

# Your Drinking Water



Fountain refreshment at Plano's Big Lake Park

## THE CITY OF PLANO WATER QUALITY REPORT, JULY, 2004

### "SUPERIOR" WATER, "SUPERIOR" SERVICE

**D**elivered fresh to your door daily, 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.

The City of Plano Utility Operations team takes special pride in working to maintain this "Superior" designation. Responsible for the maintenance of water and wastewater infrastructure within Plano, the team's highest priority is to provide safe and reliable drinking water.

Inside, you'll find a list of what's in Plano's drinking water, at what levels, and what we're doing to ensure your drinking water remains "Superior."

Plano's drinking water has never violated any water quality standards.

This brochure has been prepared to provide you, a Plano water consumer, with information about your drinking water. We want you to have



confidence in the water we deliver to you, and to reinforce our commitment of providing a safe and reliable water supply.

### 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 biological impurities, such as bacteria and viruses; inorganic impurities, such as salts and metals; pesticides and herbicides; organic

### 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 operation and up-to-date technology to provide consistently safe, reliable and 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.

chemicals from industrial or petroleum use; and radioactive contaminants.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that water poses a health risk.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency and the Texas Commission on Environmental Quality (TCEQ) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems.

## IMPORTANT HEALTH INFORMATION

*If you have a weakened immune system you may be more vulnerable to contaminants in drinking water than the general population.*

Immunocompromised persons who can be particularly at risk from infections include:

- Persons with cancer undergoing chemotherapy
- Persons who have undergone organ transplants
- Persons with HIV/AIDS or other immune system disorders
- Some elderly persons and infants

If you feel you are at risk, you should seek advice about drinking water from your health care provider.

The EPA Safe Drinking Water Hotline (800-426-4791) can provide you with additional information, including EPA guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants.



## 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 takes five 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).

# PROTECTING OUR WATER SOURCES

## LANDSCAPE WATER USE

Studies show that most lawns receive twice as much water as needed. In Plano, that means money, water and resources wasted. The best way to protect our water source is to learn when and how much to water your lawn.

### HOW MUCH TO WATER

The goal in watering should be to apply approximately an inch of water to the lawn slowly, so it can penetrate four to six inches deep into the soil.

### WHEN TO WATER

It is best to water only after the lawn begins to show signs of stress. Look for discoloration and a dark, dull appearance. A sure sign that a lawn needs water is when footprints remain visible after walking across it. In general, the lawn grasses in our area, such as Bermuda and St. Augustine, only need watering once every five to seven days once they are established.

### DEEP AND INFREQUENT WATERING IS BEST

If there were to be just one rule of lawn-watering, it would be to water deeply and infrequently. Light, frequent applications of water produces a weak, shallow-rooted turf that cannot withstand



heat and drought. By watering at the proper depth, when the lawn needs it, the deep, healthy roots can endure our hot, dry weather.

### HOW TO KNOW HOW MUCH WATER YOU HAVE APPLIED

How can you ensure that your lawn has received the right amount of water? Measure it. On a windless day, set a few empty cans or glasses of the same size around the lawn and watch how long it takes to fill them to an inch. That total length of time is all you need to run your sprinklers every five to seven days. Each zone may need different times, but it is fine to just average the one-inch fill time.

### DON'T WATER TOO MUCH AT ONCE

When watering a lawn, do not apply water to the point of run-off.

It is also important to make sure water is not spraying into the road or across sidewalks for public safety. Most irrigation systems will apply water faster than our heavy clay soil can absorb it, so waterings need to be broken into two or more sessions. If you see the water starting to run-off, you should reset the system so that it stops watering in that zone and waters another area instead. You can then have the whole cycle run again an hour or two later after the water has had time to soak in.

### MAKE IT EASY FOR WATER TO GET TO THE ROOTS

Aerate the lawn once a year to make it easier for the water to move through the soil.



### ADD COMPOST

Compost adds organic material to the soil and helps it hold water more efficiently. It is also a natural fertilizer and will reduce the amount of chemical fertilizer you need to apply. **For more information on the benefits of compost, or the purchase of Plano Pure Compost in bulk or bags, call 972-769-4150.**

# CITY OF PLANO WATER QUALITY (YEAR 2003)

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.

Substance	Range of Detections	Level in Plano Water	Maximum Contaminant Level (MCL)	Maximum Contaminant Level Goal (MCLG)	Possible Source of Substance
<b>REGULATED AT THE TREATMENT PLANT</b>					
Arsenic	ND	ND	10	0	Erosion and natural deposits
Atrazine	0.62-0.62	.62 ppb	3 ppb	3 ppb	Agricultural herbicide runoff
Barium	0.030-0.032	.032 ppm	2 ppm	2 ppm	Erosion of natural deposits
Fluoride	0.60-0.80	0.80 ppm	4 ppm	4 ppm	Water additive, natural geology
Nitrate	0.61-0.62	.62 ppm	10 ppm	10 ppm	Fertilizer runoff, erosion of natural deposits
Turbidity	.03-0.45	.11 ntu	.5 ntu	100% of samples met goal	Soil runoff
Simazine	0.13-0.13	0.13 ppb	4 ppb	4 ppb	Herbicide runoff
<b>REGULATED AT THE CUSTOMER'S TAP</b>					
Lead 2003 Test Results	90th percent values	.0018 ppm	Action Level =15 ppb	15 ppb	Corrosion of customer plumbing service connection
Copper 2003 Test Results	90th percent values	0.487 ppm	Action Level =1.3 ppm	1.3 ppm	Corrosion of customer plumbing service connection
<b>REGULATED AT THE DISTRIBUTION SYSTEM</b>					
Total Coliforms	0.00	0.00 % of samples with coliforms present	Presence in <5% of samples	0	Naturally present in the environment, human and animal waste
Total Haloacetic Acids	13.90-28.90 ppb	21.73	60	0	Disinfection by-product
Total Trihalomethanes	32.6-56.80	46.75 ppb	100 ppb	0	Disinfection by-product
<b>UNREGULATED SUBSTANCES</b>					
Sodium	14.5-17.4	17.4 ppm	Not Regulated		Erosion of Natural Deposits
Sulfate	69-79	79 ppm	250 ppm (proposed)		Mineral & Nutrient
Bromodichloromethane	11.0-11.0	11 ppb	Not Regulated		Disinfection by-product
Chloroform	11.45-11.45	11.45 ppb	Not Regulated		Disinfection by-product
Dibromochloromethane	5.45-5.45	5.45 ppb	Not Regulated		Disinfection by-product
Bromoform	ND	ND ppb	Not Regulated		Disinfectant by-product
MTBE	ND	ND ppb	Not Regulated		Gasoline additive

## GLOSSARY OF TERMS

**MCL** - Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water

**MCLG** - Maximum Contaminant Level Goal. 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, which triggers a treatment or other requirement that a water system must follow.

## MEASUREMENTS

**ppm** - Parts Per Million, or milligrams per liter (mg/l).

**ppb** - Parts Per Billion, or micrograms per liter (µg/l).

**ntu** - Nephelometric Turbidity Units is used to measure water turbidity.

**pCi/L** - Picocuries Per Liter, a measurement of radioactivity in water. A picocurie is 10 to the negative 12th power and is the quantity of radioactive material producing 2.22 nuclear transformations per minute.

## 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

Persons 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 and water conservation.

To schedule a presentation, call 972-769-4328, or email [lorrier@plano.gov](mailto:lorrier@plano.gov).

## PLANO CITY COUNCIL

Mayor Pat Evans  
Mayor Pro tem Shep Stahel  
Deputy Mayor Pro tem Ken Lambert  
Place 2, Scott Johnson  
Place 3, Phil Dyer  
Place 5, Steve Stovall  
Place 4, Sally Magnuson  
Place 7, Jean Callison

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.gov



## 2004 WATER QUALITY REPORT



### Critical and Educational Information on:

- Safe Drinking Water
- Using Water Filters
- Bottled Water
- Special Health Information
- Landscape Water Use
- Water Contaminants



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## IMPORTANT INFORMATION ABOUT YOUR DRINKING WATER

### Residential 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.



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