



# 2017 Drinking Water Quality Report

Annual Water Quality Report for the period of January 1 to December 31, 2017

Phone Number: 972-230-5724

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.

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

This report is a summary of the quality of the water provided to 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 to become more knowledgeable about what's in your drinking water.



## All Drinking Water May Contain Contaminants

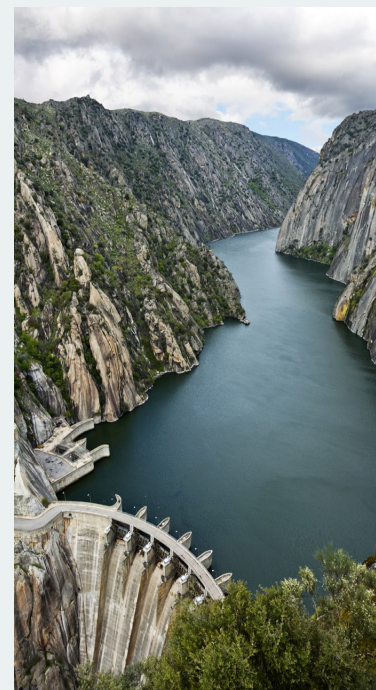
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and in some cases, radioactive materials, and can pick up substances resulting 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. In order 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. The Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

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); and radioactive contaminants (which can be naturally-occurring or be the result of oil and gas production and mining activities). 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 Allan McDonald at 972-230-5725.

More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at: **1-800-426-4791**

## Where Does Our Drinking Water Come From?

DeSoto's drinking water is purchased from the City of Dallas, which obtains its water from the following seven sources: Lake Ray Roberts, Lake Lewisville, Lake Grapevine, Lake Ray Hubbard, Lake Tawakoni, Lake Fork, and the Elm Fork of the Trinity River. Regular monthly tests are conducted on Dallas' water to ensure that it is clean and meets all water quality requirements.



## Information About 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 concern. Therefore, secondaries are not required to be reported in this document but may greatly affect the appearance and taste of your water.

## Information About Source Water Assessments

The TCEQ has completed a Source Water Assessment for all drinking water systems that own their sources. This report 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 system from which we purchase our water received the assessment report. For more information on source water assessments and protection efforts at our system, please contact Allan McDonald at 972-230-5725.

## DEFINITIONS

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

**MCL:** (Maximum Contaminant Level) - The highest level of a contaminant in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**MCLG:** (Maximum Contaminant Level Goal) - The level of contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.

**Level 1 Assessment:** A Level 1 assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**Level 2 Assessment:** A Level 2 assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.

**MRDL:** (Maximum Residual Disinfectant Level) - The highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG:** (Maximum Residual Disinfectant Level Goal) - 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.

**MFL:** Millions fiber per liter (a measure of asbestos)

**Mrem:** Millirems per year (a measure of radiation absorbed by the body)

**N/A:** Not applicable

**NTU:** Nephelometric Turbidity Units

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

**Ppb:** Parts per billion, or micrograms per liter—or one ounce in 7,350,000 gallons of water

**Ppm:** Parts per million, or milligrams per liter—or one ounce in 7,350 gallons of water

**Ppt:** Parts per trillion, or nanograms per liter (ng/L)

**TT (Treatment Technique):** A required process intended to reduce the level of a contaminant in drinking water.

**Turbidity:** A measure of the clarity of drinking water. The lower the turbidity, the better.

## UNREGULATED CONTAMINANTS

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. Any unregulated contaminants detected are reported in the following table.

CONTAMINANT	YEAR OF RANGE	AVG	MIN	MAX	MCL	MCLG	Measure Unit	Source of Contaminants
Chloroform	2017	11.64	2.04	27.9	N/A	70	ppb	Byproduct of drinking water disinfection
Bromodichloromethane	2017	4.86	3.25	6.70	N/A	0	ppb	Byproduct of drinking water disinfection
Dibromochloromethane	2017	2.81	2.25	3.14	N/A	60	ppb	Byproduct of drinking water disinfection

## LEAD AND COPPER

If present, elevated levels of lead and copper 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. DeSoto 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>.

## Water Quality Data Report 2017

This report contains water data for the City of DeSoto and Dallas Water Utilities. The list includes parameters which are tested for, in accordance with Federal and State Water Quality Regulations. The frequency of testing varies depending on the parameters and are in compliance with established standards. This report lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 contaminants.

REGULATED	Collection Date	LEVEL			MCL	MCLG	Unit of Measure	Source of Contaminants
		Average	Minimum	Maximum				
<b>DALLAS</b>								
<b>Inorganic Contaminants</b>								
Fluoride	2017	0.680	0.598	0.826	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth
Nitrate (as N)	2017	0.559	0.501	0.620	10	10	ppm	Run-off from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Nitrite (as N)	2013	0.017	<0.004	0.0315	1	1	ppm	Run-off from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Cyanide	2017	<20	<20	<20	200	200	ppb	Discharge from steel/metal factories; discharge from plastic and fertilizer factories
Bromate	2017	2.3	<5	25	10	0	ppb	Byproduct of drinking water disinfection
Arsenic	2017	<1	<1	<1	10	0	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.
Barium	2017	0.024	0.011	0.031	2	2	ppm	Discharge of drilling waste; discharge from metal refineries; erosion of natural deposits
Chromium (Total)	2017	0.43	<1	1.30	100	100	ppb	Discharge from steel and pulp mills; erosion of natural deposits
<b>Radioactive Contaminants</b>								
Gross beta particle activity	2017	5.1	4.2	6.6	50	0	pCi/L ****	Decay of natural or man-made deposits.
<b>Disinfectant</b>								
Total Chlorine Residual	2017	2.18	2.03	2.56	4*	4*	Ppm	In distribution system — Water additive used to control microbes.
<b>Organic Contaminants</b>								
Atrazine	2017	0.15	0.10	0.30	3	3	ppb	Discharge from rubber and chemical factories.
<b>Disinfection By Products</b>								
Total Haloacetic Acid***	2017	19.9	<1.00	26.9	60	N/A	N/A	Byproduct of drinking water disinfection.
Total Trihalomethanes	2017	26.6	3.0	60.1	80	N/A	N/A	Byproduct of drinking water disinfection.
<b>Total Organic Carbon</b>								
Total Organic Carbon	2017	3.30	2.24	5.73	35% removal/SUVA ≤2		ppm	Naturally present in the environment.
<b>Turbidity</b>								
Turbidity	2017	0.15	Lowest monthly % of samples meeting limits 100%			Turbidity limits 0.3 (TT)	NTU	Soil runoff
Total Coliforms	2017		Highest Monthly % of Positive Samples 1.8%			5% or more of monthly samples	Found/Not Found	Naturally Present in the environment.
<b>DESOTO</b>								
<b>Total Coliforms</b>								
Total Coliforms Bacteria	2017		Total Coliform Maximum Contaminant Level 5% of monthly samples are positive			Fecal Coliform or E. Coli Maximum Contaminant Level Total # of Positive E. Coli or Fecal Coliform Samples 0	N	Naturally present in the environment
<b>Disinfectant</b>								
Total Chlorine Residual	2017	1.13	.21	2.80	4*	4*	ppm	In distribution system — water additive used to control microbes
<b>Inorganic Contaminants</b>								
Nitrate (as N)	2017	1	0.82—0.82	10	10	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (as N)	2017	0.0972	0.0563-0.0972	1	1	ppm	N	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Disinfection By Products</b>								
Haloacetic Acid (HAAS)*	2017	17	1.2—20.7	No goal for the total	60	ppb	N	Byproduct of drinking water disinfection
Total Trihalomethanes (TTHM)	2017	14	6.74—18.6	No goal for the total	80	ppb	N	Byproduct of drinking water disinfection
<b>Lead and Copper</b>								
Lead	2017	0	Action Level (AL) 15	90th Percentile** 1	* sites over AL	Violation	Unit of Measure ppb	Likely Source of Contamination Corrosion of natural deposits; leaching from wood preservatives; erosion of natural deposits
Copper	2017	1.3	1.3	0.256	0	No	ppm	Corrosion of household plumbing sys Erosion of natural deposits; leaching from wood preservatives; corrosion of household plumbing sys

\*50 percentile value in the distribution system      \*\*\*Haloacetic Acids—five species      \*\*\*\*50 pCi/L—4 mem/yr      \*\*\*\*\*Treatment technique requires 35% removal of SUVA ≤2. The percentage of Total Organic Carbon (TOC) removal was measured each month and the system met all TOC removal requirements.

**SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, PEOPLE WITH HIV/AIDS AND 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 steroid treatment, and persons with HIV/AIDS or other immune system disorders can be particularly at risk from infections. You should seek advice about drinking water from your 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**

**WATER LOSS AUDIT**

In the water loss audit submitted to the Texas Water Development Board for the time period of Jan-Dec 2017, our system lost an estimated 546,277,481 gallons of water. If you have any questions about the water loss audit please call 972-230-5725.

VIOLATIONS			
Violation Type	Violation Began	Violation End	Comments
None	N/A	N/A	

**LET'S BE WATER SMART!!**



- Less than 1% of the water treated by public water suppliers is used for drinking and cooking.
- A full bathtub requires about 70 gallons of water; a five-minute shower uses 10 to 25 gallons.
- At one drip per second, a faucet can leak as much as 3,000 gallons in a year.
- One out of every nine people worldwide does not have access to clean water.

**Public Participation Opportunities**

**Public participation opportunities are available during the Public Comment portion of the City Council meetings, held on the 1st and 3rd Tuesday of each month at 7pm. For more information about public participation, please call us at 972-274-CITY.**