

## 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](http://water.epa.gov/drink/contaminants).

## GET MORE INFORMATION

Please contact Colleen Young at **970-350-9846** 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](http://greeleygov.com/ccr). Access information about drinking water in general on the EPA's drinking water web site at [epa.gov/safewater](http://epa.gov/safewater).

### Connect to Your Water

#### Water & Sewer Department

970-350-9813

[water@greeleygov.com](mailto:water@greeleygov.com)

[greeleygov.com/water](http://greeleygov.com/water)

#### Water Conservation

970-336-4134

[conserve@greeleygov.com](mailto:conserve@greeleygov.com)

[greeleygov.com/conserve](http://greeleygov.com/conserve)

#### Water Emergencies

970-350-9813 (daytime) | 970-616-6260 (after hours)

#### Utility Billing

970-350-9720

#### Water Taste or Odor

970-350-9324

#### Water Pressure

970-350-9320

#### Water Restrictions & Violations

970-336-4134

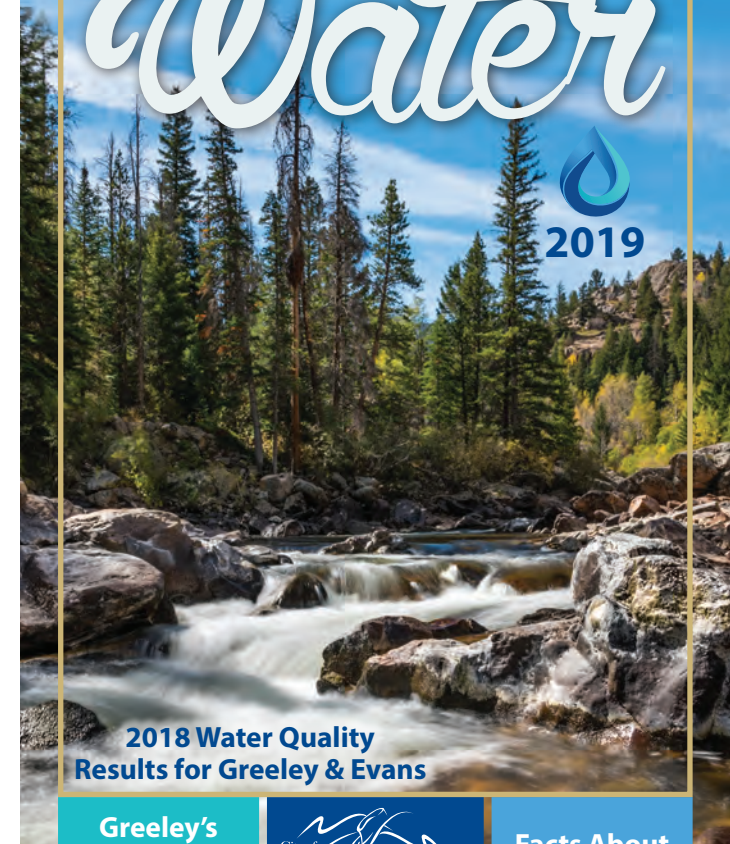
#### Utility Line Locates

811



CO0162321

# GET TO KNOW YOUR Water



## 2018 Water Quality Results for Greeley & Evans

Greeley's  
Water  
Sources



Facts About  
Your 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. Si desea este informe en español, lo puede encontrar en [greeleygov.com/ccr](http://greeleygov.com/ccr) o lo puede solicitar llamando al **970-336-4288**.

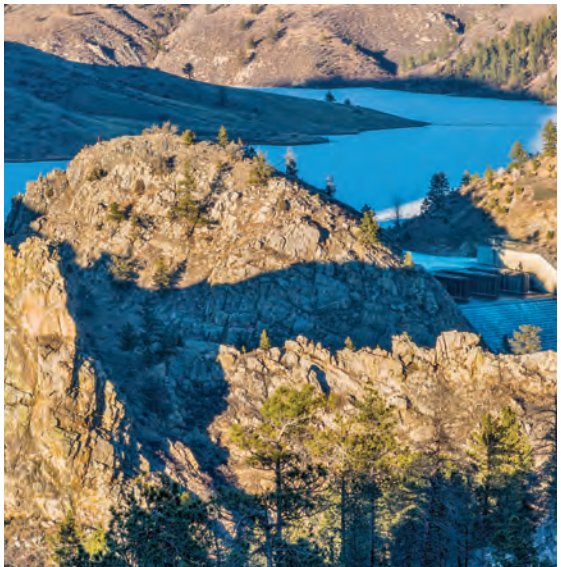


# Greeley Drinking Water Sources

Greeley drinking water comes from surface water located in four river basins: Cache la Poudre River, Laramie River, Big Thompson River, and Colorado River. Greeley uses six high-mountain reservoirs in the Poudre basin (Barnes Meadow, Comanche, Hourglass, Peterson, Milton Seaman, and Twin Lake) to retain water from spring snowmelt for redistribution during the summer and fall when water demand is high but river flows are low.

In addition, the city uses a plains reservoir system (Boyd Lake, Lake Loveland and Horseshoe Lake) to provide storage for summer demands. Greeley owns a portion of the Colorado Big Thompson (C-BT) and Windy Gap Projects. We store our 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 water demand.

Greeley treats water at the Boyd Lake Water Treatment Plant in Loveland and the Bellvue Water Treatment Plant located north of Fort Collins. Treated water is then piped to Greeley where it is distributed to customers or stored in one of three finished water reservoirs.



## Beware of Cross Connections

As part of our continuing effort to provide and maintain safe, clean drinking water, the Greeley Water has a Cross-Connection Control Program. A cross-connection is any connection that could introduce contaminants such as pesticides, fertilizers, used or dirty water, fluids, gases, or other contaminants into the water system.

Water normally flows out of the public water distribution system under pressure. When a cross-connection exists, a drop in pressure can cause a reversal of flow, allowing harmful substances to enter the public water system. Common residential cross-connection contamination include but are not limited to irrigation systems, fertilizer injection systems, hoses connected to chemical spray bottles, chemicals in water beds, hot tubs, swimming pools, water features, aquariums, and swamp coolers. Examples of commercial or industrial cross-connection sources include cooling systems, boilers, solvents and manufacturing chemicals, sprinkler systems, and the same sources listed above under residential contamination sources.

### What can you do to protect our public water system?

- Be observant. Check for potential contamination sources around your home, business or industrial site. Never leave hoses in buckets, pools or sinks.
- If you suspect a cross-connection, contact a qualified plumber who is familiar with cross-connections, hydraulics and pollution.
- Install backflow prevention assemblies to prevent potential cross-connections and have a certified backflow tester inspect and test your assemblies annually to ensure they are working properly.

**For more information and a list of certified backflow testers please visit [Greeleygov.com/backflow](http://Greeleygov.com/backflow).**

Source	Source Type	Water Type	Potential Sources of Contamination
Boyd Lake	Intake	Surface Water	EPA Hazardous Waste Generators, EPA Chemical Inventory /Storage Sites & Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground/Underground & Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Concentrated Animal Feeding Operations, Other Facilities, Commercial/Industrial/Transportation, Residential, Urban Recreational Grasses, Quarries/Strip Mines/Gravel Pits, Row Crops, Fallow, Small Grains, Pasture/Hay, Forest, Septic Systems, Oil/Gas Wells, and Road Miles.
Cache la Poudre River			
Horsetooth Reservoir			
Lake Loveland			
City of Fort Collins (C00135291)	Consecutive Connection		
East Larimer County WD (C00135233)			
City of Loveland (C00135485)			
North Weld (C00162553)			
West Fort Collins (C00135290)			

## Protecting Water Sources

The Colorado Department of Public Health and Environment has 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 [colorado.gov/cdphe/ccr](http://colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 162321, GREELEY CITY OF, or by contacting Colleen Young at 970-350-9846. 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 back 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.

# 2018 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, 2018 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.

## Summary of Disinfectants Sampled in the Distribution System

Disinfectant Name	Time Period	Results	Sample Size	TT Requirement	Samples Below Level	TT Violation	Typical Sources	MRDL
Chlorine	December 2018	Lowest period percentage of samples meeting TT requirement: 100%	101	At least 95% of samples per period (month or quarter) must be at least 0.2 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	90th Percentile AL Exceedance	Typical Sources
Copper	7/12/2018 to 7/20/2018	0.27 ppm	50	1.3	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	7/12/2018 to 7/20/2018	4.6 ppb	50	15	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)	2018	23.27 ppb	12.5 to 29.9	32	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2018	39.85 ppb	17.4 to 63.7	32	80	N/A	No	
Chlorite	2018	0.27 ppb	0.13 to 0.35	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	2018	1.24	0.99 to 1.5	19	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.

## Disinfectants Sampled at the Entry Point to the Distribution System

Disinfectant Name	Year	Number of Samples Above or Below Level	Sample Size	TT/MRDL Requirement	TT/MRDL Violation	Typical Sources
Chlorine/Chloramine	2018	0	2899	TT = No more than 4 hours with a sample below 0.2 mg/l	No	Water additive used to control microbes
Chlorine Dioxide	2018	0	319	MRDL = 800 ppb	No	

## 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: 0.26 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	



## 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 Safe Drinking Water Hotline 1-800-426-4791 or at [epa.gov/safewater/lead](http://epa.gov/safewater/lead).

## 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	2018	0.04 ppm	0.01 to 0.07 ppm	2	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Fluoride	2018	0.62 ppm	0.6 to 0.63 ppm	2	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2018	0.01 ppm	0.01 to 0.02 ppm	2	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2018	0.7 ppb	0 to 1.4 ppb	2	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

## Synthetic Organic 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
Di(2-ethylhexyl) phthalate	2018	1.57 ppb	0 to 4.7 ppb	3	6	0	No	Discharge from rubber and chemical 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 – High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2018	22.85	7.5 to 38.2	2	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). Once EPA reviews the submitted results, the results are made available in the EPA's National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>). Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our 2018 UCMR sampling and the corresponding analytical results are provided. \*\*\*More information about the contaminants that were included in UCMR monitoring can be found at: <https://drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR>. Learn more about the EPA UCMR at: <http://www.epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule> or contact the Safe Drinking Water Hotline at (800) 426-4791 or <http://water.epa.gov/drink/contact.cfm>.

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure
Anatoxin-a	2018	<0.03	N/A	16	µg/L
Cylindrospermopsin	2018	<0.09	N/A	16	µg/L
Total Microcystins & Nodularins	2018	<0.3	N/A	16	µg/L
Bromide	2018	43.18	<20.0 – 68.9	4	µg/L
Germanium	2018	<0.30	N/A	6	µg/L
Manganese	2018	1.74	0.69 – 4.79	7	µg/L
Butylated hydroxyanisole	2018	<0.03	N/A	3	µg/L
o-Toluidine	2018	<0.07	N/A	3	µg/L
Quinoline	2018	0.03	0.02 – 0.05	4	µg/L
1-Butanol	2018	<2.00	N/A	3	µg/L
2-Methoxyethanol	2018	<0.40	N/A	3	µg/L
2-Propen-1-ol	2018	<0.50	N/A	3	µg/L
Alpha-Hexachlorocyclohexane	2018	<0.01	N/A	6	µg/L
Chlorpyrifos	2018	<.03	N/A	6	µg/L
Dimethipin	2018	<0.20	N/A	6	µg/L

Contaminant Name continued...	Year	Average	Range Low – High	Sample Size	Unit of Measure
Ethoprop	2018	<0.03	N/A	6	µg/L
Oxyfluorfen	2018	<0.05	N/A	6	µg/L
Profenofos	2018	<0.30	N/A	6	µg/L
Tebuconazole	2018	<0.20	N/A	6	µg/L
Permethrin, cis & tran	2018	<0.04	N/A	6	µg/L
Tribufos	2018	<0.07	N/A	6	µg/L
Bromochloroacetic acid	2018	2.77	1.58 – 7.10	24	µg/L
Bromodichloroacetic acid	2018	1.89	0.63 – 4.14	24	µg/L
Chlorodibromoacetic acid	2018	0.42	<0.30 – 0.85	24	µg/L
Dibromoacetic acid	2018	0.44	<0.30 – 1.25	24	µg/L
Dichloroacetic acid	2018	16.35	8.30 – 32.30	24	µg/L
Monobromoacetic acid	2018	0.33	<0.30 – 0.50	24	µg/L
Monochloroacetic acid	2018	2.01	0.33 – 3.79	24	µg/L
Tribromoacetic acid	2018	<2.00	N/A	24	µg/L
Trichloroacetic acid	2018	9.82	6.88 – 14.40	24	µg/L

**No violations, significant deficiencies, backflow/cross-connection, and formal actions.**

## 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 (µg/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.