WATER QUALITY REPORT 2019

ROUND ROCK TEXAS

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al teléfono 512-218-5555.

SAFE, HIGH-QUALITY DRINKING WATER, ROUND THE CLOCK ROUND ROCK.

The City of Round Rock is committed to providing high quality, dependable water to the community. **Round Rock's water system is rated "superior" by the Texas Commission on Environmental Quality (TCEQ) – TCEQ's highest rating – and meets or exceeds all state and federal drinking water standards.**

This Consumer Confidence Report provides information about our water system, including source water, levels of detected contaminants, compliance with drinking water rules, and water quality data from the most recent U.S. Environmental Protection Agency (EPA) required tests.

Where Your Water Comes From

Round Rock's water supply comes from surface water and groundwater sources. Surface water is primarily supplied by Lake Georgetown, and groundwater is served by the Edwards Aquifer.

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.

Water can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water before treatment may include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

Water Quality

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 may be obtained by calling the EPA Safe Drinking Water Hotline at (800-426-4791).

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 City at 512-341-3134.

To ensure tap water is safe, EPA regulations limit the amounts of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Secondary Constituents

Secondary constituents, such as calcium, sodium, or iron, often found in drinking water, can cause taste, color, or odor problems. The State of Texas regulates these taste and odor constituents. These constituents are not necessarily causes for health concerns. Secondary constituents are not required to be reported but may affect the appearance or taste of your water.

Vulnerability to Drinking Water Contaminants

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 (800-426-4791).

City of Round Rock

Website: roundrocktexas.gov/utilities
Facebook: facebook.com/roundrock
Utilities Division: 512-218-5555
Water Quality Questions: 512-341-3134
Billing Questions: 512-218-5460

U.S. EPA Safe Drinking Water Hotline

800-426-4791 *or visit*
http://water.epa.gov/drink/hotline/index.cfm

Source Water Assessment

TCEQ completed an assessment of Round Rock's source water, and results indicate that some of our sources are 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 will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, please contact the City at 512-341-3134. Source water assessment information is available on Texas Drinking Water Watch at https://dww2.tceq.texas.gov/DWW/.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of January - December 2019, our system lost an estimated 5.15% of total water produced. If you have questions about the water loss audit, please call 512-341-3134.

Water Hardness

Many consumers believe that their water must be softened to prevent damage to plumbing and fixtures. This is untrue. The average water hardness in Round Rock is 222 mg/L or approximately 12.98 grains per gallon. While this level of hardness may cause minor, aesthetic problems such as water spots and dry skin, it does not cause damage to plumbing.

The City routinely performs laboratory tests to measure the stability of the drinking water. Stability refers to whether the water is aggressive or depositional. Test results indicate that Round Rock's drinking water, as delivered to your home, is stable.

Your Participation is Welcome

The Round Rock City Council meets each second and fourth Thursday at 6 p.m. in City Hall Council Chambers, 221 E. Main St. Council meetings are open to the public with opportunities for residents to comment on any city-related issue, visit roundrocktexas.gov/council for details.

For questions regarding this report, please call 512-341-3134 or email wkinder@roundrocktexas.gov.

Watershed Protection

Stormwater runoff is rain that does not absorb into the ground. It carries litter, pesticides, fertilizers, bacteria from pet waste and other harmful pollutants into nearby creeks, streams, and other waterways.

Stormwater pollution can lead to contamination of these vital water sources and increase the cost of treating drinking water as well as adversely impacting the environment.

Help keep our waterways clean. Never sweep or dump anything down storm drains.

Learn more at roundrocktexas.gov/stormwater.

Grease "Can It, Don't Drain It"

Grease may go in as a liquid, but as it travels through drains, it cools and hardens, forming a sticky, pipe-clogging wax in your pipes. When this happens, the wastewater (sewer) system backs up, and sewage overflows into your home, yard, and nearby creeks. Avoid this costly disaster by pouring grease in a can and toss in the trash.

Learn more facts and get your **FREE Cease the Grease kit** at roundrocktexas.gov/ceasethegrease.

Summer Watering 2020

Although it has been a wet spring, the lakes are not full. We have not implemented water restrictions, but the chance could arise this summer if rainfall is low. We ask you to observe voluntary water conservation; that means, when you choose to start watering your yard, do not water during the heat of the day, when it has just rained or about to rain, or more than twice per week, and don't let water runoff into the street.

Most of the water used in Round Rock happens during the summer months for outdoor uses. The easiest way to reduce your water consumption is to water your yard only when needed and fix any water leaks. You can also replace your traditional irrigation controller with a weather-based controller that changes the watering schedule based on weather data. Or install a water flow sensor on your property to alert you of continuous water flow.

Water conservation program information, such as rebate applications, educational videos, watering schedules, water use calculators, our Water Spot blog, and more can be found on the City's conservation pages, at roundrocktexas.gov/conservation.

You can see your daily and hourly water use online at our customer water portal RRTXwater.com.

2019 Drinking Water Quality Results

The following table lists the regulated and monitored chemical constituents found in our drinking water. The EPA requires water systems to test for up to 97 federally regulated primary constituents. (Data collected primarily from 2018)

Inorganic Constituents

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2019	Barium	0.0537	0.0373	0.0455	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposit
2019	Cyanide	50	50	50	200	200	ppb	N	Discharge from plastic, fertilizer and steel/metal factories
2019	Fluoride	0.84	0.0	0.328	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2019	Nitrate (measured as Nitrogen)	1.78	0.43	1.105	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 health care provider.

Radioactive Constituents

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2019	Combined Radium	1	1	1	5	0	pCi/L	N	Erosion of natural deposits

Lead and Copper in Distribution System

Date	Constituent	90th Percentile	Sites Exceeding Action Level	Action Level	MCLG	Units	Violation	Likely Source of Contamination
11/2018	Lead	4.3	2 of 50	15	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits
11/2018	Copper	0.260	0 of 50	1.3	1.3	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.

Disinfectant Residual

Year	Constituent	High	Low	Average	MRDL	MCLG	Units	Violation	Likely Source of Contamination
2019	Chloramine	3.47	1.50	2.66	4	4	ppm	N	Water additive used to control microbes

Disinfectant By-Products

Year	Constituent	High	Low	Max LRAA	MCL	MCLG	Units	Violation	Likely Source of Contamination
2019	Total Trihalomethanes	55.8	21.5	48.33	80	NA	ppb	N	By-product of drinking water disinfection
2019	Haloacetic Acids	31.1	3.70	21.10	60	NA	ppb	N	By-product of drinking water disinfection

Total Organic Carbon (TOC)

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Likely Source of Contamination
2019	TOC (Raw Water)	3.94	2.55	3.13	TT	NA	ppm	Naturally occurring organic material. There is no health effect directly associated with TOC. Removal through treatment averaged 25%.
2019	TOC (Treated Water)	2.87	2.19	2.51	TT	NA	ppm	

Turbidity

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2019	Turbidity	0.150	0.020	0.055	0.3	NA	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.

Unregulated Contaminants

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2019	Dibromochloromethane	23.6	2.0	14.09	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.
2019	Chloroform	19.2	< 1	11.25	None Established		ppb	N	
2019	Bromoform	3.6	< 1	1.81	None Established		ppb	N	
2019	Bromodichloromethane	22.3	<1	17.01	None Established		ppb	N	

Coliform Bacteria

Year	Constituent	Highest % of Positive Samples	MCL	Units	Violation	Likely Source of Contamination
2019	Total Coliform	4.88%	5% of monthly samples are positive	Presence	N	Naturally present in the environment
2019	Fecal Coliform	0	Routine or repeat sample is coliform positive, and one 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.

Secondary and Other Constituents Not Regulated

Year	Constituent	High	Low	Average	Secondary Limit	Units	Violation	Likely Source of Contamination
2019	Aluminum	92.4	92.4	92.4	50-200	ppb	N	Naturally occurring element
2019	Calcium	95.1	64.4	79.75	NA	ppm	N	Naturally occurring element
2019	Chloride	20.0	20.0	20.0	300	ppm	N	Naturally occurring element
2019	pH	8.18	7.37	7.77	> 7.0	units	N	Measure of corrosivity of water
2019	Sodium	13.4	11.6	12.5	NA	ppm	N	Naturally occurring element
2019	Sulfate	29.0	29.0	29.0	300	ppm	N	Naturally occurring material
2019	Hardness	321	182	222	NA	ppm	N	Naturally occurring calcium and magnesium
2019	Total Alkalinity	226	104	187	NA	ppm	N	Naturally soluble mineral salts
2019	Total Dissolved Solids	344	202	270.7	1000	ppm	N	Total dissolved mineral constituents in water

Definitions

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

Level 1 Assessment – A study of the water system to identify potential problems and determine (if possible) why total coliform bacteria were found.

Level 2 Assessment – A very detailed study of the water system to identify potential problems and determine (if possible) why an Escherichia coli (E. coli) MCL violation has occurred and/or why total coliform bacteria were found 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 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 health risk. 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.

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

Abbreviations

LRAA – locational running annual average

MPN – most probable number per 100 milliliters

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 (ug/L)

ppm – parts per million, or milligrams per liter (mg/L)

ppq – parts per quadrillion, or picograms per liter (pg/L)

ppt – parts per trillion, or nanograms per liter (ng/L)