

Consumer Confidence Report

Reporting Year 2023

Presented By City of Bastrop



SAMPLE
TAP

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (512) 332-8960.

PWS ID#: 0110001



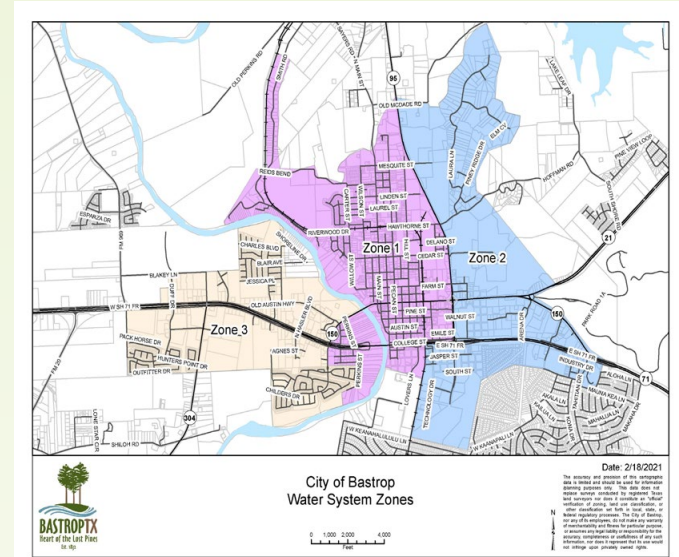
About This Report

We are pleased to present to you this year's annual water quality report covering testing performed between January 1 and December 31, 2023. Included are details about your sources of water, what it contains, and how it compares to standards set by regulatory agencies. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. Our constant goal is to provide you with a safe and dependable supply of drinking water while remaining vigilant in meeting the goals of source water protection, conservation, and community education.

Lead in Home Plumbing

If present, elevated levels of 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. This water supply is responsible for providing high-quality drinking water, but we cannot control the variety of materials used in plumbing components. 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 two minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. 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 (800) 426-4791 or epa.gov/safewater/lead.

Where Does My Water Come From?



The City of Bastrop's water supply, considered groundwater under the influence of surface water, provides water through six Colorado alluvial aquifer wells and one Simsboro aquifer well. Five of the Colorado alluvial wells are used by the Willow water treatment facility to supply Zones 1 and 2; two more wells feed the Bob Bryant Water Treatment Plant in Zone 3. In 2023 the City of Bastrop treated and distributed a combined total of over 712 million gallons of water.

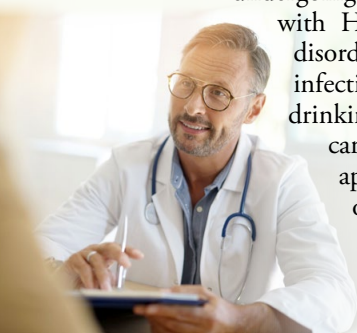
Permanent Water Restrictions

The City of Bastrop recognizes the importance of water conservation and has established year-round water restrictions for landscape irrigation. The use of automatic in-ground or hose-end sprinkler systems is prohibited between the hours of 9:30 a.m. and 6:30 p.m. every day. Visit cityofbastrop.org for more information about water restrictions and conservation to learn how you can help conserve our water supply for generations to come.

Important Health Information

While your drinking water meets U.S. Environmental Protection Agency's (U.S. EPA) standard for arsenic, it does contain low levels of arsenic. U.S. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. U.S. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and linked to other health effects such as skin damage and circulatory problems.

You may be more vulnerable than the general population to certain microbial contaminants, such as *cryptosporidium*, in drinking water. Infants, some elderly, immunocompromised persons such as those undergoing chemotherapy for cancer, those who have undergone organ transplants, those who are undergoing treatment with steroids, and people with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your physician or health care provider. Additional guidelines on appropriate means to lessen the risk of infection by *cryptosporidium* are available from the Safe Drinking Water Hotline at (800) 426-4791.



QUESTIONS?

For more information about this report, or for any questions relating to your drinking water, please call the Water and Wastewater Office at (512) 332-8960.

Information about Your Drinking Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases radioactive material, and substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, or wildlife;

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production, and which may also come from gas stations, urban stormwater runoff, and septic systems;

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor, or color of drinking water, please contact our business office. For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.

Public Participation Opportunities

The City of Bastrop's Water and Wastewater Department is part of the Bastrop city government. You are invited to attend city council meetings on the second and fourth Tuesday of every month. Regular sessions begin at 6:30 p.m. in Council Chambers at 1311 Chestnut Street. Contact the city secretary at (512) 332-8800 for information on how to participate or voice any water quality concerns you may have.



Information about Source Water

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of your source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detection of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact the Water and Wastewater office at (512) 332-8960. Source Water Assessment results can be found on the Texas Drinking Water Watch website at: <https://dww2.tceq.texas.gov/DWW>

Definitions

90th %ile: The levels reported for lead and copper represent the 90th percentile of the total number of sites tested. The 90th percentile is equal to or greater than 90% of our lead and copper detections.

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

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

MCLG (Maximum Contaminant Level Goal): 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.

MRDL (Maximum Residual Disinfectant Level): 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.

MRDLG (Maximum Residual Disinfectant Level Goal): 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.

NA: Not applicable.

ND (Not detected): Indicates that the substance was not found by laboratory analysis.

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

pCi/L (picocuries per liter): A measure of radioactivity.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

SCL (Secondary Contaminant Level): These standards are developed to protect aesthetic qualities of drinking water and are not health based.

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

Test Results

Our water is monitored for many different kinds of substances on a very strict sampling schedule, and the water we deliver must meet specific health standards. Here, we only show those substances that were detected in our water. Detection of a substance does not mean the water is unsafe to drink; our goal is to keep all detects below their respective maximum allowed levels. Monthly analysis indicated no coliform or fecal coliform bacteria.

The state recommends monitoring for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

The percentage of total organic carbon (TOC) removal was measured each month, and the system met all TOC removal requirements set (unless a TOC violation is noted in the Violation column).

REGULATED SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	MCL [MRDL]	MCLG [MRDLG]	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Arsenic (ppb)	2023	10	0	7	2.7–7.4	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm)	2023	2	2	0.413	0.111–0.413	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Beta/Photon Emitters (pCi/L)	2023	50 ¹	0	4.7	NA	No	Decay of natural and human-made deposits
Chlorine Residual, Free (ppm)	2023	[4]	[4]	1.79	1.0–2.9	No	Water additive used to control microbes
Chromium (ppb)	2023	100	100	10.2	ND–10.2	No	Discharge from steel and pulp mills; erosion of natural deposits
Combined Radium (pCi/L)	2022	5	0	1.5	NA	No	Erosion of natural deposits
Fluoride (ppm)	2023	4	4	0.58	0.52–0.58	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Haloacetic Acids [HAA5] (ppb)	2023	60	NA	19 ²	10.9–24.0	No	By-product of drinking water disinfection
Nitrate (ppm)	2023	10	10	4.88	1.35–4.88	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Selenium (ppb)	2023	50	50	20	3.6–24.4	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
Total Trihalomethanes [TTHM] (ppb)	2023	80	NA	90 ²	58.2–112	Yes	By-product of drinking water disinfection
Turbidity ³ (NTU)	2023	TT	NA	0.28	NA	No	Soil runoff
Turbidity (lowest monthly percent of samples meeting limit)	2023	TT = 95% of samples meet the limit	NA	100	NA	No	Soil runoff
Uranium (ppb)	2022	30	0	1.3	NA	No	Erosion of natural deposits

Tap water samples were collected for lead and copper analyses from sample sites throughout the community

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90TH %ILE)	SITES ABOVE AL/TOTAL SITES	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2023	1.3	1.3	0.742	0/80	No	Corrosion of household plumbing systems; erosion of natural deposits
Lead (ppb)	2023	15	0	1.0	0/80	No	Lead service lines; corrosion of household plumbing systems, including fittings and fixtures; erosion of natural deposits

SECONDARY SUBSTANCES

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	SCL	MCLG	AMOUNT DETECTED	RANGE LOW-HIGH	VIOLATION	TYPICAL SOURCE
Iron (ppb)	2023	300	NA	50.2	<0.0500–52.3	No	Leaching from natural deposits; industrial wastes
Manganese (ppb)	2023	50	NA	21.6	<0.0010–26.2	No	Leaching from natural deposits
Total Dissolved Solids [TDS] (ppm)	2023	1,000	NA	546	424–808	No	Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES⁴

SUBSTANCE (UNIT OF MEASURE)	YEAR SAMPLED	AMOUNT DETECTED	RANGE LOW-HIGH	TYPICAL SOURCE
Total Hardness [as CaCO₃] (ppm)	2023	254	199–293	Naturally occurring soluble mineral salts

¹ The MCL for beta particles is 4 millirems per year. The U.S. EPA considers 50 pCi/L to be the level of concern for beta particles.

² Highest average of all sample results collected at a location over a year.

³ Turbidity is a measure of the cloudiness of the water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

⁴ Unregulated contaminants are those for which U.S. EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist U.S. EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. The water entering distribution mains is of very high quality; however, water quality can deteriorate in areas of the distribution mains over time. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through them.

Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not pose health concerns, they can affect the taste, clarity, and color of the water. Additionally, sediments can shield microorganisms from the disinfecting power of chlorine, contributing to the growth of microorganisms within distribution mains. Flushing helps remove stale water and ensures the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell.

During flushing operations in your neighborhood, some short-term deterioration of water quality, though uncommon, is possible. You should avoid tap water for household uses at that time. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use and avoid using hot water to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

Count on Us

Delivering high-quality drinking water to our customers involves far more than just pushing water through pipes. Water treatment is a complex, time-consuming process. Because tap water is highly regulated by state and federal laws, water treatment plant and system operators must be licensed and are required to commit to long-term, on-the-job training before becoming fully qualified. Our licensed water professionals have a basic understanding of a wide range of subjects, including mathematics, biology, chemistry, and physics. Some of the tasks they complete on a regular basis include:

- Operating and maintaining equipment to purify and clarify water.
- Monitoring and inspecting machinery, meters, gauges, and operating conditions.
- Conducting tests and inspections on water and evaluating the results.
- Maintaining optimal water chemistry.
- Applying data to formulas that determine treatment requirements, flow levels, and concentration levels.
- Documenting and reporting test results and system operations to regulatory agencies.
- Serving our community through customer support, education, and outreach.

So the next time you turn on your faucet, think of the skilled professionals who stand behind each drop.

Violation Information

The MCL exceedance occurred during the third and fourth quarter of 2023 at a single location, which resulted in a locational running annual average (LRAA) above the MCL for TTHMs. The city has taken the following actions to address this issue:

- Reducing the organic material in the water by filtration.
- Optimizing chlorine usage.
- Administering high-velocity flushing to remove settlement and organic material from the pipes in the distribution system.

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system and may have an increased risk of getting cancer.

TOTAL TRIHALOMETHANES (TTHM)

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

VIOLATION TYPE	VIOLATION BEGIN	VIOLATION END	VIOLATION EXPLANATION
MCL, LRAA	7/1/23	9/30/23	Water samples showed that the amount of this contaminant in our drinking water was above its standard MCL for the period indicated.
MCL, LRAA	10/1/23	12/31/23	Water samples showed that the amount of this contaminant in our drinking water was above its standard MCL for the period indicated.

About Our Violation

VIOLATION TYPE	BEGIN	END	VIOLATION EXPLANATION
Public Notice Rule Linked to Violation	September 23, 2023	October 10, 2023	The public notice for a third-quarter exceedance of the maximum contaminant level (MCL) for total trihalomethanes (TTHMs) was sent to customers past the due date specified by TCEQ.

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

Water Loss Audit

The water loss audit submitted to the Texas Water Development Board during the year covered by this report indicated that our system lost an estimated 44 million gallons of water. If you have any questions about the water loss audit, please call the Water and Wastewater office at (512) 332-8960.