Construction Projects Timed To Keep Pace With Rapid Population Growth

The water distribution and collection system is rapidly expanding as the population continues to grow. Pipeline extensions and replacements are under way to assure an adequate quantity of water is available to the growing population. Two major improvements to the distribution currently under construction are the 42" water line on Broad Street and the two million gallon water tower also on Broad Street (shown below). Both projects are proceeding well and are expected to complete by late summer. Additional production facilities, additional clearwell capacity, treatment plant expansion, high service pumps, and pipeline networks are being planned to transport and distribute water to our customers.

The cities of Mansfield, Waxahachie, Midlothian, and Fort Worth are participating in a state of the art microfiltration pilot plant study being conducted at the Mansfield Water Treatment Plant. This technology is being evaluated for possible use in the future.

Plans are under way to forecast water quality in the water distribution system based on the quality leaving the water treatment plant. Improvements in dissemination of monitoring and quality information are already being planned by Tarrant Regional Water District that will allow the customer cities to predict and prepare for changing water quality before it leaves the lake.

Conservation Makes Sense & Can Save Dollars

1) Don't irrigate while it is raining. Take the time to read up on your irrigation system controls and become familiar with the settings and how to change them. 2) Don't water during the heat of the day. The best time to irrigate is an hour or two before sunrise. You will not loose as much water to evaporation. If you water in the evening you maybe supporting mold and fungus growth in your lawn. 3) Set your sprinkler system to apply 1 inch of water every five days. This will allow your lawn to become deep rooted and more drought tolerant. (St. Augustine may require up to 2-inches every five days.) 4) Different grasses and plants require different amounts of water. So, when you are re-planting or re-sodding choose native plants and grasses whenever possible, Mother Nature has already made them drought tolerant. 5) Use mulch in flowerbeds around your home to retain moisture. It is important in clay soils to keep the area around your foundation moist to reduce soil shifting and cracks in your foundation.

Even though the City of Mansfield isn't currently proposing drastic actions to enforce water conservation there are some common sense methods that can save water and money that we all should practice.

If you are interested in obtaining more information about native plants or water conservation in general you can contact us at (817) 477-2248. We'll be happy to provide you with the information that fits your particular needs.

Availability of Unregulated Contaminant Monitoring Rule Data (UCMR)

We participated in gathering data under the UCMR in order to assist the EPA in determining the occurrence of possible drinking water contaminants. If any unregulated contaminants were detected, they are shown in the table elsewhere in this report. This data may also be found on EPA's web site at http://www.epa.gov/safewater/data/ncod.html, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

Cryptosporidium is a microscopic parasite affecting the digestive tracts of humans and animals. It is shed in the feces and when ingested, may result in diarrhea, cramps, fever and other gastrointestinal symptoms.

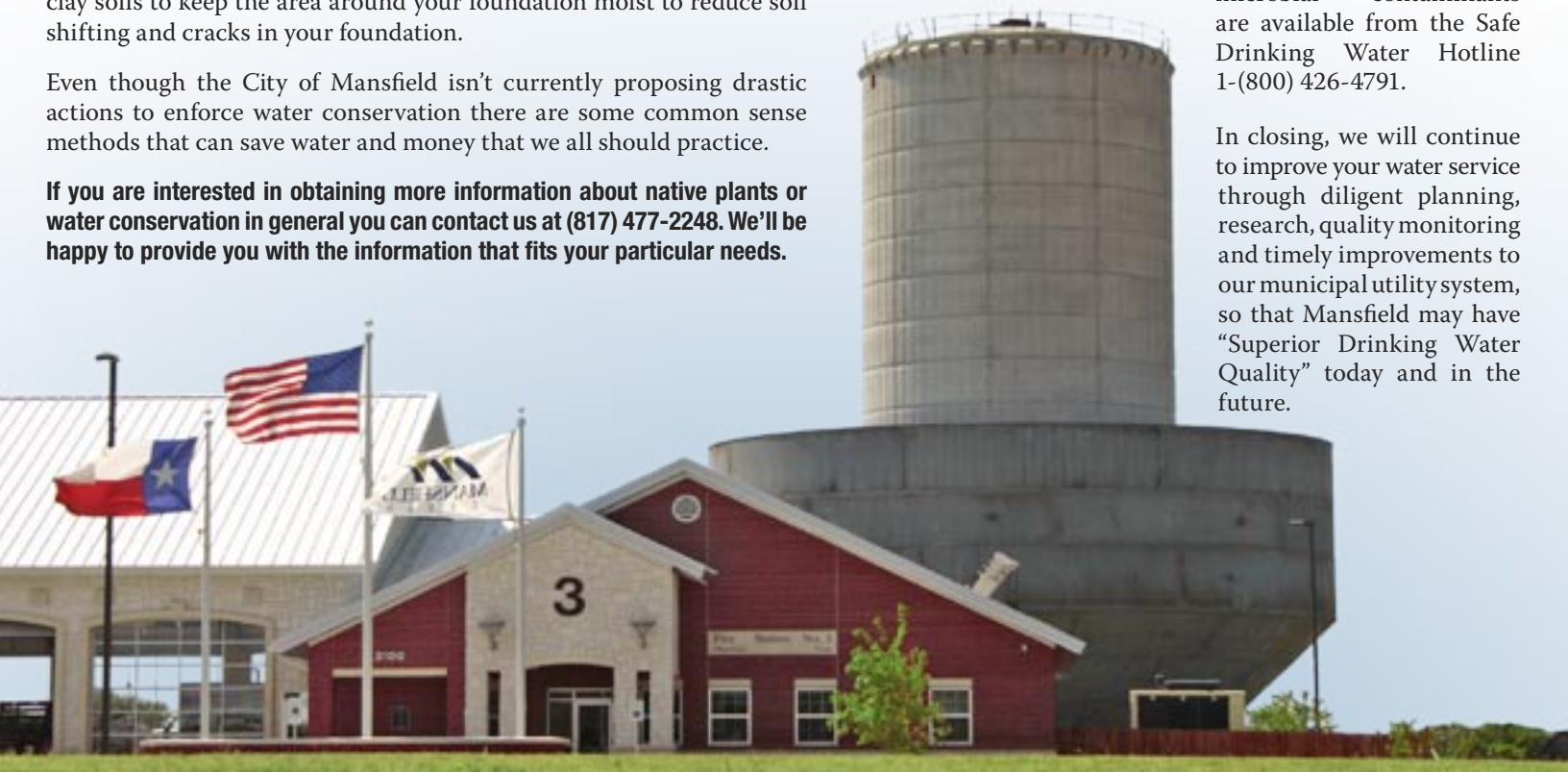
No specific drug therapy has proven to be effective, but people with healthy immune systems usually recover within two weeks. Individuals with weak immune systems, however, may be unable to clear the parasite and suffer chronic debilitating illness.

Cryptosporidium is being tested for in the City of Mansfield's raw water supply and has not been detected. The City of Mansfield uses a multiple barrier water treatment technique to reduce the possibility of contamination of the drinking water supply.

This is a Special Notice for the ELDERLY, INFANTS, CANCER PATIENTS, and people with HIV/AIDS or other problems that weaken the immune system:

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. EPA/ Centers for Disease Control and Prevention (CDC) 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.

In closing, we will continue to improve your water service through diligent planning, research, quality monitoring and timely improvements to our municipal utility system, so that Mansfield may have "Superior Drinking Water Quality" today and in the future.



A • N • N • U • A • L

WATER QUALITY REPORT

MANSFIELD
TEXAS

2005

Consumer Confidence Report: City of Mansfield

Be Sure To Remember Mansfield's Recommended Watering Schedule

The best time to water is between 6 p.m. and 10 A.m.

Street Address Ends In	Water on These Days of the Month					
1 or 6	1	6	11	16	21	26
2 or 7	2	7	12	17	22	27
3 or 8	3	8	13	18	23	28
4 or 9	4	9	14	19	24	29
5 or 0	5	10	15	20	25	30

MANSFIELD
TEXAS

City of Mansfield
Municipal Water System
1200 East Broad Street
Mansfield, Texas 76063-1896

Presorted Standard
U.S. Postage
PAID
Permit No. 10
Mansfield, TX

Dear Customer

We, the water utility employees of the City of Mansfield, are dedicated to providing a safe and reliable supply of drinking water to all customers and consumers of the municipal water system. We take great pride in being recognized as a "Superior Drinking Water System" by the Texas Commission on Environmental Quality (TCEQ).

Our City employs state certified personnel to operate and maintain the municipal water system. Each plant operator and distribution system technician is required to become state certified. The certification process involves gaining knowledge and experience while on-the-job, the completion of specific state approved training courses, and a passing grade on a state issued exam. The training and certification programs help to insure that the City of Mansfield Municipal Water System provides Safe Drinking Water to all consumers.

The information provided in this pamphlet relates to tests conducted in 2005. It is important to the City of Mansfield that consumers of the municipal water system receive this information. We want you to have confidence in our water supply and the people that provide drinking water service to your home and/or business. On the following pages you'll find several lists of what's in the water and at what level it has been detected. There are also explanations of where, why, and how your water is monitored. Please take time to review this pamphlet and contact us at the above number should you have comments or questions.

Sincerely,

Your Water Utility Employees

Water Quality Questions: (817) 477-2248 • Billing Information: (817) 276-4200

You Should Know

All Drinking Water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of these contaminants does not necessarily indicate the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling EPA's Safe Drinking Water Hotline at 1-(800) 426-4791.

About The Following Pages

The tables that follow list all of the federally regulated or monitored constituents which have been found in your drinking water. U.S. EPA requires water systems to test up to 97 constituents.

Our Water Comes From Lakes/Resevoirs

The City of Mansfield uses surface water. Surface water comes from lakes and reservoirs. The City is a member of Tarrant Regional Water District (TRWD). This water district supplies untreated (raw) water from several different lakes and reservoirs to customer cities like Mansfield, Arlington, Fort Worth and the Trinity River Authority. The sources for Mansfield's water are Cedar Creek Lake and Richland Chambers Reservoir. Each is located approximately 70 miles southeast of the Metroplex. The water is transported through two large diameter pipelines. The City of Mansfield has a water tap on each of these pipelines that provides raw water to the City's water treatment plant. TRWD recently constructed a pump station and pipeline extension to Benbrook Lake, which is located in southwest Fort Worth. Mansfield is now able to receive raw water from Benbrook Lake. TRWD determines which source water Mansfield receives by considering pumping costs, pipeline loading, and reservoir conditions.

Lakes and reservoirs are collectors of rainfall runoff. The area that drains into a lake or reservoir is called a drainage basin. The drainage basins usually include creeks and rivers that run into the lake. The lake, as well as the creeks and rivers, are impacted by the runoff from the land use in the drainage basin.

What's In The Water

When the rainfall/runoff travels over the surface of the land it picks up contaminants and dissolves naturally occurring minerals and salts. In some cases the runoff may carry substances from animal or human activity within the drainage basin. Contaminants that may be found in untreated water include; microbes, such as viruses, bacteria and protozoa; inorganic contaminants, such as salts and metals; organic contaminants, such as herbicides and pesticides (used on farm crops or lawns); chemical contaminants from industrial processes; petroleum contaminants from roads and highways; and radioactive contaminants from natural or unidentified sources.

En Español: Este reporte incluye informacion importante sobre el agua para tomar. Para obtener una copia de esta informacion traducida al Espanol, favor de llamar al telefono (817) 473-8411.

Your Questions Or Concerns Are Important To Us.

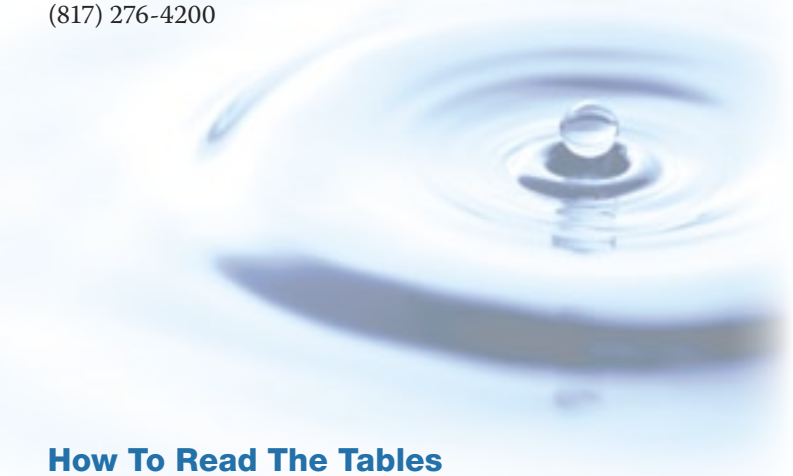
It's just not possible to answer every question about water quality in a report like this. So, if you have questions or would like to request a speaker for your group or organization, contact us at (817) 477-2248. To learn more about drinking water quality and treatment, check out "Plain Talk About Drinking Water" at the Mansfield Public Library.

Public Participation Opportunities

The City of Mansfield Municipal Water System is a part of the city government. The City Council meets at 7:00 p.m. on the second and fourth Monday of each month in the City Council Chambers of the Mansfield Municipal Complex, 1200 East Broad Street.

City of Mansfield Municipal Water System
Water Quality Questions:
(817) 477-2248

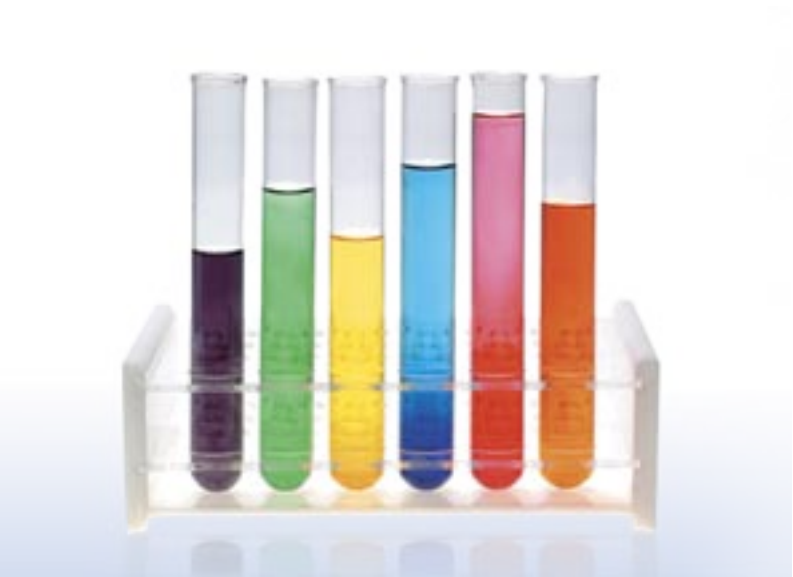
Billing Information:
(817) 276-4200



How To Read The Tables

The following list of terms provides a general definition on what each term means. The tables are setup in columns and rows. The shaded box at the top gives the heading for each column. The boxes that are not shaded reflect the information for each constituent.

These tables do not represent any violation of state or federal rules and regulations regarding water quality. They are a list of constituent levels detected. Similar levels are found in drinking water throughout the Metroplex.



Definitions:

NTU – Nephelometric Turbidity Units	This is used to measure water turbidity (clarity).
MCL – Maximum Contaminant Level	The highest permissible level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
MCLG – Maximum Contaminant Level Goal	The level of a contaminant in drinking water below which there is no known or expected health risk. MCLG's allow for a margin of safety.
AL – ACTION LEVEL	The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
ppm – Parts Per Million. *Equivalent to milligrams per liter*	A good comparison of one part per million is one packet of.artificial sweetener placed in 250 gallons of iced tea.
ppb – Parts Per Billion. *Equivalent to micrograms per liter*	An example of a part per billion is that same packet of sweetener placed in an Olympic-size swimming pool of iced tea.
ppt – Parts Per Trillion	Nanograms per liter.
ppq – Parts Per Quadrillion	picograms per liter.
pCi/L – Picocuries Per Liter	This is a measure of radioactivity in water. One picocurie is the amount of radioactive material that produces 2.22 nuclear transformations per minute.
TT – Treatment Technique	A required process intended to reduce the level of a contaminant in drinking water.
MFL – Million Fibers Per Liter	A measure of asbestos.

Inorganic Contaminants

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2004	Barium	0.043	0.43	0.043	2.0	2.0	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2005	Nitrate	0.270	.27	.27	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
2005	Fluoride	1.00	1.00	1.00	4	4	ppm	Runoff from fertilizer use; leaching from septic tanks; erosion of natural deposits.
2005	Gross Beta Emitters	3.60	3.60	3.60	50	0	pCi/L	Decay of natural and man-made deposits.

Organic Contaminants — Testing waived, not reported, none detected.

Maximum Residual Disinfectant Level

2005	Chloramines	2.8	0.2	4.0	4.0	<4.0	ppm	Disinfectant used to control microbes.

Disinfection Byproducts

2005	Total Haloacetic Acids	6.1	2.1	8.7	60		ppb	Byproduct of drinking water disinfection.
2005	Total Trihalomethanes	21.2	12.4	25.3	80		ppb	Byproduct from drinking water disinfection.

Unregulated Contaminants

2005	Chloroform	3.5	3.5	3.5			ppb	Byproduct from drinking water disinfection.
2005	Bromoform	1.7	1.7	1.7			ppb	Byproduct from drinking water disinfection.
2005	Bromodichloromethane	6.6	6.6	6.6			ppb	Byproduct from drinking water disinfection.
2004	Dibromochloromethane	7.4	7.4	7.4			ppb	Byproduct from drinking water disinfection.

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 EPA. These constituents are not causes for health concerns. Therefore, secondaries are not required to be reported in this document but they may greatly affect the appearance and taste of your water.

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Limit	Unit of Measure	Source of Contaminant
2004	Aluminium	0.043	0.043	0.043	50	ppb	Abundant naturally occurring element.
2005	Bicarbonate	159	159	159	NA	ppm	Corrosion of carbonate rocks such as limestone.
2004	Calcium	33	33	33	NA	ppm	Abundant naturally occurring element.
2005	Chloride	26	26	26	300	ppm	Abundant naturally occurring element; used in water purification; byproduct of oil field activity.
2004	Magnesium	3.2	3.2	3.2	NA	ppm	Abundant naturally occurring element.
2004	Manganese	3.2	3.2	3.2	50	ppb	Abundant naturally occurring element.
2005	pH	7.7	7.7	7.7	7	units	Measure of corrosivity of water.
2004	Sodium	26	26	26	NA	ppm	Erosion of natural deposits; byproduct of oil field activity.
2005	Sulfate	46	46	46	300	ppm	Naturally occurring; common industrial byproduct; byproduct of oil field activity.
2005	Total Alkalinity as CaCO3	130	130	130	NA	ppm	Naturally occurring soluble mineral salts.
2005	Total Dissolved Solids	249	249	249	1000	ppm	Total dissolved mineral constituents in water.
2004	Total Hardness as CaCO3	96	96	96	NA	ppm	Naturally occurring calcium.

Lead and Copper

Year	Contaminant	The 90th Percentile	Number of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2004	Lead	1.40	0	15	ppb	Corrosion of household plumbing systems; erosion of natural deposit.
2004	Copper	0.224	0	1.3	ppb	Corrosion of household plumbing systems; erosion of natural deposit; leaching from wood preservatives.

Total Organic Carbon (TOC)

Total Organic Carbon (TOC) has no health effects. The disinfectant can combine with TOC to form disinfection byproducts. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Containment	Highest Monthly Measurement	Lowest Monthly Measurement	Average Measurement	Units of Measure	Source of Contaminant
2005	Water Source	4.50	4.0 0	5.10	ppm	Naturally present in environment.
2005	Drinking Water	2.20	1.00	3.00	ppm	Naturally present in environment.
2005	Removal	1.82	1.09	5.00	% removal	NA

Turbidity

Turbidity has no health effects. However, Turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2005	Turbidity	0.90	99.0 %	0.3	NTU	Soil runoff.

Total Coliform

What are Coliforms? Total coliform bacteria are used as indicators of microbial contamination of drinking water because they are easily detected in water samples and they are found in the digestive tract of warm-blooded animals. While coliforms are not disease producers, they are often found in association with other microbes that are capable of causing disease. Coliform bacteria are hardier than many disease-causing organisms; therefore, their absence from water is a good indication that the water is bacteriologically safe for human consumption.

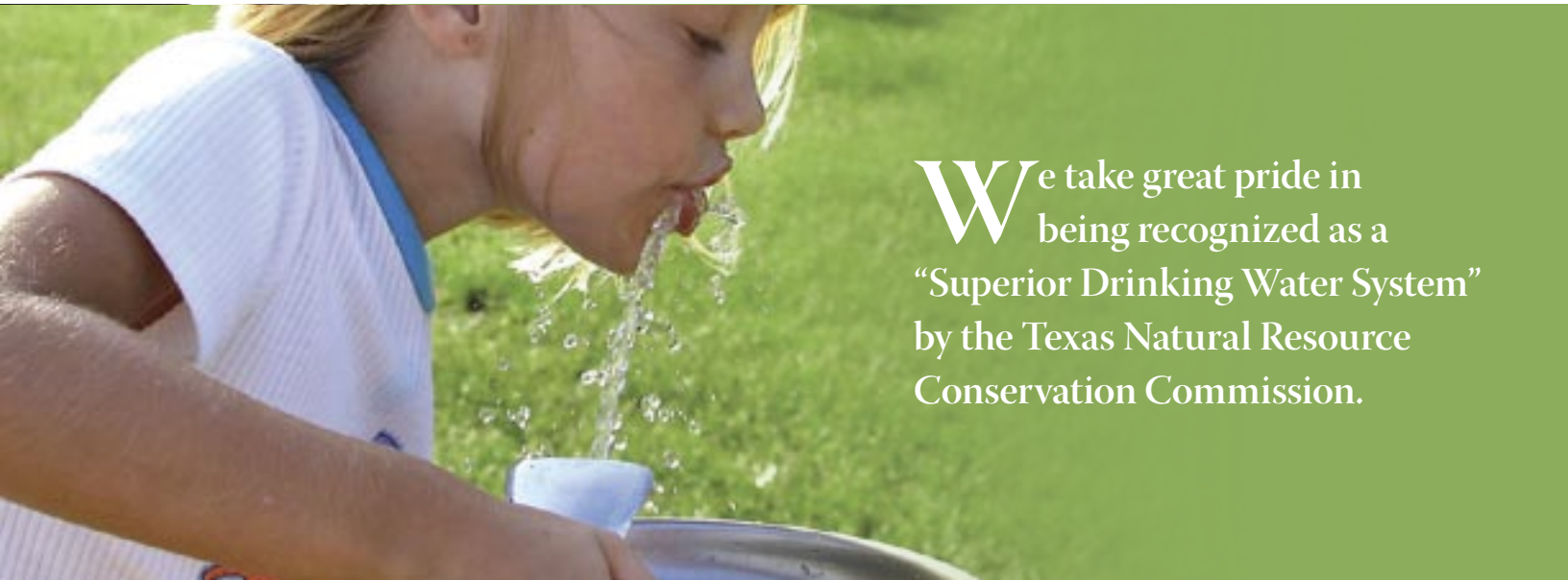
Fecal coliform bacteria, in particular E-Coli, is a portion of the coliform bacteria group originating in the intestinal tract of warm-blooded animals and are passed into the environment through feces. The presence of fecal coliform in drinking water may indicate recent contamination of the drinking water supply with fecal material. The following table indicates whether total coliform or fecal coliform bacteria were found in the monthly drinking water samples submitted for testing by your water supplier last year.

Year	Containment	Highest Monthly % Positive Samples	MCL	Average Measurement	Unit of Measurement	Source of Contaminant
2004	Total Coliform Bacteria	2	*	presence	ppm	Naturally present in environment.

** Presence of coliform bacteria in 5% or more of the monthly samples.*

Fecal Coliform

Not Detected



We take great pride in being recognized as a "Superior Drinking Water System" by the Texas Natural Resource Conservation Commission.