

Brushy Creek Water Supply Corporation

Consumer Confidence Report 2017 – PWS ID #TX0010036

Information Specific to Your Community Public Water System

Annual Water Quality Report for the period of January 1 to December 31, 2017.

This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water.

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 (800) 426-4791.

For more information regarding this report contact:

Troy Harbison, General Manager 903-549-2488 or 903-724-1430

Or Deborah Ledoux, Office Manager 903-549-2488

Este reporte incluye informacion sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefon (903) 549-2488.

Sources of Drinking Water

Type(s) of water: Brushy Creek WSC is Ground Water from the Carrizo and Wilcox aquifers located in Anderson & Henderson County, Texas. Brushy Creek WSC has five (5) groundwater wells.

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.

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 the system's business office.

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>.

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 EPA’s 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 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.

Source Water Assessment

The TCEQ completed an assessment of your source water and results indicate that some of your 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 Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact: Troy Harbison, General Manager, 903-724-1430

A Source Water Susceptibility Assessment for your drinking water source(s) 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 source based on human activities and natural conditions. The information contained in the assessment allows us to focus source water protection strategies.

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

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>

Source Water Name	Type Of Water	Report Status	Location
CR 445	GW	Yes	Anderson
CR 404	GW	Yes	Anderson
CR 441	GW	Yes	Anderson
CR 404	GW	Yes	Anderson
1182 Anderson County	GW	Yes	Anderson

Information on Detected Contaminants

The data presented in this report is from the most recent testing done in accordance with the regulations.

Water Quality Test Results

Definitions

The following tables contain scientific terms and measures, some of which may require explanation.

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

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 (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

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: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLG's allow for a margin of safety.

Maximum Contaminant Level or 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 or 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.

Maximum residual disinfectant level or 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.

MFL: million fibers per liter (a measure of asbestos.)

NTU: nephelometric turbidity units (a measure of turbidity.)

ppm: milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

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

na: not applicable.

pCi/L: picocuries per liter (a measure of radioactivity.)

ppt: parts per trillion, or nanograms per liter (ng/L).

ppq: parts per quadrillion, or pictograms per liter (pg/L).

mrem: millirems per year (a measure of radiation absorbed by the body)

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

2016 Regulated Contaminants Detected

Lead and Copper

Lead and Copper	Date Sampled	MCLG	Action Level	90 th Percentile	# Sites Over AL	Units	Violation	Source of Contaminant
Copper	2017	1.3	1.3	0.113	0	ppm	N	Corrosion of household plumbing systems; Erosion of natural deposits.
Lead	2017	0	15	9.5	0	ppb	N	Corrosion of household plumbing systems; Erosion of natural deposits.

Water Quality Test Results

Regulated Contaminants

Disinfectant and Disinfection By-Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)*	2017	17	12.8-20.9	No goal for the total	60	ppb	N	By-product of drinking water disinfection.
Total Trihalomethanes (TTHM)	2017	66	26.8-90.4	No goal for the 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	05/09/11	0.301	0-0.301	0	10	ppb	N	Erosion of natural deposits; Runoff from glass and electronics production wastes.
Barium	2017	0.013	0.012-0.13	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Beryllium	05/09/11	0.478	0-0.478	4	4	ppb	N	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries.
Chromium	2017	1.4	0-1.4	100	100	ppb	N	Discharge from steel and pulp mills; Erosion of natural deposits.
Cyanide	12/4/14	6.5	0-6.5	200	200	ppb	N	Discharge from plastic and fertilizer factories. Discharge from steel/metal factories.

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Fluoride	2017	.165	0.0871-0.165	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	0.0394	0.0159-0.0394	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
Selenium	2/26/15	1.7	1.7-1.7	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	2/26/15	7.1	0-7.1	0	50	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	2/26/15	1.5	1.5-1.5	0	5	pCi/L	N	Erosion of natural deposits.
Gross Alpha excluding radon and uranium	02/24/09	5.3	0-5.3	0	15	pCi/L	N	Erosion of natural deposits
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Xylenes	2017	0.00109	0-0.00109	10	10	ppm	N	Discharge from petroleum and chemical factories.

Disinfectant Residual Table

Chlorine

Disinfectant	Year	Average Level (Average of CCR year)	Minimum Level	Maximum Level	Maximum Residual Disinfectant Level/unit of Measure (MRDL)	Maximum Residual Disinfectant Level Goal/unit of measure (MRDLG)	Unit of Measure	Violation (Y/ N)	Likely Source of Contamination
Liquid Chlorine	2017	.95	.26	1.60	4	4	ppm	N	Water additive used to control microbes

Coliform Bacteria

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

Violations

E. Coli

Fecal coliforms and E. coli are bacteria whose presence indicated that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

Violation Type	Violation Begin	Violation End	Violation Explanation
Monitor GWR Triggered/Additional Minor	12/01/2017	12/31/2017	We failed to collect all the required follow-up samples within 24 hours of learning of the total coliform-positive sample. These needed to be tested for fecal indicators from all sources that were being used at the time the positive sample was collected.

Variance or Exemption

What the Variance or Exemption Was/Is	Date the Significant Deficiency Was Identified by the TCEQ	Plan Approved by the TCEQ and Schedule for Correction, including Interim Measures, Progress to Date, and Any Interim Measures Completed	How the Deficiency Was Corrected and the Date of the Corrections
Well #2 - No 150' Sanitary Control Easement	2009	Have filed with TCEQ for exemption, taken monthly raw water samples from well #2 for a period of 12 months. Letter from TCEQ 1/2/13 stated requirements fulfilled effective 1/12/13	TCEQ granted exemption Effective 1/12/2013 - Order terminates 1/12/18 provided WSC maintains compliance

Opportunity for public participation in decisions that may affect the quality of the water is available at regularly scheduled Board Meetings held the third Tuesday of each month at 6:00 PM at the office of Brushy Creek WSC located at 249 ACR 432 Montalba, TX.