



# 2018 Water Quality Consumer Confidence Report For Calendar Year 2017

Public Water System ID: CO0118020

We are pleased to present to you this year's water quality report. Our constant goal is to provide you with a safe and dependable supply of drinking water. Please contact Kelly Conover at 303-649-9857; 303-414-0671 with any questions or for public participation opportunities that may affect water quality. **Esta es información importante. Si no la pueden leer, necesitan que alguien se la traduzca.**

## What is a Consumer Confidence Report (CCR)?

This CCR is our annual water quality report that all community water systems are required to provide to their customers. It is based on the 1996 Amendments to the EPA's Safe Drinking Water Act and the right to know provisions of that Act. As a customer of the Cottonwood Water and Sanitation District, it gives you the opportunity to review your water quality annually. It also is provided to help you make informed choices about the water you drink. The report lets you know what, if any, contaminants are in the drinking water, and how they may affect your health.

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 water poses a health risk.

## What Does the Cottonwood Water CCR Reveal?

The drinking water provided to the residents of Cottonwood has met and/or exceeded the EPA's strict water quality drinking standards. Water quality is important to us, which is why Cottonwood Water employs some of the most qualified, highly credentialed water treatment operators in the State of Colorado. Testing and treating the drinking water is ongoing. At least twice a year we test for metals and perform ten bacteriological samples per month. We also test water quality at the faucets within a number of Cottonwood homes on a scheduled basis.

You can call us at the main office during business hours at 303-792-9509, email us at [info@CottonwoodWater.org](mailto:info@CottonwoodWater.org), or stop by 188 Inverness Drive West, Suite 150, Englewood, CO and speak to us in person.

## From Your Board

All of us serving on the Cottonwood Water and Sanitation District Board are property owners elected by the registered voters living in Cottonwood. Along with our management team, we are all dedicated to helping ensure the quality of our drinking water, reliability of wastewater services, protecting the environment and providing a sustainable water supply.

Randall Warren,  
General Manager

Kelly Conover,  
Customer Service

Ellen Buffy,  
Customer Service



# TERMS & ABBREVIATIONS

**Maximum Contaminant Level (MCL)** – The highest level of a contaminant allowed in drinking water.

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

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

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

**Action Level (AL)** – The concentration of a contaminant, which if exceeded, triggers treatment or other requirements.

**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 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 Goal (MRDLG)** – The level of a drinking water disinfectant, below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

**Violation (No Abbreviation)** – Failure to meet a Colorado Primary Drinking Water Regulation.

**Formal Enforcement Action (No Abbreviation)** – Escalated action taken by the State (due to the risk to public health, or number or severity of violations) to bring a non-compliant water system back into compliance.

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

**Gross Alpha (No Abbreviation)** – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.

**Picocuries per liter (pCi/L)** – Measure of the radioactivity in water.

**Nephelometric Turbidity Unit (NTU)** – Measure of the clarity or cloudiness of water. Turbidity in excess of 5 NTU is just noticeable to the typical person.

**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).

**Average (x-bar)** – Typical value.

**Range (R)** – Lowest value to the highest value.

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

**Parts per million** = Milligrams per liter (ppm = mg/L) – One part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion** = Micrograms per liter (ppb = ug/L) – One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**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.

Our Water Sources		
Source	Source Type	Water
CC4 MOVED TO JWPP CO0103418	Well	Groundwater
D1, D11, D2, D3, D4A WELL	Well	Groundwater
DD1 MOVED TO JWPP CO0103418	Well	Groundwater
DD4 WELL MOVED TO JWPP CO0103418	Well	Groundwater
PURCHASED FROM JWPP CO0103418	Consecutive Connection	Groundwater
PURCHASED FROM WISE CO0103843	Consecutive Connection	Surface Water

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 10, 100% of samples must be at least 0.2 ppm			
Typical Sources: Water additive used to control microbes			
Contaminant Name	Time Period	Results	Number of Samples
Chlorine	December 2017	Lowest period percentage of samples meeting TT requirement: 100%	

Lead and Copper Sampled in the Distribution System					
Contaminant Name	Time Period	90th Percentile	Sample Size	Unit of Measure	90th Percentile
Copper	07/13/2017 to 09/23/2017	0.16	31	ppm	
Lead	07/13/2017 to 09/23/2017	4.9	31	ppb	

Disinfection Byproducts Sampled in the Distribution System					
Name	Year	Average	Range Low-High	Sample Size	Unit of Measure
Total Haloacetic Acids (HAA5)	2017	0.75	0 to 1.5	2	ppb
Total Trihalomethanes (TTHM)	2017	4.82	1.5 to 8.13	2	ppb

Radionuclides Sampled at the Entry Point to the Distribution System					
Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure
Gross Alpha	2016	4.7	4.7 to 4.7	1	pCi/L

Inorganic Contaminants Sampled at the Entry Point to the Distribution System						
Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	MCL
Barium	2016	0.15	0.15 to 0.15	1	ppm	2
Fluoride	2016	1.1	1.1 to 1.1	1	ppm	4

Secondary Contaminants					
**Secondary standards are non-enforceable guidelines for contaminants that may cause cosmetic effects (such as skin discoloration, hair loss, etc.) or aesthetic effects (such as taste and odor).					
Contaminant Name	Year	Average	Range Low-High	Sample Size	MCL
Sodium	2016	33	33 to 33	1	

Violations, Significant Deficiencies, and Formal Enforcement Actions		
Name	Category	Date
STORAGE TANK RULE	FAILURE TO MEET STORAGE TANK REQUIREMENTS - HEALTH-BASED	06/08/2017
CROSS CONNECTION RULE	FAILURE TO MEET CROSS CONNECTION/BACKFLOW REQUIREMENTS - HEALTH-BASED	06/08/2017

Additional Violations	
*Please share this information with all the other people who drink this water, especially those in homes, schools, and businesses. You can do this by posting this notice in a public place. Explanation of the violation(s), the steps taken to resolve them, and the anticipated resolution.	
Backflow and Cross-Connection	
We have an inadequate backflow prevention and cross-connection control program. We have either have installed or permitted an uncontrolled cross-connection or we experienced a backflow event.	
Additional Violations	
*STORAGE TANK RULE: We are required to inspect our storage tanks periodically to be sure they are safe. We inspect its storage tanks 2-3 times per week, we did not properly document the inspections or provide documentation of those inspections to the State."	

Water Type	Potential Source(s) of Contamination
Groundwater	Above and Below ground leaking storage tanks, auto repair facilities, autobody and painting, hazardous waste generators, commercial/industrial transportation, agricultural run-off and manufacturing facilities.
Groundwater	
Groundwater	
Groundwater	
Groundwater	
Surface Water	

Number of Samples Below Level	Sample Size	TT Violation	MRDL
0	10	No	4.0 ppm

Percentile AL	Sample Sites Above AL	90th Percentile AL Exceedance	Typical Sources
1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
15	3	No	Corrosion of household plumbing systems; Erosion of natural deposits

MCL	MCLG	Highest Compliance Value	MCL Violation	Typical Sources
60	N/A		No	Byproduct of drinking water disinfection
80	N/A		No	Byproduct of drinking water disinfection

MCL	MCLG	MCL Violation	Typical Sources
15	0	No	Erosion of natural deposits

MCL	MCLG	MCL Violation	Typical Sources
2	No	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
4	No	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories

Unit of Measure	Secondary Standard
ppm	N/A

Time Period	Health Effects	Compliance Value	TT Level or MCL
2017 - 07/21/2017	May pose a risk to public health.	N/A	N/A
2017 - 07/21/2017	May pose a risk to public health.	N/A	N/A

**Notification Information**  
 Persons who may not have received this notice directly (for example, people in apartments, nursing homes) may receive copies by hand or mail.  
 Date:

**Cross-Connection**  
 Uncontrolled cross connections can lead to inadvertent contamination of the drinking water. We have inspected for backflow contamination event.  
*continued on next column*

**Information**  
 We ensure that contaminants don't have a way to enter the tanks. Although the District routinely inspects storage tanks. Since we received the violation, we have inspected our storage tanks as required and

## Detected Contaminants

Cottonwood Water & Sanitation District routinely monitors for contaminants in your drinking water according to Federal and State laws. The accompanying table(s) show all detections found in the period of January 1 to December 31, 2017 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 next 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.

## 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 (1-800-426-4791) or at <http://water.epa.gov/drink/info/lead>.

## Backflow and Cross-Connection cont'd

The customers with the commercial backflow devices that failed inspection were contacted and required to retest and repair their device to meet CDPHE compliance.

The Joint Water Purification Plant ("JWPP") violated a drinking water requirement during an inspection by the Colorado Department of Public Health and Environment ("CDPHE") that was completed on April 26, 2017. Per the CDPHE, the violation was described as the JWPP failed to develop or implement a written backflow prevention and cross-connection control program. Subsequently, the JWPP corrected the issues associated with this violation, as required by the CDPHE, on or before September 22, 2017. This violation was not identified to have a negative impact to the potable water delivered from the JWPP to its current customers. The Cottonwood Water and Sanitation District ("Cottonwood") has the ability to receive treated water from the JWPP into its potable distribution system. However, to date, Cottonwood has not received potable water deliveries from the JWPP into its system since November 2014.



## GENERAL INFORMATION

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 of 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).

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:** viruses and bacteria that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants:** salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides:** 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 byproducts of industrial processes and petroleum production, and also may come from gas stations, urban storm water 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 limiting 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



## Source Water Assessment and Protection (SWAP)

The Colorado Department of Public Health and Environment has 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](http://www.colorado.gov/cdphe/ccr). The report is located under "Guidance: Source Water Assessment Reports". Search the table using 118020, Cottonwood Water, or by contacting Kelly Conover at 303-649-9857; 303-414-0671. 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 area are listed on the next page.

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.



*We are pleased to present this 2018 Water Quality Report (CCR) that reveals our water quality continues to meet and/or exceed all the EPA's strict water quality standards.*



**Cottonwood**  
Water & Sanitation District

[www.CottonwoodWater.org](http://www.CottonwoodWater.org)

## Learn More

Visit our website at [www.CottonwoodWater.org](http://www.CottonwoodWater.org) and discover a lot of information about your water quality. And be sure to check out our "KIDS" page where kids of all ages can learn about water, how we use it everyday, how to conserve water, be resourceful and have fun while learning.

Remember, you are always welcome to attend any of our Board meetings held in our neighborhood at: 8334 Sandreed Circle. Unless otherwise posted, the meetings are held the third Thursday of the month at 6:30 p.m.