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.

Colorado Water: Live Like You Love It

DRADO WAY

Greeley is promoting a message of Live Like You Love It. The "It" in that phrase refers to water in Colorado. What can you do to Live Like You Love It?

Conserve: Using water efficiently must be our way of life, not just a response to drought. Everyone who uses water—including farmers, consumers, businesses and recreators—has reasons to use water wisely. Small changes can lead to big savings.

Care: Because we live in the state where water originates, We enjoy some of the best water in the country. Let's keep it that way. Whatever you put on your lawn, driveway or park can end up in your water supply. Simple things like picking up after pets, and using pesticides and fertilizers sparingly, help our water quality.

Commit: Compared to other expense water is a pretty good deal. Most consumers only pay around a half of penny per gallon for the water coming out of their tap. However, aging infrastructure, rising energy costs, climate change and the need for new water projects to meet a growing population all will contribute to the cost of water increasing. Commit to learn more about your water supply.

To join in and Live Like You Love It, Like Love Colorado Water on Facebook or follow on Twitter at @LoveCOWater.

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 www.greeleygov.com/ccr. Access information about drinking water in general on the EPA's drinking water web site at <u>www.epa.gov/safewater</u>.

Additionally, the public is welcome to attend meetings of Greeley's Water and Sewer Board. which are usually held on the third Wednesday afternoon of every month. For more information on times, dates and locations of the Board meetings, please contact Lory Stephens at 970-350-9812.



Connect to Your Water

Water & Sewer Department

970-350-9811 water@greeleygov.com www.greeleygov.com/water

Water Conservation

970-336-4134 conserve@greeleygov.com www.greeleygov.com/wc www.facebook.com/greeleywater www.twitter.com/greeleywater

Water Emergencies

970-350-9811 (daytime) 970-350-9600 (after hours)

Utility Billing

970-350-9720







Get to Know Your Water



Facts About Your Water

Greeley's Water Sources

2014 Water Quality Results



Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.

Greeley Drinking Water Sources & Uses Big Thompson Cache la aramie River Colorado River **Poudre River** River 6 high-mountain reservoirs 3- irrigation/water companies Laramie-Poudre Tunnel Colorado-Big Thompson (C-BT) Project 17% ownership of project **Barnes Meadow** Greeley and Loveland Irrigation 7% of C-BT System **Year Round** Comanche Co. (Boyd Lake) Residential Use Hourglass Windy Gap Project Peterson Loveland and Greeley Reservoir 9% of Windy Gap Water Co. (Lake Loveland) Twin Lake Milton Seaman Indoor Outdoor Seven Lakes Reservoir Co. 45% Plus direct flow rights 55% (Horseshoe Reservoir) Indoor 30% Summer 38 Bellvue **Boyd Lake** Residential Outdoor million established 1964 Use established 1907 70% gallons per gallons per operates April - October operates year round Raw (not treated) day capacity day capacity **Water Lines** 8 Miles Average Monthly Treated Water Use 1500 (million gallons) Transmission Lines of indoor 27% 1200 (brings treated water to the city) residential use **155.5** Miles is flushed down **Distribution Lines** 900 the toilet (brings treated water around the city) 600 **461** Miles 300 200 100 300 400 500 Miles of Pipeline Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec



2014 Drinking Water Quality Results

In compliance with the Colorado Primary Drinking Water Regulations, the Greeley Water and Sewer Department is pleased to present our annual Drinking Water Quality Report for the calendar year 2014. Our constant goal is to provide you with a safe and dependable supply of drinking water. Greeley routinely monitors for contaminants in your drinking water according to federal and state laws. The following table shows all detections found in the period from January 1 to December 31, 2014, unless otherwise noted.

The state 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.

Disinfectants Sampled in the Distribution System

Contaminant	Monitoring Period	Results	Samples	TT Requirement	Typical Sources	Violation?
Chlorine	9/14	Lowest monthly percentage of samples meeting TT requirement: 96.67%	90	For any two consecutive months, at least 95% of samples (per month) must be detectable.	Water additive used to control microbes	No

Lead and Copper Sampled in the Distribution System

Contaminant	Monitoring Period	90th Percentile AL	Number of Samples	Action Level	Sample Sites Above Action Level	Typical Sources	Violation?
Copper	7/9/2014 to 7/28/2014	1.3	30	1.3 ppm	0	Corrosion of household plumbing systems, erosion of natural deposits	No
Lead	7/9/2014 to 7/28/2014	15	30	15 ppb	0		No

Disinfection By Products Sampled in the Distribution System

		7					
Contaminant	Average of Individual Samples	Range of Individual Samples	Samples	MCL	MCLG	Typical Sources	Violation?
Chlorite	0.27 ppb	0.21 - 0.39 ppb	12	1 ppb	0.8 ppb	Byproduct of	No
Total Haloacetic Acids (HAA5)	22.74 ppb	15.4 - 35.4 ppb	32	60 ppb	N/A	drinking water disinfection	No
Total Trihalomethanes	46.02 ppb	25.2 - 95.5 ppb	33	80 ppb	N/A		No

Turbidity Sampled at the Entry Point to the Distribution System

Contaminant	Sample Date	Level Found	TT Requirement	Typical Sources	Violation?
Turbidity	4/14	Highest single measurement: 0.23 NTU	Maximum 1 NTU for any single measurement	Soil runoff	No
Turbidity	12/14	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

Total Organic Carbon (Disinfection By Products Precursor)

Contaminant Average of Individual Range of Individual Samples TT Typical Sources Ratio Samples Ratio Samples Minimum Ratio	Violation?
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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.

Cryptosporidium is a microbial pathogen found in source water in Colorado. It must be ingested to cause disease and may be spread through means other than drinking water. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. Cryptosporidium is eliminated from drinking water by an effective treatment combination utilized by the Greeley Water Department which includes coagulation, sedimentation, filtration, and disinfection.



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. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, which can be naturally-occurring or result from urban 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, urban stormwater runoff, and residential uses.
- 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, urban storm water runoff, and septic systems.

For more information about contaminants and potential

Total Organic	1.17	0.92 - 1.47	19	1	Naturally present in the	No	
Carbon Ratio					environment		

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant	Average of Individual Samples	Range of Individual Samples	Samples	MCL	MCLG	Typical Sources	Violation?
Barium	0.03 ppm	0.02 - 0.05 ppm	2	2 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	No
Fluoride	0.66 ppm	0.66 - 0.66 ppm	2	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth.	No
Nitrate	0.05 ppm	0 - 0.1 ppm	2	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	No
Selenium	2 ppb	1 to 3 ppb	2	50 ppb	50 ppb	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines	No

Microorganism Contaminants Sampled in the Distribution System

Contaminant	Sample Date	Results	Samples	MCL	MCLG	Typical Sources	Violation?
Coliform	9/14	3	100	More than 5% positive samples per period	0	Naturally present in the environment	No

Unregulated Contaminant Monitoring Rule 3 (UCMR3)

Analyte	Range of Results					
Strontium	68.0 – 76.0 ppb	The U.S. Environmental Protection Agency (EPA) requires public water systems to occasionally				
Vanadium	0.20 ppb	monitor for certain unregulated chemical contaminants in their drinking water; and report the results to their customers when laboratory analyses of samples result in one or more detections of the unregulated contaminants. Greeley is required to report their UCMR3 results in our annudrinking water report. The term, "detection" refers to any positive results above the laboratory equipment's minimum detection limits. There are no drinking water standards for unregulated				
Hexavalent Chromium	0.03 – 0.04 ppb					
Chlorate	39.0 – 78.0 ppb	contaminants. The EPA may choose to regulate these currently unregulated contaminants in the future.				

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.

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 ($\mu g/l$), a very dilute concentration of substance.

Parts per trillion (ppt): One part per billion corresponds to 1 nanogram per liter (μ g/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.

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 http://water.epa.gov/drink/contaminants.

Lead in Drinking Water

If present, elevated levels of lead can cause serious 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 in your water, 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, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 1-800-426-4791 or at www.epa.gov/safewater/lead.

Beware of Cross Connections

As part of a continuing effort to provide and maintain safe drinking water, Greeley 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 Greeley's water distribution system. Water normally flows out of the public water distribution system under pressure. When a cross-connection exists, a drop in water pressure can cause a reversal of flow, allowing harmful substances to enter the water system. Common residential cross-connections 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 can include cooling systems, boilers, solvents and manufacturing chemicals, sprinkler systems, and the same sources for residential contamination sources.

What can you do to protect our public water system?

- Be observant. Check for potential contamination sources. 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 factors.
- Install backflow prevention assemblies to prevent crossconnections and have a certified backflow tester inspect and test assemblies annually to ensure they are working properly.

For more information and a list of certified backflow testers visit http://bit.ly/GreeleyWaterQuality.