



BrightonSM

COLORADO

2023 Drinking Water Quality Report
For Calendar Year 2022



Public Water System ID: CO0101025

Esta es información importante. Si no la pueden leer,
necesitan que alguien se la traduzca.

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 Scott Olsen, Interim Director of Utilities, at 303-655-2136 with any questions or for public participation opportunities that may affect water quality.

Please see the water quality data from our wholesale system(s) (either attached or included in this report) for additional information about your drinking water.

General Information About Drinking Water

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 epa.gov/ground-water-and-drinking-water.

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 storm water 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 storm water 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.

Lead in Drinking Water

Lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high quality drinking water and removing lead pipes in the City-owned portion of the water system, but cannot control the variety of materials used in plumbing components in your home. You share the responsibility for protecting yourself and your family from the lead in your home plumbing. You can take responsibility by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. You can also use a filter certified by an American National Standards Institute accredited certifier to reduce lead in drinking water. If you are concerned about lead in your water and wish to have your water tested, contact Scott Olsen, Interim Director of Utilities, at 303-655-2136. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at epa.gov/safewater/lead.

Detected Contaminants

The City of Brighton routinely monitors 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, 2022 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.

Source Water Assessment and Protection (SWAP)

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 wqcdcompliance.com/ccr. The report is located under "Guidance: Source Water Assessment Reports". Search the table using 101025, City of Brighton, or by contacting Scott Olsen, Interim Director of Utilities, at 303-655-2136. 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.

Our Water Sources

Source	Source Type	Water Type
PURCHASED WATER FROM THORNTON	Consecutive Connection	Surface Water
PURCHASED WATER FROM DENVER (CO0116001)v	Consecutive Connection	Surface Water
WELL 7R	Well	Groundwater
BEEBE WELL A	Well	Groundwater UDI Surface Water
BEEBE WELL B	Well	Groundwater UDI Surface Water
BEEBE WELL C	Well	Groundwater UDI Surface Water
WELL 11	Well	Groundwater
WELL 12	Well	Groundwater
WELL 13	Well	Groundwater
WELL 17	Well	Groundwater
WELL 18	Well	Groundwater



Terms and Abbreviations Used in the Following Tables

<p>Maximum Contaminant Level (MCL) – The highest level of a contaminant allowed in drinking water.</p> <p>Treatment Technique (TT) – A required process intended to reduce the level of a contaminant in drinking water.</p> <p>Health-Based – A violation of either a MCL or TT.</p> <p>Non-Health-Based – A violation that is not a MCL or TT.</p> <p>Action Level (AL) – The concentration of a contaminant which, if exceeded, triggers treatment and other regulatory requirements.</p> <p>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.</p> <p>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.</p> <p>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.</p> <p>Violation (No Abbreviation) – Failure to meet a Colorado Primary Drinking Water Regulation.</p> <p>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.</p> <p>Variance and Exemptions (V/E) – Department permission not to meet a MCL or treatment technique under certain conditions.</p>	<p>Gross Alpha (No Abbreviation) – Gross alpha particle activity compliance value. It includes radium-226, but excludes radon 222, and uranium.</p> <p>Picocuries per liter (pCi/L) – Measure of the radioactivity in water.</p> <p>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.</p> <p>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).</p> <p>Average (x-bar) – Typical value.</p> <p>Range (R) – Lowest value to the highest value.</p> <p>Sample Size (n) – Number or count of values (i.e. number of water samples collected).</p> <p>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.</p> <p>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.</p> <p>Not Applicable (N/A) – Does not apply or not available.</p> <p>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.</p> <p>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.</p>
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Potential Source(s) of Contamination

The following have been found to be potential sources of contamination in your drinking water: EPA Hazardous Waste Generators, EPA Chemical Inventory/Storage Sites, EPA Toxic Release Inventory Sites, Aboveground, Underground and Leaking Storage Tank Sites, Existing/Abandoned Mine Sites, Other Facilities, Commercial/Industrial/Transportation, High Intensity Residential, Low Intensity Residential, Urban Recreational Grasses, Row Crops, Fallow, Small Grains, Pasture / Hay, Septic Systems, Oil / Gas Wells, Road Miles

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 Violation	MRDL
Chlorine	December, 2022	Lowest period percentage of samples meeting TT requirement: 100%	0	60	No	4.0 ppm

Lead and Copper Sampled in the Distribution System

Contaminant Name	Time Period	90 th Percentile	Sample Size	Unit of Measure	90 th Percentile AL	Sample Sites Above AL	90 th Percentile AL Exceedance	Typical Sources
Copper	07/06/2022 to 11/07/2022	0.78	60	ppm	1.3	0	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead	07/06/2022 to 11/07/2022	3	60	ppb	15	0	No	Corrosion of household plumbing systems; Erosion of natural deposits

Disinfection Byproducts Sampled in the Distribution System

Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Total Haloacetic Acids (HAA5)	2022	18.26	4.5 to 40.6	24	ppb	60	N/A	No	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2022	65.55	19.4 to 155.8	24	ppb	80	N/A	No	Byproduct of drinking water disinfection

Summary of Turbidity Sampled at the Entry Point to the Distribution System

Contaminant Name	Sample Date	Level Found	TT Requirement	TT Violation	Typical Sources
Turbidity	Date/Month: Oct.	Highest single measurement: 0.193 NTU	Maximum 1 NTU for any single measurement	No	Soil Runoff
Turbidity	Date/Month: Dec.	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	Soil Runoff

Inorganic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Arsenic	2022	1	1 to 1	2	ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium	2022	0.03	0.03 to 0.03	2	ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	2022	2	2 to 2	2	ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride	2022	0.7	0.66 to 0.73	2	ppm	4	4	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate	2022	3.4	3.4 to 3.4	2	ppm	10	10	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium	2022	2	2 to 2	2	ppb	50	50	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

Volatile Organic Contaminants Sampled at the Entry Point to the Distribution System

Contaminant Name	Year	Average	Range Low – High	Sample Size	Unit of Measure	MCL	MCLG	MCL Violation	Typical Sources
Xylenes	2022	0.82	0 to 2.1	5	ppb	10,000	10,000	No	Discharge from petroleum factories; discharge from chemical factories

Secondary Contaminants**

Secondary standards are **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.

Contaminant Name	Year	Average	Range Low-High	Sample Size	Unit of Measure	Secondary Standard
Sodium	2022	53.25	53.2 to 53.3	2	ppm	N/A

Unregulated Contaminants***

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) (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.

Contaminant Name	Year	Average	Range: Low – High	Sample Size	Unit of Measure

***More information about the contaminants that were included in UCMR4 monitoring can be found at: drinktap.org/Water-Info/Whats-in-My-Water/Unregulated-Contaminant-Monitoring-Rule-UCMR. Learn more about the EPA UCMR at: epa.gov/dwucmr/learn-about-unregulated-contaminant-monitoring-rule or contact the Safe Drinking Water Hotline at (800) 426-4791 or epa.gov/ground-water-and-drinking-water.

Violations, Significant Deficiencies, and Formal Enforcement Actions

No Violations or Formal Enforcement Actions



CITY OF BRIGHTON WATERING RESTRICTIONS

Watering restrictions dates are May 1 - September 30

- No watering between 10 a.m. - 6 p.m.
- Watering is limited 3 days per week
- Do not allow water to pool in the gutter, the street, or on property

The city is asking residents to voluntarily water their lawn two days a week during peak months (July & August). With a controller's limited options, it's best way is to assign days based on address, as most controllers cannot be set to every third day.

Watering Schedule for the City of Brighton

Even Address - Sunday, Tuesday, Friday
 Odd Address - Monday, Wednesday, Saturday

Sod Installation

Sod installation is prohibited from May 1 - September 30 for areas exceeding 200 square feet. Patching the existing lawn is permitted.

Brighton will monitor water conditions during the coming months and will provide periodic updates if necessary. We appreciate the cooperative efforts of our customers as the City continues its efforts to provide a safe and sustainable water supply to our community.

Contact

Contact Louis Morris 303-655-2243 or lamorris@brightonco.gov with any questions.

STORMWATER PROGRAM

Did you know the City of Brighton has a Stormwater Program? The primary goal of the City of Brighton Stormwater Program is to reduce the amount of pollutants entering our local streams, lakes and rivers. Pollutants, such as fertilizers, pesticides, sediment, trash and spilled chemicals may be transported by stormwater runoff from residential, commercial and industrial areas into the storm sewer system. This discharges directly into our local waterways, causing water pollution. Unlike the wastewater in our sewer system, stormwater is not treated before entering our streams, rivers and lakes.



So how does this pollution from stormwater runoff occur? Nutrient loading, when excessive amounts of nutrients (mainly Nitrogen and Phosphorus) enter our waterways, is the biggest culprit for pollution. Nitrogen and Phosphorus naturally exist in our environment, but also tend to excessively end up in our stream, rivers and lakes. This type of pollution can cause problems for wildlife, algae blooms, water quality and flooding during storms. The most common sources of this type of pollution in our community are leaf litter (plant leaf debris), fertilizer (lawn and garden) and pet waste.

What can I do to help prevent nutrient loading in Brighton? Easy, mindful behavioral practices can go a long way to reducing the pollution that reaches our waterways. Check out the handy pollution prevention chart below:

STORMWATER POLLUTION PREVENTION DO'S & DON'TS		
WHAT IS THE POLLUTION SOURCE?	DON'T	DO
Fertilizer: Improper application of fertilizer leads to runoff into storm drainage system.	<ul style="list-style-type: none"> • Apply fertilizer to your lawn when grass is not actively growing or when ground is frozen. • Apply fertilizer to paved surfaces. 	<ul style="list-style-type: none"> • Read the fertilizer bag labels and apply according to label directions. • Sweep up any excess or spilled fertilizer and dispose it properly.
Pet Waste: During rain events, pet waste washes off into storm drainage system, ending up in local waterways.	<ul style="list-style-type: none"> • Let your pet poop or pee in or near waterways. • Dispose of pet waste in the storm drain or the street. 	<ul style="list-style-type: none"> • Always pick up after your pet, even in your yard. • Spread the word, help your neighbor! • Carry extra bags to share on your walks or request/create pet waste bag holders in your local parks.
Leaf Litter: Gathering of leaves, grass clippings and other yard debris in roadways.	<ul style="list-style-type: none"> • Blow, rake or sweep yard debris into the roadways. 	<ul style="list-style-type: none"> • Bag your yard debris and dispose of properly. • Compost your yard waste for gardens and flower beds.

The City of Brighton is embarking on its most ambitious water project to date to improve and expand its water treatment plant (WTP). Faced with the immediate challenge of meeting brine and sulfate discharge permit requirements, the City is also investing in improvements to increase reliability and capacity to support population and development growth. The City's current water treatment plant is nearing the end of its lifespan at more than 25 years old and does not have enough capacity to meet the water needs of our rapidly expanding City. The new WTP will have a capacity of producing 20 million gallons of water per day (MGD) for a lifespan of 25 years (through 2045). The cost of the project is approximately \$155 million.



FACTS:

The current WTP can produce 10 MGD, but there have been several times just recently when the system demand exceeded this capacity. Simply put - we are using more water than we can produce. The max capacity is limited due to:

- 1) The quantity the WTP can treat
- 2) The 30-year-old infrastructure of the WTP
- 3) Discharge limits of brine by the CDPHE (Colorado Department of Public Health & Environment), which are set to expire in December 2024.

SHORT-TERM SOLUTION:

The City of Brighton has reached out to our partners, like the City of Thornton, Westminster and Denver Water, to figure out innovative ways to get us additional water. Those options of buying water from those entities will get Brighton through the next several years. After that, it is anticipated that we will solely rely on the City's new WTP.

STRATEGIES AND WATER CONSERVATION:

- Aggressive conversion of City parks and school district field to non-potable water supply or synthetic turf
- Connection to new sources for non-potable supply
- Temporary interconnect with South Adams Water and Sanitation to get an extra 500,000 gallons per day
- Enforce, encourage and incentivize water conservation throughout the city
- Implement restrictions for irrigation and outdoor water use to help conserve water and reduce peak demand during the summer months (see opposite page)



Utilities Customer Service
City of Brighton
500 South 4th Avenue
Brighton, CO 80601

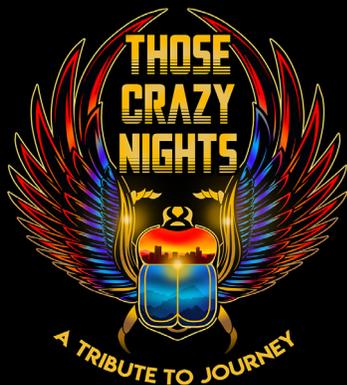
PRESORT STD
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BRIGHTON, CO
PERMIT NO. 31

BRIGHTON BBQ

Thursday, July 20
5:30 - 8 p.m.
Carmichael Park
650 Southern Street

**Come learn about the city while
enjoying a meal, kids' activities
and live music!**

FREE TO THE PUBLIC
FOOD IS FIRST COME, FIRST SERVED



**While here, enjoy a
concert from our FLIX
& KICKS summer
series at 6 p.m.**

