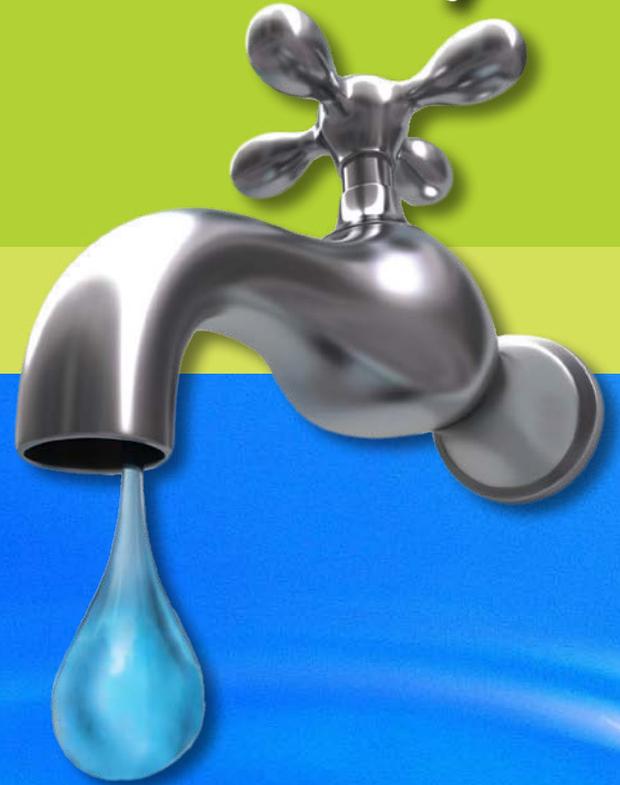


Water Quality Report 2012



Este reporte contiene información importante sobre el agua potable. Para asistencia en español, favor de llamar al teléfono 214.509.4500.



Our Message About Your Water



SAFE, HIGH QUALITY DRINKING WATER - RIGHT FROM YOUR TAP

City of Allen Water Utility employees take pride in delivering safe and “superior” quality drinking water to our customers. Our water system is rated “Superior” by the Texas Commission on Environmental Quality (TCEQ). This rating reflects the hard work and efforts of our employees to protect your health by delivering and maintaining safe and reliable drinking water. The City of Allen recognizes the North Texas Municipal Water District (NTMWD) for producing high quality drinking water.

Where does your water come from?

The Water Utilities Department is a municipal water distribution and wastewater collection utility owned by the City of Allen. Wholesale treated water is purchased from the North Texas Municipal Water District and delivered to our ground storage tanks. From there, the water is delivered to customers through the city’s distribution system.

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; and the East Fork Raw Water Supply Project (Wetland) which augment supplies. For detailed information on our water sources, treatment processes and more, please visit NTMWD’s website at: www.ntmwd.com.

A Source Water Susceptibility Assessment from 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 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, or NTMWD.

City of Allen Water Distribution System

The pumping and storage system is comprised of two pump stations, five ground storage tanks, and five elevated storage tanks. The ground storage capacity is 24 million gallons and the elevated storage capacity is 9 million gallons with a system pumping capacity of 80 million gallons per day. The Water Distribution System is comprised of over 445 miles of water mains with over 4,000 fire hydrants and 27,645 metered service connections.

City of Allen Distribution Samples Taken Last Fiscal Year

Bacteriological Scheduled	1080
Disinfectant Residual Scheduled.....	1095
Bacteriological Construction	66
Disinfectant Residual Construction	66
Trihalomethane Samples	4

Why is this report important?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some impurities. The presence of impurities do not necessarily pose a health risk. The U.S. Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain impurities in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must also provide the same protection for the health of the general public.

This Consumer Confidence Report (CCR) is an annual summary of the quality of drinking water the City of Allen provides to our customers. The CCR lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The EPA requires water systems to test for up to 97 contaminants. Our Drinking Water meets or exceeds all federal (EPA) Drinking Water Requirements.

All Drinking Water May Contain Contaminants

Where do these come from? 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 the source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants. The NTMWD conducts daily tests on both the raw water in Lavon Lake and the treated water they deliver to the City of Allen.

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 concerns. Therefore, secondaries are not required to be reported in this document but may affect the appearance and taste of your water.

Is the water safe to drink?

Yes!

The taste and odor is a palatability issue. The palatability change that results from naturally occurring algal bloom does not alter the quality of the water.

What causes the taste and odor changes in the water?

A natural occurrence in all surface water supplies, an "algal bloom" is responsible for the taste and odor changes in the treated drinking water supply. Algal blooms usually occur in Lavon Lake in late July and into August each year, but can occur at any time if the right conditions exist in the water supply reservoir.

What are the conditions for an algal bloom to occur in Lavon Lake?

Nutrients must be present—such as nitrogen, phosphorus, and calcium, which are derived from decaying vegetation in the lake. Turbidity has lessened—the turbidity or cloudiness of the lake water has cleared up, allowing the penetration of the sunlight. This occurs due to lack of rainfall. Temperature increase—the optimum temperature range of the lake water for an algal bloom to occur is between 80-85 degrees F. When all conditions are met, photosynthesis will take place and the algae will grow and/or proliferate. Algal species, such as anabaena, secrete an "oily" substance from their cells that causes the odor in the water supply. Aquatic fungi, actinomycetes, grow on dead and decaying algae and cause an earthy taste in the water. The NTMWD is pursuing the implementation of ozonation which is expected to significantly reduce and/or eliminate taste and odor issues caused by algal blooms.

Special Notice: Weakened Immune Systems

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 (1.800.426.4791).

Cryptosporidium

North Texas Municipal Water District has tested the lake water and treated water for the presence of cryptosporidium for several years. Cryptosporidium has been absent in all samples tested. Cryptosporidium is a protozoan which is so small it can be seen only with a microscope. It affects the digestive tracts of humans and animals. At this time, there is no specific drug therapy proven to be effective, but people with healthy immune systems will usually recover from a cryptosporidium infection within two weeks. The NTMWD continues to diligently test both the source and the treated water for the presence of cryptosporidium.



2012 Annual Drinking Water Quality Report

(Consumer Confidence Report)

INORGANIC CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Arsenic	<0.001	<0.001	0.001	0.01	0.01	ppm	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes.
2011	Barium	0.04	0.04	0.04	2	2	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits.
2011	Fluoride	0.66	0.46	0.66	4	4	ppm	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
2011	Nitrate	0.55	< 0.05	0.55	10	10	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
2010	Gross beta emitters	N/A	N/A	4.4	50	0	pCi/L	Decay of natural and man-made deposits.

ORGANIC CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Atrazine	0.19	0.18	0.2	3	3	ppb	Runoff from herbicide used on row crops.
2011	Simazine	0.08	< 0.07	0.16	4	4	ppb	Runoff from herbicide used on row crops.
2011	Di(2-ethylhexyl)adipate	0.37	< 0.62	0.74	400	400	ppb	Discharge from chemical factories

MAXIMUM RESIDUAL DISINFECTANT LEVEL

Year	Disinfectant	Average Level	Minimum Level	Maximum Level	MRDL	MRDLG	Unit of Measure	Source of Chemical
2011	Chlorine Residual (Chloramines)	2.23	1.16	3.22	4.0	<4.0	ppm	Disinfectant used to control microbes.
2011	Chlorine Dioxide	0	0	0.15	0.8	0.8	ppm	Disinfectant.
2011	Chlorite	0.48	0	0.80	1.0	N/A	ppm	Disinfectant.

DISINFECTION BYPRODUCTS

Year	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Total Haloacetic Acids	16.2	14	18.6	60	N/A	ppb	Byproduct of drinking water disinfection.
2011	Total Trihalomethanes	35.95	27.2	42	80	N/A	ppb	Byproduct of drinking water disinfection.

UNREGULATED CONTAMINANTS

Year or Range	Contaminant	Average Level	Minimum Level	Maximum Level	MCL	MCLG	Unit of Measure	Source of Contaminant
2011	Chloroform	13.5	10.5	15.6	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Bromoform	1.35	0	1.5	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Bromodichloromethane	14.2	10.4	17	N/A	N/A	ppb	Byproduct of drinking water disinfection.
2011	Dibromochloromethane	7.28	5.2	9.4	N/A	N/A	ppb	Byproduct of drinking water disinfection.

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

UNREGULATED CONTAMINANT MONITORING RULE 2 (UCMR2)

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2009	N-nitrosodimethylamine (NDMA)	0.0023	0	0.0023	ppb	Byproduct 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/ucmr/ucmr2/index.html>, or call the Safe Drinking Water Hotline at (800) 426-4791.

LEAD AND COPPER

Year	Contaminant	The 90th Percentile	# of Sites Exceeding Action Level	Action Level	Unit of Measure	Source of Contaminant
2009	Lead	2.3	0	15	ppb	Corrosion of customer plumbing systems; erosion of natural deposits
2009	Copper	1.04	0	1.3	ppm	Corrosion of customer plumbing systems; erosion of natural deposits; leaching from wood preservatives.

Additional Health Information for Lead: Lead was not detected during testing as indicated by this report. 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 www.epa.gov/safewater/lead.

TURBIDITY

Year	Contaminant	Highest Single Measurement	Lowest Monthly % of Samples Meeting Limits	Turbidity Limits	Unit of Measure	Source of Contaminant
2011	Turbidity	0.96	99.15	0.3	NTU	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.

TOTAL ORGANIC CARBON

Year	Contaminant	Average Level	Minimum Level	Maximum Level	Unit of Measure	Source of Contaminant
2011	Source Water	4.92	4.32	6.34	ppm	Naturally present in the environment.
2011	Drinking Water	3.93	3.52	4.66	ppm	Naturally present in the environment.
2011	Removal Ratio	20%	11%	35%	% removal *	N/A

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

NOTE: 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 level of pathogens. Byproducts of disinfection include trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

TOTAL COLIFORM

Year	Contaminant	Highest Monthly Number of Positive Samples	MCL	Unit of Measure	Source of Contaminant
2011	Total Coliform Bacteria	1	*	Presence	Naturally present in the environment.

NOTE: No more than 5% positive. Total coliform bacteria are used as indicators of microbial contamination of drinking water because testing 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 indicator that the water is microbiologically safe for human consumption.

* 2011 analyses data from most recent testing done in accordance with regulations.

** Arithmetic averages of three distribution points must be less than MCL of 1.0 ppm. Three samples are collected monthly in the distribution system and sent for analysis by ion chromatography.

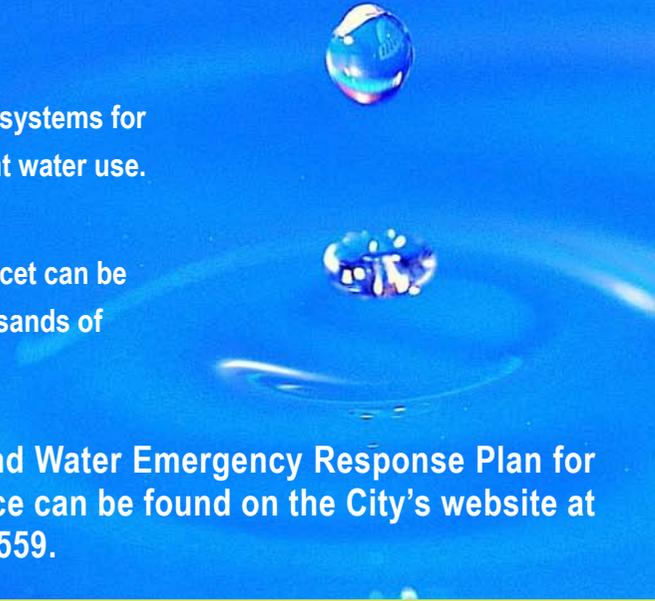
Why do we have water restrictions?

- Lake Texoma, which typically provides over 28% of the raw water for NTMWD, remains off-line due to the invasive species infestation of the zebra mussel. It may be several months to years before all the issues with this invasive species are resolved to allow removal of water from this reservoir.
- As long as Lakes Lavon and Chapman remain below the conservation pool elevation (not full), water restrictions may continue in order to insure adequate supplies.
- NTMWD water supply planning must balance public health, public safety, and fire protection capabilities with other uses of the available water supply.



Now is the time to prepare for future water needs. All consumers can and must do their part to extend the current available supplies.

- Work with licensed irrigation professionals to inspect automatic sprinkler systems for leaks and repairs, and ensure the system is operating for the most efficient water use. One broken sprinkler head could waste thousands of gallons each week!
- Check for and repair water leaks in and around your house. A dripping faucet can be wasting as much as 24 gallons per day! A leaky toilet can be wasting thousands of gallons per month!



A copy of the Water Conservation and Drought Contingency and Water Emergency Response Plan for the City of Allen, Texas (the "Plan") and implementing Ordinance can be found on the City's website at www.cityofallen.org/water-conservation or by calling 214.509.4559.

Terms to Know

The chart on the adjoining page lists the contaminants detected in Allen drinking water during calendar year 2011. Numerous tests detected no other contaminants. Listed below are the definitions for abbreviations on the adjoining page. As noted, the water quality surpasses standards for each contaminant as required by law. For additional information, please contact the Allen Water Utilities Department at 214.509.4502.

- » **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 margin of safety.
- » **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.
- » **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 contaminants.
- » **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 requirement which a water system must follow.
- » **ppm** - Parts per million, or milligrams per liter (mg/l). One part per million equals one drop of red dye in 26 gallons of water.
- » **ppb** - Parts per billion, or micrograms per liter (ug/l). One part per billion equals one drop of red dye in 26,000 gallons of water.
- » **pCi/L** - Picocuries per liter. A measure of radioactivity.
- » **mrem/yr** - Millirems per year. A measure of radiation absorbed by the body.
- » **NTU** - Nephelometric Turbidity Units. This is the unit to measure water turbidity.
- » **Turbidity** - A measure of water's clarity. Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Water with lower turbidity is clearer than water with higher turbidity.
- » **THM** - Trihalomethanes - a by-product of disinfection of water. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous system, and may have an increased risk of getting cancer.
- » **HAA** - Haloacetic Acid. A by-product of disinfection.
- » **TOC** - Total Organic Carbon.
- » **ND** - None Detected.
- » **cysts/L** - Cysts per liter.



Did you know water used through automated irrigation systems can account for more than 50% of your water use?

Always check your system before using to insure you do not have broken heads, lines, or other obvious water waste. Irrigation is regulated in the State of Texas by the Texas Commission on Environmental Quality (TCEQ). Allen residents should only hire licensed irrigators to install, repair, or upgrade irrigation systems. To verify your irrigator is licensed, go to the TCEQ website: www5.tceq.state.tx.us/lic_dpa.

H₂Ome Improvement Rebate Program

The City of Allen wants to help residents' efforts to conserve water. Currently there are several rebates available as credits on your water bill. For more rebates and information visit: www.cityofallen.org/water-rebates.

SMART Irrigation Technology Equipment

50% of the cost up to a maximum of \$125 for installation of qualifying SMART irrigation technology equipment.

Low Flow Toilet

Up to \$100 for replacing an existing high volume toilet with a new qualifying low flow toilet.

Water Efficient Washing Machines

\$75, \$100, or \$125 for a qualifying, water-efficient clothes washer purchase.



DID YOU KNOW THAT RUNOFF AND DEBRIS COLLECTED IN STORM DRAINS GOES STRAIGHT TO OUR LOCAL PONDS AND LAKES?

Do your part to keep our waterways clean and never sweep or dump anything down storm drains. Our local streams, ponds, and lakes provide drinking water, recreation, a habitat for local wildlife, and more. It also violates City Ordinance to allow any pollutants to enter the storm drainage system. Learn more at www.cityofallen.org/storm-water or contact the Illicit Discharge Hotline: 214.509.4512.

Public Participation Opportunities



The Water Department is part of the City Government.

The Allen City Council meets the 2nd and 4th Tuesdays of every month at Allen City Hall at 7 p.m.

The City of Allen general email address is: coa@cityofallen.org. The City of Allen website is: www.cityofallen.org.