



elco

Annual Water Quality Report

Covering Data For Calendar Year 2023

2023 Annual Water Quality Report for East Larimer County Water District (PWSID C00135233)

April 2024

Office Hours and Location

The ELCO office is located at 232 South Link Lane, Fort Collins, Colorado and is open from 8:00 am to 4:30 pm, Monday through Friday. The phone number is 970-493-2044.

Emergencies

Customers in need of emergency service can call 970-493-2044 after regular office hours. Emergency calls are routed to an answering service which can dispatch on-call personnel.

For Your Information

This report and other important information about ELCO Water District can be found on the District's website. The address is: www.elcowater.org

Introduction

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 Josh Meck or Randy Siddens at 970-493-2044 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 epa.gov/ground-water-and-drinking-water.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV-AIDS or other immune system disorders, some elderly, and infants can be particularly at risk of infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and microbiological contaminants call the EPA Safe Drinking Water Hotline at (1-800-426-4791).

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

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. ELCO Water District 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



Lead in Drinking Water ...

2 minutes before using water for drinking or cooking. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your

water, and you wish to have your water tested contact ELCO Water District at 970-493-2044. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the

Safe Drinking Water Hotline or at <http://water.epa.gov/drink/info/lead>

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 wqcd.compliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using our system name or ID, or by contacting Josh Meck or Randy Siddens at 970-493-2044. 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 on the next page.

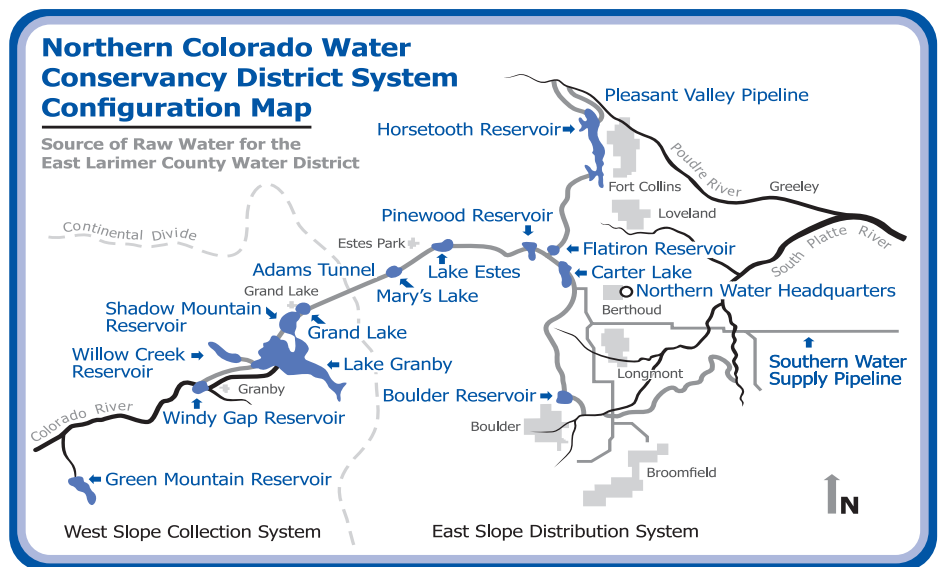
Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

ELCO Water Sources	
Sources (Water Type - Source Type)	Potential Source(s) of Contamination
<p>PURCHASED FROM C00162321 (Surface Water-Consecutive Connection) This is an emergency connection with the City of Greeley ONLY and no water was received from this source in 2023.</p> <p>PURCHASED FROM C00135718 SOLDIER CANYON (Surface Water-Consecutive Connection)</p>	<p>EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture / Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil / Gas Wells, Road Miles</p>

Where does ELCO water come from?

ELCO receives treated water from the Soldier Canyon Filter Plant (SCFP), located at the base of the Soldier Canyon Dam on Horsetooth Reservoir. Water treated at the SCFP comes directly out of Horsetooth Reservoir and the Poudre River through the Pleasant Valley Pipeline. Once water rights owned or controlled by the District have been converted from agricultural to municipal use, it is expected that half of the District's water will be diverted from the Poudre River. ELCO's water distribution system is also connected to the City of Fort Collins Water Treatment Plant (CFCWTP), which is adjacent to the SCFP, and can receive a blend of water from SCFP and the CFCWTP.

SCFP is owned and operated by the Soldier Canyon Water Treatment Authority (SCWTA), which is jointly administered by ELCO, North Weld County Water District and Fort Collins-Loveland Water District. These three water districts all receive water from SCFP and supply water to customers in all or parts of the towns and adjacent rural areas of Fort Collins, Windsor, Eaton, Ault, Severance, Timnath, Pierce and Nunn as well as Sunset Water District and portions of the Northern Colorado Water Association. Approximately 100,000 residents of northern Colorado receive their water from SCFP.



Water in Horsetooth Reservoir originates as snow in the upper reaches of the Colorado River basin. Snowmelt is collected in reservoirs on the western slope of the Rocky Mountains and diverted through a series of tunnels and canals for use in northeastern Colorado.

Horsetooth Reservoir is part of the Colorado-Big Thompson (C-BT) Project, the largest trans mountain diversion project in the state. The C-BT project is administered by the Northern

Colorado Water Conservancy District. The Conservancy District oversees the delivery of water for agricultural, municipal, and industrial uses to almost 1.5 million acres of northeastern Colorado. The map above illustrates the location of some of the reservoirs and canals used by the Conservancy District to deliver C-BT water to the Front Range. Additional information about the Conservancy District can be found at www.ncwcd.org.



Is ELCO's water hard or soft?

Many industrial and domestic water users are concerned about the hardness of their water. Manufacturers of dishwashers and washing machines sometimes recommend settings that depend on the hardness of water. Hard water requires more soap and synthetic detergents for home laundry and washing, and contributes to scaling in boilers and industrial equipment. Calcium and magnesium dissolved in water are the two most common minerals that make water "hard".

The hardness of water is referred to by two types of measurements: grains per gallon and milligrams per liter (mg/l). The water supplied by ELCO has

a hardness of approximately 35 mg/l or 2 grains per gallon. The following table shows that **ELCO water would be classified as "soft water"**.

Water Hardness Scale		
Grains per Gallon	Milligrams per Liter (mg/l)	Classification
0 - 4.3	0 - 75	Soft Water
4.3 - 8.8	75 - 150	Moderately Hard Water
8.8 - 17.5	150 - 300	Hard Water
Over 17.50	Over 300	Very Hard Water

Is there fluoride or chlorine in ELCO's water?

Small amounts of chlorine and fluoride are added to the water as it leaves the Soldier

Canyon Filter Plant. Chlorine is added to disinfect the water against any bacteria

that may still be in the water. Fluoride is added to help reduce tooth decay.

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 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

Average (x-bar) – Typical value.

Range (R) – Lowest value to the highest value.

Sample Size (n) – Number or count of values (i.e. number of water samples collected).

Parts per million = Milligrams per liter (ppm = mg/L) – 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.

2023 Detected Contaminants

Water Quality Test Results for ELCO Water District

EAST LARIMER COUNTY 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, 2023 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 (ELCO Water District)

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, 2023	Lowest period percentage of samples meeting TT requirement: 100%	0	25	No	4.0 ppm

Lead and Copper Sampled in the Distribution System (ELCO Water District)

Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	06/29/2022 to 07/22/2022	0.19	30	ppm	1.3	0	No	Corrosion of household plumbing systems; erosion of natural deposits.
Lead	06/29/2022 to 07/22/2022	4	30	ppb	15	2	No	

Disinfection Byproducts Sampled in the Distribution System (ELCO Water District)

Name	Year	Average	Range (Low to High)	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2023	26.58	15 to 35.8	16	ppb	60	N/A	No	Byproduct of drinking water disinfection.
Total Trihalomethanes (TTHM)	2023	41.24	18.1 to 63	16	ppb	80	N/A	No	
Chlorite	2021	0.4	0.37 to 0.42	3	ppb	1.0	.8	No	



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.

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

All samples analyzed for the UCMR testing in October 2023 and January 2024, were found to be "Non-Detect"

Results submitted to the EPA can be found here: <https://www.epa.gov/dwucmr/fifth-unregulated-contaminant-monitoring-rule-data-finder#data-finder>

Search for ELCO Water by PWS on the left of the page; C00135233

It is recommended to check the above website periodically, as there may be new results from other sample collections provided to the EPA.

More information about the contaminants that were included in UCMR monitoring can be found at: drinkingwater.gov/What-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Learn more about the EPA UCMR at: epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/ground-water-and-drinking-water.

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions

SIGNIFICANT DEFICIENCIES

These violations do not usually mean that there was a problem with the water quality. If there had been, we would have notified you immediately. We missed collecting a sample (water quality is unknown), we reported the sample result after the due date, or we did not complete a report/notice by the required date.

Date Identified	Deficiency Description	Deficiency Explanation and Steps Taken or Will Take to Correct	Date Deficiency was Corrected
12/13/2023	T160 - CHEMICAL SAFETY; Gas chlorine or other treatment chemical facility safety features appeared inadequate.	During a Sanitary Survey, conducted on 12/13/2023, it was discovered that a Chlorine Disinfection injection point at one of our pump stations did not have a secondary containment method, in the event of a leak. No leaks were detected A secondary containment tube has been permanently affixed and the deficiency was resolved on January 10th, 2024	1/10/2024

All Information Below is from the Soldier Canyon Filter Plant (SCFP)

Please contact MARK KEMPTON at 970-482-3413 with any questions

Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range (Low to High)	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Chlorite	2023	0.33	0.29 to 0.45	12	ppb	1.0	.8	No	Byproduct of drinking water disinfection

Total Organic Carbon (Disinfection Byproducts Precursor) Removal Ratio of Raw and Finished Water

Contaminant Name	Year	Average	Range (Low to High)	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2023	1.2	1 to 1.39	12	Ratio	1.00	No	Naturally present in the environment.

If minimum ratio not met and no violation identified, then the system achieved compliance using alternative criteria.

Summary of Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	Month: November 2023	Highest single measurement: 0.074 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Month: December 2023	Lowest monthly percentage of samples meeting TT requirement for our technology: 100%	In any month, at least 95% of samples must be less than 0.3 NTU	No	Soil Runoff

Inorganic Contaminants Sampled at the Entry Point to the Distribution System (Soldier Canyon Filter Plant)

Contaminant Name	Year	Average	Range (Low to High)	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Barium	2023	0.02	0.02 to 0.02	1	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2022	0.6	0.6 to 0.6	1	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Secondary Contaminants

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 to High)	Sample Size	Unit of Measure	Typical Sources
Sodium	2023	8.6	8.6 to 8.6	1	ppm	N/A

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions