

2020 DRINKING WATER QUALITY REPORT

PUBLIC WATER SYSTEM I.D. CO0121150

This required report is prepared in accordance with federal and state regulations of the Safe Drinking Water Act.

Esta información acerca de su agua potable es importante. Si usted no puede leer esto en inglés, por favor pídale a alguien que le traduzca esta importante información o llame a Cuidado al Cliente al número 719-668-4800.

Public Water System
I.D. CO0121150



Colorado Springs Utilities
It's how we're all connected

TABLE OF CONTENTS

3	INTRODUCTION
4	WATER SOURCES
6	COLORADO SOURCE WATER ASSESSMENT AND PROTECTION
8	WATER CONTAMINANTS
9	IMMUNOCOMPROMISED PERSONS ADVISORY
10	LEAD IN DRINKING WATER
10	FLUORIDE IN DRINKING WATER
11	PFAS
12	TERMS, ABBREVIATIONS & SYMBOLS
13	DATA PRESENTED IN THE WATER QUALITY REPORT
14	DETECTED CONTAMINANTS TABLES
18	UNREGULATED CONTAMINANT MONITORING REGULATION
20	CUSTOMERS HAVE A VOICE IN DECISIONS
20	GENERAL INFORMATION

INTRODUCTION

Colorado Springs Utilities is committed to safely and reliably delivering the most precious resource to its community: high quality drinking water. Although our source water comes from high mountain snowmelt, it takes hard work and dedication of our employees to ensure that safe drinking water is provided to you. Water is essential for healthy and sustainable communities, and our experts test and monitor water quality around the clock to ensure the water we deliver to your homes and businesses exceeds the standards set forth by the federal Safe Drinking Water Act.

We are proud to share with you the 2020 Water Quality Report. The report is designed to provide you detailed information about your drinking water. If you have any questions about this report or the quality of your water, please do not hesitate to contact us at 719-668-4560.

WATER SOURCES

Your water is blended from multiple sources, including surface water and purchased water. Your water source may vary throughout the year.

MOUNTAIN WATER SOURCES

With no major water source nearby, much of Colorado Springs Utilities raw water collection system originates from nearly 200 miles away, near Aspen, Leadville, and Breckenridge. Almost 75 percent of our water originates from mountain streams. Water from these streams is collected and stored in numerous reservoirs along the Continental Divide. Collection systems in this area consist of the Homestake, Fryingpan-Arkansas, Twin Lakes, and Blue River systems.

The majority of this raw water is transferred to our city through pipelines that help protect it from contamination, such as herbicides, pesticides, heavy metals and other chemicals. After the long journey, water is stored locally at Rampart Reservoir and the Catamount reservoirs on Pikes Peak.

LOCAL SURFACE SOURCES

To supplement the water received from the mountain sources, Colorado Springs Utilities is able to divert water from local surface water collection systems including:

- North and South Slopes of Pikes Peak – Catamount Reservoirs, Crystal Reservoir, South Slope Reservoirs and tributaries
- North and South Cheyenne Creeks
- Fountain Creek
- Monument Creek – Pikeview Reservoir
- Northfield Watershed – Rampart and Northfield Reservoirs
- Pueblo Reservoir

WATER SOURCES

PURCHASED WATER SOURCE

Fountain Valley Authority or FVA (PWSID#CO0121300) receives water from the Fryingpan-Arkansas Project – a system of pipes and tunnels that collects water in the Hunter-Fryingpan Wilderness Area near Aspen. Waters collected from this system are diverted to the Arkansas River, near Buena Vista, and then flow about 150 miles downstream to Pueblo Reservoir. From there, the water travels through a pipeline to a water treatment plant before being delivered to Colorado Springs.

WATER TREATMENT

All water sources are treated at one of our six treatment plants prior to entering our drinking water distribution system, an intricate system of tanks, pumps and pipes that ultimately deliver water to your home or business.

LOCAL GROUND WATER SOURCES

We previously pumped water from wells drilled into two different aquifers. We have two wells on the Denver aquifer (500-700 feet deep) and two wells on the Arapahoe aquifer (900-1,000 feet deep). These wells were deactivated in July 2015.

COLORADO SOURCE WATER ASSESSMENT AND PROTECTION

The Colorado Department of Public Health and Environment has 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 <https://www.colorado.gov/cdphe/ccr> (located under “Guidance: Source Water Assessment Reports” and searchable using “121150, Colorado Springs Utilities”), or by contacting Laboratory Services at 719-668-4560.

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.



COLORADO SOURCE WATER ASSESSMENT AND PROTECTION

POTENTIAL SOURCES OF CONTAMINATION TO OUR SOURCE WATER AREAS MAY COME FROM:

- EPA Superfund Sites
- EPA Abandoned Contaminated Sites
- EPA Hazardous Waste Generators
- EPA Chemical Inventory/Storage Sites
- EPA Toxic Release Inventory Sites
- Permitted Wastewater Discharge Sites
- Aboveground, Underground and Leaking Storage Tank Sites
- Solid Waste Sites
- Existing/Abandoned Mine Sites
- Concentrated Animal Feeding Operations
- Other Facilities
- Commercial/Industrial Transportation
- High-and-Low-Intensity Residential
- Urban Recreational Grasses
- Quarries/Strip Mines/Gravel Pits
- Agricultural Land (row crops, small grain, pasture/hay, orchards/vineyards, fallow and other)
- Forest
- Septic Systems
- Oil/Gas Wells
- Road Miles

The results of the source water assessment are not a reflection of our treated water quality or the water you receive, but rather a rating of the susceptibility of source water contamination under the guidelines of the Colorado Source Water Assessment and Protection Program.



WATER CONTAMINANTS

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, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operation 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 that 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 may come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants that 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.



IMMUNOCOMPROMISED PERSONS ADVISORY

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 <https://www.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.



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 two 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 <http://www.epa.gov/safewater/lead>.

FLUORIDE IN DRINKING WATER

Fluoride is a compound found naturally in many places, including soil, food, plants, animals and the human body. It is also found naturally at varying levels in all Colorado Springs' water sources. Colorado Springs Utilities does not add additional fluoride to your drinking water. Any fluoride in the drinking water comes naturally from our source waters. For more fluoride information click <https://www.csu.org/pages/water-quality-r.aspx>.

PER AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS are a man-made chemical present in food packaging, commercial household products, drinking water sources and manufacturing facilities. Currently, PFAS are not regulated under the National Primary Drinking Water Regulations. However, the EPA did issue a health advisory for specific perfluorinated compounds (PFOA and PFOS) of 70 parts per trillion (ppt). Colorado Springs Utilities tested for 18 PFAS compounds, including PFOA and PFOS, and none of these compounds were detected above the reporting limit of 1.9 parts per trillion at our water treatment facilities, including our most recent voluntary sampling conducted in the 1st quarter 2020. For more information about PFAS click <https://www.epa.gov/pfas>.

TERMS, ABBREVIATIONS & SYMBOLS

- **MAXIMUM CONTAMINANT LEVEL (MCL)** – The highest level of a contaminant allowed in drinking water.
- **TREATMENT TECHNIQUE (TT)** – A required process intended to reduce the level of a contaminant in drinking water.
- **HEALTH-BASED** – A violation of either an MCL or TT.
- **NON-HEALTH-BASED** – A violation that is not an MCL or TT.
- **ACTION LEVEL (AL)** – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.
- **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 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 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.
- **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 an 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.
- **NEPHELOMETRIC TURBIDITY UNIT (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.
- **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).
- **PARTS PER MILLION = MILLIGRAMS PER LITER (ppm = mg/L)** – As a reference, one part per million is the equivalent of one minute in two years or a single penny in \$10,000.
- **PARTS PER BILLION = MICROGRAMS PER LITER (ppb = ug/L)** – As a reference, one part per billion is the equivalent of one minute in 2,000 years, or a single penny in \$10,000,000.
- **NOT APPLICABLE (N/A)** – Does not apply or not available.
- **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.



DATA PRESENTED IN THE WATER QUALITY REPORT

We routinely monitor for contaminants in your drinking water according to federal and state laws. The tables on the following pages show the combined results of our monitoring for six water treatment plants for the period of January 1 through December 31, 2019, 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. Only detected contaminants sampled within the last five years appear in this report. If no table appears in this section, then no contaminants were detected in the last round of monitoring.

DETECTED CONTAMINANTS TABLES

COLORADO SPRINGS UTILITIES (PWSID CO0121150)

INORGANIC CONTAMINANTS

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	MCL	MCLG	UNITS	RANGE	AVERAGE	MCL VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Barium	2	2	ppm	0.0140 - 0.0578	0.0302	No	May 2019	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	100	100	ppb	0 - 1.6	0.48	No	May 2019	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	4	4	ppm	0.14 - 1.21	0.48	No	May 2019	Erosion of natural deposits; discharge from fertilizer and aluminum factories
Nickel	N/A	N/A	ppb	0 - 0.0018	0.0003	No	May 2019	Erosion of natural deposits, discharge from industries, discharge from refineries and steel mills
Nitrate (as Nitrogen)	10	10	ppm	0 - 0.37	0.12	No	May 2019	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	50	50	ppb	0 - 0.0068	0.0011	No	May 2019	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Sodium	N/A	N/A	ppm	5.39 - 24.60	12.59	No	May 2019	Erosion of natural deposits

ORGANIC CONTAMINANTS

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	MCL	MCLG	UNITS	RANGE	AVERAGE	MCL VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Hexachlorocyclopentadiene	50	0	ppb	0 - 0.048	0.004	No	May, October	Discharge from chemical factories
Xylenes	10,000	10,000	ppb	0 - 4.6	1.2	No	Jan, Jun, Jul, Oct	Discharge from petroleum factories; discharge from chemical factories

RADIONUCLIDES

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	MCL	MCLG	UNITS	AVERAGE	RANGE LOW-HIGH	MCL VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Combined Radium	5	0	pCi/L	0.3	0.3 - 0.3	No	Jan 2017	Erosion of natural deposits
Combined Uranium	30	0	ppb	3.6	3.6 - 3.6	No	Jan 2017	Erosion of natural deposits

TURBIDITY

CONTINUOUSLY MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	TT REQUIREMENT	LEVEL DETECTED	TT VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Turbidity	Maximum 1 NTU for any single measurement	Highest Single Measurement: 0.70 NTU, July	No	Jan - Dec 2019	Soil Runoff
Turbidity	In any month, at least 95% of samples must be less than 0.3 NTU	Lowest Monthly percentage of samples meeting TT requirement: 99%	No	Jan - Dec 2019	Soil Runoff

DISINFECTANTS

CONTINUOUSLY MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	MRDL/TT REQUIREMENT	UNITS	LEVEL DETECTED	MRDL/TT VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Chlorine	TT = no more than 4 hours with a sample below 0.2 ppm	ppm	0 samples above or below the level	No	Jan - Dec 2019	Water additive used to control microbes

TOTAL ORGANIC CARBON (DISINFECTION BY-PRODUCTS PRECURSOR) REMOVAL RATIO AND FINISHED WATER

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	MCL	MCLG	UNITS	AVERAGE	RANGE LOW-HIGH	MCL VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Total Organic Carbon (TOC)	TT minimum ratio = 1.00	N/A	N/A	1.25	1 - 1.81	No	Monthly - Running Annual Average	Naturally present in the environment

DISINFECTION BY-PRODUCTS

MONITORED IN THE DISTRIBUTION SYSTEM

CONTAMINANT	MCL	MCLG	UNITS	AVERAGE	RANGE LOW-HIGH	MCL VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Total Haloacetic Acids (HAA5)	60	N/A	ppb	36.0	9.1 - 59.0	No	Jan, Apr, Jul, Oct 2019	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	80	N/A	ppb	43.4	19.4 - 87.6	No	Jan, Apr, Jul, Oct 2018	By-product of drinking water disinfection

DISINFECTANTS IN THE DISTRIBUTION SYSTEM

CONTAMINANT	MRDL/TT	LOWEST TT PERCENTAGE	NUMBER OF SAMPLES BELOW 0.2	UNITS	TT VIOLATION	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Chlorine	MRDL = 4 ppm TT = at least 95% of samples per month must be at least 0.2 ppm	99% November	2	ppm	No	2019	Drinking water disinfectant used to control microbes

LEAD AND COPPER

MONITORED IN THE DISTRIBUTION SYSTEM

CONTAMINANT	AL AT THE 90TH PERCENTILE	MCLG	UNITS	90TH PERCENTILE	SAMPLE SIZE	SAMPLE SITES ABOVE AL	AL EXCEEDANCE	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Copper	1.3	1.3	ppm	0.1946	60	0	No	June - August 2019	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead	15	0	ppb	5.0	60	0	No	June - August 2019	Corrosion of household plumbing systems; erosion of natural deposits

CONTAMINANTS WITH SECONDARY MCL REQUIREMENTS¹

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	SMCL	UNITS	AVERAGE LEVEL DETECTED (RANGE)	SAMPLE DATES	POSSIBLE SOURCE(S) OF CONTAMINATION
Aluminum	0.050 - 0.2	ppm	0.0329 0 - 0.2	Monthly 2019	Erosion of natural deposits, water treatment chemical
Chloride	250	ppm	6.5 1.5 - 24.4	Quarterly 2019	Erosion of natural deposits
Manganese	0.5	ppm	0.0001 0 - 0.0059	Monthly 2019	Erosion of natural deposits
Iron	0.3	ppm	0.0013 0 - 0.0166	Monthly 2019	Erosion of natural deposits, leaching from plumbing materials
Sulfate	250	ppm	0.0352 0.0136 - 0.1310	Monthly 2019	Erosion of natural deposits
Zinc	5,000	ppb	0.4 0 - 2.2	Annual 2019	Leaching from plumbing materials

¹Secondary MCL (SMCL) is not enforceable but intended as guidelines. These contaminants in drinking water may affect the aesthetic qualities.

UNREGULATED CONTAMINANT MONITORING REGULATION (UCMR)

The 1996 amendments to the Safe Drinking Water Act required that EPA establish criteria for a program to monitor unregulated contaminants and to identify no more than 30 unregulated contaminants to be monitored every five years.

Unregulated contaminants are those contaminants that do not have a drinking water standard (maximum contaminant level) established by EPA. The purpose of the UCMR is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

The fourth round of the UCMR required monitoring for 30 contaminants. Colorado Springs Utilities was required to monitor for these contaminants starting in January 2018. The results for any contaminants detected thus far are listed below. For further information on UCMR please visit <https://www.epa.gov/dwucmr/fourth-unregulated-contaminant-monitoring-rule>.

MONITORED AT THE TREATMENT PLANT (ENTRY POINT TO THE DISTRIBUTION SYSTEM)

CONTAMINANT	AVERAGE LEVEL DETECTED (RANGE)	RANGE	UNITS	SAMPLE DATES	POTENTIAL SOURCES OF CONTAMINATION
Manganese	1.2	0 - 11	ppb	Jan, Apr, Jul, Oct 2018	Naturally occurring element, commercially available in combination with other elements and minerals, a by-product of zinc ore processing, used in infrared optics, fiber optic systems electronics and solar applications
1-Butanol	1.07	0 - 13	ppb	Jan, Mar, Apr, Jul, Oct 2018	Used as a solvent, food additive, and in the production of other chemicals
Quinoline	0.001	0 - 0.0318	ppb	Jan, Mar, Apr, Jul, Oct 2018, Feb, Mar 2019	Used as a pharmaceutical and flavoring agent, produced as a chemical intermediate, component of coal

MONITORED IN THE DISTRIBUTION SYSTEM

CONTAMINANT	AVERAGE LEVEL DETECTED (RANGE)	RANGE	UNITS	SAMPLE DATES	POTENTIAL SOURCES OF CONTAMINATION
Haloacetic Acids 5 (HAA5)	33.9	10.2 - 55.0	ppb	Jan, Apr, Jul, Oct 2018	By-product of drinking water disinfection
Brominated Haloacetic Acids 6 (HAABr6)	3.18	0.79 - 9.10	ppb	Jan, Apr, Jul, Oct 2018	By-product of drinking water disinfection
Haloacetic Acids 9 (HAA9)	36.4	14.5 - 57.0	ppb	Jan, Apr, Jul, Oct 2018	By-product of drinking water disinfection

CUSTOMERS HAVE A VOICE IN DECISIONS

We encourage customer participation in decisions affecting our drinking water. For more information about Utilities Board visit [csu.org](https://www.csu.org).

GENERAL INFORMATION

To request a printed copy of this report or for questions, call 719-668-4560.

For more water quality information or to access past Drinking Water Quality Reports, click [csu.org](https://www.csu.org).



Colorado Springs Utilities

It's how we're all connected