# MCDONALD FARMS ENTERPRISES INC 2025 Drinking Water Quality Report

# Covering Data For Calendar Year 2024

Public Water System ID: C00207500

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

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 DANIEL NIEBLER at 303-772-4577 with any questions or for public participation opportunities that may affect water quality. Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.

# 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 <a href="mailto:epa.gov/ground-water-and-drinking-water">epa.gov/ground-water-and-drinking-water</a>.

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).

## **Contaminant Information**

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.

# 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 DANIEL NIEBLER at 303-772-4577. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

# 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 MCDONALD FARMS ENTERPRISES INC, PWS ID: CO0207500 2025 CCR Page 2 of

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 DANIEL NIEBLER at 303-772-4577. This does not apply to McDonald Farms.

# 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 our system name or I D, or by contacting DANIEL NIEBLER at 303-772-4577. The Source Water Assessment Report p rovides 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.

# **Our Water Sources**

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
PURCHASED WATER FROM CO0162122 CWWD (Surface Water-Non-Piped, Purchased)	
PURCHASED FROM DENVER CO0116001 (Surface Water-Non-Piped, Purchased)	There is no SWAP report, please contact DANIEL NIEBLER at 303-772-4577 with questions regarding potential sources of contamination.
PURCHASED FROM CASTLE ROCK CO0118010 (Surface Water-Non-Piped, Purchased)	

# Terms and Abbreviations

- 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 a MCL or TT.

- Non-Health-Based A violation that is not a 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 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.
- **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 90<sup>th</sup> 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) 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.
- 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.

# **Detected Contaminants**

MCDONALD FARMS ENTERPRISES INC 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, 2024 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

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	10	No	4.0 ppm

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions



# 2025 Water Quality Report



Copies of this Consumer Confident Report can be found at CRgov.com/waterquality
Esta es información importante sobre su agua. Si necesita que alguien lo traduzca,
póngase en contacto con Castle Rock Water.

Town of Castle Rock Public Water System ID: C00118010



# The purpose of this report

Castle Rock Water's goal is to provide our customers with a safe and reliable supply of drinking water. The Water Quality Report or "Consumer Confidence Report" is produced annually to describe the overall quality of water from its raw collection and storage to the treated purity at your tap. This report is required by the Environmental Protection Agency (EPA) to summarize information regarding the water sources used, any detected contaminants, compliance and educational information.

Please contact Castle Rock Water at 720-733-6000 or email <a href="mailto:waterquality@CRgov.com">waterquality@CRgov.com</a> with any questions about the quality or treatment of our water.

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- 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.

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# Our Water Sources and Water Treatment Plants

In 2024, approximately 70 percent of the Town's water was pumped from the Town's 63 deep groundwater wells. Castle Rock overlies the Denver Basin, a geologic formation with four principal aquifers into which our deep wells are drilled: the Dawson, Denver, Arapahoe, and the deepest of the four, the Laramie-Fox Hills. The remaining 30 percent came from renewable water resources which included 14 shallow alluvial wells, two surface water diversions, one along East Plum Creek and the other along Plum Creek in Sedalia, and imported Water Infrastructure and Supply Efficiency (WISE) water. See the table below for Castle Rock's sources.

Castle Rock utilizes five treatment plants to purify and distribute potable water. Having five facilities provides redundancy to ensure reliable service. During the winter with low demand, several plants may not be in use.

Water sources and types of water are important to help Castle Rock Water determine the appropriate level of treatment, and to design the correct type of treatment plant. The five Castle Rock Water treatment plants are listed here.

The plant that treats surface water uses flocculation, coagulation, sedimentation, biological activated carbon, membrane filtration, advanced oxidation, granular activated carbon filtration, and disinfection processes:

1. Plum Creek Water Purification Facility (PCWPF)

The plants that treat groundwater use greensand filtration, or anthracite and silica sand filtration, and disinfection processes:

- 2. Founders Water Treatment Plant (FWTP)
- 3. Meadows Water Treatment Plant (MWTP)
- 4. P.S. Miller Water Treatment Plant (PSMWTP)
- 5. Ray Waterman Regional Water Treatment Facility (RWRWTF)

All of our water sources are listed below including the type of supply, and the water plant that treats and distributes the supply.

SOURCE	WATER 1	YPE	WATER PLANT
Well CR20 Mikelson A1	Well	GW	FWTP
Well CR21 Mikelson Den1	Well	GW	FWTP
Well 22 Mikelson DA1	Well	GW	FWTP
Well 31R	Well	GW	FWTP
Well 33R Enderud	Well	GW	FWTP
Well 39 Weaver 1	Well	GW	FWTP
Well 41 Weaver 1	Well	GW	FWTP
Well 43 Weaver A2	Well	GW	FWTP
Well 44 Weaver LDA2	Well	GW	FWTP
Well 45 Weaver D2	Well	GW	FWTP
Well CR-226	Well	GW	FWTP
Well CR-227	Well	GW	FWTP
Well CR27R	Well	GW	MWTP
Well 28R Meadows A-2R	Well	GW	MWTP
Well CR47 Meadows D1	Well	GW	MWTP
Well 49 Meadows A8	Well	GW	MWTP
Well 50R	Well	GW	MWTP
Well CR51A Meadows D-7A	Well	GW	MWTP
Well CR67 Meadows A7 Arapahoe	Well	GW	MWTP
Well 82 A4	Well	GW	MWTP
Well CR 83	Well	GW	MWTP
Well CR 84 Meadows A7 Denver	Well	GW	MWTP
Well CR 86	Well	GW	MWTP
Well 148 Den4	Well	GW	MWTP
Well 149 Meadows D3	Well	GW	MWTP
Well 150 Meadows D2	Well	GW	MWTP
Well CR152 Meadows A7 Dawson	Well	GW	MWTP
Well 168 LDA4	Well	GW	MWTP
Well 170 Meadows DA6	Well	GW	MWTP
Well 174 Meadows D6	Well	GW	MWTP
Well 176 Not used in treatment	Well	GW	MWTP
Well 219 A13	Well	GW	MWTP
Well CR 220	Well	GW	MWTP
Well CR 221	Well	GW	MWTP
Well CR 222	Well	GW	MWTP
Well CR 223	Well	GW	MWTP
Well CR 224	Well	GW	MWTP

SOURCE	WATER 1	YPE	WATER PLANT
Well CR 225	Well	GW	MWTP
Well CR 231	Well	GW	MWTP
Well CR14R	Well	GW	PSMWTP
PC Miller East			
Well 15R	Well	GW	PSMWTP
Well 16R	Well	GW	PSMWTP
Well AL-1	Well	GW UDI Surface	PCWPF
Well AL-2	Well	GW UDI Surface	PCWPF
Well AL-8	Well	GW UDI Surface	PCWPF
Well AL-9	Well	GW UDI Surface	PCWPF
Well AL-16	Well	GW UDI Surface	PCWPF
Well AL-18	Well	GW UDI Surface	PCWPF
Well AL-20	Well	GW UDI Surface	PCWPF
Well 11R	Well	GW UDI Surface	PCWPF
Well 12R	Well	GWUDI Surface	PCWPF
Well 13R	Well	GW UDI Surface	PCWPF
Well 78 PC Alluvium	Well	GW UDI Surface	PCWPF
Well 79 PC Alluvium	Well	GW UDI Surface	PCWPF
Well 80 PC Alluvium	Well	GW UDI Surface	PCWPF
Well 81 PC Alluvium	Well	GW UDI Surface	PCWPF
Well CR204	Well	GW	PCWPF
Well CR 228	Well	GW	PCWPF
Well CR 229	Well	GW	PCWPF
Well CR 230	Well	GW	PCWPF
Well CR 234	Well	GW	PCWPF
Well CR 235	Well	GW	PCWPF
Well CR 236	Well	GW	PCWPF
Plum Creek Diversion No. 1	Intake	Surface	PCWPF
Plum Creek Diversion at Sedalia	Intake	Surface	PCWPF
Well 72R Castle Oaks 6 Denver	Well	GW	RWRWTF
Well 73R Castle Oaks 6 Arapahoe	Well	GW	RWRWTF
Well CR 101	Well	GW	RWRWTF
Well CR 105	Well	GW	RWRWTF
Well CR 110	Well	GW	RWRWTF
Well CR 111	Well	GW	RWRWTF
Well CR 117	Well	GW	RWRWTF
Well CR 118	Well	GW	RWRWTF
Well CR 123	Well	GW	RWRWTF

SOURCE	WATER 1	ТҮРЕ	WATER PLANT
Well CR 124	Well	GW	RWRWTF
Well CR 217	Well	GW	RWRWTF
Well CR 218	Well	GW	RWRWTF
Well CR 232	Well	GW	RWRWTF
Well CR 233	Well	GW	RWRWTF
WISE Purchase from Parker WSD	CC	Surface	RWRWTF
Purchase Castle Pines Metro / CO0118005	CC	GW	DIST
Purchase The Pinery WSD / CO0118025	CC	GW	DIST

#### **Abbreviation definitions**

GW — Groundwater

GWUDI — Groundwater Under Direct Influence of Surface Water

CC — Consecutive Connection

DIST — Distribution System



# Walker Reservoir Ribbon Cutting

The Walker Reservoir project is a significant step forward for water management in the South Metro area. By transitioning from deep groundwater sources to renewable surface water supplies, communities are not only improving their water security but also enhancing sustainability efforts. The collaboration among the Cherry Creek Project Water Authority and its partners—Castle Rock Water, Cottonwood Water and Sanitation District, Inverness Water and Sanitation District, and

Pinery Water and Wastewater District—demonstrates the power of regional partnerships in optimizing resources and funding. (Partners pictured here, cutting a ceremonial ribbon for the completion of the Walker Reservoir.)

With a capacity of 650 acre-feet, this restricted-access reservoir will play a crucial role in storing excess water during times of abundance, ensuring that local supplies remain resilient. The reservoir is supplied from alluvial wells in the Cherry Creek watershed and a Denver Basin well to supplement augmentation. Walker Reservoir is expected to fill in 2025.

# **Devoted to Water Quality**

Water quality is the core of our service. Last year, we collected more than 5,000 samples and conducted tests daily, monthly, quarterly, and annually within our treatment plants, at points throughout the system and at service locations. These tests are collected, not only for compliance with local, state and federal regulations, but reveals our commitment to ensuring our systems, processes and upgrades continue to provide water to our community that is as clean and safe as possible. Castle Rock Water takes pride in being recognized throughout the water industry for water quality, technological improvements and sustainability. To further our message of exceptional water quality, the state-of-theart Plum Creek Water Purification Facility is open to the public for tours. Tour registration can be found at CRgov.com/WaterTours. (NOTE: Tours have been suspended while PCWPF is under expansion construction.)

### **Detected Contaminants**

Castle Rock Water routinely monitors for contaminants in your drinking water according to state and federal laws. The following tables show all detections found in the period of January 1 to December 31, 2024 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 also reported here.

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	Disinfectants Sampled in the Distribution System											
Disinfectant	Time	me Results Number of Sample TT MRD										
Name	Period		samples	size	violation							
			below level									
Chloramine	December	Lowest period of	0	100	No	4.0 ppm						
	2024	samples meeting TT										
		requirement: 100%										

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

Disinfection By	Disinfection Byproducts Sampled in the Distribution System											
Contaminant Name	Year	Average	Range Low to	Sample Size	Unit of Measure	MCL*	MCLG	MCL Violation	Typical Sources			
			High									
Total Haloacetic	2024	2.33	0 to	32	ppb	60	N/A	No	Byproduct of			
Acids (HAA5)			5.9						drinking			
									water			
									disinfection			
Total	2024	6.29	1.7 to	32	ppb	80	N/A	No	Byproduct of			
Trihalomethanes			14.2						drinking			
(TTHM)									water			
									disinfection			

Disinfection B	Disinfection Byproducts Sampled at the Entry Point to the Distribution System											
Contaminant Name	Year	Average	Range Low to High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources			
Bromate	2024	3.91	0 to 40	11	ppb	10	0	No*	Byproduct of drinking water disinfection			
Maximum Contamina	nt Level is	calculated by	a monthly, ru	inning annua	l average. The	lone value	of 40 ppb	did not cause a	MCL exceedance.			

Summary of	Summary of Turbidity Sampled at the Entry Point to the Distribution System										
Contaminant	Sample	Level Found	Level Found TT Requirement								
Name	Date			Violation	Sources						
Turbidity	Mar	Highest single	Maximum 0.5 NTU for	No	Soil Runoff						
		measurement:	any single								
		0.024 NTU	measurement								
Turbidity	Dec	Lowest monthly percentage	In any month, at least	No	Soil Runoff						
		of samples meeting TT	95% of samples must								
		requirement for our	be less than 0.1 NTU								
		technology: 100%									

# PARTNERSHIP FOR SAFE WATER

The Plum Creek Water Purification Facility (PCWPF) is one of the nation's most advanced water treatment plants, and Castle Rock Water is taking steps to optimize its performance even further. The facility has joined the Partnership for Safe Water, a voluntary program supported by six drinking water organizations and over 250 utilities. This program aims to enhance public health protection through prevention efforts beyond current regulations.

Being part of this partnership showcases Castle Rock Water's commitment to water quality and public health. The process involves four phases, and while it will take several years to complete, a key benefit is the opportunity to collaborate monthly with other Front Range water providers to discuss new technologies and solutions.

Phase I of our work in the partnership is complete, with the facility meeting all regulatory requirements for filtered surface water. Phase II is underway, focusing on collecting 12 months of performance data on turbidity and residuals. Phase III involves a comprehensive self-assessment to evaluate system performance and efficiency. Castle Rock Water aims for the Directors Award at this stage.

Phase IV, which is optional, recognizes top-performing plants with the President's Award for Excellence in Water Treatment. Participation in the program prepares Castle Rock Water for future regulatory changes while optimizing operations.

By joining this initiative, Castle Rock Water collaborates with key organizations like the American Water Works Association (AWWA), EPA, and Water Research Foundation (WRF), solidifying its role as a national leader in the water industry.

Inorganic Con	ntamina	ants Samp	led at the	Entry Po	int to the	Distrib	ution Sy	stem	
Contaminant	Year	Average	Range Low to High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2024	0.13	0.09 to 0.18	3	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2024	2	2 to 2	3	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2024	0.78	0.71 to 0.87	3	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2024	0.04	0 to 0.2	5	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate-Nitrite	2024	0.2	0.2 to 0.2	1	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2024	1.33	0 to 4	3	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

# **Secondary Contaminants**

Secondary standards are <u>non-enforceable</u> guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant	Year	Average	Range	Sample Size	Unit of Measure	Secondary Standard
			Low – High			
Alkalinity (CaCO₃)	2024	96	72 to 116	61	ppm	N/A
Chloride	2024	53	9 to 156	64	ppm	250
Hardness (CaCO <sub>3</sub> )	2024	121	67 to 239	64	ppm	N/A
рН	2024	7.9	6.9 to 8.7	64	SU	6.5 to 8.5
Sodium	2024	21.67	12.6 to 28.9	3	ppm	N/A
Sulfate	2024	76	11-239	49	ppm	250
Total Dissolved Solids	2024	248	156 to 486	64	ppm	500
(TDS)						
Total Iron	2024	0.01	0 to 0.05	64	ppm	0.3
Total Manganese	2024	0.01	0.001 to 0.03	64	ppm	0.05

Lead and Co	pper Sample	d in the Di	stribution S	System					
Contaminant	Time Period	Тар	90 <sup>th</sup>	Sample	Unit of	90 <sup>th</sup>	Sample	90 <sup>th</sup>	Typical Sources
		Sample	Percentile	Size	Measure	Percentile	Sites	Percentile	
		Range				AL	Above	AL	
		Low-High					AL	Exceedance	
Copper	04/29/24 to	0.019 to	0.17	60	ppm	1.3	0	No	Corrosion of household plumbing
	06/23/24	0.782							systems; Erosion of natural deposits
Lead	04/29/2024	0 to 3	2	60	ppb	15	0	No	Corrosion of household plumbing
	to								systems; Erosion of natural deposits
	06/23/2024								
Copper	10/14/2024	0.005 to	0.17	102	ppm	1.3	0	No	Corrosion of household plumbing
	to	0.841							systems; Erosion of natural deposits
	12/13/2024								
Lead	10/14/2024	0 to 41	2	102	ppb	15	1	No	Corrosion of household plumbing
	to								systems; Erosion of natural deposits
	12/13/2024								

Radionuclid	Radionuclides Sampled at the Entry Point to the Distribution System													
Contaminant	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources					
Gross Alpha	2024	9.1	9.1 to 9.1	1	pCi/L	15	0	No	Erosion of natural deposits					
Combined Radium	2024	2.8	2.3 to 3.3	2	pCi/L	5	0	No	Erosion of natural deposits					
Combined Uranium	2024	1	1 to 1	1	ppb	30	0	No	Erosion of natural deposits					
Gross Beta Particle Activity	2022	3.17	-2.09 to 6.62	3	pCi/L*	50	0	No	Decay of natural and man-made deposits					

The MCL for Gross Beta Particle Activity is 4mrem/year. Since there is no simple conversion between mrem/year and pCi/L, EPA considers 50pCi/L to be the level of concern for Gross Beta Particle Activity.

Cryptosporidium	Cryptosporidium											
Contaminant	Year	Number of Positives	Sample Size									
Cryptosporidium	2024	1	11									

Under the Surface Water Treatment Rule, water systems in Colorado that treat surface water, were required to participate in a short-term surface source water monitoring project in 2024. As such, Castle Rock Water collected 11 samples from our surface water source, with one positive result, indicating the presence of these organisms in surface water. Cryptosporidium is a microbial pathogen found in surface water throughout the United States. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our surface water treatment facility utilizes multiple filtration processes (including microfiltration), advanced oxidation treatment, ultraviolet light disinfection, and chlorine disinfection treatment methods for the effective removal and inactivation of cryptosporidium during the treatment process. Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing life-threatening illness. We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

### **Unregulated Contaminants**

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. Castle Rock Water performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod). Consumers can review UCMR results by accessing the NCOD. The sample collection requirements for the current UCMR 5 began in 2023 and will be completed in 2024. Contaminants that were detected during UCMR 5 sampling in 2024, and the corresponding analytical results are provided below.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Lithium	2024	24.4	N/A	1	ppb
PFPeA	2024	0.003	N/A	1	ppb

More information about the contaminants that were included in UCMR monitoring can be found at: <a href="mailto:drinktap.org/Water-Info/Whats-in-My-water/Unregulated-Contaminant-Monitoring-Rule-UCMR">drinktap.org/Water-Info/Whats-in-My-water/Unregulated-Contaminant-Monitoring-Rule-UCMR</a>. Learn more about the EPA UCMR at: <a href="mailto:epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule">epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule</a> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <a href="mailto:epa.gov/ground-water-and-drinking-water">epa.gov/ground-water-and-drinking-water</a>.

### **Violations, Significant Deficiencies and Formal Enforcement Actions**

No violations, significant deficiencies or formal enforcement actions in 2024.

# Lead Testing in Castle Rock

Castle Rock Water is required by State and Federal regulations to conduct periodic lead and copper testing. Samples are collected from indoor taps in designated single-family homes built between 1982 through 1987. These homes have been identified because they were built during the timeframe when lead-based solder was more widely used. Lead can enter the water through contact with plumbing pipes and fixtures containing lead within the home. It does this by leaching lead and copper from your private plumbing through the corrosion of pipes, solder, faucets and fittings. As part of our treatment process, Castle Rock Water treats the water to minimize, reduce, and eliminate, to the extent possible the potential for this corrosion to occur.

If residents have any concerns, or would like their home to be considered for lead testing, contact our Water Quality staff at 720-733-6000 or visit CRgov.com/WaterQuality. This test is performed at no cost to the homeowner.

# 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 system. 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.

# Service Line Inventory

New state and federal laws require Castle Rock Water 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 our Water Quality staff at 720-733-6000 or visit CRgov.com/WaterQualityReport.

Image of Castle Rock Water staff with Vac Truck accessing and inspecting a service line for material classification.



# **Terms and Abbreviations**

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 a MCL or TT.

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

**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 90<sup>th</sup> 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 and tested).

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.

**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 a 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 a water system on multiple occasions.

# Common Questions About Water

#### Is my water safe to drink?

Yes. Our water meets or surpasses all the regulatory standards set by the Colorado Department of Public Health and Environment and the U.S. Environment Protection Agency. We are required to conduct frequent and routine water quality testing to ensure your water stays safe.

### Why is my water discolored?

If you see black or brown water coming from your hot water tap, the culprit may be your water heater. Most manufacturers suggest flushing your water heater at least once a year. This discoloration is due to sediment settling at the bottom of the tank which, over time, will build up. The sediment includes naturally occurring minerals in the water, such as manganese and iron which can cause discoloration of the tap water, or dark stains on laundry.

White or cloudy water may be due to air bubbles in the pipes that are released when water leaves the tap. It is not a health risk. Other causes of this type of discoloration may be due to the time of the year – during colder months water in outdoor pipes is colder and holds more oxygen than household pipes. When the cold water enters your home or building and begins to warm, the oxygen bubbles escape which can cause the water to look milky. Another cause may be maintenance or construction on the distribution system lines. This may allow air to enter the water pipes and cause the water to have a cloudy appearance.

Brown or yellow water from the first draw, may be the internal plumbing of your home or building. This may be the issue if you only see the discoloration for the first minute or two after your tap is turned on. If you see this discoloration constantly, it may be due to sediments in the water mains. Sediment can get stirred up if there is flushing or maintenance in the area and may cause a brown or yellow color. One way to figure out whether the discoloration is due to your indoor plumbing or from the water mains is to consult with your neighbors and see if they are having similar issues with their water quality.

Please contact us at 720-733-6000 or waterquality@CRgov.com with any questions.

### Is the water in Castle Rock hard?

Castle Rock has moderately hard water. Hardness is caused by naturally occurring calcium and

magnesium ions in the water. White spots on glassware or other fixtures are caused by the calcium. This is not harmful. In fact, calcium and magnesium are found in many food products. For more information about hardness, visit <a href="mailto:CRgov.com/waterquality">CRgov.com/waterquality</a>.

### Why does my water taste/smell funny?

Your water may taste funny to you if you recently moved from an area containing very few naturally occurring minerals, or if you are accustomed to a certain type of source water. Occasionally, we receive reports from customers that their water smells like rotten eggs or sewage/septic. Often, these odors are caused by gases that are formed in the household drains and may not be directly related to your water supply. Bacteria that live on hair, food, soap and other organic matter can form gases and can produce unpleasant odors. Another cause of these odors may be your water heater. If your water heater has been turned off and not in use for a while, it can produce a septic or sulfuric smell.

### Is there fluoride in my water?

Yes, there is naturally occurring fluoride in Castle Rock's water. Fluoride comes from the erosion of natural deposits. The fluoride level in Castle Rock has an average of 0.8 ppm with the Maximum Contaminant Level set at 4 ppm. Castle Rock does not add fluoride to the water supply.

#### Is there lead in my drinking water? If so, what is the Town of Castle Rock doing about it?

Lead can enter drinking water when plumbing materials that contain lead corrode. Castle Rock Water's distribution piping does not contain lead. However, corrosion can occur within the building or home when drinking water comes into contact with internal plumbing, solder, fixtures and faucets (brass) and fittings that contain lead. We are required to regularly conduct lead and copper testing to ensure proper treatment that prevents corrosion of plumbing materials in homes and buildings. Since testing began in 1992, Castle Rock Water has only found one case in which private plumbing corroded to the point where the fixture needed to be replaced.

If you would like to have your home tested for lead, please contact us at waterquality@CRgov.com or 720-733-6000.

### Where can I get my water tested?

Castle Rock Water can run certain simple tests in the field or our lab, specifically relating to odor, taste and plumbing questions related to water quality. For more extensive testing, please contact CDPHE at <a href="https://cdphe.colorado.gov/laboratory-services/water-testing">https://cdphe.colorado.gov/laboratory-services/water-testing</a>



Construction on Castle Rock Reservoir #2 began in 2023. The 790-acre-foot reservoir will store renewable water supplies.

# Central Weld County Water District

2025 Drinking Water Quality Report

Covering data for Calendar Year 2024

Consumer Confidence Report PWSID CO0162122

CENTRAL WELD CNTY WD, PWS ID: C00162122 2025 CCR Page 1 of 8

# CENTRAL WELD CNTY WD 2025 Drinking Water Quality Report Covering Data For Calendar Year 2024

Public Water System ID: C00162122

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

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 STAN LINKER at 970-352-1284 with any questions or for public participation opportunities that may affect water quality. Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.

# 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 <a href="mailto:epa.gov/ground-water-and-drinking-water">epa.gov/ground-water-and-drinking-water</a>.

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).

### Contaminant Information

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.

# 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 STAN LINKER at 970-352-1284. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

# 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 STAN LINKER at 970-352-1284.

# 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 our system name or ID, or by contacting STAN LINKER at 970-352-1284. 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.

# **Our Water Sources**

Sources (Water Type - Source Type)	Potential Source(s) of Contamination
MASTER METER CONNECTION 402 (Surface Water-Consecutive Connection)  BERTHOUD MASTER METER CONNECTION (Surface Water-Consecutive Connection)  LEFT HAND MASTER METER COUNTY RD 12  (Surface Water-Consecutive Connection)  LEFT HAND MASTER METER COUNTY RD 6 (Surface Water-Consecutive Connection)  PUR CARTER LAKE 135476 SW (Surface Water-Consecutive Connection)  MASTER METER CONNECTION 401 (Surface Water-Consecutive Connection)	There is no SWAP report, please contact STAN LINKER at 970-352-1284 with questions regarding potential sources of contamination.
Carter Lake Water Sources (Water Type - Source Type)	Potential Source(s) of Contamination
Purchased Water from Carter Lake CO0135476 (Surface Water-Intake)	EPA Hazardous Waste Generators, Sites: EPA Chemical Inventory/Storage, EPA Toxic Release Inventory, Permitted Wastewater Discharge, Aboveground, Underground & Leaking Storage Tank, Solid Waste, Existing/Abandoned Mine. Other
Carter Lake (Surface Water-Intake)	Facilities: Commercial/Industrial/Transportation, Low Intensity Residential, Urban Rec Grasses, ROW Crops, Fallow, Small
Dry Creek Reservoir (Surface Water-Reservoir)	Grains, Pasture/Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil/Gas Wells, Road Miles

## Terms and Abbreviations

- 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 a MCL or TT.
- Non-Health-Based A violation that is not a 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 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.
- **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 90<sup>th</sup> 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) 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.
- 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.

## **Detected Contaminants**

CENTRAL WELD CNTY WD 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, 2024 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. The Average Total Hardness = 33 mg/L (less than 60 mg/L is considered soft)

**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.

	Т	T Require	e <b>ment</b> : At l If samp	east 95% ole size is	of samp	es per	ed in the r period (1 o more th additive 1	nont an 1	th or c	uarte le is	er) mu below	st be at 0.2 pp		pm <u><i>OR</i></u>	
Disinfectar Name	nt	Time Per	iod	Results				<u> </u>				Sample Size	TT Violation	MRDL	
Chlorine	Γ	December,		24 <u>Lowest period</u> percentage of samples 0 meeting TT requirement: 100%					9	No	4.0 ppm				
	I		Disin	fection l	Byprodu	cts S	ampled i	n th	e Dis	tribu	ition (	Systen	1	1	
Name	Year	Averag	_	nge - High	Sample Size		Unit of Ieasure	M	CL	MO	CLG		CL lation	Typical So	urces
Total Haloacetic Acids (HAA5)	2024	36.21	26.2	to 52	8		ppb	6	60	N	/A	I	No	Byproduct of drinki water disinfection	
Total Trihalome thanes (TTHM)	2024	43.04	32 to	55.6	8		ppb	8	30	N	//A	I	No	Byproduct of water disinf	_
		l	Le	ad and	Copper	Samp	pled in th	ne Di	istrib	utio	n Sys	tem			
Contaminar Name	nt	Time Period	Tap Sample Range Low-High	90 <sup>th</sup> Percen		mple ize	Unit of Measure		90 <sup>th</sup> Percen AL	tile	Sam Site Abo AI	es ve	90 <sup>th</sup> Percentile AL Exceedance	Typical Sc	ources
Copper		/1/2024 – 0/30/2024	0 to 0.31	0.23	3	30	ppm		1.3		0		No	Corrosion of l plumbing syst Erosion of na deposits	tems;
Lead		/1/2024 - 0/30/2024	0 to 36.1	1.8		30	ppm		15		1		No	Corrosion of liplumbing systemsion of national	tems;

Violations, Significant Deficiencies, and Formal Enforcement Actions
No Violations or Formal Enforcement Actions

deposits

#### **Unregulated Contaminants\*\*\***

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (epa.gov/dwucmr/national-contaminant-occurrence-database-ncod) Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

\*\*\*More information about the contaminants that were included in UCMR monitoring can be found at: <a href="mailto:drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR">drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR</a>. Learn more about the EPA UCMR at: <a href="mailto:epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule">epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule</a> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <a href="mailto:epa.gov/ground-water-and-drinking-water">epa.gov/ground-water-and-drinking-water</a>.

### **Detected Contaminants at Carter Lake Filter Plant:**

The Carter Lake Filter Plant routinely monitors for contaminants in your drinking water according to Federal and State laws. The following tables show all detections found in the period of January 1 to December 31, 2024 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 re-ported 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.

	Inor	ganic Con	taminants Sam	pled at th	e Entry Po	oint to tl	he Distri	bution Sys	tem
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2023	0.01	0.01 to 0.01	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2022	0.59	0.54 to 0.65	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2024	0.09	0.00 to 1.2	2	Ppm	10	10	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
		:	Summary of Turk	oidity Sam	ipled at the	Treatme	nt Plants		
Contamina	nt	Sample	Level					TT	
Name		Date	Detecte	d	TT Rec	quiremen	ıt V	violation violation	Typical Sources
Turbidity		Nov	Highest sir measurement 0.		Maximum any single i			No	Soil Runoff
Turbidity		Nov	Lowest mor percentage of meeting TT requ for our techn 99.37%	nthly sample uirement ology:	In any mo 95% of san less than	onth, at le nples mus n 0.3 NTU	ast st be J	No	Soil Runoff
		D	isinfection Bypro	ducts Sam	pled in the I	Distributi	on Systen	1	

	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				
Chlorite	2024	0.28	0 to 0.44	12	ppb	1.0	.8	No	Byproduct of drinking water disinfection				

	Radionuclides Sampled at the Entry Point to the Distribution System													
Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL	MCGL	MCL Violation	Typical Sources					
Gross Alpha	2019	1.8	1.8 to 1.8	1	pCi/L	15	0	No	Erosion of natural deposits					
Combined Radium	2019	1.1	1.1 to 1.1	1	pCi/L	5	0	No	Erosion of natural deposits					

# Secondary Contaminants\*\* Sampled by Carter Lake Filter Plant

\*\*Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2023	8.84	8.76 to 8.93	2	ppm	N/A

Violations, Significant Deficiencies, and Formal Enforcement Actions No Violations or Formal Enforcement Actions

VOC's and SOC's (sampled by Carter Lake Filter Plant)
The 21 Volatile Organic Compounds (VOC's) tested for in 2024 were all below detection limits.
The 32 Synthetic Organic Compounds (SOC's) tested for in 2023 were all below detection limits.





# WHAT IS THIS REPORT?

The Environmental Protection Agency requires public water suppliers that serve the same people year-round (community water systems) to provide consumer confidence reports to their customers. These reports are also known as annual water quality reports. This report summarizes information regarding water sources used, any detected contaminants, compliance and educational information.

# Where does your water come from?

Denver's drinking water comes from rivers, lakes, streams, reservoirs and springs fed by high-quality mountain snowmelt. Denver Water's supply is 100% surface water that covers about 4,000 square miles of watersheds on both sides of the Continental Divide.

### Mountain water sources

Denver Water's water sources include the upper South Platte River, the upper Blue River, Bear Creek, South Boulder Creek, Ralston Creek, tributaries to the Fraser River, and the upper Williams Fork River. Denver Water stores its water in five mountain reservoirs: Antero, Eleven Mile Canyon, Cheesman, Dillon and Gross. From these reservoirs, the water is sent to the metro area through a complex system of streams, canals and pipes to be treated.

After treatment, drinking water is fed by both gravity and pumps to a system of underground, clean-water reservoirs before continuing to your home or business. More than 3,000 miles of water mains — enough to stretch from Los Angeles to New York — carry water to

Denver Water customers.

#### Source water assessment

The Colorado Department of Public
Health and Environment has completed
a source water assessment
of the potential for
contaminants reaching any of
Denver Water's three terminal
reservoirs at Strontia Springs,
Marston and Ralston, the last stop for
water before it is treated. The potential
sources of contamination that may exist
are:

- EPA areas of concern.
- permitted wastewater discharge sites.
- above-ground, underground and leaking storage tank sites.
- solid waste sites.
- · existing or abandoned mine sites.

Continued on the next page.

# In this report:

#### What we test for

Denver Water has met all drinking water standards for regulated water contaminants. Test results are detailed on pages 6-13.

#### Monitoring requirements not met

In 2024, Denver Water failed to meet two monitoring requirements. This did not pose a safety risk and does not require any action from you. For details, see page 4.

#### **Public board meetings**

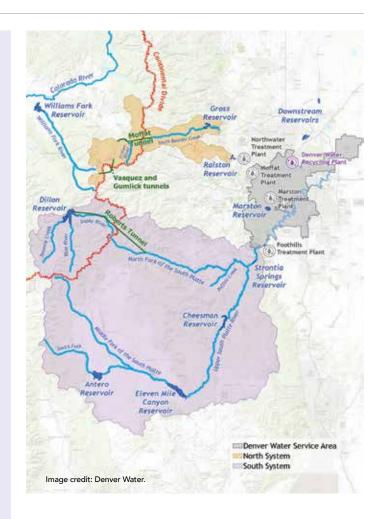
The Denver Board of Water Commissioners is responsible for setting water rates and monitoring the cost and maintenance of the water system. Public meetings are generally held twice a month. For a schedule and location of board meetings, visit denverwater.org/BoardMeetings.

#### Obtain a paper copy of this report

Paper copies of this report, in English or Spanish, can be requested through Denver Water Customer Care at **303-893-2444**, Monday through Friday, from 7:30 a.m. to 5:30 p.m. You can also email **CustomerCare@denverwater.org.** 

#### Informacion importante acerca de la calidad del agua

Para recibir la versión en español del Informe de Calidad de Agua de 2025 de Denver Water, llame a Servicio al cliente al 303-893-2444 o visite denverwater.org/2025CalidadDeAgua



- other facilities.
- commercial, industrial and transportation activities.
- residential, urban recreational grasses.
- quarries, strip mines and gravel pits.
- agriculture.
- forests.
- septic systems; oil and gas wells and roads.

The Source Water Assessment Report provides a screeninglevel 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 high-quality drinking water is delivered to your home.

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 116001, Denver Water Board, or call Denver Water Customer Care at 303-893-2444.

# **DENVER WATER'S SYSTEM**

### **Devoted to water quality**

Denver Water proudly serves high-quality water to 1.5 million people in the city of Denver and many surrounding suburbs. Since 1918, we have expertly planned, developed and operated a complex system that provides clean, safe, great-tasting water. Denver Water is a public agency funded by water rates, new tap fees and the sale of hydropower, not taxes. We are Colorado's oldest and largest water utility — Denver Water has a total water service area of approximately 300 square miles.

Denver Water serves 25% of the state's population with less than 2% of all the water used in the state. The natural environment is our lifeline, and we help protect it by promoting wise water use. In 2024, we collected about 63,000 water samples and conducted about 145,000 tests. Denver Water is required by state and federal law to monitor for — and provide this report on — regulated contaminants in drinking water.

Denver Water also goes above and beyond these requirements to monitor for additional compounds in drinking water. This information is available on our website at denverwater.org/TreatedWater.

# **SOURCES OF DRINKING WATER**



Sources of drinking 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. It can also pick up substances resulting from human activity and the presence of animals. Contaminants may include the following:

### Microbial contaminants

Viruses, bacteria and other microbes that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

### **Inorganic contaminants**

Salts and metals, which can naturally occur or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

#### Pesticides and herbicides

Chemical substances resulting from a variety of sources, such as agricultural and urban stormwater runoff, and residential uses.

## Organic chemical contaminants

Substances 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.

#### Radioactive contaminants

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

# WATER AT A GLANCE

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

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency Safe Drinking Water Hotline at 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 people, such as people with cancer undergoing chemotherapy, people 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.

Those at risk should seek advice about drinking water from their health care providers. Guidelines from the EPA and the Centers for Disease Control and Prevention on appropriate ways to lessen the risk of infection by cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline, 800-426-4791.

# LEAD REDUCTION PROGRAM

Denver Water is committed to delivering safe water to our customers. Lead can get into water as it moves through customer-owned water service lines and household plumbing that contain lead.

Service lines bring water into a home or building from Denver Water's main delivery pipe in the street. In Denver Water's experience, homes built prior to 1951 are more likely to have lead service lines. Homes built before 1987 may have lead solder connecting copper pipes in their plumbing. Faucets and fixtures made before 2014 do not meet today's "lead-free" requirements.

Lead exposure can cause serious health problems for all age groups, especially pregnant people and young children.

To address this issue, Denver Water has launched the Lead Reduction Program, which was approved in December 2019 by the Environmental Protection Agency and Colorado Department of Public Health and Environment.

# The Lead Reduction Program has five main components:

• Managing our system's water chemistry, including an increased pH level to reduce the risk of lead getting into drinking water from lead service lines or household plumbing.

- Maintaining (and updating) a publicly accessible inventory of all customer-owned lead service lines in Denver Water's service area. This interactive map is available at denverwater.org/Lead.
- Providing a free water pitcher and filters that are certified to remove lead to all customers suspected of having a lead service line until their line is replaced, and for six months after.
- Replacing the entire inventory of lead service lines within our service area with copper lines at no direct charge to the customer. When initially launched, all lead service lines were slated to be removed by 2035. Progress on service line replacements can be viewed on the program dashboard at denverwater.org/Lead.
- · Ongoing communication, outreach and education to reach and engage with the diverse communities we serve.

# How the program came to be

Since 1992, as part of the EPA's Lead and Copper Rule, Denver Water has

monitored water quality in homes that have service lines or plumbing that contain lead.

Only once, in 2012, did test results from those homes indicate additional action was needed to protect public health, and Denver Water remains in compliance today. However, Denver Water is still required to implement the best plan to reduce the risk of lead in tap water in homes with lead-containing plumbing or service lines.

That plan is the Lead Reduction Program, which is now underway. Learn more about this effort and the program at denverwater.org/Lead.

If you are concerned about lead, you can request to have your water tested. Denver Water customers can request a free lead test kit at denverwater.org/Leadtest.

Information on lead in drinking water, testing and steps to minimize exposure is available from the Safe Drinking Water Hotline at 800-426-4791, at epa.gov/safewater/lead and at denverwater.org/Lead.

# HOW TO MINIMIZE YOUR EXPOSURE TO LEAD

You share the responsibility of protecting yourself and your family from lead in your home's plumbing. You can take the following actions to reduce your household's risk of exposure.

Flush If water has not been used in the property for a few hours, such as first thing in the morning or when coming home from work, run cold water from the kitchen or any bathroom faucet for five minutes. You can also run the dishwasher, take a shower or do a load of laundry to help flush water in your home's internal plumbing before drinking, cooking or preparing infant formula.

# Replace old fixtures Replace faucets and indoor



plumbing with "lead-free" components. Faucets and fixtures installed prior to 2014 do not meet today's requirements for "lead-free" fixtures.

#### Clean aerators

A faucet aerator is a small screen added to the end of a faucet to mix air with water to reduce the flow of water coming from the faucet. Remove and

they may have trapped particles

#### Maintain filters



faucet-mounted filters, under-sink filter or refrigerator filters. The results of your water quality test may help to determine if you still wish to continue using a filter. Boiling the water does not remove lead.

You can find instructional videos on flushing and filter use at denverwater.org/Lead.

# IS THERE A PRESENCE OF **CRYPTOSPORIDIUM AND GIARDIA?**

Denver Water has tested for Cryptosporidium (crypto) and giardia in both raw and treated water since the 1980s. Since that time. Denver Water has never detected a viable indication of either in the drinking water.

Crypto and giardia are microscopic organisms that, when ingested, can cause diarrhea, cramps, fever and other gastro-intestinal symptoms. Crypto and giardia are usually spread through means other than drinking water.

While most people readily recover from the symptoms, crypto and giardia can cause more serious illness in people with compromised immune

systems. The organisms are in many of Colorado's rivers and streams and are a result of animal wastes in the watershed. At the treatment plants, Denver Water removes crypto and giardia through effective filtration, and giardia is also killed by disinfection.

# SIGNIFICANT DEFICIENCY

Public water suppliers are required to notify customers of unresolved deficiencies in design, operation, maintenance or administration, or a failure or malfunction in a system component, including sources, treatment, storage or distribution system that have the potential to cause risks to the reliable delivery of safe drinking water.

# What happened?

During a state inspection in September

2022, inspectors found a deficiency related to storage conditions. There is no evidence that the water you drink was affected by this situation.

Storage conditions: State inspectors found that the hatches on the 56th Avenue tank were installed incorrectly. Denver Water is repairing the hatches according to the corrective action plan; repairs will be completed by May 2025.

# How did this impact drinking water quality?

There is no evidence that the water you drink was affected by this situation.

# What has been done to correct this situation?

Denver Water worked with the state health department to develop a corrective action plan and make necessary repairs.

# WATER QUALITY VIOLATIONS

# **Combined Uranium Sampling**

In 2024, our water system was in violation of a drinking water monitoring requirement. Although this situation did not pose a safety risk and does not require you to take action, as our customers you have a right to know what happened and what we did to correct this situation.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During the first quarter of 2024, monitoring and testing for combined uranium at the Moffat Treatment Plant was not completed.

#### What happened?

Combined uranium sampling at Moffat Treatment Plant is a quarterly requirement and was automatically scheduled for collection in January 2024. The treatment plant went offline January 9th, 2024 and the collection was not rescheduled when Moffat Treatment Plant came back online, which resulted in the monitoring violation.

### How did this impact water quality?

Five years of historical combined uranium results at Moffat Treatment Plant show no detection of uranium. Additionally, uranium was sampled monthly during 2024 while Moffat Treatment Plant was online during subsequent quarters, and no uranium was detected. Given historical and ongoing results, we do not believe there is a risk to public health.

#### What was done?

- Instituted monthly sampling for combined uranium at Moffat Treatment Plant to ensure redundancy in our sampling program.
- Developed procedure and trained staff on scheduling and verifying collection of compliance drinking water samples in tandem with plant outage schedules in accordance with our state compliance monitoring schedule.

This problem has been resolved. For more information, please contact Denver Water Customer Care, 303-893-2444, 7:30 a.m.-5:30 p.m., Monday through Friday.

# **Turbidity Monitoring**

In 2024, our water system was in violation of a state drinking water monitoring requirement at one of our treatment plants. Although this situation did not pose a safety risk and does not require you to take action, as our customers you have a right to know what happened and what we did to correct this situation.

#### What happened?

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether our drinking water meets health standards. During the first quarter of 2024 there was a 17-hour lapse in monitoring and testing for turbidity at one of our 17

regulatory turbidity meters at Foothills Treatment Plant due to lack of water flow to that specific meter. Turbidity measures suspended material in water, or, how clear the water is.

#### How did this impact water quality?

Turbidity at the treatment plant was confirmed to be within acceptable ranges at alternate sampling points during the 17-hour time lapse. Given results at the other 16 turbidity meters and all other water quality parameters within regulatory limits, we do not believe that water quality was impacted during the lapse in turbidity measurements at the single meter

#### What was done?

• A new alarm system was programmed to notify treatment plant staff when turbidity

- instrumentation flow rates are outside of manufacturer recommended settings. The alarms trigger immediate intervention and investigation to restore flow or further repair.
- All turbidity instrument flow alarm functions were then tested and confirmed to be in working order. This change in alarm settings supplement instrument checks done on a regular shift by shift basis to ensure all turbidity instruments have correct flow and meet manufacturer settings.

The problem was resolved in March 2024. For more information, please contact Denver Water Customer Care, 303-893-2444, 7:30 a.m.-5:30 p.m., Monday through Friday.

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 a public place or distributing copies by hand or mail.

# What is Denver Water doing about PFAS?

Denver Water is committed to ensuring a clean, safe water supply for our customers that meets or goes beyond state and federal drinking water standards.

We have tested for PFAS-related compounds in the source water that comes into our treatment plants and the drinking water that leaves the plants since 2017 and have not detected anything above the Environmental Protection Agency's new regulatory limits.

Learn more about PFAS monitoring at denverwater.org/PFAS.

# Fluoride in Denver Water's treated water

Fluoride is a naturally occurring compound in Denver Water's source water. It enters the water when fluoriderich minerals in soils and rock dissolve.

The Centers for Disease Control and Prevention recognizes the widespread adoption of community fluoridation as one of the 10 greatest public health achievements of the 20th century.

Since Denver Water began monitoring and managing the level of fluoridation in our water back in 1953, we have relied on the latest science from the foremost national and local authorities to inform our policy.

Learn more at denverwater.org/Fluoride.

# THE TREATMENT PROCESS

The treatment process consists of five steps:

# COAGULATION/ **FLOCCULATION**

Raw water is drawn into mixing basins at our treatment plants where we add positively charged coagulant and polymer to bond with the negatively charged particles that are suspended in the water that we want to remove. As the negatively charged particles and the positively charged coagulants are joined together, they form larger particles called floc.



Over time, the now larger floc particles become heavy enough to settle to the bottom of a basin from which sediment is removed.

# FILTRATION

The water is then filtered through layers of filter media made of anthracite coal. As the water moves through the filter media, larger particles get caught in the spaces between the grains of anthracite, and clear water emerges.

# **DISINFECTION**

As protection against any bacteria, viruses and other microbes that might remain, disinfectant is added before the water flows into underground reservoirs throughout the distribution system and into your home or business. Denver Water carefully monitors the amount of disinfectant added to maintain quality of the water at the farthest reaches of the system.

# CORROSION CONTROL

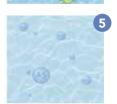
Treatment operators maintain the water's pH by adding alkaline substances to make the water less corrosive. This helps strengthen an existing coating on the inside of water service lines. The coating reduces the potential for lead to get into the water.











# REGULATED WATER CONTAMINANTS: WHAT IS IN THE WATER?

# TERMS, ABBREVIATIONS AND SYMBOLS

Some of the terms, abbreviations and symbols contained in this report are unique to the water industry and might not be familiar to all customers. Terms used in the table are explained below.

#### action level (AL)

Concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

#### average

Typical value.

#### below reporting level (BRL)

Below the reportable level for an analysis or below the lowest reliable level that can be measured.

#### compliance value

Single or calculated value used to determine if a regulatory contaminant level is met. Examples of calculated values include average, 90th percentile, running annual average, locational running annual average.

#### contaminant

Potentially harmful physical, biological, chemical or radiological substance.

#### formal enforcement action

Escalated action taken by the state (due to the risk to public health, or number or severity of violations) to bring a noncompliant water system back into compliance.

#### health-based

Violation of either a maximum contaminant level or treatment technique.

#### gross alpha

Gross alpha particle activity compliance value. It includes r**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 maximum contaminant level violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

#### locational running annual average (LRAA)

The average of sample results for samples collected at a particular monitoring location during the most recent four calendar quarters.

#### maximum contaminant level (MCL)

Highest level of a contaminant allowed in drinking water. MCLs are set as close to the maximum contaminant level goal as feasible using the best available treatment technology.

#### maximum contaminant level goal (MCLG)

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 disinfection level (MRDL)

Highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of disinfectant is necessary to control microbial contaminants.

# maximum residual disinfection 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 in excess of 5 NTU is just noticeable to the typical person.

#### non-health-based

A violation that is not a maximum contaminant level or treatment technique.

#### not applicable (N/A)

Does not apply or not available.

#### parts per billion (ppb)

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 million.

### parts per million (ppm)

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.

#### picocuries per liter (pCi/L)

Measure of radioactivity in water.

#### range (R)

Lowest value to the highest value.

#### running annual average (RAA)

The average of sample results for samples collected during the most recent four calendar quarters.

#### sample size

Number or count of values. (i.e., number of water samples collected).

# secondary maximum contaminant level (SMCL)

Non-enforceable, recommended limits for substances that may affect the taste, odor, color, or other aesthetic qualities of drinking water.

### treatment technique (TT)

Required process intended to reduce the level of a contaminant in drinking water.

#### turbidity

Measure of suspended material in water. In the water field, a turbidity measurement, expressed in nephelometric turbidity units (NTU), is used to indicate clarity of water.

# unregulated contaminant monitoring rule five (UCMR5)

The fifth list of unregulated contaminants, created by the Environmental Protection Agency, to be monitored by public water systems. A new list is determined every five years.

#### variance and exemptions

Department permission not to meet maximum contaminant level or treatment technique under certain conditions.

#### violation

Failure to meet a Colorado primary drinking water regulation.

# **REGULATED WATER CONTAMINANTS: WHAT WE TEST FOR**

Data collected throughout 2024

Denver Water monitors for the list of regulated parameters below in our treated drinking water. Sample points include entry points to the distribution system from our four treatment plants — Foothills, Marston, Moffat, Northwater — and sites throughout Denver Water's distribution system.

Inorganio	: Chemicals	,	/olatile Orga	nic Chemicals				
Antimony	Thallium	Benzene	1,2-Dich	loropropane	Trichloroethylene			
Arsenic	Sodium	Carbon Tetrachloride	Ethyl	lbenzene	Xylenes (total)			
Barium	Total Chlorine	1,2-Dichloroethane	Monoch	lorobenzene	Vinyl Chloride			
Beryllium	Fluoride	o-Dichlorobenzene						
Cadmium	Nitrate	p-Dichlorobenzene	Tetrachl	oroethylene				
Chromium	Nitrite	1,1-Dichloroethylene	To	oluene				
Mercury	Lead	cis-1,2-Dichloroethylene	1,2,4-Tric	hlorobenzene				
Nickel	Copper	trans-1,2-Dichloroethylene	1,1,1-Trio	chloroethane				
Selenium		Dichloromethane						
Synthetic Org	ganic Chemicals		Byproducts					
1,2-Dibromo-3-chloropro- pane	Endothall	Haloacetic Acids (HAA5) are regulated as the sum of the five contaminants listed below:  Total Trihalomethanes (TT regulated as the sum of t contaminants listed be						
2,4,5-TP	Endrin	Dibromoacetic Acid			Chloroform			
2,4-D	Ethylene dibromide	Dichloroacetic Acid		Bron	nodichloromethane			
Aldicarb	Heptachlor	Monobromoacetic Ac	cid	Dibr	omochloromethane			
Aldicarb sulfone	Heptachlor Epoxide	Monochloroacetic Ac	id		Bromoform			
Aldicarb sulfoxide	Hexachlorobenzene	Trichloroacetic Acid	d					
Atrazine	Hexachlorocyclopentadiene	F	Radiological (	Contaminants				
Benzo(a)pyrene	Lasso (Alachlor)	Gross /	Alpha Emitte	rs excluding Ura	nium			
BHC-Gamma	Methoxychlor		Combine	ed Radium				
Carbofuran	Oxamyl		Combine	d Uranium				
Chlordane	Pentachlorophenol	Microbiological Contaminants						
Dalapon	Picloram	Total Coliform						
Di(2-ethylhexyl) adipate	Polychlorinated Biphenyls	ls <i>E.coli</i>						
Di(2-ethylhexyl) phthalate	Simazine	Other Regulated Contaminants						
Dinoseb	Toxaphene	Total Organic Carbon						
Diquat			Turk	oidity				

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Foothills Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	Inorg	anic Contamin	ants Detec	ted at the	Entry Poir	nt to the D	istributio	n System –	- Foothills
Chemical Parameters	ical Parameters Year Sampling Frequency Average		Range	Unit of MCL Measure		MCLG	Standard Met	Typical Sources	
Barium	2024	Monthly	34.0	30.0-36.5	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Fluoride	2024	Monthly	675	530-930	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Nitrate as N	2024	Monthly	107	BRL-144	ppb	10,000	10,000	1	Runoff from fertilizer use, leaching from septic tanks and sewage, erosion of natural deposits.
Nickel	2024	Monthly	1.10	1.0-1.2	ppb	N/A	N/A	1	Discharge from industrial uses such as transportation, chemical industry, electrical equipment and construction.
Sodium	2024	Monthly	19,520	17,700- 21,100	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

	Summary of Turbidity Sampled at the Entry Point to the Distribution System — Foothills												
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources						
Turbidity	2024	Daily	Highest single measurement: 0.131 NTU (August)	NTU	Maximum 1 NTU for any one single measurement.	✓	Soil runoff						
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU.	1	Soil runoff						

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total Org	anic Car	bon (Disinfection By	products Precursor) Removal Ratio of Raw and Fi	nished Water –	– Foothills
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/ or demonstrates compliance with alternative criteria.	1	Natural organic matter present in the environment.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

		Radiologic	als Detect	ed at the E	ntry Poin	t to the	Distribu	ıtion System –	– Foothills
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	0.75	BRL-1.5	pCi/L	5	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Gross Alpha (excluding Uranium)	2024	6-9 years	N/A	1.8	pCi/L	15	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Combined Uranium	2024	Monthly	Average	Range	nnh	30	0	<b>✓</b>	Erosion of natural deposits, mine drainage.
Combined Orallium	2024	IVIOLITIIII	0.1	BRL-0.5	ppb	30			Elosion of Hattiai deposits, Hillie dialilage.

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Marston Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	lno	rganic Cont	aminants De	tected at the	e Entry Poi	nt to the D	istributio	n System -	— Marston
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Arsenic	2024	Monthly	0.1	BRL-0.8	ppb	10	0	1	Erosion of natural deposits, discharge of drilling wastes
Barium	2024	Monthly	39.9	33.9-49.9	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Fluoride	2024	Monthly	636	510-760	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories
Nitrate as N	2024	Monthly	119	58-167	ppb	10,000	10,000	✓	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Nickel	2024	Monthly	1.65	1.0-2.3	ppb	N/A	N/A	1	Discharge from industrial uses such as transportation, chemical industry, electrical equipment & construction.
Sodium	2024	Monthly	23,350	19,100- 29,300	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water

	Sui	mmary of Tu	rbidity Sampled at the Entry I	oint to th	e Distribution System — Mar	son	
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources
Turbidity	2024	Daily	Highest single measurement: 0.129 NTU (February)	NTU	Maximum 1 NTU for any one single measurement.	1	Soil runoff
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU	1	Soil runoff

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total	Organic C	Carbon (Disin	fection Byproducts Precursor) Removal Ratio of	Raw and Finish	ed Water — Marston
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources
Total Organic Carbon Ratio	2024	Once per month	**Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	✓	Natural organic matter present in the environment.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

		Radiologi	cals Detect	ed at the E	ntry Point	to the D	istributior	System — I	<b>Marston</b>
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	0.95	BRL-1.9	pCi/L	5	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Gross Alpha (excluding Uranium)	2024	6-9 years	N/A	2.7	pCi/L	15	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Combined Uranium	2024	Monthly	Average	Range	nnh	30	0	1	Erosion of natural deposits,
Combined Orallium	2024	ivioritiny	0.2	BRL-1.4	ppb	30			mine drainage.

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Moffat Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	ln	organic Con	taminants l	Detected a	t the Entry	Point to t	he Distri	bution Sys	tem — Moffat
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Barium	2024	Monthly	21.7	18.9-26.8	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Chromium	2024	Monthly	0.33	BRL-1.0	ppb	100	100	1	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2024	Monthly	585	480-640	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Nitrate as N	2024	Monthly	86	76-93	ppb	10,000	10,000	1	Runoff from fertilizer use, leaching from septic tanks and sewage, erosion of natural deposits.
Sodium	2024	Monthly	12,230	11,300- 12,900	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

	Summary of Turbidity Sampled at the Entry Point to the Distribution System — Moffat												
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources						
Turbidity	2024	Daily	Highest single measurement: 0.208 NTU (July)	NTU	Maximum 1 NTU for any one single measurement	1	Soil runoff						
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU	1	Soil runoff						

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total	Organic	Carbon (Dis	infection Byproducts Precursor) Removal Ratio of Raw	and Finished	Water — Moffat
Chemical Parameters	Year	Frequency	Treatment Technique Requirement	Standard Met	Typical Sources
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	1	Natural organic matter present in the environment.

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

		Radiologica	als Detected a	t the Entr	y Point to the	Distribut	tion Systen	n — Moffat	
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Combined Radium (Ra-226 and Ra-228)	2021	6-9 years	1.1	BRL-2.1	pCi/L	5	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Gross Alpha (excluding Uranium)	2023	6-9 years	3	1.1-4.8	pCi/L	15	0	1	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.
Combined Uranium	2024	Monthly	BRL	BRL	ppb	30	0	1	Erosion of natural deposits, mine drainage.

The data tables below include regulated contaminants from page 7 that were monitored for and detected at Northwater Treatment Plant, one entry point to the Denver Water distribution system, in 2024. If a contaminant from page 7 is not displayed in these tables, then it was not detected above the reporting limit at the sample location.

	Inorg	anic Contan	ninants Det	ected at the I	Entry Point	to the Dis	tribution	System —	Northwater
Chemical Parameters	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources
Barium	2024	Monthly	23.4	17.3-30.2	ppb	2,000	2,000	1	Erosion of natural deposits, discharge of drilling wastes.
Chromium	2024	Monthly	0.80	BRL-1.1	ppb	100	100	1	Discharge from steel and pulp mills; erosion of natural deposits.
Fluoride	2024	Monthly	251	BRL-600	ppb	4,000 (2,000 is SMCL)*	4,000	1	Erosion of natural deposits, water additive that promotes strong teeth, discharge from fertilizer and aluminum factories.
Nitrate as N	2024	Monthly	76	60-93	ppb	10,000	10,000	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
Sodium	2024	Monthly	13,844	10,200- 16,500	ppb	N/A	N/A	1	Naturally occurring.

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor or color) in drinking water.

	Summary of Turbidity Sampled at the Entry Point to the Distribution System — Northwater												
Chemical Parameters	Year	Sampling Frequency	Level Found	Unit of Measure	Treatment Technique Requirement	Standard Met	Typical Sources						
Turbidity	2024	Daily	Highest single measurement: 0.141 NTU (October)	NTU	Maximum 1 NTU for any one single measurement.	1	Soil runoff						
Turbidity	2024	Daily	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	NTU	In any month, at least 95% of samples must be less than 0.3 NTU.	1	Soil runoff						

Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

Total O	Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water — Northwater									
Chemical Parameters Year Frequency Treatment Technique Requirement		Standard Met	Typical Sources							
Total Organic Carbon Ratio	2024	Once per month	Denver Water uses enhanced treatment to remove the required amount of natural organic material and/or demonstrates compliance with alternative criteria.	1	Natural organic matter present in the environment.					

Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts including trihalomethanes (TTHMs) and haloacetic acids (HAA5s). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.

	Radiologicals Detected at the Entry Point to the Distribution System — Northwater											
Chemical Parameters	Year	Sampling Frequency	Average	Result	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources			
Gross Alpha (excluding Uranium)	2024	Quarterly	BRL	BRL	pCi/L	15	0	✓	Erosion of natural deposits, mine drainage, industrial or manufacturing discharges.			
Combined Uranium	2024	Monthly	BRL	BRL	ppb	30	0	1	Erosion of natural deposits, mine drainage.			

#### The following data tables provide regulated contaminants in Denver Water's distribution system.

	Lead and Copper Sampled in the Distribution System											
Contaminant Name	Period	Tap Sample Range	90th Percentile	Sample Size	Unit of Measure		Sample Sites Above Action Limit	Standard Met	Typical Sources			
Copper	1/1/2024 - 6/30/2024	BRL-826	60	402	ppb	1,300	0	1	Corrosion of household plumbing; erosion of natural deposits.			
Lead	1/1/2024 - 6/30/2024	BRL-44.6	4	457	ppb	15	7	1	Corrosion of household plumbing; erosion of natural deposits.			
Copper	7/1/2024 - 12/31/2024	BRL-261	60	478	ppb	1,300	0	✓	Corrosion of household plumbing; erosion of natural deposits.			
	7/1/2024 - 12/31/2024			478	ppb	15	3	1	Corrosion of household plumbing; erosion of natural deposits.			

	Microbial Contaminants Regulated in the Distribution System									
Name	Year	Sampling Frequency		MCLG	Unit of Measure	Highest Monthly Percentage	Number of Positives	Standard Met	Typical Sources	
Total Coliform (T. coli)	2024	Daily	No more than 5% positive per month		Present/ Absent	No positive samples in 2024	0 out of 4,723 total samples 0; 0 <i>E. coli</i> positive samples	1	Naturally present in the environment.	

	Disinfectants Sampled in the Distribution System*										
Name Year Results Number of Samples Frequency MRDL							Typical Sources				
Disinfectant as Total Cl2	2024	Lowest period percentage of samples above 0.2 ppm: 100%	0	Daily	4.0 ppm	1	Drinking water disinfectant used to control microbial growth.				

<sup>\*</sup>Treatment technique requirement: at least 95% of samples per period (month or quarter) must be at least 0.2 ppm.

	Disinfection Byproducts Sampled in the Distribution System										
Name	Year	Sampling Frequency	Highest Locational RAA	Range	Unit of Measure	MCL	MCLG	Standard Met	Typical Sources		
Total Trihalo -methanes (TTHM)	2024	Quarterly	37.9	16.4-64.7	ppb	80	N/A	✓	Byproduct of drinking water disinfection.		
Haloacetic Acids (HAA5s)	2024	Quarterly	22.9	7.7-37.2	ppb	60	N/A	1	Byproduct of drinking water disinfection.		

### The data tables below provide information on unregulated parameters that were detected in the Denver Water distribution system.

Wat	Water Quality Parameters with Secondary Maximum Contaminant Levels Sampled in the Distribution System										
Name	Year	Sampling Frequency	Average	Range	Unit of Measure	MCL	SMCL*	Standard Met	Typical Sources		
Aluminum	2024	Quarterly	39.5	17.5-81.0	ppb	N/A	50-200	1	Erosion of natural deposits.		
Chloride	2024	Quarterly	21,400	8,700- 34,500	ppb	N/A	250,000	1	Naturally occurring; road salt.		
Copper	2024	Quarterly	5.9	BRL-69.5	ppb	N/A	1,000	1	Corrosion of household plumbing; erosion of natural deposits.		
Manganese	2024	Quarterly	2.5	BRL-10.6	ppb	N/A	50	1	Naturally occurring.		
Sulfate	2024	Quarterly	49,200	22,000- 69,000	ppb	N/A	250,000	✓	Naturally occurring.		
Zinc	2024	Quarterly	2.5	BRL-11.1	ppb	N/A	5,000	1	Naturally occurring.		

<sup>\*</sup>Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Additional Water Quality Parameters Sampled in the Distribution System										
Name	Year	Sampling Frequency	Average	Range	Unit of Measure	Typical Sources				
Alkalinity	2024	Monthly	62,200	44,000-81,000	ppb	Erosion of natural deposits.				
Total Hardness	2024	Quarterly	89,000	48,000-116,000	ppb	Erosion of natural deposits.				
Conductivity	2024	Quarterly	296	140-410	μs/cm	Naturally occurring.				
Potassium	2024	Quarterly	1,700	810-2,200	ppb	Erosion of natural deposits.				
Calcium	2024	Quarterly	25,300	15,400-33,100	ppb	Erosion of natural deposits.				
Magnesium	2024	Quarterly	6,400	2,400-8,200	ppb	Erosion of natural deposits.				
Boron	2024	Quarterly	12.1	BRL-19.8	ppb	Erosion of natural deposits.				

These parameters do not have an EPA MCL or SMCL, but can be helpful in understanding the buffering capacity and mineral content of the water. Some applications of these parameters include understanding scale build-up on water fixtures, caring for a home aquarium or brewing beer.

# **TESTING FOR UNREGULATED CONTAMINANTS**

Since 1996, the Environmental Protection Agency, through its Unregulated Contaminant Monitoring Rule, every five years requires water utilities across the country to test for a list of substances that are suspected of being in drinking water but are not currently regulated under the Safe Drinking Water Act. Utilities report their test results to the EPA, which uses the information to learn more about the presence of these substances and decide whether they should be regulated in the future to protect public health.

Denver Water's 2024 test results were reported to the EPA as required. The data tables

Lithium

below include substances that were detected during Denver Water's tests and the levels at which they were found.

The American Water Works Association has more information about the rule and the process on its website: drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Information about the rule also can be found on the EPA's website at <a href="https://www.epa.gov/dwumr/learn-about-unregulated-contaminant-monitoring-rule">www.epa.gov/dwumr/learn-about-unregulated-contaminant-monitoring-rule</a> or you can contact the Safe Drinking Water Hotline at 800-426-4791 or <a href="https://www.epa.gov/drink/contact.cfm">water.epa.gov/drink/contact.cfm</a>.

UCMR5: PFAS Contaminants Sampled	at Entry Po	oint to the Dis	tribution Sy	stem — All Treatm	ent Plants
Chemical Parameters	Year	Average	Range	Unit of Measure	Minimum Reporting Level
11-chloroeicosafluoro-3-oxaundecane-1-sulfonic acid (11Cl-PF3OUdS)	2023/2024	BRL	BRL	ppb	0.005
1H,1H, 2H, 2H-perfluorohexane sulfonic acid (4:2FTS)	2023/2024	BRL	BRL	ppb	0.003
1H,1H, 2H, 2H-perfluorooctane sulfonic acid (6:2FTS)	2023/2024	BRL	BRL	ppb	0.005
1H,1H, 2H, 2H-perfluorodecane sulfonic acid (8:2 FTS)	2023/2024	BRL	BRL	ppb	0.005
9-chlorohexadecafluoro-3-oxanonane-1-sulfonic acid (9CI-PF3ONS)	2023/2024	BRL	BRL	ppb	0.002
4,8-dioxa-3H-perfluorononanoic acid (ADONA)	2023/2024	BRL	BRL	ppb	0.003
Hexafluoropropylene oxide dimer acid (HFPO DA)	2023/2024	BRL	BRL	ppb	0.005
Nonafluoro-3,6-dioxaheptanoic acid (NFDHA)	2023/2024	BRL	BRL	ppb	0.02
Perfluorobutanoic acid (PFBA)	2023/2024	BRL	BRL	ppb	0.005
Perfluorobutanesulfonic acid (PFBS)	2023/2024	BRL	BRL	ppb	0.003
Perfluorodecanoic Acid (PFDA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorododecanoic Acid (PFDoA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro(2-ethoxyethane)sulfonic acid (PFEESA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoroheptanesulfonic acid (PFHpS)	2023/2024	BRL	BRL	ppb	0.003
Perfluoroheptanoic acid (PFHpA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorohexanoic Acid (PFHxA)	2023/2024	BRL	BRL	ppb	0.003
Perfluorohexanesulfonic acid (PFHxS)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro-4-methoxybutanoic acid (PFMBA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoro-3-methoxypropanoic acid (PFMPA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorononanoic Acid (PFNA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorooctanoic Acid (PFOA)	2023/2024	BRL	BRL	ppb	0.004
Perfluorooctanesulfonic acid (PFOS)	2023/2024	BRL	BRL	ppb	0.004
Perfluoropentanoic acid (PFPeA)	2023/2024	BRL	BRL	ppb	0.003
Perfluoropentanesulfonic acid (PFPeS)	2023/2024	BRL	BRL	ppb	0.004
Perfluoroundecanoic acid (PFUnA)	2023/2024	BRL	BRL	ppb	0.002
N-ethyl perfluorooctanesulfonamidoacetic acid (NEtFOSAA)	2023/2024	BRL	BRL	ppb	0.005
N-methyl perfluorooctanesulfonamidoacetic acid (NMeFOSAA)	2023/2024	BRL	BRL	ppb	0.006
Perfluorotetradecanoic acid (PFTA)	2023/2024	BRL	BRL	ppb	0.008
Perfluorotridecanoic acid (PFTrDA)	2023/2024	BRL	BRL	ppb	0.007

In 2023, three treatment plant entry points (Foothills, Marston and Moffat) were tested for the above Per- and polyfluoroalkyl Substances (PFAS) under UCMR5, and were below the minimum reporting levels. In 2024, North Treatment Plant entry point was tested for the above Per- and polyfluoroalkyl Substances (PFAS) under UCMR5, and were below the minimum reporting levels.

UCMR5 Lithium	Contaminant Samp	led at Entry Poir	nt to the Distri	bution Syste	em — Foothills Trea	atment Plant				
Chemical Para	meters	Year	Average	Range	Unit of Measure	Minimum Reporting Level				
Lithium		2023	5.30	BRL-10.8	ppb	9				
UCMR5 Lithium Contaminant Sampled at Entry Point to the Distribution System — Marston Treatment Plant										
Chemical Para	meters	Year	Average	Range	Unit of Measure	Minimum Reporting Level				
Lithium		2023	9.23	9- 9.4	ppb	9				
UCMR5 Lithiur	n Contaminant Sam	pled at Entry Poi	int to the Dist	ibution Syst	tem — Moffat Trea	tment Plant				
Chemical Para	meters	Year	Average	Range	Unit of Measure	Minimum Reporting Level				
Lithium		2023	BRL	BRL	ppb	9				
UCN	UCMR5: Lithium Contaminant Sampled at Entry Point to the Distribution System - NTP									
Chemical Para	meters	Year	Average	Range	Unit of Measure	Minimum Reporting Level				

BRL

BRL

ppb

9

2024

