

City of Dallas 2014 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 (1-800-426-4791).

In order to ensure that tap water is safe to drink, U.S. EPA prescribes regulations which 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 which 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 2014, Dallas continued testing for cryptosporidium in both untreated and treated water. Dallas Water Utilities began monitoring for cryptosporidium in 1993. It has been found only in the untreated water supply. Cryptosporidi-

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 1-800-426-4791.

um has not been found in Dallas treated drinking water. To protect your drinking water, 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 (1-800-426-4791).

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 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

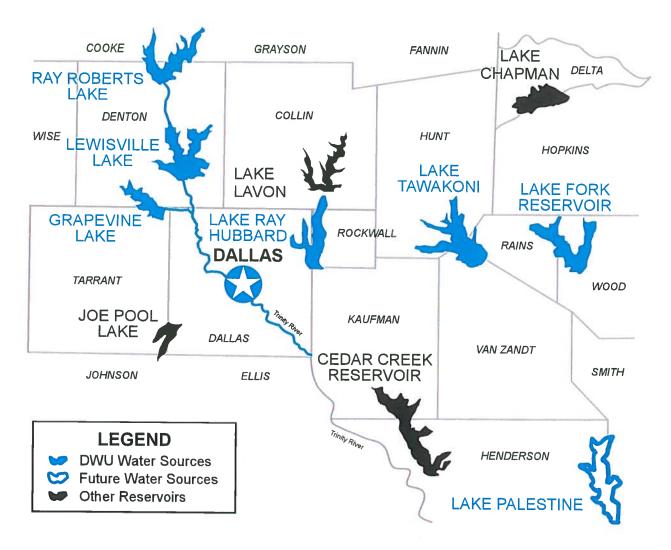
exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at http://www.epa.gov/safewater/lead.

Chlorine

Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

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.



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.

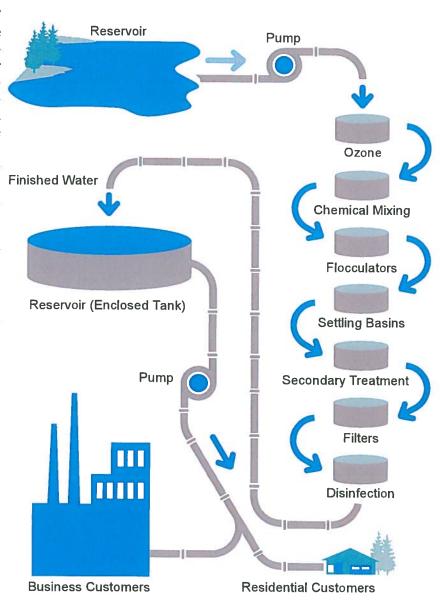
The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick 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.

Contaminants may be found in drinking water that may cause taste, color or odor problems. These type of problems

Treatment Process



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, 2013 to September 30, 2014, Dallas' system lost an estimated 7.37% of the system input volume. If you have any questions about the water loss audit, please call Dallas' 311 InformationLine.

Water Quality Data Report 2014

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. parameters.

	YEAR OF			1		 -		
CONTAMINANT	RANGE	LEVEL Average Minimum Maximum			MCL	MCLG	Unit of Measure	Source of Contaminants
Inorganic Contaminants								Cource of Contaminants
Fluoride	2014	0.51	0.4	0.64	4	4	ppm	Erosion of natural deposits water additive which promotes strong teeth.
Nitrate (as N)	2014	0.89	0.42	1 62	10	10	ppm	Run-off from fertilizer use; leaching from septic tanks, sewage, erosion of natural deposits.
Cyanide	2014	0.0870	0.0503	0.1530	0.2	0.02	ppm	Discharge from steel/metal factories, discharge from plastic and fertilizer factories
Bromate	2014	<1.0	<0.003	<1.0	10	0	ppb	By-product of drinking water disinfection
Arsenic	2014	1.20	0.98	1.51	10	0	ppb	Erosion of natural deposits, runoff from orchards, runoff from glass and electronics production wastes.
Barlum	2014	27.0	16.0	39.9	2000	2000	dqq	Discharge of drilling waste; discharge from metal refineries, erosion of natural deposits.
Chromium (Total)	2014	2.587	1,600	3.760	100	100	ppb	Discharge from steel and pulp milis; Erosion of natural deposits.
Selenium	2014	2.77	2.00	3.81	50	50	ppb	Discharge from petroleum and metal refineries, erosion of natural deposits, discharge from mines.
Radioactive Contaminants	T		1			_		
Combined Radium (226 & 228)	2011	1.0	1.0	1.0	5		pCi/L****	Erosion of natual deposits.
Gross beta particle activity	2011	5.3	4	7.2	50	0	pCi/L****	
	2011	0.0		7.2	30	0	рсис	Decay of natural or man-made deposits
Organic Contaminants								
Atrazine	2014	0.14	<0.08	0.25	3	3	ppb	Runoff from herbicide on row crops
Simazine	2014	0.16	0.08	0.24	4	4	ppb	Herbicide runoff
Di(2-Ethylhexyl)phthalate	2014	0.17	<0.5	0.5	6	0	ppb	Discharge from rubber and chemical factories.
Disinfection By Products	1							
Total Haloacetic Acid***	2014	11.5	<1.0	23.8	60	N/A		
Total Trihalomethanes	2014	15.1	35	35.0	80	N/A	ppb	Byproduct of drinking water disinfection
	2014	10.1	- 55	33.0		IVA	ppb	Byproduct of drinking water disinfection.
Total Organic Carbon					Treated Water Alkatinity			
Total Organic Carbon	2014	4.42	3.65	4.96	< 60 mg/L as CaCO3		ppm	Naturally present in the environment.
Disinfectant	T	Γ	Minimum	Maximum	MRDL	MRDLG	Unit of Measure	
Total Chlorine Residual	2014	4.04	2.73	5.12	4*	4.	ppm	In distribution system - Water additive used to control microbes
Land and Conner								IN DESIGNATION OF THE ORDER OF THE ORDER
Lead and Copper	2042	90 th Percentile**		of sites exceeding action level		Level	Unit of measure	
Copper	2012	0.00135	0		0.015		ppm	Corrosion of household plumbing systems, erosion of natural deposits.
and the same of th	2012	U 04	<u>'</u>			J	ppm	Солозіол of household plumbing systems, erosion of natural deposits.
Turbidity		Highest Single Messurement	Lowest Monthly % of Samples Meeting Limits		Turbidity Limits		Unit of Measure	
Turbidity	2014	0.17	100%		03		NTU	Soil Runoff
Total Coliforms		Highest Monthly % of Positive Samples					Unit of Measure	
Total Coliforms Bacteria	2014	, agrees matte	4.7%		5 % or more of monthly samples		Found/Not Found	Naturally present in the environment.

^{*} as annual average
** 90 percentile value in the distribution system

^{***} Haloacetic Acids - five species
**** 50 pCi/L - 4 mrem/yr

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	OF LEVEL						
	RANGE	Average	Minimum	Maximum	MCL	MCLG	Unit of Measure	Source of Contaminants
Chloroform	2014	3.30	3.22	3.38	N/A	70	ppb	Byproduct of drinking water disinfection.
Bromodichloromethane	2014	2.91	2.37	3.59	N/A	0	ppb	Byproduct of drinking water disinfection.
Dibromochloromethane	2014	1.85	1.63	2 24	N/A	60		Byproduct of drinking water disinfection.
Bromoform	2014	0.35	<1.00	0 35	N/A	0	ppb	Byproduct of drinking water disinfection.
Chloromethane	2014	0.50	<0.500	0 770	N/A	N/A		Used as foaming agent, in production of other substances, byproduct of water disinfection.

Unregulated Contaminants Monitoring Rule 3 (UCMR 3)

The UCMR program was developed in coordination with the Contaminant Candidate List (CCL). The CCL is a list of contaminants that are not regulated by the National Primary Drinking Water Regulations, are known or anticipated to occur at public water systems and may warrant regulation under the Safe Drinking Water Act. Data collected through UCMR are stored in the National Contaminant Occurrence Database (NCOD) to support analysis and review of contaminant occurrence, to guide the CCL selection process and to support the Administrator's determination of whether to regulate a contaminant in the Interest of protecting public health. For additional information visit http://www.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr/3/index.cfm.

CONTAMINANT	YEAR OF	LEVEL						
	RANGE	Average	Minimum	Maximum	MCL	MCLG	Unit of Measure	Source of Contaminants
Chromium Total	2014	0 322	0.121	0 475	100	100	ppb	Discharge from steel and pulp mills. Erosion of natural deposits.
Molybdenum	2014	1.70	0.25	2.76			ppb	Naturally-occurring element and is commonly used as molybdenum trioxide as a chemical reagent.
Strontium	2014	114	248	366			nnh	Naturally-occurring element used as strontium carbonate in pyrotechnics, in steel production, as a catalyst and as a lead scavenger.
Vanadium	2014	0.044	<0.2	0.299			ppb	Naturally-occurring element commonly used as vanadium pentoxide in the production of other substances and as a catalyst.
Chromlum-6	2014	0,103	0.144	0.402			ppb	Naturally-occurring element: used in making steel and other alloys, used for chrome plating, dyes, pigments, leather tenning, and wood preservation.
Chlorate	2014	6.3	<20	67.7			ppb	Chlorate compounds are used in agriculture as defoliants or desiccents and may occur in drinking water related to use of disinfectants such as chlorine dioxide

Definitions

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

Maximum Contaminant Level (MCL): The highest level of a contaminant 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.

mrem/year: Millerems per year (measure of radiation absorbed by the body).

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDGLs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

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.

Nephelometric Turbidity Units (NTU): Measure of turbidity in water.

pCi/L: Pico-curies per liter (a measure of radioactivity).

ppb: Parts per billion or micrograms per liter (ug/L).

ppm: Parts per million or milligrams per liter (mg/L).

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.

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

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