



Get to Know Your

Water

2020 Water Quality Results for Greeley & Evans

Greeley's Water Sources | Facts About Water



En Español

El agua de la Ciudad de Greeley supera los estándares estatales y federales para el agua potable. Esta publicación contiene información sobre la calidad del agua de nuestra ciudad. Esto incluye su origen, su contenido, y cómo es tratada y distribuida a nuestra comunidad.

Para obtener más información, puede visitar nuestro sitio web en greeleygov.com/services/ws/system/water-quality

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.

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, 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 health care providers. Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria that may come from wastewater treatment plants, septic systems, agricultural livestock, and wildlife.
- **Inorganic contaminants**, such as salts and metals, which can be naturally-occurring or result from stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides**, which may come from a variety of sources, such as agriculture, stormwater runoff, and residential landscapes.
- **Radioactive contaminants**, that 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, storm water runoff, and septic systems.

For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency and the U.S. Centers for Disease Control 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** or visit water.epa.gov/drink/contaminants.



Director's Message



This past year has challenged us all, tested our resiliency and reinforced our appreciation for community. Beyond the COVID pandemic, 2020 was the most severe wildfire season on record in Northern Colorado; and more than 400,000 acres of critical watershed was damaged by fire. City of Greeley staff have maintained their consistent approach to the work of providing safe, reliable and affordable high quality water. This Water Quality Report is published to ensure our customers have transparent access to accurate information on water quality and the delivery system.

Greeley's source water originates high in the mountains, mostly as snowpack built over the winter months, and coming from the Cache la Poudre, Big Thompson, Upper Colorado River and Laramie River basins. Our team of certified professional water operators and engineers coordinate the delivery of these supplies to the city's water reservoirs and two treatment facilities. The treatment plants are operated by certified water professionals, who are deeply committed to public health and safety.

This water quality report provides detailed information on the water system and water quality from the prior year's laboratory analysis of water quality samples. If you have questions regarding the report or your water quality, please call 970-336-4095. You can also find additional information on the city's water supply at greeleygov.com/water I hope you will take a moment to review the contents of this report.

Sean P. Chambers
Director of Greeley Water & Sewer Department

Greeley Drinking Water Sources

Greeley drinking water originates as mountain snowpack from a variety of surface water rivers and reservoirs in four river basins: Cache la Poudre River, Laramie River, Big Thompson River, and Colorado River. Greeley normally uses six high-mountain reservoirs in the Poudre Basin to retain water from spring snowmelt during the summer and fall when water demand is high but river flows are low. The 2020 Cameron Peak wildfire had a significant impact on the watershed and impact mitigation and slope stabilization will limit Greeley's use of the high mountain storage system.

The city also has a Front Range reservoir system (Boyd Lake, Lake Loveland and Horseshoe Lake) to provide storage of city water rights for summer demands. Greeley owns a portion of the Colorado Big Thompson (C-BT) and Windy Gap projects and is a partner in the Chimney Hallow project that will add significant water storage for the city's Windy Gap water. Greeley, in coordination with the Northern Colorado Water Conservancy District, stores its portion from the C-BT Project in Lake Granby, Horsetooth Reservoir and Carter Lake and can deliver water to either the Poudre or Big Thompson basins to meet the city's water demand.

Greeley treats water at the Bellvue Water Treatment Plant year-round, which recently underwent a \$22 million upgrade to replace aging filter infrastructure. The city also operates the Boyd Lake Water Treatment Plant in Loveland. Treated water is then piped to Greeley where it is distributed to customers or stored in one of three finished water reservoirs. The city's water master plan prioritizes public investments in infrastructure, storage and water for the future good of the community.

Source	Source Type	Water Type	Potential Sources of Contamination
Purchased East Larimer CNTY (CO0135233)	Consecutive Connection	Surface Water	EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Concentrated Animal Feeding Operations, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Quarries / Strip Mines / Gravel Pits, Row Crops, Fallow, Small Grains, Pasture / Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil / Gas Wells, Road Miles
Purchased City of Loveland (CO0135485)			
Purchased North Weld (CO0162553)			
Horsetooth Reservoir	Intake		
Boyd Lake			
Cache La Poudre River			
Lake Loveland Big Thompson GLIC pump station			

Protecting Water Sources

The Colorado Department of Public Health and Environment has provided the public with a Source Water Assessment Report for our water supply. 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. For general information or to obtain a copy of the report please visit cdphe.colorado.gov/swap-assessment-phase. In the search bar, type in Greeley or 162321 to access the pdf.

Over recent years, the city has worked to develop a more robust system for non-potable irrigation water, acquired additional water shares and purchased the Terry Ranch Aquifer Storage and Recovery Project. These supply development strategies make our community more resilient to drought and prepared for sustainable economic growth. The city's source water protection activities will expand to comprehensively cover all sources of water and storage owned and used by the city.

The city has a small but growing team of water quality staff who are available to share their expertise and interpret data for our citizens.



2020 DRINKING WATER QUALITY RESULTS

The City of Greeley 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, 2020 unless otherwise noted. The state of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Only detected contaminants sampled within the last five years appear in this report. If no tables appear in this section then no contaminants were detected in the last round of monitoring.



Disinfectants Sampled in the Distribution System

Disinfectant Name	Time Period	Results	Sample Size	TT Requirement	Samples Below Level	TT Violation	Typical Sources	MRDL
Chlorine	monthly	100% Greeley's monthly samples met the TT requirement.	101	At least 95% of samples per period must be at least .2 ppm	0	no	Water additive used to control microbes	4.0 ppm

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90th Percentile	Sample Size	90th Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
Copper	8/03/2020-8/12/2020	0.2 ppm	50	1.3 mg/l	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	8/03/2020-8/12/2020	.0028 ppm	50	.015 mg/l	0	No	

Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range Low - High	Sample Size	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2020	26.25 ppb	13.9 to 37.6	32	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2020	46.5 ppb	29.2 to 71.3	32	80	N/A	No	
Chlorite	2020	0.31 ppb	0.21 to 0.45	12	1.0	0.8	No	

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

Contaminant Name	Year	Average	Range Low - High	Sample Size	Unit of Measure	TT Minimum Ratio	TT Violation	Typical Sources
Total Organic Carbon Ratio	2020	1.25 mg/l	1.02 to 1.57	17	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	May	Highest single measurement: 0.32 NTU	Maximum 1 NTU for any single measurement	No	Soil runoff
Turbidity	Dec	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	

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low-High	Sample Size	MCL	MCLG	MCL Violation	Typical Sources
Barium	2020	0.02 ppm	0.02 to 0.03 ppm	2	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2020	0.61 ppm	0.59 to 0.64 ppm	2	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2020	0.04 ppm	0 to 0.08 ppm	2	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2020	1.05 ppb	0 to 2.1 ppb	2	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

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 - High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2020	12.75	9.5 to 16	2	ppm	N/A

2020 Violations

Non-Health-Based Violations
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. For Lead and Copper, we failed to collect a second set of samples from the same location as the first samples.

Additional Violation Information

Name	Description	Time Period
LEAD AND COPPER RULE	FAILURE TO MONITOR / REPORT	07/01/2020 - Resolved

Describe the steps taken to resolve the violation(s), and the anticipated resolution date:

As soon as the sampling error was identified, Greeley Water modified their sample collection schedule to be compliant with Regulation 11.26 (4) Lead and Copper Rule for the current monitoring period of January 1, 2021 through June 30, 2021 and thereafter. The city also sent out a Tier 3 public notice as required by CDPHE.

Lead in Drinking Water



If present, elevated levels of lead can cause health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead, 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 is available from the Greeley web page: <https://greeleygov.com/services/ws/system/corrosion-control>.

Terms and Abbreviations

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

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

Maximum Contaminant Level Goal (MCLG): The 'Goal' is 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 (MRDL): Highest level of a disinfectant allowed in drinking water, based on convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Nephelometric Turbidity Unit (NTU): Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per million (ppm): One part per million corresponds to 1 milligram per liter (mg/l), a very dilute concentration of substance.

Parts per billion (ppb): One part per billion corresponds to 1 microgram per liter (ug/l), a very dilute concentration of substance.

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

Violation: Failure to meet a Colorado Primary Drinking Water Regulation.



Get More Information

Please contact **Nina Cudahy** at 970-397-5478 with any questions about this report or for public participation opportunities that may affect water quality.

To view the report online, visit greeleygov.com/ccr.

Access information about drinking water in general on the EPA's drinking water web site at epa.gov/safewater.

Connect to Your Water

Water & Sewer Department
970-350-9813
water@greeleygov.com
greeleygov.com/water

Water Conservation
970-336-4134
conserve@greeleygov.com
greeleygov.com/conserve

Emergencies
Water (7am - 3pm) 970-350-9320
Water (7am - 3pm) 970-350-9222
After Hours 970-616-6260

Utility Billing
970-350-9720

Water Taste or Odor
970-415-1618

Water Pressure
970-350-9320

Utility Line Locates
811

Water Restrictions & Violations
970-336-4134



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Para obtener más información, puede visitar nuestro sitio web en greeleygov.com/services/ws/system/water-quality