

# 2017 Annual Drinking Water Quality Report

## Consumer Confidence Report (CCR)

### City of Red Oak

(972) 576-3414

#### **Special Notice: *Required language for all community public water supplies:***

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 (1-800-426-4791).

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 Red Oak 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>.

#### **Our Drinking Water Is Regulated**

PWS ID Number: TX0700031 PWS Name: City of Red Oak  
Annual Water Quality Report - January 1, 2017 to December 31, 2017

This report is intended to provide you with important information about your drinking water and the efforts made by the City of Red Oak to provide safe drinking water. In order to ensure tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. 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 Red Oak's Public Works Department. 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. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (800) 426-4791. For more information regarding this report, please contact the City of Red Oak's Public Works Department at (972) 576-3414. Public participation is welcome. City Council meetings are held the second Monday of each month at 200 Lakeview Pkwy, Red Oak, TX 75154. Please contact the City Secretary at (469) 218-1207 for more information about how to participate.

**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 include: 1) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife; 2) 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; 3) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses; 4) 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; and 5) Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

**En Español:** Este reporte incluye información importante sobre el agua para tomar. Para asistencia en español, favor de llamar al telefono (972) 617-3638 para hablar con una persona bilingüe en español.

**WHERE YOUR WATER COMES FROM:** The City of Red Oak distributes to its customers combined surface water [as received from the City of Dallas (who uses surface water from seven sources: the Elm Fork of the Trinity River and lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard, Tawakoni and Fork)] and ground water [as received from the City's two active ground water wells/ground waters from within the Woodbine Aquifer]. The City of Red Oak also has emergency back-up surface water supply connections with Rockett Special Utility District (SUD) and the City of Glenn Heights.

**INFORMATION ABOUT SOURCE WATER ASSESSMENTS:** The TCEQ completed an assessment of Red Oak's source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for Red Oak's water system are based on this susceptibility and previous sample data. Any detections of these contaminants will be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at our system, contact the Director of Public Works, Ray Siva-Reyes, at (972) 576-3414. Further details about sources and source water assessments are available in Drinking Water Watch at the following URL: <http://dww2.tceq.texas.gov/DWW/>.

**2016 WATER AUDIT:** In the water audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2016, the City of Red Oak public water system had an estimated water loss of 8%.

**About The Following Pages:** The following pages list all of the Federal and State regulated or monitored contaminants which have been found in your drinking water. The frequency of testing varies depending on the parameters and are in compliance with established standards.

**Definitions:** The following tables contain scientific terms and measures, some of which may require explanation.

**Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples.

**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 contamination.

**Unregulated Contaminant Monitoring Rule (UCMR):** EPA uses UCMR program to collect data for contaminants suspected to be present in drinking water, but that do not have health-based standards set under the Safe Drinking Water Act.

**Minimum Reporting Level (MRL):** UCMR minimum reporting level.

**n/a:** not applicable.

**pCi/L:** picocuries per liter (a measure of radioactivity)

**ppb:** micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

**ppm:** milligrams per liter or parts per million – or one ounce in 7,350 gallons of water.

**Ug/L:** micrograms per liter or parts per billion – or one ounce in 7,350,000 gallons of water.

## 2017 Coliform Bacteria Monitoring Results

| Total Coliform MCLG | Total Coliform MCL         | Highest Monthly Number of Total Coliform Positives | Fecal Coliform or E. Coli MCL | Total No. of Positive E. Coli or Fecal Coliform Samples | Violation | Likely Source of Contamination        |
|---------------------|----------------------------|--|-------------------------------|---|-----------|---------------------------------------|
| 0                   | 1 positive monthly sample. | 1  | 0                             | 0   | No        | Naturally present in the environment. |

## Regulated Contaminants Detected

### Lead and Copper

Definitions:

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.

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

| Lead and Copper | Date Sampled | MCLG | Action Level (AL) | 90 <sup>th</sup> Percentile | # Sites over AL | Units | Violation | Source of Contaminant   |
|-----------------|--------------|------|-------------------|-----------------------------|-----------------|-------|-----------|---|
| Copper          | 07/15/2017   | 1.3  | 1.3               | 0.471                       | 1               | ppm   | No        | Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems. |
| Lead            | 07/15/2017   | 0    | 15                | 2                           | 1               | ppb   | No        | Corrosion of household plumbing system; Erosion of natural deposits.                                    |

### Regulated Contaminants Detected

| Disinfectants and Disinfection By-Products | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG              | MCL | Units | Violation | Source of Contaminant                     |
|--|-----------------|------------------------|--------------------------|-------------------|-----|-------|-----------|---|
| Haloacetic Acids (HAA5)                    | 2017            | 13                     | 11.4 - 14.6              | No goal for total | 60  | ppb   | No        | Byproduct of drinking water disinfection. |
| Total Trihalomethanes (TTHM)               | 2017            | 23                     | 17.1 - 24.8              | No goal for total | 80  | ppb   | No        | Byproduct of drinking water disinfection. |

### Regulated Contaminants Detected

| Inorganic Contaminant          | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contaminant   |
|--------------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|--|
| Barium                         | 2/24/2016       | 0.019                  | 0.019 - 0.019            | 2    | 2   | ppm   | No        | Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits.                      |
| Chromium                       | 2/24/2016       | 2.3                    | 2.3 - 2.3                | 100  | 100 | ppb   | No        | Discharge from steel and pulp mills; Erosion of natural deposits.  |
| Cyanide                        | 09/28/2017      | 20.4                   | 20.4 - 20.4              | 200  | 200 | ppb   | No        | Discharge from plastic and fertilizer factories; Discharge from steel/metal factories.                           |
| Fluoride                       | 09/28/2017      | 0.864                  | 0.864 - 0.864            | 4    | 4.0 | ppm   | No        | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum. |
| Nitrate (measured as Nitrogen) | 2017            | 0.592                  | 0.592 - 0.592            | 10   | 10  | ppm   | No        | Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.                     |

### Regulated Contaminants Detected

| Radioactive Contaminants | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination          |
|--------------------------|-----------------|------------------------|--------------------------|------|-----|-------|-----------|---|
| Beta/Photon emitters     | 2/24/2016       | 4.6                    | 4.6 - 4.6                | 0    | 50  | pCi/L | No        | Decay of natural and man-made deposits. |
| Combined Radium 226/228  | 2/24/2016       | 1.5                    | 1.5 - 1.5                | 0    | 5   | pCi/L | No        | Erosion of natural deposits.            |

\*EPA considers 50pCi/L to be the level of concern for beta particles.

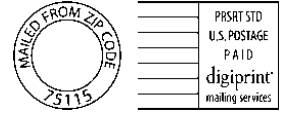
### Regulated Contaminants Detected

| Synthetic organic contaminants including pesticides and herbicides | Collection Date | Highest Level Detected | Range of Levels Detected | MCLG | MCL | Units | Violation | Likely Source of Contamination           |
|--|-----------------|------------------------|--------------------------|------|-----|-------|-----------|--|
| Atrazine   | 2017            | 0.1                    | 0.1 - 0.1                | 3    | 3   | ppb   | No        | Runoff from herbicide used on row crops. |

## Maximum Residual Disinfectant Level

| Year | Disinfectant                | Average Level | Minimum Level | Maximum Level | MRDL | MRDLG | Unit of Measure | Violation | Likely Source of Contaminant              |
|------|-----------------------------|---------------|---------------|---------------|------|-------|-----------------|-----------|---|
| 2017 | Chloramines & Free Chlorine | 1.825         | 0.50          | 4.00          | 4    | 4     | ppm             | No        | Chlorine Gas and Liquid Ammonium Sulfate. |

City of Red Oak  
 Department of Public Works  
 411 West Red Oak Road  
 Red Oak, TX 75154



The City of Red Oak is preparing for the long hot summer months ahead. At this stage, conservation of water use is very important, especially when watering lawns.

# Top Ten Ways to Save Water in Summer

*50-70% of the water used in the summer is outdoors. Here are 10 simple ways to use less.*

1. **Check your automatic sprinkler system** — According to a recent study by the American Water Works Association, homes with automatic sprinkler systems use 37% more water than those who do not. Homeowners who use an automatic timer on their systems use 47% more water than those that do not. Be sure to check your systems for leaks and misdirected or broken sprinkler heads. If you have a timer, only use it when you will be out of town.
2. **Water your lawn only when needed** — Many people make the mistake of watering their lawn or landscape just because it is hot outside. Plants can be stressed by heat, but they may not need water. Check the soil an inch or so below the surface, if it is dry. If you walk across your grass and leave footprints, your lawn needs water.
3. **Use mulch in your landscape** — Two to four inches of mulch under trees, shrubs and the garden shades the soil, reduces evaporation and prevents weeds.
4. **Use less water for a healthier lawn** — Turf grass needs one inch of water every 5 to 10 days. Watering every other day wastes water and encourages a shallow root system which makes lawns more Susceptible to pests, freezing and drought.
5. **Water with efficient sprinklers** — Sprinklers that throw big drops of water close to the ground deliver more water where you need it. Avoid using sprinklers that mist or throw small drops of water high in the air.
6. **Don't water too much at once** — Depending on your soil and landscape, you may not be able to apply all the water you need at one time. Water that runs off to the sidewalk or street is wasted. Give your soil a chance to absorb the water, move the sprinkler to a new location and come back after the water has soaked in, about 30 minutes or more.
7. **Use native and adapted plants** — There are many beautiful plants that flourish in North Texas with very little water or care. Grow plants that belong in this area instead of varieties that are not well suited for this region.
8. **Aerate your lawn** — When soil becomes compacted, it is difficult for water to get into the roots of your grass. Use a device that removes a plug of soil instead of just poking a hole in the ground, which will compact it even more.
9. **Use a sprayer with a shut off valve on your hose** — Don't let the water run when you're not using it. Use the water you need, but don't waste it.
10. **Learn about water-wise landscaping** — Go to [www.savedallaswater.com](http://www.savedallaswater.com) or [www.texassmartscape.com](http://www.texassmartscape.com) to learn more about saving water on your landscape. Dallas Water Utilities offers free classes on water-wise gardening in the spring and fall.