FERN BLUFF
Municipal Utility District

2024 Consumer Confidence Report for Public Water System FERN BLUFF MUD

This is your water quality report for January 1 to December 31, 2024

FERN BLUFF MUD provides surface water from Lake Georgetown and groundwater from Edwards Aquifer located in Williamson County.

For more information regarding this report contact:

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Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (512)238-0606.

Definitions and Abbreviations

Definitions and Abbreviations	The following tables contain scientific terms and measures, some of which may require explanation.
Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Avg:	Regulatory compliance with some MCLs are based on running annual average of monthly samples.
Level 1 Assessment:	A Level 1 assessment is 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.
Level 2 Assessment:	A Level 2 assessment is 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.
Maximum Contaminant Level or MCL:	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.
Maximum Contaminant Level Goal or 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 residual disinfectant level or 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.
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.
MFL	million fibers per liter (a measure of asbestos)
Mrem:	millirems per year (a measure of radiation absorbed by the body)
NA:	not applicable.
NTU	nephelometric turbidity units (a measure of turbidity)
pCi/L	picocuries per liter (a measure of radioactivity)

Definitions and Abbreviations

ppb:	micrograms per liter (ug/l) or parts per billion
ppm:	milligrams per liter (mg/l) or parts per million
ppq	parts per quadrillion, or picograms per liter (pg/L)
ppt	parts per trillion, or nanograms per liter (ng/L)
Treatment Technique or TT:	A required process intended to reduce the level of a contaminant in drinking water.

Information about 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.

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 EPAs Safe Drinking Water Hotline at (800) 426-4791.

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 storm water 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 storm water 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 storm water runoff, and septic systems.

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

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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.

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; persons 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 providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium are available from the Safe Drinking Water Hotline (800-426-4791).

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. We are 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 2 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 or at http://www.epa.gov/safewater/lead.

Fern Bluff has completed the required service line inventory, and it can be located on our website at https://fernbluffmud.org/wp-content/uploads/2024/11/LSLI.pdf. Our inventory concluded that there are no lead, galvanized requiring replacement or unknown service lines in our distribution system.

Information about Source Water From City of Round Rock

FERN BLUFF MUD purchases water from CITY OF ROUND ROCK. CITY OF ROUND ROCK provides purchase surface water from Lake Georgetown and groundwater from Edwards Aquifer located in Williamson County.

TCEQ completed a Source Water Susceptibility for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system(s) from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system contact Hector Alanis at 512-238-0606.

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Lead	08/2024	0	0.015	<0.001	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits
Copper	08/2024	1.3	1.3	.0003	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
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. We are 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 2 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 or at http://www.epa.gov/safewater/lead.								

Turbidity	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Turbidity	2024	0.065	0.02 - 0.16	NA	0.3	NTU	N	Soil Runoff
Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.								

Synthetic Organic Contaminants, Semivolatile Organic Contaminants, Pesticides, Herbicides & Carbamates	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2024	<0.1	<0.1 - 0.11	3	3	ppb	N	Runoff from herbicides used on row crop
Di (2-ethylhexyl) phthalate	2024	0.91	0 - 1	0	6	ppb	N	Discharge from rubber and chemical factories

Inorganic Contaminants	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Aluminum	2024	0.0997	0.0997 - 0.0997	0.2	0.05 - 0.2	ppm	N	Erosion of natural deposits
Barium	2024	0.0382	0.0382 - 0.0382	2	2	ppm	N	Erosion of natural deposits
Calcium	2024	39.4	39.4 - 39.4	NA	NA	ppm	N	Erosion of natural deposits
Cyanide	2024	0.09	0.09 - 0.09	0.2	0.2	ppm	N	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
Fluoride	2024	0.22	0.22 - 0.22	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth.
Magnesium	2024	20.1	20.1 - 20.1	NA	NA	ppm	N	Erosion of natural deposits
Manganese	2024	0.0017	0.0017 - 0.0017	NA	NA	ppm	N	Erosion of natural deposits
Nitrate (surface water)	2024	0.188	0.05 - 0.32	10	10	ppm	N	Runoff from fertilizer use; Leachate from septic tanks, sewage; erosion of natural deposits
Nitrate (ground water)	2024	0.649	0.34 - 1.12	10	10	ppm	N	Runoff from fertilizer use; Leachate from septic tanks, sewage; erosion of natural deposits
Nickel	2024	0.0014	0.0014 - 0.0014	NA	NA	ppm	N	Erosion of natural deposits
Potassium	2024	3.63	3.63 - 3.36	NA	NA	ppm	N	Erosion of natural deposits
Sodium	2024	41.0	41.0 - 41.0	NA	NA	ppm	N	Erosion of natural deposits

Total Organic Carbon	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Source Water Total Organic Carbon	2024	3.50	3.04 - 3.92	None Established		ppm	N	Naturally organic material. There is no health effect directly associated with TOC
Treated Water Total Organic Carbon	2024	2.84	2.6 - 3.13	None Established		ppm	N	Naturally organic material. There is no health effect directly associated with TOC

Radioactive Contaminants	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Radium 228	2024	<1.0	<1.0 - <1.0	0	5	pci/L	N	Erosion of natural deposits
Gross Beta Emitters	2024	<4.0	<4.0 - <4.0	0	50	pci/L	N	Decay of natural and man-made deposits
Gross Alpha Particles	2024	<2.0	<2.0 - <2.0	0	15	pci/L	N	Erosion of natural deposits

Unregulated Contaminants	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Hardness (Surface Water)	2024	186	130 - 242	NA	NA	ppm	N	Naturally occurring calcium and magnesium
Hardness (Ground Water)	2024	294	230 - 358	NA	NA	ppm	N	Naturally occurring calcium and magnesium
LSI (Surface Water)	2024	-0.030	-0.28 - 0.22	NA	NA	NA	N	LSI between -0.5 and 0.5 means the water is stable or balanced
LSI (Ground Water)	2024	-0.115	-0.52 - 0.29	NA	NA	NA	N	LSI between -0.5 and 0.5 means the water is stable or balanced

Information about Source Water From Brushy Creek MUD

FERN BLUFF MUD purchased water from Brushy Creek MUD. Brushy Creek MUD provides purchased surface water from Lake Georgetown and groundwater under the influence of surface water and from Edwards Aquifer located in Williamson County.

Inorganic Contaminants	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2024	0.039	0.039 - 0.039	2	2	ppm	N	Discharge of drilling wastes; Discharges 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	0.2	0.22 - 0.23	4	4	ppm	N	Erosion of natural deposits; Water additives 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, Semivolatile Organic Contaminants, Pesticides, Herbicides & Carbamates	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Atrazine	2024	0.1	0.1 - 0.1	3	3	ppb	N	Runoff from herbicides used on row crop

Turbidity	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Turbidity	2024	0.09	0.09 - 0.09	NA	0.3	NTU	N	Soil Runoff
Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.								

2024 Water Quality Test Results

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	06/03/2022	1.3	1.3	0.036	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing
Lead	06/03/2022	0	0.015	<0.01	0	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits

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. We are 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 2 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 or at http://www.epa.gov/safewater/lead.

Disinfection By-Products	Year	Highest Level Detected/LCRR	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2024	9	5.2 - 9.5	No goal for the total	60	ppb	N	By-product of drinking water disinfection

*The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year

Total Trihalomethanes (TTHM)	2024	55	45.2 - 61.7	No goal for the total	80	ppb	N	By-product of drinking water disinfection

*The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year

Inorganic Contaminants	Year	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2024	0.37	0.08 - 0.37	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should seek advice from your healthcare provider.

Disinfectant Residual	Year	Average Level Detected	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Likely Source in Drinking Water
Chloramine	2024	2.00	0.52-3.18	4	4	ppm	N	Water additive used to control microbes

Coliform Bacteria	Year	Highest % of Positive Samples	MCL	Units	Violation	Likely Source of Constituent
Total Coliform	2024	0.00%	Presence in 5% or more of the monthly samples	Presence	N	Naturally present in the environment
Fecal Coliform	2024	0.00%	Routine or repeat sample is coliform positive and on is also fecal positive	Presence	N	Naturally present in the environment

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption. Fecal coliform bacteria and, in particular, E. coli, are members of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform bacteria (E. coli) in drinking water may indicate recent contamination of the drinking water with fecal material.

Unregulated Contaminants	Year	Average Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Dibromochloromethane	2024	23.66	20.3 - 26.2	None Established		ppb	N	Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining their occurrence in drinking water and if future regulation is warranted
Chloroform	2024	4.40	2.5 - 8.5	None Established		ppb	N	
Bromoform	2024	10.76	7.6 - 14.1	None Established		ppb	N	
Bromodichloromethane	2024	14.99	10.3 - 20.9	None Established		ppb	N	