



CITY OF WEST BEND WATER UTILITY 2022 CONSUMER CONFIDENCE REPORT

West Bend Water Utility
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To Our Valued Customers:

The information contained in this report represents our 26th Annual Consumer Confidence Report which the Environmental Protection Agency (EPA) is requiring all Water Utilities across the United States to provide to the users of their water supply. Please read this information carefully and if you have any concerns or questions, do not hesitate to contact us.

Since 1908, the City of West Bend Water Utility has strived to provide a safe and reliable water supply to its customers. The year 2022 marked a total of 114 years of service to the community. This report is based upon tests conducted in the year 2022 by Northern Lake Services, Eurofins SFA Labs and the Wisconsin State Laboratory of Hygiene for the City of West Bend Water Utility. The data presented in this report is from the most recent testing done in accordance with regulations.

CITY OF WEST BEND WATER SOURCE

The City of West Bend Water Utility is supplied by groundwater pumped from various wells throughout the City. Chlorine, fluoride and polyphosphates are added to our drinking water supply on a daily basis. To obtain a summary of the source water assessment please contact Travis Thull at (262) 335-5040.

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 (1-800-426-4791).

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 (1-800-426-4791).

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.

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, the 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.

The tables included in this report contain many scientific terms and abbreviations. The following definitions may help clarify the data:

TERM	Definition
AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
HA and HAL	HA: Health Advisory. An estimate of acceptable drinking water levels for a chemical substance based on health effects information. 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.
HI	Hazard Index: A Hazard Index is used to assess the potential health impacts associated with mixtures of contaminants. Hazard Index guidance for a class of contaminants or mixture of contaminants may be determined by the US EPA or Wisconsin Department of Health Services. If a Health Index is exceeded, a system may be required to post a public notice.
Level 1 Assessment	A Level 1 assessment is a study of the water system to identify potential problems and determine, if possible, why total coliform bacteria have been found in our water system.
Level 2 Assessment	A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine, if possible, why an E. coli MCL violation occurred or why total coliform bacteria have been found in our water system, or both, on multiple occasions.
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.
MFL	million fibers per liter
MRDL	Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MRDLG	Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
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)
ppt	parts per trillion, or nanograms per liter
ppq	parts per quadrillion, or picograms per liter
PHGS	Public Health Groundwater Standards are found in NR 140 Groundwater Quality. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
RPHGS	Recommended Public Health Groundwater Standards: Groundwater standards proposed by the Wisconsin Department of Health Services. The concentration of a contaminant which, if exceeded, poses a health risk and may require a system to post a public notice.
SMCL	Secondary drinking water standards or Secondary Maximum Contaminant Levels for contaminants that affect taste, odor or appearance of the drinking water. The SMCLs do not represent health standards.
TCR	Total Coliform Rule
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.

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 along with the sample date.

The EPA requires monitoring for over 80 contaminants.
There were no detected contaminants which were in violation in 2022.
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.

**** WATER QUALITY TABLE ****

Disinfection Byproducts

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2022)	Violation	Typical Source of Contaminant
HAA5 (ppb)	18	60	60	5	5		No	By-product of drinking water chlorination
TTHM (ppb)	18	80	0	24.7	24.7		No	By-product of drinking water chlorination
HAA5 (ppb)	SEWER PLANT	60	60	1	1		No	By-product of drinking water chlorination
TTHM (ppb)	SEWER PLANT	80	0	19.6	19.6		No	By-product of drinking water chlorination

Inorganic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2022)	Violation	Typical Source of Contaminant
ARSENIC (ppb)		10	n/a	1	0 – 1	03/10/2020	No	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes
BARIUM (ppm)		2	2	0.150	0.057 – 0.150	03/10/2020	No	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
FLUORIDE (ppm)		4	4	0.9	0.1 – 0.9	03/10/2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
NICKEL (ppb)		100		4.0000	1.0000 – 4.0000	03/10/2020	No	Nickel occurs naturally in soils, ground water and surface waters and is often used in electroplating, stainless steel and alloy products.
NITRATE (NO3-N) (ppm)		10	10	1.70	0.00 – 1.70		No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
SODIUM (ppm)		n/a	n/a	220.00	6.60 – 220.00	03/10/2020	No	n/a
THALLIUM TOTAL (ppb)		2	0.5	0.5	0.0 - 0.5	03/10/2020	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories

Contaminant (units)	Action Level	MCLG	90th Percentile Level Found	# of Results	Sample Date (if prior to 2022)	Violation	Typical Source of Contaminant
COPPER (ppm)	AL=1.3	1.3	0.8100	2 of 60 results were above the action level.	09/23/2021	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
LEAD (ppb)	AL=15	0	12.00	4 of 60 results were above the action level.	9/21/2021	No	Corrosion of household plumbing systems; Erosion of natural deposits

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 following 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.

Typical Source of Contaminant		Drinking water is one way that people can be exposed to PFAS. In Wisconsin, two-thirds of people use groundwater as their drinking water source. PFAS can get in groundwater from places that make or use PFAS and release from consumer products in landfills.			
Contaminant (units)	Site	RPHGS or HAL (PPT)	Level Found	Range	Sample Date (if prior to 2022)
PFBA (ppt)		450000	[2.81]	0.00 – 2.81	
PFHxA (ppt)		150000	1.31	0.00 – 1.31	
PFHpA (ppt)		150000	[0.64]	0.00 – 0.64	
PFOA (ppt)		20	4.31	0.00 – 4.31	
PFBS (ppt)		450000	2.77	0.00 – 2.77	
PFHxS (ppt)		40	1.90	0.00 – 1.90	
PFOS (ppt)		20	0.84	0.00 – 0.84	

Radioactive Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2022)	Violation	Typical Source of Contaminant
Gross Alpha, Excl. R & U (pCi/l)		15	0	2.1	0.0 – 2.1	03/10/2020	No	Erosion of natural deposits.
Radium (226 + 228) (pCi/l)		5	0	1.0	0.0 – 1.0	03/10/2020	No	Erosion of natural deposits.
Gross Alpha, Incl. R & U (n/a)		n/a	n/a	3.1	0.0 – 3.1	03/10/2020	No	Erosion of natural deposits.
Combined Uranium (ug/l)		30	0	1.5	0.5 – 1.5	03/10/2020	No	Erosion of natural deposits.

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

The following tables list 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 any combination thereof. There are no violations for detections of contaminants that exceed Health Advisory Levels, 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 levels at which concentrations of the contaminant present a health risk.

Contaminant (units)	Site	SMCL (ppm)	HAL (ppm)	Level Found	Range	Sample Date (if prior to 2022)	Typical Source of Contaminant
CHLORIDE (ppm)		250		300.00	15.00 – 300.00	09/29/2020	Runoff/leaching from natural deposits, road salt, water softeners
IRON (ppm)		0.3		0.15	0.00 – 0.15	09/29/2020	Runoff/leaching from natural deposits, industrial wastes
MANGANESE (ppm)		0.05	0.3	0.18	0.00 – 0.18	09/29/2020	Leaching from natural deposits
SULFATE (ppm)		250		71.00	30.00 – 71.00	03/10/2020	Runoff/leaching from natural deposits, industrial wastes

Health Effects for any contaminants with MCL Violations/Action Level Exceedances/SMCL Exceedances/PHGS or HAL Exceedances

Contaminant	Health Effects
CHLORIDE	Waters containing chloride in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor or color
MANGANESE	Waters containing manganese in quantities above the SMCL are not hazardous to health but may be objectionable for taste, odor or color.

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 2022)
BROMOCHLOROACETIC ACID (BCAA)	.77	0.44 – 1.1	11/21/2019
BROMODICHLOROACETIC ACID (BDCAA)	1.0	1.0	11/21/2019
CHLORODIBROMOACETIC ACID (CDBAA)	0.44	0.38 – 0.49	11/21/2019
DIBROMOACETIC ACID (DBAA)	0.64	0.58 – 0.69	11/21/2019
DICHLOROACETIC ACID (DCAA)	0.97	0.74 – 1.20	11/21/2019
TRICHLOROACETIC ACID (TCAA)	1.5	1.5	11/21/2019
HAA5 (ppb)	5.721	0.991 – 5.721	11/04/2019 – 5/18/2020
HAA6Br (ppb)	6.03	1.395 – 6.03	11/04/2019 – 5/18/2020
HAA9 (ppb)	9.676	1.981 – 9.676	11/04/2019 – 5/18/2020
Manganese (ppb)	199.74	3.547 – 199.74	11/04/2019 – 5/18/2020

Volatile Organic Contaminants

Contaminant (units)	Site	MCL	MCLG	Level Found	Range	Sample Date (if prior to 2022)	Violation	Typical Source of Contaminant
CIS-1,2-DICHLOROETHYLENE (ppb)		70	70	0.5	0.0 – 0.6		No	Discharge from industrial chemical factories
TRICHLOROETHYLENE (ppb)		5	0	0.3	0.0 – 0.4		No	Discharge from metal degreasing sites and other factories

IMPORTANT INFORMATION ABOUT LEAD AND COPPER

Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilsons Disease should consult their personal doctor.

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.

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. West Bend 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 AND RADON

Our water system did not monitor our water for cryptosporidium or radon during 2022. We are not required by State or Federal drinking water regulations to do so.

WATER CONSERVATION - SAVE WATER, SAVE ENERGY

Water conservation has become an important part of our daily lives. Hidden water leaks can waste thousands of gallons of water – costing you money and wasting precious water resources. Following are a few tips to help you do your part to conserve:

- Check all faucets, toilets and appliances for water leaks and fix them.
- Turn the water off while you brush your teeth.
- Install water-efficient toilets, bathroom faucets and accessories.
- Water your lawn and landscape plants early in the morning when the water is less likely to evaporate.

It takes a lot of energy to deliver and treat the water you use every day. Letting your faucet run for five minutes uses about as much energy as leaving a 60-watt light bulb on for 14 hours. By reducing household water use, you can reduce the energy required to supply and treat public water supplies. Conserving water is good for all of us. Using less water means less energy is used to treat it, pump it and distribute it. By conserving water, you are helping maintain our natural resources.

For more information on water-efficient products, programs and practices visit www.epa.gov/watersense.

WHERE CAN I GET MORE INFORMATION? The Board of Public Works, which oversees the Water Utility, has regularly scheduled meetings the 1st and 3rd Mondays of each month. These meetings are held in Council Chambers at City Hall, 1115 S. Main Street, West Bend, Wisconsin. If you would like to know more about the information contained in this report, please contact the Water Utility Manager, Travis Thull, at (262) 335-5040.