



City of Fitchburg Public Works Department Utility District  
2018 Annual Water Quality Report  
Danville System  
PWSID#11340989

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**THE MARK OF EXCELLENT SERVICE**

The City of Fitchburg, Public Works Department/Utility Division, is pleased to present to you the 2018 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. Madison pumps groundwater from 22 deep wells. Each well ranges in depth from 500 to 1,188 feet deep. Madison also has 43.235 million gallons of auxiliary storage capacity.

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 2018, Madison's system-wide average of 6,466 tests was 0.71 mg/l. Certified staff at the City of Fitchburg and certified laboratories conduct bacteriological tests twice a month.

In addition, two wells have iron and manganese filters. A third well is outfitted with a low-profile air stripper to remove volatile organic compounds (VOC) including PCE and TCE. After air stripping, an additive adjusts the pH to limit chemical scales that can clog water pipes.

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**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.

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### ADDITIONAL HEALTH INFORMATION

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 City of Fitchburg and Madison Water Utility 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 for the Safe Drinking Water Hotline or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

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### 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:

**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.

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

**90<sup>TH</sup> Percentile:** 90% of samples are equal to or less than the number on the chart.

**Units in the Table:**

ND = not detected at testing limits

ppb = parts per billion

ppm = parts per million

pCi/L = picocuries per liter – a measure of radioactivity

millirems/year = is a measure of radiation absorbed by the body.

ug/l = micrograms per liter

mg/l = milligrams per liter

n/a = Not Applicable


## WATER QUALITY

Contaminant	Unit	MCL	MCLG	Level Detected	Range	Violation (Yes/No)	Potential Source of Contamination
<b>Disinfection Byproducts</b>							
Haloacetic Acids [HAA5]	ppb	60	60	1	1	No	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	ppb	80	0	3.1	3.1	No	By-product of drinking water chlorination
<b>Regulated Contaminants</b>							
Antimony	ppb	6	6	ND	ND – 1.1	No	Discharge from petroleum refineries; fire retardants; electronics; ceramics
Atrazine	ppb	3	3	ND	ND – 0.03	No	Runoff from herbicide used on row crops
Barium	ppb	2000	2000	18	6.5 – 6.1	No	Erosion of natural deposits; Discharge from metal refineries
Chromium, Total	ppb	100	100	2.2	ND – 4.3	No	Erosion of natural deposits; Discharge from steel and pulp mills
Copper	ppm	AL=1.3	1.3	0.1600	0 of 10 results were above the action level	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
1,2-Dichloroethane	ppb	5	0	ND	ND – 0.1	No	Discharge from industrial chemical factories
1,2-Dichloroethylene, cis	ppb	70	70	ND	ND – 0.4	No	Discharge from industrial chemical factories; Biodegradation of PCE and TCE
Ethylbenzene	ppb	700	700	ND	ND – 0.7	No	Discharge from petroleum refineries
Fluoride	ppm	4	4	0.8	0.7 – 1.1	No	Erosion of natural deposits; Water additives which promotes strong teeth; Discharge from fertilizer and aluminum factories
Lead	ppb	AL=15	0	1.20	0 of 10 results were above the action level	No	Corrosion of household plumbing systems; Erosion of natural deposits
Nickel	ppb	100	n/a	1.6	ND – 2.7	No	Occurs naturally in soils, ground water and surface waters; Used in electroplating, stainless steel and alloy products
Nitrate	ppm	10	10	0.8	ND – 4.0	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion from natural deposits
Selenium	ppb	50	50	ND	ND – 2.0	No	Erosion of natural deposits; Discharge from petroleum and metal refineries
Tetrachloroethylen {PCE}	ppb	5	0	ND	ND – 2.1	No	Discharge from factories, dry cleaners, and auto shops
Thallium	ppb	2	0.5	ND	ND – 0.3	No	Leaching from ore-processing sites; Discharge from electronics, glass, and drug factories
Toluene	ppb	1000	1000	ND	ND – 0.2	No	Discharge from petroleum refineries
1,1,1-Trichloroethane	ppb	200	200	ND	ND – 0.1	No	Discharge from metal degreasing sites, other factories
Trichloroethylene {TCE}	ppb	5	0	ND	ND – 0.3	No	Discharge from metal degreasing sites, other factories
Xylene, Total	ppb	10000	10000	ND	ND – 4.5	No	Discharge from petroleum and chemical factories
<b>Radioactive Contaminants</b>							
Gross Alpha	pCi/l	15	0	6.3	2.7 – 12	No	Erosion of natural deposits
Gross BETA	pCi/l	50	0	5.7	ND – 13	No	Decay of natural and man-made deposits
Radium, (226+228)	pCi/l	5	0	2.9	ND – 4.9	No	Erosion of natural deposits
Uranium	ppb	30	0	0.3	0.3 – 0.4	No	Erosion of natural deposits
<b>Unregulated Contaminants</b>							
Chromium, Hexavalent	ppb	n/a	n/a	0.5	ND – 2.0	No	Erosion of natural deposits; Chrome plating, leather tanning, wood preservation
1,4-Dioxane (2015 Data)	ppb	n/a	n/a	ND	ND – 0.31	No	Discharge from chemical factories; Cosmetics and detergents
Metolachlor (2017 data)	ppb	n/a	n/a	ND	ND – 0.01	No	Runoff from herbicide used on row crops
PFOA & PFOS	ppb	n/a	n/a	ND	ND – 0.01	No	Firefighting foam; Landfills, food packaging, clothing, fabrics, upholstery
Strontium	ppb	n/a	n/a	80	50 – 142	No	Erosion of natural deposits
Trichlorofluoromethane	ppb	n/a	n/a	ND	ND – 0.6	No	Discharge from industrial chemical factories; Degreaser, propellant, refrigerant
<b>Other Substances</b>							
Chloride	ppm	n/a	n/a	ND	ND – 140	No	Erosion of natural deposits; Road salt application
Iron	ppm	n/a	n/a	0.02	ND – 0.54	No	Erosion of natural deposits
Manganese	ppb	n/a	n/a	3.2	0.3 – 45	No	Erosion of natural deposits
Sodium	ppm	n/a	n/a	8.5	2.3 – 51	No	Erosion of natural deposits; Road salt application
Sulfate	ppm	n/a	n/a	22	7.4 – 114	No	Erosion of natural deposits

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## 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](http://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"><li>• Water in early morning.</li><li>• Water plants according to their water needs.</li><li>• Set sprinklers to water lawns and gardens only – no sidewalks or driveways.</li><li>• Use soaker hoses or trickle irrigation systems for trees/shrubs.</li><li>• Install a rain barrel.</li></ul>
Use appliances wisely	<ul style="list-style-type: none"><li>• Wash only full loads; set small loads to appropriate level.</li><li>• Scrape rather than rinse dishes before loading the dishwasher</li><li>• Replace old clothes washer with ENERGY STAR labeled one.</li></ul>
Don't flush money down the toilet/drain	<ul style="list-style-type: none"><li>• Check your toilet for leaks by adding food coloring to the tank and seeing if color appears in the bowl within 15 minutes.</li><li>• When replacing your toilet, look for WaterSense labeled models.</li></ul>
Conserve around the house	<ul style="list-style-type: none"><li>• Keep drinking water in the refrigerator; don't run faucet till cool.</li><li>• Don't leave the tap running while brushing teeth or shaving.</li><li>• Take shorter showers.</li><li>• Install low-flow showerheads and faucets.</li></ul>
Stop leaks	<ul style="list-style-type: none"><li>• 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.</li></ul>

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## FOR MORE INFORMATION

Please contact Philip Manion, Fitchburg Utility Supervisor, via e-mail: [philip.manion@fitchburgwi.gov](mailto:philip.manion@fitchburgwi.gov) by calling 608-729-1730 for more information. For additional water quality information you may also contact the Madison Water Utility at 608-266-4661 or visit their web-site at [www.cityofmadison.com/Water](http://www.cityofmadison.com/Water) . You are encouraged to attend the Fitchburg's Board of Public Works meetings at Fitchburg City Hall, 5520 Lacy Road. Please see the Public Meetings Calendar on Fitchburg's web-site for meeting dates and times.