



CITY OF  
**ASPEN**

**2023**

# DRINKING WATER QUALITY REPORT

PUBLIC WATER SYSTEM ID: PWSID CO0149122



**We are pleased to present to you this year's water quality report. This report summarizes water quality testing results for the 2023 calendar year. Our constant goal is to provide you with a safe and dependable supply of drinking water.**

*Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.*

## **LEARN MORE ABOUT ASPEN'S WATER**

If you have any questions about this report or for more information about the City of Aspen's Water resources, conservation goals and our Integrated Water Resource Plan, please contact the City's Utility Office at 970-920-5110 or the Colorado Department of Public Health and Environment at 303-692-3500.



# CITY OF ASPEN WATER SOURCES

The City of Aspen is very fortunate to have our source water coming directly from Certified Wilderness Areas within the White River National Forest. This includes Castle Creek, Maroon Creek, Thomas Reservoir and Rio Grande Well. Rio Grande Well is designated as an emergency source only. The water you use at your home or business typically comes from Castle Creek but may be supplemented periodically from Maroon Creek. Source water protection is an important aspect of maintaining water quality for environment aspects and Drinking water production. The City of Aspen maintains a Source Water Assessment Plan (SWAP).

## ESTIMATED SUSCEPTIBILITY

Moderately High

## POTENTIAL CONTAMINATION SOURCES

EPA Superfund / Abandoned Contaminated sites, Past Mining Activity, Aboveground, Underground, and leaking storage sites, existing/Septic Systems



# GENERAL INFORMATION ABOUT DRINKING WATER

All 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 the water poses a health risk. Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).



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. Contaminants that may be present in source water include:

- **Microbial contaminants:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** may come from a variety of sources, such as agriculture, urban storm water runoff, and residential uses.
- **Radioactive contaminants:** can be naturally occurring or be the result of oil and gas production and mining activities.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water runoff, and septic systems.

In order to ensure that tap water is safe to drink, the Colorado Department of Public Health and Environment prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



# WATER QUALITY DATA TERMS AND ABBREVIATIONS

**Action Level (AL)** - The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.

**Maximum Contaminant Level (MCL)** - The highest level of a contaminant allowed in drinking water.

**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.

**Nephelometric Turbidity Unit (NTU)** - Measure of the clarity or cloudiness of water. Turbidity more than 5 NTU is just noticeable to the typical person.

**Not Established (NE)** - Does not apply or not available.

**Parts per Billion = Micrograms per liter (ppb = ug/L)** - One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per Million = Milligrams per liter (ppm = mg/L)** - One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Treatment Technique (TT)** - A required process intended to reduce the level of a contaminant in drinking water.

**Running Annual Average (RAA)** - An average of Monitoring results for the previous 12 calendar months or previous four quarters Running Annual Average (LRAA).

# DRINKING WATER QUALITY DATA

The City of Aspen routinely monitors for contaminants in your drinking water according to Federal and State laws. The data presented in this report are the results of monitoring for the period of Jan. 1 to Dec. 31, 2023 or from the most recent testing done in accordance with regulations. The Colorado Department of Public Health & Environment does not require us to monitor for all contaminants each year because the concentrations of some constituents are not expected to vary significantly from year to year or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old.

## Disinfectants Sampled in the Distribution System

**TT Requirement:** At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR If sample size is less than 40 no more than 1 sample is below 0.2 ppm

**Typical Sources:** Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2023	Lowest period percentage of samples meeting TT requirement: 100%	0	30	No	4.0 ppm

## Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	08/09/2023 to 09/06/2023	0.18	30	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	08/09/2023 to 09/06/2023	1	30	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2023	8.98	5 to 14	8	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2023	9.2	6.03 to 13.6	8	ppb	80	N/A	No	Byproduct of drinking water disinfection

## Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water

Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2023	1.77	1 to 4	8	Ratio	1.00	No	Naturally present in the environment

\*If minimum ratio not met and no violation identified then the system achieved compliance using alternative criteria.

## Summary of Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found		TT Requirement	TT Violation	Typical Sources
Turbidity	June	Highest single measurement: 0.108 NTU		Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Dec	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%		In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

## Radionuclides Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2020	2.59	2.59 to 2.59	1	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2020	1.2	1.2 to 1.2	1	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2020	3	3 to 3	1	ppb	30	0	No	Erosion of natural deposits

## Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2023	0.04	0.04 to 0.04	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2023	0.63	0.63 to 0.63	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

## Disinfection Byproduct Precursors - Total Organic Carbon Removal Ratio

Water Treatment Plant	Compliance Factor (minimum RAA)*	RAA	Violation (yes/No)	Sample Date	Typical source of Constituent
Castle Creek Treatment Plant	1.0	1.77	No	2023	Naturally present in the Environment

\*If Minimum ratio not met and no violation identified then the system achieved compliance using alternative criteria



## LEAD TESTING INFORMATION

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing. The City of Aspen provides high-quality drinking water that does not promote any leaching or corrosion leading to higher levels of lead. 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.

Additional information on lead in drinking water, testing methods, and steps you can take to minimize exposure if available from the Safe Drinking Water Hotline (1-800-426-4791) or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## 2023 VIOLATION

Findings from the required monthly reporting information submitted to the Colorado Department of Public Health and Environment for the month of February 2023 resulted in notification to Aspen Water Department on March 15, 2023 of the violations noted below.

The City of Aspen monitors water quality 24 hours a day, seven days a week, to ensure the water is safe for consumption. The violation was a clerical error, was not an emergency, and did not require the use of an alternate water source. There were no adverse health impacts from the violation and no actions were needed by water customers.

This notification complies with federal and state laws requiring water systems to notify customers when a drinking water standard is not in compliance.

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### FAILURE TO MONITOR OR TIMELY REPORT – ENTRY POINT DISINFECTANT

The City is required to submit various water system data monthly to the Colorado Department of Public Health and Environment. Monthly data is due prior to the end of the 10th day of the following month. February 2023 data for entry point disinfectant residual was erroneously submitted with a clerical error which left the cell confirming the number of samples taken empty. The City took all of the required entry point disinfectant samples and corrected the clerical error was received by the State on March 20, 2023. A more thorough quality assurance review of State reports has been implemented to reduce these kinds of errors. The Aspen Water Department remedied all actions which resulted in the violation notice for the month of February 2023, and the system was back in compliance in March 2023.

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### FOR FURTHER QUESTIONS CONTACT:

Aspen Water Customer Care  
City of Aspen Utilities Department  
500 Doolittle Drive, Aspen CO 81611  
970-920-5110  
Justin.Forman@aspen.gov

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in public places or by distributing copies by hand.



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