



# 2015 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. Texas Commission on Environmental Quality has completed a source water susceptibility assessment for your drinking water source(s) and results indicate that your source(s) are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. Source water assessment information is available at 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 Royce E. Goddard, Water Manager at (210) 651-6831

### 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 EPAs 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, 2014, our water system had an unaccountable water loss of an estimated 25,143,074 gallons of water out of an estimated 317,864,354 gallons pumped. This equates to an approximately 7.91% 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).

**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. Therefore, secondary's are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

**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**

**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

**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.

**Inorganic Contaminants**

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MCL	MCLG	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2012	Asbestos	0.1883	0.8113 - 0.8113	7	7	MFL	Decay of asbestos cement water mains; Erosion of natural deposits.
2014	Barium	0.0314	0.0314 - 0.0314	2	2	ppm	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.
2014	Fluoride	0.13	0.11- 0.16	4.0	4	ppm	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
2015	Nitrate (measured as Nitrogen)	2	1.54-2.27	10	10	ppm	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.

**Radioactive Contaminants**

2014	Combined Radium 226/228	1	1 - 1	5	0	pCi/L	Erosion of natural deposits
------	-------------------------	---	-------	---	---	-------	-----------------------------

### Volatile Organic Contaminants

YEAR	CONTAMINANT	HIGHEST LEVEL DETECTED	RANGE OF LEVELS DETECTED	MAXIMUM LEVEL	MCL	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2015	Xylenes	0.0021	0-0.0021	10	10	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 (DLQR). 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
2015	CHLORINE	0.81	0.42	1.89	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	UNIT OF MEASURE	LIKELY SOURCE OF CONTAMINANT
2015	Haloacetic Acids (HAA5)*	1	1.1-1.1	No goal for the total	60	ppb	Byproduct of drinking water chlorination.
2015	Total Trihalomethanes	8	7.5-7.5	No goal for the total	80	ppb	Byproduct 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
2012	Copper	0.216	0	1.3	ppm	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives.
2012	Lead	4.11	0	15	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.

### 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.

Violation Type	Violation Begins	Violation Ends	Violation Explanation
Follow-up or routine tap M/R (LCR)	10/01/2015	2015	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.

**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)

YEAR	CONSTITUENT	AVERAGE LEVEL	MINIMUM LEVEL	MAXIMUM LEVEL	LIMIT	UNIT OF MEASURE	LIKELY SOURCE OF CONSTITUENT
2014	Bicarbonate	314	306	326	N/A	ppm	Corrosion of carbonate rocks such as limestone.
2014	Calcium	84.4	84.4	84.4	N/A	ppm	Abundant natural occurring element.
2014	Chloride	15	12	18	300	ppm	Abundant natural occurring element; used in water purification; byproduct of oil field activity
2014	Copper	0.003	0.003	0.003	1	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
2014	Hardness as Ca/Mg	279	268	294	N/A	ppm	Naturally occurring calcium and magnesium
2014	Magnesium	14.3	14.3	14.3	N/A	ppm	Abundant natural occurring element.
2014	Nickel	0.0021	0.0021	0.0021	N/A	ppb	Erosion of natural deposits.
2014	pH	7.6	7.5	7.7	>7.0	units	Measure of corrosivity of water.
2014	Sodium	6	6	6	N/A	ppm	Erosion of natural deposits; byproduct of oil field activity
2014	Sulfate	14	13	15	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity
2014	Total Alkalinity CaCO <sub>3</sub>	258	251	267	N/A	ppm	Naturally occurring soluble mineral salts.
2014	Total Dissolved Solids	315	302	326	1000	ppm	Total dissolved mineral constituents in water.
2014	Total Hardness CaCO <sub>3</sub>	270	270	270	NA	ppm	Naturally occurring calcium.