

2010 WATER QUALITY REPORT

City of
West
University
Place



Water System
ID #TX1010027





Where to Get More Information

When requesting information about the City of West University Place's water system, use our number (TX1010027), which is the number assigned to our water system by the U.S. Environmental Protection Agency (EPA).

Visit the EPA's water information site at www.epa.gov/safewater/.

You may also call the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Water quality data for community water systems throughout the U.S. is available on the Internet at www.waterdata.com. Previous years' water quality reports for the City of West University Place are available at www.westu.org.

You are welcome to contact Patrick Walters, Operations Superintendent for the City of West University Place, with questions about your water. He may be reached at 713-662-5858 or PWalters@westu.org.



En Español

Este reporte incluye informacion importante sobre el agua para tomar. Si tiene preguntas o discusiones sobre este reporte, favor de llamar al tel. 713-662-5846 para hablar con una persona bilingue en español.

In 2010, your water quality surpassed all state and federal requirements for drinking water.

How and Why We Test Your Water

Testing frequency

The City of West University Place tests your water daily, weekly, monthly, quarterly, yearly, and at greater intervals for as many as 97 constituents. In 2010, we performed 3,231 individual tests on your water. Testing intervals are determined by state and federal regulatory agencies. The purpose of testing is to make sure your water quality remains within safe levels as determined by the U.S. Environmental Protection Agency (EPA).

Who tests the water

Technicians who are licensed by the Texas Commission on Environmental Quality (TCEQ) collect water samples from wells, storage facilities, points in the distribution system, and residents' homes. Much of our testing is done in the field, although some samples are sent to a state-licensed laboratory for analysis.

What we test for

In general, we test for the following substances: biological (such as viruses and bacteria); inorganic (such as salts and metals); organic (such as chemicals from industrial or petroleum use); radioactive, which occur naturally or result from oil/gas production and mining activities; and pesticides and herbicides. The tests also check levels of inorganic ions (nitrate, nitrite, fluoride, phosphate, sulfate, chloride and bromide) that are essential for human health in small quantities, but which in larger quantities can cause unpleasant taste and odor—or even illness.

How substances enter the water

As rain and other water travels over land and sinks through the ground into aquifers, the water dissolves certain naturally occurring minerals, and breaks down naturally occurring radioactive materials. This water may also pick up dissolved substances resulting from the presence of plants, animals or human activity.

Who sets the regulations

To ensure that your water is safe to drink, the U.S. EPA regulates tap water, and the U.S. Food and Drug Administration (FDA) regulates bottled water. 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.

You may get more information about drinking water standards and the potential health effects of water constituents by calling the EPA's Safe Drinking Water Hotline at 1-800-426-4791.

Test Results

The water provided by the City of West University Place met or surpassed all state and federal requirements for drinking water in 2010. There were no violations of the federal Safe Drinking Water Act.

The table on the facing page shows the results of our water-quality analyses. Every contaminant we detected in the water—even in the minutest traces—is listed here. The table contains the name of each substance and the amount detected, together with numbers that show the highest level allowed by regulation (MCL) and the ideal goal for public health (MCLG).

While we did see a presence of volatile organic contamination (listed on the chart under "Disinfection Byproducts"), this is a by-product of disinfecting the water with chlorine. Chlorine is still the most-accepted and best-available technology for disinfecting drinking water.

YOUR WATER SOURCE

Your water in 2010 was a blend of 50% groundwater and 50% surface water.

The groundwater comes from two water wells owned and operated by the City of West University Place. The wells pump water from about 560 feet down, drawing from the Evangeline Aquifer located in the Gulf Coastal Sands.

The surface water is purchased from the City of Houston's East Water Purification Plant #3. Because the City of Houston draws the water it sells to our utility from surface sources (e.g. lakes or reservoirs), it tests regularly for cryptosporidium, a pathogen that causes a diarrheal illness. No cryptosporidium was found in the City of Houston's drinking water in 2009.

According to the City's Source Water Assessment (2006 completion), "Our source waters' contamination opportunities are rare and protection levels are high."

TEST RESULTS

Meets/Exceeds Quality Standard	Constituent, Unit of Measurement	Test Date	Detected Level	Range of Analytical Results	Regulatory Limit (MCL)	Regulatory Limit Goal (MCLG)	Likely Sources of Constituent
INORGANIC							
✓	Chloride, ppm	2008*	34.0	34.0 – 34.0	300	300	Erosion of natural deposits
✓	Fluoride, ppm	2008*	0.73	0.73 – 0.73	4.0	4.0	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories
✓	Nitrate, ppm	2010	0.11	0.01 – 0.11	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
✓	Nitrite, ppm	2006*	0.385	0.385 – 0.385	1.0	1.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
✓	Sulfate, ppm	2008*	66.0	66.0 – 66.0	300	300	Erosion of natural deposits
DISINFECTION BYPRODUCTS							
✓	Chloramine, ppm	2010	3.90	0.58 – 3.90	MRDL-4	MRDLG-4	Water additive used to control microbes
✓	Free Chlorine	2010	0.29	0.29 – 2.45	MRDL-4	MRDLG-4	Water additive used to control microbes
✓	THAAs (Total Haloacetic Acids), ppb	2010	21.9	1.5 – 21.9	60	0	By-product of drinking water chlorination
✓	TTHMs (Total Trihalomethane), ppb	2010	22.4	3.1 – 22.4	80	0	By-product of drinking water disinfection
UNREGULATED**							
N/A	Bicarbonate	2008	233	117.0 – 233.0	N/A	N/A	By-product of drinking water disinfection
N/A	Bromochloroacetic Acid, ppb	2010	9.7	1.2 – 9.7	N/A	N/A	By-product of drinking water disinfection
N/A	Bromodichloromethane, ppb	2010	8.0	1.6 – 8.0	N/A	N/A	By-product of drinking water disinfection
N/A	Bromoform***, ppb	2010	6.1	<1.0 – 6.1	N/A	N/A	By-product of drinking water disinfection
N/A	Chloroform, ppb	2010	10.8	1.5 – 10.8	N/A	N/A	By-product of drinking water disinfection
N/A	Dibromoacetic Acid, ppb	2010	3.4	<1.0 – 3.4	N/A	N/A	By-product of drinking water disinfection
N/A	Dibromochloromethane, ppb	2010	3.7	1.3 – 3.7	N/A	N/A	By-product of drinking water disinfection
N/A	Dichloroacetic Acid, ppb	2010	12.8	<1.0 – 12.8	N/A	N/A	By-product of drinking water disinfection
N/A	Monochloroacetic Acid, ppb	2010	2.2	<2.0 – 2.2	N/A	N/A	By-product of drinking water disinfection
N/A	Trichloroacetic Acid, ppb	2010	4.4	<1.4 – 4.4	N/A	N/A	By-product of drinking water disinfection
TURBIDITY							
✓	Turbidity, NTU (cloudiness); reflects content of City of Houston surface water	2010	0.09 – Avg.	0.03 – 0.27	1.0	N/A	Soil runoff. See "Additional Health Information," next page. *Your water contains even less turbidity, since it is diluted 50% by well water with no substantive turbidity.

COPPER AND LEAD

Meets/Exceeds Quality Standard	Substance	Test Date	# Samples Collected	90th Percentile	Action Level (AL)	Number of test sites exceeding Action Level (AL)	Source of Contaminant
✓	Copper, mg/L	2010	30	0.18	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
✓	Lead, mg/L	2010	30	0.0021	0.015	0	Corrosion of household plumbing systems; erosion of natural deposits. See "Additional Health Information," to the right



City of West University Place

INFORMATION FOR TEST RESULTS

* These test dates reflect the most recent testing done in accordance with regulations.

** The City of West University Place is participating in gathering data under the Unregulated Contaminant Monitoring Rule (UCMR) to help the EPA in determine the occurrence of possible drinking water contaminants. If unregulated contaminants were detected, they are shown in this table. This data may also be found on EPA's website at <http://www.epa.gov/safewater/data/ncod.html>, or you can call the Safe Drinking Water Hotline at 1-800-426-4791.

*** Bromodichloromethane, Bromoform, Chloroform, and Dibromochloromethane are in a chemical group called trihalomethanes. Even though none of these is individually regulated, they are regulated as a group: the total trihalomethane amount should not exceed 80 ppb (see listing for Trihalomethanes in chart at left).

KEY

ppb	Parts per billion
ppm	Parts per million
MCL	Maximum Contaminant Level – the highest level of a contaminant that is allowed in drinking water. MCLs are set as low to the goals as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal – 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.
MRDL	Maximum Residual Disinfectant Level
MRDLG	Maximum Residual Disinfectant Level Goal
AL	Action Level – The concentration of a contaminant, which if exceeded, triggers treatment or other requirement that a water system must follow.
NTU	Nephelometric Turbidity Units – a measurement of particles in the water



How to Get Involved

We encourage public interest and participation in our community's decisions affecting drinking water. The public is welcome at regular City Council Meetings, which occur the 2nd and 4th Mondays of each month at 6:30 p.m. at the Municipal Building, 3800 University Blvd., City of West University Place. Get more information about these meetings at www.westu.org or by calling 713-662-5839.

Additional Health Information

FLUORIDE

You've heard a lot about fluoride in the news over the past months. Here's what you need to know about your water in West University Place: Testing here shows fluoride levels at 0.73 parts per million (ppm)—in line with the recommended 0.7 ppm for the general Houston area; it is also markedly less than the EPA "Primary" limit of 4 ppm, and less than half of the preferred "Secondary" limit of 2 ppm. Fluoride exists naturally in water, but is adjusted to achieve a range of 0.6 – 2.0 ppm in most communities because of its recognized positive effects on dental health.

IMMUNE SYSTEM DISORDERS

Some people may be more vulnerable than others to constituents in drinking water. Immuno-compromised persons such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek drinking water advice from their health care providers.

LEAD

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. It is possible that 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. When your water has been sitting in the water lines 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 elevated lead levels in your home's water, you may wish to have your water tested. Call the Safe Drinking Water Hotline (1-800-426-4791) for more information, or search 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. The organisms include bacteria, viruses and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

drought

IT'S HERE. BE READY.

MULCH YOUR PLANTS. Spread 3-4" thick mulch around plant beds and younger trees now, before summer's hot, dry conditions and possible water rationing unduly stress these plants. Mulch reduces plants' water needs, and helps keep moisture consistent near plant roots.

CHANGE WATER TIMERS NOW. After you've checked to make sure your automatic watering system is watering properly, change your watering time to 3 a.m. Water has a chance to sink more deeply into the ground in the dark hours of early morning, which promotes deeper roots, healthier plants, and more drought-resistant plants.

FLUSH TOILETS LESS OFTEN. You know when they need to be flushed, and when they don't. Toilet flushing accounts for 28 percent of indoor water use.

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TRY LOW-FLOW SHOWERHEADS. Many deliver a perfectly acceptable shower experience! A \$10 low-flow showerhead can save you \$75 per year in water and energy.

TRADE OLD TOP-LOADING WASHING MACHINES FOR NEW FRONT-LOADING MACHINES. The average family washes 400 loads of laundry per year. New Energy-Star-rated washers can save up to \$145 per year in energy and water. (Plus clothes dry faster in the dryer or on the line.) Washing machines account for 22 percent of indoor water use each year—second only to toilet flushing.

90% of Texas
is now in a drought,
with **68%** of the state in
"severe," "extreme" and
even "exceptional" drought.

These areas include the City of
West University Place and all of
the surrounding Harris County.

Source: U.S. Drought Monitor

CITY OF WEST UNIVERSITY PLACE DROUGHT CONTINGENCY PLAN

How The City Will Handle A Water Shortage

Although there's no water shortage now, you should be prepared to conserve water should drought occur—whether due to nature or another event that might restrict water supplies.

Several years ago, the City implemented a four-step Drought Contingency Plan that remains in place today. We always follow the first step—reminding you to conserve water each summer—but you might want to familiarize yourself with all four steps:

1. ANNUAL CONSERVATION REMINDER. Each Spring, the City reminds water customers to conserve water. Users are urged to re-set their water irrigation timers to water earlier in the day...to check faucets for leaks...to readjust sprinkler heads...and to run washing machines and dishwashers only when full. This is good water stewardship—an important step to avoiding water shortages during summer.

2. VOLUNTARY USE RESTRICTIONS. If the demand for water rises to a certain threshold (65 percent of pumping capacity for 3 consecutive days), the City will ask users to voluntarily conserve more water—including not watering outside between the hours of 5 a.m. and 10 p.m.

3. MODERATE WATER USE RESTRICTIONS. When water supplies drop significantly or when customer demand begins to require 70 percent pumping capacity for 3 consecutive days, users will be banned from outside watering (landscapes, washing cars) between 10 a.m. and 7 p.m. Pools will not be filled. Most fountains and ponds will not be filled. Hydrants will not be flushed unless needed for public health, safety and welfare. Parks and green zone watering will be restricted to between 8 p.m. and 5 a.m. Non-essential uses of water (hosing down sidewalks, using water for dust control, etc.) will be prohibited. Full restrictions are listed at the City's website at www.westu.org (click on City Departments: Public Works: Operations).

4. CRITICAL WATER USE RESTRICTIONS. If water supplies and/or demand reach certain critical thresholds or if water supplies become contaminated, then severe restrictions will occur, including a ban on all outdoor water use or irrigation, regardless of time of day. Police and other personnel will enforce the bans. This stage of the Plan will end when all conditions listed as "triggering events" have ceased to exist for five days.





City of West University Place
Public Works Operations
3826 Amherst
West University Place, TX 77005

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Tips for watering during a drought:

1. **USE SOAKER HOSES, DRIP IRRIGATION, OR HAND-HELD HOSES.** Overhead sprinklers don't deliver as much water to plant roots, and chronic wet foliage attracts disease and pests.
2. **TRY A LONG-HANDLED SPRAY NOZZLE** when hand-watering. It creates raindrop-sized droplets and delivers them near plant roots, helping avoid runoff.
3. **APPLY SURVIVAL-LEVEL WATER EVERY THREE DAYS** when it hasn't rained, to recharge the soil water.
4. **DON'T WATER DAILY**, especially on heavy clay soils. One or two deep waterings are much more effective than many shallow or light waterings. Shallow watering encourages shallow roots, which in turn makes the tree even more prone to drought stress.
5. **REMOVE ALL GRASS AROUND YOUNG TREES** (one foot beyond drip line). Young trees are particularly susceptible to water competition from turf grass. Mulch helps protect bare soil areas.

Source: WalterReeves.com