

2023

WATER QUALITY REPORT

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/boards/water.

COMMITTED TO QUALITY

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



TEST RESULTS

Utilities' Water Quality Lab performed 16,140 water quality analyses on 3371 samples in 2023. Samples are collected weekly at various locations throughout the water distribution system.

FOR MORE INFORMATION

970-212-2900 V/TDD: 711
fcgov.com/water-quality
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 | 1.2 | 1.02 -1.46 | 12 | Ratio | 1.00 | Yes | Naturally present in the environment |

*This ratio reflects the amount of organic carbon removed vs the amount of organic carbon required to be removed.

SAMPLED AT THE ENTRY POINT TO THE DISTRIBUTION SYSTEM

| Parameter | Month | Result | Standard | Meet Standard? | Typical Sources |
|-----------|---------------|---------------------------------------|---|----------------|-----------------|
| Turbidity | June | Highest single measurement = 0.21 NTU | Maximum is 1 NTU for any single measurement | Yes | Soil Runoff |
| | All 12 months | 100% of samples were below 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.

| Parameter | Results | Range | Number of Samples | Unit of Measure | MCL | MCLG | Meet Standard? | Typical Sources |
|-----------|---------|-------|-------------------|-----------------|-----|------|----------------|--|
| Barium | 0.02 | - | 1 | ppm | 2 | 2 | Yes | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Fluoride | 0.58 | - | 1 | | 4 | 4 | | |
| Nitrate | 0.13 | - | 1 | | 10 | 10 | | |

*No range provided when only one sample is collected.

SAMPLED IN THE DISTRIBUTION SYSTEM

| Parameter | Monitoring Period | Standard | Results | Number of Samples Not Meeting Standards | Number of Samples | Meet Standard? | Typical Source |
|-------------------|----------------------|--|---|---|---|----------------|---|
| Chlorine Residual | All months of 2023 | At least 95% of samples in the 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 120-153 samples | Yes | Water additive used to control microbes |
| | All quarters of 2023 | The running annual average must be <=4.0 ppm | The running annual average for all four quarters was <4.0 ppm. | 0 | | | |

| Parameter | Monitoring Period* | 90th Percentile | Standard | Unit of Measure | Number of Samples | Number of Samples Above Standard | Meet Standard? | Typical Source |
|-----------|-------------------------|-----------------|----------|-----------------|-------------------|----------------------------------|----------------|---------------------------------|
| Copper | 03/03/2021 to 10/1/2021 | 0.17 | 1.3 | ppm | 73 | 0 | Yes | Corrosion of household plumbing |
| Lead | | 2 | 15 | ppb | 73 | | | |

*Data for lead and copper is from 2021. Fort Collins Utilities is required to monitor for lead and copper every 3 years.

| Parameter | Average | Range | Number of Samples | Unit of Measure | MCL | MCLG | Meet Standard? | Typical Source |
|-----------------------------|---------|--------------|-------------------|-----------------|-----|------|----------------|--|
| Haloacetic Acids, HAA5 | 23.86 | 14.3 to 70.6 | 32 | ppb | 60 | N/A | Yes | Byproduct of drinking water disinfection |
| Total Trihalomethanes, TTHM | 24.82 | 15.3 to 37.8 | 32 | | 80 | N/A | | |
| Chlorite | 0.26 | 0.16 to 0.33 | 12 | | 1.0 | 0.8 | | |

SECONDARY CONTAMINANT SAMPLED AT ENTRY POINT TO DISTRIBUTION SYSTEM

| Parameter | Average | Range | Unit of Measure | Number of Samples | Meet Standard? | Typical Source |
|-----------|---------|-------|-----------------|-------------------|---|---------------------|
| Sodium | 3.18 | - | ppm | 1 | There is no standard for this parameter | Naturally occurring |

Our Water Treatment Facility produces nearly all the water it distributes; however, customers may occasionally receive a blend of water from Fort Collins Utilities and **Fort Collins Loveland Water District (FCLWD)**. Both facilities use Horsetooth Reservoir and the Cache la Poudre River as sources of water. 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 Fort Collins Utilities. Only detected contaminants sampled within the last 5 years appear in this report.

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

Ratio: amount of organic carbon removed/amount of organic carbon required to be removed

Sanitary Survey: Inspection performed by CDPHE every three years to ensure drinking water facilities are in compliance with all regulations and to evaluate the adequacy of the facilities for producing and distributing safe drinking water.

Secondary Contaminant: Non enforceable guidelines for contaminants that may cause cosmetic effects (such as skin, or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Watershed: The 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. 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).

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. The Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



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 2023, Fort Collins Utilities tested the untreated source waters for these organisms. *Giardia* was found in the Poudre River samples. Neither organism was found in the Horsetooth Reservoir samples.

MONITORING AND PROTECTING OUR SOURCE WATER

Fort Collins' drinking water supply comes from two primary surface water 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

Fort Collins Utilities' Watershed Program collaborates with regional partners to monitor water quality trends in the Poudre River and Horsetooth Reservoir. Monitoring includes analyses of chemical, physical and biological parameters throughout our source watersheds.

The 2020 Cameron Peak (208,913 acres) and East Troublesome wildfires (192,457 acres) are considered the two largest wildfires in Colorado history. Neither fire directly impacted the City's drinking water infrastructure; however, water quality in the Poudre River has been negatively impacted by increases in ash, sediment, turbidity, nutrients, and other constituents which can be challenging to water treatment. Fort Collins Utilities and Northern Water Conservancy District staff continue to work with regional partners to implement real-time water quality monitoring networks on the Poudre River and Horsetooth Reservoir. The City's source watersheds have continued to provide high-quality water in part due to the detection and mitigation of post-fire pollution events ([learn more fcgov.com/source-water-monitoring](https://fcgov.com/source-water-monitoring)).

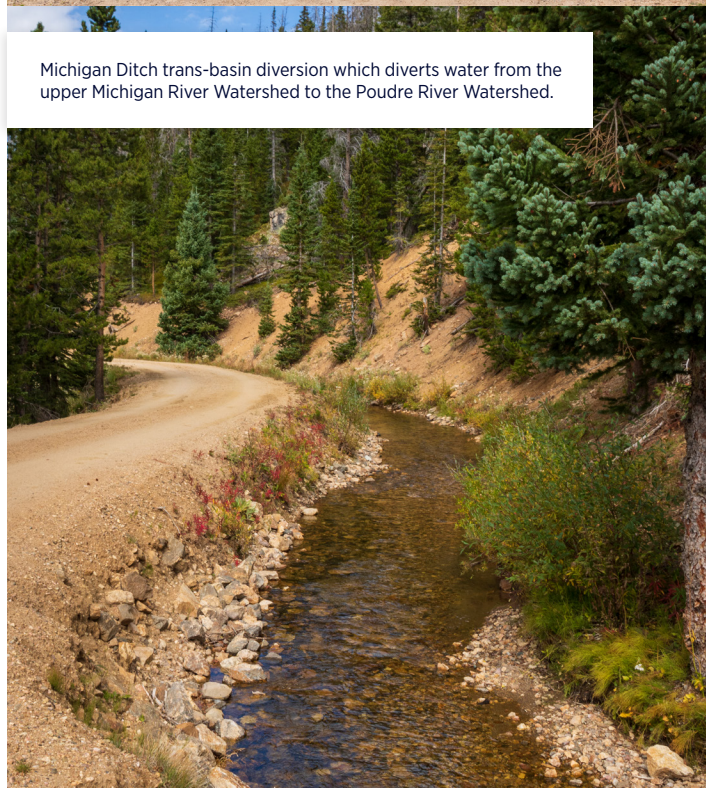
SOURCE WATER PROTECTION

The City of Fort Collins' **Source Water Protection Plan (SWPP)** was completed in 2016. The SWPP identifies and prioritizes major pollution threats to the City's source watersheds and identifies key protection or mitigation strategies. The threat of large-scale catastrophic wildfires continues to be the highest priority threat to both source water supplies and drinking water infrastructure. Historical mines, vehicle related chemical spills and flooding are moderate priority threats. Utilities' Watershed Program is leading the development of a collaborative Source Water Protection plan in 2024, which will include Fort Collins, City of Greeley, Soldier Canyon Water Authority, Northern Water and City of Thornton.

Utilities continues to work closely with the Coalition for the Poudre River Watershed (CPRW), Colorado State Forest Service, Larimer Conservation District and other key watershed stakeholders to improve the health and resiliency of the Poudre River. The Colorado State Forest Service (CSFS) awarded Utilities a \$508,000 grant to protect the Michigan Ditch and associated infrastructure. This project is intended to reduce the threat of large-scale wildfire threats to the Michigan Ditch system, and in turn, protect the City's source water supplies and infrastructure. Utilities is providing funding match for the grant and CSFS will provide additional federal funds. The first phase of this work is expected to start in 2024.



Maintenance and staff residence cabins.



Michigan Ditch trans-basin diversion which diverts water from the upper Michigan River Watershed to the Poudre River Watershed.

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 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 a minimum of 50 homes every three years. 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 building. Some plumbing installed 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/lead.

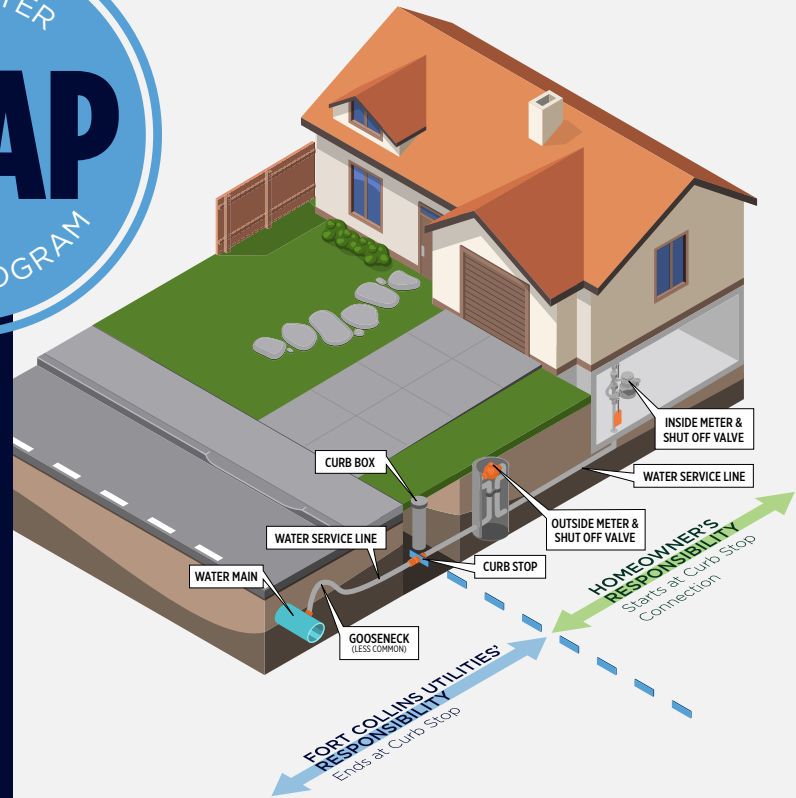


WHAT IS SWAP?

Through the **Safe Water Action Program (SWAP)**, Fort Collins Utilities has replaced 125 water service lines to date, and continues to work on replacing known galvanized lines, as well as investigating the remaining service lines that may potentially have small lead connectors called goosenecks. Fort Collins Utilities does not have full lead service lines and there is effectively no lead in the drinking water. However, to provide the highest level of protection for our customers, we are proactively working to locate, remove and replace this small but potential source of lead material in the water system through this multi-year program. Water testing results both before and after lead gooseneck replacement showed that the presence of lead goosenecks did not have any detectable effect on lead concentrations in the drinking water and risk to customers is low.



Water and wastewater service line ownership and responsibility.



WE WANT YOU TO KNOW

Fort Collins Utilities received a treatment technique violation in April 2023. This is the same violation you were told about in a past notice; however the Code of Colorado Regulations requires that it also be included in our annual water quality report. This did not require customers to use an alternative source and does not compromise the quality of water we continue to supply.

THE VIOLATION

We have an inadequate backflow prevention and cross-connection control program. Uncontrolled cross connections can lead to inadvertent contamination of the drinking water. This was because we failed to complete the testing requirements for backflow prevention devices.

WHAT HAPPENED?

In 2021 there were 5 privately owned backflow devices that did not get tested within the required timeframe which put Fort Collins Utilities out of compliance. The 5 backflow devices met all testing requirements by December 2022. The violation was issued during a Sanitary Survey by CDPHE in April 2023 and notices were sent to our customers the following month.

For more information about our backflow program go to fcgov.com/backflow-prevention or call 970-416-2249.