

# 2018 Annual Drinking Water Quality Report

## Consumer Confidence Report

### CITY OF STEPHENVILLE

PWS ID Number TX0720002 Phone Number: 254-918-1223

## **SPECIAL NOTICE**

### **Required language for ALL Community Public Water Systems**

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).

### **Required Additional Health Information for Lead**

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 water has been sitting for several hours, the potential for lead exposure can be minimized by flushing the 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 to take to minimize exposure are available from the Safe Drinking Water Hotline or at the following URL: <http://www.epa.gov/safewater/lead>.

## **Public Participation Opportunities**

**Date:** 1<sup>st</sup> Tuesday of Each Month

**Time:** 5:30 p.m.

**Location:** City Hall - 298 W. Washington

**Phone Number:** 254-918-1212

To learn about future public meetings (concerning your drinking water), or to request to schedule one, please call us.

## **OUR DRINKING WATER IS REGULATED**

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

### **Sources of Drinking Water**

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, and can pick up substances resulting from the presence of animals or from human activity. 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 EPAs Safe Drinking Water Hotline at (800) 426-4791. 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 runoff, 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 runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

### **En Español**

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono al tel. (254) 918-1230.

## Welcome

The City of Stephenville is committed to providing consumers with a consistent supply of superior quality drinking water now and far into the future. This year's Drinking Water Quality Report is another testimony to the highly trained Public Works professionals dedicated to protecting and preserving our water sources and our treatment and delivery systems. Their diligent efforts have again yielded the highest-ranking water system classification; "Superior" which means our drinking water continues to meet or exceed all Federal and State regulations.

Sincerely,

Nick Williams, P.E.,  
Director of Public Works

## Information About Source Water Assessments

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 Nick Williams, Public Works Director at 254-918-1223. Further details about water sources and assessments are available in Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>

## 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 point of use 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. In order to ensure that tap water is safe to drink, EPA prescribes regulations, which limit the amount 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. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

## Secondary Constituents

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

## Abbreviations

- NTU – Nephelometric Turbidity Units (a measure of turbidity)
- MFL – million fibers per liter (a measure of asbestos)
- Mrem/yr – Millirems per year (a measure of radiation absorbed by the body)
- pCi/L – picocuries per liter (a measure of radioactivity)
- ppm – parts per million, or milligrams per liter (mg/L) – or one ounce in 7,350 gallons of water.
- ppb – parts per billion, or micrograms per liter (µg/L) – or one ounce in 7,350,000 gallons of water.
- ppt – parts per trillion, or nanograms per liter (ng/L) – or one ounce in 7,350,000,000 gallons of water.
- ppq – parts per quadrillion, or picograms per liter (pg/L) – or one ounce in 7,350,000,000,000 gallons of water.

## Definitions

**Action Level (AL)** - 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 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 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 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 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 contamination.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**na** - not applicable.

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

## Where do we get our drinking water?

The drinking water used by the CITY OF STEPHENVILLE is a combination of GROUND and SURFACE waters from the TRINITY AQUIFER and the UPPER LEON RIVER MUNICIPAL WATER DISTRICT located respectively in Erath and Comanche Counties.

Source Water Name	Water Type	Report Status	Latitude / Longitude Location in the Trinity Aquifer
1 - BOWMAN RIDGE WF - BART GREENWAY	GW	A	32.08585,-98.219759
2 - BOWMAN RIDGE WF - BART GREENWAY	GW	A	32.079326,-98.215437
BOWMAN RIDGE WF - GARY GREENWAY /	GW	A	32.091148,-98.20942
BOWMAN RIDGE WF - L2 LILLJEDAHL / CR	GW	A	32.12985,-98.229065
BOWMAN RIDGE WF - L3 FARRAR /CR 253	GW	A	32.11088,-98.231791
BOWMAN RIDGE WF - L4 PACK II / CR 273	GW	A	32.109013,-98.216124
DOWNTOWN WF - P1 WEST / 501 N	GW	A	32.221545,-98.20836
DOWNTOWN WF - P4 PECAN / 700 N	GW	A	32.223466,-98.210159
FM914 WF - G10 TAYLOR SOUTH	GW	A	32.145003,-98.192476
FM914 WF - G11 MCALLISTER	GW	A	32.140072,-98.196491
FM914 WF - G12 MCCOY	GW	A	32.134676,-98.197089
FM914 WF - G13 SHARP	GW	A	32.128315,-98.193093
FM914 WF - G6 MCINROE	GW	A	32.176408,-98.197028
FM914 WF - G7 ALBRITTON	GW	A	32.166972,-98.19358
FM914 WF - G8 PACK	GW	A	32.159208,-98.18892
FM914 WF - G9 TAYLOR NORTH	GW	A	32.152167,-98.188845
IN-TOWN WF - G2 SAFEWAY / 732	GW	A	32.229046,-98.214587
IN-TOWN WF - G3 HARBIN / 2100	GW	A	32.225889,-98.233877
IN-TOWN WF - G4 DALE / 2274 W	GW	A	32.210053,-98.228586
IN-TOWN WF - G5 RAILROAD /432 S LILLIAN	GW	A	32.210684,-98.214998
US67 WF - A3 BROWN	GW	A	32.202342,-98.159915
US67 WF - A4 YOUNG / CR 490	GW	A	32.19369,-98.154281
US67 WF - A5 DUNSON 1 / CR 488	GW	A	32.201113,-98.150052
US67 WF - A6 DUNSON II / CR 488	GW	A	32.205184,-98.141639
US67 WF - A7 STACY	GW	A	32.196116,-98.136108
US67 WF - A8 LINCOLN / CR 182	GW	A	32.200964,-98.127827
US67 WF-A10 HUEY I / CR 182	GW	A	32.211571,-98.10627
US67 WF-A11 HUEY II / PR 701	GW	A	32.218441,-98.112035
US67 WF-A9 LINDLEY / CR 182	GW	A	32.205448,-98.118815

The Upper Leon River Municipal Water District's 2018 Consumer Confidence Report is posted with this report. Additional water quality data for the Upper Leon River Municipal Water District may be found at <http://ulrmwd.com>.

## About The Following Pages

The pages that follow list all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

### Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2018, the Stephenville Public Water System calculated an adjusted total water loss percentage of 3.38 percent. The United States Environmental Protection Agency, in the "Water Audits and Water Loss Control For Public Water Systems" report, estimates 16 percent as the nation's water loss average for similar-sized water systems.

### Lead and Copper

Definitions: 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.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90 <sup>th</sup> Percentile	No. of Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	8/19/2016	1.3	1.3	0.29	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	8/19/2016	0	15	3.4	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### Disinfection Data

Year	Disinfectant Residual	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2018	Chlorine Residual, Free	1.66	1.02	2.53	4.0	4.0	ppm	Disinfectant used to control microbes.

### Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Individual Samples	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2018	6	0-4.4	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)	2018	12	1.09-12.7	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

Inorganic Contaminants	Collection Date	Highest Single Sample	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2018	0.14	0.14-0.14	2	2	ppm	N	Discharge from drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium	2017	1.6	0 – 1.6	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride	2018	0.3	0.344 – 0.344	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2018	1	0.365 – 0.599	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Nitrate Advisory – Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six month 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.

Selenium	2016	2.6	0 – 2.6	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.
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### Radioactive Contaminants

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	04/13/2017	5.5	0-5.5	0	50	pCi/L*	N	Decay of natural and man-made deposits.

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	04/13/2017	4.2	1.45 – 4.2	0	5	pCi/L	N	Erosion of natural deposits.
Gross alpha excluding radon and Uranium	2017	7	1-7	0	15	pCi/L	N	Erosion of natural deposits.
Uranium	2017	4	3.3 – 4	0	30	ug/l	N	Erosion of natural deposits.

### Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive Samples	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		0	N	Naturally present in the environment.

### Violations Table

Revised Total Coliform Rule (RTCR)			
The Revised Total Coliform Rule (RTCR) seeks to prevent waterborne diseases caused by E. coli. E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Human pathogens in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a greater health risk for infants, young children,			
Violation Type	Violation Begin	Violation End	Violation Explanation
MONITORING, ROUTINE, MINOR (RTCR)	09/01/2018	09/30/2018	<p>“We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.” The above language is required to be posted in this report by the TCEQ.</p> <p>The alleged violation stems from a single, standard, treated water distribution sample that falsely tested positive for coliform in July of 2012. As per standards, the exact location was re-sampled within 24 hours as well as connections on both sides of the original sample location. All re-samples confirmed the absence of Total Coliform and E-Coli. TCEQ asserts a violation because Stephenville did not sample 30 raw water well locations following the false positive. The city respectfully disagrees with the TCEQ as the false positive was taken in the distribution system, after treatment, and if a valid contamination issue had occurred, positive samples would have been identified throughout the system and not as a single isolated event. The city feels the sample container may have been contaminated, but feels the water quality was never compromised. The city takes 312 routine samples each year and continues to maintain a SUPERIOR WATER SYSTEM classification, the highest classification ranking available from the TCEQ and is committed to providing a reliable and, above all, a safe and superior quality of water.</p>

Additional water quality data for the Upper Leon River Municipal Water District may be found by calling (254) 879-2258 or visiting the website at <http://ulrmwd.com>.

### ULMWD Lead and Copper

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.

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

Lead and Copper	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	09/14/2016	1.3	1.3	0.04	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives;
Lead	09/14/2016	0	15	2.2	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

### ULMWD Regulated Contaminants

Disinfectants and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Chlorite	2018	0.66	0.078 - 0.66	0.8	1	ppm	N	By-product of drinking water disinfection.
Haloacetic Acids (HAA5)	2018	23	16.8 – 27.2	No goal for total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2018	52	26.5 – 65.6	No goal for total	80	ppb	N	By-product of drinking water disinfection.

Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Arsenic	2018	3	2.6 – 2.6	0	10	ppb	N	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
Barium	2018	0.077	0.077 – 0.077	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Cyanide	2018	80	80 – 80	200	200	ppb	N	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.
Fluoride	2018	0.1	0.12 – 0.12	4	4.0	ppm	N	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate [measured as Nitrogen]	2018	0.23	0.23 – 0.23	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2018	3.1	3.1 – 3.1	50	50	ppb	N	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines.

Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Beta/photon emitters	2018	8.4	8.4 – 8.4	0	50	pCi/L*	N	Decay of natural and man-made deposits.

\*EPA considers 50 pCi/L to be the level of concern for beta particles.

Combined Radium 226/228	6/14/2018	1	1 - 1	0	5	pCi/L	N	Erosion of natural deposits.
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### ULMWD Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
Highest Single Measurement	1 NTU	0.46 NTU	N	Soil runoff.
Lowest Monthly % of Samples Meeting Limits	0.3 NTU	99%	N	Soil runoff.

ULMWD Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration system and disinfectants.

### Total Organic Carbon

Contaminant (Unit of Measure)	Collection Date	Average Raw Water TOC	Average Treated Water TOC	Average Monthly Compliance Ratio	Average Treated Water SUVA (L/mg-m)	Treatment Technique Violation	Likely Source of Contamination
Total Organic Carbon (ppm)	2018	7.94	6.06	0.76	1.53	N	TOC is naturally present in the environment.

The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements set, unless a TOC violation is noted in the violation section.