

OPPORTUNITIES FOR PUBLIC PARTICIPATION

The public is always welcome to attend Commission Meetings scheduled on the second and fourth Thursday of each month at 6:30 PM at City Hall. For more information about these meetings, call 903-935-4421.



HOW TO CONTACT US

For Questions or Concerns Regarding Water Quality or About This Report, please Contact the Water Treatment Plant at:

903-935-4485

Monday–Friday
8:00 AM–5:00 PM

Water Billing Questions:

903-935-4435

Water and Sewer Emergencies:

903-935-4485

Source Water Assessment Questions:

903-935-4485

TCEQ:

903-535-5100

or Visit Our Website at:

www.marshalltexas.net

EN ESPAÑOL:

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al Tel. 903-935-4455 or 903-935-4439 para hablar con una persona bilingüe en español.

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CITY OF MARSHALL WATER UTILITY DIVISION

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MARSHALL TX 75671

SPECIAL NOTICE

Required language for ALL community public water supplies: 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.

WATER SOURCES

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 may come from 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.

- Radioactive contaminants, which can be naturally-occurring or be the result of oil and gas production and mining activities.

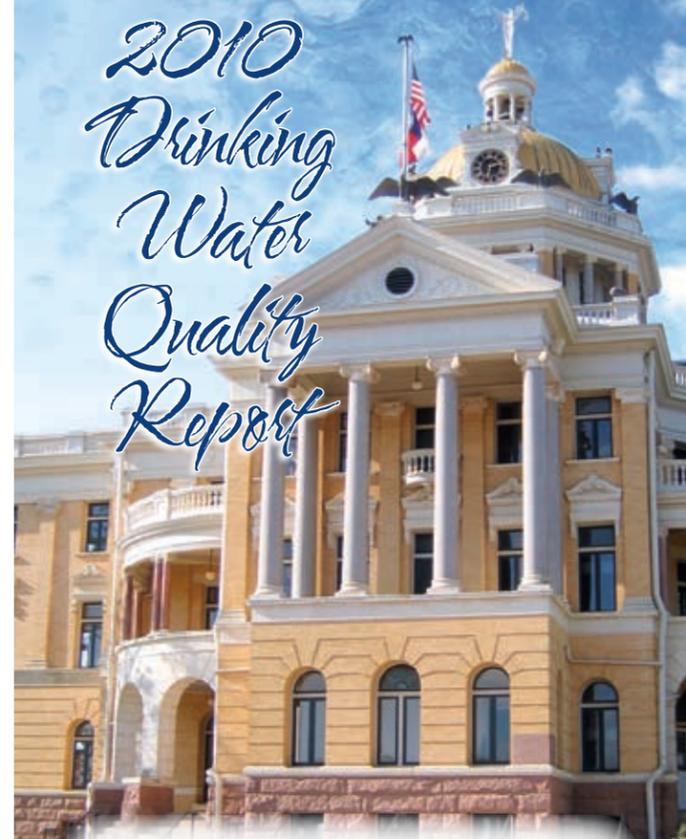
En Español

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WHERE DO WE GET OUR DRINKING WATER?

Our drinking water is obtained from SURFACE water sources. It comes from the following River: BIG CYPRESS BAYOU. A Source Water Susceptibility Assessment for your drinking water source(s) is currently being updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available later this year on Texas Drinking Water Watch at <http://dww.tceq.state.tx.us/DWW/>. For more information on source water assessments and protection efforts at our system, please contact us.

2010 Drinking Water Quality Report



Our Drinking Water is Regulated

This report is a summary of the quality of the water we provide our customers. The analysis was made by using the data from the most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become more knowledgeable about what's in your drinking water.

ALL DRINKING WATER MAY CONTAIN CONTAMINANTS.

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

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



ABOUT THE FOLLOWING PAGES

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



DEFINITIONS

Maximum Contaminant Level (MCL)—The highest permissible level of a contaminant 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 health risk. MCLGs allow for a margin of safety.

Maximum Residual Disinfectant Level (MRDL)—The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)—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 contamination.

Treatment Technique (TT)—A required process intended to reduce the level of a contaminant in drinking water.

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



ABBREVIATIONS

NTU—Nephelometric Turbidity Units

MFL—million fibers per liter (a measure of asbestos)

pCi/L—picocuries per liter (a measure of radioactivity)

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

ppb—parts per billion, or micrograms per liter (µg/L)

ppt—parts per trillion, or nanograms per liter

ppq—parts per quadrillion, or picograms per liter



TOTAL COLIFORM

Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing for them is easy. While not disease-causing organisms themselves, they are often 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.

Year	Max. Contaminant Level Goal	Ttl. Coliform Max. Contaminant Level	Highest No. of Positive	Ttl. No. of Positive E. Coli or Fecal Coliform Samples
2010	0	1 positive mo. sample	1	0

Likely Source: Naturally present in the environment.

Fecal Coliform—REPORTED MONTHLY TESTS FOUND NO FECAL COLIFORM BACTERIA.

SECONDARY AND OTHER CONSTITUENTS NOT REGULATED (No associated adverse health effects)

Year	Constituent	Avg. Level	Min.–Max. Level	Secondary Limit
2010	Bicarbonate (ppm)	21	21–21	NA
Corrosion of carbonate rocks such as limestone.				
2010	Chloride (ppm)	11.6	11.6–11.6	300
Abundant naturally occurring element; used in water purification; by-product of oil field activity.				
2008	Hardness as Ca/Mg (ppm)	26	26–26	NA
Naturally occurring calcium and magnesium.				
2010	pH (units)	8.4	8.4–8.4	>7.0
Measure of corrosivity of water.				
2010	Sodium (ppm)	12.9	12.9–12.9	NA
Erosion of natural deposits; by-product of oil field activity.				
2010	Sulfate (ppm)	11.1	11.1–11.1	300
Naturally occurring; common industrial by-product; by-product of oil field activity.				
2010	Total Alkalinity as CaCO ₃ (ppm)	21	21–21	NA
Naturally occurring soluble mineral salts.				
2010	Total Dissolved Solids (ppm)	76	76–76	1000
Total dissolved mineral constituents in water.				

INORGANIC CONTAMINANTS

Year	Contaminant	Highest Level Detected	Min.–Max. Level	MCL	MCLG
2010	Fluoride (ppm)	0.62	0.62–0.62	4	4
Likely Source: Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.					
2010	Nitrate (ppm)	0.15	0.15–0.15	10	10
Likely Source: Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.					

TOTAL ORGANIC CARBON

Total organic carbon (TOC) no health effects. The disinfectant can combine with TOC to form disinfection by-products. Disinfection is necessary to ensure that water does not have unacceptable levels of pathogens. By-products of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

Year	Contaminant	Avg. Level	Min.–Max. Level
2010	Source Water (ppm)	7.61	5.35–16.0
Naturally present in the environment.			
2010	Drinking Water (ppm)	3.51	3.19–4.39
Naturally present in the environment.			
2010	Removal Ratio (% removal*)	1.10	.90–1.58
NA			

*Removal ratio is the percent of TOC removed by the treatment process divided by the percent of TOC required by TCEQ to be removed.

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Systems must complete and submit disinfection data on the Surface Water Monthly Operations Report (SWMOR). On the CCR report, the system must provide disinfectant type, minimum, maximum and average levels.

Year	Disinfectant	Avg. Level	Min.–Max. Level	MRDL	MRDLG
2010	Chloramines (ppm)	1.87	0.5–2.9	4	<4

Source: Disinfectant used to control microbes.

DISINFECTION BY-PRODUCTS

Year	Contaminant	Highest Level Detected	Min.–Max. Level	MCL
2010	Total Haloacetic Acids (ppb)	28.0	6.7–36.2	60
Likely Source: By-product of drinking water chlorination.				
2010	Total Trihalomethanes (ppb)	45.0	13.9–62.5	80
Likely Source: By-product of drinking water chlorination.				

LEAD AND COPPER

Year	Contaminant	The 90 th Percentile	Number of Sites Exceeding Action Level	Action Level
2010	Lead (ppb)	.0024	0	15
Likely Source: Corrosion of household plumbing systems; erosion of natural deposits.				
2010	Copper (ppm)	0.053	0	1.3
Likely Source: Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.				

REQUIRED ADDITIONAL HEALTH INFORMATION FOR LEAD

"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. This water supply 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>."

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	Limit (Treatment Technique)	Level Detected	Violation	
2010				
Highest Single Measurement (NTU)		1	0.77	N
Lowest Monthly % Meeting Limit (NTU)		0.3	86.03	Y

Likely Source: Soil runoff.

VIOLATIONS TABLE

Interim Enhanced SWTR—The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.

Violation Type	Violation Begin	Violation End
Monthly Comb Filtr Effluent (IESWTR/LT1)	Jan. 1, 2010	Jan. 31, 2010

Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.

Steps to Correct Violation: Adjusted chemical dosage to remove turbidity.

