



CITY OF
ASPEN

2024

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 2024 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

Our Water Sources

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
WELL RIO GRANDE (Groundwater-Well) INTAKE CASTLE CREEK (Surface Water-Intake) INTAKE MAROON CREEK (Surface Water-Intake) INTAKE LEONARD THOMAS RESERVOIR (Surface Water-Intake)	EPA Superfund Sites, EPA Abandoned Contaminated Sites, EPA Hazardous Waste Generators, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Small Grains, Pasture / Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Road Miles



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 Applicable (NA) – Does not apply or not available.

Parts per Billion = Micrograms per liter (ppb = $\mu\text{g/L}$) – 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.



WATER QUALITY DATA TERMS AND ABBREVIATIONS

Health-Based – A violation of either a MCL or TT.

Non-Health-Based – A violation that is not a MCL or TT.

Violation (No Abbreviation) – Failure to meet a Colorado Primary Drinking Water Regulation.

Formal Enforcement Action (No Abbreviation) – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

Variance and Exemptions (V/E) – Department permission not to meet a MCL or treatment technique under certain conditions.

Gross Alpha (No Abbreviation) – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.

Picocuries per liter (pCi/L) – Measure of the radioactivity in water.

Compliance Value (No Abbreviation) – Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met. Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

Average (x-bar) – Typical value.

Range (R) – Lowest value to the highest value.

Sample Size (n) – Number or count of values (i.e. number of water samples collected).

Level 1 Assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment – A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

SERVICE LINE INVENTORY

New state and federal laws require us to inventory all water service lines in our service area to classify the material. A service line is the underground pipe that carries water from the water main, likely in the street, into your home or building. If you would like to view a copy of our service line inventory or have questions about the material of your service line, contact Ryan Loebach at 970-429-1986.

SOURCE WATER ASSESSMENT AND PROTECTION (SWAP)

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit wgcdcompliance.com/ccr. The report is located under “Guidance: Source Water Assessment Reports”. Search the table using our system name or ID, or by contacting Ryan Loebach at 970-429-1986. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water area are listed below. Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

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, 2024 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. Violations and Formal Enforcement Actions, if any, are reported in the next section of the report.

NOTE: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, the no contaminants were detected in the last round of monitoring.

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, 2024	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	90th Percentile AL	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

Footnote: Cooper tap sample range was 0.0118 ppm to 0.312 ppm. Lead tap sample range was 0 ppb to 1.92 ppb.

For individual sample results, please visit: <https://oitco.hylandcloud.com/cdphermipop/docpop/docpop.aspx>

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)	2024	7.61	4 to 11	8	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2024	8.96	4.31 to 16.7	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	2024	1.38	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: 0.128 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

LEAD IN DRINKING WATER

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. We are 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 Ryan Loebach at 970-429-1986. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at [epa.gov/safewater/lead](https://www.epa.gov/safewater/lead).

2024 Sanitary Survey: Corrected Significant Deficiencies and Violations

The Field Services Section of the Colorado Department of Public Health & Environment's Water Quality Control Division (CDPHE-WQCD) conducted a sanitary survey at the City of Aspen on September 18 and 19, 2024. The CDPHE-WQCD sent a sanitary survey findings letter on October 11, 2024 that provided the City with written notice of significant deficiencies and violations identified during the sanitary survey. Over the past several months, City staff have worked with CDPHE-WQCD to correct significant deficiencies and violations summarized below. As of April 11, 2025, CDPHE-WQCD consider each significant deficiencies and violation closed and resolved.

1. **Significant Deficiency 1 (T901) – Treatment – SWTP03 East Cross Connection:** East plant filter to waste cross-connections.
2. **Significant Deficiency 2 (T310) – Treatment – SWTP03 East Prior to EP Storage Condition:** East plant clearwell hatch, chlorine injection line and sensor line.
3. **Significant Deficiency 3 (T901) – Treatment – SWTP02 West Cross Connection:** West plant cross-connection assembly bypass and turbidimeter drain lines.
4. **Significant Deficiency 4 (T310) - Treatment - SWTP02 West Prior to EP Storage Condition:** West plant clearwell hatch and old level sensor pipe.
5. **Significant Deficiency 6 (F317) - Finished Water Storage - Upper Aspen Grove Storage Tank Air Vent Opening:** Air vent not downturned.
6. **Significant Deficiency 7 (F317) - Finished Water Storage – Storage 2 MG Contact Tank Air Vent Opening:** Gaps in air vent screen.
7. **Significant Deficiency 8 (F310) - Finished Water Storage – Storage 2 MG Contact Tank Storage Condition:** No gasket on hatch.
8. **Violation 1 (F326) - Finished Water Storage – Comprehensive Storage Tank Inspections Not Performed or Documented:** Late comprehensive inspections.
9. **Violation 2 (R212) - Monitoring, Recordkeeping and Data Verification - Residual Disinfectant Monitoring Location:** Incorrect entry point location.
10. **Significant Deficiency No 5 (F315) – Finished Water Storage – Buttermilk Storage Tank Overflow Pipe:** Not adequately protected.

Backflow Prevention and Cross-Connection Program Violations

The City of Aspen water system received two violations related to the system's backflow prevention and cross connection control (BPCCC) program. These violations are as follows:

1. **M619 - Management: Backflow Prevention Annual Compliance Ratio.** Supplier has not achieved the backflow prevention annual compliance ratio of 90%.
2. **M611 - Management: Supplier has Permitted a Cross Connection.** Supplier has permitted a cross connection by an assembly not being tested within two consecutive calendar years.

The City of Aspen water system submitted its backflow prevention and cross connection control (BPCCC) testing compliance report to the CDPHE-WQCD. Based on the 2023 report the City of Aspen water supply system had an inadequate backflow prevention and cross-connection control program. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water.

Since that time, City of Aspen water department has addressed these violations by achieving a compliance ratio of greater than 90% for the 2024 calendar year and reduced the number of backflow assemblies not tested in two years from 242 customers/assemblies to 1.

NOTE: On May 6, 2025, the city received a M611 Management violation notification related to 15 remaining private property backflow assemblies that had not been tested within two consecutive years. City staff has since been in contact with the owners of the 15 private property backflow assemblies and they have tested the assembly and submitted a passing test report. City relayed this information to CDPHE-WQCD in May 2025. Customers should expect a separate public notification for this violation from the City on June 5th, 2025.

CDPHE-WQCD considers these violations closed and resolved.

FOR FURTHER QUESTIONS CONTACT:

Aspen Water Customer Care
City of Aspen Utilities Department
500 Doolittle Drive, Aspen CO 81611
970-920-5110
ryan.loebach@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.



CITY OF **ASPEN**

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