



2009 Annual Drinking Water Quality Report

(Consumer Confidence Report)

Provided to you by:

The City of Fredericksburg

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www.fbgtx.org

The United States Environmental Protection Agency (EPA) requires all drinking water suppliers to provide a water quality report to their customers on an annual basis. The information in this report is based on tests conducted by the Texas Commission on Environmental Quality (TCEQ). We can, once again, report that we never violated any water quality standard. It is also important to us that you have information about your drinking water so you can have confidence in the product we deliver. On the tables included in this report, you will find a list of what is in the water and at what levels. *The City of Fredericksburg water system has received a Superior Water Supply Rating from the TCEQ.*

WATER SOURCES

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 before treatment include microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

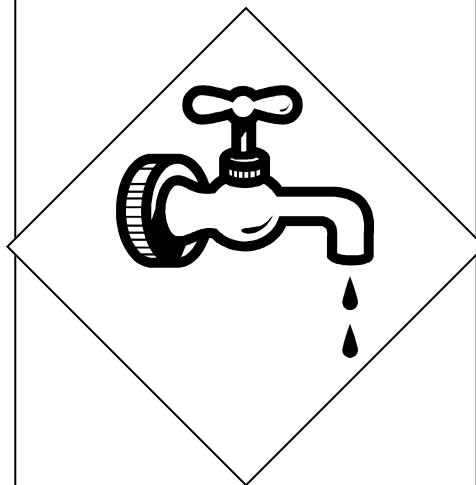
WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from ten groundwater wells; eight are located in the Ellenburger and two in the Hickory Sands Aquifers. A Source Water Susceptibility Assessment for our drinking water sources is currently being updated by the Texas Commission on Environmental

Quality. The 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 our source water protection strategies. Some of this source water assessment information will be available later this year on the Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

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 Environmental



Protection Agency's Safe Drinking Water Hotline (1-800-426-4791).

SPECIAL NOTICE

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; 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 physical or healthcare 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).

WE WELCOME YOUR COMMENTS AND PARTICIPATION

The City of Fredericksburg Water Department is part of your city government. The city council meets the first and third Mondays of every month at 7:00 p.m. at the Law Enforcement Center at 1601 East Main Street. If you have any questions or concerns about water quality, please call Tony Hawley, Water Department Superintendent, at 830-997-7521.

EN ESPAÑOL

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre este informe en español, favor de llamar al tel. (830) 997-7521 para hablar con una persona bilingüe en español.

UNDERSTANDING THE CHARTS

These tables 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.

Definitions & Abbreviations

Maximum Contaminant Level (MCL) - The highest permissible level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal (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.

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.

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.

NTU - Nephelometric Turbidity Units. This is the unit used to measure water turbidity.

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

ppm - Parts per million, or milligrams per liter (mg/L). One part per million equals one packet of artificial sweetener sprinkled into 250 gallons of iced tea.

ppb - Parts per billion, or micrograms per liter (µg/L). One part per billion is equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.

Treatment Technique (TT) - A required process intended to reduce the level of a contaminant in drinking water.

pCi/L - Picocuries per liter is a measure of radioactivity in water.

MFL - million fibers per liter (a measure of asbestos)

ppt - parts per trillion, or nanograms per liter

ppq - parts per quadrillion, or picograms per liter

Maximum Residual Disinfectant Level—Chlorine—Tested in 2009

Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source Of Disinfectant
Chlorine Residual, Free	0.76	0.45	1.25	4	4	ppm	Disinfectant used to control microbes.
Chloramine Residual	0.93	0.59	1.32	4	4	ppm	Disinfectant used to control microbes.

Disinfection Byproducts—Tested in 2008

Contaminant	Average Level	Minimum Level	Maximum Level	MCL	Unit of Measure	Source Of Contaminant
Total Haloacetic Acids	10.9	8.1	12.7	60	ppb	Byproduct of drinking water disinfection.
Total Trihalomethanes	12.4	1.6	18.6	80	ppb	Byproduct of drinking water disinfection.

Contaminants Regulated at the Customer's Tap—Lead & Copper—2007

Substance	90th Percentile Values	# of Sites Exceeding Action Level	Action Level	Possible Source of Substance
Lead (ppb)	6.100	1	15	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper (ppm)	0.199	0	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.

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. 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>.

Table of Detections—Inorganic Substances Tested in 2008 & 2009

Contaminant	Average Level at any Sampling Point	Range (Minimum-Maximum) of Detected Levels	MCL	MCLG	Unit of Measure	Possible Sources Of Contaminant
Fluoride	0.47	0.45—0.48	4	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate	1.99	1.90—2.07	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Total Coliform: Reported monthly tests found no coliform bacteria.

Fecal Coliform: Reported monthly tests found no fecal coliform bacteria.

Turbidity: Not required.

Organic Contaminants: Testing waived, not reported, or none detected.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts: Waived or not yet sampled.

Unregulated Contaminants: Not reported or none detected.

Table of Detections—Secondary and Other Constituents Not Regulated— Tested in 2008

Constituent	Average Level	Range (Minimum-Maximum) of Detected Levels	Secondary Limit	Unit of Measure	Source of Constituent
Bicarbonate	297	284-310	N/A	ppm	Corrosion of carbonate rocks, such as limestone.
Chloride	82	68-96	300	ppm	Abundant naturally-occurring element; used in water purification; byproduct of oil field activity.
Hardness as Ca/Mg	350	325-375	N/A	ppm	Naturally-occurring calcium and magnesium.
pH	7.6	7.5-7.7	>7.0	units	Measure of corrosivity of water.
Sulfate	35	33-36	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oilfield activity.
Total Alkalinity as CaCO ₃	297	284-310	N/A	ppm	Naturally-occurring soluble mineral salts
Total Dissolved Solids	497	458-535	1000	ppm	Total dissolved mineral constituents in water

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

OUR DRINKING WATER MEETS OR EXCEEDS ALL FEDERAL (EPA) DRINKING WATER REQUIREMENTS

Providing safe and reliable drinking water is the highest priority for the City of Fredericksburg Water Department. Our employees take pride in producing and delivering water to your tap that meets or exceeds state and federal requirements.

This report is a summary of the quality of the water that the City of Fredericksburg provides our customers. This analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests, and is presented in this report. We hope this information helps you become more knowledgeable about what's in your drinking water.

WATER CONSERVATION EFFORT IN FREDERICKSBURG FOR SUMMER 2010

The City of Fredericksburg staff and officials would like to remind all residents that, according to the Drought Contingency Plan Ordinance, **we have entered into our regular *Stage 1* Water Conservation Effort.** *Stage 1* is mandatory conservation from June 1 through September 30 of each year. This stage requires that customers are allowed to water only in the evening and early morning hours between 6:00 p.m. through 10:00 a.m. In *Stage 1*, watering is prohibited between the daytime hours of 10:00 a.m. to 6:00 p.m.

In addition to the water restrictions of the Drought Contingency Plan, citizens are encouraged to participate in a few simple water conservation practices. For many households, the single-biggest water usage is outdoors through an automated sprinkler system. Automated sprinkler systems can comprise as much as 60% or more of the total water used on any residential property. Here are a few suggestions to make your watering more efficient...

- Apply only enough water to moisten the root zone of your plants.
- Water when the sun is down. This will allow more water to reach the roots rather than evaporating.
- Use sprinklers that produce droplets of water rather than spraying a mist. Sprinklers that spray water high into the air or produce a mist lose most of water through evaporation.
- Make sure you are watering your lawn and landscape only - not the driveway or street.
- If possible, use drip irrigation or a soaker hose for flower beds, shrub beds, gardens and trees. This will allow the water to be applied directly to the root and reduces water loss from evaporation.

Indoors, water consumption in the bathroom accounts for approximately 75% of water used in the home. However, there are ways to conserve water throughout the home. Some of these ways include...

- Regularly check for any leaks in the toilets, faucets, and water hose bibs.
 - Install a low-flow showerhead and higher-efficiency toilets.
 - Take shorter showers. Showers use less water than baths.
 - Wash only full loads in the dishwasher and the clothes washing machine.
 - When purchasing new appliances, consider energy-efficient and water-saving appliances.
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In the event of moderate water shortage conditions, the City of Fredericksburg would implement *Stage 2* of the Water Conservation Effort. In this situation, the following schedule and regulations should be followed:

- All outdoor irrigation by hose-end sprinklers, automatic sprinklers, soaker hoses, or drip irrigation, may occur between the hours of 12:00 midnight and 10:00 a.m., and 6:00 p.m. to 12:00 midnight.
 - The time restrictions do not apply to the irrigation of commercial plant nurseries; however, these establishments shall curtail all nonessential water use.
 - The designated outdoor water use days are as follows:
 - ⇒ SUNDAY, WEDNESDAY, AND FRIDAY - ***EVEN*** numbered addresses may water as noted above.
 - ⇒ TUESDAY, THURSDAY, AND SATURDAY - ***ODD*** numbered addresses may water as noted above.
 - ⇒ No watering is allowed on MONDAYS.
 - Charity carwashes are prohibited.
 - The washing of automobiles, trucks, trailers, boats, airplanes, and other types of mobile equipment is prohibited except between the hours of 12:00 midnight to 10:00 a.m., and 6:00 p.m. to 12:00 midnight. The washing, when allowed, must be done with a hand-held bucket or hand-held hose equipped with a positive shutoff nozzle for quick rinses.
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City personnel will be monitoring compliance of the regulations as set forth in the Drought Contingency Plan. A complete copy of the City of Fredericksburg's Drought Contingency Plan can be found on the City's website. For more helpful tips on water conservation, please visit our website at www.fbgtx.org.

Residents with questions about the Drought Contingency Plan Ordinance or Water Conservation Effort, please contact the Code Enforcement Officer at (830)997-7521.