

2019 Annual Drinking Water Quality Report

Consumer Confidence Report (CCR): Public Water System #TX0610003

(940) 648-2541 | www.cityofjustin.com/ccr



Our Drinking Water is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

En Español: Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español favor de llamar al teléfono (940) 648-2541 para hablar con una persona bilingüe en español.

Public Participation Opportunities

Date: 2nd and Last Monday of each Month
Time: 7:00 PM
Location: 415 N. College Ave., Justin, TX 76247
Phone: (940) 648-2541

Where Do We Get Our Drinking Water?

The source of drinking water used by the City of Justin water system is obtained from surface and ground water sources. It comes from Upper Trinity Regional Water District at Lewisville/Chapman Lakes and the Trinity/Hickory Aquifers. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of the City's source water and results indicate that some sources are susceptible to certain contaminants. The sampling requirements for your water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this CCR. For more information on source water assessment and protection efforts at our system, please contact us.

Information about your Drinking Water

The sources of drinking water, both tap and bottled, 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.

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 run-off, 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 run-off, 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 run-off, 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 limits the amounts 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 cause for health concerns. For more information on taste, odor, or color of drinking water, please contact (940) 648-2541.

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>.

Abbreviations and Definitions

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.

AVG: Regulatory compliance with some MCLs are based on running annual average of monthly samples.

Level 1 Assessment: 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 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)

N/A: Not Applicable

NTU: Nephelometric Turbidity Units (a measure of water turbidity or clarity)

pCi/L: Picocuries per Liter (a measure of radioactivity)

ppb: Micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water

ppm: Milligrams per liter or parts per million – 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)

Treatment Technique or TT: A required process intended to reduce the level of a contaminant in drinking water.

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 Public Works Director, Josh Little, or the Utilities Superintendent, Gilberto Ramirez at 940-648-2541.

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination
0	1 positive monthly sample	1		0	N	Naturally present in the environment

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2019	1.3	1.3	0.163	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Disinfections by-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2019	8	4.8 - 9.3	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

Disinfections by-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Total Trihalomethanes (TTHM)	2019	16	14.7 - 16.7	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

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	10/17/2018	4.7	4.7 - 4.7	0	50	pCi/L*	N	Decay of natural and man-made deposits.

Disinfectant Residual	Year	Average Level	Range of Levels Detected	MRDL	MRDLG	Unit of Measure	Violation	Source in Drinking Water
Total Residual	2019	2.12	.50 - 3.60	4	4	ppm	N	Water additive used to control microbes.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	02/18/2016	1.6	1.6 - 1.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	02/18/2016	0.052	0.052 - 0.052	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Fluoride	02/18/2016	0.216	0.216 - 0.216	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer
Nitrate [measured as Nitrogen]	2019	1	0.531 - 0.531	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	02/18/2016	1.5	1.5 - 1.5	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

City of Justin Water Loss 2019

For the calendar year 2019, our system lost an estimated 6,669,265 gallons of water per the audit submitted to the Texas Water Development Board. If you have any question about the water loss audit please call (940) 648-2541.

2019 WATER QUALITY REPORT

**WATER FROM UPPER TRINITY REGIONAL WATER DISTRICT
CONSTITUENTS DETECTED FOR 2019**

UTRWD Source Water - Name: Lewisville/Chapman Lakes - Type: Surface Water - Location: Denton/Delta and Hopkins Counties

Date	Substance	Maximum Amount in UTRWD Water	Range in UTRWD Water	MCL	MCLG	Possible Source
Regulated at the Treatment Plant						
10/2/2019	Barium (ppm)	0.039	0.036 - 0.039	2 ppm	2 ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Q3 - 2019	Bromate (ppb)	9.13	2.23 - 9.13	10 ppb	0	Byproduct of drinking water disinfection
Apr - 2019	Chloramines (ppm)	3.80	2.7 - 3.8	4.0*	4.0^	Water additive used to control microbes
3/7/2019	Cyanide (ppm)	0.0474	ND - 0.0474	0.2 ppm	0.2 ppm	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories
3/7/2019	Fluoride (ppm)	0.198	0.149 - 0.198	4 ppm	4 ppm	Water additive (UTRWD does not add Fluoride to its water), erosion of natural deposits, discharge from fertilizer and aluminum factories
3/7/2019	Nitrate (ppm)	0.738	.254 - 0.738	10 ppm	10 ppm	Fertilizer runoff, septic tanks, wastewater plant effluent, animal waste runoff.
Sep - 2019	TOC (ppm)	3.10	1.1 - 3.1	TT	N/A	Naturally present in the environment
8/27/2019	Turbidity (NTU)	0.14	0.05 - 0.14	TT	N/A	Soil runoff.

* = MRDL ^ = MRDLG

Radioactive Contaminants

2/2/2017	Gross Beta Emitters (pCi/L)	ND	N/A	50	0	Decay of natural and man-made deposits.
9/16/2015	Combined Radium (pCi/L)	1.5	N/A	5	0	Erosion of natural deposits

Synthetic Organic Chemicals Including Pesticides and Herbicides

10/2/2019	Atrazine (ppb)	0.2	0.1 - 0.2	3 ppb	3 ppb	Herbicide runoff.
3/7/2019	Simazine (ppb)	0.18	ND - 0.18	4 ppb	4 ppb	Herbicide runoff.

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. Upper Trinity continues to analyze our source water for the presence of *Cryptosporidium*. **Cryptosporidium has never been detected in any samples of Upper Trinity water.**

Definitions:

<p>MCL- Maximum Contaminant Level: The highest level of a contamination that is allowed in drinking water.</p> <p>MCLG-Maximum Contaminant Level Goal: The level of a contamination in drinking water below which there is no known or expected risk to health.</p> <p>MRDL-Maximum Residual Disinfectant Level: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminations.</p> <p>MRDLG- Maximum Residual Disinfectant Level Goal: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of disinfectants use to control microbes.</p> <p>NTU: Nephelometric turbidity units. A measure of turbidity in water.</p> <p>pCi/L: Picocuries per liter. A measure of radioactivity in water equal to 10⁻¹² curies. Quantitv of radioactive material producina 2.22 nuclear transformations per minute.</p> <p>ppb: Parts per billion. One part per billion is roughly equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.</p>	<p>ppm: Parts per million. One part per million approximates one packet of artificial sweetener sprinkled into 250 gallons of iced tea.</p> <p>TT- Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.</p> <p>Turbidity: A measure of the clarity of water. While turbidity has no known health effects, it can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing symptoms such as nausea, cramps, diarrhea, and associated headaches.</p> <p>TOC-Total Organic Carbon: Has no known health affects. However, TOC provides a medium for the formation of disinfection by-products. These include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these by-products in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.</p>
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THIS REPORT CONTAINS THE MOST RECENT DATA AVAILABLE IN ACCORDANCE WITH REGULATIONS.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (972-219-1228)

For opportunities to participate in decisions that may affect water quality, Board Meetings are held on the first Thursday of the month, starting at 1pm. Additional resources can be found at www.utrwd.com or by calling 972-219-1228