

Blissfield Water Treatment Plant

# Annual Water Quality Report for 2025

PWS ID: MI0000750





## **A Message From Your Water Plant Supervisor**

Dear Community,

This is your annual report about your drinking water quality, also called a Consumer Confidence Report or CCR. Having clean, safe water is one of the most important services we provide, and we want you to be as informed as possible about your drinking water. This report is a snapshot of the quality of water that we provided you in 2025.

Our intention is to provide peace of mind and confidence in your drinking water. Here we explain where your water comes from, the results of sampling that we have performed, and what we are doing to protect you and your family. Monitoring and reporting to the Department of Environment, Great Lakes, and Energy (EGLE) requires us to test our water on a regular basis to ensure its safety. We are proud to report that the water we provide to you has met all federal and state requirements in 2025.

We will update this report annually and will keep you informed of any problems that may occur throughout the year, as they happen. Copies of this report are available at the Village office, or on-line at <https://blissfieldmichigan.gov/consumer-confidence-report/> .

If upon reading this report, you have any questions, please reach out. You may contact us at 517-486-3350 and [waterplant@blissfieldmichigan.gov](mailto:waterplant@blissfieldmichigan.gov)

Sincerely,

**Nora Kiefer, WTP Supervisor**

*1330 Beamer Rd*

*Blissfield, MI 49228*

*517-486-3350 or [Waterplant@blissfieldmichigan.gov](mailto:Waterplant@blissfieldmichigan.gov)*

## About Your Water



### Where Your Drinking Water Comes From

Most drinking water in the United States comes from a river, a lake, or from an underground well. The water we provide to you comes from the River Raisin which is surface water.

### Protecting the Source

Making the water safe to drink starts by protecting the place it comes from. In 2004 the U.S. geological survey partnered with Michigan Department of Environmental quality and prepared a source water assessment for the village of Blissfield's water supply; it was determined that Blissfield's source is very highly susceptible to potential contamination. We are making efforts

to protect our water source by implementing a source water intake protection plan with the state of Michigan, copies available at <https://blissfieldmichigan.gov/water-treatment-plant/>.

### What Is in Your 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:

- **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 Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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 at 800-426-4791.

## Stay Informed About Your Water

### Monthly Council Meetings

We need your understanding and support to be successful, so we hope you will get involved with us all the ways you can on projects, programs, and policies. You are welcome to attend our Council meetings. We meet on the second and fourth Monday of the month at 7:00pm at the Blissfield village office, 130 South Lane St. A meeting agenda is posted at our website before each meeting. We always make time to hear from guests and answer questions so please join us to learn more about what we're working on. Your input is important to us!

### Projects and Rates

Water fees and infrastructure improvements go hand in hand. The revenue collected through water rates provides the funding necessary to maintain, repair, and modernize the systems that deliver clean, safe water to our community. These fees directly support major capital projects and the ongoing operation of our water utility.

Our current and upcoming infrastructure efforts include significant lead service line replacements to improve water quality and meet regulatory requirements. We are also investing in water main replacements, which include upgrading aging pipes, installing new fire hydrants, and replacing critical valves to improve reliability, water flow, and fire protection. These improvements reduce the risk of leaks, breaks, and service disruptions while strengthening the overall performance of the distribution system. In addition to distribution system upgrades, we continue to prioritize the maintenance and improvement of our water treatment plant. Ongoing plant maintenance, equipment upgrades, and system improvements ensure we continue to meet state and federal water quality standards while operating efficiently and sustainably.

Infrastructure projects of this scale require long-term planning and stable funding. Water rates help us keep pace with rising material and construction costs, regulatory changes, and the need to replace aging infrastructure. Without adequate funding, it becomes increasingly difficult to complete necessary upgrades and maintain reliable service. Water fees are essential to sustaining the infrastructure that protects public health, supports fire protection, and ensures dependable water service now and into the future.

For more information about our current budget, capital improvement plan, water rates, lead and copper updates, and our water treatment plant, please visit our website at [www.blissfieldmichigan.gov](http://www.blissfieldmichigan.gov).

### Your Role in Water Quality Check Your Home or Business' Plumbing for Lead and Copper

We work hard to provide high quality water when it arrives on your property. Once the water we provide passes through the meter on your property, it is exposed to a whole new environment in your home that we have no control over. But you have control of them. Some of the things that can change the water quality on your property include your plumbing and pipe material, how long you go without running the water, and whether or how you connect outdoor hoses to your home's water supply. Lead can cause serious health effects in people of all ages, especially for 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. The village of Blissfield is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in plumbing and in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. 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 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 at least 5 minutes to flush water

from both your home plumbing and the lead service line. If you are concerned about lead in your water and wish to have your water tested, contact Blissfield water treatment plant at 517-486-3350 for available resources. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at <http://www.epa.gov/safewater/lead>

Estimated Number of Service Connections by Service line material A service line includes any section of pipe from the water main to the building plumbing at the 1st shut-off valve inside the building, or 18 inches inside the building, whichever is shorter			
Unknown Materials		Contains neither Lead nor Galvanized Previously Connected to Lead	Total Service connections
Likely Contains Lead	Likely does not Contain Lead		
399	0	1,155	1,554

## Run Water After Vacation

Another factor that affects water quality in your home is how “stale” the water is. When you leave your home or business for a long time, as you may when you take a vacation, the water in the pipes and plumbing doesn’t move. When water has been sitting in the pipes for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start to seep into the water. The best thing to do when you get back from being away after a long time is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. And always use cold water for cooking, to draw in fresh water from the outside.



## Safely Connect Outdoor Hoses

A third factor that can influence water quality in your home are connections to your water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a sprinkler system connected, there is the potential for chemicals from the bottle or the lawn to be accidentally sucked back into your internal plumbing. To prevent this from happening, we recommend (and in some states it is the law) that you have a device installed to prevent that from happening.

## Look Out for Special Populations

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 Safe Drinking Water Hotline at 800-426-4791.

## Table of Water Data for 2025

The tables below list all the drinking water contaminants that we detected during the 2025 calendar year. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The state allows us to monitor for certain contaminants less than once a year because the concentrations of these contaminants are not expected to vary significantly from year to year. All of the data is representative of the water quality, but some are more than one year old.

**Lead and Copper – Tested throughout the Village, from customer’s tap. Testing is done every June-September yearly. Most recent tests were done in 2025.**

<b>Lead – Corrosion of household plumbing; Erosion of natural deposits</b>	
<b>Range of Detection</b>	<b>0-3 ppb</b>
Ideal Goal (MCLG)	0 ppb
90 <sup>th</sup> Percentile	1 ppb
Action Level	12 ppb
Highest Amount Detected	3 ppb
Violation	No
<b># of sites above action level</b>	<b>0/14</b>

<b>Copper - Corrosion of household plumbing; Erosion of natural deposits; Leaching from wood preservatives</b>	
<b>Range of Detection</b>	<b>0.0-0.4 ppm</b>
Ideal Goal (MCLG)	0 ppm
90 <sup>th</sup> Percentile	0.3 ppm
Action Level	1.3ppm
Highest Amount Detected	0.4 ppm
Violation	No
<b># of sites above action level</b>	<b>0/14</b>

Lead: There is no safe level of lead in drinking water. 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 persons 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.

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 Wilsom’s Disease should consult their personal doctor.

**Total Chlorine Residual – Continuously Monitored at Blissfield Water Treatment Plant**

Sample Location	Minimum Disinfectant Residual Level Allowed	Lowest Level Detected	Yearly Range	Violation	Annual Average	Source
Distribution system	0.10 ppm	0.10 ppm	0.10 – 0.91 ppm	No	0.55 ppm	Disinfectant

\*\*\* The chlorine “level detected” was calculated using a running annual average.

**Total Coliform (bacteria) – Continuously Monitored at Blissfield Water Treatment Plant**

We look for bacteria regularly, as required by law, and there are 8 locations in the water system where we take samples for analysis. More thorough testing, evaluation, and action is required if bacteria are found in even a small percentage of tests. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children, the elderly, and people with severely compromised immune systems.

Regulated Contaminant	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Range of Test Results 2025	Violation	Source
Total Coliform	TT	ND	ND	ND	No	Naturally present in the environment

## Inorganic Chemicals (IOC) – Blissfield monitors for IOC more often than required by EPA. Nitrates and Fluoride are tested daily.

**Nitrate:** Infants below the age of six months who drink water containing nitrate in excess of the MCL of 10 PPM could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and 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. Pregnant woman, nursing mothers, and infants less than six months old are advised to seek an alternative source of drinking water if nitrate levels exceed 10 ppm.

**Fluoride:** Some people who drink water containing fluoride in excess of the MCL of 4 PPM over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of the children's teeth, usually in children less than 9 years old. Mottling, also known as dental fluorosis, may include brown staining or pitting of the teeth, or both, and occurs only in developing teeth before they erupt from the gums.

Chemicals Detected	Highest Level Allowed (MCL)	Ideal Goal (MCLG)	Highest Result	Range of Test Results 2025	Violation	Source
Barium *	2 ppm	2 ppm	0.04 ppm	0.04 ppm	No	Discharge from refineries or drilling & natural erosion
Fluoride	4 ppm	4 ppm	0.73 ppm	0.34-0.73 ppm	No	Water additive- promotes strong teeth, erosion of natural deposits, Discharge from fertilizer and aluminum factories
Nitrate	10 ppm	10 ppm	6.89 ppm	0.73-6.89 ppm	No	Fertilizer runoff; septic tank leaching, or erosion of natural deposits
Sodium ***	N/A	N/A	92 ppm	71-92 ppm	No	Naturally present in groundwater
Uranium**	30 ppb	0	0.05 ppb	0.05 ppb	No	Erosion of natural deposits

\*Barium is tested once every 9 years. Last tested Aug 2018

\*\* Uranium is tested once every 9 years. Last tested May 2024

\*\*\* Sodium is an unregulated contaminate and there is no MCL associated with it. Unregulated contaminate monitoring helps EPA to determine whether there is a need to regulate that contaminate.

## Total Organic Carbon – Tested at water treatment plant

The Total Organic Carbon (TOC) removal ratio is calculated as the ratio between the actual TOC removal and the TOC removal requirements. TOC has no health effects. However, TOC provides a medium for the formation of disinfection byproducts.

Treatment Technique Requirement	Location (One-year range)	Violation	Source
Percent of Removal Required	25 %	No	Naturally present in the environment
Percent of Removal Achieved	56.26%	No	Naturally present in the environment
Number of Quarters out of Compliance	0	No	Naturally present in the environment
Range of percent removal detection	32.76 -85.0 %	No	Naturally present in the environment

## Turbidity – A Measure of Clarity, Tested at the treatment plant effluent .

Turbidity is the measure of cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system. However, too much turbidity can interfere with the disinfection process, making it easier for

bacteria to grow. High turbidity may therefore indicate the presence of bacteria or other disease-causing organisms, such as viruses and parasites.

	Plant Tap	Violation	Source
Treatment Technique Requirement: 95% of samples must be at or below 0.30 NTU	100 % below 0.30 NTU	No	Soil, Runoff
Highest single value for the year	0.19 NTU	No	Soil, Runoff
Range of detection	0.04 - 0.19 NTU	No	Soil, Runoff

*NTU - Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.*

## Disinfection By-products

Trihalomethanes are compounds that can form in water over time when the chlorine used for disinfectant breaks down. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Contaminant	Highest Level Allowed (MCL) - RAA	Maximum Locational RAA (2025)	System Wide Range of Results	Violation	Source
Total Trihalomethanes (TTHMs)	80 ppb	72 ppb	29-74 ppb	No	By products of drinking water chlorination
Total Haloacetic Acids (THAAs)	60 ppb	14.5 ppb	5-16 ppb	No	By products of drinking water chlorination

## Definitions

ACRONYMS	DEFINITIONS
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.
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.
TT	Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
NA	Not applicable
NTU	Nephelometric Turbidity Units: Turbidity is measured with an instrument called a nephelometer. Measurements are given in nephelometric turbidity units.
PPM	Part Per Million= 1 drop of water in a hot tub
PPB	Part Per Billion = 1 drop of water in an Olympic size swimming pool
RAA	Running Annual Average
AL	Action Level – The level of containment, which, if exceeded, triggers treatment or other requirements, which the water treatment system must follow
ND	Non- detect – contaminant was not detected in sample

## Additional Resources

- Information on lead in drinking water: [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead)
- Requirements of the Water Quality Report (also known as the Consumer Confidence Report): [http://www.epa.gov/sites/default/files/201405/documents/guide\\_qrg\\_ccr\\_2011.pdf](http://www.epa.gov/sites/default/files/201405/documents/guide_qrg_ccr_2011.pdf)
- The Safe Drinking Water Act: [www.epa.gov/sdwa](http://www.epa.gov/sdwa)
- CDC Guide to Understanding your CCR: [http://www.cdc.gov/healthywater/drinking/public/understanding\\_ccr.html](http://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html)
- Lenawee County Health Department: 517-264-5214 <https://www.lenawee.mi.us/1077/Health-Department>
- Please sign up for Lenawee Alerts at [www.LenaweeAlerts.com](http://www.LenaweeAlerts.com)