

# NTMWD welcomes your questions and comments.

Doing what we can to keep our water supply clean is everyone's environmental responsibility. You can learn more about how to keep pesticides and other contaminants out of our watershed by visiting the EPA's Web site at [www.EPA.gov](http://www.EPA.gov). Simple changes can make an impact on the quality of water in our lakes and streams. Water is a finite resource. We must all do our part to save what we can and encourage others to do the same. As the NTMWD service area grows larger each year, it is imperative that each person adjusts to a lifestyle that is focused on water quality, water efficiency, and water conservation. This will help ensure an adequate supply of superior drinking water for all in the future.

## Contact Us

For more information regarding this report contact:

Denise Hickey  
Public Relations Coordinator  
(972) 442-5405

## En Español

Este informe contiene información muy importante sobre el agua que usted bebe. Tradúzcalo ó hable con alguien que lo entienda bien.  
[www.ntmwd.com](http://www.ntmwd.com).

## About Your Water Supplier

The NTMWD is a conservation and reclamation district and political subdivision of the State of Texas, created and functioning under Article XVI, Section 59, of the Texas Constitution, pursuant to Chapter 62, Acts of 1951, 52nd Legislature of Texas, Regular Session, as amended (the ACT). An amendment to the NTMWD's creating ACT by the legislature in 1975, Section 27, authorizes the NTMWD to acquire, treat, and distribute potable water, and to collect, treat and dispose of wastes, both liquid and solid, in order to reduce pollution, conserve and develop the natural resources of Texas. NTMWD Board of Director's Meetings are traditionally held on the fourth Thursday each month with adjustments made for holidays or other conflicts. Meetings are held at 505 E. Brown Street, Wylie, Texas in the Board Room and begin at 4:00 p.m. A complete schedule of Board of Director's Meetings held throughout the year can be found at [www.ntmwd.com](http://www.ntmwd.com).



## Misaligned sprinklers waste more than water.



NORTH TEXAS MUNICIPAL  
WATER DISTRICT

Water IQ is a licensed service mark of the Texas Water Development Board.



North Texas Municipal Water District  
505 E. Brown Street  
P.O. Box 2408  
Wylie, TX 75098

PROVIDING SAFE AND RELIABLE DRINKING WATER IS A PRIORITY

# Consumer Confidence Report

2011

The North Texas Municipal Water District (NTMWD) provides safe and reliable drinking water to meet the needs of the citizens it serves. With a service area of 1,976 square miles and serving in excess of 1.6 million individuals, it is of utmost importance to assure that water quality meets or exceeds all Safe Drinking Water Standards established by the U.S. Environmental Protection Agency (EPA) as well as regulations set by the state. The NTMWD utilizes a multi-barrier treatment process to accomplish this goal. The treatment process eliminates or reduces particulates, impurities, and waterborne microorganisms in the water supply. The NTMWD routinely performs a range of water quality tests prior to, during, and after the water treatment process takes place to ensure that high quality water is delivered.

## Where Do We Get Our Drinking Water?

The NTMWD drinking water is obtained from surface water sources. The NTMWD receives raw water from Lavon Lake for treatment at the Wylie Water Treatment Plants. In addition to Lavon Lake, NTMWD holds water rights in: Lake Texoma, Jim Chapman Lake (Cooper Lake), Lake Tawakoni (through a contract with the Sabine River Authority), and the East Fork Raw Water Supply Project (Wetland) which augment supplies. For detailed information on our water sources, treatment processes and more, visit our Web site at [www.ntmwd.com](http://www.ntmwd.com).

## Sources of Drinking Water

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 before treatment include:

- Microbial contaminants, such as viruses and bacteria, which may come from

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



## ALL Drinking Water May Contain Contaminants

When drinking water meets federal standards there may not be any health 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 at (800) 426-4791.

## Information About Secondary Contaminants

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.

## Our Drinking Water is Regulated

This report is intended to provide you with important information about your drinking water and the efforts made by NTMWD to provide safe drinking water. It is a summary of the quality of the water NTMWD provides to our customers. The analysis was made by using the data from the most recent EPA required tests and is presented in the following pages. We hope this information helps you become more knowledgeable about what is in your drinking water.

## DEFINITIONS

The following tables contain scientific terms and measures, some of which may require explanation.

**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.

**Maximum Contaminant Level (MCL):** The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

**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.

**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.

## Cryptosporidium

The NTMWD continues to diligently analyze both source water and treated water for the presence of Cryptosporidium. Cryptosporidium has not been detected in any of the samples tested.

Cryptosporidium is a microbial parasite that may be commonly found in surface water. Cryptosporidium may come from animal and human feces in the watershed. Although treatment by filtration removes Cryptosporidium, it cannot guarantee 100 percent removal. The testing methods used cannot determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water.

## Special Notices

### Vulnerability of Some Populations to Contaminants in Drinking Water

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 (800) 426-4791.

### Information About Source Water Assessments

A Source Water Susceptibility Assessment for your drinking water sources 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 NTMWD to focus source water protection strategies.

For more information about your sources of water, please refer to the Source Water Assessment Viewer available at the following URL:  
<http://gis3.tceq.state.tx.us/swav/Controller/index.jsp?wtrsrc=>

Further details about sources and source water assessments are available in Drinking Water Watch at the following URL:  
<http://dww.tceq.texas.gov/DWW/>

### Source Water Assessment Protection

The TCEQ completed an assessment of the NTMWD source water, and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for the NTMWD water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this Consumer Confidence Report. For more information on source water assessments and protection efforts at the NTMWD system, contact Denise Hickey, Public Relations Coordinator at 972-442-5405 or dhickey@ntmwd.com.

## ABBREVIATIONS

- Avg:** Regulatory compliance with some MCLs are based on running annual average of monthly samples
- MFL:** Million fibers per liter (a measure of asbestos)
- mrem:** Millirems per year (a measure of radiation absorbed by the body)
- na:** Not applicable
- NTU:** Nephelometric Turbidity Units
- pCi/L:** Picocuries per liter (a measure of radioactivity)
- ppb:** Micrograms per liter or parts per billion - or one ounce in 7,350,000 gallons of water
- ppm:** Milligrams per liter or parts per million - or one ounce in 7,350 gallons of water
- ppq:** Parts per quadrillion, or picograms per liter
- ppt:** Parts per trillion, or nanograms per liter

## Public Notice - DBP2 Compliance Monitoring Extension

The North Texas Municipal Water District (NTMWD) has been granted a two-year extension by the Texas Commission on Environmental Quality (TCEQ) to the Stage 2 Disinfection Byproducts Rule (DBP2) in accordance with 30 TAC §290.115(a)(2). This extension is warranted because the NTMWD is making extensive and complex capital improvements to the Wylie Water Treatment Plant to facilitate compliance with the rule; the NTMWD and its customers have demonstrated a need for the extension by having one or more locations where high DBP results were evident or possible during drought conditions. The extension is valid from April 1, 2012, to March 30, 2014. During this period, compliance monitoring will continue under the Stage 1 Disinfection Byproduct Rule. Compliance monitoring for DBP2 will begin on April 1, 2014.

Please share this information with all people who drink this water, especially those who may not have received this notice directly (i.e., people in apartments, nursing homes, schools, and businesses). You can do this by posting this report in a public place or distributing copies by hand or mail. If you have questions regarding this matter, you may contact Denise Hickey, Public Relations Coordinator at (972) 442-5405 or by email at [dhickey@ntmwd.com](mailto:dhickey@ntmwd.com).



### Invasive Species - Zebra Mussels

Since July 2009, NTMWD has been unable to access 28% of its total raw water supply due to the infestation of an invasive species, the zebra mussel, being identified in Lake Texoma. As a wholesale water provider, the identification of zebra mussels in Lake Texoma is unique in that the NTMWD is the only water provider transferring raw water from the Red River Basin into the Trinity Basin. Transporting water supplies from Lake Texoma, tainted with zebra mussels, through the NTMWD's raw water pipeline and discharging into Sister Grove Creek could facilitate a transfer of this invasive species into the Trinity River Basin and waterways downstream.

NTMWD has and will continue to collaborate

with the United States Army Corps of Engineers and other federal and state regulatory agencies to minimize the transport of zebra mussels into the Trinity River basin. Although zebra mussels are not harmful to humans and do not contaminate the water supply for potable water, the zebra mussels do attach to water facilities and pipes causing increased operating and maintenance costs for the NTMWD. At this time, no proven large-scale eradication method for zebra mussels exists that does not in turn cause a detriment to the natural water's delicate ecosystem.

To restore the Texoma supply, NTMWD is expediting the extension of the current transmission pipeline system so the Texoma supply will be transported directly to the

Wylie Water Treatment Plants thereby the Texoma supply will not reenter the environment through a natural tributary. The Texoma pipeline extension project is anticipated to be completed in the fall of 2013. Until all raw water supplies are fully restored, NTMWD will remain in some Stage of the NTMWD's Water Conservation and Drought Contingency/Water Emergency Response Plan.

NTMWD encourages all boaters and anglers to properly "Clean – Drain – Dry" their watercraft to minimize the spread of invasive species from one water body to another. For more information on "Clean – Drain – Dry" visit [www.TexasInvasives.org](http://www.TexasInvasives.org).

## Water is a finite resource. Please, don't waste your water.



### Only Water Landscape When Needed

The majority of water use during the summer months is attributed to landscape watering. Many times, over 50% of that water is wasted due to overwatering our landscapes and broken or misdirected sprinkler heads. Operating your automatic sprinkler system on manual ensures that the landscape is only watered as needed and does not operate during or directly after a rain event. Many times, the waste of water can be attributed to an irrigation controller not being properly set or malfunctioning. It is best to enlist the expertise of a licensed irrigator to maintain your automatic landscape controller.

### Finding a Licensed Irrigator

Residents can go to [www5.tceq.texas.gov/lic\\_dpa](http://www5.tceq.texas.gov/lic_dpa) (the TCEQ's Licensing Database) and search the database for licensed irrigators by city or county. Licensed irrigators must use their license number in all advertisements. Residents should ask to see the irrigator's license. All irrigators will have a pocket card showing the license number. For additional information, visit [www.tceq.texas.gov/goto/lawn](http://www.tceq.texas.gov/goto/lawn).



Coliform Bacteria											
Maximum Contaminant Level Goal	Total Coliform Maximum Contaminant Level	Highest No. of Positive	Fecal Coliform or E. Coli Maximum Contaminant Level	Total No. of Positive E. Coli or Fecal Coliform Samples	Violation	Likely Source of Contamination					
0	1 positive monthly sample	1	0	0	No	Naturally present in the environment.					
<b>NOTE:</b> Reported monthly tests found no fecal coliform bacteria. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present.											
Regulated Contaminants											
Disinfectants and Disinfection By Products	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination			
Total Haloacetic Acids (HAA5)	2011	21.2	9.6 - 21.2	No goal for the total	60	ppb	No	By-product of drinking water chlorination.			
Total Trihalomethanes (TTHM)	2011	53.7	28.1 - 53.7	No goal for the total	80	ppb	No	By-product of drinking water chlorination.			
<b>NOTE:</b> Not all sample results may have been used for calculating the Highest Level Detected because some results may be part of an evaluation to determine where compliance sampling should occur in the future.											
Inorganic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination			
Antimony	2011	Levels lower than detect level	0 - 0	6	6	ppb	No	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder; and test addition.			
Arsenic	2011	1.08	0.548 - 1.08	0	10	ppb	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes.			
Barium	2011	0.0447	0.03 - 0.0447	2	2	ppm	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.			
Beryllium	2011	Levels lower than detect level	0 - 0	4	4	ppb	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries.			
Cadmium	2011	Levels lower than detect level	0 - 0	5	5	ppb	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints.			
Chromium	2011	1.58	1.35 - 1.58	100	100	ppb	No	Discharge from steel and pulp mills; erosion of natural deposits.			
Fluoride	2011	0.66	0.46 - 0.66	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.			
Mercury	2011	Levels lower than detect level	0 - 0	2	2	ppb	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland.			
Nitrate (measured as Nitrogen)	2011	0.57	0 - 0.57	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits.			
<b>Nitrate Advisory:</b> Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.											
Selenium	2011	0.549	0 - 0.549	50	50	ppb	No	Discharge from petroleum and metal refineries; erosion of natural deposits; discharge from mines.			
Thallium	2011	Levels lower than detect level	0 - 0	0.5	2	ppb	No	Discharge from electronics, glass, and leaching from ore-processing sites; drug factories.			
Radioactive Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination			
Beta/photon emitters	4/29/2010	4.4	4.4 - 4.4	0	4	mrrem/yr	No	Decay of natural and man-made deposits.			
Gross alpha excluding radon and uranium	4/29/2010	Levels lower than detect level	0 - 0	0	15	pCi/L	No	Erosion of natural deposits.			
Synthetic organic contaminants including pesticides and herbicides	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination			
2, 4, 5 - TP (Silvex)	2011	Levels lower than detect level	0 - 0	50	50	ppb	No	Residue of banned herbicide.			
2, 4 - D	2011	Levels lower than detect level	0 - 0	70	70	ppb	No	Runoff from herbicide used on row crops.			
Alachlor	2011	Levels lower than detect level	0 - 0	0	2	ppb	No	Runoff from herbicide used on row crops.			
Atrazine	2011	0.2	0.18 - 0.2	3	3	ppb	No	Runoff from herbicide used on row crops.			
Benzo (a) pyrene	2011	Levels lower than detect level	0 - 0	0	200	ppt	No	Leaching from linings of water storage tanks and distribution lines.			
Carbofuran	2011	Levels lower than detect level	0 - 0	40	40	ppb	No	Leaching of soil fumigant used on rice and alfalfa.			
Chlordane	2011	Levels lower than detect level	0 - 0	0	2	ppb	No	Residue of banned termiticide.			
Dalapon	2011	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff from herbicide used on rights of way.			
Di (2-ethylhexyl) adipate	2011	0.74	0 - 0.74	400	400	ppb	No	Discharge from chemical factories.			
Di (2-ethylhexyl) phthalate	2011	Levels lower than detect level	0 - 0	0	6	ppb	No	Discharge from rubber and chemical factories.			
Dibromochloropropane (DCP)	2011	Levels lower than detect level	0 - 0	0	0	ppt	No	Runoff / leaching from soil fumigant used on soybeans, cotton, pineapples, and orchards.			
Dinoseb	2011	Levels lower than detect level	0 - 0	7	7	ppb	No	Runoff from herbicide used on soybeans and vegetables.			
Endrin	2011	Levels lower than detect level	0 - 0	2	2	ppb	No	Residue of banned insecticide.			
Ethylene dibromide	2011	Levels lower than detect level	0 - 0	0	50	ppt	No	Discharge from petroleum refineries.			
Heptachlor	2011	Levels lower than detect level	0 - 0	0	400	ppt	No	Residue of banned termiticide.			
Heptachlor epoxide	2011	Levels lower than detect level	0 - 0	0	200	ppt	No	Breakdown of heptachlor.			
Hexachlorobenzene	2011	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from metal refineries and agricultural chemical factories.			
Hexachlorocyclopentadiene	2011	Levels lower than detect level	0 - 0	50	50	ppb	No	Discharge from chemical factories.			
Lindane	2011	Levels lower than detect level	0 - 0	200	200	ppt	No	Runoff / leaching from insecticide used on cattle, lumber, and gardens.			
Methoxychlor	2011	Levels lower than detect level	0 - 0	40	40	ppb	No	Runoff / leaching from insecticide used on fruits, vegetables, alfalfa, and livestock.			
Oxamyl [Vydate]	2011	Levels lower than detect level	0 - 0	200	200	ppb	No	Runoff / leaching from insecticide used on apples, potatoes, and tomatoes.			
Pentachlorophenol	2011	Levels lower than detect level	0 - 0	0	1	ppb	No	Discharge from wood preserving factories.			
Simazine	2011	0.16	0 - 0.16	4	4	ppb	No	Herbicide runoff.			
Toxaphene	2011	Levels lower than detect level	0 - 0	0	3	ppb	No	Runoff / leaching from insecticide used on cotton and cattle.			
Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination			
1, 1, 1 - Trichloroethane	2011	Levels lower than detect level	0 - 0	200	200	ppb	No	Discharge from metal degreasing sites and other factories.			
1, 1, 2 - Trichloroethane	2011	Levels lower than detect level	0 - 0	3	5	ppb	No	Discharge from industrial chemical factories.			
1, 1 - Dichloroethylene	2011	Levels lower than detect level	0 - 0	7	7	ppb	No	Discharge from industrial chemical factories.			
1, 2, 4 - Trichlorobenzene	2011	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from textile-finishing factories.			
1, 2 - Dichloroethane	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.			
1, 2 - Dichloropropane	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from industrial chemical factories.			
Benzene	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories; leaching from gas storage tanks and landfills.			

### Regulated Contaminants (continued)

Volatile Organic Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Violation	Likely Source of Contamination
Carbon Tetrachloride	2011	Levels lower than detect level	0 - 0	0	5	5	No	Discharge from chemical plants and other industrial activities.
Chlorobenzene	2011	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from chemical and agricultural chemical factories.
Dichloromethane	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from pharmaceutical and chemical factories.
Ethylbenzene	2011	Levels lower than detect level	0 - 0	0	700	700	No	Discharge from petroleum refineries.
Styrene	2011	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from rubber and plastic factories; leaching from landfills.
Tetrachloroethylene	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from factories and dry cleaners.
Toluene	2011	Levels lower than detect level	0 - 0	1	1	ppm	No	Discharge from petroleum factories.
Trichloroethylene	2011	Levels lower than detect level	0 - 0	0	5	ppb	No	Discharge from metal degreasing sites and other factories.
Vinyl Chloride	2011	Levels lower than detect level	0 - 0	0	2	ppb	No	Leaching from PVC piping; discharge from plastics factories.
Xylenes	2011	Levels lower than detect level	0 - 0	10	10	ppm	No	Discharge from petroleum factories; discharge from chemical factories.
cis - 1, 2 - Dichloroethylene	2011	Levels lower than detect level	0 - 0	70	70	ppb	No	Discharge from industrial chemical factories.
o - Dichlorobenzene	2011	Levels lower than detect level	0 - 0	600	600	ppb	No	Discharge from industrial chemical factories.
p - Dichlorobenzene	2011	Levels lower than detect level	0 - 0	75	75	ppb	No	Discharge from industrial chemical factories.
trans - 1, 2 - Dichloroethylene	2011	Levels lower than detect level	0 - 0	100	100	ppb	No	Discharge from industrial chemical factories.

### Turbidity

	Limit (Treatment Technique)	Level Detected	Violation	Likely Source of Contamination
<b>Highest single measurement</b>	1 NTU	0.96 NTU	No	Soil runoff.
<b>Lowest monthly percentage (%) meeting limit</b>	0.3 NTU	99.15%	No	Soil runoff.

**NOTE:** 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.

### Maximum Residual Disinfectant Level

Disinfectant Type	Year	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Units	Source of Chemical
Chlorine Residual (Chloramines)	2011	2.99	0.9	4	4.0	<4.0	ppm	Disinfectant used to control microbes.
Chlorine Dioxide	2011	0	0	0.15	0.8	0.8	ppm	Disinfectant.
Chlorite	2011	0.48	0	0.8	1.0	N/A	ppm	Disinfectant.

### Total Organic Carbon

	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Source Water	2011	6.34	4.32 - 6.34	ppm	Naturally present in the environment.
Drinking Water	2011	4.66	3.52 - 4.66	ppm	Naturally present in the environment.
Removal Ratio	2011	35%	11% - 35%	% removal *	N/A

**NOTE:** Total organic carbon (TOC) has 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.

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

### Lead and Copper

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	MCLG	MCL	Units	Likely Source of Contamination
Lead	2011	0.3500	0.0550 - 0.3500	15	15	ppm	Corrosion of customer plumbing. Action Level = 15
Copper	2011	0.0307	0.0030 - 0.0307	1.3	1.3	ppm	By-product of drinking water disinfection. Action Level = 1.3

**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. The NTMWD 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>.

### Unregulated Contaminants

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Chloroform	2011	14.7	8.8 - 14.7	ppb	By-product of drinking water disinfection.
Bromofom	2011	1.2	<1.0 - 1.2	ppb	By-product of drinking water disinfection.
Bromodichloromethane	2011	17.5	11 - 17.5	ppb	By-product of drinking water disinfection.
Dibromochloromethane	2011	10.1	5.7 - 10.1	ppb	By-product of drinking water disinfection.

**NOTE:** Bromoform, chloroform, dichlorobromomethane, and dibromochloromethane are disinfection by-products. There is no maximum contaminant level for these chemicals at the entry point to distribution.

### Unregulated Contaminant Monitoring Rule 2 (UCMR2)

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
N-nitrosodimethylamine (NDMA)	2009	0.0023	0 - 0.0023	ppb	By-product of manufacturing process.

**NOTE:** 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 this report. For additional information and data visit <http://www.epa.gov/safewater/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

### Secondary and Other Constituents Not Regulated

Contaminants	Collection Date	Highest Level Detected	Range of Levels Detected	Units	Likely Source of Contamination
Bicarbonate	2011	120	73 - 120	ppm	Corrosion of carbonate rocks such as limestone.
Calcium	2011	54	32 - 54	ppm	Abundant naturally occurring element.
Chloride	2011	33	25 - 33	ppm	Abundant naturally occurring element; used in water purification; by-product of oil field activity.
Hardness as Ca/Mg	2011	184	112 - 184	ppm	Naturally occurring calcium and magnesium.
Iron	2011	0.07	<0.05 - 0.07	ppm	Erosion of natural deposits; iron or steel water delivery equipment or facilities.
Magnesium	2011	4.3	3.9 - 4.3	ppm	Abundant naturally occurring element.
Manganese	2011	0.002	<0.001 - 0.002	ppm	Abundant naturally occurring element.
Nickel	2011	0.005	0.004 - 0.005	ppm	Erosion of natural deposits.
pH	2011	7.9	7.6 - 7.9	units	Measure of corrosivity of water.
Sodium	2011	39	29 - 39	ppm	Erosion of natural deposits; by-product of oil field activity.
Sulfate	2011	68	65 - 68	ppm	Naturally occurring; common industrial by-product; by-product of oil field activity.
Total Alkalinity as CaCO <sub>3</sub>	2011	104	63 - 104	ppm	Naturally occurring soluble mineral salts.
Total Dissolved Solids	2011	263	240 - 263	ppm	Total dissolved mineral constituents in water.
Total Hardness as CaCO <sub>3</sub>	2011	153	95 - 153	ppm	Naturally occurring calcium.
Zinc	2011	0.01	<0.01 - 0.01	ppm	Moderately abundant naturally occurring element used in the metal industry.