

**GOFORTH SPECIAL UTILITY DISTRICT** 

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# **2016 CONSUMER CONFIDENCE REPORT: Annual Drinking Water Quality Report** January 1 to December 31, 2016 Goforth SUD – PWS I.D. 1050019

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. For more information regarding this report contact Goforth SUD at (512) 376-5695.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (512) 376-5695.

#### **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 Environmental Protection Agency'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 runoff, and septic systems.
- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities

In order to ensure that tap water is safe to drink, the Environmental Protection Agency prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration 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 at (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 form the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

#### Information about Source Water Assessments

The Texas Commission on Environmental Quality completed an assessment of your source water and results indicate that some of your sources are susceptible to certain contaminants. The sampling requirements for you water system are based on this susceptibility and previous sample data. Any detection 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 Goforth SUD at (512) 376-5695.

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

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <u>http://dww.tceq.state.tx.us/DWW/</u>.

#### Water Sources

Goforth SUD uses	groundwater and	purchased	surface water	for its drinki	ng water sources.

Name	Location	Type of Water	Source
Well 1 (Plant A)	CR 228 (E of Buda)	Groundwater	Edwards Aquifer
Well 2 (Plant A)	CR 228 (E of Buda)	Groundwater	Edwards Aquifer
Well 3 (Plant A)	CR 228 (E of Buda)	Groundwater	Edwards Aquifer
Well 4 (Plant A)	CR 228 (E of Buda)	Groundwater	Edwards Aquifer
Well 5 (Plant D)	S Loop 4 (SE of Buda)	Groundwater	Edwards Aquifer
Plant G	High Road	Purchased Surface Water	Canyon Lake/Lake Dunlap & San Marcos River
Plant I	Hillside Terrace Drive	Purchased Surface Water	Canyon Lake/Lake Dunlap
Plant L	CR 118	Purchased Surface Water	Canyon Lake/Lake Dunlap

#### Water Loss

In the water loss audit submitted to the Texas Water Development Board for calendar year 2016, our system lost an estimated 36,254,633 gallons of water, or 6.1% of total system input. If you have any questions about the water loss audit please call (512) 376-5695.

#### Definitions

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

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

*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.

*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.

Maximum Contaminant Level Goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

*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 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.

*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.

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

*N/A*: not applicable.

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

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

*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  $(\mu g/L)$  – or one ounce in 7,350,000 gallons of water.

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

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

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

#### Disinfectant

Disinfectant Used	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Violation	Source of Chemical
Chloramines	2016	2.43	0.91	4.0	4.0	<4.0	ppm	N	Water additive used to control microbes – mixture of Chlorine Gas and Liquid Ammonium Sulfate (LAS)

#### **Regulated Contaminants Detected – Goforth SUD**

The following tables represent regulated contaminants detected in the Goforth SUD's water system.

#### Coliform Bacteria

MCLG	Total Coliform MCL	0	Fecal Coliform or <i>E. Coli</i> MCL	or Hacal	Violation	Likely Source of Contamination
0	1 positive monthly sample	0	1 positive monthly routine sample	0	Ν	Naturally present in the environment

Goforth SUD had no positive samples within its distribution system for the 2016 calendar year; however, there was a positive sample on April 12, 2016. This positive sample was waived since Goforth SUD supplied the appropriate paperwork to TCEQ and no further action was required.

### Lead and Copper

Definitions:

Action Level Goal or 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 or AL: 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	AL	90 <sup>th</sup> Percentile	No. Sites Over AL	Units	Violation	Likely Source of Contamination
Copper	2016	1.3	1.3	0.441	0	ppm	N	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead	2016	0	15	2	0	ppb	Ν	Corrosion of household plumbing systems; Erosion of natural deposits

## Disinfection By-Products

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	15	0 - 39.3	No goal for the total	60	ppb	Ν	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	42	0-61.3	No goal for the total	80	ppb	Ν	By-product of drinking water disinfection

## Inorganic Contaminants

Contaminant	Collection Date	Highest Level Detected/ Annual Avg.	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Barium	2016	0.117	0.0765 – 0.117	2	2	ppm	N	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits
Cyanide	8/22/2014	40	40 - 40	200	200	ppb	Ν	Discharge from plastic and fertilizer factories; Discharge from steel/metal factories
Fluoride	8/22/2014	2.4	2.4 - 2.4	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]	2016	2	0.09 – 1.62	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Nitrite [measured as Nitrogen]	06/22/2015	0.08	0-0.08	1	1	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

## Radioactive Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Combined Radium 226/228	7/17/2013	2.1	2.1 - 2.1	0	5	pCi/L	Ν	Erosion of natural deposits
Gross alpha excluding radon and uranium	7/17/2013	2.1	2.1 – 2.1	0	15	pCi/L	N	Erosion of natural deposits

# Synthetic Organic Contaminants including Pesticides and Herbicides

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Dalapon	2016	1	0 – 1	200	200	ppb	Ν	Runoff from herbicide used on rights of way.

#### Regulated Contaminants Detected – Guadalupe Blanco River Authority IH 35 Transmission Main

Water systems that purchase drinking water are required to list the regulated contaminants detected in the water systems they purchase from. Goforth SUD purchases a portion of its drinking water from the Guadalupe Blanco River Authority IH 35 Transmission Main. The following tables represent regulated contaminants detected in the Guadalupe Blanco River Authority IH 35 Transmission Main.

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Haloacetic Acids (HAA5)	2016	48	47.7 – 47.7	No goal for the total	60	ppb	Ν	By-product of drinking water disinfection
Total Trihalomethanes (TTHM)	2016	57	57.3 - 57.3	No goal for the total	80	ppb	Ν	By-product of drinking water disinfection

#### **Disinfection By-Products**

### Inorganic Contaminants

Contaminant	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Nitrate [measured as Nitrogen]	2016	1	1.28 – 1.28	10	10	ppm	N	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

### Violations Table

Lead an Copper Rule									
The Lead and Copper Rule protects public health by minimizing lead and copper levels in drinking water, primarily by reducing water corrosivity. Lead and copper enter drinking water mainly from corrosion of lead an copper containing plumbing materials.									
Violation Type	Violation Begin	Violation End	Violation Explanation						
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2010	2016	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.						
FOLLOW-UP OR ROUTINE TAP M/R (LCR)	10/01/2016	2016	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.						