



The City of Fitchburg Public Works Department Utility District
2024 Annual Water Quality Report
South System
PWSID #11310046

THE MARK OF EXCELLENT SERVICE

The City of Fitchburg, Public Works Department, is pleased to present to you the Annual Water Quality Report for 2024. We are committed to providing our customers with safe and reliable drinking water. This commitment demands diligence, foresight, investment, and long-range planning.

Monitoring and treatment are key methods by which the City of Fitchburg protects the public water supply. Each year the Utility Division works hard at ensuring your water supply meets the highest of standards established by the State of Wisconsin and the U.S. Environmental Protection Agency (EPA). Drinking water in Fitchburg continues to meet or exceed all of the Environmental Protection Agency's standards. The water quality data contained in this report is based on monitoring results from the 2024 calendar year.



FITCHBURG WATER

How often is Fitchburg's water tested?

Certified staff at the City of Fitchburg and certified laboratories conduct the following tests:

Daily: Fluoride

Weekly: Chlorine (two times)

Monthly: Bacteriological (two times)

Additional testing is completed quarterly, annually, and tri-Annually based upon the State of Wisconsin and the U.S. Environmental Protection Agency (EPA) requirements

Where does my water come from?

Fitchburg's South System relies on groundwater pumped from two wells, approximately 462 feet deep, producing an average of 22,000 gallons of water per day. This system also relies on two hydro-pneumatic tanks with a combined capacity of 6,000 gallons for fire protection and to maintain system pressures.

Our wells in this system pump water from a locally recharged deep sandstone aquifer, allowing us to

bypass some of the upper aquifer water, which is more susceptible to surface contamination. Though certain aquifers maybe less susceptible than others, all aquifers are susceptible to some degree of contamination. For this reason, it is imperative that wellhead protection guidelines are practiced in an effort to maintain the quality of water produced by these wells.

What is my water treated with?

Your water is treated with liquid chlorine at each individual well site to reduce or remove harmful bacteriological contaminants that may come from the source water. We maintain a disinfection residual of 0.6 mg/l (milligrams per liter or parts per million).

To help prevent tooth decay we add liquid fluoride. Our goal is to maintain a residual of 0.7 mg/l of fluoride.

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

Di claim 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.

FOR MORE INFORMATION

Please contact Barry Schwingel, Fitchburg Utility Supervisor, via e-mail at barry.schwingel@fitchburgwi.gov or by phone at 608-729-1730 for more information or to obtain a copy of the source water assessment. Additional information may also be found on the City's web-site at www.fitchburgwi.gov. You are encouraged to attend the City's Board of Public Works at Fitchburg City Hall, 5520 Lacy Road. Please see the Public Meeting calendar on our web-site for meeting dates and times.

MESSAGE FROM THE ENVIRONMENTAL PROTECTION AGENCY (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 EPA'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 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/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).

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.

Contaminations 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 byproducts 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 bottle water, which shall provide the same protection for public health.

CONTAMINANT REPORTING

The EPA and Wisconsin Department of Natural Resources (WDNR) establish the safe drinking water regulations that limit the amount of contaminants allowed in drinking water. The table below shows the concentrations of detected substances in comparison to the regulatory limits. Substances not detected are not included in the table.

Terms and units used in the Water Quality Table are identified and defined below:

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

Health Advisory (HA): An estimate of acceptable drinking water levels for a chemical substance based on health effects information.

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

Maximum Contaminant Level (MCL): 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 Contaminant Level Goal (MCLG): 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.

Maximum residual disinfectant level (MRDL): 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

Maximum residual disinfectant level goal (MRDLG): 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.

Recommended Public Health Groundwater Standards (RPHGS): 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.

Secondary Maximum Contaminant Levels (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.

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.

90TH Percentile: 90% of samples are equal to or less than the number on the chart.

Units in the Table:

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

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

ppm = parts per million

ppb = parts per billion

ppt = parts per trillion

mg/l = milligrams per liter

ug/l = micrograms per liter

nd = not detected at testing limits

n/a = not applicable

WATER QUALITY

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 in your water. If a contaminant was detected last year, it will appear in the following table 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 table below along with the sample date.

TABLE 1: WATER QUALITY TABLE

Contaminant	Unit	MCL	MCLG	Level Detected	*Range	Violation (Yes/No)	**Sampling Date	Potential Source of Contamination
Disinfection Byproducts								
Haloacetic Acids (HAA5)	ppb	60	60	2	2	No		By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	ppb	80	0	11.7	11.7	No		By-product of drinking water chlorination
Inorganic Contaminants								
Barium	ppm	2	2	0.046	0.026 - 0.046	No	7/19/2023	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Chromium	ppb	100	100	2	1 - 2	No	7/19/2023	Discharge from steel and pulp mills; Erosion of natural deposits
Copper	ppm	AL = 1.3	1.3	0.3100	0.0960 – 0.3300. 0 of 5 results were above the action level	No	6/6/2023	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Fluoride	ppm	4	4	0.6	0.4 - 0.6	No	7/19/2023	Erosion of natural deposits; Water additives which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	ppb	AL = 15	0	5.15	0.68 – 8.80. 0 of 5 results were above the action level	No	6/6/2023	Corrosion of household plumbing systems; Erosion of natural deposits
Nitrate (N03-N)	ppm	10	10	6.43	5.40 – 7.20	No		Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits
Sodium	ppm	n/a	n/a	7.70	6.60 - 7.70	No	7/19/2023	Erosion of natural deposits; Road salt application
Radioactive Contaminants								
Gross Alpha, Excl. R & U	pCi/l	15	0	2.4	0.4-2.4	No	7/29/2020	Erosion of natural deposits
Radium (226 + 228)	pCi/l	5	0	1.4	0.7-1.4	No	7/29/2020	Erosion of natural deposits
Gross Alpha, Incl. R & U	n/a	n/a	n/a	2.4	0.4-2.4	No	7/29/2020	Erosion of natural deposits
Synthetic Organic Contaminants including Pesticides and Herbicides								
Atrazine	ppb	3	3	0.0	0.0-0.0	No	7/19/2023	Runoff from herbicide used on row crops

*Systems exceeding a lead and/or copper action level must take actions to reduce lead and/or copper in the drinking water. The lead and copper values represent the 90th percentile of all compliance samples collected. If you want information on the NUMBER of sites or the actions taken to reduce these levels, please contact your water supply operator.

**Sampling Date listed only if prior to 2024.

The following table lists contaminants which were detected in your water and that have either a Health Advisory Level (HAL), a Secondary Maximum Contaminant Level (SMCL), or both. 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. Health Advisory Levels are levels at which problems such as objectionable taste, odor, or color. Health Advisory Levels are levels at which concentrations of the contaminant present a health risk.

TABLE 2: WATER QUALITY TABLE

CONTAMINANT	UNIT	SMCL	HAL	LEVEL DETACHED	RANGE	**SAMPLING DATE	POTENTIAL SOURCE OF CONTAMINATION
Other Substances (Aesthetic Goal)							
Chloride	ppm	250		17.00	13.00 – 17.00	7/19/2023	Runoff/leaching from natural deposits, road salt, water softeners

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.

Note: The recommended health-based levels in the table below were in effect in 2024. These levels were revised by WDHS in 2025. They can be found here <https://www.dhs.wisconsin.gov/water/gws.htm>.

TABLE 3: WATER QUALITY TABLE

CONTAMINANT	UNIT	RPHGS or HAL	LEVEL DETECTED	RANGE	**SAMPLING DATE	Typical Source of Contaminant
PFAS Contaminants with a Recommended Health Advisory Level						
Perfluorobutanesulfonic acid (PFBS)	ppt	450000	0.50	0.00 – 0.50	6/13/2023	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.

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.

TABLE 4: WATER QUALITY TABLE

Contaminant	Unit	MCL	MCLG	Level Detected	*Range	Violation (Yes/No)	**Sampling Date	Potential Source of Contamination
Unregulated Contaminants								
Metolachlor (Dual)	ppb	n/a	n/a	0.03	0.03	No	7/19/2023	

ADDITIONAL HEALTH INFORMATION

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than 6 months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider. Females who are or may become pregnant should not consume water with nitrate concentrations that exceed 10 ppm. There is some evidence of an association between exposure to high nitrate levels in drinking water during the first weeks of pregnancy and certain birth defects. The Wisconsin Department of Health Services recommends people of all ages avoid long-term consumption of water that has nitrate level greater than 10 milligrams per liter (mg/L).

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Fitchburg Utility District No. 1 South is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used properly. Use only cold water for drinking, cooking, and making baby formula. Boiling water does not remove lead from water. Before using tap water for drinking, cooking, or making baby formula, flush your pipes for several minutes. You can do this by running your tap, taking a shower, doing laundry or a load of dishes. If you have a lead service line or galvanized requiring replacement service line, you may need to flush your pipes for a longer period. If you are concerned about lead in your water and wish to have your water tested, contact Barry Schwingel at (608) 729-1730. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <https://www.epa.gov/safewater/lead>.


Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney or nervous system problems.

Additional Information on Service Line Materials

We were required to develop an initial inventory of service lines connected to our distribution system by October 16, 2024 and to make the inventory publicly accessible. You can access information about the City of Fitchburg's Water Service Line Inventory here: <https://www.fitchburgwi.gov/2963/Material-Inventory>. For information about specific service lines, please contact Chelsea Wilson at (608) 270-4264 or by email at chelsea.wilson@fitchburgwi.gov.

WATER CONSERVATION

The City of Fitchburg is offering toilet rebates of up to \$100 for residential properties who replace their high water using toilets with EPA WaterSense approved high efficiency toilets. Please visit our website at www.fitchburgwi.gov for eligibility requirements and to obtain an application.

 5 SIMPLE WAYS TO SAVE WATER	
Be smart when irrigating your lawn or landscape	<ul style="list-style-type: none">• Water in early morning.• Water plants according to their water needs.• Set sprinklers to water lawns and gardens only – no sidewalks or driveways.• Use soaker hoses or trickle irrigation systems for trees/shrubs.• Install a rain barrel.
Use appliances wisely	<ul style="list-style-type: none">• Wash only full loads; set small loads to appropriate level.• Scrape rather than rinse dishes before loading the dishwasher• Replace old clothes washer with ENERGY STAR labeled one.
Don't flush money down the toilet/drain	<ul style="list-style-type: none">• Check your toilet for leaks by adding food coloring to the tank and seeing if color appears in the bowl within 15 minutes.• Place weights in the tank to decrease the volume of water used per flush.• When replacing your toilet, look for WaterSense labeled models.
Conserve around the house	<ul style="list-style-type: none">• Keep drinking water in the refrigerator; do not run faucet until cool.• Do not leave the tap running while brushing teeth or shaving.• Take shorter showers.• Install low-flow showerheads and faucets.
Stop leaks	<ul style="list-style-type: none">• Read water meter before and after a two-hour period when no water is being used; it should be zero. If it is not zero, locate the leak and repair it.