

2017 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

Immunocompromised persons such as those undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants 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. The city 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: 1st 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. 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 informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (254) 918 - 1230 para hablar con una persona bilingüe en español.

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

The TCEQ completed an assessment of our source water and results indicate that some sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information about our water sources, please refer to the Source Water Assessment Viewer at the following URL or contact Nick Williams, Public Works Director at 254-918-1223: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>. Further details about water sources and assessments are available in Drinking Water Watch at the following URL: <http://dww.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. 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
- 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

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.

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.

ppt - nanograms per liter or parts per trillion

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. A Source Water Susceptibility Assessment for your drinking water sources is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water sources based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies. For more information on source water assessments and protection efforts in our system visit the source Water Assessment Viewer available at the following URL: <http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=> or feel free to call us directly at 254-918-1223. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: <http://dww.tceq.texas.gov/DWW>

| 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 LILLJEDAHN / 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 2017 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 2017, 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 th 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 |
|------|-------------------------|---------------|---------------|---------------|------|-------|-----------------|--|
| 2017 | Chlorine Residual, Free | 1.63 | 0.89 | 2.53 | 4.0 | 4.0 | ppm | Disinfectant used to control microbes. |

Regulated Contaminants

| Disinfectants and Disinfection By-Products | Collection Date | Highest Level or Average Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--|-----------------|-----------------------------------|--------------------------|-----------------------|-----|-------|-----------|--|
| Haloacetic Acids (HAA5)* | 2017 | 7 | 0 – 13.2 | No goal for the total | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2017 | 14 | 2.97 – 18.9 | No goal for the total | 80 | ppb | N | By-product of drinking water disinfection. |

Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.

Inorganic Contaminants

| Inorganic Contaminants | Collection Date | Highest Single Sample | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|--------------------------------|-----------------|-----------------------|--------------------------|------|-----|-------|-----------|--|
| Barium | 2017 | 0.15 | 0.1 – 0.15 | 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 | 2017 | 0.364 | 0.294 – 0.364 | 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] | 2017 | 1 | 0.378 – 0.605 | 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. |
|----------|------|-----|---------|----|----|-----|---|---|

Radioactive Contaminants

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination |
|---|-----------------|------------------------|--------------------------|------|-----|---------|-----------|---|
| Beta/photon emitters | 2017 | 5.5 | 0-5.5 | 0 | 4 | mrem/yr | N | Decay of natural and man-made deposits. |
| Combined Radium 226/228 | 2017 | 4.2 | 1.45 – 4.2 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |
| Gross alpha excluding radon and Uranium | 2017 | 9.3 | 1 – 9.3 | 0 | 15 | pCi/L | N | Erosion of natural deposits. |
| Uranium | 2017 | 4 | 3.3 – 4 | 0 | 30 | ug/l | N | Erosion of natural deposits. |

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

Coliform Bacteria

| Maximum Contaminant Level Goal | Collection Date | Total Coliform Maximum Contaminant Level | Highest No. of Positive Samples | Violation | Likely Source of Contamination | Resolution |
|--------------------------------|-----------------|--|---------------------------------|-----------|---------------------------------------|---|
| 0 | 09/05/2017 | Detect | 1 | N | Naturally present in the environment. | Three (3) re-samples, within 24 hours, at the original sample location, an upstream and a down-stream location detected no contamination. |

Violations Table

| Violation Type | Violation Begin | Violation End | Violation Explanation |
|----------------|-----------------|---------------|-----------------------|
| NONE | N/A | N/A | N/A |

Public Notification Rule

The Public Notification Rule helps to ensure that consumers will always know if there is a problem with their drinking water. These notices immediately alert consumers if there is a serious problem with their drinking water (e.g., a boil water emergency).

| Violation Type | Violation Begin | Violation End | Violation Explanation |
|--|-----------------|---------------|--|
| PUBLIC NOTICE RULE LINKED TO VIOLATION | 11/10/2012 | 2012 | The City of Stephenville failed to adequately notify water consumers about an alleged violation in 2012 of the drinking water regulations. There was no impact to water quality and Stephenville 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. |

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 | 2017 | 0.73 | 0.09 – 0.73 | 0.08 | 1 | ppm | N | By-product of drinking water disinfection. |
| Haloacetic Acids (HAA5) | 2017 | 34 | 14.9 – 32.9 | No goal for total | 60 | ppb | N | By-product of drinking water disinfection. |
| Total Trihalomethanes (TTHM) | 2017 | 45 | 36 – 59.8 | 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 | 2017 | 2 | 2.2 – 2.2 | 0 | 10 | ppb | N | Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes. |
| Barium | 2017 | 0.0842 | 0.0842 – 0.0842 | 2 | 2 | ppm | N | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits. |
| Nitrate [measured as Nitrogen] | 2017 | 0.11 | 0.11 – 0.11 | 10 | 10 | ppm | N | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits. |
| Selenium | 2017 | 3.9 | 3.9 – 3.9 | 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 | 06/19/2012 | 6.8 | 6.8 - 6.8 | 0 | 4 | mrem/yr | 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 | 06/19/2012 | 1 | 1 - 1 | 0 | 5 | pCi/L | N | Erosion of natural deposits. |
|-------------------------|------------|---|-------|---|---|-------|---|------------------------------|

ULMWD Turbidity

| | Limit (Treatment Technique) | Level Detected | Violation | Likely Source of Contamination |
|--|-----------------------------|----------------|-----------|--------------------------------|
| Highest Single Measurement | 1 NTU | 0.35 NTU | N | Soil runoff. |
| Lowest Monthly % of Samples Meeting Limits | 0.3 NTU | 99.5 % | 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

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.