

# WATER OUALITY REPORT

**Consumer Confidence Report (CCR)** 

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

> PWSID #CO0103035 Calendar Year 2021

Water filtration system at the ECCV Northern Water Treatment Plant

# 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?

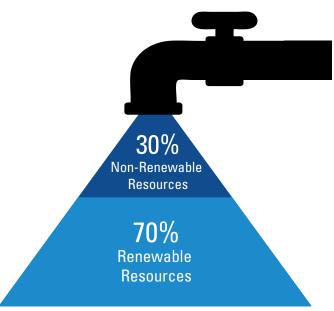
#### In 2021, ECCV received its water supply from two sources:



Non-Renewable Resources - 30%

#### **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a "non-renewable" source because they cannot be replenished with rainfall or snow melt as quickly as the water is withdrawn.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 - 70%

#### **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.

#### **Sustainability Partners**

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

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.

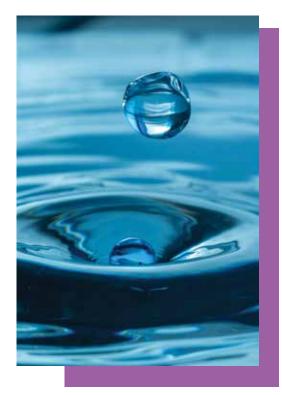
# **Drinking Water and Your Health**

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, 2021, 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 8 of this report.

# **ECCV** - Water Quality Table

### **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, 2021	Lowest period percentage of samples meeting TT requirement: 100%	0	66	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
Lead	01/07/2021 to 02/26/2021	1	63	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	01/07/2021 to 02/26/2021	0.09	63	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/08/2021 to 09/23/2021	0.1	60	ppb	15	1	No	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	07/08/2021 to 09/23/2021	2	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

## Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Halo- acetic Acids (HAA5)	2021	10.48	0 to 23.4	32	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Triha- Iomethanes (TTHM)	2021	37.06	0 to 73.5	32	ppb	80	N/A	No	Byproduct of drinking water disinfection

Radionu	clide	es San	npled at	t the E	Intry Po	oint to	the Di	stribution	System
Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	<b>Typical Sources</b>
Gross Alpha	2021	1.68	0 to 5.32	8	pCi/L	15	0	No	Erosion of natural deposits
Combined Radium	2021	2.55	0 to 5.7	8	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

Microbiolog	gical				
Contaminant	Violation	Highest % of Positive Samples	MCL	MCGL	Typical Source
Coliform, Total	No	0% January 2021	Less than 5% positive each month	0	Human and Animal Fecal Waste

#### 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
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	0.45	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	2021	0.25	0 to 0.7	17	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrate- Nitrite	2021	0.5	0.5 to 0.5	1	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	conda	ry 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.	
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Name	Year	Average	Kange Low – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2021	61.2	51.4 to 67.3	8	ppm	N/A

#### 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).

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Bromochloroacetic acid	2019	3.315	0 to 6.12	32	ррb
Bromodichloroacetic acid	2019	1.845	0 to 4.97	32	ppb
Chlorodibromoacetic acid	2019	1.71	0 to 3.22	32	ppb
Tribromoacetic acid	2019	1.75	0 to 3.35	32	ppb

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.

N/A				ppm	32	9.1 to 28.8	20.13	2021	Sodium
					Size	Low – High			
Secondary Standard				Unit of Measure	Sample	Range	Average	Year	Contaminant Name
tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.	tion) or aesthetic effects (s		Secondary Contaminants** e cosmetic effects (such as skin, or	Secondary ( ause cosmetic effec	nts that may c	es for contamina	orceable guidelin	Secondary Contaminants <sup>3</sup> Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin,	**Second
Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits	No	10	10	ppm	32	0 to 0.2	0.07	2021	Nitrate
Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories	No	4	4	ppm	32	0.41 to 0.84	0.6	2021	Fluoride
Discharge from steel and pulp mills; erosion of natural deposits	No	100	100	ddd	32	0 to 1	0.03	2021	Chromium
Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No	2	2	ppm	32	0.02 to 0.04	0.03	2021	Barium
Typical Sources	MCL Violation	MCLG	MCL	Unit of Measure	Sample Size	Range Low – High	Average	Year	Contaminant Name
	the Distribution System		ne Entry Point to	Inorganic Contaminants Sampled at the	ontaminant	Inorganic C			
Erosion of natural deposits	No	0			9	0.67 to 2.1	1.61	2021	Combined Radium 20
Frosion of natural deposits				Unit of Measure	Size	Kange Low – High	Average 0 77	rear	ne
	System		try Point to the	Radionuclides Sampled at the Entry Point to the	nuclides Sa	Radio	•	<b>(</b>	
	Soil Runoff	No	at least 95% of ess than 0.3 NTU	In any month, at least 95% of samples must be less than 0.3 NTU	amples meet- plogy: 100 %	percentage of sant for our techn	Lowest monthly percentage of samples meet- ing TT requirement for our technology: 100 %	Month: Dec	Turbidity
	Soil Runoff	No	U for any single ement	Maximum 1 NTU for any single measurement	nent:	Highest single measurement: 0.201 NTU	Highest	Date/Month: Jun	Turbidity
	Typical Sources	TT Violation	irement	TT Requirement		Level Found	1 1 1	Sample Date	Contaminant Name
	In minimum ratio normer and no violation tremmed mentitie system admissed compliance using anemative dimena- Summary of Turbidity Sampled at the Entry Point to the Distribution System	the Distribut	Entry Point to	Summary of Turbidity Sampled at the Entry Point to t	of Turbidity	Summary			
Nationally present in the environment		NO	1.00		CO CO	-31.44 (0 1.43	U.40	1202	Ratio
Nationally appoint in the participation		2	Ratio		Size	Low – High		2024	Tatal Orazonia Cashan
Typical Sources		<b>TT</b> Violation	TT Minimum	Unit of Measure	Sample	Range	Average	Year	Contaminant Name
ater	Precursor) Removal Ratio of Raw and Finished Water	oval Ratio of	recursor) Remo	(Disinfection Byproducts P	Disinfection	Organic Carbon (	Total Org		
Byproduct of drinking water disinfection	No	N/A	80	ppb	64	16.1 to 35.7	27.18	2021	Total Trihalomethanes (TTHM)
Byproduct of drinking water disinfection	No	N/A	60	ddd	64	7 to 20.4	14.38	2021	Total Haloacetic Acids (HAA5)
Typical Sources	MCL Violation	MCLG	MCL	Unit of Measure	Sample Size	Range Low – High	Average	Year	Name
	tem	ibu	npled in the Distr	Byproducts Sampled in the	n				-
Corrosion of household plumbing systems: Erosion of natural denosits	Corrosion of household p	N	о ·	1.3	nuu 244	513	90.0	07/01/2021 to 12/30/2021	-
Corrosion of household plumbing systems: Erosion of natural deposits	Corrosion of household p		70	1љ	nnh	л13	0.00 4 л	07/01/2021 to 12/30/2021	
Corrosion of household plumbing systems; Erosion of natural deposits	Corrosion of household p	No	40	15	ppb	470	4.1	01/01/2021 to 06/30/2021	
Typical Sources		90th Percentile AL Exceedance	Sample Sites Above AL	90th Percentile AL	Unit of Measure	Sample Size	90th Percentile	Time Period	Contaminant Name
		ution System	d in the Distrib	Lead and Copper Sampled in the Distribu	Lead and				-
4.0 ppm	No	383	0	Lowest period percentage of samples meeting TT requirement: 100%	es meeting TT	centage of samp	Lowest period per	December, 2021	Chloramine
MRDL	TT Violation	Sample Size	Number of Samples Below Level		ults	Results		Time Period	Disinfectant Name
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	ess than 40 no more than	f sample size is l rol microbes	east 0.2 ppm OR I Iditive used to cont	Juarter) must be at Sources: Water ac	od (month or c <b>Typical</b>	samples per peri	At least 95% of :	TT Requirement:	
		ion System	in the Distribut	Disinfectants Sampled in the Distribution System	Disinfec				
7				lable		Water Quality	Wate	ENVER WAIER-	DENVER
7				1 - -	-	)			) ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ] ]

## 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.

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.