



# 2016 Drinking Water Quality Report

(Consumer Confidence Report)

City of Garden Ridge Water Department  
PWS ID 0460027

Water Manager - Royce E. Goddard

(210) 651-6831

### Where do we get our drinking water?

Our drinking water is obtained from ground water sources. It comes from the following Aquifers: Edwards North BFZ and the Trinity Aquifer. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality (TCEQ). 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. Further details about sources and source-water assessments are available in Texas Drinking Water Watch at the following URL: <http://dww.tceq.state.tx.us/DWW>.

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### Our Drinking Water Meets or Exceeds All Federal (EPA) Drinking Water Requirements

This Report is a summary of the quality of the water we provide our customers. The analysis was made using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

### 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 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.

### Public Participation Opportunities

#### City Water Commission Meetings

Date: Fourth Tuesday of every month

Time: 6:00 pm

Location: City Hall (Court Room)  
9400 Municipal Parkway

- Information subject to change, current information will be posted at City Hall 72 hours prior to meeting and on the city's website.
- To learn about future public meetings (concerning your drinking water), or to request to schedule one, please

### 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. (210) 651-6831-para hablar con una persona bilingüe en español.

### Help Us Keep Your Drinking Water Safe

You can help keep your drinking water safe for your family and your neighbors by installing the proper backflow prevention devices at your residence. Backflow devices are especially important for homes with private wells or a combination of irrigation system with on-site septic tanks. Ordinance 54 Section 15 has more information on these requirements or call (210) 651-6831, M-F, 8-5.

In the water loss audit submitted to the Texas Water Development Board (TWDB) for the time period of Jan 01 - Dec 31, 2016, our water system had an unaccountable water loss of an estimated 28,614,509 gallons of water out of an estimated 295,811,000 gallons pumped. This equates to an approximately 9.63% water loss for the year.

If you have any questions about the water loss audit, please call (210) 651-6831, M-F, 8-5

**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; those who have undergone organ transplants; those who are undergoing treatment with steroids; and people with HIV/AIDS or other immune 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 Safe Drinking Water Hotline (1-800-426-4791).

**ABBREVIATIONS**

- NTU** – Nephelometric Turbidity Units
- MFL** – million fibers per liter ( a measure of asbestos)
- 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 (ug/l)
- ppt** – parts per trillion, or nanograms per liter
- ppq** – parts per quadrillion, or picograms per liter

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.

**Inorganic Contaminants**

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	MCLG	VIOLA-TION	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2012	Asbestos	0.1883	0.8113 - 0.8113	7	7	N	MFL	Decay of asbestos cement water mains; Erosion of natural deposits.
2016	Barium	0.0314	0.0314 - 0.0314	2	2	N	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2014	Fluoride	0.16	0.11- 0.16	4.0	4	N	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2016	Nitrate (measured as Nitrogen)	2	1.54-2.27	10	10	N	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

YEAR	RADIOACTIVE CONTAMINANTS	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	MCLG	VIOLA-TION	UNIT OF MEASURE	LIKELY SOURCE OF CONSTITUENT
2014	Combined Radium 226/228	1	306	326	N/A	ppm	pCi/L	Erosion of natural deposits

**Where do we get our drinking water (cont.)**

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:  
<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

**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 concerns.

**About The Following Pages**

The tables that follow list all the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

**DEFINITIONS**

**Maximum Contaminant Level (MCL):**

The highest level of a contaminant in drinking water. MCL's are set as close to the MCLG's 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 not known or expected health risk. MCLG's 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 disinfectant is necessary for control 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:**

A required process intended to reduce the level of a contaminant in drinking water.

**Action Level:**

The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

### Volatile Organic Contaminants

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MAXIMUM LEVEL	MCL	VIOLATION	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2016	Xylenes	0.0008	0-0.0008	10	10	N	ppm	Discharge from petroleum factories; Discharge for chemical factories.

### Organic Contaminants TESTING WAIVED, NOT REPORTED, OR NONE DETECTED

Maximum Residual Disinfectant Level								
Systems must complete and submit disinfection data on the Disinfection Level Quarterly Operating Report (DLQOR). Failure to do so WILL result in violations.								

YEAR	DISINFECTANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	MDRL	MRDGL	UNIT OF MEASURE	VIOLATION (Y/N)	SOURCE OF CHEMICAL
2016	Chlorine	0.84	0.36	1.59	4.0	<4.0	ppm	N	150lb chlorine tanks at well sites

### Disinfection By-Products

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MAXIMUM LEVEL	MCL	VIOLATION	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2016	Haloacetic Acids (HAA5)*	2	1.5-1.5	No goal for the total	60	N	ppb	By-product of drinking water chlorination.
2016	Total Trihalomethanes	14	14.3-14.3	No goal for the total	80	N	ppb	By-product of drinking water chlorination.

Unregulated Initial Distribution System Evaluation for Disinfection Byproducts WAIVED OR NOT YET SAMPLED

### Unregulated Contaminants

Unregulated contaminants are those for which the EPA has not established drinking water standards. The purpose of unregulating contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulations are warranted

YEAR	CONTAMINANT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL		UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2014	Chloroform	1.00	0	None at entry point to distribution		ppb	Byproduct of drinking water disinfection.
2014	Bromoform	1.20	1.05	None at entry point to distribution		ppb	Byproduct of drinking water disinfection.
2014	Bromodichloromethane	1.00	0	None at entry point to distribution		ppb	Byproduct of drinking water disinfection.
2014	Dibromochloromethane	1.60	2.02	None at entry point to distribution		ppb	Byproduct of drinking water disinfection.

### Lead and Copper

YEAR	CONTAMINANT	THE 90 <sup>TH</sup> PERCENTILE	NUMBER OF SITES EXCEEDING ACTION LEVEL	ACTION LEVEL	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2016	Copper	0.21	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2016	Lead	2.40	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.

### Required Additional Health Information for Lead

*“If present, elevated levels of lead can cause serious health problems, especially for pregnant women and 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 (1-800-426-4791) or at <http://www.epa.gov/safewater/lead>.”*

**Turbidity - NOT REQUIRED**

**Total Coliform** – Reported Monthly Tests Found No Coliform Bacteria.

**Fecal Coliform** – Reported Monthly Tests Found No Fecal Coliform Bacteria.

**Secondary and Other Not Regulated Constituents**  
(No associated adverse health effects)

**Violations Table**

**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.

<b>Violation Type</b>	<b>Violation Begins</b>	<b>Violation Ends</b>	<b>Violation Explanation</b>
Follow-up or routine tap M/R (LCR)	10/01/2015	10/03/2016	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.
Lead Consumer Notice (LCR)	12/30/2016	02/10/2017	We failed to provide the results of the 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.

**Revised Total Coliform Rule (RTCR)**

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

<b>Violation Type</b>	<b>Violation Begins</b>	<b>Violation Ends</b>	<b>Violation Explanation</b>
Monitoring, Routine, Major (RTCR)	04/01/2016	04/30/2016	We failed to collect all required routine samples of 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