

Brushy Creek Municipal Utility District

Annual Water Quality Report for 2024

PWS ID: 2460061





A Message From Your General Manager

Dear BCMUD residents,

This is your annual report on the quality of your drinking water, also known as a Consumer Confidence Report (CCR). Providing clean, safe water is the most important service we offer, and we want you to be as informed as possible about your drinking water.

This report aims to provide peace of mind and confidence in your drinking water. Here, we explain the source of your water, the results of the sampling that have been conducted, and our efforts to protect you and your family. The District is proud to carry the designation of **Superior Public Water System.** The Texas Commission on Environmental Quality determines this designation after reviewing the District's water quality, water treatment, pumping, and storage capacity, and finding that the District meets, or has exceeded, minimum requirements.

If you have any questions after reading this report, please don't hesitate to contact us at (512) 255-7871.

Sincerely,

Shean Dalton

Shean Dalton

16318 Great Oaks Dr.

www.bcmud.org

En español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512) 255-7871.

About Your Water



Where Your Drinking Water Comes From

The District has two raw water sources located within Williamson County. Surface water travels through an eleven-mile pipeline from Lake Georgetown.

Additionally, the District receives groundwater (under the influence of surface water) from three wells that pump out of the Edwards Aquifer. Both sources are blended at the District's raw water basin located at the Membrane Microfiltration Water Treatment Facility.

What Is in Your Drinking Water

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, such as viruses and bacteria, which 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 by-products 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 be the result of oil and gas production and mining activities.

To ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

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 the system's business office.

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 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 at 800-426-4791.

DEFINITIONS:

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

Average or Avg: Regulatory compliance with some MCL's is based on running annual average of monthly samples.

Level 1 Assessment: A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria has been found in our water system.

Level 2 Assessment: A 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 has been found in our water system on multiple occasions.

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

Maximum Contaminant Level Goal or MCLG: The maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, and which allows an adequate margin of safety.

Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for the control of microbial contaminants.

Maximum Residual Disinfectant Level Goal or 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.

Treatment Technique: A required process intended to reduce the level of a contaminant in

drinking water.

MFL: Million Fibers Per Liter **Mrem:** Millirems Per Year

MRL: Minimum Reporting Level

N/A: Non-Applicable

NTU: Nephelometric Turbidity Units

pCi/L: Picocuries Per Liter (a measure of radioactivity)

ppb: Parts Per Billionppm: Parts Per Millionppt: Parts Per Trillionµg/L: Parts Per Billion

About the Tables

The tables list all the federally regulated or monitored constituents that have been found in your drinking water. Constituents (such as calcium, sodium, or iron) that can be found in drinking water can cause taste, color, and odor problems. These types of issues are not necessarily a cause for health concerns. Answers to Questions about discolored water, aesthetics, hardness, lead, fluoride, and others can be found on our website at www.bcmud.org

Special Notice for Availability of Unregulated Contaminant Monitoring Data IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

Availability of Monitoring Data for Unregulated Contaminants for Brushy Creek MUD

Our water system has sampled for a series of unregulated contaminants. Unregulated contaminants are those that don't yet have a drinking water standard set by the EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. As our customers, you have a right to know that this data is available. If you are interested in examining the results, please submit an open records request at www.bcmud.org or by contacting Customer Service at 512-255-7871 or in person at 16318 Great Oaks Drive Round Rock, TX 78681.

This notice is being sent to you by Brushy Creek MUD. State Water System ID#: 2460061

Water Quality Test Results

| Lead and Copper | Date Sampled | MCLG | AL | 90th Percentile | Sites Over AL | Units | Violation | Likely Source of Contamination |
|--------------------|-----------------|------|-----|--------------------|------------------|-------|-----------|---------------------------------------------------------------------------------------------------------|
| Copper | 2022 | 1.3 | 1.3 | 0.11 | 0 | ppm | N | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead | 2022 | 0 | 15 | 1.3 | 0 | ppb | N | Corrosion of household plumbing systems; Erosion of natural deposits. |

| Disinfection By-Products | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|------------------------------------|--------------------|------------------------------|-----------------------------------|-----------------------------|-----|-------|-----------|--------------------------------------------|
| Haloacetic Acids (HAA5) | 2024 | 14.6 | 9.9 – 14.6 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2024 | 50.9 | 4.7 – 50.9 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection. |

^{*} Value in Highest Level Detected column is the highest average of all HAA5 / TTHM sample results collected at a location over a year.

| Inorganic Contaminants | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--------------------------------------|--------------------|------------------------------|-----------------------------------|------|-----|-------|-----------|----------------------------------------------------------------------------------------------------------------------------------------|
| Barium | 2024 | 0.039 | 0.0390 -0.0351 | 2 | 2 | ppm | N | Discharge of drilling wastes: Discharge from metal refineries; Erosion of natural deposits. |
| Cyanide | 2024 | 50 | 50-50 | 200 | 200 | ppb | N | Discharge from plastic and fertilizer factories; Discharge from steel/metal factories. |
| Fluoride | 2024 | 0.66 | 0.66 – 0.66 | 4 | 4.0 | ppm | N | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories. |
| Nitrate [Measured as Nitrogen] | 2024 | 0.23 | 0.23 - 0.23 | 10 | 10 | ppm | N | Runoff from fertilizer use: Leaching from septic tanks, sewage; Erosion of natural deposits. |

| Synthetic organic contaminants, including pesticides and herbicides | Collection Date | Highest Level Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|---------------------------------------------------------------------|--------------------|------------------------------|------|-----|-------|-----------|-------------------------------------------|
| Atrazine | 2024 | 0.1 | 3 | 3 | ppb | N | Runoff from herbicides used on row crops. |

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Individual Samples | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|-------------------------------|--------------------|------------------------------|-----------------------------------|------|-----|-------|-----------|--------------------------------|
| Combined Radium 226/228 | 2024 | 0 | 0 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |

| Disinfectant Residual | Year | Average | Range of Levels Detected | MRDL | MRDL G | Unit of Measure | Violation (Y/N) | Source in Drinking Water |
|--------------------------|------|---------|--------------------------------|------|-----------|--------------------|--------------------|------------------------------------------|
| Chloramines | 2024 | 1.82 | 0.57 – 2.42 | 4 | 4 | ppm | Z | Water additive used to control microbes. |

| Turbidity | Level Detected | Limit (Treatment Technique) | Violation | Likely Source of Contamination |
|--------------------------------|----------------|--------------------------------|-----------|--------------------------------|
| Highest single measurement | 0.09 NTU | 1.0 NTU | N | Soil runoff. |
| Lowest monthly % meeting limit | 100% | 0.3 NTU | N | Soil runoff. |

Information Statement: Turbidity is the measure of cloudiness of the water and has no health effects. However, too much turbidity can interfere with the disinfection process, making it easier for bacteria to grow. High turbidity may therefore indicate the presence of bacteria or other disease-causing organisms, such as viruses and parasites that can cause symptoms like nausea, cramps, diarrhea, and headaches.

UCMR 5 Results (Fifth **Unregulated** Contaminant Monitoring Rule)

| Unregulated Contaminant | Average Level (µg/L) | Range of Levels Detected (µg/L) | UCMR MRL (µg/L) | Health-Based Reference Concentration (μg/L) (Recommended, not required in the CCR) |
|----------------------------|-------------------------|------------------------------------|--------------------|------------------------------------------------------------------------------------|
| Lithium | 14.9 | 13.3 - 16.3 | 9 | 10 |
| PFBS | 0.0043 | 0.0037 - 0.0055 | 0.003 | N/A |
| PFHxA | 0.0036 | 0.0034 - 0.0038 | 0.003 | N/A |
| PFHxS | 0.0035 | 0.0031 - 0.0037 | 0.003 | N/A |
| PFPeA | 0.0052 | 0.0045 - 0.0060 | 0.003 | N/A |
| PFBA | 0.0057 | 0.0052 - 0.0061 | 0.005 | N/A |

^{*}This data is part of UCMR5 results in relation to minimum reporting levels and available non-regulatory health-based reference concentrations.

Coliform

| 0011101111 | | | | | | | |
|------------|-------------------|----------------------------|------|-----|-------|-----------|--------------------------------|
| Year | Constituent | Highest No. Positive | MCLG | MCL | Units | Violation | Likely Source of Contamination |
| 2024 | Total Coliform | 0 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |

Sampling and Testing

We test more than 200 constituents in our water system, looking for bacteria, metals, and chemicals to ensure the water is safe to drink.

Bacteria

We look for bacteria regularly, as required by law, and we take samples for analysis at 20 monthly locations in the water system. If bacteria are found in even one of the tests, more thorough testing, evaluation, and action are required.

<u>Disinfection by-products (Trihalomethane (THM) or Halo Acetic Acids (HAA))</u>

Four times per year, we look for byproducts from the disinfection process. When chlorine, the disinfectant we use to protect against the water of bacteria and viruses in the water, starts to break down in the water, it can form new compounds. These compounds, trihalomethanes (THM) and haloacetic acids (HAA), have been known to cause cancer at high levels. The legal limit for drinking water is 80 parts per billion and 60 parts per billion, respectively. We test these compounds at four different locations in the water system.

Lead and Copper

If present, 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. BCMUD is responsible for providing high-quality drinking water and removing lead pipes, but it 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. Before drinking tap water, flush your pipes for several minutes by running your tap, taking a shower, doing laundry, or running a load of dishes. 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 BCMUD at (512) 255-7871. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available at http://www.epa.gov/safewater/lead (opens in a new window)

LCRR Compliance

The LCRR (Lead and Copper Rule Revisions) is a set of regulatory changes made by the U.S. Environmental Protection Agency (EPA) to strengthen public health protections against lead in drinking water. The rule focuses heavily on Lead Service Lines (LSLs) — the pipes that connect water mains to homes and buildings, which are a major source of lead contamination. Here are the key LSL-related requirements under the LCRR:

1. Lead Service Line Inventory

- Water systems must develop and maintain a public inventory of all service lines, classifying each as:
 - Lead
 - Galvanized requiring replacement
 - Non-lead
 - Unknown
- The initial inventory was due by October 16, 2024.

2. Lead Service Line Replacement Plans

- Systems with lead present must prepare a Lead Service Line Replacement Plan (LSLR Plan) that includes:
 - Prioritization of high-risk areas (like schools and homes with children)
 - Public outreach and communication strategies
 - Cost and funding considerations
- The plan must support the goal of full replacement over time.

3. Trigger for Replacement

- If a lead action level of 15 parts per billion (ppb) is exceeded in testing, the system must:
 - Replace at least 3% of lead service lines annually until levels are under control.
 - Follow strict procedures for partial replacements, which are discouraged because they can temporarily increase lead levels.

4. Public Notification

- Residents must be notified within 24 hours if their home's water exceeds the lead action level.
- Utilities must inform customers about the presence and risks of LSLs, including during construction or repair work.

5. Sampling and Testing at Schools and Childcare Facilities

• Water systems are required to sample drinking water in schools and childcare centers, especially those served by the utility but not necessarily owned by it.

6. Tap Sampling Revisions

- Changes to how tap water is tested:
 - Sampling must include homes known to have LSLs.
 - Focuses on first and fifth-liter sampling to better capture lead levels from both the faucet and service line.

Summary

The LCRR emphasizes proactive identification and replacement of lead service lines, along with better testing, public communication, and protections for vulnerable populations. These changes are part of the EPA's broader effort to eliminate lead exposure from drinking water.

To comply with LCRR, Brushy Creek set a process of execution that included the following steps:



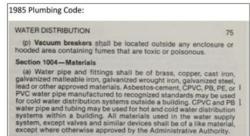


A wealth of information existed in various sources which assisted in the inventory and minimized field inspections.

Conducting Historical Record Review

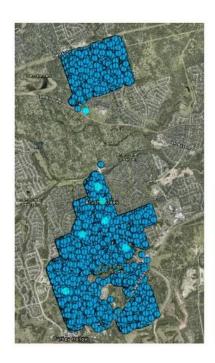
- Construction and Plumbing Codes
- Water System Records
- Inspection Records
- Meter Installation Records
- Capital Improvement Plans
- Standard Operating Procedures
- Local Ordinances
- Construction/As-builts Drawings
- County Appraisal District Records







The ESRI GIS tool enabled us to capture data gathered from the historical record review and associate it to each individual service line.

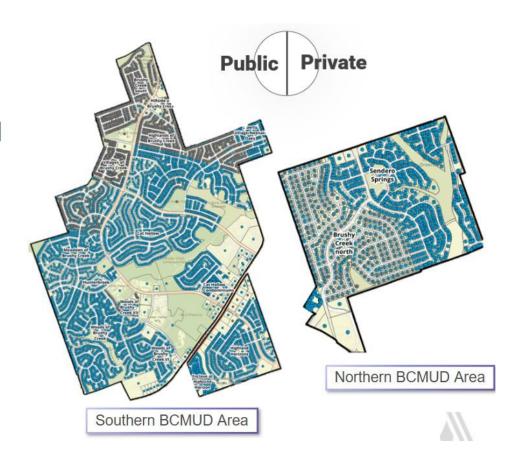




| OBJECTID * | Utility Status * | Utility Side Notes * |
|------------|------------------|-------------------------------------------------------------------------------|
| 2430 | Non-Lead | Utility SL Classification was determined by the COA standard detail amendment |
| 1830 | Non-Lead | Meter Pit Investigation Location, PVC Pipe |
| 4018 | Non-Lead | Meter Pit Investigation Location |
| 3760 | Non-Lead | Construction Standard Details (1982) |
| 643 | Non-Lead | water meter installation on 01/08/1989 |
| 605 | Non-Lead | Platted in 1993, SL Material is Copper or Polyethylene |
| 4945 | Non-Lead | Water treatment Facility - Platted in 2004 |
| 2082 | Non-Lead | Utility SL Classification was determined by the COA standard detail amendment |



Brushy Creek had ruled 78% of SLs are Non-Lead based on Historical Record Review. (1,305 Unknown SLs)



To identify the remaining 22% of unknown service lines, Brushy Creek continued to conduct meter pit inspections until their system had 100% known service lines.



Executing meter pit inspections

- ▲ 1,305 meter pit inspections
- 4 month duration



Results of the LCRR Service Line Inventory Project

Following the completion of the LCRR Service Line Inventory (SLI) project, BCMUD was able to confirm that there are **NO** lead service lines in the District. To view the complete service line inventory report, please submit an open records request at www.bcmud.org or by contacting Customer Service at 512-255-7871 or in person at 16318 Great Oaks Drive Round Rock, TX 78681.

Stay Informed About Your Water

Public Participation Opportunities Notice

See www.bcmud.org for upcoming Board of Directors Meetings

Location: Brushy Creek Community Center 16318 Great Oaks Drive, Round Rock, Texas

Social Media

Follow us on:

Facebook: https://www.facebook.com/bcmud/

LinkedIn: https://www.linkedin.com/company/68292810/admin/dashboard/

Nextdoor: https://nextdoor.com/city/feed/?

YouTube: https://www.youtube.com/@BrushyCreekMUD

<u>Tips:</u>

Run Water After Vacation

Another factor that affects water quality in your home is how "stale" the water is. When you leave your home or business for a long time, as you may when you take a vacation, the water in the pipes and plumbing doesn't move. When water has been sitting in the pipes for days, bacteria can grow, and if you have lead or copper plumbing, those metals can start to seep into the water. The best thing to do when you get back from being away after a long time is to run the water on full blast for 30 seconds to two minutes before using it for drinking or cooking. And always use cold water for cooking, to draw in fresh water from the outside.

Safely Connect Outdoor Hoses

Another factor that can influence water quality in your home are connections to your water outside your home. The outdoor spigot connection to a hose provides a potential way for pollutants to enter your plumbing. If you use the hose to spray chemicals on your yard by connecting the nozzle to a spray bottle, or if you have a sprinkler system connected, there is the potential for chemicals from the bottle or the lawn to be accidentally sucked back into your internal plumbing. To prevent this from happening, the Uniform Plumbing Code (603.3.3) requires that you have a non-removable hose bib vacuum breaker installed to prevent potential backflow.

Additional Resources

- Information on lead in drinking water: www.epa.gov/safewater/lead (opens in a new window)
- The Safe Drinking Water Act: www.epa.gov/sdwa (opens in a new window)
- CDC Guide to Understanding your CCR: http://www.cdc.gov/healthywater/drinking/public/understanding_ccr.html (opens in a new window)
- American Water Works Association: http://www.awwa.org (opens in a new window)
- Texas Commission on Environmental Quality: www.tceq.texas.gov/agency/water_main.html

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