

# 2004 Water Quality Report

O U R D R I N K I N G W A T E R I S R E G U L A T E D

**A SPECIAL NOTICE FOR THE ELDERLY, INFANTS, CANCER PATIENTS, AND PEOPLE WITH HIV OR OTHER IMMUNE SYSTEM CONCERNS.**



You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly, or immuno-compromised 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 Environmental Protection Agency's (EPA) **Safe Drinking Water Hotline**, 800-426-4791.

**WHERE DO WE GET OUR DRINKING WATER?**

Grand Prairie's drinking water is obtained from both surface and ground water sources and has maintained its "Superior" water quality rating.

Grand Prairie purchases the majority of our drinking water supply from the City of Dallas, although some is purchased from the City of Fort Worth as well.

Dallas treats and uses surface water from six sources, the Elm Fork of the Trinity River and Lakes Ray Roberts, Lewisville, Grapevine, Ray Hubbard, and Tawakoni.

Fort Worth's drinking water sources include: Lakes Benbrook, Bridgeport, Eagle Mountain, and Worth, and the Cedar Creek and Richland-Chambers Reservoirs.

Grand Prairie utilizes up to 11 ground water wells, mainly during the summer to meet demand. The wells each have an average depth of 2,000 feet and are pumped from the Trinity Aquifer. A current assessment of source water susceptibility for all drinking water sources for Grand Prairie is available by calling 972-237-8055. This report describes the susceptibility and types of constituents that may come into contact with City drinking water sources based on human activities and natural conditions. Contaminants that may be present in source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. The Texas Commission on Environmental Quality (TCEQ) completed a source assessment and results indicate that some of our sources are susceptible to certain contaminants. Any detections of these contaminants will be found in this report. The susceptibility of our purchased water sources is not included in this assessment. For more information on source water assessments and protection efforts at our system, please contact us.



**EN ESPAÑOL** Este reporte incluye información relevante sobre el agua potable. Si tiene preguntas o comentarios sobre este reporte, favor de comunicarse al 972-237-8055 para hablar en español con una persona bilingüe.

The tables located in this report contain detected regulated and unregulated contaminants within the Grand Prairie water system. Unregulated contaminants are those for which the EPA has not established drinking water standards. Unregulated contaminants detected in Dallas and Fort Worth's systems are listed in each city's individual Consumer Confidence Report (CCR) and can be obtained by calling their Water Departments.

The purpose of unregulated contaminant monitoring is to assist the EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation may be warranted. All drinking water testing results are well below those established by the EPA to ensure that the water coming from your tap is safe to drink. 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 EPA's **Safe Drinking Water Hotline at 800-426-4791**. Contaminants may be found in drinking water that can 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 the Environmental Services Department at 972-237-8055.

**A NOTE ABOUT CRYPTOSPORIDIUM**

Cryptosporidium has not been found in our treated drinking water supply. To ensure that we deliver the safest drinking water to the public, the water treatment facilities are required to treat all contaminants such as Cryptosporidium with the most effective methods of filtration, sedimentation, and disinfection available.



<b>UNREGULATED CONSTITUENTS<sup>+</sup></b>			
<b>DETECTED VOLATILE ORGANIC CONTAMINANTS</b>			
<i>Constituent</i>	<i>Average Amount Detected in Water</i>	<i>Range Detected</i>	<i>Possible Source</i>
Chloroform (ppb)	15.844	0 - 28.0	By-product of disinfection
Bromodichloromethane (ppb) (2002*)	5.159	0 - 12.0	By-product of disinfection
Dibromochloromethane (ppb)	2.243	0 - 3	By-product of disinfection

<sup>+</sup> Unregulated characteristics do not have a MCL or MCLG and are not currently regulated.

Grand Prairie's well data did not include any detected inorganic unregulated constituents.

\* In accordance with the regulations, the data presented in this table is from the most recent testing done. No date indicates testing done in 2004.

**T E R M I N O L O G Y**

**Action Level (AL)** - The concentration of a contaminant, which if exceeded, triggers treatment or other requirements that 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.

N/A - Not applicable.

**Nephelometric Turbidity Units (NTU)** - A measure of turbidity in water (reported as single highest reading and lowest monthly percentage).

**pCi/L** - Picocuries per liter. A measure of radiation.

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

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

**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 better.

**A NOTE ABOUT COLIFORMS**

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is relatively easy. While not disease-causing organisms themselves, coliforms may be found in association with other microbes that are capable of causing disease. Coliform bacteria are more hardy than many disease-causing organisms; therefore, their absence from water is a good indication that the water is microbiologically safe for human consumption. In the month of September, 2004 the City experienced a non-acute Maximum Contaminant Level (MCL) violation, in other words, more total coliforms were found in the water than is allowed. During this time all samples were negative for fecal coliform bacteria, which if it had been present, would have been a strong indication that a disease-causing organism may have been present. An MCL violation such as what happened in September is

not necessarily a health threat, it is merely a warning of potential problems in the distribution system. In our case the bacterial growth in the system was a result of low disinfectant residuals due to water age resulting from lower than normal water use. Accordingly, the City has taken several steps to counter these problems. The distribution system was flushed and physically cleaned for a six week period from October to mid-November. From November 2004 to February 2005, the City super-chlorinated the distribution system in order to disinfect the system and return it to prime operating condition. At no time was the City's water ever considered unsafe for consumption.

# I N F O R M A T I O N I N T H E C H A R T S

## REGULATED CHARACTERISTICS

### DETECTED INORGANIC CONTAMINANTS

Constituent	Average Level	Range Detected	MCLG	MCL	Possible Sources
Arsenic (ppb) (2002*)	0.564	0 - 3.1	0**	10**	Erosion of natural deposits, runoff from orchards; runoff from glass and electronics production wastes
Barium (ppm) (2002*)	0.038	0.03 - 0.06	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium (ppb) (2002*)	10.000	0 - 50	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Fluoride (ppm)	1.43	0.8 - 2.4	4	4	Water additive, natural geology
Nitrate (ppm)	0.204	0 - 0.69	10	10	Runoff from fertilizer use, leaching from septic tanks; sewage, erosion of natural deposits
Nitrite (ppm)	0.169	0.04 - 0.5	1	1	Same as nitrate
Selenium (ppb) (2002*)	0.277	0 - 0.277	50	50	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines

### DETECTED ORGANIC CONTAMINANTS

Atrazine (ppb)	0.463	0 - 0.65	3	3	Agricultural herbicide runoff
Simazine (ppb)	0.405	0.14 - 0.55	4	4	Herbicide runoff

### LEAD AND COPPER

Constituent	90th percentile	Sites Exceeding Action Level	Action Level	Possible Sources
Copper (ppm) (2003*)	0.390	0	1.300	Corrosion of household plumbing
Lead (ppb) (2003*)	0.0022	0	0.015	Corrosion of household plumbing

### DETECTED MICROBIAL CONTAMINANTS

Constituent	Amount Found in Water	MCLG	MCL	Possible Source
Total coliform bacteria (presence/absence)	Highest monthly % of positive samples = 11	0	Greater than 5% of monthly samples positive for total coliform <sup>1</sup>	Naturally present in the environment
Fecal coliform and E. coli (presence/absence)	Total number of positive samples = 1	0	Routine and repeat sample total coliform positive, and one also fecal coliform or E. coli positive <sup>2</sup>	Human and animal fecal waste

### DETECTED RADIOACTIVE CONTAMINANTS

Constituent	Average Level	Range Detected	MCLG	MCL	Possible Source
Beta/photon emitters (pCi/L) (2002*)	2.023	0 - 4.8	0	50	Decay of natural and man-made deposits
Combined Radium 226 & 228 (pCi/L) (2002*)	0.008	0 - 0.008	0	5	Erosion of natural deposits

### MAXIMUM RESIDUAL DISINFECTANT LEVEL

Constituent	Average Level	Range Detected	MCLG	MCL	Possible Source
Chloramine (ppm)	2.085	0 - 5.5	4	4	Disinfectant used to control microbes

### DISINFECTION BY-PRODUCTS

Constituent	Average Level	Range Detected	MCLG	MCL	Possible Source
Total Haloacetic Acids (HAA5) (ppb)	27.625	5.5 - 68.8	0	60	By-product of drinking water chlorination
Total Trihalomethanes** (ppb)	47.066	0 - 100.5	0	80	By-product of drinking water chlorination

### TREATMENT REQUIREMENTS

Constituent	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	MCL	Possible Source
Turbidity <sup>†</sup> (NTU)	0.33**	100%	TT AL=0.3	Soil runoff

\* In accordance with the regulations, the data presented in this table is from the most recent testing done. No date indicates testing done in 2004. \*\*These arsenic values are effective January 23, 2006. Until then, the MCL is 50 ppb and there is currently no MCLG. <sup>1</sup>A violation of the total coliform MCL occurred 9/1/2004 to 9/30/2004; please see "A Note About Coliforms" <sup>2</sup>One fecal coliform positive sample occurred in March 2004, however repeat sampling showed no contamination and there was no violation of the fecal coliform MCL.

<sup>†</sup>Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity must be less than 0.3 NTU for 95% of monthly samples. <sup>\*\*</sup>This was the highest single reading on any sample taken at the water treatment plant.

2004 Water Quality Report  
City of Grand Prairie  
Environmental Services Department  
201 NW 2nd Street, Suite 100  
Grand Prairie, TX 75050

PRESORTED STANDARD  
US POSTAGE  
**PAID**  
GRAND PRAIRIE, TX  
PERMIT NO. 178

POSTAL CUSTOMER  
GRAND PRAIRIE, TX

Y O U R C I T Y O F G R A N D P R A I R I E

# 2004 Water Quality Report



For more information about this report, contact the Grand Prairie Environmental Services Department at 972-237-8055. Additional copies of the Water Quality Report are available in the Environmental Services Department office at 201 NW 2nd Street, Suite 100, or visit the City of Grand Prairie website at [www.gptx.org](http://www.gptx.org).

To participate in decisions concerning water, attend Grand Prairie City Council meetings on the first and third Tuesday of each month at 6:30 p.m. in Council Chambers located at City Hall, 317 W. College.

For more information about public participation at council meetings, call 972-237-8035.

