

2019 Water Quality Report



Centennial Water & Sanitation District is committed to providing safe, sustainable and reliable water and wastewater utility services to customers with superior quality and value.



CENTENNIAL
WATER AND SANITATION DISTRICT

SWAP Program

The Source Water Assessment Program (SWAP) protects the quality of groundwater and surface water supplies. The Colorado Department of Public Health and Environment provides Centennial Water with a SWAP report of its water supply sources. You may obtain a copy of the report by visiting wqcdcompliance.com/ccr (click on Source Water Assessment Reports (listed by county)), or by contacting Centennial Water at 303-791-2185, ext. 3523.

The SWAP report provides a screening level of potential contamination that could occur. It does not mean contamination has or will occur. This information is useful in evaluating the need to improve water treatment capabilities and prepare for future contamination threats. This helps ensure high quality drinking water is delivered to your home. In addition, the source water assessment results provide a starting point from which a source water protection plan may be developed.

Water waste makes me grrrouchy.



The most efficient way to save water and money in your home is to fix leaks.

Potential sources of contamination in our source water may come from discrete sources (abandoned contaminated sites, hazardous waste generators, chemical inventory/storage sites, solid waste sites, permitted wastewater discharge sites, above ground, underground and leaking storage tank sites, existing/abandoned mine sites,

and other facilities) and from dispersed sources (land use/cover: commercial/industrial/transportation, high/low intensity residential, urban recreation grasses, row crops, fallow, pasture/hay, quarries/strip mines/gravel pits, deciduous forest, evergreen forest, mixed forest, septic systems and roads).

Centennial Water maintains a variety of programs and procedures to ensure Highlands Ranch has a safe and dependable water supply. For more information about these programs and procedures, please visit centennialwater.org, or contact Centennial Water at 303-791-2185, ext. 3523.

Safely and securely dispose of medications

Centennial Water encourages its customers to safely dispose of expired, unused and unwanted prescription and over-the-counter drugs, keeping them out of the water supply and out of harm's way for Highlands Ranch residents and the natural environment.

In the past, flushing expired, unwanted medications down the toilet was a preferred method of disposal. This is no longer the preferred disposal method. It is never safe to dispose of medications by flushing them down the toilet.

Twice a year, Centennial Water, along with the Highlands Ranch Metro District and Douglas County Sheriff's Office, participates in National Drug Take Back events, providing the public a safe, secure way to dispose of these medications.

Last year in Colorado, 32,898 pounds of medications were collected at drop off sites across the state. According to the Colorado Consortium for Prescription Drug Abuse Prevention, the average American household possesses four pounds of unwanted, unused, expired medications. But it's not just prescription medications. It also includes vitamins, cold medicine, even prescriptions for pets.

Centennial Water encourages you to go through your cabinets and get rid of any medications you no longer need. Safely dispose of them during a National Drug Take Back event. Visit dcsheriff.net to learn more.

If you are unable to attend one of the Drug Take Back events, medications can also be safely disposed at a secure drop box located at the Walgreens pharmacy at 9141 S. Broadway, Highlands Ranch.

National Prescription Drug Take Back

Saturday, April 27
Saturday, October TBD
10 a.m. to 2 p.m.
DCSO Highlands Ranch
Substation

303-791-0430
centennialwater.org



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, 2018.

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.
- 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.

Drinking water taste and odor

The major source of drinking water for Highlands Ranch is surface water from the South Platte River. Periodically, Centennial Water may choose to supplement the drinking water supply with groundwater sources (wells).

Why does my water smell musty?

Periodically in the spring or fall, Centennial Water's surface water storage reservoirs experience algae growth that produces non-harmful compounds that can give water a musty/earthy taste and odor. Water treatment plant operators add activated carbon to reduce the taste and odor in the treated water.

Why does my water taste different?

At times when groundwater sources are used, you may notice a different taste or odor described as chemical or metallic tasting. The groundwater sources contain different levels of minerals. Sometimes when these sources are blended with treated surface water, residents notice a difference in the taste of drinking water.

Is my water safe to drink?

Yes. Highlands Ranch residents can be assured all sources of drinking water, both surface and groundwater, are tested on a regular basis and meet all state and federal drinking water regulations and requirements.



2019 Highlands Ranch Water Quality Report

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)

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, 2018. 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 (2017)	Results at the 90th Percentile	AL	MCLG	Meets EPA Standards	Likely Source
Copper (ppm) (0 of 37 samples exceeded the AL)	0.38	1.3	1.3	Yes	Corrosion of household plumbing systems
Lead (ppb) (0 of 37 samples exceeded the AL)	3.3	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)	0.75-3.6	NA	4 (MRDL)	4 (MRDLG)	Yes	Water additive used to control microbes
Haloacetic Acids (ppb)	8.10-18.00	14.7	60	NA	Yes	Byproduct of drinking water disinfection
Total Trihalomethanes (ppb)	18.1-41.9	36.3	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	0.0-8.2	4.5	50	0	Yes	Decay of natural and man-made deposits
Radium (combined 226/228) (pCi/L)	0.9-3.5	2.1	5	0	Yes	Erosion of natural deposits
Combined Uranium (ppb)	0.0-5.2	2.1	30	0	Yes	Erosion of natural deposits
Gross Alpha (pCi/L)	0.7-3.9	2.7	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

Disinfection Byproducts	Range	Average Level	TT Minimum Ratio	Meets TT Requirements	Likely Source
Total Organic Carbon Ratio	1.09-3.33	2.26	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)	56-68	62	2,000	2,000	Yes	Erosion of natural deposits
Fluoride (ppm)	0.87-0.89	0.88	4	4	Yes	Erosion of natural deposits
Nitrate (ppm)	<0.1-0.1	<0.1	10	10	Yes	Erosion of natural deposits
Arsenic (ppb)	<1.0-1.0	<1.0	10	0	Yes	Erosion of natural deposits

Other Monitoring	Range	Average Level	MCL	MCLG	Likely Source
Nickel (ppb)	<1.0-2.0	<1.0	NA	NA	Naturally present in the environment
Sodium (ppm)	30.7-47.8	41.2	NA	NA	Naturally present in the environment
Total Dissolved Solids (ppm)	176-570	387	500 (SMCL)	NA	Erosion of natural deposits

*Regulated Turbidity	Sample Date	Level Found	TT Requirement	Likely Source
Turbidity (NTU)	June 2018	Highest single measurement: 0.09	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 2018, the highest turbidity reading was 0.09 NTU and 100 percent of all samples taken in 2018 were below the standard of 0.3 NTU.

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If you have questions about this report or your water services, please contact Centennial Water at 303-791-2185, ext. 3523. We want you, our valued customer, to be informed about your water utility.