

City of
KENNEDALE
Texas
EST. 1887

YOU'RE HERE  YOUR HOME

Drinking Water Quality Report

Be Water Wise

Please remember to conserve water. Visit www.twdb.texas.gov/publications/brochures for useful water-saving tips. Kennedale is currently under year-round restrictions prohibiting landscape irrigation (other than hand-watering) between the hours of 10:00 a.m. and 6:00 p.m. Additionally, customers can irrigate no more than twice a week on designated days only. Refer to the table at right or visit www.cityofkennedale.com/lawn.

Where do we get our drinking water?

The City of Kennedale's drinking water during 2015 consisted of 53% ground and 47% surface water. Kennedale has five wells that pull groundwater from the Trinity Aquifer (Twin Mountains, Travis Peak, and Paluxy). This is blended with treated surface water purchased from the City of Fort Worth, which is sourced from Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Benbrook Lake, Cedar Creek Reservoir, and Richland-Chambers Reservoir. Kennedale's utility system water loss audit (on file with the Texas Water Development Board) reported a water loss of 8.25% for January to December 2015. The nationwide water loss average is 16%. Water loss below 10% is considered excellent.

Source Water Assessment Protection

The Texas Commission on Environmental Quality (TCEQ) completed an assessment of the City of Kennedale's source water and results indicate that two (2) of the well water sources are high in minerals. The sampling requirements for the water system are based on this susceptibility and previous sample data. Any detection of these minerals may be found in this Consumer Confidence Report as "Total Dissolved Solids and Sulfates". For more information on source water assessments and protection efforts in the City of Kennedale, contact Public Works Director Larry Ledbetter at 817-985-2171.

WATERING SCHEDULE

MONDAY
NO WATERING ALLOWED

TUESDAY & FRIDAY
NON RESIDENTIAL SITES
(apartments, businesses, sports fields, parks, common areas, HOA's)

WEDNESDAY & SATURDAY
RESIDENTIAL ADDRESSES ENDING
IN EVEN NUMBERS (0, 2, 4, 6, 8)

THURSDAY & SUNDAY
RESIDENTIAL ADDRESSES ENDING
IN ODD NUMBERS (1, 3, 5, 7, 9)



*Sprinklers are not allowed
from 10 a.m. to 6 p.m.
Handwatering only.*

405 Municipal Drive Kennedale, TX 76060
817-985-2170 www.cityofkennedale.com/water

Annual Water Quality Report for the period from January 1 to December 2015

Chloramines

The addition of chloramines may cause problems to persons dependent on dialysis machines. A condition known as hemolytic anemia can occur if the disinfectant is not completely removed from the water that is used for the dialysate. Consequently, the pretreatment scheme used for the dialysis units must include some means, such as charcoal filtering, for the removal of chloramines. If you are utilizing a dialysis machine, please contact the manufacturer for information concerning this matter. In addition, **chloramines in certain concentrations may be toxic to fish.** If you have a fish tank, please make sure that the chemicals or filters you are using are designed for use in water that has been treated with chloramines. Your local pet store is a good source of information on this topic along with the appropriate reagents for neutralizing chloramines.

Fluoride

This is an alert about your drinking water and a cosmetic dental problem that might affect children under nine (9) years of age. At low levels, fluoride can help prevent cavities, but **children drinking water containing more than 2 milligrams per liter (mg/L) of fluoride may develop cosmetic discoloration of their permanent teeth (dental fluorosis).** The drinking water provided by one of the four wells in the City of Kennedale has a fluoride concentration of 2.42 mg/L. The other three wells have fluoride concentrations below 2 mg/L, and the treated surface water purchased from Fort Worth has a fluoride concentration well below 2 mg/L. Roughly 50% of your drinking water is from Fort Worth and roughly 20% of your water is from the well with a fluoride residual slightly over 2.0 mg/L. The average fluoride concentration of the City of Kennedale drinking water is normally below 2.0 mg/L, but the concentration in one well before it is blended with the other water in the distribution system is slightly above 2 mg/L, and we are therefore required to alert our customers of this fact.

Dental fluorosis, in its moderate or severe forms, may result in a brown staining and/or pitting of the permanent teeth. This problem occurs only in developing teeth, before they erupt from the gums. Children under nine (9) should be provided with alternative sources of drinking water or water that has been treated to remove the fluoride to avoid the possibility of staining and pitting of their permanent teeth. You may also want to contact your dentist about proper use by young children of fluoride-containing products. Older children and adults may safely drink the water. Drinking water containing more than 4 mg/L of fluoride (the U.S. Environmental Protection Agency's drinking water standard) can increase your risk of developing bone disease. Your drinking water **does not** contain more than 4 mg/L of fluoride, but we're required to notify you when the fluoride level in any of the wells exceeds 2 mg/L because of this cosmetic dental problem.

For more information, please call the City of Kennedale at 817-985-2170. If you have children under the age of nine (9) and would like your water tested we will set up a time to meet with you and test the fluoride concentration in your house. Some home water treatment units are available to remove fluoride from drinking water. To learn more about available home water treatment units, you may call NSF International at 1-877-8-NSF-HELP or visit their website at www.nsf.org/consumer-resources.

Abbreviations and Definitions *An explanation of some terms and measures in this document.*

DEFINITIONS: **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 health risk. 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.; **Treatment Technique (TT):** A required process intended to reduce the level of a contaminant in drinking water.; **Action Level (AL):** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.; **ABBREVIATIONS:** **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); **ppb:** parts per billion, or micrograms per liter (µg/L)

CITY OF KENNEDALE

Groundwater Analysis Results

Regulated Contaminants

Collection Date	Contaminant	Highest Level Detected	Range of Levels Detected	MCL	MCLG	Unit of Measure	Violation	Common Sources of Substance
2015	Haloacetic Acids (HAA5)	11.1	0 to 11	60	NA <small>(not applicable)</small>	ppb	NO	Byproduct of drinking water disinfection
2015	Total Trihalo-methanes (TTHM)	15.4	0 to 15.4	80	NA <small>(not applicable)</small>	ppb	NO	Byproduct of drinking water disinfection
2014	Fluoride	2.42	0.96 to 2.42	4	4	ppm	NO	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
2010	Arsenic	0.843	0.441 to 0.843	10	0	ppb	NO	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes
2010	Barium	0.0219	0.00973 to 0.0219	2	2	ppm	NO	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
2010	Chromium	6.75	4.9 to 6.75	100	100	ppb	NO	Discharge from steel and pulp mills; erosion of natural deposits
2014	Cyanide	115	46.2 to 115	200	200	ppb	NO	Discharge from plastic and fertilizer factories; discharge from steel/metal factories
2010	Selenium	0.781	0 to 0.781	50	50	ppb	NO	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines
2010	Thallium	0.111	0 to 0.111	2	0.5	ppb	NO	Discharge from electronics, glass, and drug factories; leaching from ore processing sites
2015	Nitrate (measured as Nitrogen)	0.186	0.02 to 0.186	10	10	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
2015	Nitrite (measured as Nitrogen)	none detected	NA <small>(not applicable)</small>	1	1	ppm	NO	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Distribution Residual Disinfectant Levels

Year (Range)	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2015	Chloramine	2.31	0.5	3.4	4	4	ppm	Disinfectant used to control microbes

Coliform Bacteria

Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive Samples	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Common Sources of Substance
0	1 positive monthly sample	0	0	0	NO	Coliforms are bacteria that are naturally present in the environment; they are used as an indicator that other, potentially harmful bacteria may be present

Lead & Copper

Date Sampled	Contaminant	MCLG	The 90 th Percentile	Number of Sites Over AL	Action Level (AL)	Unit of Measure	Violation	Common Sources of Substance
2013	Lead	0	1.28	0	15	ppb	NO	Corrosion of household plumbing systems; erosion of natural deposits
2013	Copper	1.3	0.0732	0	1.3	ppm	NO	Corrosion of household plumbing systems; erosion of natural deposits

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 Kennedale 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 two 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 EPA Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/safewater/lead.

Secondary & Other Constituents Not Regulated

As there are no associated adverse health effects, secondary constituents are not required to be reported in this document, but they may greatly affect the appearance and taste of water.

Year	Constituent	Average Level	Minimum Level	Maximum Level	Secondary Limit	Unit of Measure	Common Sources of Substance
2014	Bicarbonate Alkalinity	325	175	412	NA (not applicable)	ppm	Corrosion of carbonate rocks such as limestone
2014	Chloride	50	30	76.6	300	ppm	Abundant naturally occurring element
2010	Hardness as Ca & Mg	11	6	24	NA (not applicable)	ppm	Naturally occurring calcium and magnesium
2011	pH	8.5	8.3	8.7	8.5	units	Measure of corrosivity of water
2010	Sodium	274	264	299	NA (not applicable)	ppm	Erosion of natural deposits
2014	Sulfate	210	89	487	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2014	Total Alkalinity	339	175	436	NA (not applicable)	ppm	Naturally occurring soluble mineral salts
2014	Total Dissolved Solids	772	382	1220	1000	ppm	Total dissolved mineral constituents in water

The data presented in this report is from the most recent testing done in accordance with regulations. This report can be viewed online at www.cityofkennedale.com/water.



CITY OF FORT WORTH

Surface Water Analysis Results

Contaminant	Measure	MCL	2015 Highest Single Result	Lowest Monthly % of Samples <0.3 NTU	MCLG	Common Sources of Substance
Turbidity ¹	NTU	TT	0.50	98.9%	NA (not applicable)	Soil runoff

Contaminant	Measure	MCL	2015 Level	Range	MCLG	Common Sources of Substance
Total Coliforms (including fecal coliform & E. coli)	% positive samples	Presence in 5% or less of monthly samples	Presence in 2% or more of monthly samples	0 to 2%	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.

Contaminant	2015 Level	Range	MCL	MCLG	Measure	Common Sources of Substance
Gross Beta particles & photon emitters	5.6	4 to 5.6	50	NA (not applicable)	pCi/L	Decay of natural and man-made deposits
Radium 226/228	1	1 to 1	5	0	pCi/L	Erosion of natural deposits
Arsenic	1.70	0.96 to 1.70	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronic production wastes
Antimony	0.21	0 to 0.21	6	6	ppb	Discharge from petroleum refineries, fire retardants, ceramics, electronics, solder, test addition
Barium	0.07	0.05 to 0.07	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (Total)	1	0.87 to 1	100	100	ppb	Discharge from steel and pulp mills, erosion of natural deposits
Cyanide	145	13.4 to 145	200	200	ppb	Discharge from plastics and fertilizer factories; discharge from steel and metal factories
Fluoride	0.56	0.12 to 0.56	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	0.67	0.2 to 0.67	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	0.04	0 to 0.04	1	1	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	6.22	0 to 6.22	10	0	ppb	By-product of drinking water disinfection
Haloacetic Acids	15.6	8.8 to 15.6	60	NA (not applicable)	ppb	By-product of drinking water disinfection
Total Trihalomethanes	27.8	12.4 to 27.8	80	NA (not applicable)	ppb	By-product of drinking water disinfection

Contaminant	High	Low	Average	MCL	MCLG	Common Sources of Substance
Total Organic Carbon ²	1	1	1	TT = % removal	NA (not applicable)	Naturally occurring

¹ Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.

² Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.

Interconnects or Emergency Sources

Source of the Water	Length of Time Used	Explanation of Why It Was Used	Whom to Call for Additional Water Quality Information
City of Fort Worth	All Year	To supplement water supply	Mary Gugliuzza at 817-392-8253 or visit www.fortworthtexas.gov/tapwater

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

The full 2015 Water Quality Report for the City of Fort Worth can be viewed online at www.fortworthtexas.gov/tapwater. Request a paper copy by calling Mary Gugliuzza at 817-392-8253.

Annual Water Quality Report for the period of January 1 to December 31, 2015

This report is intended to provide you with important information about the City of Kennedale's water supply and its efforts to provide safe drinking water for you and your family. It is reasonable to expect that drinking water, including bottled water, may contain at least small amounts of some contaminants. However, the presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects is available from the **Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/safewater**.

To ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration (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 and can cause taste, color, or odor problems. These types of problems are not necessarily causes for health causes. **For more information regarding this report or the taste, odor, or color of your drinking water, please call 817-985-2170. Este reporte incluye informacion importante sobre el agua potable. Para asistencia en espanol, favor de llamar al telefono 817-985-2163, ext. 2227, y pregunte por Dianna Garcia.**

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:

- 💧 **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 agricultural, urban storm water runoff, and residential uses.
- 💧 **Organic chemical contaminants**, including synthetic and volatile organic chemicals, which are byproducts 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.

Public Participation Opportunities

Public participation at advisory board and council meetings is welcome and encouraged. City Council typically meets the third Monday of each month at 7:00 p.m. at City Hall (405 Municipal Drive). Upcoming meeting dates can be found at www.cityofkennedale.com/cal.

Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, people with HIV/AIDS or other immune problems:

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 provider. Additional guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* are available from the **Environmental Protection Agency (EPA) Safe Drinking Water Hotline at 1-800-426-4791 or www.epa.gov/safewater**.