

# WATER QUALITY REPORT

**Consumer Confidence Report (CCR)** 

East Cherry Creek Valley Water & Sanitation District 6201 S. Gun Club Road Aurora, CO 80016

> PWSID #CO0103035 Calendar Year 2022

ECCV Northern Water Treatment Plant near Brighton, CO

# At East Cherry Creek Valley Water and Sanitation District (ECCV), our mission is sustaining our community by providing safe, reliable water. The quality of the water in your home is of the utmost importance to us.

This report is intended to give you valuable information about your water. It will help you to understand where the water you use comes from, and how water contributes to your family's health. ECCV wants its customers to be informed about the services we provide, and the quality of the water we deliver to you every day. If you have any questions about this report or concerns about water quality, please contact **Sara Brewer**, **Water Quality Analyst at 303-693-3800 ext 191** or visit our website: www.eccv.org

# Where Does My Water Come From?

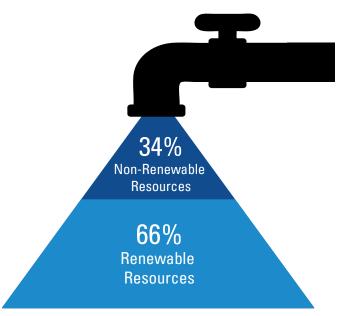
#### In 2022, ECCV received its water supply from two sources:



Non-Renewable Resources- 34%

#### **Deep Aquifers**

ECCV uses approximately 86 wells within the District and in its Western Well Field. These wells draw water from the Denver Basin Aquifer. Aquifers are open spaces, typically filled with gravel and sand, in underground bedrock layers that contain water. Groundwater from aquifers typically needs little treatment to meet drinking water standards because it is not exposed to environmental pollutants. Deep aquifers are considered a "non-renewable" source because they cannot be replenished with rainfall or snow melt as quickly as the water is withdrawn.





#### Renewable Resources- 66%

#### **ECCV Northern Project**

This project delivers renewable water near the South Platte River and comprises more than half of ECCV's annual water supply. ECCV stores this water in the Beebe Draw aquifer near Brighton. When needed, ECCV's Northern Water Treatment Plant uses thirteen wells to extract the water. ECCV then treats the water with Reverse Osmosis and disinfection. Once treated, the water is transported through a 31-mile pipeline to our distribution system. In order to improve sustainability and redundancy, ECCV receives water from Denver Water and from the South Metro WISE Authority pipeline. Denver Water treats surface water from five reservoirs that receive water from the South Platte River and the sources that feed Dillon Reservoir and the Fraser River. The WISE Authority is a water wholesaler that does not have any of its own sources. The WISE Authority delivers water from ECCV's western well field and Aurora Water. Aurora Water treats surface water from 12 reservoirs and lakes that receive water from the Colorado, Arkansas and South Platte River basins.

All water sources are tested regularly and meet all State and Federal drinking water regulations.

## UNIQUE CHARACTERISTICS OF ECCV WATER

The mineral content of ECCV's water varies from the **two sources** enough to cause taste and odor differences in the water as wells are rotated and supplies blended. ECCV's treatment plant provides more consistency to the water supply and less variation in the taste and odor of the water.

# More Information About Your Water

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

• Microbial contaminants Such as viruses and bacteria: These may come from wastewater treatment facilities, septic systems, agricultural and/or livestock operations and wildlife.

#### Inorganic contaminants

Such as salts and metals: These 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

Which may originate from a variety of sources, such as: agriculture, urban storm water runoff, and septic systems.

Organic chemical contaminants

This includes synthetic and volatile organic chemicals. These are byproducts of industrial processes and petroleum production. They may also come from gas station, urban stormwater runoff, and septic systems.

#### Radioactive contaminants

These can be naturally occurring or the result of oil and gas production and mining activities.

ECCV ensures that your tap water is safe to drink by adhering to EPA regulations that limit the amount of certain contaminants in water provided by public water systems.

#### Iron and Manganese

Iron and manganese are naturally occurring minerals that exist in deep aquifers where ECCV gets a portion of its water supply. While infrequent, iron and manganese can cause temporary discoloration in water. This presents as a slight yellowing or a rust color in the water.

In instances where discoloration is present the water remains safe to consume. Drinking water regulations classify both iron and manganese as secondary contaminants, as they can impact the look, taste, and odor of water but do not present acute health risks. Suggested limits for iron and manganese in drinking water, known as Secondary Maximum Contaminant Limits (MCL), are listed below along with results of testing for iron and manganese in water entering the ECCV system:

	2022 Average	Secondary Maximum Contaminant Limit (MCL)
Iron	0.047 mg/L	0.3 mg/L
Manganese	0.012 mg/L	0.05 mg/L

ECCV flushes water lines each spring to remove iron and manganese that may have settled in the lines. Customers who experience discoloration issues that do not clear after running a faucet on cold for 15 minutes should contact ECCV as additional flushing may be necessary. ECCV also encourages customers to avoid doing laundry until water is once again running clear to prevent possible staining.

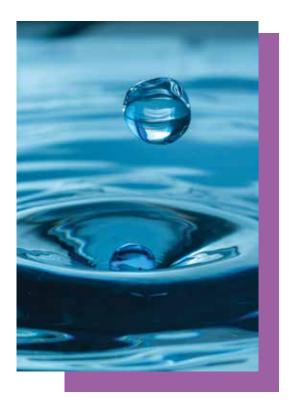
# **Drinking Water and Your Health**

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily mean 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 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.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons; such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice concerning 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.



## **GUARDING AGAINST LEAD IN YOUR HOME'S WATER**

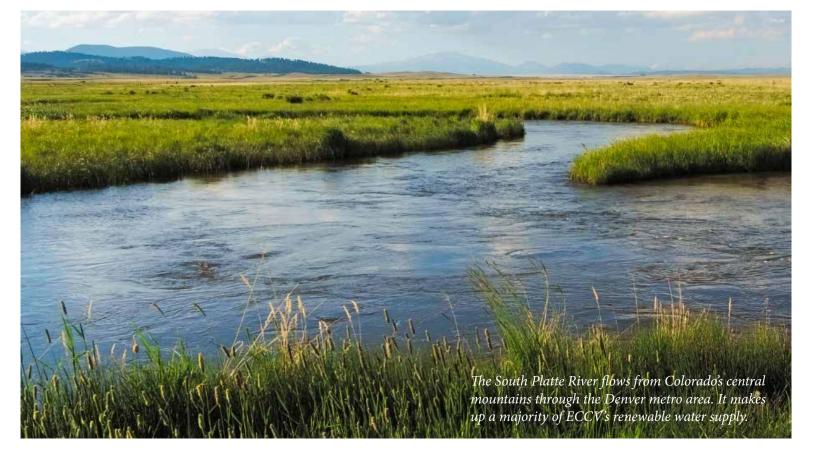
If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. ECCV is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline (1-800-426-4791) or at http://water.epa.gov/drink/info/lead.

## **Source Water Protection**

The Colorado Department of Public Health & Environment (CDPHE) has provided ECCV with a Source Water Assessment Report for the District's water supply. To obtain a copy of the report or for information about Denver or Aurora Water's potential sources of contamination, visit the CDPHE website: https://www.colorado.gov/pacific/cdphe/swap-assessment-phase or contact ECCV at 303-693-3900 ext 191.

Potential sources of contamination in our source water area come from commercial and industrial activities such as leaking underground storage tanks. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has occurred or will occur. ECCV can use this information to evaluate our current water treatment capabilities and prepare for future contamination threats. This can help ECCV ensure quality water is delivered to your home. In addition, the source water assessment results provide a starting point for developing a source water protection plan.



# Testing for Your Safety

ECCV routinely monitors for contaminants in its drinking water supply, in accordance with Federal and State laws. The table below shows all of the applicable drinking water contaminants detected from January 1 to December 31, 2022, unless otherwise noted. Constituents not detected within the last five (5) years are not listed. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. You can find the definitions to the terms in this table on Page 7 of this report.

# ECCV-Water QualityTable

### **Disinfectants Sampled in the Distribution System**

TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm OR If sample size is less than 40 no more than 1 sample is below 0.2 ppm Typical Sources: Water additive used to control microbes

Disinfectant Name	Time Period	Results	Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chlorine	December, 2022	Lowest period percentage of samples meetingTT requirement: 100%	0	77	No	4.0 ppm

## Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percen- tile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	01/10/2022 to 04/11/2022	0.07	61	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	01/10/2022 to 04/11/2022	1	61	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	07/14/2022 to 11/15/2022	0.09	61	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/14/2022 to 11/15/2022	2	61	ppb	15	3	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfec	tion	Bypro	ducts S	ampl	ed in th	e Dis	tributio	n System	
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Halo- acetic Acids (HAA5)	2022	9.31	0 to 19	32	ppb	60	N/A	No	Byproduct of drinking water disinfection
TotalTriha- lomethanes (TTHM)	2022	32.16	0 to 72.2	32	ppb	80	N/A	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	MCLG	MCL Violation	Typical Sources
Gross Alpha	2021	1.68	0 to 5.32	8	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2022	1.1	0.2 to 2	4	pCi/L	5	0	No	Erosion of natural deposits
Combined Uranium	2021	3.5	3 to 4	8	ppb	30	0	No	Erosion of natural deposits

Inorgani	c Co	ntami	nants S	ample	ed at th	e Enti	ry Point	to the I	Distribution System
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2021	0.02	0.01 to 0.03	8	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2021	0.88	0 to 2	8	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2021	0.44	0.37 to 0.55	8	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	0.18	0 to 1	11	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2021	2.13	2 to 3	8	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
				Se	condary	Contar	inants**		
**Secon				•					osmetic effects (such as skin, drinking water.
Contaminant Name	Year	Average	Rang Low – I		Sample	e Size	Unit of	Measure	Secondary Standard
Sodium	2021	61.2	51.4 to	67.3	8		p	pm	N/A

## **Terms and Definitions**

**br** means below the reportable level for an analysis; the reportable level is the lowest reliable level that can be measured.

**Trigger levels** are limits that when reached warrant further investigation and/or action as per a specific regulation.

**MRDLG** is the Maximum Residual Disinfectant Level Goal.

**Contaminant:** A potentially harmful physical, biological, chemical substance.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to MCLG's as feasible using the best available treatment technology.

**Maximum Contaminant Level Goal (MCLG):** The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

#### Secondary Maximum Contaminant Levels (SMCL): are

non-enforceable recommended limits for substances that affect taste, odor, color or other aesthetic qualities of drinking water, rather than posing a health risk.

**Parts per billion (ppb):** Equivalent to micrograms per liter. One ppb is comparable to one drop of water in 55,000 gallons.

**Parts per million (ppm):** Equivalent to milligrams per liter. One ppm is comparable to one drop of water in 55 gallons.

**pCi/L** is picoCuries per Liter. This is a radiological unit measuring radioactivity per unit volume.

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

Action Level (AL): the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

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Disinfectants Sampled in the Distribution System

		וי או וכמשו שט /0 טו	adilipica per perio	Typical	Sources: Water ac	Iditive used to cont	rol microbes		Type and the set of th
Disinfectant Name	Time Period		Results	Its		Number of Samples Below Level	Sample Size	TT Violation	MRDL
Chloramine	December, 2022	Lowest period pe	Lowest period percentage of samples meeting TT	es meeting TT	requirement: 100%	0	354	No	4.0 ppm
				Lead and	<b>Copper Sampled</b>	d in the Distribution System	ution System		
Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance		Typical Sources
Conner	01/02/2022 to 06/30/2022	0.06	395	and a	13	c	Q	Corrosion of household	Corrosion of household nlumhing systems: Erosion of natural demosits
l ead	01/02/2022 to 06/30/2022	30	395	quu	2 2	> ~	e ov	Corrosion of household	Corrosion of household hlumhing systems: Erosion of natural denosits
Conner	07/01/2022 to 12/30/2022	0.05	320	and muc	2 4		e v	Corrosion of household	Corrosion of household humbing systems; Erosion of natural deposits
Lead	07/01/2022 to 12/30/2022	3.8	329	qaa	15	~	2 9 9	Corrosion of household	Corrosion of household plumbing systems; Erosion of natural deposits
				R	Byproducts Sampled in the Distribution System	npled in the Dis	tribution Sys	tem	
Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2022	17.01	8.1 to 30.4	64	qdd	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2022	27.02	14.9 to 46.9	64	qdd	80	N/A	N	Byproduct of drinking water disinfection
	_	Total Org	Total Organic Carbon (	(Disinfectio		recursor) Remo	oval Ratio of I	n Byproducts Precursor) Removal Ratio of Raw and Finished Wate	Vater
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation		Typical Sources
Total Organic Carbon Ratio	2022	1.2	0.86 to 1.63	61	Ratio	1.00	No		Naturally present in the environment
		*If mi	*If minimum ratio not met and no viol Summarv of Turbiditv	um ratio not met and no vio Summary of Turbidity	lation identified then / Sampled at the	ation identified then the system achieved compliance using alternativ Sampled at the Entry Point to the Distribution System	ved compliance u the Distribut	ation identified then the system achieved compliance using alternative criteria. Sampled at the Entry Point to the Distribution System	
Contaminant Name	Sample Date		Level Found		TT Requirement	irement	TT Violation	<b>Tvpical Sources</b>	
Turbidity	Date/Month: Aug	Highest	Highest single measurement: 0.276 NTU	ient:	Maximum 1 NTU for al measurement	Maximum 1 NTU for any single measurement	No	Soil Runoff	
Turbidity	Month: Dec	Lowest monthly TT requireme	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	ples meeting 3gy: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	at least 95% of ess than 0.3 NTU	No	Soil Runoff	
			Radion	Radionuclides Sa		mpled at the Entry Point to the	Distribution System	System	
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Gross Alpha	2021	0.77	0.5 to 1	3	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2021	0.92	0 to 2.1	9	pCi/L	5	0	0N :	Erosion of natural deposits
Combined Uranium	7077	0.0	Inorganic C	ا ا Contaminan	ts Sampled at the	JU he Entry Point (	Entry Point to the Distribution System	no Ition Svstem	Erosion of natural deposits
Contaminant Name	Year	Average		Sample Size		MCL	MCLG	MCL Violation	Typical Sources
Barium	2022	0.03	0.02 to 0.05	31	mdd	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium	2022	0	0 to 0.1	31	qdd	വ	Q		Corrosion of galvanized pipes, erosion of natural deposits, dis- charge from metal refineries; runoff from waste batteries and paints
Chromium	2022	0.19	0 to 1.4	31	qdd	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2022	0.63	0.55 to 0.78	31	mqq	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	0.05	0 to 0.16	31	mdd	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
**Secd	**Secondary standards are non-enforceable guidelines for contaminants that may	forceable guidelin	les for contaminar	its that may c	Secondary ( ause cosmetic effec	Secondary Contaminants** e cosmetic effects (such as skin, o	r tooth discolorat	ion) or aesthetic effects (	Secondary Contaminants** 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	2022	19.89	7.9 to 29.2	31	mqq				NA