City of Dallas
2017 Water Quality Report

Why you've received this report

This report is produced to provide information about the Dallas water system including source water, the levels of detected contaminants and compliance with drinking water rules. This report is also produced in order to answer your water quality questions. **Dallas Water Utilities (DWU) is a "Superior" Rated Water System, the highest rating of the Texas Commission on Environmental Quality (TCEQ). Dallas' water meets or exceeds all State and Federal requirements for water quality, and is safe to drink.** If you need more information, please call Dallas' 311 Information Line.

All drinking water may contain contaminants.

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 U.S. EPA's Safe Drinking Water Hotline (800-426-4791).

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. U.S. Food and Drug Administration, which provides the same protection for public health, prescribes regulations that establish limits for contaminants in bottled water.

Cryptosporidium

Cryptosporidium is a tiny intestinal parasite found naturally in the environment. It is spread by human and animal waste. If ingested, cryptosporidium may cause cryptosporidiosis, an intestinal infection (symptoms include nausea, diarrhea, and abdominal cramps). Some of the ways cryptosporidium can be spread include drinking contaminated water, eating contaminated food that is raw or undercooked, exposure to the feces of animals or infected individuals (i.e. changing diapers without washing hands afterward), or exposure to contaminated surfaces. Not everyone exposed to the organism becomes ill.

During 2017, Dallas continued testing for cryptosporidium in untreated water. Dallas Water Utilities began monitoring for cryptosporidium in 1993. It has been found only in the untreated water supply. Cryptosporidium has not been found in Dallas treated drinking water. To protect your drinking water,

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 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.

Dallas works to protect the watershed from contamination and optimizes treatment processes. Although Dallas' water treatment process removes cryptosporidium, immunocompromised persons should consult their doctors regarding appropriate precautions to take to avoid infection. To request more information on cryptosporidium, please call the U.S. EPA's Safe Drinking Water Hotline (800-426-4791) or visit http://water.epa.gov/drink/hotline/index.cfm.

Lead and Copper

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. Dallas Water Utilities is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. 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 800-426-4791 or at http://www.epa.gov/safewater/lead.

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.

Where your water comes from

Dallas uses surface water from seven sources: the Elm Fork of the Trinity River and lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard, Tawakoni and Fork.

LEGEND
- DWU Water Sources
- Future Water Sources
- Other Reservoirs
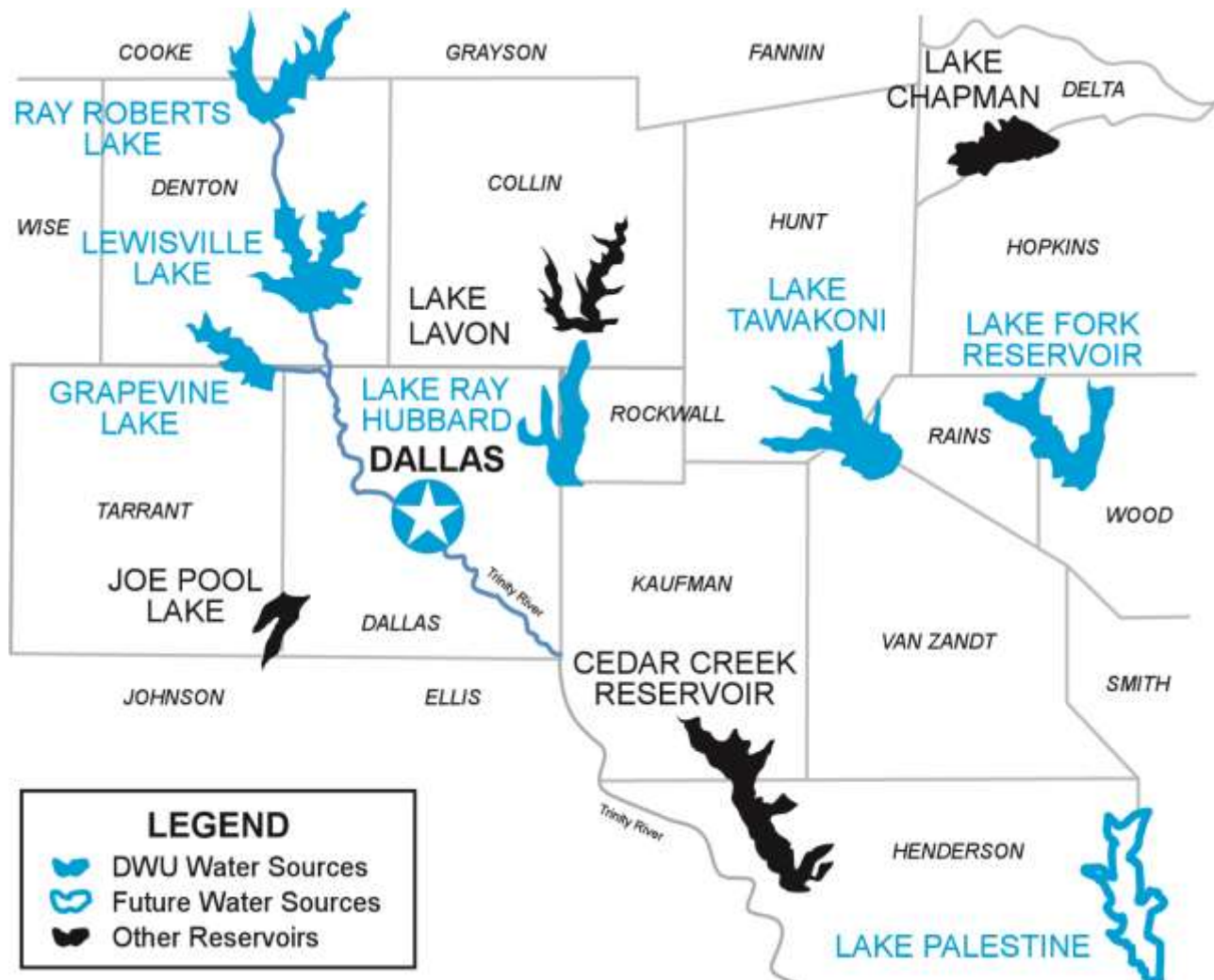
Source Water Assessment and Protection

TCEQ completed an assessment of Dallas' source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for Dallas' 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 call Dallas' 311 Information Line.

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 might have 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 the result of oil and gas production and mining activities.

Treatment Process
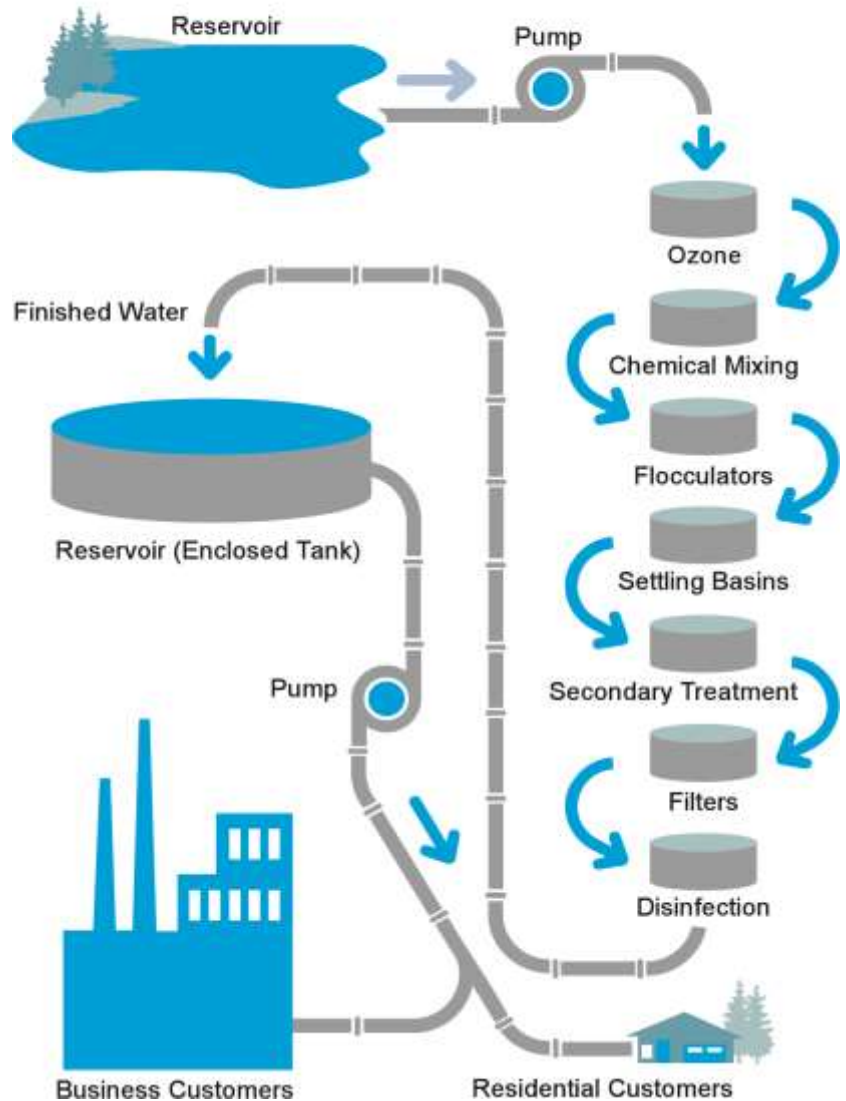
Contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily cause for health concerns. For more information on taste, odor or color of drinking water, please contact City of Dallas, Water Utilities Department at (214) 670-0915.

Water Loss

In the water loss audit submitted to the Texas Water Development Board for the time period of October 1, 2016 to September 30, 2017, Dallas' system lost an estimated 6.62% of the system input volume. If you have any questions about the water loss audit, please call Dallas' 311 Information Line.

Water Quality Data Report 2017

This is a summary of water quality data for Dallas Water Utilities. The list includes parameters which DWU currently tests 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. Dallas Water Utilities is a "Superior" Rated Water System by Texas Commission on Environmental Quality. All three water treatment plants are optimized and certified by meeting the Texas Optimization Program and Partnership for Safe Drinking Water criteria. Dallas water exceeds Federal and State water quality parameters.

CONTAMINANT	YEAR OF RANGE	LEVEL			MCL	MCLG	Unit of Measure	Source of Contaminants
		Average	Minimum	Maximum				
Inorganic Contaminants								
Fluoride	2017	0.680	0.598	0.826	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
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	By-product 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 wastes; 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.
Radioactive Contaminants								
Gross beta particle activity	2017	5.1	4.2	6.6	50	0	pCi/L****	Decay of natural or man-made deposits.
Organic Contaminants								
Atrazine	2017	0.15	0.10	0.30	3	3	ppb	Runoff from herbicide on row crops.
Disinfection By Products		Highest LRAA						
Total Haloacetic Acid*	2017	19.9	<1.00	26.9	60	N/A	ppb	Byproduct of drinking water disinfection.
Total Trihalomethanes	2017	26.6	3.0	60.1	80	N/A	ppb	Byproduct of drinking water disinfection.
Total Organic Carbon					TT (no MCL) *****			
Total Organic Carbon	2017	3.30	2.24	5.73	35% removal/SUVA ≤2		ppm	Naturally present in the environment.
Disinfectant			Minimum	Maximum	MRDL	MRDLG	Unit of Measure	
Total Chlorine Residual	2017	2.18	2.03	2.56	4*	4*	ppm	In distribution system - Water additive used to control microbes
Lead and Copper		90 th Percentile**	# of sites exceeding action level				Unit of measure	
Lead	2015	1.1	0		AL=15	0	ppb	Corrosion of household plumbing systems; erosion of natural deposits.
Copper	2015	0.400	0		AL=1.3	1.3	ppm	Corrosion of household plumbing systems; erosion of natural deposits.
Turbidity		Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits		Turbidity Limits		Unit of Measure	
Turbidity	2017	0.15	100%		0.3 (TT)		NTU	Soil runoff.
Total Coliforms		Highest Monthly % of Positive Samples					Unit of Measure	
Total Coliforms Bacteria	2017	1.8%			5 % or more of monthly samples		Found/Not Found	Naturally present in the environment.

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

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. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

CONTAMINANT	YEAR OF RANGE	LEVEL			MCL	MCLG	Unit of Measure	Source of Contaminants
		Average	Minimum	Maximum				
Chloroform	2017	11.64	2.01	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.

Definitions

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

Level 1 Assessment is a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria were found.

Level 2 Assessment is a very detailed study of the water system to identify potential problems and determine (if possible) why an *Escherichia coli (E. coli)* maximum contaminant level (MCL) violation has occurred and/or why total coliform bacteria were found on multiple occasions.

LRAA: Locational Running Annual Average is the average of sample analytical results for samples taken at a particular monitoring location during the previous four calendar quarters.

MCL: Maximum Contaminant Level is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

MCLG: Maximum Contaminant Level Goal is 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.

mrem/year: millirems per year is a measure of radiation absorbed by the body.

MRDLG: Maximum Residual Disinfectant Level Goal is 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.

MRDL: Maximum Residual Disinfectant Level is 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.

NTU: Nephelometric Turbidity Units is a measure of turbidity.

pCi/L: picocuries per liter is a measure of radioactivity.

ppb: parts per billion, or micrograms per liter (ug/L)

ppm: parts per million, or milligrams per liter (mg/L)

TT: Treatment Technique is 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.

Your participation is welcome

Dallas Water Utilities is a not-for-profit department of the City of Dallas and is governed by the Dallas City Council. The City Council meets weekly on Wednesdays. For information about meetings and how to register as a speaker, contact the City Secretary's office at 214-670-3738.

U.S. EPA Safe Drinking Water Hotline
800-426-4791 or visit
http://water.epa.gov/drink/hotline/index.cfm

Other helpful phone numbers:

Questions or concerns about water quality:
Dallas' 311 Information Line

Questions about your bill: 214-651-1441

Water conservation information: 214-670-3155

Water Quality Reports from previous years may be found here.