



Your Drinking Water



City of Plano • Water Quality Report • 2006

“SUPERIOR” WATER SERVICE

This brochure has been prepared to provide you with information about your drinking water. As a water consumer in the City of Plano, you enjoy “superior” water every time you turn on the tap. “Superior” is the state’s highest water quality designation, given to the City of Plano for excellence in meeting water quality criteria.

Our Utility Operations team takes special pride in maintaining this prestigious designation. Responsible for the city’s water and wastewater infrastructure, the team’s highest priority is to provide safe and reliable drinking water.

Inside, you’ll find the laboratory test results for our water as well as other beneficial information. Plano’s drinking water has never violated any water quality standards and we value your continued confidence in us to provide you with the very best drinking water.

WHAT’S IN OUR WATER?

As water travels over the land’s surface, or through the ground, it dissolves naturally-occurring minerals, as well as substances resulting from human or animal activity. Contaminants that may be in untreated water include microbial contaminants, such as bacteria and viruses; inorganic impurities, such as salts and metals; pesticides and herbicides; organic chemicals from industrial or petroleum use; and radioactive contaminants.

The Environmental Protection Agency (EPA) and the Texas Commission on Environmental Quality (TCEQ) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.



Contaminants may be found in drinking water that may cause taste, color, or odor problems. These types of problems are not necessarily causes for health concerns. 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.

OUR WATER SOURCE

The City of Plano contracts with the North Texas Municipal Water District (NTMWD) for the water supply to our community. Since its founding in 1951 by ten cities, including Plano, the primary concern and responsibility of the NTMWD has been the conservation and preservation of clean, high quality, safe drinking water. This concern is shared by the City of Plano, who with the NTMWD, has combined proper system operation and up-to-date technology to consistently provide safe, reliable and high quality drinking water to all Plano water consumers.

The NTMWD obtains surface water from three sources: Lake Lavon, Plano’s primary water source, and Lakes Texoma and Cooper, our supplemental water sources.

The TCEQ has completed a Source Water Susceptibility Assessment for all drinking water systems that own their sources. This report describes the susceptibility and types of constituents that may come into contact with the drinking water source based on human activities and natural conditions. The system from which we purchase our water (NTMWD) has received the assessment. For more information on source water assessments and protection efforts at our system, contact the Public Works Department.



IMPORTANT HEALTH INFORMATION

If you have a weakened immune system, you may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Immuno-compromised persons who can be particularly at risk from infections include persons who:

- Are undergoing chemotherapy for cancer
- Have undergone organ transplants
- Are undergoing treatment with steroids
- Have HIV/AIDS or other immune system disorders
- Infants and some elderly persons

If you feel you are at risk, 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.

YOUR DRINKING WATER IS SAFE

The Environmental Protection Agency has issued drinking water standards, or Maximum Contaminant Levels, for more than 80 contaminants. The standards establish limits on the amount of various substances in drinking water that can, at certain levels, adversely affect human health.

Periodically, these standards are reviewed and refined, based on scientific and technological advancements. Public water utilities are required to implement a regular program of sample collection and laboratory analysis, meeting the federal and state standards.

Plano's "Superior" water supply meets and exceeds all federal and state regulations for drinking water.

In addition to daily monitoring by NTMWD of both the raw water in Lake Lavon and the treated water, Plano's Utility Operations team take over 130 water samples from across the city each month to ensure your water is reaching you in good condition. The samples are analyzed in the NTMWD laboratory, with quality reports submitted to the TCEQ.

Under the Safe Drinking Water Act Amendments of 1996, we must inform you within 24 hours of any violations that have the potential to have serious adverse effects on your health as a result of short-term exposure.

CRYPTOSPORIDIUM

This microscopic parasite is prevalent in surface water, affecting the digestive tracts of humans and animals. It is shed in feces and when ingested, may result in diarrhea, cramps, fever and other gastrointestinal symptoms. No specific drug therapy has proven to be effective, but individuals with healthy immune systems will usually recover within two weeks or less. Individuals with weakened immune systems, however, may be unable to clear the parasite and suffer chronic and debilitating illness.

The NTMWD has diligently tested both our lake water and treated water for the presence of *cryptosporidium* for many years. It has been absent in all of the samples tested.

Additional information about *Cryptosporidium* can be obtained from the EPA Safe Drinking Water Hotline (800) 426-4791.

LEAD

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that the lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your kitchen tap for 30 seconds before using the tap water. Additional information is available from the EPA Safe Drinking Water Hotline (800) 426-4791.



WHY MANDATORY OUTDOOR WATERING RESTRICTIONS?

North Texas is enduring its worst drought since the 1950's. Sound long-range planning and management of our water resources by your local water authority and your City has consistently provided you a safe, clean water supply. Partnering together on conserving water through this time of drought and beyond will ensure us a continued secure water source for decades to come.

To maintain the long-range integrity of our water supply, all North Texas Municipal Water District water customers, including Plano, are enacting outdoor watering restrictions. Plano's Stage 3 water use restrictions include limiting landscape watering to once per week.



The Texas Water Development Board estimates landscape irrigation accounts for more than 50 percent of water usage during the summer months, with more than half of that amount wasted due to over-watering or run-off. This is why conservative use of landscape water plays such a major role in conserving our water resources.

Your cooperation and support plays a critical role in the success of our conservation efforts and we appreciate your help and understanding.

A COMMON QUESTION FROM PLANO RESIDENTS:

How can I keep water from running off of my lawn and onto the street?

Answer: Instead of running each sprinkler zone for 10 or 15 minutes each, run the zone only the amount of time the soil can absorb the water that is put down. Depending on the slope this could vary widely. Each landscape owner will have to test their zones to see when the water begins to run off onto the driveway, sidewalk or street. Let's say the water runs off after 5 minutes. Set all the zones for 4 minutes each and then program the controller to come back around and do another 4 minutes and, if needed, the controller can be set to come back around a third time and water for another 4 minutes.

This gives the soil an opportunity to receive water and then soak it in, receive a little more water and soak it in, etc. Our clay soil does not absorb water quickly. Shorter run times on each sprinkler zone and then running a second or third round right behind the first will allow clay soil to absorb at a rate that will minimize runoff. Running one round in the morning and one in the evening will not be effective because it gives the soil too much time to dry out between rounds.

You can access general information regarding landscape irrigation and irrigation controllers at www.planotx.org/water.

USING WATER FILTERS

Some people use home filters to improve tap water smell, taste and appearance, but this may not make the water safer or healthier to drink. Different filters remove different substances from the water, but the filter must match the problem to be effective.

Point-of-use (POU) systems treat water at a single tap. Point-of-entry (POE) systems treat water used throughout a house. Both systems are based on various contaminant removal technologies and are available in a wide range of prices. Maintenance is required on all POU and POE treatment units for effective operation. *Without proper maintenance, contaminants may accumulate in the units and actually worsen water conditions.*

Installing a home treatment device is a personal decision. Plano's tap water consistently meets federal and state drinking water standards and it is not necessary to use a home water treatment device to have safe water to drink.

For additional information on treatment systems, contact the National Sanitation Foundation (800) 673-8010.

BOTTLED WATER

Consumers use bottled water for a variety of reasons, including convenience, taste preference and as a substitute for other beverages.

Plano's tap water consistently meets federal and state drinking water standards. It is not necessary to use bottled water to have safe water to drink.

Bottled water is often perceived to be healthier and safer to drink than tap water. As with tap water, its quality depends upon the source of water, its protection and monitoring procedures, as well as treatment and testing.

Bottled water is considered a food product and is regulated by the United States Food and Drug Administration, while tap water, a utility product, is regulated by the Environmental Protection Agency.

Because bottled water is not required to be date stamped, its quality can deteriorate over time.



Any bacteria in the water at the time of bottling can continue to grow.

Bottled water labels must include the manufacturer's name, address and the source of water.

Information on bottled water can be obtained by calling 800-928-3711, the International Bottled Water Association Hotline.

WATER TASTE AND ODOR

Your water may sometimes have an unpleasant taste or odor problem, yet still be perfectly safe to drink. This is because taste and odor problems are aesthetic and not health-related concerns.

Extended hot weather periods cause lake algae to reproduce, or "bloom," emitting an oily, organic substance which sometimes affects both taste and odor.

During this time, additional procedures are taken by the North Texas Municipal Water

District during the treatment process to reduce the organic residue from the bloom to control any taste or odor produced.

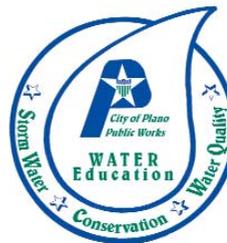
Again, your water quality, as regulated by the TCEQ and Environmental Protection Agency standards, continues to remain "Superior," with no health hazards created by the "algal blooms."

EDUCATIONAL PROGRAMS

Personnel are available for educational and informational programs concerning drinking water, water conservation and watershed protection.

Also available for loan to Plano residents and organizations are educational discovery boxes, science fair water

testing kits and educational videos. These items are loaned free of charge. To schedule a presentation or to inquire about the water education items listed above, please call 972-769-4328 or email lorrier@plano.gov.



CITY OF PLANO WATER QUALITY (YEAR 2005)

This chart lists the contaminants detected in the North Texas Municipal Water District drinking water supplied to the City of Plano. As noted, the water quality surpasses standards for each contaminant, as required by law.

*Data is from most recent testing done in accordance with federal regulations.

Substance	Highest Measurement	Lowest Monthly Percentage of Samples Meeting Limits	Turbidity Limits	Possible Source	
Turbidity (NTU)	0.15	97.00	0.37	Soil Runoff	
Turbidity has no health effects, however, it 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 cause symptoms such as nausea, cramps, diarrhea and associated headaches.					
Substance	Range	Highest Avg. Sample Point	Maximum Contaminant Level	Maximum Contaminant Level Goal	Possible Source
Regulated at the Treatment Plant					
Atrazine (ppb)	1.0 - 1.28	1.21	3	3	Herbicide runoff
Barium (ppm)*	0.030 - 0.032	0.031	2	2	Erosion of natural deposits
Fluoride (ppm)	0.50 - 0.70	0.76	4	4	Water additive
Nitrate (ppm)	0.64 - 0.76	0.76	10	10	Runoff from fertilizer
Simazine (ppb)	0.0 - 0.29	0.15	4	4	Herbicide runoff
Arsenic (ppb)*	ND	ND	10	None	Erosion of natural deposits
Gross Beta Emitters (pCi/L)	3.4 - 3.6	3.5	50	0	Decay of natural & manmade deposits
Carbon Tetrachloride	0.0 - 0.6	0.3	5	0	Discharge from industrial activities
Regulated at the Customer's Tap					
Lead (ppb)*	90th %	3	Action Level=15	15	Corrosion of customer plumbing
Copper (ppm)*	90th %	0.743	Action Level=1.3	1.3	Corrosion of customer plumbing
Chloramine (ppm)	High = 2.3 Low = 1.9	Avg. 2.10	4	4	Microbial Disinfectant
Regulated in the Distribution System					
**Total Coliform (%)	0 - 2.5	1.0	<5% of monthly samples	0	Human and animal waste
Total HAA (ppb)	19.5 - 29.4	24.5	60	N/A	Disinfection by-product
Total THMs (ppb)	51.2 - 65.6	58.4	80	N/A	Disinfection by-product
** Violation (August 2005) Not enough routine coliform samples.					
Unregulated Substances					
Sodium (ppm)*	15.0 - 17.0	16.0	Not Regulated		Mineral
Sulfate (ppm)	68.0 - 69.0	69.0	250 proposed		Mineral
Bromodichloromethane (ppb)	17.1 - 27.0	22.12	Not regulated		Disinfection by-product
Chloroform (ppb)	19.0 - 31.8	25.61	Not regulated		Disinfection by-product
Dibromochloromethane (ppb)	8.0 - 15.6	12.51	Not regulated		Disinfection by-product
Bromoform (ppb)	0.0 - 2.0	0.58	Not regulated		Disinfection by-product
TOC (ppm)	4.15 - 4.79	4.46	Not regulated		Organic material runoff

Maximum Contaminant Level (MCL) – the highest level of a contaminant that is allowed in drinking water

Maximum Contaminant Level Goal (MCLG) – the level of a contaminant in drinking water below which there is no known or expected risk to health.

Action Level – The concentration of a contaminant that triggers a treatment or other requirement a water system must follow.

(ppm) – Parts per million

(ppb) – Part per billion

Secondary and other non-regulated constituents available upon request.

(pCi/L) – picocuries per liter, a measurement of radioactivity in water.

NTU – Nephelometric Turbidity Units. Turbidity is a measure of the clarity of water.

- Water Contaminants
- Water Education
- Special Health Information
- Bottled Water
- Using Water Filters
- Safe Drinking Water

**Information on:
Critical and Educational**



Plano City Council

Mayor Pat Evans

Mayor Pro tem Scott Johnson

Deputy Mayor Pro tem Sally Magnuson

Place 1, Shep Stahel

Place 3, Loretta Ellerbe

Place 5, Harry LaRosilliere

Place 7, Jean Callison

Place 8, Lee Dunlap

Utility Operations, responsible for your water distribution

and infrastructure system maintenance, is part of the City

government. The City Council meets on the second and

fourth Monday of each month for a 5:00 p.m. workshop and

at 7:00 p.m. for a regular meeting in the Plano Municipal

Center, Council Chamber, 1520 Avenue K.

Utility Operations Department

972-769-4160

www.plano.tx.org



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Important Information About Your Drinking Water

Postal Customer

Este reporte incluyen informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte en espanol, favor de llamar al tel. 972-769-4160, para hablar con una persona bilingue en espanol.