

2017 Drinking Water Quality Report (Consumer Confidence Report)

City of Round Rock
(512) 341-3133

The United States Environmental Protection Agency (EPA) requires that all drinking water suppliers provide a water quality report to their customers on an annual basis. This Drinking Water Quality Report provides information on the City of Round Rock drinking water.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para obtener una copia de esta información traducida al español, favor de llamar al teléfono (512) 218-5555.

Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This report is a summary of the quality of the water we provide our customers. The data presented in the following pages is from the most recent EPA required tests. We hope this information helps you become more knowledgeable about what is in your drinking water.

Where Your Water Comes From

Round Rock drinking water customers receive their water from ground and surface water sources. Approximately 94 percent comes from Lake Georgetown and the remainder comes from the Edwards Aquifer. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our 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 in our water system, please call (512) 341-3133. Source water assessment information is available on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>.

It is important to protect drinking water by protecting our water sources. You can help by disposing of hazardous home chemicals properly. For disposal information, call (512) 218-5559 or go to www.roundrocktexas.gov/hhw.



All Drinking Water May Contain Contaminants

When drinking water meets federal standards, there may not be any health based benefits to purchasing bottled water or home treatment devices. 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 EPA's Safe Drinking Water Hotline at (800) 426-4791.

Secondary Constituents

Many constituents, such as calcium, sodium, or iron, which are often found in drinking water, can cause taste, color, and odor problems. The taste and odor are called secondary constituents and are regulated by the State of Texas, not EPA. These constituents are not causes for health concerns. Therefore, secondary constituents are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

For Customers with Special Health Concerns

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.

The City of Round Rock had no reporting, monitoring, maximum contaminant level exceedance or notification violations in 2017.

Because the concentration of some contaminants does not change frequently, the state allows us to monitor these contaminants less than once per year. Some of our data, though representative, are more than one year old.

PUBLIC PARTICIPATION OPPORTUNITIES

The public is welcome to attend the Round Rock City Council meetings held each second and fourth Thursday at 221 E. Main Street in Round Rock. For specific questions related to this report, please call (512) 341-3133 or email bpritchett@roundrocktexas.gov.

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 197 mg/L or approximately 11.5 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. The stability refers to whether the water is aggressive or depositional. Test results indicate that the City of Round Rock drinking water, as delivered to your home, is stable. Please see our web site, roundrocktexas.gov for more information.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time of Jan-Dec 2017, our system lost an estimated 188,224,408 gallons of water. This is approximately 3.25% of the total water produced and includes losses from leaks, theft and meter inaccuracies. If you have any questions about the water loss audit please call (512) 341-3333.

DEFINITIONS

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 Contaminant Level (MCL)

The highest permissible level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Residual Disinfectant Level (MRDL)

The highest level of disinfectant allowed in drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG)

The level of a drinking water disinfectant below which there is no known or expected risk to health.

Treatment Technique (TT)

A required process intended to reduce the level of a contaminant in drinking water.

Action Level (AL)

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

LRAA – Locational Running Annual Average.

NTU - Nephelometric Turbidity Units

MPN – most probable number per 100 milliliters.

pCi/l - picocuries per liter (a measure of radioactivity)

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

ppb - parts per billion, or micrograms per liter (ug/L)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

Summer Watering 2018

Although it has been a dry winter and spring, the City is not currently under mandatory water restrictions. However, we do observe voluntary conservation year-round. When you choose to start watering your yard, use common sense. Do not water during the heat of the day or more than twice per week. It is best to get outdoor watering completed before the sun comes up—early morning is the ideal time.

Most of the water used in Round Rock happens during the summer months for outdoor uses. The easiest ways to reduce your water consumption is to water your yard only when needed and fix any water leaks. You can also replace your traditional sprinkler controller with a weather-based controller, that changes the watering schedule based on weather-data. Many weather-based controllers are eligible for the City's Efficient Irrigation Rebate.

Water conservation program information, such as rebate program applications and details, educational videos, landscape watering schedules, and more can be found on the City's conservation pages, at www.roundrocktexas.gov/conservation.

You can also now see your daily and hourly water use online at our customer portal. Register at www.RRTXWater.com You can also sign up to receive a notification email or text should your meter register nonstop usage for 24-hours (such as a leak).

Inorganics

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Source of Constituent
2017	Barium	0.0419	0.0419	0.0419	2	2	ppm	N	Erosion of natural deposits.
2017	Cyanide	30	30	30	200	200	ppb	N	Discharge from plastic, fertilizer and steel/metal factories.
2017	Copper	0.0178	<0.002	0.0099	1.3	1.3	ppm	N	Corrosion of household plumbing systems; erosion of natural deposits.
2017	Fluoride	0.4	0.1	0.26	4	4	ppm	N	Erosion of natural deposits; water additive which promotes strong teeth.
2017	Nitrate	1.74	0.25	0.995	10	10	ppm	N	Runoff from fertilizer use; Leachate 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 ask advice from your health care provider.

Synthetic Organics

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Source of Constituent
2017	None exceeded detection levels								

Radioactive Contaminants

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Source of Constituent
2011	Combined Radium	1	1	1	5	0	pCi/L	N	Erosion of natural deposits.

Lead and Copper in Distribution System

Date	Constituent	90 th Percentile	Sites Exceeding Action Level	Action Level	MCLG	Units	Violation	Source of Constituent
8/2015	Lead	5.3	0 of 50	15	0	ppb	N	Corrosion of household plumbing systems; erosion of natural deposits.
8/2015	Copper	0.270	1 of 50	1.3	1.3	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. This water supply 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>.

Disinfectant Residuals

Year	Constituent	High	Low	Average	MRDL	MCLG	Units	Violation	Source of Constituent
2017	Chloramine	3.58	1.68	3.12	4	4	ppm	N	Disinfectant used to control microbes.

Disinfection Byproducts

Year	Constituent	High	Low	Max LRAA	MCL	MCLG	Units	Violation	Source of Constituent
2017	Total Trihalomethanes	43.6	17.3	39.75	80	NA	ppb	N	Byproduct of drinking water chlorination.
2017	Haloacetic Acids	14.6	5.10	12.45	60	NA	ppb	N	Byproduct of drinking water chlorination.

Total Organic Carbon (TOC)

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Source of Constituent
2017	TOC (Raw Water)	3.23	2.43	2.78	TT	NA	ppm	Naturally occurring organic material. There is no health effect directly associated with TOC. Removal through treatment averaged 25%.
2017	TOC (Treated Water)	2.87	2.05	2.39	TT	NA	ppm	

Turbidity

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Source of Constituent
2017	Turbidity	0.32	0.03	0.147 0% > 0.3	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	Source of Constituent
2016	Dibromochloromethane	10	10	10	None Established		ppb	N	Unregulated contaminants are those for which the 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 whether future regulations are warranted.
2016	Chloroform	13	13	13	None Established		ppb	N	
2016	Bromoform	1.2	1.2	1.2	None Established		ppb	N	
2016	Bromodichloromethane	15	15	15	None Established		ppb	N	

Lake Georgetown Monitoring

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Source of Constituent	
2017	E. Coli	<1	<1	<1	NA	NA	MPN	N	Soil runoff.	
2017	Giardia & Cryptosporidium	None detected							N	Soil runoff.

Under the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule, the city monitored Lake Georgetown for E. Coli and two protozoa. Neither E. Coli nor protozoa were detected in 2017.

Coliform

Year	Constituent	Highest % of Positive Samples	MCL	Units	Violation	Source of Constituent
2017	Total Coliform	.93%	Presence in 5% or more of the monthly samples.	Presence	N	Naturally present in environment.
2017	Fecal Coliform	0	Routine or repeat sample is coliform positive and one is also fecal positive.	Presence	N	Naturally present in 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 harder 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	Source of Constituent
2017	Aluminum	151	151	151	50-200	ppb	N	Naturally occurring element.
2017	Calcium	57.8	57.8	57.8	NA	ppm	N	Naturally occurring element.
2017	Chloride	21	20	20.5	300	ppm	N	Naturally occurring element.
2017	pH	7.9	7.2	7.62	> 7.0	units	N	Measure of corrosivity of water.
2017	Sodium	10.4	10.4	10.4	NA	ppm	N	Naturally occurring element.
2017	Sulfate	37	31	34	300	ppm	N	Naturally occurring material.
2017	Hardness	320	170	197	NA	ppm	N	Naturally occurring calcium and magnesium
2017	Total Alkalinity	200	144	166	NA	ppm	N	Naturally soluble mineral salts.
2017	Total Dissolved Solids	366	251	308.5	1000	ppm	N	Total dissolved mineral constituents in water.

A Note about Storm Water and Pollution Prevention

The City of Round Rock works to prevent pollution of our lakes, creeks, rivers, streams and aquifers. Storm water 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.

Storm water pollution occurs when rainfall picks up and carries pollutants into local waterways and aquifers. How can you help? Never sweep leaves or grass clippings into a storm drain. Take used oil and home chemicals to a recycling center or to a household hazardous waste collection event. Follow directions on pesticides and fertilizers and avoid application when rain is forecast. If you have pets, pick up their waste and dispose of it properly to keep bacteria and parasites out of our creeks. Remember, Storm Water drains to creeks. For more information about preventing Storm Water pollution please visit www.roundrocktexas.gov/stormwater.