Consumer Confidence Report

Reporting Year 2022

Presented By City of Bastrop
About This Report

We are once again pleased to present our annual water quality report covering all testing performed between January 1 and December 31, 2022. Over the years, we have dedicated ourselves to producing drinking water that meets all state and federal standards. We continually strive to adopt new methods for delivering the best-quality drinking water to you. As new challenges to drinking water safety emerge, we remain vigilant in meeting the goals of source water protection, water conservation, and community education while continuing to serve the needs of all our water users. Please remember that we are always available should you ever have any questions or concerns about your water.

Safeguard Your Drinking Water

Protection of drinking water is everyone’s responsibility. You can help protect your community’s drinking water source in several ways:

• Eliminate excess use of lawn and garden fertilizers and pesticides – they contain hazardous chemicals that can reach your drinking water source.
• Pick up after your pets.
• If you have your own septic system, properly maintain it to reduce leaching to water sources, or consider connecting to a public sewer system.
• Dispose of chemicals properly; take used motor oil to a recycling center.
• Volunteer in your community. Find a watershed or wellhead protection organization in your community and volunteer to help. If there are no active groups, consider starting one. Use U.S. EPA’s Adopt Your Watershed to locate groups in your community.

Information about Source Water

The Texas Commission on Environmental Quality 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 detections 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.

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 our website at www.cityofbastrop.org for more information about water restrictions and conservation to learn how you can help conserve our water supply for generations to come.

Public Participation Opportunities

The City of Bastrop’s Water and Wastewater Division 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, 1311 Chestnut Street. Contact the city secretary at (512) 332-8800 for details and information on how to participate or voice any water quality concerns you may have.

Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or 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.

Water Loss Audit

In the water loss audit submitted to the Texas Water Development Board during the year covered by this report, our system lost an estimated 37.8 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.

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.

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono (512) 332-8960.
**Where Does My Water Come From?**

The City of Bastrop’s water supply is considered groundwater under the influence of surface water and provides water to the city's customers 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, while two wells feed the Bob Bryant Water Treatment Plant in Zone 3. In 2022 the City of Bastrop treated and distributed a combined total of just under 630 million gallons of water.

**Violation Information**

The MCL exceedance occurred during the first and second quarters of 2022 at a single location, which resulted in the locational running annual average (LRAA) being above the MCL for TTHMs. In the third and fourth quarter, TTHMs were within acceptable limits. 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.

**All Drinking Water May Contain Contaminants**

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.

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**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 at www.epa.gov/safewater/lead.
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 found no coliform or fecal coliform bacteria.

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).

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.

### REGULATED SUBSTANCES

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>MCL [MRDL]</th>
<th>MCLG [MRDLG]</th>
<th>AMOUNT DETECTED</th>
<th>RANGE LOW-HIGH</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arsenic (ppb)</td>
<td>2022</td>
<td>10</td>
<td>0</td>
<td>9.5</td>
<td>3.6–9.5</td>
<td>No</td>
<td>Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes</td>
</tr>
<tr>
<td>Barium (ppm)</td>
<td>2022</td>
<td>2</td>
<td>2</td>
<td>0.312</td>
<td>0.132–0.312</td>
<td>No</td>
<td>Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits</td>
</tr>
<tr>
<td>Beta/Photon Emitters (pCi/L)</td>
<td>2022</td>
<td>50$^2$</td>
<td>0</td>
<td>5.7</td>
<td>4.7–5.7</td>
<td>No</td>
<td>Decay of natural and human-made deposits</td>
</tr>
<tr>
<td>Chlorine Residual, Free (ppm)</td>
<td>2022</td>
<td>[4]</td>
<td>[4]</td>
<td>1.31</td>
<td>0.51–2.25</td>
<td>No</td>
<td>Water additive used to control microbes</td>
</tr>
<tr>
<td>Chromium (ppb)</td>
<td>2022</td>
<td>100</td>
<td>100</td>
<td>25.3</td>
<td>0 - 25.3</td>
<td>No</td>
<td>Discharge from steel and pulp mills; Erosion of natural deposits</td>
</tr>
<tr>
<td>Combined Radium (pCi/L)</td>
<td>2022</td>
<td>5</td>
<td>0</td>
<td>1.5</td>
<td>1.5–1.5</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
<tr>
<td>Fluoride (ppm)</td>
<td>2022</td>
<td>4</td>
<td>4</td>
<td>0.6</td>
<td>0.49–0.56</td>
<td>No</td>
<td>Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories</td>
</tr>
<tr>
<td>Haloacetic Acids [HAA5] (ppb)</td>
<td>2022</td>
<td>60</td>
<td>NA</td>
<td>17$^4$</td>
<td>8.6–18.6</td>
<td>No</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Nitrate (ppm)</td>
<td>2022</td>
<td>10</td>
<td>10</td>
<td>4</td>
<td>1.73–4.19</td>
<td>No</td>
<td>Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits</td>
</tr>
<tr>
<td>Selenium (ppb)</td>
<td>2022</td>
<td>50</td>
<td>50</td>
<td>30</td>
<td>7.2–31.1</td>
<td>No</td>
<td>Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines</td>
</tr>
<tr>
<td>Total Trihalomethanes [TTHMs] (ppb)</td>
<td>2022</td>
<td>80</td>
<td>NA</td>
<td>83$^4$</td>
<td>47–81.8</td>
<td>Yes</td>
<td>By-product of drinking water disinfection</td>
</tr>
<tr>
<td>Uranium (ppb)</td>
<td>2022</td>
<td>30</td>
<td>0</td>
<td>1.6</td>
<td>1.3–1.6</td>
<td>No</td>
<td>Erosion of natural deposits</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>SUBSTANCE (UNIT OF MEASURE)</th>
<th>YEAR SAMPLED</th>
<th>AL</th>
<th>MCLG</th>
<th>AMOUNT DETECTED (90TH %ILE)</th>
<th>SITES ABOVE AL/TOTAL SITES</th>
<th>VIOLATION</th>
<th>TYPICAL SOURCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper (ppm)</td>
<td>2022</td>
<td>1.3</td>
<td>1.3</td>
<td>1.3</td>
<td>4/40</td>
<td>No</td>
<td>Corrosion of household plumbing systems; Erosion of natural deposits</td>
</tr>
<tr>
<td>Lead (ppb)</td>
<td>2022</td>
<td>15</td>
<td>0</td>
<td>1.3</td>
<td>0/40</td>
<td>No</td>
<td>Lead service lines; Corrosion of household plumbing systems, including fittings and fixtures; Erosion of natural deposits</td>
</tr>
</tbody>
</table>

### TURBIDITY $^5$

<table>
<thead>
<tr>
<th>LEVEL DETECTED</th>
<th>LIMIT (TREATMENT TECHNIQUE)</th>
<th>VIOLATION</th>
<th>LIKELY SOURCE OF CONTAMINATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Highest single measurement</td>
<td>0.11 NTU</td>
<td>1 NTU</td>
<td>No</td>
</tr>
<tr>
<td>Lowest monthly % meeting limit</td>
<td>100%</td>
<td>0.3 NTU</td>
<td>No</td>
</tr>
</tbody>
</table>

"Thousands have lived without love, not one without water.”

—W.H. Auden
IRON (ppb) 2022 300 NA 0.066 <0.050–0.216 No Leaching from natural deposits; Industrial wastes
Manganese (ppb) 2022 50 NA 0.0147 <0.0010–0.0540 No Leaching from natural deposits
Total Dissolved Solids [TDS] (ppm) 2022 1,000 NA 506 384–788 No Runoff/leaching from natural deposits

UNREGULATED SUBSTANCES

Total Hardness [as CaCO₃] (ppm) 2022 262 210–315 Naturally occurring soluble mineral salts

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.

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.

PpCi/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.

1 While your drinking water meets U.S. EPA standards 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.

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

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

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

5 Turbidity is a measure of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

6 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.

About Our Violation

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 system and may have an increased risk of getting cancer.

VIOLATION TYPE BEGIN END VIOLATION EXPLANATION

MCL, LRAA 01/01/2022 03/31/2022 Water samples showed that the amount of this contaminant in our drinking water was above the maximum contaminant level (MCL) for the period indicated.

MCL, LRAA 04/01/2022 06/30/2022 Water samples showed that the amount of this contaminant in our drinking water was above the MCL for the period indicated.