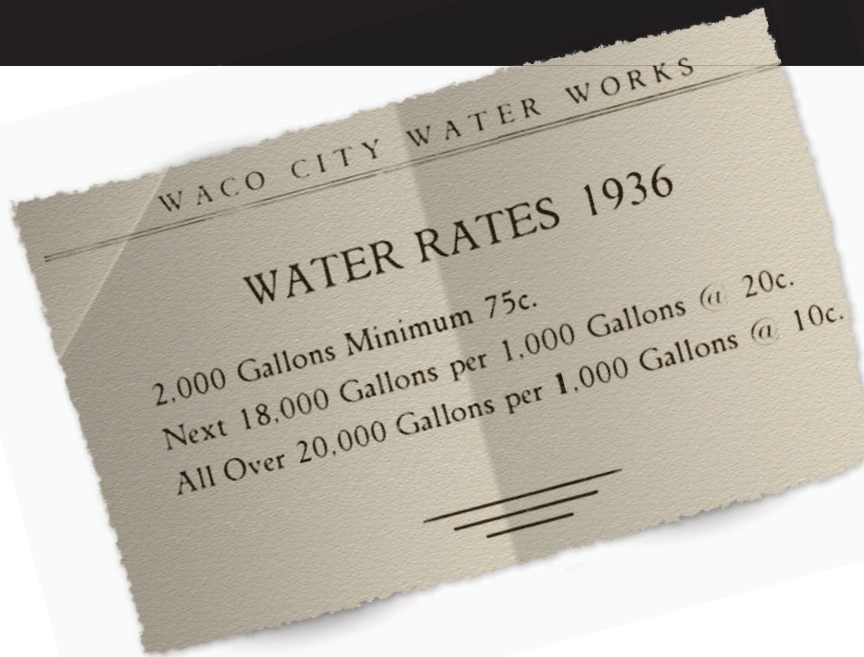


2011 WATER QUALITY REPORT

100 YEARS

1912 - 2012





# About This Report:

Our Drinking Water meets or **exceeds all federal (EPA) and state drinking water requirements**. The City of Waco Water Utility Services Department (Public Water System #1550008) is proud to maintain a **Superior** rating from the Texas Commission on Environmental Quality (TCEQ) for water quality.

This report is a summary of the quality of the water we provided our customers during 2011. The analysis was made by using data from the most recent U.S. Environmental Protection Agency (EPA) required tests. Our goal is that this information will help you become more knowledgeable about what's in your drinking water.

The table that follows lists all of the federally regulated or monitored contaminants which have been found in your drinking water. The U.S. EPA requires water systems to test for up to 97 different contaminants.

## Where Does Our Water Come From?

Our drinking water is obtained from surface water sources. The primary source of drinking water for residents of the City of Waco and surrounding communities is Lake Waco, in Waco, TX.

## Source Water Assessment Protection

The TCEQ completed an assessment of our source water and results indicate that some of our sources are susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detections of these contaminants may be found in this report. For more information on source water assessments and protection efforts in our system, contact the Waco Water Quality Lab.

## Special Notice

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immunocompromised 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 for infection. 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 at (800) 426-4791.

## En Español

Este informe incluye información importante sobre el agua potable. Si tiene preguntas o comentarios sobre éste informe en español, favor de llamar al tel. (254) 299-2489 -para hablar con una persona bilingüe en español.



# Water Quality Tables for Surface Water - Lake Waco

## Inorganic Contaminants

COLLECTION DATE OR YEAR	CONTAMINANT	HIGHEST SINGLE SAMPLE	MIN - MAX LEVELS	MCL/MCLG		UNITS	VIOLATION	SOURCES IN DRINKING WATER
4/14/2011	Fluoride	1.01	0.16 - 1.01	4	4	ppm	No	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories.
1/20/2011	Nitrate	0.35	0.01 - 0.35	10	10	ppm	No	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits.
4/14/2011	Barium	0.06	0.0431 - 0.06	2	2	ppm	No	Decay of natural and man-made deposits.

## Residual Disinfectant Level

COLLECTION DATE OR YEAR	DISINFECTANT	AVG WACO LEVEL	MIN - MAX LEVELS	MRDL/MRDLG		UNITS	VIOLATION	SOURCES IN DRINKING WATER
2011	Chloramines	2.41	0.5 - 4.28	4.0	<4.0	ppm	No	Disinfectant used to control microbes.

## Disinfection Byproducts

COLLECTION DATE OR YEAR	CONTAMINANT	AVG LEVEL	MIN - MAX LEVELS	MCL/MCLG		UNITS	VIOLATION	SOURCES IN DRINKING WATER
2011	Haloacetic Acids (HAA5)	18	5.2 - 20.2	60	no goal	ppb	No	By-product of drinking water disinfection
2011	Trihalomethanes (THMs)	30	15.9 - 48.5	80	no goal	ppb	No	By-product of drinking water disinfection

## Lead and Copper

**Action Level Goal (ALG):** The concentration of a contaminant in drinking water below which there is no known or expected risk to health. ALGs allow for a margin of safety.

**Action Level:** The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

YEAR	CONTAMINANT	90TH PERCENTILE	SITES EXCEEDING ACTION LEVEL	ALG	ACTION LEVEL	UNIT OF MEASURE	VIOLATION	SOURCES IN DRINKING WATER
2009	Lead	9.09	0	0	15	ppb	No	Erosion of natural deposits; Corrosion of household plumbing systems
2009	Copper	0.249	1	1.3	1.3	ppm	No	

## HEALTH INFORMATION FOR LEAD

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 <http://www.epa.gov/safewater/lead>.

## Turbidity

YEAR		LIMIT	LEVEL DETECTED	VIOLATION	SOURCES OF SUBSTANCE IN DRINKING WATER
2011	Highest single measurement	1 NTU	0.18 NTU	No	Soil Runoff
2011	Lowest monthly % meeting limit	0.3 NTU	100%	No	Soil Runoff

## Cryptosporidium Monitoring Information

Cryptosporidium is a microbial pathogen that may be found in water contaminated by feces. Although filtration removes Cryptosporidium, it cannot guarantee 100 percent removal nor can the testing methods determine if the organisms are alive and capable of causing cryptosporidiosis, an abdominal infection with nausea, diarrhea and abdominal cramps that may occur after ingestion of contaminated water. **Monitoring in Lake Waco (untreated water) at the Lake Waco water intake structure was performed from October 2006 - September 2008.**

**NO Cryptosporidium has been detected.**

## Total Coliform

YEAR	CONTAMINANT	HIGHEST % OF POSITIVE SAMPLES	MCL/MCLG		VIOLATION	SOURCES OF SUBSTANCE IN DRINKING WATER
2011	Total Coliform Bacteria	0.8%	5%	0%	No	Naturally present in the environment
2011	Fecal Coliform or E. Coli	0%	0%	0%	No	Naturally present in the environment

## Abbreviations

<b>NTU</b> -	Nephelometric Turbidity Units (a measure of turbidity)
<b>MFL</b> -	million fibers per liter (a measure of asbestos)
<b>pCi/L</b> -	picrouries per liter (a measure of radioactivity)
<b>ppm</b> -	parts per million, or milligrams per liter (mg/L), or one ounce in 7,350 gallons of water
<b>ppb</b> -	parts per billion, or micrograms per liter (µg/L), or one ounce in 7,350,000 gallons of water
<b>ppt</b> -	parts per trillion, or nanograms per liter
<b>ppq</b> -	parts per quadrillion, or picograms per liter
<b>mrem</b> -	millirems per year (a measure of radiation absorbed by the body)
<b>na</b> -	not applicable
<b>avg</b> -	average, regulatory compliance with some MCLs are based on running annual average of monthly samples

## Definitions

**Maximum Contaminant Level (MCL)** - 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.

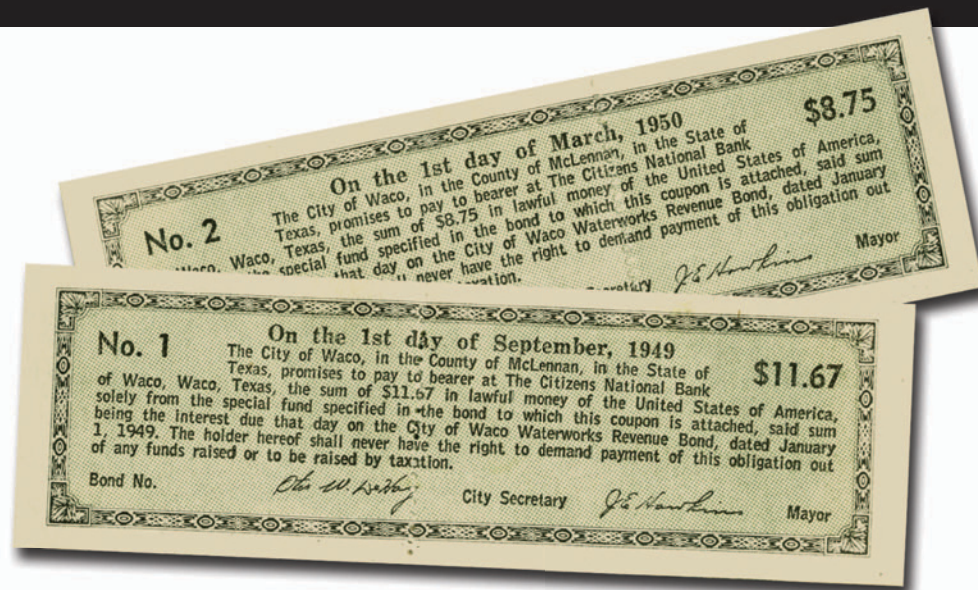
**Maximum Contaminant Level Goal (MCLG)** - Level of a contaminant in drinking water below which there is no known or expected health risk. MCLGs allow for a margin of safety.

**Maximum Residual Disinfectant Level (MRDL)** - The highest level of 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 contamination.

**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 requirements that a water system must follow.



## Drinking Water Standards

In order to ensure that tap water is safe to drink, the EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water that must provide the same protection for public health.



## Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. 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 source water before treatment include: microbes, inorganic contaminants, pesticides, herbicides, radioactive contaminants, and organic chemical contaminants.

## All drinking water may contain contaminants.

When drinking water meets federal standards there may not be any health based benefits to purchasing bottled water or point of use devices. 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 (1-800-426-4791).

## Secondary Constituents

Contaminants may be found in drinking water that may cause taste, color, and odor problems. These types of problems are not necessarily causes for health concerns. For more information on taste, odor or color of drinking water, please contact Waco Water Utility services.



# *Water Conservation*

## It's Just Good Common Sense

Conserving water not only saves you money, it's the right thing to do. Even doing small things to conserve water can go a long way towards ensuring a reliable water supply for years to come. Check out our water saving tips and be sure to try out our new online water conservation tool.



## New Online Water Conservation Tool

### Online Waco Weather Data Can Help Determine How Much Water Your Grass Needs

#### HOW MUCH SHOULD YOU WATER YOUR LAWN?

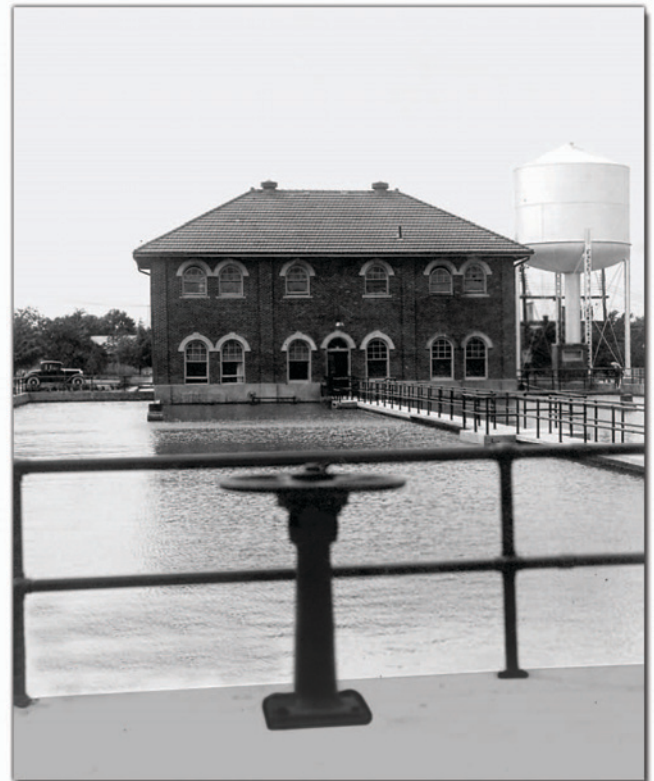
There's no need to guess. Now you can access the new Waco Weather Station Data and online conservation tool.

Access the new online water conservation tool by visiting:  
[www.wacowater.com/weatherstation](http://www.wacowater.com/weatherstation)

At the site, you can view current local weather data such as rainfall, soil moisture, temperature, wind speed and even solar radiation. All the data is collected at the new Water Utilities sponsored weather station located at Cottonwood Creek Golf Course.

This new online tool will let you know exactly how much water your lawn currently needs. You just input your type of grass, amount of shade and sprinkler flow and the system calculates how long you need to run your sprinklers.

The new weather station and online network is part of the TexasET Network, a project in partnership with the Irrigation Technology Center of AgriLIFE Extension, a part of Texas A&M University.



# Stormwater Pollution Prevention

Anything on the ground when it rains may get washed into the storm drain system along with the rain. Unlike our wastewater, this stormwater runoff goes straight into our creeks, lakes and rivers without being treated. That makes disposing of oil and other chemicals properly extremely important. You wouldn't dump oil or pesticide straight into the river, but dumping these on the ground has the same end result. Remember, **Only Rain Down the Drain!**

The Texas Commission on Environmental Quality grants the city's storm water permit. This permit is administered by the Stormwater section of the Environmental Services Division of Water Utility Services and details steps the city will take to prevent and mitigate the impact "non-point source" pollutants have on our rivers, creeks and lakes.

For more information on stormwater pollution prevention, or to request a school visit or presentation, contact Stormwater Services at 254.750.1662.



## Water Saving Tips :



- Water your lawn and outdoor plants in the morning or evening, when temperatures are cooler and there is less evaporation.
- Use a timer when watering to avoid forgetful over watering.
- Wash fruits and vegetables in a pan of water instead of under a running faucet.
- If you have a pool or spa, use a cover to decrease evaporation.
- Adjust your lawn mower to a higher setting. Taller grass helps soil hold more moisture.
- Collect rain water from your roof to water plants.
- Check pipes and faucets, indoors and out, for leaks on a regular basis.
- Shorten your showers by just a minute or two and save up to 150 gallons per month.
- Defrost food in the refrigerator instead of under running water.
- Wash dishes and clothes only when loads are full.
- Turn off the faucet while brushing your teeth or shaving.
- Use water-saving aerators on all of your faucets.

# For more than a century...

For more than 100 years, Waco Water has been provided to citizens - first from the Brazos River and later, through construction of a dam on the Bosque River, from Lake Waco.

In 1912, the first City of Waco Waterworks bonds were issued for the construction of a filter treatment plant, beginning a century of the provision of safe and reliable drinking water to the citizens of Waco.

Through the years, Waco has remained on the cutting edge in treatment technology and in planning ahead for ample future supply of water. From early chlorination, to lake aeration and recently, dissolved air flotation, Waco has always been a leader in water technology.

Celebrate with us - a century of Waco Water!

## WacoWater.com

Your City of Waco Water Department is online at [www.wacowater.com](http://www.wacowater.com). Online, you can pay your bill, read about current news and projects, find conservation tips, contact information and more. You can sign up for **e-bill and setup automatic recurring payments**, as well. Visit the website for more information.

### Ways to Pay Your Water Bill:

Online at: **[www.wacowater.com](http://www.wacowater.com)**

At the City of Waco Water Office:

425 Franklin Avenue

Waco, Texas 76701

Lobby: (Mon-Fri) 9 a.m. to 5 p.m.

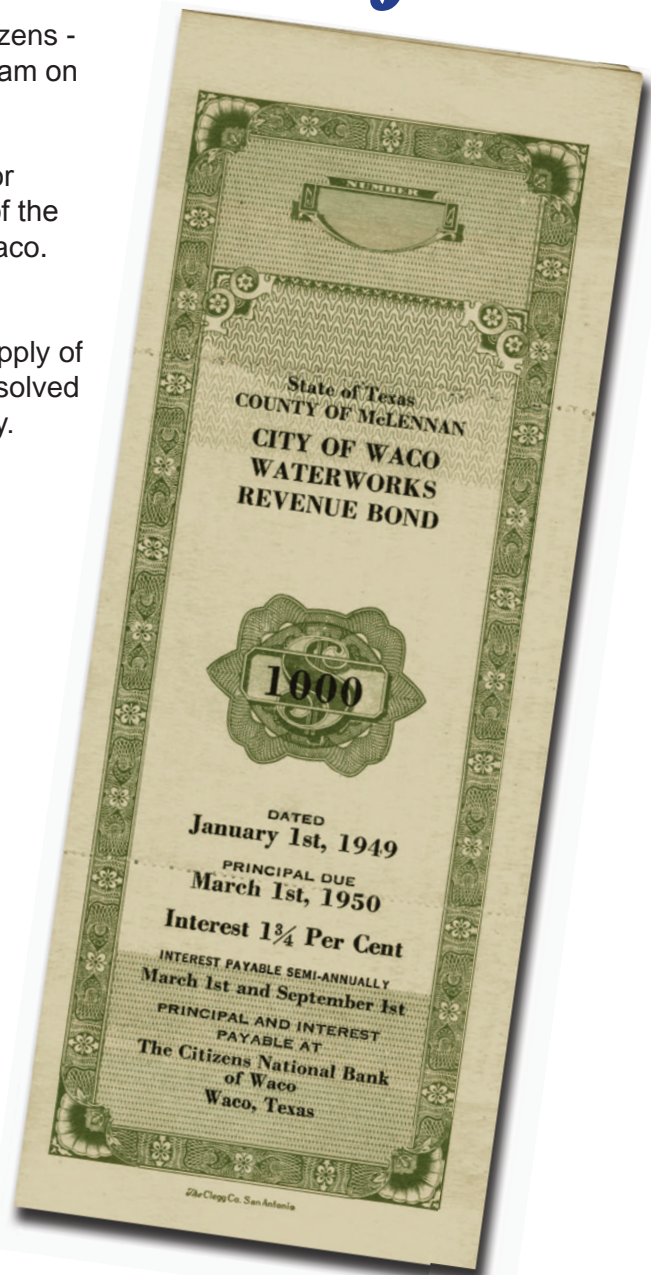
Drive-Thru: (Mon-Fri) 7:30 a.m. to 5:30 p.m.

**At your Neighborhood HEB:**

9100 Woodway Dr., 1301 Wooded Acres Dr.,

801 N. IH-35, 1110 S. Valley Mills Dr., 3801 N.

19th St., 1102 Speight Ave.





WACO CITY  
WATER WORKS

# WACO WATER

Utility Services

for more than 100 years

WACO CITY WATER WORKS



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