



City of Fitchburg Public Works Department Utility District
2024 Annual Water Quality Report
Danville System
PWSID#11340989

THE MARK OF EXCELLENT SERVICE

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

Fitchburg purchases water from the Madison Water Utility to service the Danville Neighborhood. This purchased water primarily comes from Madison's Well 20. Madison pumps groundwater from 21 active deep wells. Each well ranges in depth from 500 to 1,188 feet deep.

The City of Madison disinfects your water with gas chlorine to reduce harmful contaminants that may come from the source water. Madison's goal is to maintain a chlorine residual above 0.1 milligrams per liter (mg/l) at all points in their distribution system. Typical concentrations range from 0.2 to 0.4 mg/l.

Fluoride is also added to Madison's drinking water to improve dental health and reduce tooth decay. The US Centers for Disease Control and Prevention (CDC) and the Wisconsin Department of Health Services recommend maintaining an average fluoride level of 0.7 mg/l. Madison tests water from each well daily to achieve this target level. In 2024, Madison's system-wide average of 6,638 tests was 0.68 mg/l. Certified staff at the City of Fitchburg and certified laboratories conduct bacteriological tests twice a month.

In addition, three wells have iron and manganese filters that remove approximately 95% of the iron and manganese before it enters the system.



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.

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 Advisories are determined by US EPA.

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.

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:

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

LEAD AND COPPER

TABLE 1: WATER QUALITY TABLE

| Contaminant | Unit | Action Level | MCLG | 90 th Percentile | Range | # of Results | Sample Date (if prior to 2023) | Violation | Typical Source of Contamination |
|-------------|------|--------------|------|-----------------------------|-----------------|---|--------------------------------|-----------|--|
| Copper | ppm | AL = 1.3 | 1.3 | 0.1200 | 0.0520 – 0.1600 | 0 of 6 results were above the action level. | 6/7/2023 | No | Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives |
| Lead | ppb | AL = 15 | 0 | 1.30 | 0.00 – 1.50 | 0 of 6 results were above the action level. | 6/7/2023 | No | Corrosion of household plumbing systems; Erosion of natural deposits |

* 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 2021.

WATER QUALITY

TABLE 2: WATER QUALITY TABLE

| Contaminant | Unit | MCL | MCLG | Level Detected | Range | Violation (Yes/No) | Wells with Detections | Potential Source of Contamination |
|-------------------------------------|-------|--------|--------|----------------|-----------|--------------------|-------------------------------|---|
| Disinfection Byproducts | | | | | | | | |
| Haloacetic Acids [HAA5] | ppb | 60 | 60 | 1 | 1 | No | n/a | By-product of drinking water chlorination |
| Haloacetic Acids [HAA9] (2019 data) | ppb | n/a | n/a | nd | nd – 3.8 | No | n/a | By-product of drinking water chlorination |
| Total Trihalomethanes (TTHM) | ppb | 80 | 0 | 3.4 | 3.4 | No | n/a | By-product of drinking water chlorination |
| Regulated Contaminants | | | | | | | | |
| Arsenic | ppb | 10 | 0 | nd | nd – 0.3 | No | n/a | Erosion of natural deposits; Glass & electronics production |
| Atrazine | ppb | 3 | 3 | nd | nd – 0.03 | No | 11,13,14,16,25,29 | Runoff from herbicide on row crops |
| Barium | ppb | 2000 | 2000 | 21 | 7.2 – 69 | No | All Wells | Erosion of natural deposits; Discharge from metal refineries |
| Chromium, Total | ppb | 100 | 100 | nd | nd – 2.6 | No | Wells 11,14,20,25 | Erosion of natural deposits; Discharge from steel and pulp mills |
| 1,1-Dichloroethylene | ppb | 7 | 7 | nd | nd – 0.2 | No | Well 18 | Discharge from industrial chemical factories |
| 1,2-Dichloroethylene, cis | ppb | 70 | 70 | nd | nd – 0.5 | No | Wells 7 and 11 | Discharge from industrial chemical factories; Biodegradation of PCE and TCE |
| Fluoride | ppm | 4 | 4 | 0.7 | 0.5 – 0.8 | No | All Wells | Erosion of natural deposits; Added to promote strong teeth |
| Nickel | ppb | 100 | n/a | nd | nd – 2.5 | No | 6,11,14,17,19,26,27,28 | Erosion of natural deposits; Electroplating, stainless steel and alloy products |
| Nitrate | ppm | 10 | 10 | 0.9 | nd – 4.1 | No | Thirteen Wells | Fertilizer use; Leaching from septic tanks, sewage; Erosion of natural products |
| PFOA | ppt | 4 | 0 | nd | nd – 1.9 | No | Nine Wells | Firefighting foam; Landfills, food packaging, clothing, fabrics, upholstery |
| PFOS | ppt | 4 | 0 | nd | nd – 1.6 | No | 6,9,11,16,26 | Firefighting foam; Landfills, food packaging, clothing, fabrics, upholstery |
| Selenium | ppb | 50 | 50 | nd | nd – 1.5 | No | 6,9,14 | Erosion of natural deposits; Petroleum and metal refineries |
| Tetrachloroethylene (PCE) | ppb | 5 | 0 | nd | nd – 3.1 | No | 6,7,9,11,18 | Discharge from factories, dry cleaners, and auto shops |
| Trichloroethylene (TCE) | ppb | 5 | 0 | nd | nd – 0.4 | No | Wells 7,11 & 18 | Discharge from metal degreasing sites, other factories |
| Thallium (2022 data) | ppb | 2 | 0.5 | nd | nd – 0.3 | No | 11,12,16,19,27 | Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories |
| Xylene, Total (2023 data) | ppb | 10,000 | 10,000 | nd | nd – 0.3 | No | Well 9 | Discharge from petroleum and chemical factories |
| Radioactive Contaminants | | | | | | | | |
| Gross Alpha | pCi/l | 15 | 0 | 1.3 | nd – 5.1 | No | 7,19,24,28 | Erosion of natural deposits |
| Gross Beta (2020 data) | pCi/l | 50 | 0 | 4.2 | 0.2 – 10 | No | All Wells | Decay of natural and man-made deposits |
| Radium, (226+228) | pCi/l | 5 | 0 | 2.4 | 1.6 – 5.3 | No | 7,19, 24, 27, 28, 30 | Erosion of natural deposits |
| Uranium (2020 data) | ppb | 30 | 0 | 0.7 | 0.3 – 1.4 | No | Wells Sampled: 19, 24, and 27 | Erosion of natural deposits |

TABLE 3: WATER QUALITY TABLE

| Contaminant | Unit | MCL | MCLG | Level Detected | Range | Violation (Yes/No) | Wells with Detections | Potential Source of Contamination |
|--|------|------|------|----------------|-----------|--------------------|------------------------|--|
| Unregulated Contaminants | | | | | | | | |
| Bromide (2019 data) | ppb | n/a | n/a | 39 | nd – 60 | No | 7, 9, 11, 13, 15, 29 | Erosion of natural deposits |
| Chromium, Hexavalent | ppb | n/a | n/a | 0.4 | nd – 2.0 | No | Thirteen Wells | Erosion of natural deposits; Chrome plating, leather tanning, wood preservation |
| 1,4-Dioxane | ppb | n/a | n/a | nd | nd – 0.4 | No | 9,11,18 | Discharge from chemical factories; Cosmetics and detergents |
| 1,1-Dichloroethane | ppb | n/a | n/a | nd | nd – 0.1 | No | Well 9 | Discharge from industrial chemical factories |
| Metolachlor (2023 data) | ppb | n/a | n/a | nd | nd – 0.01 | No | Well 14 | Runoff from herbicide used on row crops |
| Strontium | ppb | n/a | n/a | 82 | 49 – 100 | No | All Wells | Erosion of natural deposits |
| Trichlorofluoromethane | ppb | n/a | n/a | nd | nd – 0.8 | No | Wells 9,11 | Discharge from industrial chemical factories; Degreaser, propellant, refrigerant |
| Other Substances (Aesthetic Goal) | | | | | | | | |
| Chloride | ppm | 250 | 250 | 16 | 1.6 – 210 | No | All Wells | Erosion of natural deposits; Road salt application |
| Iron | ppm | 0.3 | 0.3 | nd | nd – 0.25 | No | 7,17,19,24,27,28,29,30 | Erosion of natural deposits |
| Manganese | ppb | 50 | 50 | 2.5 | nd – 45 | No | Fourteen wells | Erosion of natural deposits |
| Silver (2023 data) | ppm | 0.1 | 0.1 | nd | nd-0.00 | No | Well 25 | Discharge from industrial chemical factories |
| Sodium | ppm | n/a | n/a | 7.3 | 2.3 – 64 | No | All Wells | Erosion of natural deposits; Road salt application |
| Sulfate | ppm | 250 | 250 | 18 | 6.6 – 39 | No | All Wells | Erosion of natural deposits |
| Zinc | ppb | 5000 | 5000 | 3.8 | nd – 8.8 | No | Sixteen Wells | Erosion of natural deposits |

* 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 2021.

ADDITIONAL HEALTH INFORMATION

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. Danville Drive Service Area 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; don't run faucet till cool.• Don't 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. |

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.