

2019 Annual Water Quality Testing Report

The Board of Directors of Barton Creek West Water Supply Corporation and our Operations company, TUMCO Consultants, Inc. are committed to supplying safe and sufficient drinking water to our neighbors. We are proud to present our annual water quality report, as required by law, covering all testing performed in 2019. Additionally we are providing data from the previous four years for contaminants that were tested at that time. The Safe Drinking Water Act Amendments of 1996 require that we provide you the information in this report.

What you need to know and testing results

Our drinking water is safe and has exceeded all required testing criteria for the past five years.

Where Do We Get Our Water

Our drinking water is purchased surface water from the West Travis County Regional Water System owned by the West Travis County Public Utility Agency (PUA). The PUA obtains its water from Lake Austin.

Source Water Assessment

The Texas Commission on Environmental Quality (TCEQ) is the state water regulatory agency and they have completed a source water assessment for all drinking water systems that own their sources. The report describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The system from which we purchase our water (PUA) received the assessment report. For more information on source water assessments and protection efforts at our system, contact Jennifer Reichers, General Manager of the West Travis County Public Utility Agency, at 512-263-0100 or at the following URL: <http://www.wtcgua.org/>

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL: <https://www.tceq.texas.gov/gis/swaview>

Further details about sources and source water assessments are available in Drinking Water Watch at the following <https://www.tceq.texas.gov/drinkingwater>

Important Health Information

You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium* in drinking water. Although the treatment process is designed to eliminate *Cryptosporidium* from your drinking water, infants, some elderly or persons with compromised immune systems, 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 for 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 1-800-426-4791 or URL:

<https://www.epa.gov/dwstandardsregulations>

Substances That Could Be In Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of

these contaminants does not necessarily indicate that the water poses a health risk.

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 can acquire naturally occurring minerals, in some cases, radioactive material, and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife.

Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 by-products of industrial processes and petroleum production and which may also come from gas stations, urban storm water runoff, and septic systems.

Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

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 our office. For more information about contaminants and potential

health effects, call the U.S. EPA's Safe drinking Water Hotline at (800) 426-4791 or URL: <https://www.epa.gov/dwstandardsregulations>

Lead in Home Plumbing

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 URL: www.epa.gov/safewater/lead

Effects of Chlorine in Drinking Water

Chlorine is a natural element commonly used to disinfect drinking water. Since its use began in the United States almost 100 years ago, chlorination has virtually eradicated water-borne diseases such as typhoid fever, cholera and dysentery.

Scientists discovered years ago that chlorine reacts with naturally occurring chemicals in water to create low concentrations of disinfectant by-products (DBP's). The U.S. EPA regulates the sum of these by-products because they are considered a health risk if consumed in high concentrations over many years.

The disinfectant by-products detected in your water are listed individually and as a total of

these substances, total trihalomethanes and haloacetic acids and they are in compliance with regulations.

Secondary Substances

Many substances (such as calcium, sodium, or iron) which are often found in drinking water can cause taste, color, and odor problems. The taste and odor substances are called secondary substances and are regulated by the State of Texas, not the U.S. EPA. These substances are not causes for health concern. Therefore, secondary's are not required to be reported in this document but may greatly affect the appearance and taste of your water. This report does list the 2018, 2017, 2016 and 2015 secondary substances that were tested.

Contact

For more information about this report, or for any questions relating to your drinking water, please call William Swanks, General Manager, at (512) 280-6622.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (512) 280-6622.

BCW WSC Board and Community Participation

You are invited to attend the Board of Directors meetings at 6:30 p.m. on the third Tuesday of each month at the CE-BAR Fire Station at 353 S Commons Ford Rd, Austin, Texas. Please call (512) 280-6622 for more information.

Definitions used in this report

AL Action Level

MCL Maximum contaminant level

MCLG Maximum contaminant level goal

MRDL Maximum residual disinfectant level

ppb Parts per billion

ppm Parts per million

**Barton Creek West Water Supply Corporation
EPA Water Testing Results - 2019
+ 4 Prior Years**

REGULATED SUBSTANCES

Note: ppb = Parts Per Billion
ppm = Parts Per Million

Year	Contaminant	Average Level	Range of Levels Detected	Maximum Contaminant Level	Maximum Contaminant Level Goal	Units	Violation	Likely Source of Contamination
2019	Haloacetic Acids (HAA5)	19	17.9-19.7	60	No Goal for the total	ppb	No	By-product of drinking water disinfection
2018	Haloacetic Acids (HAA5)	21.2	11.7-33.3	60	No Goal for the total	ppb	No	By-product of drinking water disinfection
2017	Haloacetic Acids (HAA5)	25	17.7 - 20.4	60	No Goal for the total	ppb	No	By-product of drinking water disinfection
2016	Haloacetic Acids (HAA5)	26	21.8-29.9	60	No Goal for the total	ppb	No	By-product of drinking water disinfection
2015	Haloacetic Acids (HAA5)	26.1	23.0-29.1	60	No Goal for the total	ppb	No	By-product of drinking water disinfection
2019	Total Trihalomethanes(TTHM)	43.3	29.1-51.3	80	No goal for the total	ppb	No	By-product of drinking water disinfection
2018	Total Trihalomethanes(TTHM)	49.3	35.9-65.7	80	No goal for the total	ppb	No	By-product of drinking water disinfection
2017	Total Trihalomethanes(TTHM)	54	44.7 - 57	80	No goal for the total	ppb	No	By-product of drinking water disinfection
2016	Total Trihalomethanes(TTHM)	54	38.6-55.1	80	No goal for the total	ppb	No	By-product of drinking water disinfection
2015	Total Trihalomethanes(TTHM)	56.2	49.3-68.4	80	No goal for the total	ppb	No	By-product of drinking water disinfection
2019	Nitrate	0.65	0.65	10	10	ppm	No	Runoff from fertilizer use; Leaching from
2018	Nitrate	0.1	0.1-0.1	10	10	ppm	No	septic tanks, sewage, Erosion of
2017	Nitrate	0.13	0.13 -0.13	10	10	ppm	No	natural deposits
2016	Nitrate	0.14	0.14-0.14	10	10	ppm	No	
2015	Nitrate	-	0.27	10	10	ppm	No	
2015	Nitrate-Nitrite	-	0.27	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage, Erosion of natural deposits
		Highest Level						
2019	Fluoride	0.16	.16-.16	4	4	ppm	No	Erosion of natural deposits; Water
2018	Fluoride	0.23	0.23-0.23	4	4	ppm	No	additive which promotes strong teeth;
2017	Fluoride	0.21	0.21-0.21	4	4	ppm	No	
2016	Fluoride	0.19	0.19-0.19	4	4	ppm	No	
2015	Fluoride	0.24	0.24-0.24	4	4	ppm	No	
2019	Barium	0.0617	.0617-.0617	2	2	ppm	No	Discharge of drilling wastes; Discharge from
2018	Barium	0.0649	.0649-.0649	2	2	ppm	No	metal refineries; Erosion of natural deposits
2017	Barium	0.0554	0.0554-0.0554	2	2	ppm	No	
2016	Barium	0.0588	0.0588-0.0588	2	2	ppm	No	
2015	Barium	0.0624	0.0624-0.0624	2	2	ppm	No	
2019	Cyanide	0.04	0.04-.04	0.2	0.2	ppm	No	Discharge from steel/metal factories;discharge
2018	Cyanide	0.05	0.05-0.05	0.2	0.2	ppm	No	rom plastic and fertilizer factories
2016	Cyanide	0.12	0.12-0.12	0.2	0.2	ppm		

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Disinfectant Levels

Disinfectant residuals are required to keep the water free from harmful microbial contaminants, levels below the Maximum Disinfectant Level (MRDL) have no known or expected health risks. There were No Violations.

Year	Disinfectant	Average Level	Minimum Level	Max Level	Maximum Residual Disinfectant Level Goal	Maximum Residual Disinfectant Level	Unit	Source
2019	Chloramines	2.03	1.1	3.2	<4.0	4	ppm	Added during treatment to protect against microbial contaminants.

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.

Violation Explanation: Turbidity levels though low, exceeded a standard for the month of October. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water. One turbidity measurement exceeded a standard for the month indicated. Turbidity is measured at the West Travis County Public Utility Agency water treatment plant on Bee Caves Road.

Turbidity in nephelometric turbidity units (ntu)				
Year	Highest	Limit (Treatment Technique)	Violation	Source
2019	0.82	1 NTU	no	Soil Runoff
98% of the readings were at or below 0.3 NTU				

UNREGULATED SUBSTANCES (NO MCL's)

Unregulated contaminants are those for which the EPA has not established drinking water standards. Unregulated contaminant monitoring is intended to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted.

Year	Contaminant	Average	Range of	Maximum Contaminant Level	Maximum Contaminant Level Goal	Units	Violation	Likely Source of Contamination
2019	Monochloroacetic Acid	0	0.0-0.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2019	Dichloroacetic Acid	11	9.7-11.5	N/A	N/A	ppb	No	By-product of drinking water disinfection
2018	Dichloroacetic Acid	11.8	5.8-19.6	N/A	N/A	ppb	No	By-product of drinking water disinfection
2017	Dichloroacetic Acid	10.8	10.0-11.7	N/A	N/A	ppb	No	By-product of drinking water disinfection
2016	Dichloroacetic Acid	15.7	13.2-17.7	N/A	N/A	ppb	No	By-product of drinking water disinfection
2015	Dichloroacetic Acid	13.7	11.9-16.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2019	Trichloroacetic Acid	4.9	4.5-6.1	N/A	N/A	ppb	No	By-product of drinking water disinfection
2018	Trichloroacetic Acid	6.6	2.5-12.4	N/A	N/A	ppb	No	By-product of drinking water disinfection
2017	Trichloroacetic Acid	5.5	4.7-6.0	N/A	N/A	ppb	No	By-product of drinking water disinfection

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2016	Trichloroacetic Acid	8.4	6.2-10.3	N/A	N/A	ppb	No	By-product of drinking water disinfection
2015	Trichloroacetic Acid	7.6	6.3-9.3	N/A	N/A	ppb	No	By-product of drinking water disinfection
2019	Monobromoacetic Acid	0	0.0-0.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2018	Monobromoacetic Acid	0	0.0-0.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2019	Dibromoacetic Acid	3.1	2.3-3.6	N/A	N/A	ppb	No	By-product of drinking water disinfection
2018	Dibromoacetic Acid	2.8	1.3-4.6	N/A	N/A	ppb	No	By-product of drinking water disinfection
2017	Dibromoacetic Acid	2.9	2.4-3.5	N/A	N/A	ppb	No	By-product of drinking water disinfection
2016	Dibromoacetic Acid	2.4	1.8-3.3	N/A	N/A	ppb	No	By-product of drinking water disinfection
2015	Dibromoacetic Acid	5	3.3-8.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2019	Bromochloroacetic Acid	7.5	6.7-8.0	N/A	N/A	ppb	No	By-product of drinking water disinfection
2018	Bromochloroacetic Acid	6.9	5.1-9.1	N/A	N/A	ppb	No	By-product of drinking water disinfection
2017	Bromochloroacetic Acid	7.1	6.5-7.5	N/A	N/A	ppb	No	By-product of drinking water disinfection
2016	Bromochloroacetic Acid	7.9	7.3-8.6	N/A	N/A	ppb	No	By-product of drinking water disinfection
2015	Bromochloroacetic Acid	8.5	7.5-9.6	N/A	N/A	ppb	No	By-product of drinking water disinfection

UNREGULATED DISINFECTION BY-PRODUCTS

Year	Contaminant	Average	Range of	Maximum Contaminant Level	Maximum Contaminant Level Goal	Units	Violation	Likely Source of Contamination
2019	Chloroform	16.6	12.8-21.2	100	N/A	ppb	No	By-product of drinking water disinfection
2018	Chloroform	18.6	9.9-31.2	100	N/A	ppb	No	By-product of drinking water disinfection
2017	Chloroform	17	15.5-19.4	100	N/A	ppb	No	By-product of drinking water disinfection
2016	Chloroform	23.2	16.5-30.0	100	N/A	ppb	No	By-product of drinking water disinfection
2015	Chloroform	19.6	15.4-26.0	100	N/A	ppb	No	By-product of drinking water disinfection
2019	Bromoform	0.9	0-1.3	100	N/A	ppb	No	By-product of drinking water disinfection
2018	Bromoform	2.4	1.8-3.1	100	N/A	ppb	No	By-product of drinking water disinfection
2017	Bromoform	1.5	1.2-1.7	100	N/A	ppb	No	By-product of drinking water disinfection
2016	Bromoform	0	0.0-0.0	100	N/A	ppb	No	By-product of drinking water disinfection
2015	Bromoform	2.2	1.4-3.2	100	N/A	ppb	No	By-product of drinking water disinfection
2019	Bromodichloromethane	16.9	10.6-18.3	100	N/A	ppb	No	By-product of drinking water disinfection
2018	Bromodichloromethane	17.4	13.7-22.8	100	N/A	ppb	No	By-product of drinking water disinfection
2017	Bromodichloromethane	19.4	17.4-22.7	100	N/A	ppb	No	By-product of drinking water disinfection
2016	Bromodichloromethane	17.6	14.5-19.3	100	N/A	ppb	No	By-product of drinking water disinfection
2015	Bromodichloromethane	20.5	17.5-27.7	100	N/A	ppb	No	By-product of drinking water disinfection
2019	Dibromochloromethane	8.9	5.7-11.2	100	N/A	ppb	No	By-product of drinking water disinfection
2018	Dibromochloromethane	11.4	4.2-18.0	100	N/A	ppb	No	By-product of drinking water disinfection
2017	Dibromochloromethane	11.2	10.2-13.2	100	N/A	ppb	No	By-product of drinking water disinfection
2016	Dibromochloromethane	7.8	5.9-10.1	100	N/A	ppb	No	By-product of drinking water disinfection
2015	Dibromochloromethane	13.9	12.9-16.4	100	N/A	ppb	No	By-product of drinking water disinfection

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

Year	Contaminant	Highest Level	Range of Levels Detected	Units	Likely Source of Contamination
2019	Calcium	42.9	42.9	ppm	Abundant naturally occurring element
2019	Total Alkalinity	160	146-160	ppm	Naturally occurring soluble mineral salts
2018	Total Alkalinity	229	118-229	ppm	Naturally occurring soluble mineral salts
2016	Total Alkalinity	199	128-199	ppm	Naturally occurring soluble mineral salts
2019	Chloride	32	32-32	ppm	Runoff/leaching from natural deposits
2018	Chloride	39.5	34.2-39.5	ppm	Runoff/leaching from natural deposits
2017	Chloride	37	37-37	ppm	Runoff/leaching from natural deposits
2016	Chloride	38	38-38	ppm	Runoff/leaching from natural deposits
2015	Dissolved Solids	-	290	ppm	Total dissolved mineral constituents in water
2019	Magnesium	16.4	16.4-16.4	ppm	Abundant naturally occurring element
2019	Aluminum	-	0.0239	ppm	Erosion of natural deposits; Residual
2019	Sodium	16.3	16.3-16.3	ppm	Erosion of natural deposits; byproduct of oil field activity
2015	Bicarbonate	-	182	ppm	Corrosion of carbonate rocks such as
2017	Manganese	0.0016	0.0016-0.0016	ppm	Leaching from natural deposits
2016	Manganese	0.0013	0.0013-0.0013	ppm	Leaching from natural deposits
2015	Manganese	-	0.0021	ppm	Leaching from natural deposits
2019	Total Hardness	175	175-360	ppm	Naturally occurring in calcium & magnesium
2019	Zinc	0.0107	0.0107	ppm	Runoff/leaching from natural deposits;
2019	Sulfate	23	23	ppm	Naturally occurring; Common industrial
2018	Sulfate	30.1	25-30.1	ppm	Naturally occurring; Common industrial
2017	Sulfate	24	24-24	ppm	byproduct; byproduct of oil activity
2019	Nickel	0.0017	0.0017-0.0017	ppm	Abundant naturally occurring element

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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. ALG's 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.

Year	Contaminant	Action Level Goal	Action Level	90th %	# sites over AL	Units	Violation	Likely Source of Contamination
2019	Copper	1.3	1.3	0.718	0	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
2019	Lead	0	15	2.71	0	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.

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	Maximum Contaminant Level	Maximum Contaminant Level Goal	Highest No. of Positive Samples	Violation	Likely Source of Contamination
2019	Total Coliform	0	0	0	No	Naturally present in the environment.
2019	Fecal Coliform or E. Coli	0	0	0	No	Naturally present in the environment.

Definitions

- AL Action level
- MCL Maximum contaminant level
- MCLG Maximum contaminant level goal
- MRDL Maximum residual disinfectant level
- MRDLG Maximum residual disinfectant level goal
- ppb Parts per billion
- ppm Parts per million