

Drinking Water Quality Report.



Water Testing Performed in 2011.



Utilities for the 21st Century.

Protecting the Colorado-Big Thompson and Cache la Poudre watersheds.

Fort Collins Utilities' drinking water comes from the Cache la Poudre River and Colorado-Big Thompson (C-BT) watersheds. Utilities collaborates with other drinking water providers to monitor and assess water quality in the upper Cache la Poudre watershed. We also are a member of the Big Thompson Watershed Forum (btwatershed.org) and partner with a variety of organizations to monitor and analyze water quality in the C-BT watershed. Monitoring data are used to determine if activities in the watershed are causing water quality to change over time. Water quality data collected by Utilities do not indicate the presence of any persistent sources of contamination within either watershed.

To help protect our watersheds, the Colorado Department of Public Health and Environment (CDPH&E) prepared a screening-level assessment of potential sources of

Community participation.

Community members are welcome to attend Fort Collins Utilities' Water Board 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.php.

Fluoridation.

As directed by City Council and our customers, Utilities adds fluoride to the water, resulting in levels that range from 0.7 to 1.2 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/fluoride for more information.

EPA information.

The U.S. Environmental Protection Agency (EPA) states drinking water—including bottled water—may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

More information about contaminants and potential health risks can be obtained by calling the Safe Drinking Water Hotline at (800) 426-4791 or visiting epa.gov/safewater.

contaminants. The ratings show our two watersheds have moderate and moderately low susceptibility for contamination from several potential sources, which may include underground, above ground and/or leaking storage tanks, existing and/or abandoned mine sites, permitted wastewater discharge sites, hazardous waste generators, roads, agricultural lands, forested areas, residential areas, concentrated animal feeding operations, solid waste sites, septic systems, oil and/or gas wells and chemical storage sites. View the report at www.cdphe.state.co.us/wq/sw/swapreports/swapreports.html.

In 2011, Utilities began surveying mine sites identified by the CDPH&E for evidence of drainage or disturbance that could potentially impact water quality. To date, the site investigations have not identified any potential sources of contamination.

Utilities' most recent source water quality reports can be found at fcgov.com/source-water-monitoring.

Treating source water.

To ensure tap water is safe to drink, the CDPH&E regulates the amount of certain contaminants in water from public water systems. Source water may contain:

- Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife
- 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, which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production; contaminants also may come from gas stations, urban stormwater runoff and septic systems
- 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 2011, Fort Collins Utilities tested untreated source water for both organisms. *Giardia* was found in the Poudre River and in Horsetooth Reservoir. *Cryptosporidium* was found in the Poudre River.



Continuing our commitment.

Fort Collins Utilities is proud to present the annual *Drinking Water Quality Report*. We remain committed to delivering high-quality drinking water and meeting the challenges of source water protection, water conservation and community education.

Lead.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing.

While Utilities is responsible for providing high-quality drinking water, we cannot control the variety of materials used in plumbing components. 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. If you are concerned, you may wish to have your water tested.

For more information about testing methods and steps to minimize exposure, call the Safe Drinking Water Hotline at (800) 426-4791 or visit epa.gov/safewater/lead.



Water quality test results.

The values below represent data for water treated by the Utilities Water Treatment Facility (Utilities) and the Soldier Canyon Filter Plant (SCFP). All data are from monitoring that was completed during 2011, in compliance with regulations.

Definitions.

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

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

MCL: Maximum contaminant level – 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

MRDL: Maximum residual disinfectant level – highest level of a disinfectant allowed in drinking water; the addition of a disinfectant is necessary to control microbial contaminants

MRDLG: Maximum residual disinfectant level goal – level of a drinking water disinfectant, below which there is no known or expected risk to health; MRDLGs do not reflect the benefits of disinfectants used to control microbial contaminants

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

TOC: Total organic carbon

TT: Treatment technique – required process intended to reduce the level of a contaminant in drinking water

Sampled in the Distribution System									
Parameter	Monitoring Period	Results		Number of Samples		TT Requirement		Meet Standard?	Typical Sources
Chlorine	Nov. 1-30, 2011	Lowest monthly percentage of samples meeting TT requirement: 97%		118		For any two consecutive months, at least 95% of samples per month must be greater than 0.001 ppm		Yes	Water additive used to control microbes
Parameter	Monitoring Period	Results		Number of Samples		MCL	MCLG	Meet Standard?	Typical Sources
Total coliform bacteria	Jul. 1-31, 2011	0.9% positive samples		108		No more than 5% positive samples per period	0	Yes	Naturally present in the environment
Parameter	Year	Avg. of Individual Samples	Range of Individual Samples	Number of Samples	Unit of Measure	MCL	MCLG	Meet Standard?	Typical Sources
Chlorite	2011	0.17	0.06 - 0.34	36	ppm	1	0.8	Yes	By-product of disinfection
HAA5		19.0	15 - 22	16	ppb	60	N/A	Yes	
TTHM		32.1	23.9 - 49.4	16	ppb	80	N/A	Yes	
Parameter	Monitoring Period	90 th Percentile	Number of Samples	Unit of Measure	Action Level		Sample Sites Above Action Level	Typical Sources	
Copper	Jan. 1, 2011 to Dec. 31, 2011	0.109	50	ppm	1.3		0	Corrosion of household plumbing systems	
Lead		2.3	50	ppb	15		0		

Raw and Finished Water								
Parameter	Year	Avg. of Individual Ratio Samples	Range of Individual Ratio Samples	Number of Ratio Samples	Unit of Measure	TT Minimum Ratio	Meet Standard?	Typical Sources
Total organic carbon, Utilities	2011	1.34	0.99 - 1.59	12	Ratio	The TT minimum level is a ratio of 1	Yes	Naturally present in the environment
Total organic carbon, SCFP		1.32	1.06 - 1.57	12			Yes	

Sampled at Entry Point to the Distribution System						
Parameter	Sample Date	Level Found		TT Requirement	Meet Standard?	Typical Sources
Turbidity, Utilities	May 1, 2011	Highest single measurement: 0.31 NTU		Maximum 1 NTU for any single measurement	Yes	Soil runoff
Turbidity, SCFP	Dec. 28, 2011	Highest single measurement: 0.08 NTU			Yes	
Turbidity, SCFP & Utilities	All months of 2011	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	Yes	

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

Parameter	Year	Avg. of Individual Samples	Range of Individual Samples	Number of Samples	Unit of Measure	MCL	MCLG	Meet Standard?	Typical Sources
Barium, Utilities	2011	0.013	0.013 - 0.013	1	ppm	2	2	Yes	Erosion of natural deposits
Barium, SCFP		0.016	0.016 - 0.016	1				Yes	
Chlorine Dioxide, Utilities		0	0-30	daily	ppb	800	800	Yes	Water additive to control manganese
Chlorine Dioxide, SCFP		0	0-90					Yes	Water additive to control microbes
Fluoride, Utilities		1.02	1.02-1.02	1	ppm	4	4	Yes	Water additive that prevents tooth decay
Fluoride, SCFP		1	1-1	1				Yes	

Para más información de este informe de su calidad de agua potable en español, llame Fort Collins Utilities a (970) 221-6700, TDD (970) 224-6003 o mande preguntas en español a utilities@fcgov.com.

Where our raw water originates.

Fort Collins Utilities' water comes from the Horsetooth Reservoir and Cache la Poudre River. Beginning as rain and snow in the mountains, Horsetooth water is delivered from the western slope via the Colorado-Big Thompson Water Project, while Poudre River water originates on the eastern slope, northwest of Fort Collins.

Utilities' 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. Both treatment facilities use Horsetooth Reservoir and the Cache la Poudre River as sources of water.

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. Both facilities remove these contaminants through treatment processes.



Vulnerable populations.

Some people may be more vulnerable to contaminants in drinking water than the general population. Particularly at risk are immunocompromised persons, such as those undergoing chemotherapy; those who have received organ transplants; those with HIV/AIDS or other immune-system disorders; and some elderly and infants. These people should seek advice about drinking water from their healthcare providers.

Guidelines to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available via the EPA/Center for Disease Control. Call the Safe Drinking Water Hotline at (800) 426-4791 or visit epa.gov/safewater.

Colorado Environmental Leadership Program.

The Colorado Environmental Leadership Program (ELP) is a voluntary program that recognizes organizations for superior environmental performance and for consistently operating at a level that goes beyond regulatory compliance. The Water Treatment Facility is a Silver Partner of the ELP, for the third consecutive year. To help Utilities move to the Gold Tier, work began on an Environmental Management System in 2010. This system will audit our environmental impacts and consequent controls.

Utilities' Water Treatment Facility also is a member of the Partnership for Safe Water, earning the Director's Award 13 years in a row—an achievement only 101 U.S. water plants have accomplished. The mission of the Partnership is to improve the quality of drinking water by optimizing system operations.

