

2021
Annual Drinking Water
Quality Report
(Consumer Confidence Report)



903-831-0091

Texas Public Water System ID TX0190021

Riverbend Water Resources District (RWRD) is pleased to present to you our 2021 Annual Drinking Water Quality Report. This report is intended to provide you with important information about your drinking water and the efforts we make to provide safe drinking water to our customers. We hope this information will help you become more knowledgeable about your drinking water.

SPECIAL NOTICE - Required Language for ALL Community Public Water Supplies:

Some people may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. People at particular risk of infections include: some elderly, infants, immuno-compromised persons such as those undergoing chemotherapy for cancer, organ transplant recipients, those who are undergoing treatment with steroids, and people with HIV/AIDS or other immune system disorders. These people should seek advice about drinking water from their health care providers. Additional guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791. **No Cryptosporidium has been detected in either of Texarkana's water sources.**

Where do we get our drinking water?

Riverbend Water Resources District purchases water from Texarkana Water Utilities (TWU). TWU has two surface water sources: **Wright Patman Lake** located in northeast Texas and **Millwood Lake** located in southwest Arkansas. This report provides information about water from both lakes and water treatment plants, as well as the RWRD distribution system.

TYPES OF WATER SOURCES: 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 materials and, in some cases, radioactive material. It can also pick up substances resulting from the presence of animals or from human activity. Contaminants that may be present in our source (lake) water include: microbial contaminants such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agriculture, livestock operations and wildlife; inorganic contaminants such as minerals and metals, 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 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 are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff and septic systems; radioactive contaminants can be naturally occurring or the result of oil and gas production and/or mining activities.

In order to assure tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Public Participation Opportunities

If you have any questions about this report or concerning your water utility, please contact Eli Hunt, Operations Manager, at 903-831-0091, or Kyle Dooley, Executive Director/CEO at 903-831-0091. We want our valued customers to be informed about their water utility

Source Water Assessments

The Texas Commission on Environmental Quality completed an assessment of Lake Wright Patman and results indicate that it is susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system contact Eli Hunt, Operations Manager, at 903-831-0091.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards, there may not be any health benefits to purchasing bottled water or point-of-use devices. 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 their potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

Lead and Drinking Water

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. TWU is responsible for providing high quality drinking water, but 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>.

Secondary Contaminants

Many constituents such as calcium, sodium and iron are often found in drinking water and are capable of causing taste, color and odor problems. These taste and odor constituents are called secondary contaminants and are regulated by State regulatory agencies, not the EPA. These constituents are not cause for health concerns however, they can greatly affect the appearance and taste of your water.

About the Following Table

RWRD routinely monitors for contaminants in your drinking water according to State and Federal laws. The following table lists the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for over 100 contaminants. The following table shows results for the monitoring period of January 1, 2020 – December 31, 2020. In the following table, you might find terms and abbreviations that are not familiar to you. To help you better understand these terms, we have provided the following definitions.

Definitions and Abbreviations

Action Level:	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Action Level Goal (ALG):	The level of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.
Average (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 (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 (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 (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 (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)
ppb:	Parts per billion or micrograms per liter - or one ounce in 7,350,000 gallons of water.
ppm:	Parts per million or milligrams per liter - or one ounce in 7,350 gallons of water.
ppq:	Parts per quadrillion, or picograms per liter (pg/L)
ppt:	Parts per trillion, or nanograms per liter (ng/L)
Texas Commission on Environmental Quality (TCEQ):	The regulatory agency for drinking water in the state of Texas.
Treatment Technique (TT):	A required process intended to reduce the level of a contaminant in drinking water.

2021 Water Quality Test Results

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 is 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 Eli Hunt at (903) 831-0091.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample.	1	Fecal Coliform or E. Coli MCL: A routine sample and a repeat sample are total coliform positive, and one is also fecal coliform or E. coli positive.	0	N	Naturally present in the environment.

	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/06/2017	1.3	1.3	0.081	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	09/06/2017	0	15	3.8	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)	2021	30	16 – 48.2	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)	2021	44	28.7 – 62.2	No goal for the total	80	ppb	N	By-product of drinking water disinfection.
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* 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	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2021	0.237	0.237 – 0.237	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Nitrite [measured as Nitrogen]	2021	0.343	0.11 – 0.343	1	1	Ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Disinfectant Residual

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation (Y/N)	Source in Drinking Water
Chlorine	2021	2.64	0.57-3.9	4	4	ppm	ppm	Water additive used to control microbes.

Turbidity

Turbidity is a measure of the cloudiness of the water. It is used to indicate water quality and filtration effectiveness (e.g., whether disease-causing organisms are present). Higher turbidity levels are often associated with higher levels of disease-causing microorganisms such as viruses, parasites, and some bacteria. These organisms can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Contaminant	Location	Highest Single Measure ment	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
Turbidity	Wright Patman	0.29	100%	≤0.3 in 95% of samples	NTU	Soil runoff
	Millwood	0.24	100%			

Inorganic Contaminants

Contaminant	Reporting Agency	Average Level Detected	Range of Detected Level	MCL	MCLG	Unit of Measure	Source of Contaminant
Barium	WP by (TCEQ)	0.028	0.02 - 0.0036	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
	Millwood by (TCEQ)	0.0181	0 - 0.0181				
Fluoride	Wright Patman	0.0401	0 - 0.0401	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
Nitrate (as Nitrogen)	WP & MW (by TCEQ)	0.1285	0.103 – 0.154	10	10	ppm	Discharge from steel/metal factories; discharge from plastic and fertilizer factories

Radioactive Contaminants (2020 Results)

Contaminant	Location	Average Level Detected	Range of Detected Level	MCL	MCLG	Unit of Measure	Source of Contaminant
Gross Alpha	Millwood	4.1 (+/- 0.9)	4.1 (+/- 0.9)	15	0	pCi/L	Erosion of natural deposits of certain radioactive minerals that may emit a form of radiation known as alpha radiation
Gross Beta	Millwood	2.7 (+/- 0.7)	2.7 (+/- 0.7)	50	0	pCi/L	Decay of natural and man-made deposits of certain radioactive minerals that may emit forms of radiation known as photons and beta radiation.

Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether further regulation is warranted. MCLs (Maximum Contaminant Levels) and MCLGs (Maximum Contaminant Level Goals) have not been established for all unregulated contaminants.

Contaminant	Reporting Agency	Level Detected Range	Avg Level Detected	Unit of Measure	MCLG	Source of Contaminant
Chloroform	TCEQ	37.6 - 51.7	44.65	ppb	70	By-products of drinking water disinfection
	ADH	32.9 - 32.9	32.9			
Bromodichloromethane	TCEQ	0 – 10.6	7.765	ppb	0	
	ADH	6.88 – 6.88	8.40			
Dibromochloromethane	ADH	1.91 – 2.61	0.96	ppb	60	
Acetone	TCEQ	0 – 6.21	6.21	ppb	6000	Used in manufacture of plastic, fibers, cosmetics, photographic film and many other kinds of consumer goods.

DEFINITIONS

TCEQ - Texas Commission on Environmental Quality

ADH - Arkansas Department of Health

Action Level (AL) - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which water systems must follow.

Maximum Contaminant Level (MCL) - the highest level of a contaminant that is allowed in drinking water.

Maximum Contaminant Level Goal (MCLG) – unenforceable public health 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.

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.

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.

NA – not applicable

Nephelometric Turbidity Unit (NTU) – a unit of measurement for the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Parts per million (ppm) – a unit of measurement for detected levels of contaminants in drinking water. One part per million corresponds to one minute in two years or a single penny in \$10,000.

Parts per billion (ppb) - a unit of measurement for detected levels of contaminants in drinking water. One part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

TWU - Texarkana Water Utilities

