



P.O. Box 217
Krum, TX 76249



PWS ID #TX0610007

2018 Annual Drinking Water Quality Report

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Our Drinking Water Is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. The City of Krum, is monitored and follows regulations of the Environmental Protection Agency at a federal level and the Texas Commission on Environmental Quality (TCEQ) at the state level. We hope this information helps you become more knowledgeable about what's in your drinking water.

Source 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 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 runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Where Do We Get Our Drinking Water?

The source of drinking water used by the City of Krum purchases water from UTRWD Regional Water Treatment Plant. UTRWD Regional Water Treatment Plant provides purchase surface water from Lewisville Chapman Lakes. The city of Krum also provides ground water from city wells in the Trinity Aquifer, located in Denton County. The TCEQ completed an assessment of your source water and results indicate that some of our 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 Devon Kennedy.

All Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health 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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

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.

Required 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. The City of Krum 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>.

For More Information

To learn more about the information included in this report, please contact Devon Kennedy, at (940) 398-7307.

En Español

Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (940) 398-7307.



We routinely monitor for constituents in your drinking water according to Federal and State laws. The test results table shows the results of our monitoring for the period of January 1st to December 31st, 2018.

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminant 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

City of Krum's water department.

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).

Inorganic Contaminants							
Contaminant (Units)	Violation	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Likely Source of Contamination
Barium (ppm)	N	2/3/16	0.035	0.0059 - 0.035	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
Chromium (ppb)	N	2/3/16	1.3	0.52 - 1.3	100	100	Discharge from steel and pulp mills; Erosion of natural deposits.
Fluoride (ppm)	N	2017	0.206	0.109 - 0.206	4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.
Nitrate (measured as Nitrogen) (ppm)	N	2018	0.276	0.023-0.276	10	10	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

Lead and Copper							
Contaminant (Units)	Date Sampled	MCLG	Action Level (AL)	90th Percentile	# Sites Over AL	Violation	Likely Source of Contamination
Copper (ppm)	2017	1.3	1.3	0.067	0	N	Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing systems
Lead (ppb)	2017	0	15	1.8	0	N	Corrosion of household plumbing systems; erosion of natural deposits

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at the homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline at (800) 426-4791.

Radioactive Contaminants							
Contaminant (Units)	Violation	Collection Date	Highest Level or Average Detected	Range of Individual Samples	MCLG	MCL	Likely Source of Contamination
Combined Radium 226/228 (pCi/L)	N	2/28/17	1.5	1.5 - 1.5	0	5	Erosion of natural deposits.

Disinfection By-Products							
Contaminant (Units)	Violation	Collection Date	Average or Highest Level Detected	Range of Levels Detected	MCLG	MCL	Likely Source of Contamination
Haloacetic Acids (HAA5) (ppb)	N	2018	1	0-0	No goal for total	60	By-product of drinking water disinfection
Total Trihalomethanes (TTHM) (ppb)	N	2018	5	0-8.52		80	By-product of drinking water disinfection

Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

** The value in the Highest Level or Average Detected column is the highest average of all HAA5 sample results collected at a location over a year.*

** The value in the Highest Level or Average Detected column is the highest average of all TTHM sample results collected at a location over a year.*

Disinfectant Residual							
Contaminant (Units)	Violation	Collection Date	Average or Highest Level Detected	Range of Levels Detected	MRDL	MRDLG	Likely Source of Contamination
Chlorine and Chloramines (ppm)	N	2018	1.60	0.50-3.90	4	4	Water additive used to control microbes.

Violations

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Violation Type	Violation Begin	Violation End	Violation Explanation
Disinfectant Level Quarterly Operating Report (DLQOR).	01/01/2018	03/31/2018	We failed to test our drinking water for the contaminant and the period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.

Lead and 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 and copper containing plumbing materials.

Violation Type	Violation Begin	Violation End	Violation Explanation
LEAD CONSUMER NOTICE (LCR)	12/30/17	3/2/18	We failed to provide the results of lead tap water monitoring to the consumers at the location water was tested. These were supposed to be provided no later than 30 days after learning the results.

Definitions

In the table you might find terms and abbreviations with which you are not familiar. To help you better understand these terms we've provided the following definitions:

Action Level (AL) – the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Action Level Goal (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.

Avg. – Regulatory compliance with some MCLs is based on running annual average of monthly samples.

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 (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 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 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 (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.

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

NA – not applicable.

NTU – Nephelometric Turbidity Units.

Parts per billion (ppb) – micrograms per liter ($\mu\text{g}/\text{l}$) or one ounce in 7,350,000 gallons of water.

Parts per million (ppm) – milligrams per liter (mg/l) or one ounce in 7,350 gallons of water.

Secondary Contaminant Level (SCL) – represents reasonable goals for drinking water quality & provides a guideline for public water suppliers.

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

Water Conservation

You can play a role in conserving water and saving yourself money in the process by becoming conscious of the amount of water your household is using and by looking for ways to use less whenever you can. It is not hard to conserve water. Here are a few tips:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it and you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank. Watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from an invisible toilet leak. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances. Then check the meter after 15 minutes. If it moved, you have a leak.

6 Tips to Prevent Storm Water Pollution

- 1) Turn off your sprinklers when it rains to avoid water runoff.
- 2) Do not apply fertilizers and pesticides before it rains. Contrary to popular belief, the rain will not help soak chemicals into the ground; instead, it creates polluted runoff into the local waters.
- 3) Do not dump your car's oil on the ground or in the storm drain; dispose of it properly at an oil recycling center.
- 4) Check your car, boat or motorcycle for leaks. Clean up spilled fluids with an absorbent material; do not rinse it into the storm drain.
- 5) Wash your car with water only or use biodegradable soap to avoid runoff of harmful chemicals and try to wash your car on a lawn or other unpaved surface.
- 6) Don't mess with Texas! Throw your litter in a garbage can and recycle what you can!