2020

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.

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COMMUNITY PARTICIPATION

Community members are welcome to attend Utilities' Water Commission meetings, a citizen committee that advises City Council on matters of policy and budget. Please see the schedule and location at *fcgov.com/cityclerk/water*.

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.

FOR MORE INFORMATION

970-212-2900 V/TDD: 711 utilities@fcgov.com RADIOACTIVE CONTAMINANTS















TEST RESULTS

Utilities' Water Quality Lab performed approximately

16,150 water quality analyses

on just over 3,639 samples.

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

in drinking water.

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*.

WATER QUALITY TEST RESULTS

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	1.2	1 to 1.54	12	Ratio	1.00	Yes	Naturally present in the environment	
Total Organic Carbon Ratio, SCFP	1.27	1.09 to 1.47	12	KdllO	1.00	res		

SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

Parameter	Month	Result	Standard	Meet Standard?	Typical Sources
Turbidity, Utilities	September	Highest single measurement: 0.86 NTU	Maximum is 1 NTU for any single	No	Call Durineff
Turbidity, SCFP	January	Highest single measurement: 0.127 NTU	measurement		
Turbidity, Utilities	All 12 months	During all 12 months of 2020, 100% of samples were less than 0.3 NTU.	Yes	Soil Runoff	
Turbidity, SCFP	All 12 months	During all 12 months of 2020, 100% of samples were less than 0.3 NTU.	In any month, at least 95% of samples must be less than 0.3 NTU		

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

Parameter	Result	Number of Samples	Unit of Measure	MCL	MCLG	Meet Standard?	Typical Sources					
Barium, Utilities	0.01	1		2	2	Yes	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits Erosion of natural deposits; water additive which promotes strong teeth					
Barium, SCFP	0.01	1		2	2							
Fluoride, Utilities	0.61	1	ppm									
Fluoride, SCFP	0.66	1		4			Erosion of natural deposits; water additive which promotes strong teeth					
Nitrate, Utilities	0.06	1		10			Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits					

SAMPLED IN THE DISTRIBUTION SYSTEM

Parameter	Date	Stan	dard		Result				Number of Samples Not Meeting Standards			Number of Samples		Meet Standard?		Typical Sources	
Chlorine Residual All autors of 2020		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							Monthly sample size ranged from 121-		Yes		Water additive used to control	
		The running annual average must be <=4.0 ppm			for all	The running annual averag for all four quarters of 2020 was <4.0 ppm						150 samples		fes		microbes	
Parameter	neter Monitoring Period Result Standar			Standard	Unit of M	leasure	asure Number of S			Number of Above Sta		le Sites	Sites Meet Standard?		Typical Sources		
Copper	0/17/2020 10		0.11 1.3		р	om 55				0			Yes		Corrosion of household plumbing		
Lead			2.5	15	ppb			55		0			165				
Parameter Average Ra			Range	Number of Samples Unit of			Unit of	Measure	easure MCL MCLG			Meet Standard?			Typical Sources		
Haloacetic Acids 20.28		13.3 to 39	32					60	N/A	1							
Total Trihalo	methanes	2	4.95	15.54 to 39.2	2 32		ppb		opb	80 N/A		Yes	Yes		Byproduct of drinking water disinfection		
Chlorite	lorite 0.3		0.16 to 0.36	12				1.0	0.8								
Unregulated Contaminants ¹			Year	Averag	e Range			Nu	lumber of Samples		s Unit o	Unit of Measure		Sample Site			
HAA6Br ²				2.57		1.66 -	- 4										
HAA9 ²				27.87	:	18.73 - 38.12			16			ррb		Distribution System			
Manganese			2020	1.25	1.25 1.1 - 1.4		L.4		2					Finished Water			
тос				4100	2600 - 7900		7900	4							Untreated Source Water		

¹In 2020, EPA required that we monitor for contaminants that are not currently regulated. EPA plans to use this data in their decision regarding whether to regulate the contaminants. For more information, please see www.fcgov.com/utilities/unregulated-contaminant-monitoring-rule-ucmr-4

² HAA are haloacetic acids. Five are already regulated (HAA5) and include dibromoacetic acid, dichloroacetic acid, monobromoacetic acid, monochloroacetic acid, and trichloroacetic acid. Four additional brominated acetic acids were evaluated for UCMR4 and include bromochloroacetic acid, bromodichloroacetic acid, dibromochloroacetic acid, and tribromoacetic acid, end tribromoacetic acid, and t

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 2020.

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

 $\ensuremath{\text{ppb}}$: Parts of contaminant per billion parts of water, $\ensuremath{\mu g}/L$

 ${\rm ppm}:$ Parts of contaminant per million parts of water, ${\rm mg/L}$

SCFP: Soldier Canyon Filter Plant

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

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:

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.

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.

MICROBIAL CONTAMINANTS

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

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 2020, 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.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791) or visiting *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 analyses of chemical, physical and biological parameters throughout our source watersheds. As in previous years, 2020 water quality data indicated that our source watersheds continue to provide high-quality water (learn more at *fcgov.com/source-water-monitoring*).

The Cameron Peak (208,913 acres) and East Troublesome wildfires (192,457 acres) are the two largest in Colorado history. Neither fire directly impacted the City's drinking water infrastructure and source water quality was not impacted in 2020. There will likely be significant source water quality impacts to the Upper Cache la Poudre and Horsetooth Reservoir supplies in 2021. The Watershed Program is developing post-fire water quality monitoring recovery plans for both watersheds.

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. The threat of large-scale catastrophic wildfires has been identified as the highest priority threat to our source water quality and drinking water infrastructure; historical mines and flooding are a moderate priority. 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 following the High Park Fire of 2012. CPRW is leading the Cameron Peak Wildfire local recovery group, including identifying priority restoration areas and projects aimed at protecting our source water quality.





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.

LONG-STANDING CORROSION CONTROL

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) of water mains, services lines and home plumbing, Utilities began implementing specific treatment measures in 1984. These measures continue 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, and as required by the Colorado Department of Public Health and Environment, 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? If there is lead present in drinking water, it is primarily from plumbing leading to or inside a home. Some plumbing installed in homes built after the mid-1980s included a combination of copper pipes and lead solder. If this plumbing corrodes or deteriorates, lead can seep into the water if it sits in the pipes for an extended period. While Utilities provides high-quality drinking water to our customers, we have limited control regarding the material used in home plumbing. You share responsibility for protecting yourself and your family from lead in your home plumbing. Ways to protect your family include identifying and removing lead materials within your home plumbing.

Also, consider flushing your water line first thing in the morning or after it has been stagnant for six or more hours. This flushing can include running the tap, taking a shower, doing laundry or a load of dishes. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water.

If you have concerns about your water quality or questions about water testing, contact the Water Quality Lab at *970-221-6863* or V/TDD 711. 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*

