

# 2003 Dallas

## Drinking Water Quality Report

Dallas water meets or exceeds all state and federal water quality standards.

## 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. If you need more information, please call our water quality information line at 214-670-0917.

## Special notice for the elderly, infants, cancer patients, people with HIV/AIDS and other immune problems

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing

chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. U.S. EPA/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 1-800-426-4791.

## 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

During 2003, Dallas continued monthly 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. *Cryptosporidium* 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*, immuno-compromised persons should consult their doctors regarding appropriate precautions to take to avoid infection.

*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 abdominal 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.

To request more information on *cryptosporidium*, please call the U.S. EPA's Safe Drinking Water Hotline 1-800-426-4791.

## Where your water comes from

Dallas uses surface water from six sources: the Elm Fork of the Trinity River and Lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard and Tawakoni. In addition, Dallas has water rights in Lakes Fork and Palestine, which currently do not supply water to Dallas but are available to meet future needs. To address issues such as future water use, the city of Dallas regularly reviews its Long Range Water Supply Plan.

Dallas has an active Watershed Management Program that performed more than 8,000 tests on the water quality in the rivers, streams and reservoirs in 2003. In addition, the city of Dallas' storm water quality and industrial pretreatment programs help prevent pollution. As water travels over the surface of the land, it dissolves naturally occurring minerals and can be polluted by animals or by human activity. The presence of any of these pollutants in the untreated water does not necessarily pose a health risk in your drinking water. The city of Dallas will continue to commit the resources needed to ensure proper treatment and delivery of high-quality drinking water to its customers.

## Treating your drinking water

Dallas water is purified through chemical treatment, settling, filtration and disinfection. Water treatment chemicals including lime, ferric sulfate, powdered activated carbon, polymers and carbon dioxide are added to remove impurities and eliminate tastes and odors, chloramines (chloride and ammonia) and ozone are added to kill harmful bacteria, and fluoride is added to help prevent tooth decay.

## Water quality monitoring results

As the charts show, the levels of contaminants in Dallas water meet or are better than the amounts allowed by law. The charts list contaminants detected in Dallas drinking water in 2003 and the amounts allowed by the state and federal governments (maximum contaminant level). Definitions of terms are also listed.

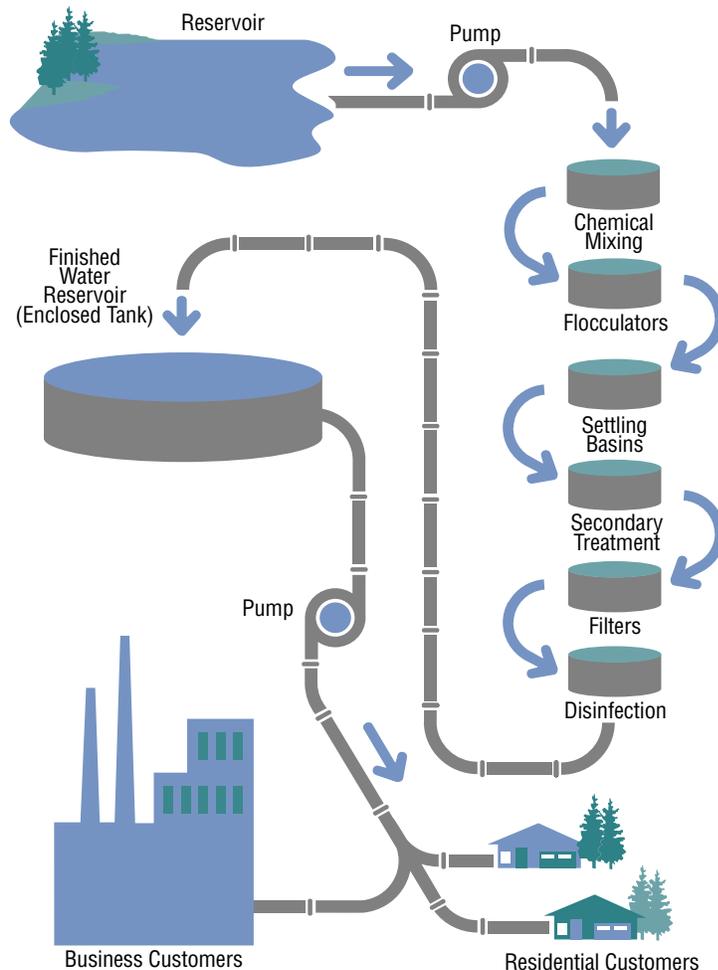
Dallas regularly tests drinking water for more than 180 contaminants. About 50,000 tests each month are conducted on Dallas' water to ensure that it is clean and meets all water quality requirements. To request a complete list of the contaminants tested for and the results, please write and send a self-addressed, stamped business-size envelope to Dallas Water Utilities, 1500 Marilla, Room 5AS, Dallas, TX 75201.

## 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.

Following are other helpful telephone numbers:

- Questions or concerns about water quality - 214-670-0917;
- Questions about your bill - 214-651-1441;
- For brochures on water conservation - 214-670-3155.



Water saving tips are available at [www.savedallaswater.com](http://www.savedallaswater.com). You can also call 214-670-3155 to request brochures and other water conservation information.

Conserving water helps us keep our rates low and saves you money. Thank you for complying with our water conservation ordinance during 2003.



This report is mailed to all Dallas Water Utilities customers. It is available in Dallas public libraries and recreation centers and is on the city of Dallas website [www.dallascityhall.com](http://www.dallascityhall.com). For additional copies call 214-670-3147.



Dallas, the City that Works: Diverse, Vibrant and Progressive

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## Regulated Characteristics

Detected Inorganic Contaminants					
Contaminant	Maximum Contaminant Level Goal (MCLG)	Maximum Contaminant Level (MCL)	Amount Detected		Possible Source
			Average	Range	
Barium (ppm)	2	2	0.025	0.02 - 0.03	Erosion of natural deposits; Discharge of drilling wastes or metal refineries
Fluoride (ppm)	4	4	0.75	0.26 - 0.90	Water additive to promote strong teeth
Lead (ppb)	0	AL = 15	ND	ND	Corrosion of household plumbing
Copper (ppm)	1.3	AL = 1.3	0.032	ND - 0.52	Corrosion of household plumbing
Nitrate as Nitrogen (ppm)	10	10	0.26	ND - 2.10	Runoff from fertilizer use; Leaching from septic tanks, sewage, erosion of natural deposits
Nitrite as Nitrogen (ppm)	1	1	0.02	ND - 0.02	Runoff from fertilizer use; Leaching from septic tanks, sewage, erosion of natural deposits
Detected Organic Contaminants					
Atrazine (ppb)	3	3	0.30	ND - 0.92	Herbicide runoff
Simazine (ppb)	4	4	0.34	ND - 0.72	Herbicide runoff
Detected Microbial Contaminants					
Total Coliform Bacteria	0	5% of monthly samples	0.15%	0% - 0.5%	Naturally present in the environment
Detected Radioactive Contaminants					
Beta Emitters (pCi/L)†	0	50	5.1	4.6 - 5.5	Decay of natural and man-made deposits
Disinfection By-Products					
Total Trihalomethanes THM (ppb)	0	80*	32	1.2 - 76.8	By-product of drinking water chlorination
Total Haloacetic Acids (HAA5)(ppb)	0	60*	19	9.2 - 56.3	By-product of drinking water chlorination
Bromate (ppb)	0	10**	< 5	< 5	By-product of drinking water ozonation
Treatment Requirements					
Turbidity - plants effluents, NTU	N/A	TT AL = 0.3	0.07	0.04 - 0.14	Soil runoff
Total Chlorine Residual POE (mg/L)	N/A	0.5 - 4.0	3.15	2.25 - 3.85	Disinfection process
Total Organic Carbon Removal (BH)	N/A	min. 35% as annual average	35.7	29.5 - 37.9	TOC is a natural precursor of DBP
Total Organic Carbon Removal (ES and EF)	N/A	max. 60 mg/L Alkalinity	49	43 - 54	TOC is a natural precursor of DBP

- † 50 pCi/L = 4 mrem/year
- \* MCL is based on average of four quarterly samples in the distribution system.
- \*\* Elm Fork WTP monthly effluent
- BH Bachman Water Treatment Plant
- ES Eastside Water Treatment Plant
- EF Elm Fork Water Treatment Plant

## Unregulated Characteristics\*

Detected Inorganic Contaminants			
Contaminant	Amount Detected		Possible Source
	Average	Range	
Sodium (mg/L)	36	12 - 54	Natural contaminant
Total Hardness (mg/L)	119	92 - 167	Natural contaminants
Total Alkalinity (mg/L)	68	28 - 120	Natural contaminant
Detected Volatile Organic Contaminants			
Bromochloroacetic acid	7.3	5.9 - 97	Chlorination by-product

\* Unregulated characteristics do not have MCL or MCLG.

**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** - Millirem per year (measure of radiation absorbed by the body).

**ND** - Not detected.

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

**ppm** - Parts per million. One part per million equals one packet of artificial sweetener sprinkled into 250 gallons of iced tea.

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

**ppb** - Parts per billion. One part per billion is equal to one packet of artificial sweetener sprinkled into an Olympic-size swimming pool.

**POE** - Point of entry. Sample measured at the point where water enters the distribution system.

**Treatment Technique (TT)** - 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.