

This annual Drinking Water Report, also known as the Consumer Confidence Report, is from your water supplier, *Upper Leon River Municipal Water District*. It provides detailed information about your drinking water so that you can be informed and have confidence in the product we deliver. The Water District employees take pride in producing and delivering water to your tap that meets or exceeds federal and state standards. The information being provided in this report is for the appropriate reporting year as required by federal and state guidelines. Additional information may be obtained by contacting the Water District's General Office, located adjacent to Lake Proctor Dam, from 8:00 a.m. to 4:30 p.m. Monday thru Friday. The phone number is (254) 879-2258.





Upper Leon River Municipal Water District Water Department 2250 Highway 2861 Comanche, Texas 76442 PRESORTED FIRST CLASS POSTAGE PERMIT NO. 500

Upper Leon River MWD Customers **DEFINITIONS & ABBREVIATIONS:** The tables in this report contain scientific terms and measures, some of which may require the following explanations.

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 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.

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

NTU - Nephelometric Turbidity Units. This is the unit used to measure water turbidity.

na: - not applicable

MFL - million fibers per liter (a measure of asbestos) Mrem/year - millirems per year (a measure of radiation absorbed by the body)

pCi/L - Picocuries per liter (a measurement for radioactivity) ppm - Parts per million or milligrams per liter (mg/l) - or one ounce in 7,350 gallons of water

**ppb** - Parts per billion or micrograms per liter ( $\mu$ g/l) - or one ounce in 7,350,000 gallons of water

**ppt** - parts per trillion, or nanograms per liter (ng/L)**ppq** - parts per quadrillion, or picograms per liter (pg/L)

**Turbidity** - a measurement of the cloudiness of water. A good indicator of effectiveness of a filtration system.

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.

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.

## Secondary Contaminants....

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 EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

# PUBLIC PARTICIPATION OPPORTUNITIES

There will be a review of this Consumer Confidence Report by the Upper Leon River MWD Board of Directors in open meeting to be held at the following times.... DATE: June 23nd and July 28th, 2014; TIME: 6:30 PM; LOCATION: General Office, 2250 Highway 2861, Comanche (by Lake Proctor Dam) For more information, PHONE NO: (254)-879-2258.

## ADDITIONAL INFORMATION AVAILABLE FROM YOUR LOCAL SUPPLIER

There are many opportunities available to learn more about water quality, water treatment, and the Upper Leon River MWD. For questions or concerns about water quality, to request a speaker for a group, or to book a tour of the facility, call the Proctor Water Treatment Plant @ (254) 879-2258 and speak with Gary Lacy or Carroll Abbey, or visit the website www.ulrmwd.com.

Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (619)813-4432

**TASTE & ODOR** (**T & O**)... Water quality is often judged by its aesthetic qualities, specifically its taste and odor or color Regardless of the source, water can be very safe to drink and still have an unpleasant taste and odor. Contaminants may be found in drinking water that may cause taste, odor, or color problems. These types of problems are not necessarily causes for health concerns. Taste and odor are aesthetic qualities and microscopic organisms such as algae, that can create these taste and/or odor problems, are typically more abundant during the hot summer months. However, episode events may occur such as a change in temperature, or excessive rainfall and flooding, or any number of other reasons that may cause noticeable changes. Additionally, distribution systems conveying the water to a service, or the localized plumbing including hot water heaters, may also cause T & O concerns. Whatever the cause of unpleasant tastes and odors, be assured that the water treatment plant and distribution system operators and technicians, at Upper Leon River Municipal Water District, continually study the best ways to treat our water, and minimize the impact of taste and odor episodes, and to provide a safe reliable supply to your tap. For more information on taste, odor, or color of drinking water, please contact the Water Treatment Plant at (254) 879-2228.

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 Safe Drinking Water Hotline at (800) 426-4791.

Where do we get our drinking water? Upper Leon River MWD customers receive treated water supplied from Proctor Lake in Comanche County, which is classified as a surface water supply. This water receives full treatment at the District's Proctor Treatment Plant, as prescribed by federal and state regulatory agencies. The entire process is monitored continually for compliance and quality control by certified and experienced operators who are always willing to answer questions.

The TCEQ completed an assessment of your source water and results indicate that some of vour 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 Gary Lacy or Carroll Abbey. You may also refer to the Source Water Assessment Viewer available at the following URL: http://gis3.tceq.state.tx.us/swav/Controller/ index.jsp?wtrsrc=. Further details about sources and source-water assessments are available in Drinking Water Watch at the following URL: http://dww.tceq.texas.gov/DWW.

**Our Drinking Water Meets or Exceeds EPA Drinking Water Requirements** This report is intended to provide you with important information about your drinking water and the efforts made by the water system to provide safe drinking water. 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. We hope this information helps you become more knowledgeable about what's in your drinking water.

### ALL drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices.

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:

•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.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. In order to ensure that tap water is safe to drink, the EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. 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.

| Disinfectants and Disinfection<br>By-Products | Collection<br>Date | Highest<br>Level De-<br>tected | Range of<br>Levels De-<br>tected | MCLG                  | MCL | Units | Violation | Likely Source of Contamination                  |
|---|--------------------|--------------------------------|----------------------------------|-----------------------|-----|-------|-----------|---|
| Haloacetic Acids (HAA5)*                      | 2013               | 32                             | 24.7 - 38.6                      | No goal for the total | 60  | ppb   | N         | By-product of drinking water disinfec-<br>tion. |
| Total Trihalomethanes (TTHM)                  | 2013               | 45                             | 0 - 46.4                         | No goal for the total | 80  | ppb   | N         | By-product of drinking water disinfec-<br>tion. |

| Inorganic Contaminants         | Collection<br>Date | Highest<br>Level De-<br>tected | Range of<br>Levels De-<br>tected | MCLG | MCL | Units | Violation | Likely Source of Contamination  |
|--------------------------------|--------------------|--------------------------------|----------------------------------|------|-----|-------|-----------|---|
| Arsenic                        | 2013               | 3                              | 2.84 - 2.84                      | 0    | 10  | ppb   | N         | Erosion of natural deposits; Runoff from<br>orchards; Runoff from glass and elec-<br>tronics production wastes.                     |
| Barium                         | 2013               | 0.0804                         | 0.0804 -<br>0.0804               | 2    | 2   | ppm   | N         | Discharge of drilling wastes; Discharge<br>from metal refineries; Erosion of natura<br>deposits.                                    |
| Chromium                       | 2013               | 0.64                           | 0.64 - 0.64                      | 100  | 100 | ppb   | Ν         | Discharge from steel and pulp mills;<br>Erosion of natural deposits.  |
| Fluoride                       | 2013               | 0.1                            | 0.14 - 0.14                      | 4    | 4   | ppm   | N         | Erosion of natural deposits; Water<br>additive which promotes strong teeth;<br>Discharge from fertilizer and aluminum<br>factories. |
| Nitrate [measured as Nitrogen] | 2013               | 0.05                           | 0.0229 -<br>0.05                 | 10   | 10  | ppm   | N         | Runoff from fertilizer use; Leaching<br>from septic tanks, sewage; Erosion of<br>natural deposits.                                  |
| Selenium                       | 2013               | 10                             | 7.84 - 7.84                      | 50   | 50  | ppb   | N         | Discharge from petroleum and metal<br>refineries; Erosion of natural deposits;<br>Discharge from mines.                             |

| Radioactive Contaminants | Collection<br>Date | Highest<br>Level De-<br>tected | Range of<br>Levels De-<br>tected | MCLG | MCL | Units  | Violation | Likely Source of Contamination               |
|--------------------------|--------------------|--------------------------------|----------------------------------|------|-----|--------|-----------|--|
| Beta/photon emitters     | 6/19/2012          | 6.8                            | 6.8 - 6.8                        | 0    | 50  | pCi/L* | Ν         | Decay of natural and man-made depos-<br>its. |
| Combined Radium 226/228  | 6/19/2012          | 1                              | 1-Jan                            | 0    | 5   | pCi/L  | Ν         | Erosion of natural deposits.                 |

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

| Synthetic organic contaminants<br>including pesticides and herbi-<br>cides | Collection<br>Date | Highest<br>Level De-<br>tected | Range of<br>Levels De-<br>tected | MCLG | MCL | Units | Violation | Likely Source of Contamination                   |
|--|--------------------|--------------------------------|----------------------------------|------|-----|-------|-----------|--|
| Atrazine   | 2013               | 0.082                          | 0 - 0.082                        | 3    | 3   | ppb   | Ν         | Runoff from herbicide used on row<br>crops.      |
| Di (2-ethylhexyl) phthalate  | 2013               | 1                              | 0 - 0.58                         | 0    | 6   | ppb   | Ν         | Discharge from rubber and chemical<br>factories. |

#### Lead and Copper

| Lead and<br>Copper | Date Sam-<br>pled | MCLG | Action Level<br>(AL) | 90th Percen-<br>tile | # Sites Over<br>AL | Units | Violation | Likely Source of Contamination   |
|--------------------|-------------------|------|----------------------|----------------------|--------------------|-------|-----------|--|
| Copper             | 2012              | 1.3  | 1.3                  | 0.0695               | 0                  | ppm   | N         | Erosion of natural deposits; Leaching from wood preserv-<br>atives; Corrosion of household plumbing systems. |
| Lead               | 2012              | 0    | 15                   | 3.21                 | 0                  | ppb   | N         | Corrosion of household plumbing systems; Erosion of<br>natural deposits.                                     |

See list of 'Definitions & Abbreviations' for further explanations

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. We are responsible for providing high quality drinking water but Upper Leon River MWD 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 <u>http://www.epa.gov/safewater/lead</u>.

#### Turbidity

|                                | Limit (Treatment Technique) | Level Detected | Violation | Likely Source of Contamination |
|--------------------------------|-----------------------------|----------------|-----------|--------------------------------|
| Highest single measurement     | 1 NTU                       | 0.41 NTU       | Ν         | Soil runoff.                   |
| Lowest monthly % meeting limit | 0.3 NTU                     | 97.85%         | Ν         | Soil runoff.                   |

Information Statement: Turbidity is a measurement of the cloudiness of the water caused by suspended particles.

We monitor it because it is a good indicator of water quality and the effectiveness of our filtration

### Disinfectant

|            | Year | Avg<br>Level | Min<br>Level | Max<br>Level | MRDL | MRDLG | Unit of<br>Measure | Source of Chemical                    |
|------------|------|--------------|--------------|--------------|------|-------|--------------------|---------------------------------------|
| Chloramine | 2013 | 3.6          | 1.1          | 6.4          | 4    | <4.0  | ppm                | Disinfectant used to control microbes |

| <b>Total Coliform Bacteria</b> | REPORTED MONTHLY | TESTS FOUND NO TOTAL COLIFORM BACTERIA |  |
|--------------------------------|------------------|--|--|
| Fecal Coliform                 | REPORTED MONTHLY | TESTS FOUND NO FECAL COLIFORM BACTERIA |  |

### Total Organic Carbon

Removal Ratio

2013

Total organic carbon (TOC) has no health effects. Disinfectants can combine with TOC to form byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include THMs and HAA5s which are reported elsewhere in this report Minimum Maximum Unit of Average Year Contaminant Source at Contaminant Level Level Level Measure 2013 Source Water 8.55 7.69 10.30 Naturally present in the environment. ppm Drinking Water 5.88 7.42 2013 6.83 Naturally present in the environment. ppm

% removal\*

Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

#### Unregulated Contaminant Monitoring Regulations (UCMR) Reporting

1.10

0.36

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

NA

### **Unregulated Contaminants**

0.55

Bromoform, chloroform, dibromochloromethane, bromodichloromethane are disinfection byproducts. There is no maximum contaminant level for these chemicals at the entry point to distribution. Limits in Distribution System are shown below.

| Point of Entry   | Date Collected                        | Level<br>Detected                         | MCLG                                     | Unit of Measure                            |  | Source of Contaminant  |
|--|---------------------------------------|---|--|--|--|--|
| Chloroform   | 08/20/2013                            | 3.11                                      | NA                                       | ppb; parts p                               | per billion                                | Byproduct of drinking water disinfection   |
| Bromoform  | 08/20/2013                            | 8.79                                      | NA                                       | ppb; parts p                               | per billion                                | Byproduct of drinking water disinfection   |
| Bromodichloromethane   | 08/20/2013                            | 7.95                                      | NA                                       | ppb; parts p                               | per billion                                | Byproduct of drinking water disinfection   |
| Dibromochloromethane   | 08/20/2013                            | 9.95                                      | NA                                       | ppb; parts per billion                     |  | Byproduct of drinking water disinfection   |
|  |                                       |   |  |  |  |  |
| Distribution System  | Year of Range                         | Average<br>Level                          | Minimum<br>Level                         | Maximum<br>Level                           | Unit of<br>Measure                         | Source of Contaminant  |
| Distribution System<br>Chloroform                                      | Year of Range<br>2013                 | Average<br>Level<br>3.08                  | Minimum<br>Level<br>2.54                 | Maximum<br>Level<br>3.60                   | Unit of<br>Measure<br>ug/L                 | Source of Contaminant Byproduct of drinking water disinfection   |
| Distribution System<br>Chloroform<br>Bromoform                         | Year of Range<br>2013<br>2013         | Average<br>Level<br>3.08<br>13.95         | Minimum<br>Level<br>2.54<br>10.8         | Maximum<br>Level<br>3.60<br>18.30          | Unit of<br>Measure<br>ug/L<br>ug/L         | Source of Contaminant Byproduct of drinking water disinfection Byproduct of drinking water disinfection  |
| Distribution System<br>Chloroform<br>Bromoform<br>Bromodichloromethane | Year of Range<br>2013<br>2013<br>2013 | Average<br>Level<br>3.08<br>13.95<br>9.23 | Minimum<br>Level<br>2.54<br>10.8<br>8.70 | Maximum<br>Level<br>3.60<br>18.30<br>10.50 | Unit of<br>Measure<br>ug/L<br>ug/L<br>ug/L | Source of Contaminant Byproduct of drinking water disinfection Byproduct of drinking water disinfection Byproduct of drinking water disinfection |

In the Texas Water Development Board Utility Profile for Upper Leon River Municipal Water District, WATER LOSS for the periods from 2007 thru 2011 averaged an estimated 35,931,300 gallons per year. Water Loss information will be provided customers as new Water Loss Audits are conducted and the information made available. You will receive this information on the next water bill after the audit is completed, or the next annual Consumer Confidence Report, whichever comes first. This is 25.94 % expressed as a percentage. If you have questions about water loss please contact Upper Leon River Municipal Water District at 254-879-2258.

#### Secondary and Other Constituents Not Regulated

(No associated adverse health effects)

| Contaminant                                   | Year of<br>Range | Average<br>Level | Minimum<br>Level | Maximum<br>Level | Secondary<br>Limit | Unit of<br>Measure | Source of Contaminant  |
|---|------------------|------------------|------------------|------------------|--------------------|--------------------|--|
| Total Alkalinity<br>as CaCO3                  | 03/06/13         | 99               | 99               | 99               | NA                 | ppm                | Naturally occurring soluble mineral salts  |
| Alkalinity, Bicar-<br>bonate                  | 03/06/13         | 99               | 99               | 99               | NA                 | ppm                | Naturally occurring soluble mineral salts  |
| Aluminum Total                                | 08/20/2013       | 29.8             | 29.8             | 29.8             | 0.05-0.2           | ppm                | Naturally occurring in the environment. Aluminum salts are used as coagulants to purify water.   |
| Chloride                                      | 03/06/13         | 86.3             | 86.3             | 86.3             | 300                | ppm                | Abundant naturally occurring element; used in<br>water purification; byproduct of oil field activity   |
| Fluoride                                      | 03/06/13         | 0.14             | 0.14             | 0.14             | 2.0                | ppm                | Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories.   |
| Iron Total                                    | 08/20/2013       | <0.0200          | <0.0200          | <0.0200          | 0.3                | ppm                | The primary sources of iron in drinking water<br>are from natural geologic sources and corrod-<br>ing distribution systems and household pipes.  |
| Nitrogen, Ni-<br>trate (As N)                 | 03/06/13         | 0.05             | 0.05             | 0.05             | 10                 | ppm                | Runoff from fertilizer use; Leaching from sep-<br>tic tanks, sewage; Erosion of natural deposits.  |
| Nitrite (as N)                                | 08/20/2013       | <0.000800        | <0.000800        | <0.000800        | 1                  | ppm                | Runoff from fertilizer use; Leaching from sep-<br>tic tanks, sewage; Erosion of natural deposits   |
| Copper (Total)                                | 08/20/2013       | 0.00173          | 0.00173          | 0.00173          | 1.3                | ppm                | Corrosion of household plumbing systems;<br>Erosion of natural deposits.   |
| Mercury Total                                 | 08/20/2013       | <0.000700        | <0.000700        | <0.000700        | 0.002              | ppm                | Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland.   |
| Sodium  | 03/06/13         | 44.0             | 44.0             | 44.0             | NA                 | ppm                | Erosion of natural deposits; byproducts of oil<br>field activity   |
| Sulfate                                       | 03/06/13         | 61.4             | 61.4             | 61.4             | 300                | ppm                | Naturally occurring; common industrial by-<br>product; byproduct of oil field industry   |
| Total Dissolved<br>Solids                     | 03/06/13         | 365              | 365              | 365              | 1000               | ppm                | Total dissolved mineral constituents in water  |
| Specific Conduct-<br>ance @ 25 <sup>°</sup> C | 03/06/13         | 544              | 544              | 544              | NA                 | µmhos/<br>cm       | Specific conductance (SC) is a measure of electrical<br>conductance (µmhos/cm) that estimates the con-<br>centration of dissolved ions in the water, including<br>salinity, total dissolved solids, and chlorides. |



The General Office of the Upper Leon River Municipal Water District, and the Proctor Water Treatment Plant, are located adjacent to Lake Proctor Dam off of FM 2861. General Office hours are 8:00a to 4:30p, Monday thru Friday and the phone number is (254) 879-2258 or (254) 879-2259. Visit our website @ http://www.ulrmwd.com