



PUBLIC NOTICE

2022 Annual Drinking Water Quality Report

About this Report

The City of Columbia Falls is pleased to provide the 2022 Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality and covers from January 1, 2022 through December 31, 2022. We are committed to providing you with information because informed customers are our best resource to aid in maintaining and improving water quality. We are proud to report that our drinking water meets, or exceeds, all established federal and state regulations.

Where does my water come from? Is my water treated?

The City's water is provided by three deep ground water wells that draw water from the Flathead Valley Deep Alluvial Aquifer. The water system also includes a 2.2 million-gallon storage tank and approximately 37 miles of water main in the distribution network. The City is fortunate to provide water that does not require treatment to meet the SDWA standards. The City does not add chlorine to the water system therefore the City enforces the cross-connection control ordinance to protect the quality of the water. Additionally, the City does not add fluoride to the water. The source water assessment report for your water system provides additional information on your source water's susceptibility to contamination. To access this report please go to:

<https://deq.mt.gov/water/Programs/dw-sourcewater>

Do I need to take special precautions?

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 for infections. These people should seek advice about drinking water from their health care providers. The Environmental Protection Agency (EPA) and Centers for Disease Control (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 (800-426-4791).

Why are there contaminants in my drinking water?

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 potential health effects can be obtained by calling 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.

- Microbial contaminants, such as viruses and bacteria that 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.

Additional information on lead in drinking water

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. It is possible that lead levels at your home, school or office may be higher than others in the community as a result of materials used in the plumbing. The City of Columbia Falls 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 the 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 by visiting www.epa.gov/safewater/lead.

How can I get involved?

As your water utility, it is our responsibility to provide the highest available quality of water to meet all of the requirements and standards set forth by the State of Montana. If you have any questions or concerns as a consumer of our water, we are here to help and provide information to you.

Getting Involved

Attend a City Council meeting on the First and Third Mondays of each month, excluding holidays at 7:00 pm in the City Council Chambers in City Hall, 130 6th Street West, Columbia Falls, MT 59912

Contact the City at 406-892-4391 Visit our website: www.cityofcolumbiafalls.org

Additional Information

Due to the proximity to the Columbia Falls Aluminum Plant site, the City has continued to test the City's wells for possible related contaminants regularly. Aluminum, Cyanide, Mercury, Vanadium and Zinc were not detected in samples taken October 2020. The City will complete new tests in the fall of 2023. The Fluoride levels were well below the Maximum Contaminant Levels set by the EPA and are consistent with past results. There is no evidence of contamination in the City's water supply. The full analytical report is available upon request at City Hall. CFAC has continued regular on-site monitoring as well as off-site private wells adjacent to the site and is conducting EPA-required site analyses of groundwater, air and soil.

WATER QUALITY DATA TABLE

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health. The tables below list all of the drinking water contaminants we detected during the calendar year of this report. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. The EPA or the State of Montana requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one-year-old. In the tables you will find terms and abbreviations that might not be familiar to you. To help you better understand these terms, we have provided the definitions below the tables.

The City of Columbia Falls collects and tests five (5) separate bacteriological samples each month as required by the DEQ Total Coliform Rule at sampling stations throughout the City. The City had three (3) violations of the Total Coliform Rule in 2021. It was determined that a couple of the sampling stations had become compromised due to freezing, expanding and breaking internal plumbing components. The City replaced all five (5) stations in August of 2022, with one violation at one sampling station following installation. It was determined the sampling station did not have adequate flushing prior to initial testing. After flushing properly, the City has had no more violations for the DEQ Total Coliform Rule to date for any of the five (5) sampling sites.

The City is required to monitor the organic contaminate Di(2-ethylhexyl)phthalate yearly at the LP Well due to a detection of the contaminate in 2017. This compound is a common plasticizer found most everywhere in everyday life, such as water bottles and food packaging. The detected amount was below the MCL. Typically, this compound is sampled every three years. Di(2-ethylhexyl)phthalate was not detected in the sample collected in October 29, 2021. Most likely, the 2017 detection was due to sampling or laboratory error.

WATER CONTAMINANTS TEST RESULTS								
Contaminant	Violation	Sample Date	Highest Level Detected	Range Detected	Units	MCLG	MCL	Likely Source of Contamination
Inorganic Chemicals								
Barium	No	10/07/21	.14	.14 - .14	mg/l	2	2	Erosion of natural deposits
Nitrate + Nitrite (as Nitrogen)	No	5/11/22	.63	.54 - .63	mg/l	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Fluoride	No	10/29/21	.06	.04 -.06	mg/l	4	4	erosion of natural deposits; discharge from fertilizer and aluminum factories
Radiological Contaminants								
Gross Alpha	No	2/8/2022	3.0	3.0-1.9	pCi/L	0	15 pCi/l	Erosion of natural deposits of certain minerals that are radioactive and may emit a form of radiation known as alpha radiation
Uranium	No	2/8/2022	1.1	0.9-1.1	pCi/L	0	30	Erosion of natural deposits

Lead and Copper Monitoring Rule (Tap Water Samples were collected for lead and copper from sites throughout the city)						
Metals	Violation	Sample Date	Amount Detected at 90th Percentile level	Number of Samples Collected	Action Level	Likely Source of Contamination
Copper (mg/L)	No	7/16/2021	0.20	20	1.3	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ug/L)	No	7/16/2021	2	20	15	Corrosion of household plumbing systems, erosion of natural deposits

Secondary Standards (Aesthetic, Cosmetic and Technical, Non-Health Related) and Additional Unregulated Parameters

Parameter	Sample Date	Highest level Detected	Range Detected	Units	Secondary MCL	Noticeable Effects and/or Definitions
Total Alkalinity	11/01/2017	273	214-273	mg/l CaCO ₃ /l	500	A measurement of the water's ability to neutralize acids
Bicarbonate Alkalinity	11/01/2017	273	214-273	mg/l CaCO ₃ /l	500	Alkalinity due to bicarbonate ion, HCO ₃ ⁻
pH	11/01/2017	7.64	7.47-7.64		6.5-8.5	low pH: bitter metallic taste; corrosion high pH: slippery feel; soda taste; deposits
Hardness	11/01/2017	284	220-284	mg/l CaCO ₃	Not federally regulated	Total Hardness. Measure of the capacity of water to precipitate soap.
Conductivity	11/01/2017	547	387-547		Not federally regulated	
Calcium	11/1/2017	79	62-79	mg/l	Not federally regulated	Hardness; mineral deposits
Chloride	11/01/2017	28.5	5-28.5	mg/l	250	Salty taste
Magnesium	11/01/2017	21	16-21	mg/l	500	Important contributor to hardness.
Sodium	11/01/17	15.1	2.7-15.1	mg/l	Not federally regulated	Salty taste
Sulfate	10/29/21	4.1	3.4-4.6	mg/l	250	Salty taste
Total Dissolved Solids	11/01/17	325	238-325	mg/l	500	hardness; deposits; colored water; staining; salty taste

Violations

In 2022 we received the following violation for failure to report our synthetic organic monitoring results on time. The violation was returned to compliance when the results were reported to MT DEQ.

Violation for Synthetic Organic Compounds			
Alachlor, Atrazine, Carbofuran, Chlordane, EDB (ethylene dibromide), DBCP (1,2-dibromo-3-chloropropane), Heptachlor, Heptachlor epoxide, Lindane, Methoxychlor, Toxaphene, PCBs, 2,4-D, 2,4,5-TP, Pentachlorophenol, Aldicarb1, Aldicarb sulfone1, Aldicarb sulfoxide1, Benzo(a)pyrene, Dalapon, Di(ethylhexyl)-adipate, Di(ethylhexyl)-phthalate, Dinoseb, Diquat, Endothall, Endrin, Glyphosate, Hexachlorobenzene, Hexachlorocyclo-pentadiene, Oxamyl, Picloram, Simazine, 2,3,7,8-TCDD (dioxin)			
Violation Type	Violation Period	Resolution Date	Violation Explanation
MONITORING, ROUTINE MAJOR	07/01/2022 to 09/30/2022	10-13-2022	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Understanding Definitions and Abbreviations for the Data Tables

- **AL (Action Level)** - the concentration of a contaminant if exceeded, triggers treatment or other requirements that a water system must follow.
- **TT (Treatment Technique) (TT)** - a required process intended to reduce the level of a contaminant in drinking water.
- **pCi/L (Picocuries Per Liter)** – A measure of radioactivity.
- **mg/l (Milligrams Per Liter)** – Standard unit of measure.
- **ug/L (micrograms per liter or parts per billion)** – or one ounce in 7,350,000 gallons of water.
- **ND-** Not detectable at testing limit.
- **MCL (Maximum Contaminant Level)** -The highest level of a contaminant allowable 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.
- **Variances and Exemptions** - State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- **MRDLG (Maximum Residual Disinfection Level Goal)** - The level of a drinking water disinfection 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.
- **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.

What does it all mean?

The City of Columbia Falls is proud to supply drinking water that **meets or exceeds all federal and state requirements**. We have learned through routine sampling and testing that some elements have been detected. The EPA has determined that your water **IS SAFE** at these levels. The City of Columbia Falls will continue routine sampling and monitoring of the wells throughout the year.

This Annual Drinking Water Quality Report **will not be mailed** to individual water customers. If you have any questions about this report or the City's Water Utility, please contact Chris Hanley, Public Works Director at

(406) 892-4430 or email hanleyc@cityofcolumbiafalls.com. This report is available on the City website, posted at City Hall or upon request.