



2014 DRINKING WATER QUALITY REPORT

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.

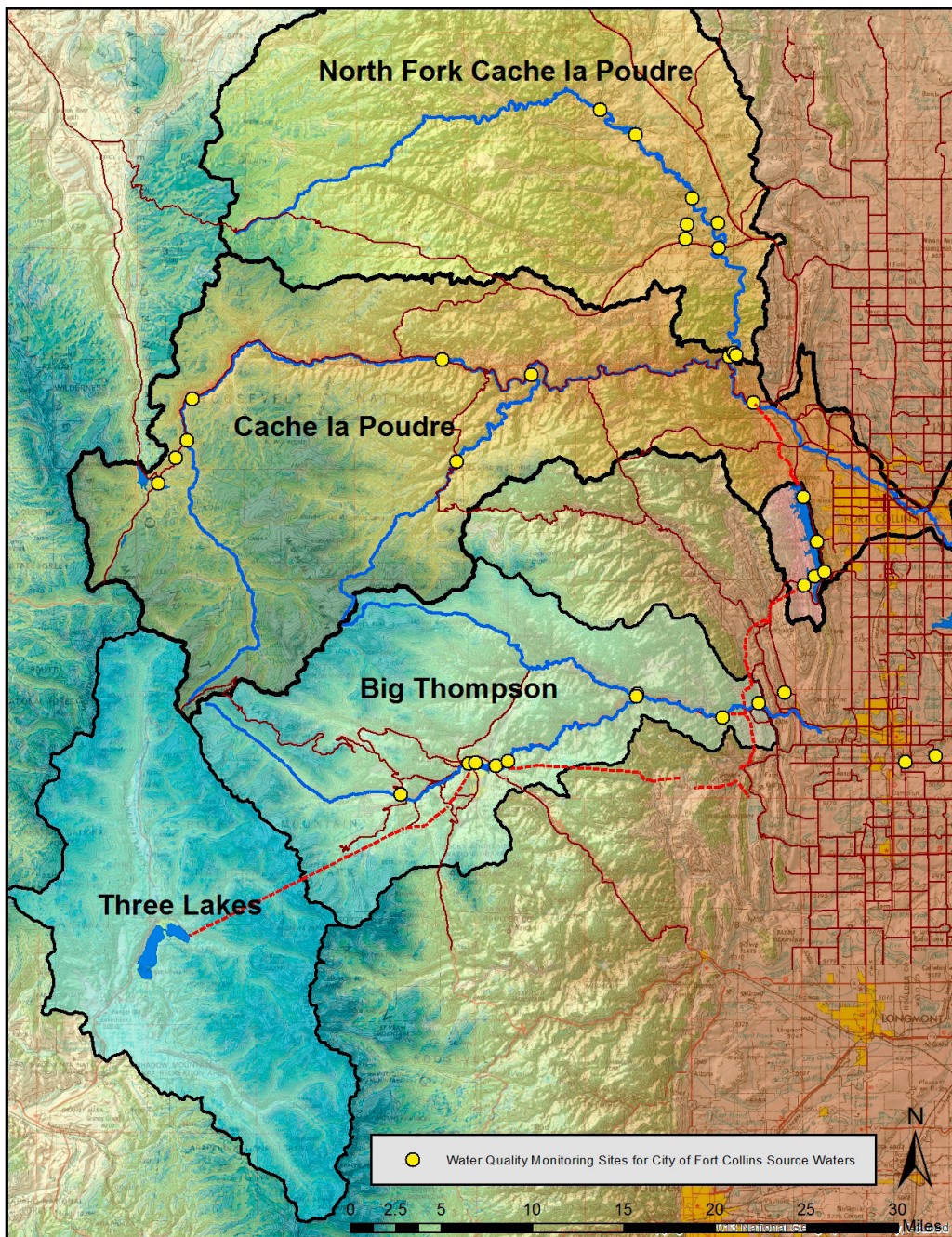
Continuing Our Commitment

Know your H2O. Learn where your drinking water comes from and how it compares to federal standards by checking out this Report. Fort Collins Utilities remains committed to delivering high-quality drinking water and meeting the challenges of source water protection, water conservation and community education.

Where Our 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.

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 (owned by the Tri-Districts). Both treatment facilities use Horsetooth Reservoir and the Cache la Poudre River as sources of water.



Water Quality Test Results

These monitoring results are representative of water treated by Utilities and the Soldier Canyon Filter Plant (SCFP). The unregulated contaminated monitoring data was collected during 2013 and 2014; all other data are from monitoring completed during 2014, in compliance with regulations. Acronym definitions are listed on page 5.

Regulated in the Distribution System

Parameter	Month with the lowest number of samples with detectable chlorine	Results	Number of Samples	TT Requirement	Meet Standard?	Typical Sources
Chlorine	November	99.04%	104	For any two consecutive months, at least 95% of samples (per month) must be detectable. The higher the percentage the better.	Yes	Water additive used to control microbes
	Chlorine was detectable in 100% of samples in all other months.					

Parameter	Month with the highest percentage of positive samples	Results	Number of Samples	MCL	MCLG	Meet Standard?	Typical Sources
Total Coliform	October	0.93% positive	107	No more than 5.0% positive samples per month (the lower the percentage the better)	0	Yes	Naturally present in the environment

Parameter	Average	Range of Individual Samples	Number of Samples	Unit of Measure	MCL	MCLG	Highest Compliance Value	Meet the Standard?	Typical Sources
HAA5	25.53	7.4 to 40	32	ppb	60	N/A	28.5	Yes	Byproduct of drinking water disinfection
TTHM	36.36	22.8 to 54.2	32		80	N/A	44.6	Yes	
Chlorite	0.14	0.06 to 0.24	36		1.0	0.8	N/A	Yes	

Regulated at the Consumer's Tap—52 Homes Were Tested

Parameter	Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Number of Sample Sites Above Action Level	Meet Standard?	Typical Sources
Copper	08/25/2014 to 09/29/2014	0.08	52	ppm	1.3	0	Yes	Corrosion of household plumbing systems
Lead		2	52	ppb	15	0	Yes	

Raw and Finished Water Ratio

Parameter	Average	Range	Number of Samples	Unit of Measure	TT Minimum Ratio	Meet the Standard?	Typical Sources
Total Organic Carbon Ratio, Utilities	1.30	1.13 to 1.47	12	Ratio	1.00 (the higher the better)	Yes	Naturally present in the environment
Total Organic Carbon Ratio,SCFP	1.18	1.03-1.31	12	Ratio	1.00	Yes	

Sampled at the Entry Point to the Distribution System

Parameter	Month	Level Found	TT Requirement	Meet the Standard?	Typical Sources
Turbidity, Utilities	August	Highest single measurement: 0.15 NTU	Maximum is 1 NTU for any single measurement	Yes	Soil Runoff
Turbidity, SCFP	April	Highest single measurement: 0.13 NTU		Yes	
Turbidity, Utilities and SCFP	All months of 2014	100% of samples were less than 0.3 NTU	In any month, at least 95% of samples must be less than 0.3 NTU	Yes	

Parameter	Result	Number of Samples	Unit of Measure	MCL	MCLG	Meet the Standard?	Typical Sources
Barium, Utilities	0.02	1	ppm	2	2	Yes	Erosion of natural deposits
Barium, SCFP	0.016	1	ppm	2	2	Yes	
Fluoride, Utilities	0.88	1	ppm	4	4	Yes	Water additive promoting strong teeth
Fluoride, SCFP	0.66	1	ppm	4	4	Yes	
Nitrate, Utilities	0.09	1	ppm	10	10	Yes	Runoff from fertilizer use
Nitrate, SCFP	0.08	1	ppm	10	10	Yes	

Unregulated Contaminants

EPA required that we monitor the finished water in 2013 and 2014 for 28 contaminants that are not currently regulated (no MCL). EPA plans to use this information for writing future regulations.

Contaminant	Year	Range of Results	Unit of Measure	Typical Sources
Chromium	2013–2014	200–300	ppt	Naturally occurring metal
Strontium		40–53	ppb	Naturally occurring element
Vanadium		200–300	ppt	Naturally occurring element
Chromium, hexavalent		170–350	ppt	Naturally occurring metal
Chlorate		<20–41	ppb	Byproduct of drinking water disinfection
Chlorodifluormethane		<80–460	ppt	Propellants and refrigerants



Watershed recovery

Definitions

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

HAA5: Haloacetic Acids

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.

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, $\mu\text{g/L}$.

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

ppt: Parts of contaminant per trillion parts of water, ng/L .

TOC: Total organic carbon.

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

TTHM: Total Trihalomethanes

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 2014, Fort Collins Utilities tested the untreated source water for the organisms. Both *Giardia* and *Cryptosporidium* were found in the Poudre River samples. Neither was found in Horsetooth Reservoir samples.

Treating Source Water

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.

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**, 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. These 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.

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

Monitoring and Protecting Our Water Sources

The City of Fort Collins' drinking water supply comes from two water sources, the Cache la Poudre River and Horsetooth Reservoir. Fort Collins Utilities collaborates with local drinking water providers to monitor and assess water quality in the upper Cache la Poudre watershed. We 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 watersheds and Horsetooth Reservoir. Monitoring data are used to support the protection of the City's drinking water sources. The City's source watersheds continue to provide reliable, high-quality drinking water with the exception of "short-lived" impacts on Poudre River water quality from the after-effects of the 2012 wildfires.

In 2014, the Upper Poudre Watershed continued to experience post-wildfire impacts on water quality due to sediment erosion and flash flooding from the Hewett and High Park Fire burn scars. Utilities used early-warning technology and targeted water quality monitoring to mitigate post-wildfire impacts on water treatment operations and evaluate the watershed recovery process. Utilities treated more Poudre River water in 2014 compared to any pre-fire year, while continuing to meet the standards for high quality drinking water.

The City of Fort Collins Utilities completed work with the Natural Resource Conservation Service (NRCS) and other local partners through the Emergency Watershed Protection (EWP) program to assess and mitigate the hazards associated with flash flooding and sediment erosion. The final phase of the three year project was completed in August 2014 with a total of 1,800-acres of land treated with wood mulch since 2012. Utilities will continue to monitor watershed recovery and work with watershed stakeholders, including the newly formed Coalition for the Poudre River Watershed and its partners, to support watershed protection efforts in our source watersheds.

The most recent source water quality reports can be found at fcgov.com/utilities/what-we-do/water/water-quality/source-water-monitoring.

Environmental Leadership

The Water Treatment Facility is committed to protecting the environment by identifying and reducing its environmental impacts in order to increase its operating efficiency. To help achieve this goal, the facility has established a formal Environment Management System (EMS) that has been certified to conform to the International Organization for Standardization (ISO) 14001:2004 standard. The goals of an EMS are to prevent pollution, comply with legal requirements, and continually improve environmental performance. The key environmental objectives set by the facility include reduction in greenhouse gas emissions by



Sampling the North Fork
Cache la Poudre River

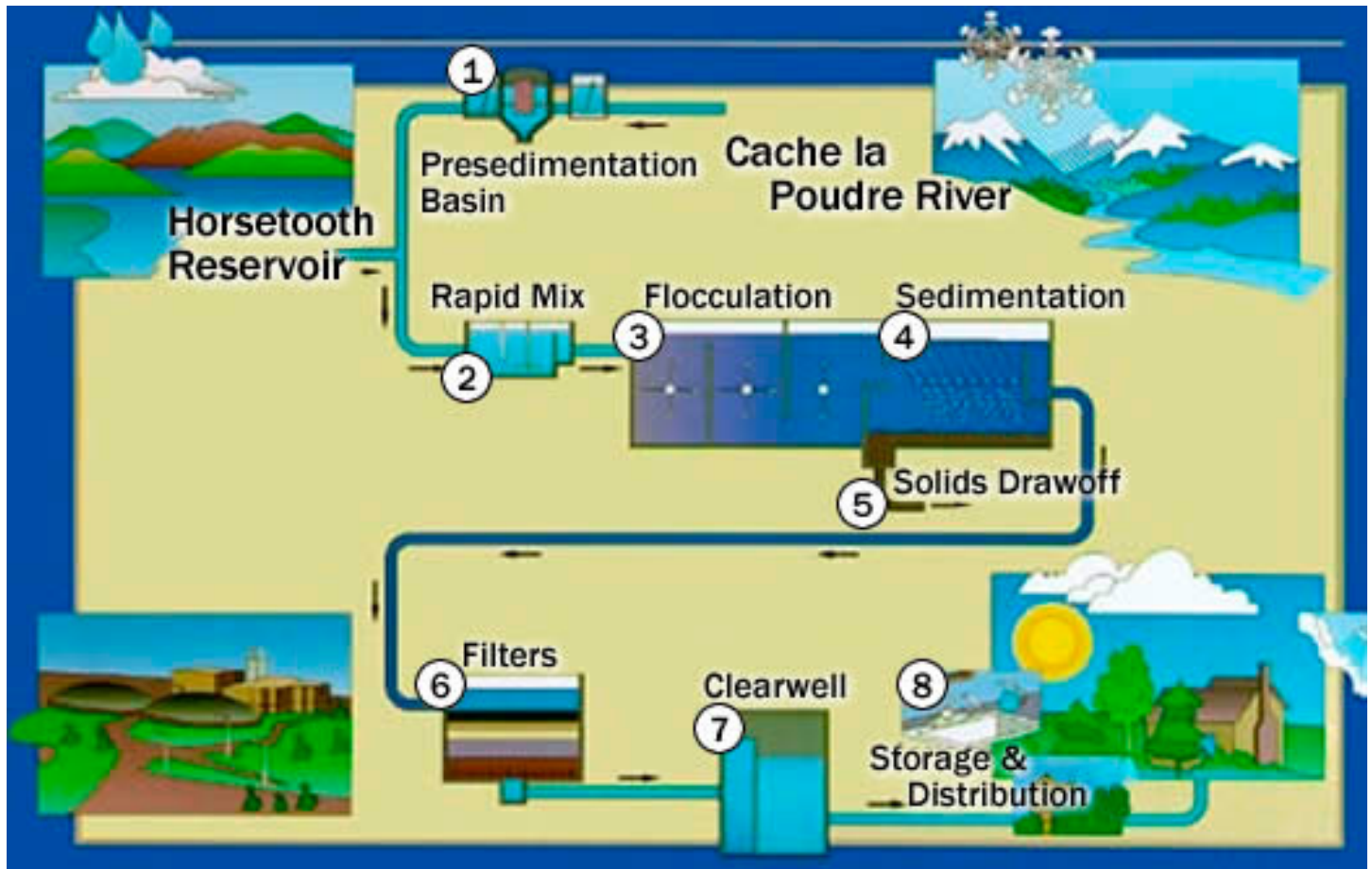
reducing energy and fuel consumption, and sustainably managing the facility's landscape to minimize risks to public safety, private property, and the environment.

The facility is participating in the Colorado Industrial Energy Challenge (CIEC), which is sponsored by the Colorado Governor's Energy Office and the U.S. Department of Energy (DOE). The CIEC is a voluntary program that supports industrial facilities to overcome barriers in achieving energy efficiency goals. Through this program, the facility conducted technical energy audits and engineering studies whose recommendations yielded significant reductions in energy usage, and cost savings; even in the face of rising treated water demands.

In addition, the facility participates in the Colorado Environmental Leadership Program (ELP), an environmental recognition and reward program administered by the Colorado Department of Public Health and Environment Division of Environmental Health and Sustainability. As a result of its continuing environmental stewardship and the successful ISO certification of the EMS, the facility was recognized as an ELP Gold Leader in 2014.

The Water Treatment Facility earned their 15th consecutive Director's Award as a member of the Partnership for Safe Water. The Partnership is an alliance of six drinking water organizations including the USEPA. The director's award is only awarded to top-tier water facilities that have demonstrated the commitment to providing superior quality water to their customers, beyond the requirements of the USEPA regulations.

Water Treatment Process



Fluoridation

As directed by City Council and our customers, Utilities adds fluoride to the water, resulting in levels that range from 0.9 to 1.05 ppm.

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. Particularly at risk are immunocompromised persons, such as those undergoing chemotherapy; those who have received organ transplants; people 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 the EPA/Center for Disease Control. Call the Safe Drinking Water Hotline at (800) 426-4791 or visit epa.gov/safewater.

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

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.