



# WATER QUALITY REPORT 2021

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'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 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. Likewise, the 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](http://roundrocktexas.gov/utilities)

Facebook: [facebook.com/roundrock](https://facebook.com/roundrock)

Utilities Division: 512-218-5555

Water Quality Questions: 512-341-3134

Billing Questions: 512-218-5460

### EPA Safe Drinking Water Hotline

800-426-4791 or visit

[water.epa.gov/drink/hotline/index.cfm](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 [dww2.tceq.texas.gov/DWW/](http://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 2021, our system lost an estimated 13.04 % 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 240 mg/L or approximately 14.04 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](http://roundrocktexas.gov/council) for details.

## Watershed Protection

Stormwater runoff is rain that does not absorb into the ground. Instead, it runs over driveways, parking lots, and streets picking up litter, pet waste, and other harmful pollutants as it flows into the storm drain. Once this polluted stormwater enters the storm sewer system, it flows downstream to the nearest creek, lake, or river. No filtration. No treatment.

With your help, we can keep Round Rock's creeks clean!

- Keep storm drains free of yard waste and debris
- Pick up after your pets
- Dispose of paint, fertilizers, and hazardous waste at an HHW collection [roundrocktexas.gov/hhw](http://roundrocktexas.gov/hhw)
- Never sweep or dump anything down storm drains

Learn more at [roundrocktexas.gov/stormwater](http://roundrocktexas.gov/stormwater)

## "Grease and Wipes Clog Pipes"

Grease may go in as a liquid, but it cools and hardens into a pipe-clogging wax in your home plumbing. Wipes, even those labeled flushable, should never be flushed. They do not disintegrate like toilet paper. Instead, they accumulate and block pipes and pumps.

Protect your home and the quality of our water. Only flush toilet paper and put grease and wipes in the trash. [roundrocktexas.gov/wastewaterathome](http://roundrocktexas.gov/wastewaterathome)

## Summer Watering 2022

Water conservation protects the integrity of Round Rock's water supply facilities and prolongs the life of existing water sources. The City's conservation efforts continue to grow through rebates on water-efficient products and services, discounted rain barrel sales twice per year, free irrigation evaluations, and several educational programs to help residents use water more efficiently.

Most water usage 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. The best time to water is before noon or after 7 p.m. The watering schedule is voluntary unless drought restrictions are in place; however, the City recommends you follow the schedule even when no drought restrictions are in effect.

The City's website provides information and resources to encourage smart watering at home. Residents can request free leak detection kits, save money on water-efficient appliances and fixtures and find new tools and information at [roundrocktexas.gov/conservation](http://roundrocktexas.gov/conservation).

You can see your daily and hourly water use online at our customer water portal [RRTXwater.com](http://RRTXwater.com).

# 2021 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.

## Inorganic Constituents

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2021	Barium	0.0387	0.0387	0.0387	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposit
2021	Cyanide	140	140	140	200	200	ppb	N	Discharge from plastic, fertilizer and steel/metal factories
2021	Fluoride	0.21	0.21	0.2	4	4	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2021	Nitrate (measured as Nitrogen)	1.80	0.11	0.456	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
2017	Combined Radium	1	1	1	5	0	pCi/L	N	Erosion of natural deposits

## Lead and Copper in Distribution System

Date	Constituent	90 <sup>th</sup> Percentile	Sites Exceeding Action Level	Action Level	MCLG	Units	Violation	Likely Source of Contamination
7/2020	Lead	3.4	2 of 100	15	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits
7/2020	Copper	0.25	0 of 100	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
2021	Chloramine	2.61	2.04	2.35	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
2021	Total Trihalomethanes	74.2	30.9	54.45	80	NA	ppb	N	By-product of drinking water disinfection
2021	Haloacetic Acids	19.7	6.30	12.53	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
2021	TOC (Raw Water)	3.62	2.74	3.13	TT	NA	ppm	Naturally occurring organic material. There is no health effect directly associated with TOC. Removal through treatment averaged 12.60%.
2021	TOC (Treated Water)	3.25	2.45	2.68	TT	NA	ppm	

## Turbidity

Year	Constituent	High	Low	Average	MCL	MCLG	Units	Violation	Likely Source of Contamination
2021	Turbidity	0.21	0.03	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
2021	Dibromochloromethane	28.4	1.8	20.83	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.
2021	Chloroform	13.9	<1	6.61	None Established		ppb	N	
2021	Bromoform	11	1.2	7.04	None Established		ppb	N	
2021	Bromodichloromethane	26.5	<1	15.79	None Established		ppb	N	

Coliform Bacteria						
Year	Constituent	Highest % of Positive Samples	MCL	Units	Violation	Likely Source of Contamination
2021	Total Coliform	1.80%	5% of monthly samples are positive	Presence	N	Naturally present in the environment
2021	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
2021	Aluminum	0.0994	0.0994	0.0994	0.05-0.2	ppm	N	Naturally occurring element
2021	Calcium	36.7	36.7	36.7	NA	ppm	N	Naturally occurring element
2021	Chloride	54	54	54	300	ppm	N	Naturally occurring element
2021	pH	7.88	6.96	7.56	> 7.0	units	N	Measure of corrosivity of water
2021	Sodium	27.3	27.3	27.3	NA	ppm	N	Naturally occurring element
2021	Sulfate	43	24.3	33.28	300	ppm	N	Naturally occurring material
2021	Hardness	328	162	240	NA	ppm	N	Naturally occurring calcium and magnesium
2021	Total Alkalinity	292	130	207	NA	ppm	N	Naturally soluble mineral salts
2021	Total Dissolved Solids	685	223	348	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)