2019 WATER QUALITY REPORT

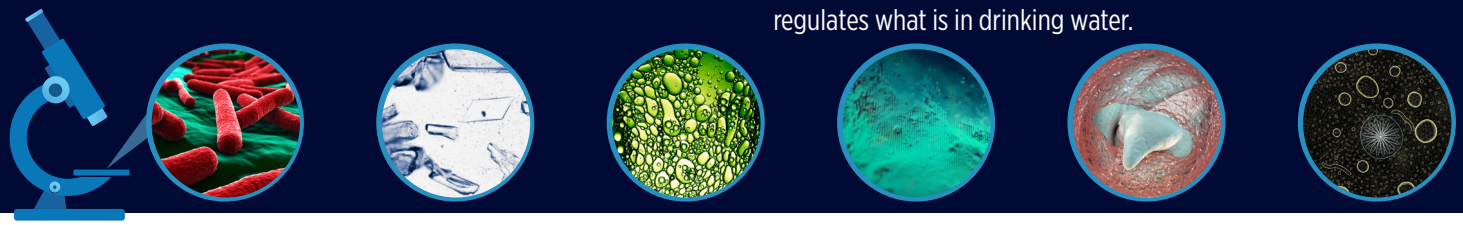
COMMITTED TO QUALITY

Fort Collins Utilities remains committed to delivering high-quality drinking water. Look inside this report to learn where your drinking water comes from, how it compares to drinking water standards and about community participation.

TEST RESULTS

Utilities' Water Quality Lab performed approximately 44,000 water quality analyses on just over 7,100 samples.

To ensure tap water is safe to drink, the Colorado Department of Public Health and Environment (CDPHE) regulates what is in drinking water.



MICROBIALS | INORGANICS | ORGANICS | RADIOACTIVE CONTAMINANTS | *CRYPTOSPORIDIUM* AND *GIARDIA* | CHLORINE

PROTECTING AND TREATING SOURCE WATER

Utilities collaborates with local drinking water providers and other water stakeholders to monitor water quality trends in the Poudre River, Big Thompson River and Horsetooth Reservoir.

- Monitoring includes 25+ naturally occurring chemicals, physical and microbiological parameters at 35 locations throughout our source watersheds.

Abby Eurich, Watershed Technician, measures water quality field parameters on the Cache la Poudre River.

COMMUNITY PARTICIPATION

Community members are welcome to attend Utilities' Water Board meetings, a citizen committee that advises City Council on matters of policy and budget.

City of Fort Collins Utilities

FOR MORE INFORMATION

970-212-2900
utilities@fcgov.com

Para más información de este informe de su cualidad de agua potable en español, llame Fort Collins Utilities a 970-212-2900, V/TDD: 711 o mande preguntas en español a ***utilities@fcgov.com***.

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WATER QUALITY TEST RESULTS

Our Water Treatment Facility produces nearly all the water it distributes. However, customers may occasionally receive a blend of water treated by Utilities and the Soldier Canyon Filter Plant (SCFP). Both treatment facilities use Horsetooth Reservoir and the Cache la Poudre River as sources of water. The SCFP is owned by Soldier Canyon Water Treatment Authority. To determine your water provider, view an interactive map of water districts in Fort Collins and surrounding areas.

▶ The monitoring results shown here are representative of water treated by Utilities and the SCFP. All data are from monitoring completed during 2019.

Definitions

AL: Action level — concentration of a contaminant, which, if exceeded, triggers treatment or other requirements that a water system must follow

CDPHE: Colorado Department of Public Health and Environment

EPA: United States Environmental Protection Agency

MCL: Maximum contaminant level — highest level of a contaminant allowed in drinking water; MCLs are set as close to MCLGs as feasible, using the best available treatment technology

MCLG: Maximum contaminant level goal — 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

N/A: Not applicable

NTU: Nephelometric turbidity unit — measure of particles in the water or clarity

ppb: Parts of contaminant per billion parts of water, µg/L

ppm: Parts of contaminant per million parts of water, mg/L

SCFP: Soldier Canyon Filter Plant

Watershed: Land area that collects, stores and drains water into a shared network of streams, rivers, lakes and reservoirs

Raw and Finished Water Samples

Parameter	Average	Range	Number of Samples	Unit of Measure	Minimum Ratio	Meet Standard?	Typical Sources
Total Organic Carbon Ratio, Utilities	1.33	1.23 to 1.48	12	Ratio	1.00	Yes	Naturally present in the environment
Total Organic Carbon Ratio, SCFP	1.23	1.08 to 1.47	13				

Combined Filter Effluent Samples (from within both Fort Collins and SCFP treatment plants)

Parameter	Month	Result	Standard	Meet Standard?	Typical Sources
Turbidity, Utilities	March	Highest single measurement: 0.11 NTU	Maximum is 1 NTU for any single measurement	Yes	Soil Runoff
Turbidity, SCFP	April	Highest single measurement: 0.27 NTU			
Turbidity, Utilities	All 12 months	During all 12 months of 2019, 100% of samples were less than 0.3 NTU.	In any month, at least 95% of samples must be less than 0.3 NTU		
Turbidity, SCFP	All 12 months	During all 12 months of 2019, 100% of samples were less than 0.3 NTU.			

Turbidity is a measure of the clarity of the water and is a good indicator of the effectiveness of the filtration system.

Sampled at the Entry Point to the Distribution System

Parameter	Result	Number of Samples	Unit of Measure	MCL	MCLG	Meet Standard?	Typical Sources
Barium, Utilities	0.02	1	ppm	2	2	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Barium, SCFP	0.01	1					
Fluoride, Utilities	0.68	1		4	4		Erosion of natural deposits; water additive which promotes strong teeth
Fluoride, SCFP	0.62	1					
Nitrate, Utilities	0.05	1		10	10		Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits
Nitrate, SCFP	0.07	1					

Sampled in the Distribution System

Parameter	Month	Standard	Lowest monthly percentage	Number of Samples Below 0.2 ppm	Number of Samples	Meet Standard?	Typical Sources
Chlorine Residual	All months of 2019	At least 95% of samples per month must have a chlorine residual of at least 0.2 ppm	100% of all monthly samples had a chlorine residual of at least 0.2 ppm	0	Monthly sample size ranged from 104-139	Yes	Water additive used to control microbes

Parameter	Month	Standard	Meet Standard?	Typical Sources
Chlorine Residual	All months of 2019	All samples must be less than or equal to 4.0 ppm	Yes	Water additive used to control microbes

Parameter	Monitoring Period	Number of Samples	Standard	Result	Unit of Measure	Number of Sample Sites Above Standard	Meet Standard?	Typical Sources
Copper	6/25/2019 to 8/26/2019	54	1.3	0.17	ppm	0	Yes	Corrosion of household plumbing systems; Erosion of natural deposits
Lead		54	15	2	ppb			

Parameter	Average	Range	Number of Samples	Unit of Measure	MCL	MCLG	Meet Standard?	Typical Sources
Total Haloacetic Acids	18.95	4.1 to 33.1	32	ppb	60	N/A	Yes	Byproduct of drinking water disinfection
Total Trihalomethanes	25.49	12.2 to 64.2	32		80	N/A		
Chlorite	0.28	0.19 to 0.43	12		1.0	0.8		

Unregulated Contaminants*	Year	Average	Range	Number of Samples	Unit of Measure	Sample Site
Bromochloroacetic Acid	2019	1.2	0.6 to 1.6	16	ppb	Distribution
Bromodichloroacetic Acid		1.0	0.5 to 1.6			
Dichloroacetic Acid		9.3	3-13			
Trichloroacetic Acid		11.8	9.8 to 14			
Manganese		1.1	1 to 1.2	2		Entry point to the distribution
TOC		2400	1700 to 2900	4		Raw Water

*In 2019, EPA required that we monitor the raw and finished water for contaminants that are not currently regulated. EPA plans to use this data in their decision regarding whether to regulate the contaminants. If you would like more information about this monitoring, please contact us.

TREATING SOURCE WATER

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.

As water travels over the land's surface or through the ground, it dissolves naturally occurring minerals and can pick up substances resulting from the presence of animals and humans. To ensure tap water is safe to drink, the CDPHE regulates the amount of certain contaminants in water from public water systems.

Source water may contain:

MICROBIAL CONTAMINANTS

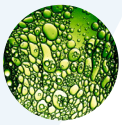
Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.

INORGANIC CONTAMINANTS

Inorganic contaminants, such as salts and metals, which may be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.

PESTICIDES AND HERBICIDES

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.

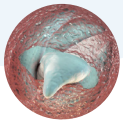


ORGANIC CHEMICAL CONTAMINANTS

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production. These contaminants also may come from gas stations, urban stormwater runoff and septic systems.

RADIOACTIVE CONTAMINANTS

Radioactive contaminants, which may be naturally occurring or the result of oil and gas production and mining activities.



CRYPTOSPORIDIUM AND GIARDIA

Cryptosporidium and *Giardia* come from animal and human waste in the watershed and are common in untreated surface water. When ingested, the organisms may cause fever, nausea and diarrhea. They are removed by a well-maintained water treatment process.

In 2019, Fort Collins Utilities tested our untreated source water for the organisms. *Giardia* was found in the Poudre River samples. Neither organism was found in the Horsetooth Reservoir samples.

For more information about contaminants and potential health risks, call the Safe Drinking Water Hotline at 800-426-4791 or visit *epa.gov/safewater*.

PROTECTING AND TREATING OUR SOURCE WATER

Our drinking water supply comes from two sources: the upper Cache la Poudre River (Poudre River) and Horsetooth Reservoir. Poudre River water originates as rain and snow in the mountains on the eastern slope of the Continental Divide, northwest of Fort Collins. Horsetooth water is delivered from the Colorado River Basin on the western slope via the Colorado-Big Thompson Water Project.

Source Water Quality Monitoring

Utilities' Watershed Program collaborates with regional partners to monitor water quality trends in the ***Poudre River, Big Thompson River*** and ***Horsetooth Reservoir***. Monitoring includes chemical, physical and biological parameters throughout our source watersheds. As in previous years, 2019 water quality data indicated that our source watersheds continue to provide high-quality water (learn more at ***fcgov.com/source-water-monitoring***).

The High Park Fire of 2012 significantly impacted our source water quality and damaged drinking water infrastructure in the Poudre River Watershed. Utilities began working closely with the Coalition for the Poudre River Watershed (CPRW) and other stakeholders to improve the *health and resiliency* of the Poudre River.

Source Water Protection Plan

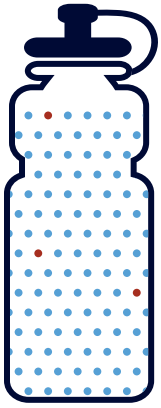
The City of Fort Collins' ***Source Water Protection Plan (SWPP)*** was completed in 2016. The SWPP identifies and prioritizes major pollution threats to our water sources and identifies key protection or mitigation strategies. Wildfires and historic mining were identified as the highest priority threats to our source water quality and drinking water infrastructure. In 2016, CPRW completed the Poudre River Watershed Resiliency Plan which is used by Utilities to prioritize areas for wildfire restoration and mitigation projects.

In 2019, Utilities contributed more than $60,000 to two cost-share collaborative wildfire mitigation projects aimed at protecting Horsetooth Reservoir and the Poudre River Watersheds. Combined, the projects treated 231 acres of high-priority forest by mastication, hand thinning, piling and pile burning (photos below).

An ***abandoned mine assessment*** was completed in 2016. It concluded there is no known mine drainage to the Poudre River or its tributaries, which is consistent with metals data from routine Poudre River monitoring from 2008-2016.

Learn more about our Watershed Program and source water monitoring efforts, including seasonal updates, annual and five-year reports at ***fcgov.com/source-water-monitoring***.

FLUORIDATION

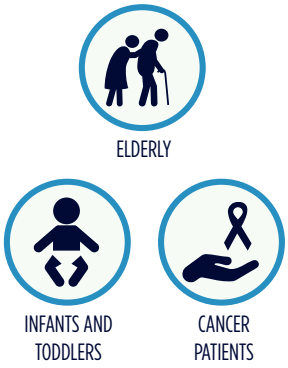


As directed by City Council and our customers, Utilities adds fluoride to the water, resulting in levels that range from 0.60 to 0.75 milligrams of fluoride per liter of treated water.

If you or members of your household are sensitive to fluoride or fluoridation-related substances or if you provide our water to an infant younger than six months of age, please consult your physician or another health expert regarding precautions you may want to consider.

Visit *fcgov.com/water/fluoride.php* for more information.

VULNERABLE POPULATIONS



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 from infections. These people should seek advice about drinking water from their healthcare providers.

EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

TREATING SOFT WATER TO MINIMIZE CORROSION IN HOME PLUMBING SYSTEMS

Fort Collins Utilities' source water has a low mineral content and is naturally soft because it comes from snowmelt and rainfall. Without additional treatment, soft water can be corrosive. To help prevent corrosion (the leaching of metals), Utilities began implementing specific treatment measures in 1984 and is proud to continue these treatment measures today. This additional treatment, which includes adding calcium and carbon dioxide to the water before it leaves the treatment plant, helps minimize corrosion. As a check to ensure our approach is effective, Utilities monitors lead and copper levels in the drinking water of 50 homes annually. These tests have shown the levels to be substantially below EPA's action level.

If our source water has a low mineral content, **where do the metals come from?** While Utilities provides high-quality drinking water to our customers, we have limited control regarding the material that is used for home plumbing. Some plumbing installed in homes built after the mid-1980s included a combination of copper pipes and lead solder. Copper and lead can leach from plumbing materials when the water sits for an extended period.

If you are concerned that the water has been sitting in your service line for several hours, you can minimize the potential for lead exposure by flushing your cold water tap for 30 seconds to 2 minutes (until you feel a temperature change) before drinking or cooking. If you have concerns about your water quality, contact the Water Quality Lab at 970-221-6863. Any concerns about home plumbing should be directed to a licensed plumber.

If present, elevated levels of lead can cause serious health problems, particularly for pregnant women and young children. For more information, testing methods and steps to minimize exposure, call the Safe Drinking Water Hotline at 800-426-4791 or visit *epa.gov/safewater/lead.*