2016 City of Boulder

Water Quality Report

The City of Boulder 2016 Drinking Water Quality Report summarizes water quality testing results from the 2015 calendar year. The city's goal is to provide customers with safe and high-quality drinking water. The City of Boulder's drinking water meets or surpasses all federal and state drinking water standards and had no violations in 2015.

Esta es información importante. Si no la pueden leer, necesitan 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 303-413-7400 or the Colorado Department of Public Health and Environment (CDPHE) at 303-692-3500. For more information about Boulder's water, visit www.BoulderWater.net 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 7 p.m. in the city's Municipal Services Center at 5050 Pearl St. For more information about the board, call 303-413-7149 or visit www.BoulderWater.net, select "Boards," and then select "Water Resources Advisory Board."

INQUIRE BOULDER

CITY OF BOULDER WATER SOURCES

The City of Boulder gets its water from Barker Reservoir, Lakewood Reservoir, Boulder Reservoir and Carter Lake (via the Boulder Feeder Canal). Water used at your home or business may come from any of these sources, depending on the season or availability.

The CDPHE provided the City of Boulder with a Source Water Assessment Report for Boulder's water supplies. To access this report, visit **https://www.colorado.gov/cdphe/swap-assessment-phase**. Under "Find my county's water report" select "A-C," then select "boulder," and then "107152Boulder_city _of_ SW_ REVISED.pdf".

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 drinking water advice from their health care providers. To receive a copy of the Environmental Protection Agency (EPA) and U.S. Centers for Disease Control guidelines on appropriate means to lessen the risk of infection, call the EPA Safe Drinking Water Hotline at 1-800-426-4791.

The sources of 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 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 and 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 AND ABBREVIATIONS

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

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.

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

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.

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

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

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.

NE = Not Established

NTU = Nephelometric Turbidity Units

ppm = parts per million, or milligrams per liter (mg/l)

ppb = parts per billion, or micrograms per liter (µg/l)

How do you protect and conserve water?

- To learn about events, tips and ways you can help protect our streams, visit: **www.KeepItCleanPartnership.org**
- To learn about ways you can save water and money with water conservation, visit: **www.BoulderSavesWater.net**

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, 2015 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	0.01 average 0.01 - 0.02 range	No	2015	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chlorine	ppm	MRDL = 4	MRDLG = 4	0.76 average 0.02 - 1.25 range	No	At least 120 samples per month in 2015	Water additive used to control microbes
Fluoride	ppm	4	4	0.75 average 0.23 - 1.18 range	No	Daily 2015	Erosion of natural deposits; water additive which promotes strong teeth
Sodium (not regulated)	ppm	NE	NE	3.8 average 2.8 - 4.7 range	No	2015	Erosion of natural deposits
Total Coliform Bacteria	Absent or Present	No more than 5% of at least 120 samples can be positive	0	0.81% (1 sample) of 124 samples was positive	No	Oct. 2015	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: 0.14 Range: 0.01 - 0.14	No	Daily 2015	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 2015	

Constituent	Units	AL	90th Percentile	Number of Sites over AL	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Copper	ppm	1.3	0.17	0	No	2014	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	ppb	15	2.18	0	No	2014	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	34.0	18.1 - 53.0	36.9	No	Quarterly 2015	Byproduct of drinking water disinfection
Total Trihalomethanes	ppb	80	NE	36.0	13.7 - 68.8	44.4	No	Quarterly 2015	Byproduct of drinking water disinfection

**Compliance based on LRAA*

DISINFECTION BYPRODUCT PRECURSOR - Total Organic Carbon Removal Ratio

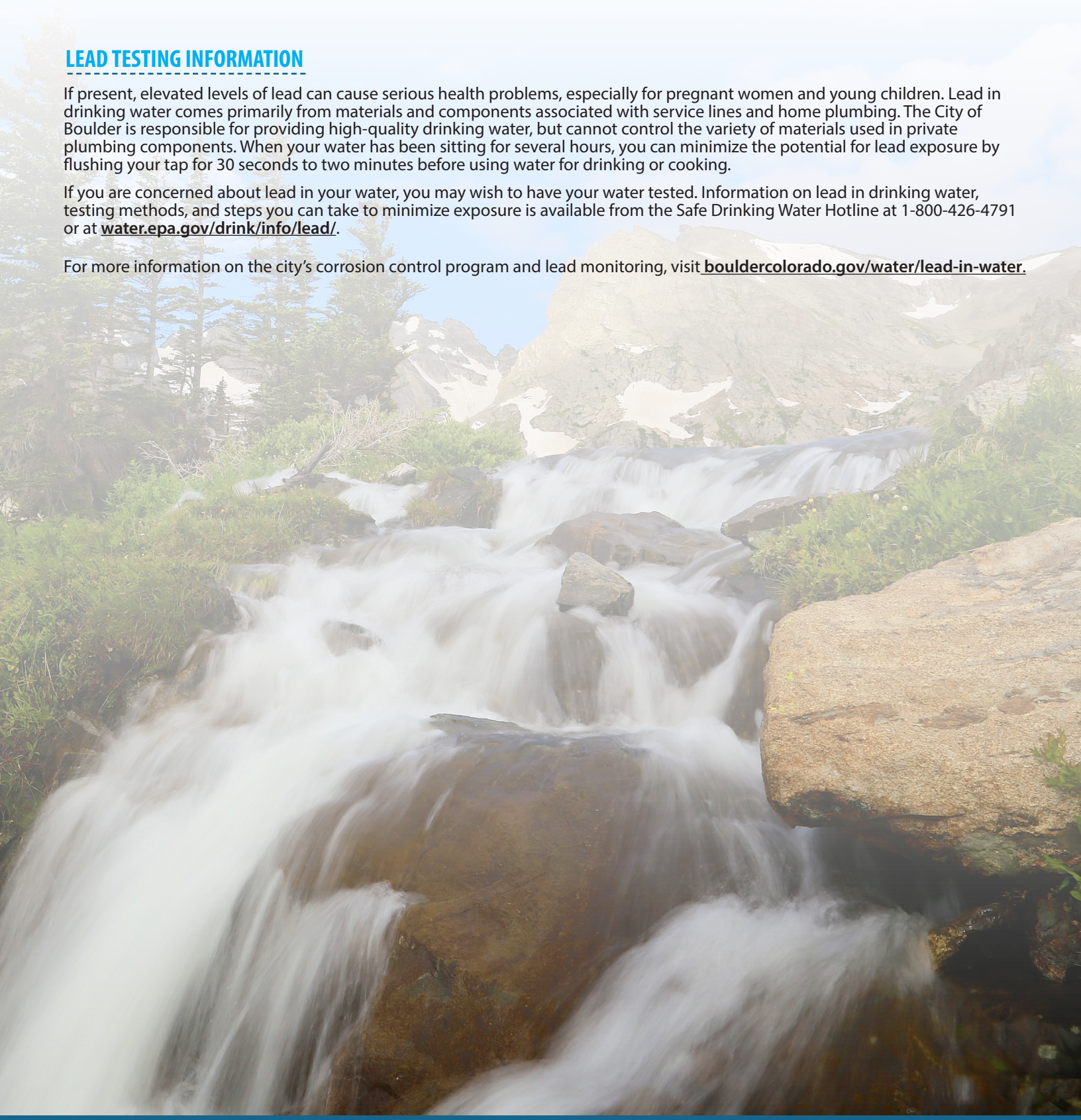
Water Treatment Facility	Compliance Factor (minimum RAA)	RAA	Violation (Yes / No)	Sample Date	Typical Source of Constituent
Betasso Water Treatment Facility	1.0	1.36	No	2015	Naturally present in the environment
Boulder Reservoir Water Treatment Facility	1.0	1.06	No	2015	Naturally present in the environment

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. 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 Safe Drinking Water Hotline at 1-800-426-4791 or at **water.epa.gov/drink/info/lead/**.

For more information on the city's corrosion control program and lead monitoring, visit **bouldercolorado.gov/water/lead-in-water**.



Digital copies of this report can be found by scanning this QR code to the right or 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 303-413-7400 or via InquireBoulder.com.

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