



SouthWest  
Water Company®

# 2019 Drinking Water Quality Report

(Consumer Confidence Report)

## What's inside?

This is an annual, overall summary report of the water quality in your area that explains the source of your water, test results and general information for those with health concerns. The analysis was made 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. If you have any questions concerning water quality or the source of your water, please call our Regulatory Department at (512) 219-2294.

**Our drinking water meets or exceeds all federal (EPA) drinking water requirements.**

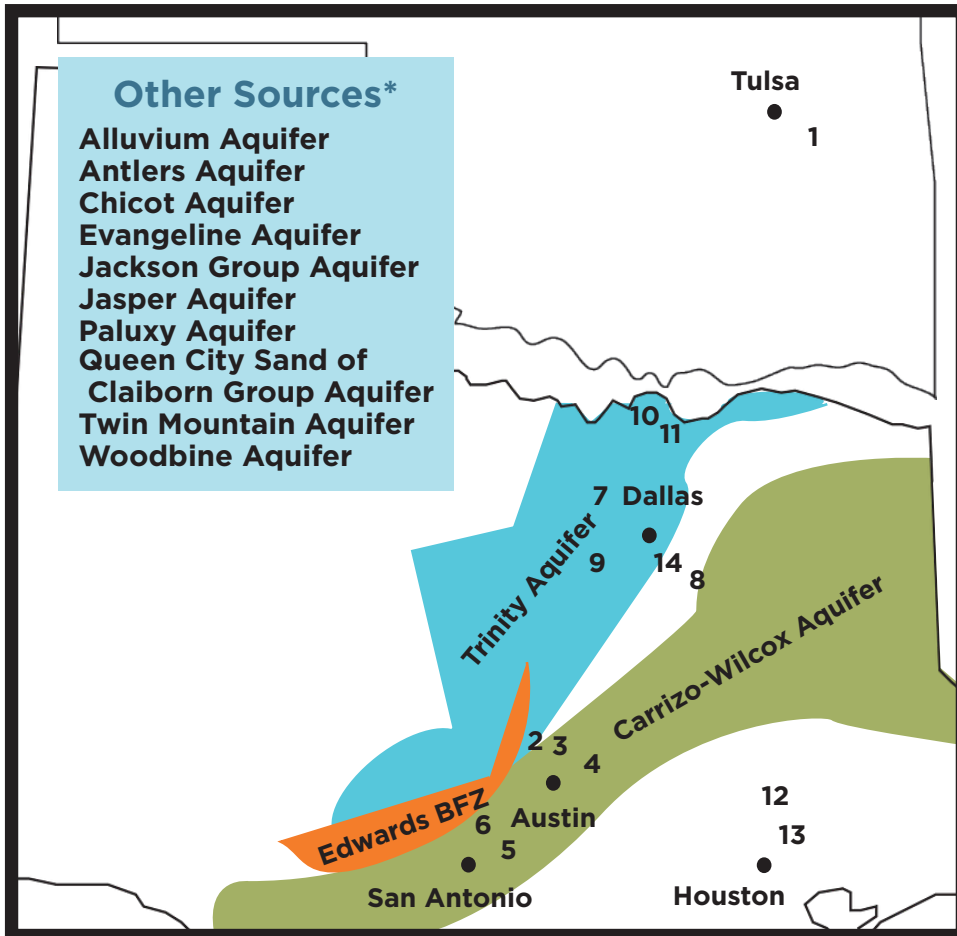
**Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:** You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly or immune-compromised persons such 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 (1-800-426-4791).

**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 1-866-654-7992 para hablar con una persona bilingue en español.**

P.W.S.

# Your Water Source

## ON THE MAP



### Lake Sources

- |                     |                          |
|---------------------|--------------------------|
| 1 Lake Tenkiller    | 8 Lake Palestine         |
| 2 Lake Travis       | 9 Lake Granbury          |
| 3 Lake Austin       | 10 Lake Texoma           |
| 4 Lake Pflugerville | 11 Lake Randell          |
| 5 Lake Dunlap       | 12 Lake Livingston       |
| 6 Canyon Lake       | 13 Lake Houston          |
| 7 Lake Bridgeport   | 14 Cedar Creek Reservoir |

\*These aquifers were too small to put on this map, but check it out online!

**Public Participation Opportunities:** The Utility does not hold regularly scheduled meetings. However, if you wish to contact the owners, please call our Customer Care at 866-654-7992.

## TYPES OF SOURCES

ivers

lakes

streams

ponds

reservoirs

springs

wells

## What is surface water?

The water found in rivers, streams, creeks, lakes, and reservoirs.

## What's the water quality before treatment?

Surface water is affected by many factors, which is why it requires much more filtration and sanitization. Pollutants you can find within the untreated, raw water before treatment includes: fertilizers, litter, pesticides and large particles of dirt.

## Why are there contaminants?

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 before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. Therefore, **all drinking water may contain contaminants**. The Texas Commission on Environmental Quality (TCEQ) completed an assessment of our source water and the 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 us.

## HOW IS SURFACE WATER TREATED?

1

### Starts With the Source

Water comes through an intake from your local lake or reservoir.

### Coagulation

Mixing solutions are added to the water to cause dirt particles to stick together.

2

3

### Flocculation

Water is moved around to cause smaller dirt particles to collide and create larger particles.

### Sedimentation

The water then flows through a basin or tank to allow the dirt particles to sink to the bottom in order to be removed easily.

4

5

### Filtration

It passes through material that filters out the particles and other substances.

### Disinfection

This process removes any naturally-occurring germs in the water.

6

7

### Ends at Your Tap

After the water has been fully treated, it goes into a ground storage tank and is ready for you to turn on your tap.

## What is ground water?

The water found underground in the cracks and spaces in soil, sand and rock. It is stored in and moves slowly through geologic formations of soil, sand and rocks called aquifers.

## What's the water quality before treatment?

The ground water we use has less contaminants than surface water because there is not much human interaction. Therefore, the water does not require as much filtration as our surface water.

## Why are there contaminants?

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# HOW IS GROUND WATER TREATED?

1

### Starts With the Source

Water comes in pumped through a well from your local aquifer.

### Cleaning the Water

Water is treated and sanitized with chlorine. This process is called chlorination. It is an effective way to kill naturally-occurring germs in ground water, and is a common practice by most systems.

2

3

### Ends at Your Tap

Once the water has been cleaned, it goes into a ground storage tank and is ready for you to turn on your tap.



1: Well



2: Chlorination



3: Storage Tank

## What are the charts about?

The charts on 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.

## How to read the charts:

From left to right, you will see the year the water was required to be tested, the contaminant we tested for, the amount detected within the water, the acceptable level developed by the EPA, and the source of the mentioned contaminant. For an even more detailed explanation, below are the definitions of the terms used within the charts.

# 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 before the contaminant reaches a harmful level.

### Maximum Contaminant Level (MCL)

The highest allowable level of a contaminant in drinking water. MCLs are set as close to the MCLGs as possible 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 an addition of a disinfectant is necessary for control of microbial contaminants.

### 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.

### 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 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, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

### Abbreviations

NTU – Nephelometric Turbidity Units  
MFL – million fibers per liter (a measure of asbestos)  
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 (µg /L)  
ppt – parts per trillion, or nanograms per liter  
ppq – parts per quadrillion, or picograms per liter



**Inorganic Contaminants**

Year	Contaminant	Our Average Level	Minimum Level	Maximum Level	MCL	MCLG	Typical Source
2019	Barium (ppm)	0.072	0.072	0.072	2	2	Discharge of drilling wastes, discharge from metal refineries; erosion of natural deposits.
2018	Fluoride (ppm)	0.225	0.225	0.225	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2016	Lead (ppb)	0.51	0.51	0.51	15	0	Corrosion of household plumbing systems; Erosion of natural deposits.
2019	Nitrate (ppm)	0.8	0	2.9	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.

**Radioactive Contaminants**

Year	Contaminant	Our Average Level	Minimum Level	Maximum Level	MCL	MCLG	Typical Source
2018	Combined Radium 226 & 228 (pCi/L)	1.22	1.22	1.22	5	0	Erosion of natural deposits.
2018	Gross alpha (pCi/L)	5.3	5.3	5.3	15	0	Erosion of natural deposits.

**Organic Contaminants** TESTING WAIVED, NOT REPORTED, OR NONE DETECTED**Maximum Residual Disinfectant Level**

Year	Disinfectant	Our Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Typical Source
2019	Chlorine Residual (ppm)	1.58	0.50	4.00	4.00	4.00	Disinfectant used to control microbes

**Unregulated Initial Distribution System Evaluation for Disinfection Byproducts (DBP2)**

Year	Contaminant	Our Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Typical Source
2019	Total Haloacetic Acids	14.79	0	37	60	ppb	Byproduct of drinking water disinfection.
2019	Total Trihalomethanes	36.69	2.72	45.6	80	ppb	Byproduct of drinking water disinfection.

**Unregulated Contaminants**

Bromoform, chloroform, bromodichloromethane, and dibromochloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution.

Year	Contaminant	Our Average Level	Minimum Level	Maximum Level	Unit of Measure	Typical Source
2019	Bromoform	0.91	0	2.73	ppb	Byproduct of drinking water disinfection.

*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 the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted.*

#### Lead and Copper

Year	Contaminant	90% of Test Levels Were Less Than	# of Tests With Levels Above EPA's Action Level	Action Level	Unit of Measure	Typical Source
2019	Lead	2.2	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
2019	Copper	0.25	0	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.

*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>.*

#### Total Coliform

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 more-hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption.					
Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Typical Source
2019	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment.
*Two or more coliform found samples in any single month.					

**Fecal Coliform** REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA

#### Turbidity

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.						
Year	Contaminant	Highest Single Measurements	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Typical Source	
2019	Turbidity (NTU)	0.29	100%	0.3	Soil runoff.	

#### Secondary and Other Constituents Not Regulated (No associated adverse health effects)

Year	Contaminant	Our Average Level	Minimum Level	Maximum Level	Limit	Typical Source
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2019	Calcium (ppm)	49.7	49.7	49.7	NA	Abundant naturally occurring element.
2018	Chloride (ppm)	17.1	17.1	17.1	300	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2018	Copper (ppm)	0.016	0.016	0.016	1	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2019	Iron (ppm)	0.159	0.159	0.159	.3	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
2019	Magnesium (ppm)	7.87	7.87	7.87	NA	Abundant naturally occurring element.
2019	Manganese (ppm)	0.003	0.003	0.003	0.05	Abundant naturally occurring element.
2018	Nickel (ppm)	0.002	0.002	0.002	NA	Erosion of natural deposits.
2019	Sodium (ppm)	501	501	501	NA	Erosion of natural deposits; byproduct of oil field activity.
2018	Sulfate (ppm)	23.5	23.5	23.5	300	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2018	Total Alkalinity as CaCO <sub>3</sub> (ppm)	305	305	305	NA	Naturally occurring soluble mineral salts.
2018	Total Dissolved Solids (ppm)	390	390	390	1000	Total dissolved mineral constituents in water.
2019	Total Hardness as CaCO <sub>3</sub> (ppm)	156	156	156	NA	Naturally occurring calcium.
2019	Zinc (ppm)	0.011	0.011	0.011	5	Moderately abundant naturally occurring element used in the metal industry.

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2019, our system lost an estimated 31,928,317 gallons of water, or 29.89% of total water produced. If you have any questions about the water loss audit please call our Customer Care Department at 1-866-454-2334.