosion of natural deposits.
Gross Alpha inc. R&U (n/a)	2014	n/a	n/a	n/a	7.1	0.0 – 7.1	Erosion of natural deposits.
Combined Radium 226/228	2014	pcCi/L	0	5	4	1.9 – 4.0	Erosion of natural deposits.
DISINFECTION BYPRODUCTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
TTHM Site D9	2018	ppb	0	80	28.0	19.5 - 38.5	By-product of drinking water chlorination.
TTHM Site D15	2018	ppb	0	80	22.7	12.8 - 37.2	By-product of drinking water chlorination.
TTHM Site D17	2018	ppb	0	80	28.9	14.7 - 45.7	By-product of drinking water chlorination.
TTHM Site D22	2018	ppb	0	80	27.7	14.9 - 45.3	By-product of drinking water chlorination.
HAA5 Site D9	2018	ppb	60	60	9	8.0 – 12.0	By-product of drinking water chlorination.
HAA5 Site D15	2018	ppb	60	60	7	5.0 – 9.0	By-product of drinking water chlorination.
HAA5 Site D17	2018	ppb	60	60	9	6.0 – 13.0	By-product of drinking water chlorination.
HAA5 Site D22	2018	ppb	60	60	9	6.0 – 12.0	By-product of drinking water chlorination.
Bromate	2018	ppb	10	10	2	0.0 – 3.0	By-product of ozone disinfection.
UNREGULATED CONTAMINANTS	DATE TESTED	UNIT	GOAL (MCLG)	MAXIMUM ALLOWED (MCL)	DETECTED LEVEL	RANGE OF VALUES TESTED	SOURCE OF CONTAMINANTS
Bromochloroacetic Acid	2018	ppb	n/a	n/a	3.9	1.6 – 3.9	
Bromodichloroacetic Acid	2018	ppb	n/a	n/a	3.6	1.9 – 3.6	
Chlorodibromoacetic Acid	2018	ppb	n/a	n/a	1.7	0.65 – 0.93	
Monobromoacetic Acid	2018	ppb	n/a	n/a	0.93	0.36 – 0.93	
Dibromoacetic Acid	2018	ppb	n/a	n/a	1.4	0.68 – 1.4	
Dichloroacetic Acid	2018	ppb	n/a	n/a	6.7	2.5 – 6.7	
Trichloroacetic Acid	2018	ppb	n/a	n/a	4	1.2 - 4	
Bromide	2018	ppb	n/a	n/a	35	27 – 35	
Total Organic Carbon	2018	mg/l	n/a	n/a	2.3	1.7 – 2.3	

*Result above action limit.

DATA TABLE KEY: UNIT DESCRIPTIONS

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 MCLG 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.

n/a: not applicable

nd: not detected

NTU: Nephelometric Turbidity Units

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

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

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

GREEN BAY WATER UTILITY IS A MEMBER OF:

American Water Works Association
Association of Metropolitan Water Agencies
Public Water Systems ID #40503562

Regular Green Bay Commission meetings occur on the second Monday of every month at 8:30 a.m. at the Green Bay Water Utility office, 631 S. Adams St., P.O. box 1210, Green Bay, WI 54305-1210.

If you would like to know more about the information contained in this report, please contact Russ Hardwick at (920) 845-2031.

