

CITY OF WEST UNIVERSITY PLACE



# 2012 WATER QUALITY REPORT

Water System ID #TX1010027



# In 2012, your water quality surpassed all state and federal requirements for drinking water.

## How and Why We Test Your Water

### 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/](http://www.epa.gov/safewater/).

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

Water quality information for the State of Texas may be accessed via the Texas Commission on Environmental Quality (TCEQ) at [www.tceq.state.tx.us](http://www.tceq.state.tx.us). Previous years' water quality reports for the City of West University Place are available at [www.westutx.gov](http://www.westutx.gov) > Departments & Services > Public Works > Operations Division.

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@westutx.gov](mailto:PWalters@westutx.gov).



### En Español

Este reporte incluye información 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.

### 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 2012, we performed 4,508 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 1-800-426-4791.2*

### Test Results

The water provided by the City of West University Place met or surpassed all state and federal requirements for drinking water in 2012. 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 2012 was a blend of ground and surface water, with an annual target of 50% of each.**

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 2012.

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

West U's water is again rated "Superior" (the highest designation possible) by Texas Commission on Environmental Quality. We have received this designation continuously since 1943.

# TEST RESULTS

Meets/Exceeds Quality Standard	Constituent, Unit of Measurement	Test Date	Detected Level	Range	Regulatory Limit (MCL)	Regulatory Limit Goal (MCLG)	Likely Sources of Constituent
<b>INORGANIC</b>							
✓	Altrazine, ppb	2012	0.26	0.10 – 0.26	3.0	3.0	Runoff from herbicide used on row crops
✓	Chloride, ppm	2011*	30.0	28.0 – 30.0	300	300	Erosion of natural deposits
✓	Fluoride, ppm	2011*	0.42	0.37 – 0.42	4.0	4.0	Erosion of natural deposits; water additive to promote strong teeth; discharge from fertilizer and aluminum factories
✓	Nitrate, ppm	2012	0.43	0.43 – 0.43	10.0	10.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
✓	Nitrite, ppm	2012	0.02	0.02 – 0.02	1.0	1.0	Runoff from fertilizer use; leaching from septic tanks & sewage; erosion of natural deposits
✓	Simazine, ppb	2012	0.09	0.07 – 0.09	4.0	4.0	Herbicide runoff
✓	Sulfate, ppm	2011*	31.0	28.0 – 31.0	300	300	Erosion of natural deposits
<b>DISINFECTION BY-PRODUCTS</b>							
✓	Chloramine, ppm	2012	1.3 – Avg.	0.5 – 3.7	MRDL-4.0	MRDLG-4.0	Disinfectant added to drinking water to control microbes
✓	THAAs (Total Haloacetic Acids), ppb	2012	58.6	2.1 – 58.6	60	0	By-product of drinking water disinfection
✓	TTHMs (Total Trihalomethane), ppb	2012	31.4	5.2 – 31.4	80	0	By-product of drinking water disinfection
<b>UNREGULATED</b>							
N/A	Bicarbonate, ppm	2011*	178	170.0 – 178.0	N/A	N/A	By-product of drinking water disinfection
N/A	Bromochloroacetic Acid, ppb	2012	6.3	1.0 – 6.3	N/A	N/A	By-product of drinking water disinfection
N/A	Bromodichloromethane***, ppb	2012	7.6	2.5 – 7.6	N/A	N/A	By-product of drinking water disinfection
N/A	Bromoform***, ppb	2012	<1.0	<1.0 – <1.0	N/A	N/A	By-product of drinking water disinfection
N/A	Chloroform***, ppb	2012	23.0	3.0 – 23.0	N/A	N/A	By-product of drinking water disinfection
N/A	Dibromoacetic Acid, ppb	2012	1.6	<1.0 – 1.6	N/A	N/A	By-product of drinking water disinfection
N/A	Dibromochloromethane***, ppb	2012	1.6	<1.0 – 1.6	N/A	N/A	By-product of drinking water disinfection
N/A	Dichloroacetic Acid, ppb	2012	32.7	2.1 – 32.7	N/A	N/A	By-product of drinking water disinfection
N/A	Monochloroacetic Acid, ppb	2012	14.8	<2.0 – 14.8	N/A	N/A	By-product of drinking water disinfection
N/A	Trichloroacetic Acid, ppb	2012	9.0	<1.0 – 9.0	N/A	N/A	By-product of drinking water disinfection
<b>TURBIDITY</b>							
✓	Turbidity, NTU (cloudiness); reflects content of City of Houston surface water	2012	0.098 – Avg.	0.07 – 0.28	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.

## COLIFORM BACTERIA

Microbiological Contaminant	Highest # of detections	# of months in violation	MCL	Violation	MCLG	Source of Contaminant
✓ Total Coliform Bacteria	No positive samples found in 2012 in 317 samples taken	0	More than 1 sample in a month with a detection	No	0	Naturally present in the environment.

## COPPER AND LEAD

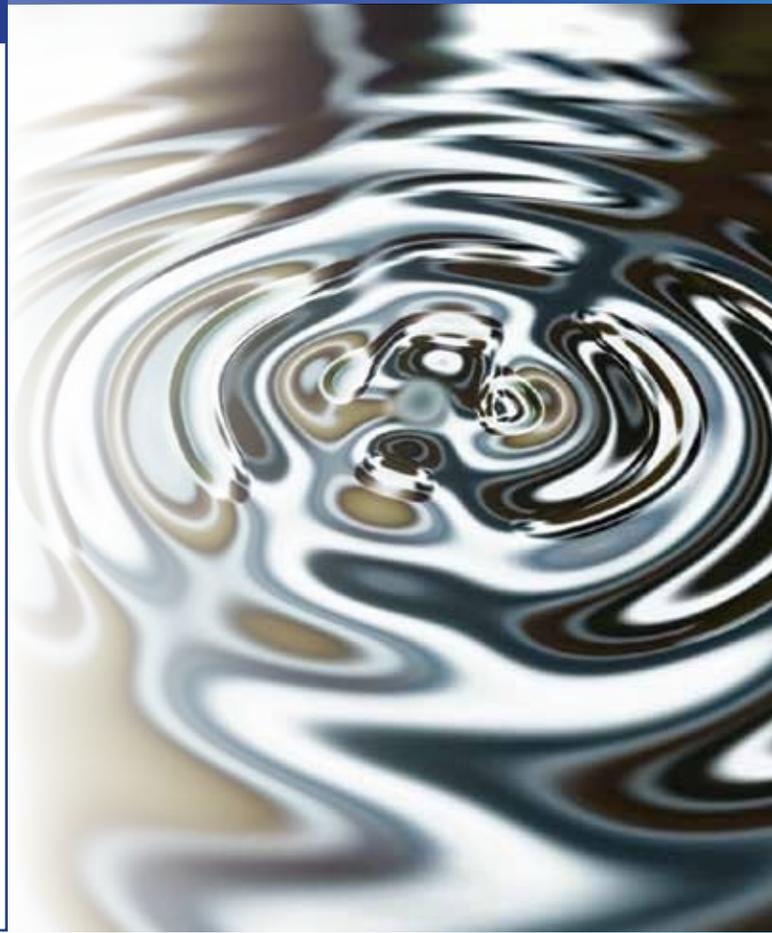
Meets/Exceeds Quality Standard	Substance	Test Date	# Samples Collected	90th Percentile	Action Level (AL)	Number of test sites exceeding Action Level (AL)	Source of Contaminant
✓	Copper, ppm	2010*	30	0.233	1.3	0	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives.
✓	Lead, ppb	2010*	30	3.4	15	0	Corrosion of household plumbing systems; erosion of natural deposits. See "Additional Health Information," to the right on the next page.

## 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

<b>ppb</b>	Parts per billion
<b>ppm</b>	Parts per million
<b>MCL</b>	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.
<b>MCLG</b>	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.
<b>MRDL</b>	Maximum Residual Disinfectant Level
<b>MRDLG</b>	Maximum Residual Disinfectant Level Goal
<b>AL</b>	Action Level – The concentration of a contaminant, which if exceeded, triggers treatment or other requirement that a water system must follow.
<b>NTU</b>	Nephelometric Turbidity Units – a measurement of particles in the water

## Additional Health Information

### FLUORIDE

Testing shows fluoride levels at 0.42 parts per million (ppm)—less than the 0.7 ppm generally found in the Houston area; it is also markedly less than the EPA “Primary” limit of 4 ppm, and less than one-quarter of the preferred “Secondary” limit of 2 ppm. Fluoride exists naturally in water, but is adjusted to achieve a range of 0.6 - 1.0 ppm in most communities due in part to regional differences in the amounts of water consumed. In Houston’s warmer climate, where even more water is consumed, the optimum target lies at the low end of the range.

### 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.



### 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 2<sup>nd</sup> and 4<sup>th</sup> 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.westutx.gov](http://www.westutx.gov) or by calling 713-668-4441.

# 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.

## Toilet flushing accounts for 28% of indoor water use.

**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.

**57%** of Texas is now in a drought, with **42%** of the state in "severe," "extreme" and even "exceptional" drought.

One year ago, only 25% of the state fell into these latter three classification areas.

Source: U.S. Drought Monitor

## CITY OF WEST UNIVERSITY PLACE DROUGHT CONTINGENCY PLAN How The City Will Handle A Water Shortage

**Be prepared to conserve water should drought conditions create water shortages.**

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.westutx.gov](http://www.westutx.gov) (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  
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 West University Place, TX 77005

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## Install a Rain Sensor, Save \$\$\$

Wasted water hurts in times like these. Don't let your sprinklers run in the rain. Install a wireless rain sensor (less than \$100) to regulate your watering system, and save up to 35% on watering bills over a year. Search "rain sensor sprinkler" on the Internet, or call your contractor.

The water-saving wireless rain sensor attaches easily to fence or roofline.



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# DE-GUNK!

## COOKING GREASE DOWN THE DRAIN COSTS YOU MONEY

Grease in city sewer lines costs you money in the form of higher maintenance costs—both for you and for the City (think taxes).

Running hot water after dumping grease does not help. The water quickly cools, cooling the grease along with it. Cooled grease deep in your drain is a recipe for clogging, and can cause sewage to back up into your home.

Contrary to popular belief, soaps do not help. In fact, soaps combine with grease deep in our drainage system to form hardened masses that are difficult and expensive to remove. The soap-grease combination is costing our City time and money—not to mention unsightly and inconvenient repairs.

All fats—salad oils, marinades, gravies and old salad dressings—are the culprit, not just hot cooking greases. They belong in the trash—not down the drain. (And as silly as it sounds, grease does not go down the toilet, either.)



### TIPS FOR DISPOSING OF USED GREASE

1. Cool grease, then pour into discarded containers (milk cartons, juice cans, etc.), cover, and place upright in trash.
2. Wipe dishes and pots free of grease with paper towels before washing (or putting in dishwasher). Place paper towels in trash.
3. Drain fatty foods over paper towels, not over sink.
4. Dispose of fat trimmings in the trash, not the garbage disposal.
5. *Everyone* in the house must understand and help—including household workers.

### TRASH THESE GREASES

- Frying oil
- Meat trimmings & grease
- Salad oil
- Marinades
- Gravy
- Salad dressings