

2021 Water Quality Report



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CENTENNIAL
WATER AND SANITATION DISTRICT

Water Sources

The community's water supply comes from a combination of surface water and groundwater. Use of these two water sources is known as a conjunctive use system.

Surface water is renewable while the deep groundwater is mainly non-renewable; therefore, groundwater is used primarily as a back up water source to the surface water. Centennial Water uses on average 85% surface water annually. Our water sources include:

Groundwater wells

- Denver Basin aquifers
 - Denver
 - Arapahoe
 - Laramie - Fox Hills
- South Platte River alluvium

Surface water

- Plum Creek
- Dad Clark Gulch
- South Platte River

Raw water storage reservoirs

- South Platte Reservoir
- McLellan Reservoir
- Chatfield Reservoir

For more information about water sources and to view a detailed list, visit centennialwater.org.

**VOLUNTEERS
NEEDED!**

Volunteers sought for home water sampling

Centennial Water is seeking homeowners to participate in a sampling program required by the Colorado Department of Public Health and Environment. If you live in a single-family home built between 1983 and 1987, we want to hear from you. Participants will receive a gift card as a thank you for participating.

With the assistance of homeowners, Centennial Water will test the amount of lead and copper levels in water at the tap. This is not a new program, and is something required of all water districts across the state.

If you are interested in participating, call 303-791-2185, ext. 3523, or email info@centennialwater.org.

Source Water Assessment Report

The Colorado Department of Public Health and Environment (CDPHE) provided Centennial Water and Sanitation District (Centennial Water) with a Source Water Assessment Report for Centennial Water's groundwater and surface water supplies.

The report analyzes potential susceptibility of each public drinking water source to contamination. It does not mean contamination has or will occur. Potential sources of contamination in our source water may include the following:

- Abandoned contaminated sites
- Hazardous waste generators
- Chemical inventory/storage sites
- Solid waste sites
- Permitted wastewater discharge sites
- Aboveground, underground and leaking storage tank sites
- Solid waste sites
- Existing/abandoned mine sites
- Other facilities
- Commercial/industrial/transportation
- High/low intensity residential
- Urban recreation grasses
- Row crops
- Fallow
- Pasture/hay
- Evergreen forest
- Septic systems
- Roads

You may obtain a copy of the report by visiting wqcdcompliance.com/ccr. Click on Source Water Assessment Reports and search by county. You can also contact Centennial Water at 303-791-2185, ext. 3523.

**Be drought
smart. Use
water wisely.**



Q&A About the Quality of Your Water

Centennial Water & Sanitation District is committed to providing a safe and dependable supply of high quality drinking water. Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Our primary surface water source is the South Platte River which is diverted into McLellan Reservoir and the South Platte Reservoir for storage. Our secondary water source is nontributary wells in Denver Basin aquifers.

Is our community's drinking water regularly tested?

Yes. Centennial Water routinely monitors constituents in drinking water according to federal and state laws. The table in this report shows the monitoring results for the period of Jan. 1 through Dec. 31, 2020.

Are there contaminants in drinking water?

All drinking water, including bottled drinking water, may contain trace contaminants. The presence of contaminants does not necessarily pose a health risk. Immuno-compromised people such as people with cancer undergoing chemotherapy, people who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly individuals, 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 EPA and the U.S. Centers for Disease Control 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.

Why does drinking water sometimes contain contaminants?

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 naturally occurring radioactive material, and can pick up substances resulting from the presence of animals or from human activity. These contaminants may include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- Inorganic contaminants, such as 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 and road de-icing.
- 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, and can also come from gas stations, urban stormwater runoff and septic systems.
- Radioactive contaminants, which can be naturally occurring, or the result of oil and gas production and mining activities.

To ensure tap water is safe to drink, the EPA 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, which must provide the same protection for public health.

How can I learn more about Highlands Ranch water?

If you have questions about this report or your water services, please contact Centennial Water's lab at 303-791-2185, ext. 3523. We want you to be informed about your water utility. Attending a board meeting is a great way to learn more about Centennial Water's water supply. Meetings are held at the Hendrick Office Building, 62 Plaza Dr., Highlands Ranch, CO 80129. Please visit centennialwater.org for a board meeting schedule.



Sign-up for Centennial Water's eNewsletter.
Text **22828** to **CWSD** to sign-up.

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The Water Quality Data Table to the right contains many terms and abbreviations that may be unfamiliar. The following definitions should help you better understand these terms:

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

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

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.

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

Nephelometric Turbidity Unit (NTU): Nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of five NTU is visually noticeable to the average person.

Non-detect (ND): Laboratory analysis indicates the constituent was not detected above laboratory detection limits.

Parts per million (ppm): One part per million corresponds to one minute in two years, or a single penny in \$10,000.

Parts per billion (ppb): One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

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

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

Running Annual Average (RAA): An average of monitoring results for the previous 12 calendar months calculated each quarter.

Secondary Maximum Contaminant Level (SMCL): Non-enforceable, recommended limits for substances that affect the taste, odor, color or

other aesthetic qualities of drinking water, but do not pose a health risk.

Not Available (NA)

Failure to Monitor and/or Report

In August 2020, Centennial Water failed to collect a sample from both groundwater treatment plants for pH and alkalinity as part of the every other week sampling requirement. This resulted in a drinking water violation from CDPHE. There were no known health effects because of the missed sample. All samples collected at the treatment plants and in the distribution system had acceptable levels for pH and alkalinity in 2020. There is nothing you need to do at this time. Your water is safe to drink then and now. Centennial Water has since taken the required samples. The samples showed we are meeting the drinking water standards. We have also implemented changes to ensure monitoring events will not be missed going forward.

Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in public places or by distributing copies by hand.

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Results of Lead Monitoring

Pregnant women and young children are typically more vulnerable to lead in drinking water than the general population. It is possible 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 elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at 1-800-426-4791 or online at epa.gov/safewater/lead.

Centennial Water and Sanitation District's Water Quality Data Table

PWSID # CO 0118015

The table below lists all of the drinking water contaminants detected during the calendar year of this report. The presence of contaminants in water does not necessarily indicate the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done from January 1 to December 31, 2020. According to either EPA or state requirements, certain contaminants may be monitored less than once per year because the concentrations of these contaminants do not change frequently. The state has issued waivers for monitoring asbestos, cyanide, dioxin and glyphosate.

Regulated Copper and Lead	Results at the 90th Percentile	AL	MCLG	Meets EPA Standards	Likely Source
Copper (ppm) (0 samples exceeded the AL)	0.32-0.33	1.3	1.3	Yes	Corrosion of household plumbing systems
Lead (ppb) (0 samples exceeded the AL)	2	15	0	Yes	Corrosion of older household plumbing systems

Regulated Disinfectants and Disinfection Byproducts	Range (all data)	Highest Locational RAA Level	MCL	MCLG	Meets EPA Standards	Likely Source
Chloramines (ppm)	0.5-3.8	NA	4 (MRDL)	4 (MRDLG)	Yes	Water additive used to control microbes
Haloacetic Acids (ppb)	<1.00-14.00	17.40	60	NA	Yes	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	4.60-49.40	41.38	80	NA	Yes	Byproduct of drinking water disinfection

Regulated Radioactive Substances	Range	Average Level	MCL	MCLG	Meets EPA Standards	Likely Source
Gross Beta (pCi/L) Particle Activity	<4.0-5.4	1.8	50	0	Yes	Decay of natural and man-made deposits
Radium (combined 226/228) (pCi/L)	0.5-3.7	1.97	5	0	Yes	Erosion of natural deposits
Combined Uranium (ppb)	<0.7-1.0	0.67	30	0	Yes	Erosion of natural deposits
Gross Alpha (pCi/L)	<0.1-3.7	1.62	15	0	Yes	Erosion of natural deposits

Regulated Microbiological	Range	Highest Level	MCL	MCLG	Meets EPA Standards	Likely Source
Total Coliform (% positive samples/month)	0-1	1	5	0	Yes	Naturally present in the environment

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Disinfection Byproducts	Range	Average Level	TT Minimum Ratio	Meets TT Requirements	Likely Source
Total Organic Carbon Ratio	1.56-2.7	2.06	1.0	Yes	Natural organic material that is present in the environment.

Regulated Inorganic Substances	Range	Average Level	MCL	MCLG	Meets EPA Standards	Likely Source
Barium (ppb)	61-74	68	2,000	2,000	Yes	Erosion of natural deposits
Fluoride (ppm)	0.81-1.17	1.00	4	4	Yes	Erosion of natural deposits
Arsenic (ppb)	<1.0-8.0	4.0	10	0	Yes	Erosion of natural deposits
Chromium (ppb)	2-3	2.7	100	100	Yes	Erosion of natural deposits
Selenium (ppb)	<1-2	1.33	50	50	Yes	Erosion of natural deposits

Other Monitoring	Range	Average Level	MCL	MCLG	Likely Source
Nickel (ppb)	1.0-3.0	1.7	NA	NA	Naturally present in the environment
Sodium (ppm)	49.4-68.7	60.8	NA	NA	Naturally present in the environment
Total Dissolved Solids (ppm)	137-729	405	500 (SMCL)	NA	Erosion of natural deposits

*Regulated Turbidity	Sample Date	Level Found	TT Requirement	Likely Source
Turbidity (NTU)	Sept 2020	Highest single measurement: 0.10	Maximum 1 NTU for any single measurement.	Soil runoff
Turbidity (%)	Every 4 hours	Lowest monthly percentage of samples less than 0.3	In any month, at least 95% of samples must be less than 0.3 NTU.	Soil runoff

*Centennial Water samples the treated water every four hours for turbidity. In 2020, the highest turbidity reading was 0.10 NTU and 100 percent of all samples taken in 2020 were below the standard of 0.3 NTU.

UCMR4 - Unregulated Contaminant Monitoring Rule	Range	Average Level	MCL	Likely Source
Manganese (ppb)	0.79-0.89	0.84	NA	Erosion of natural deposits
Bromochloroacetic Acid (ppb)	1.66-6.24	4.45	NA	Byproduct of drinking water disinfection
Bromodichloroacetic Acid (ppb)	2.14-7.68	5.89	NA	Byproduct of drinking water disinfection
Chlorodibromoacetic Acid (ppb)	1.07-8.96	5.39	NA	Byproduct of drinking water disinfection
Dibromoacetic Acid (ppb)	0.66-4.75	2.84	NA	Byproduct of drinking water disinfection
Dichloroacetic Acid (ppb)	2.47-5.35	4.21	NA	Byproduct of drinking water disinfection
Monobromoacetic Acid (ppb)	<0.3-1.13	0.71	NA	Byproduct of drinking water disinfection
Tribromoacetic Acid (ppb)	<2-2.84	0.98	NA	Byproduct of drinking water disinfection
Trichloroacetic Acid (ppb)	1.8-4.52	3.05	NA	Byproduct of drinking water disinfection