



2019 ANNUAL DRINKING WATER QUALITY REPORT

(for calendar year 2018)

5150 Snead Dr., Fort Collins, CO 80525 - www.FCLWD.com - Phone: (970) 226-3104 - <https://www.facebook.com/FCLWD/>

Dear Customers of the Fort Collins– Loveland Water District,

We're pleased to send you the District's water quality report for 2018. In this report, we share with you information about your drinking water quality and interesting facts about the District. Our constant goal is to provide you with a safe and dependable supply of drinking water.

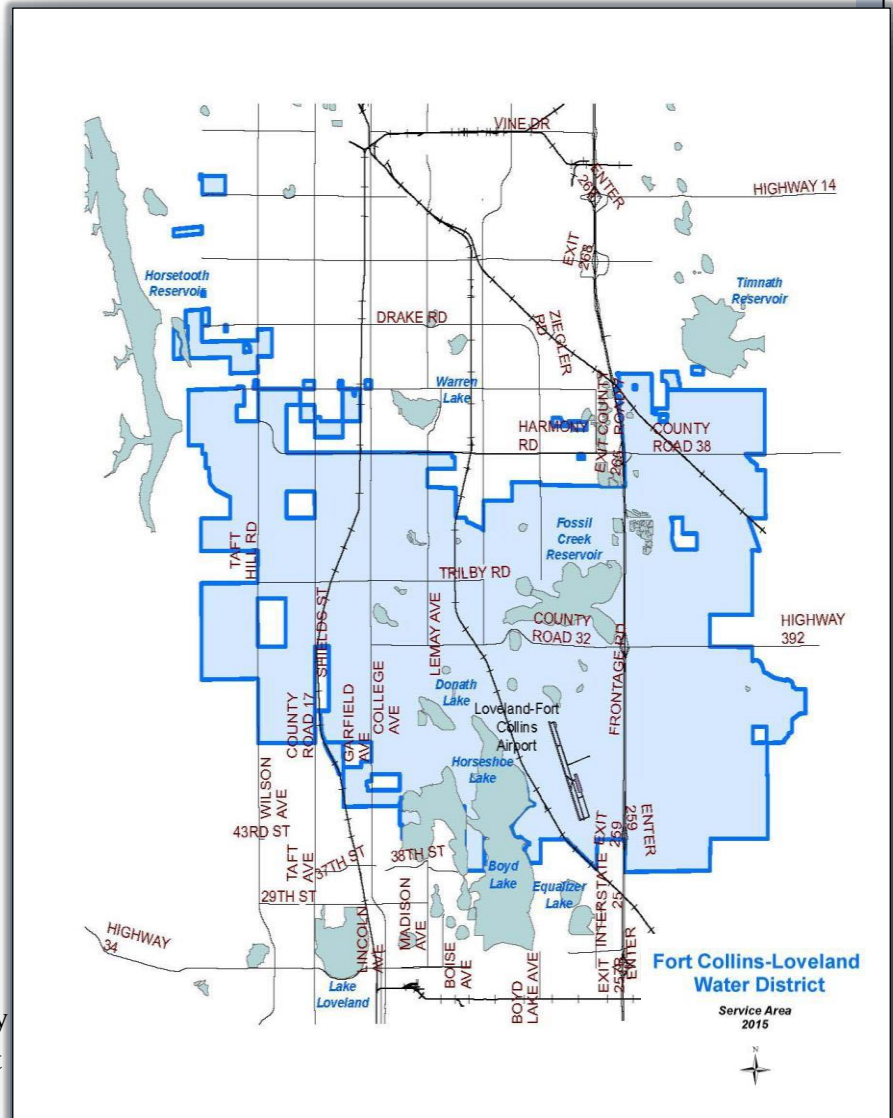
The District continues to grow at a moderate rate and sales of new taps reached 584 in 2018. We do not anticipate any water restrictions in the coming year.

We continue to look forward to serving you and invite you to attend the monthly meetings of your Board of Directors. The meetings are held at the District office at 5150 Snead Drive on the third Tuesday of every month starting at 7:00PM.

As a reminder, our office hours are Monday-Friday, 8:00 to 4:30 with after hours on call. You can also contact us at 970-226-3104. If you have any questions regarding this report, please call the District Manager at 970-226- 3104 extension 101.

YOUR DRINKING WATER MEETS ALL STATE AND FEDERAL STANDARDS

The Fort Collins–Loveland Water District (FCLWD) is committed to providing our customers with a safe and dependable supply of drinking water. Throughout 2018, we met all state and federal health standards.



WHERE DOES YOUR WATER COME FROM?

The water delivered to you by the FCLWD comes from the Soldier Canyon Water Treatment Authority (SCWTA) and the City of Fort Collins, which pull from the Poudre River and Horsetooth Reservoir. The SCWTA water treatment plant is owned and operated by the Fort Collins-Loveland Water District, the East Larimer County Water District and the North Weld County Water District. The FCLWD sometimes purchases water from The City of Loveland during summer demand and sells water to the Town of Windsor, The City of Loveland and the Little Thompson Water District.

Sources (Water Type – Source Type)
PURCHASED WATER CO0135485 MM MONROE (Surface Water-Consecutive Connection)
PURCHASED WATER CO0162553 (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135718 (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135291 MM TIMBERLINE (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135291 MM ROCK CRK (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135485 MM GARFIELD (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135291 MM HARMONY (Surface Water-Consecutive Connection)
PURCHASED WATER CO0135291 MM TAFT HILL (Surface Water-Consecutive Connection)

SOURCE WATER ASSESSMENT AND PROTECTION (SWAP)

SOLDIER CANYON WATER TREATMENT AUTHORITY CO0135718 & WELD COUNTY CO0162553

The Colorado Department of Public Health and Environment (CDPHE) has provided us with a Source Water Assessment Report for our water supply. You may obtain a copy of the report by visiting www.colorado.gov/cdphe/ccr. The Report is located under Guidance “Source Water Assessment Reports”. Search the table using 135718 Soldier Canyon Filter Plant, or by contacting Chris Harris at 970-482-3143. The Source Water Assessment Report provides a screening level evaluation of potential contamination that COULD occur. It Does Not mean that the contamination HAS or WILL occur.

We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us insure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water are listed below. Potential sources of contamination in our source water area may come from: (Low Susceptibility to) EPA hazardous waste generators, commercial/Industrial/ Transportation, low intensity residential, urban recreational grasses, row crops, fallow, pasture/hay, mixed forest, & oil/gas wells, (Moderately Low Susceptibility to) Solid waste sites, deciduous forest, evergreen forest, septic systems, road miles, (Moderate Susceptibility to) EPA chemical inventory/storage sites, EPA toxic release inventory sites, permitted wastewater discharge sites, & other facilities, (Moderately High Susceptibility to) Aboveground, underground,, and leaking storage tank sites, & existing/abandoned mine sites.

SOURCE WATER ASSESSMENT AND PROTECTION (SWAP) CITY OF FORT COLLINS CO0135291

The City of Fort Collins completed a Source Water Protection Plan (SWPP) in 2016. The SWPP found that the highest potential threats of pollution to the Cache la Poudre River and Horsetooth Reservoir are past and future wildfires, and historical mining. A follow-up report on mining in these watersheds determined that the risk of contamination from historical mining is low. To obtain a copy of either report, contact Mark Kempton at 970-221-6692.

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report please visit www.colorado.gov/cdphe/ccr. The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 135291, FT COLLINS CITY OF, or by contacting MARK KEMPTON at 970-221-6692. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water are EPA Hazardous Waste

Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Concentrated Animal Feeding Operations, Other Facilities, Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture/Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil/Gas Wells, Road Miles.

Please contact us to learn more about what you can do to help protect your drinking water sources, any questions about the Drinking Water Quality Report, to learn more about our system, or to attend scheduled public meetings. We want you, our valued customers, to be informed about the services we provide and the quality water we deliver to you every day.

SOURCE WATER ASSESSMENT AND PROTECTION (SWAP) CITY OF LOVELAND CO0135485

The Colorado Department of Public Health and Environment may have provided us with a Source Water Assessment Report for our water supply. For general information or to obtain a copy of the report, please visit www.colorado.gov/cdphe/ccr. The report is located under “Guidance: Source Water Assessment Reports”. Search the table using 135485, LOVELAND CITY OF, or by contacting CHRISTOPHER GIESTING at 970-278-7322. The Source Water Assessment Report provides a screening-level evaluation of potential contamination that could occur. It does not mean that the contamination has or will occur. We can use this information to evaluate the need to improve our current water treatment capabilities and prepare for future contamination threats. This can help us ensure that quality finished water is delivered to your homes. In addition, the source water assessment results provide a starting point for developing a source water protection plan. Potential sources of contamination in our source water are EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Permitted Wastewater Discharge Sites, Aboveground, Underground and Leaking Storage Tank Sites, Solid Waste Sites, Existing/Abandoned Mine Sites, Concentrated Animal Feeding Operations, Other Facilities, Commercial/Industrial/Transportation, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Pasture/Hay, Deciduous Forest, Evergreen Forest, Mixed Forest, Septic Systems, Oil/Gas Wells, Road Miles.

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Detected Contaminants

The Fort Collins-Loveland Water District and the Soldier Canyon Filter Plant routinely monitor for contaminants in your drinking water according to Federal and State laws. The following table(s) show all detections found in the period of January 1 to December 31, 2018 unless otherwise noted. The State of Colorado requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants are not expected to vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. Therefore, some of our data, though representative, may be more than one year old. Violations and Formal Enforcement Actions, if any, are reported in the last section of this report.

Note: Only detected contaminants sampled within the last 5 years appear in this report. If no tables appear in this section, then no contaminants were detected in the last round of monitoring.

Definitions of Terms Used In Report

Fort Collins - Loveland Water District - FCLWD ID#CO0135292
City of Fort Collins - FC ID# CO0135291 **Tri Districts/Soldier
Canyon Filter Plant/TD, SCFP** - ID#CO0135718
City of Loveland/LVD-ID#CO0135485

Action Level (AL): The concentration of a contaminant, which, if exceeded, triggers treatment or other requirements, which a water system must follow.

Maximum Contaminant Level (MCL): The highest level of a contaminant allowed in drinking water. MCL's are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (MCLG): The 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.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant, below which there is no known or unexpected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control micro-bialcontaminants.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per billion (ppb) or Micrograms per liter (µg/l): One part per billion corresponds to one minute in 2,000 years or one penny in \$10,000,000.

Parts per million (ppm) or Milligrams per liter (mg/l): One part per million corresponds to one minute in two years or one penny in \$10,000.

PicoCuries per Liter (pCi/l): A measure of radioactivity in water.

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

Average of Individual Samples: The typical value.

Range: The lowest value to the highest value.

Gross Alpha, Including RA, Excluding RN & U: This is the gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222 and uranium.

Violation: A failure to meet a Colorado Primary Drinking Water Regulation.

Formal Enforcement Action: An escalated action taken by the State (due to the number and/or severity of violations) to bring a non-compliant water system back into compliance by a certain time, with an enforceable consequence if the schedule is not met.

Health-Based: A violation of either a MCL or TT.

Non-Health-Based: A violation that is not a MCL or TT.

Variance and Exemptions (V/E): Department permission not to meet a MCL or treatment technique under certain conditions.

Compliance Value (No Abbreviation): Single or calculated value used to determine if regulatory contaminant level (e.g. MCL) is met.

Examples of calculated values are the 90th Percentile, Running Annual Average (RAA) and Locational Running Annual Average (LRAA).

Sample Size (n): Number or count of values (i.e. number of water samples collected).

Not Applicable (N/A): Does not apply or not available.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

Level 2 Assessment: A very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

General Information

Esta informacion es importante, si no puede leerla, pidale a alguien que la traduzca, por favor

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels, over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wild life.
- Inorganic contaminants salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining of farming
- Pesticides and herbicides that may come from a variety of sources, such as agriculture, urban stormwater runoff, and residential uses
- Radioactive contaminants can be naturally occurring or be the result of oil and gas production and mining activities.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by products of industrial processes and petroleum production, and also may come from gas stations, urban stormwater runoff, and septic systems.

“In order to ensure that tap water is safe to drink, the Colorado

Department of Public Health and Environment prescribes regulations that limit the amount of certain contaminants in water provided by 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.”

“All 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 (1-800-426-4791) or by visiting <http://water.epa.gov/drink/contaminants>.

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 for infections. These people should seek advice about drinking water from their health care providers. For more information about contaminants and potential health effects, or to receive a copy of the U.S. Environmental Protection Agency (EPA) and the U.S. Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by cryptosporidium and microbiological contaminants, call the EPA Safe Drinking Water Hotline at 1-800- 426-4791 or visit <http://water.epa.gov/drink/contaminants>.

Lead and Copper Sampled in the Distribution System

Contaminant Name		Monitoring Period	90th Percentile	Number of Samples	Unit of Measure	Action Level	Sample Sites Above Action Level	90th Percentile Action Level Exceedance	Typical Sources
Copper	FCLWD	6/7/2018-6/15/2018	0.25	30	ppm	1.3	0	No	Corrosion of household plumbing systems Erosion of natural deposits
Lead*	FCLWD	6/7/2018-6/15/2018	4	30	ppb	15	0	No	

Disinfectants Sampled in the Distribution System

TT Requirement: At least 95% of samples per period (month or quarter) must be at least 0.2 ppm **OR** if sample size is less than 40 no more than 1 sample is below 0.2 ppm.

Typical Sources: Water additive used to control microbes.

Disinfectant Name		Time Period	Results	Number of Samples Below Level	Sample Size	TT/MRDL Violation	MRDL
Chlorine	FCLWD	December, 2018	Lowest Period Percentage samples meeting TT Requirement: 100%	0	40	No	4.0 ppm

Disinfection Byproducts (TTHMs, HAA5, and Chlorite) Sampled in the Distribution System

Contaminant Name		Year	Average of Individual Samples	Range of Individual Samples (Lowest - Highest)	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Chlorite	FCLWD	2018	0.41	0.21-0.55	12	ppb	1	0.8	No	By-Product of drinking water disinfection
Total Haloacetic Acids (HAA5)	FCLWD	2018	21.66	15.2-29.5	16	ppb	60	N/A	No	
Total Trihalomethanes (TTHM)	FCLWD	2018	27.77	13.3-0.42	16	ppb	80	N/A	No	

***LEAD IN DRINKING WATER**

If present, elevated levels of lead can cause serious health problems (especially for pregnant women and young children). It is possible that lead levels at your home may be higher than other homes in the community as a result of materials used in your home's plumbing. If you are concerned about lead in your water, you may wish to have your water tested. 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. Additional information on lead in drinking water, testing methods and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at 1-800-426-4791 or visit <http://www.epa.gov/safewater/lead>

Turbidity Sampled at the Entry Point to the Distribution System						
Contaminant Name		Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	SCFP	Oct. 10, 2018	Highest single measurement: 0.075 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
		Month: All 12 Months	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	No	
	FC	Mar. 2018	Highest single measurement 0.16 NTU	Maximum 1 NTU for any single measurement	No	
		Month: All 12 Months	Lowest monthly percentage of samples meeting TT requirement for our technology: 99%	In any month, at least 95% of samples must be less than 0.3 NTU	No	
	LVD	Mar. 2018	Highest single measurement 0.14 NTU	Maximum 1 NTU for any single measurement	No	
		Dec. 2018	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	No	

Inorganic Contaminants Sampled at the Entry Point to the Distribution System										
Contaminant Name	Year	Average	Range Low-High	Number of Samples	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources	
Barium	SCFP	2018	0.018	0.018 to 0.018	1	ppm	2	2	No	Discharge or drilling waste; Discharge from metal refineries; Erosion of natural deposits.
	LVD	2018	0.01	0.01 to 0.01	1	ppm	2	2	No	
	FC	2018	0.01	0.01 to 0.01	1	ppm	2	2	No	
Fluoride	SCFP	2018	0.64	0.64 to 0.64	1	ppm	4	4	No	Erosion of natural deposits; Water additive that promotes strong teeth; Discharge from fertilizer and aluminum factories.
	FC	2018	0.67	0.67 to 0.67	2	ppm	4	4	No	
	LVD	2018	0.68	0.68 to 0.68	1	ppm	4	4	No	
Nitrate	SCFP	2018	<0.010	<0.010	1	ppm	10	10	No	Runoff from fertilizer use; Leaching from septic tanks, sewer; Erosion of natural deposits.

Disinfectants Sampled at the Entry Point to the Distribution System

<i>Contaminant Name</i>		<i>Year</i>	<i>Number of Samples Above or Below Level</i>	<i>Sample Size</i>	<i>TT/MRDLE Requirement</i>	<i>TT/MRDL Violation</i>	<i>Typical Sources</i>
Chlorine	SCFP	2018	0	2187	TT= No more than 4 hours with a sample Below 0.2 ppm	No	Water additives to control microbes
	LVD	2018	0	4378		No	
	FC	2018	0	2190		No	
Chlorine Dioxide	SCFP	2018	0	365	MRDL= 800 ppb	No	Water additives to control microbes
	FC	2018	0	365	MRDL= 800 ppb	No	

Total Organic Carbon (Disinfection By-Products Precursor) Percentage Removal Ratio of Raw & Finished Water

<i>Contaminant Name</i>		<i>Year</i>	<i>Average of Individual Ratio samples</i>	<i>Range of Individual Ratio Samples (Lowest-Highest)</i>	<i>Number of Ratio Samples</i>	<i>Unit of Measure</i>	<i>TT Minimum Ration</i>	<i>TT Violation</i>	<i>Typical Sources</i>
Total Organic Carbon	SCFP	2018	1.24	0.98-1.43	12	Ratio	1	No	Naturally present in the environment
	FC	2018	1.35	1.19-1.58	12	Ratio	1	No	
	LVD	2018	1.41	0.9-1.51	12	Ratio	1	No	

Disinfection Byproducts Sampled at the Entry Point

Name		Year	Average	Range Low-High	Total Samples Tested	Unit of Measure	MCL	MCLG	Highest Compliance Value	Typical Sources
Chlorite	SCFP	2018	0.48	0.17 to 0.68	365	ppm	1.0	0.8	N/A	Byproduct of drinking water disinfection

Unregulated Contaminants Sampled In The Distribution System

EPA has implemented the Unregulated Contaminant Monitoring Rule (UCMR) to collect data for contaminants that are suspected to be present in drinking water and do not have health-based standards set under the Safe Drinking Water Act. EPA uses the results of UCMR monitoring to learn about the occurrence of unregulated contaminants in drinking water and to decide whether or not these contaminants will be regulated in the future. We performed monitoring and reported the analytical results of the monitoring to EPA in accordance with its Unregulated Contaminant Monitoring Rule (UCMR). Once EPA reviews the submitted results, the results are made available in the EPA’s National Contaminant Occurrence Database (NCOD) (<http://www.epa.gov/dwucmr/national-contaminant-occurrence-database-ncod>). Consumers can review UCMR results by accessing the NCOD. Contaminants that were detected during our UCMR sampling and the corresponding analytical results are provided below.

Contaminants Sampled In The Distribution System

Contaminant Name	Year	Average	Range Low-High	Sample Size	Units of Measure
BROMOCHLOROACETIC ACID	2018	1.07	0.401-1.61	4	ug/L
BROMODICHLOROACETIC ACID	2018	1.16	1.14-1.18	4	ug/L
DICHLOROACETIC ACID	2018	8.84	4.20-12.8	4	ug/L
TRICHLOROACETIC ACID	2018	16.43	15.5-17.4	4	ug/L
MANGANESE	2018	0.52	<0.400-1.03	2	ug/L

Secondary Contaminants**						
Secondary standards are <u>non-enforceable</u> guidelines for contaminants that may cause cosmetic effects (such as skin/tooth discoloration) or aesthetic effects (ie. taste, odor, or color) in drinking water.						
Contaminant Name		Year	Average	Range of Results	Sample Size	Unit of measure
Sodium	SCFP	2018	9.7	9.7-9.7	1	ppm
	LVD	2018	10.9	10.9-10.9	1	ppm
	FC	2018	2.3	2.3-2.3	1	ppm

Raw Source Water E. Coli				
Contaminant Name		Year	Number of Positives	Sample Size
E.Coli	SCFP	2018	4	9

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 2018, Fort Collins Utilities tested the untreated source water for the organisms. *Giardia* was found in the Poudre River samples. Neither organism was found in the Horsetooth Reservoir samples.

Violations, Significant Deficiencies, Backflow/Cross-Connection, and Formal Enforcement Actions

There were no Violations or Formal Enforcement Actions in the Calendar Year 2018 for the FCLWD. The City of Loveland had the violation listed below for two entry point facilities..

Violations					
Name	Category	Time Period	Health Effects	Compliance Value	TT Level or MCL
CHLORINE/CHLORAMINE	FAILURE TO MONITOR AND/OR REPORT – NON-HEALTH BASED	11/01/2018-11/20/2018	N/A	N/A	N/A