HOOVER HILLS WSD 2022 Drinking Water Quality Report

Covering Data For Calendar Year 2021 Public Water System ID: CO0107352

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact CADE BERTRAND at 720-432-6322 with any questions or for public participation opportunities that may affect water quality. Please see the water quality data from our wholesale system for additional information about your drinking water.

(This has been appended to this report on page 4.)

LEARN MORE ABOUT OUR WATER

If you have any questions about this report, please contact Hoover Hills at 720-432-6322 or the Colorado Department of Public Health and Environment (CDPHE) at 303-692-3500.

Hoover Hills Board meetings are an additional opportunity for the public to learn about drinking water.

Board meetings are held via zoom @ (https://us04web.zoom.us/j/4915934395) and advertised on the District Website.

For more information about Board Meetings or your water, call 720-432-6322 or visit: www.hhwsd.org / wqcdcompliance.com

INQUIRE

www.hhwsd.org

Our goal is to provide customers with safe and high-quality drinking water that meets or surpasses all federal and state drinking water standards.

Our system had no violations in 2020.

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

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 wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 107352, HOOVER HILLS WSD, or by contacting CADE BERTRAND at 720-432-6322. 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 on the next page.

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.

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
PURCHASED FROM 107152 BOULDER (Surface Water-Consecutive Connection)	There is no SWAP report, please contact CADE BERTRAND at 720-432-6322 with questions regarding potential sources of contamination.

General Information

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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (1-800-426-4791) or by visiting epa.gov/ground-water-and-drinking-water.

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:

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.

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.

Microbial contaminants: : viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

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.

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.

Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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 is available from the Safe Drinking Water Hotline (1-800-426-4791) or at epa.gov/safewater/lead.

Detected Contaminants

HOOVER HILLS WSD routinely monitors for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2021 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants 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 this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section then 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

Contaminant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2021	Lowest period percentage of samples meeting TT requirement: 100%	0	1	No	4.0

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	6/24/2021 to 6/30/2021	0.09	10	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	6/24/2021 to 6/30/2021	1	10	ppm	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)	2021	24.77	20.4 to 33.9	4	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2021	39.72	32.3 to 47.5	4	ppb	80	N/A	No	Byproduct of drinking water disinfection

Violations, Significant Deficiencies, and Formal Enforcement Actions

HOOVER HILLS WSD has No Violations or Formal Enforcement Actions

Terms and Abbreviations

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.

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.

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

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

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.

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.

Not Applicable (N/A) – Does not apply or not available.

2022 CITY OF BOULDER
Drinking Water Quality Report

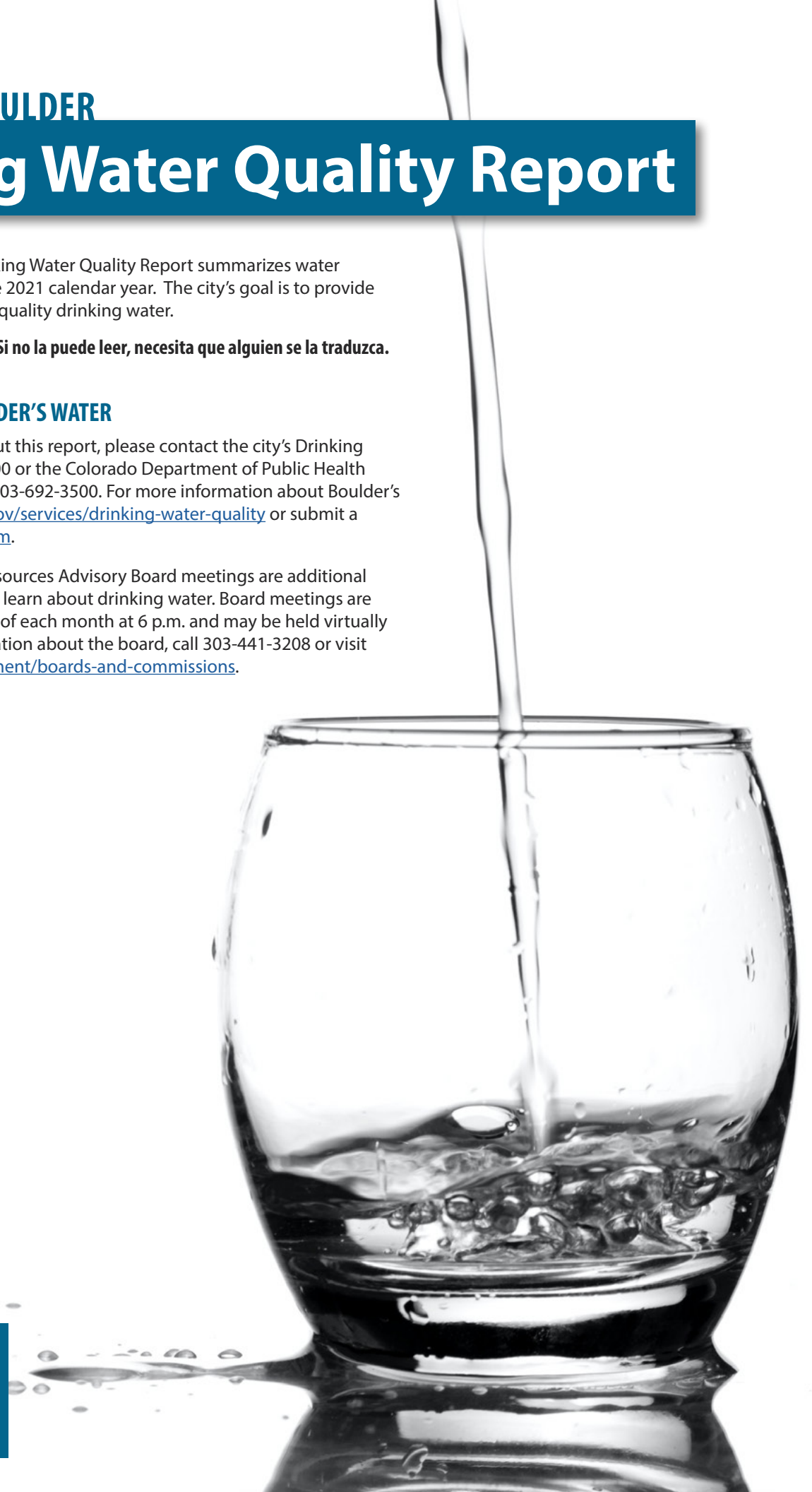
The City of Boulder 2022 Drinking Water Quality Report summarizes water quality testing results from the 2021 calendar year. The city's goal is to provide customers with safe and high-quality drinking water.

Esta es información importante. Si no la puede leer, necesita que alguien se la traduzca.

LEARN MORE ABOUT BOULDER'S WATER

If you have any questions about this report, please contact the city's Drinking Water Program at 303-441-3200 or the Colorado Department of Public Health and Environment (CDPHE) at 303-692-3500. For more information about Boulder's water, visit bouldercolorado.gov/services/drinking-water-quality or submit a question to inquireboulder.com.

The City of Boulder's Water Resources Advisory Board meetings are additional opportunities for the public to learn about drinking water. Board meetings are usually held the third Monday of each month at 6 p.m. and may be held virtually or in-person. For more information about the board, call 303-441-3208 or visit bouldercolorado.gov/government/boards-and-commissions.



City of Boulder
Public Works - Utilities

INQUIRE BOULDER
inquireboulder.com

CITY OF BOULDER WATER SOURCES

The City of Boulder is fortunate to have several high-quality sources of drinking water: Barker Reservoir, North Boulder Creek and Carter Lake. Water used at your home or business may come from any of these sources, depending on the season or availability. Source water protection has long been recognized as a necessary and often cost-effective component of providing clean, safe drinking water. The city closely monitors activities that could affect source water and impact drinking water. The city's Source Water Protection Plan is available at bouldercolorado.gov/services/water-supply-and-planning or on request by calling the Drinking Water Program at 303-441-3200. The protection plan identifies potential contaminant sources that could occur (which does not mean they do occur) and best management practices to protect the city's water supply at its source.

Overall Estimated Susceptibility	Potential Contaminant Sources
High	Stormwater, Floods, Backcountry Recreation, Wildland Fire, Roads, Wildlife, Mining
Moderate	Agriculture, Septic Systems, Atmospheric Deposition, Aquatic Nuisance Species, Hazardous Waste – Illegal Dumping, Residential Practices, Storage Tanks, Wastewater Treatment Discharges, Pesticide Applications, Oil and Gas Development
Low	Business Practices, Hazardous Waste – Permitted, Recreation – Aquatic

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 people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, have 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. Environmental Protection Agency (EPA) and U.S. Centers for Disease Control 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 1-800-426-4791.

Sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances associated with animals or humans. Contaminants that may be present in source water include:

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 stormwater runoff and septic systems.

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 & Herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

Radioactive Contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Microbial Contaminants such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

To ensure that tap water is safe to drink, the CDPHE prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. 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 & ABBREVIATIONS

AL **Action Level**: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

LRAA **Locational Running Annual Average**: The average of sample results for samples collected at a particular monitoring location during the most recent four calendar quarters.

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.

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.

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.

MRDLG **Maximum Residual Disinfectant Level Goal**: The level of a drinking water disinfectant, below which there is no known or expected risk to health.

NE **Not Established**

NTU **Nephelometric Turbidity Units**

ppb **Parts Per Billion**, or micrograms per liter (µg/l)

ppm **Parts Per Million**, or milligrams per liter (mg/l)

RAA **Running Annual Average**: An average of monitoring results for the previous 12 calendar months or previous four quarters.

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

How Do You Protect & Conserve Water?

Learn how you can help protect our streams: keepitcleanpartnership.org

Learn how you can save water and money with water conservation: bouldersaveswater.net

DRINKING WATER QUALITY DATA

The City of Boulder routinely monitors for constituents in drinking water according to federal and state laws. The data presented in this report are the result of monitoring for the period of Jan. 1 to Dec. 31, 2021, or from the most recent testing done in accordance with regulations. The CDPHE does not require the City of Boulder to monitor all constituents each year, because the concentrations of some constituents are not expected to vary significantly from year to year or because the City of Boulder's system is not considered vulnerable to that type of constituent. Therefore, some of the data, though representative, may be more than one year old.

Constituents Detected

Constituent	Units	MCL	MCLG	Result	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Barium	ppm	2	2	Average: 0.0115 Range: 0.010 - 0.013	No	2021	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	ppm	MRDL = 4	MRDLG = 4	Average: 0.84 Range: 0.21 - 1.40	No	At least 120 samples per month in 2021	Water additive used to control microbes
Fluoride	ppm	4	4	Average: 0.67 Range: 0.1 - 1.25	No	Daily 2021	Erosion of natural deposits; water additive which promotes strong teeth
Sodium (not regulated)	ppm	NE	NE	Average: 4.4 Range: 3.3 - 5.5	No	2021	Erosion of natural deposits
Total Coliform Bacteria	Absent or Present	No more than 5% of at least 120 samples can be positive	0	0% (0 samples) were positive	No	At least 120 samples per month in 2021	Naturally present in the environment

Constituent	Units	TT Requirement	Result	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Turbidity	NTU	Not to exceed 1 NTU for any single measurement	Highest single measurement: 0.16 Range: 0.01 - 0.16	No	Daily 2021	Soil Runoff
	NTU	At least 95% of month's samples must be ≤ 0.3 NTU	Lowest monthly percentage of samples meeting TT standard: 100%	No	Monthly 2021	
Chlorine	ppm	At least 95% of month's samples must be at least 0.2 ppm	Lowest monthly percentage of samples meeting TT standard: 100%	No	At least 120 samples per month in 2021	Water additive used to control microbes

Constituent	Units	AL	90th Percentile	Number of Sites over AL	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Copper	ppm	1.3	0.14	0	No	2021	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	1.7	0	No	2021	Corrosion of household plumbing systems, erosion of natural deposits

Constituent	Units	MCL	MCLG	Average	Range of All Samples	Highest LRAA	Violation* (Yes / No)	Sample Date	Typical Source of Constituent
Haloacetic Acids	ppb	60	NE	23.1	14.1 - 37.5	25.58	No	Quarterly 2021	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	NE	26.3	16.0 - 37.2	29.7	No	Quarterly 2021	Byproduct of drinking water disinfection

**Compliance based on LRAA*

Disinfection Byproduct Precursor - Total Organic Carbon Removal Ratio

Water Treatment Plant	Compliance Factor (minimum RAA)	RAA	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Betasso Water Treatment Plant	1.0	1.43	No	2021	Naturally present in the environment
Boulder Reservoir Water Treatment Plant	1.0	1.30	No	2021	Naturally present in the environment

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 Boulder is responsible for providing high-quality drinking water, but cannot control the variety of materials used in private plumbing components. Boulder implements a **Corrosion Control Program** that treats tap water to make it less corrosive and reduce lead exposure from home plumbing.

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 two minutes before using water for drinking or cooking.

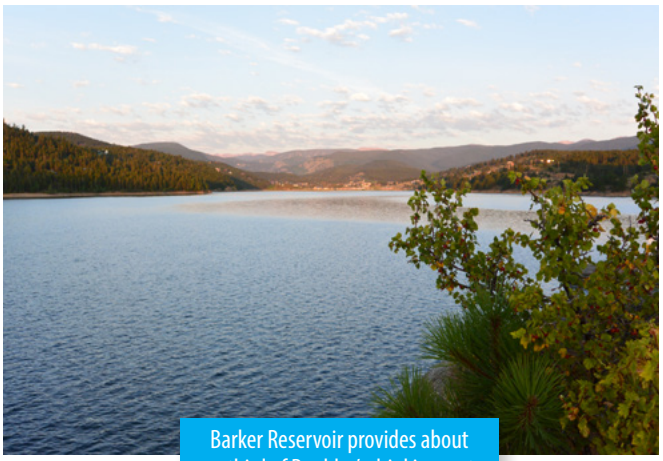
If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Environmental Protection Agency at tinyurl.com/EPASafeDrinkingWater.

PROTECTING BOULDER'S WATER SUPPLY THROUGH HEALTHY FORESTS

Forest Restoration Creates Healthier Forests

In Colorado, many forested areas are at risk of fast-spreading wildfire, due to overly dense tree stands, encroachment of trees into meadows, tree mortality due to bark beetle and mistletoe infestation, and climate change. The City of Boulder has identified wildfire as a primary threat to the city's water supply and is **working to scale up forest restoration work.**

After identifying areas at high risk for post-fire water quality impacts, city staff have been planning forest health projects in the Barker Reservoir watershed in partnership with the Boulder Watershed Collective and landowners. These projects include thinning overly dense tree stands and removing dead and infested trees. Such efforts contribute to forest health by reducing the spread of bark beetle and mistletoe, restoring forests back to their historic densities, protecting healthy trees, reducing the potential for wildfire spread and severity, and increasing access for first responders in the event of a wildfire.



Barker Reservoir provides about one-third of Boulder's drinking water

Healthy Forests Provide Many Benefits to Streams, Lakes & Reservoirs

They filter contaminants, anchor soils and prevent erosion, keeping pollution out of waterways. With more than 75% of Boulder's source watersheds in forested areas, the city's water supply benefits from these natural services, which contribute to high quality drinking water and reduced treatment costs.

Healthy Forests = Clean Water

Boulder is committed to funding forest health projects that reduce the risk of fast-spreading wildfire in critical source water areas and protect the water supply from negative post-fire impacts.

Digital copies of this report can be found by visiting bouldercolorado.gov/water/water-report. Federal regulations require that this report be distributed to all City of Boulder water customers. The city no longer mails printed copies of the report to all customers, but if you wish to request a printed copy or if you have any questions about this report, please contact the Drinking Water Program at 303-441-3200 or via inquireboulder.com.

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