

Public Works Department 1301 Solana Boulevard Building 4, Suite 4202 Westlake, Texas 76262

## **2015 WATER QUALITY REPORT**



2015 WATER QUALITY REPORT FOR THE TOWN OF WESTLAKE PUBLIC WORKS DEPARTMENT \* PUBLISHED ANNUALLY \* FREE

## Mandatory Language for Monitoring and Reporting Violation Failure to Submit a Disinfectant Level Quarterly Operating Report (DLQOR) MONITORING, ROUTINE (DBP), MAJOR/CHLORINE

The TOWN OF WESTLAKE water system PWS ID 2200350 has violated the monitoring and reporting requirements set by Texas Commission on Environmental Quality (TCEQ) in Title 30, Texas Administrative Code (30 TAC), Section 290, Subchapter F. Public water systems are required to properly disinfect water before distribution, maintain acceptable disinfection residuals within the distribution system, monitor the disinfectant residual at various locations throughout the distribution system, and report the results of that monitoring to the TCEQ on a quarterly basis.

Results of regular monitoring are an indicator of whether or not your drinking water is safe from microbial contamination.

This/These violation(s) occurred in the monitoring period(s):  $\frac{4^{\text{th}} \text{ Quarter 2015}}{4^{\text{th}} \text{ Quarter 2015}}$ 

We are taking the following actions to address this issue:

The Town of Westlake performs daily monitoring of the chlorine residual in our water distribution system. All daily residuals for the fourth quarter of 2015 were performed and logged but we failed to submit the Quarterly Report on January 10, 2016 as required by Texas Commission on Environmental Quality (TCEQ). The report was mailed to TCEQ on February 19, 2016. All subsequent reports have been submitted to TCEQ as required.

If you have questions regarding this matter, you may contact Jarrod Greenwood at (817) 490-5717.

### Microorganism testing shows low detections in raw water

Tarrant Regional Water District monitors the raw water at all intake sites for *Cryptosporidium, Giardia Lamblia* and viruses. The source is human and animal fecal waste in the watershed.



The 2015 sampling showed low level detections of *Cryptosporidium, Giardia Lamblia* and viruses that are common in surface water. The table below indicates when detections were found in each raw water source.

*Cryptosporidium* and *Giardia Lamblia* monitoring is done monthly. Virus monitoring is performed four times a year in January, March, July and September.

Viruses are treated through disinfection processes. *Cryptosporidium* and *Giardia Lamblia* are removed through a combination of disinfection and/or filtration.

Intake Location	Cryptosporidium	Giardia Lamblia	Adenovirus	Enterovirus	Astrovirus	Rotavirus
Richland-Chambers Reservoir	Not detected	Not detected	January	Not detected	Not detected	Not detected
Cedar Creek Lake	Not detected	Not detected	January & March	Not detected	Not detected	Not detected
Lake Benbrook	Not detected	Not detected	January & March	Not detected	Not detected	Not detected
Eagle Mountain Lake	June	June	January	September	Not detected	Not detected
Lake Worth	Not detected	Not detected	January & March	Not detected	Not detected	Not detected
Clearfork of Trinity River	Not detected	June	January & March	Not detected	Not detected	Not detected



# Water Conservation

### WATER CONSERVATION SCHEDULE

#### **STAGE 1 – WATER WATCH**

**<u>Prohibited</u>**: Outdoor watering with sprinklers or irrigation systems between 10 a.m. and 6 p.m. **<u>Limited to twice per week</u>**: Landscape watering with sprinklers or irrigation systems at each service address is limited to a twice per week schedule.

### **STAGE 2 – WATER WARNING**

**Prohibited:** Outdoor watering with sprinklers or irrigation systems between 10 a.m. and 6 p.m. **Restricted to once every seven days:** Outdoor watering with sprinklers or irrigation systems at each service address shall be restricted to a once per week schedule.

### **STAGE 3 – WATER EMERGENCY**

Prohibited: ALL outdoor watering.

### WESTLAKE YEAR ROUND WATERING SCHEDULE

Monday - No watering allowed

*Tuesday and Friday* – Non residential sites (businesses, sports fields, parks, common areas, HOAs) *Wednesday and Saturday* – Residential addresses ending in even numbers: 0, 2, 4, 6, 8 *Thursday and Sunday* – Residential addresses ending in odd numbers: 1, 3, 5, 7, 9

For water/sewer emergencies and after hours, please call (817) 680-1422.

For questions regarding our Westlake water and sewer services, please contact Public Works Director/Assistant to the Town Manager, Jarrod Greenwood at jgreenwood@westlake-tx.org or (817) 490-5717.

> For additional information about water conservation, please visit: SaveTarrantWater.com

# What's in the Water

Contaminant	Measure	MCL	2015 Level	Range of Detects	MCLG	Common Sources
Beta particles & Photon emitters	pCi/L	50	5.6	4 To 5.6	N/A	Decay of natural and man-made deposits of certain minerals that are radioactive and may emit forms of radiation known as photons and beta radiation
Fluoride	ppm	4	0.56	0.27 To 0.62	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Nitrate (measured as Nitrogen)	ppm	10	0.341	0.28 To 0.82	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Nitrite (measured as Nitrogen)	ppm	1	0.004	0 To 0.03	1	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Bromate	ppb	10	6.22	0 To 8.92	0	By-product of drinking water disinfection
Haloacetic Acids	Ppb	60	20.7	1.6 To 6.7	N/A	By-product of drinking water disinfection
Total Trihalomethanes	ppb	80	12.2	6.8 To 11.2	N/A	By-product of drinking water disinfection
Total Coliforms (including fecal coliform & E. coli)	% of positive samples	Present in 5% of monthly samples	No presence in monthly samples	0	0	Coliforms are naturally present in the environment as well as feces; fecal coliforms and E. coli only come from human and animal fecal waste.
Turbidity <sup>1</sup>	NTU	TT	0.5 Highest single result	N/A	N/A	Soil runoff
Disinfectant	Measure	MRDL	2015 Level	Range of Detects	MRDLG	Common Sources
Chloramines	ppm	4	2.45	0.9 To 4.0	4	Water additive used to control microbes
Contaminant	High	Low	Average	MCL	MCLG	Common Sources
Total Organic Carbon <sup>2</sup>	1	1	1	TT = % removal	N/A	Naturally occurring
Contaminant	Measure	MCL	# of sites exceeding action level	90th Percentile <sup>4</sup>	MCLG	Common Sources of Substance in Drinking Water
Lead <sup>3</sup>	Ppb	Action Level = 15	0	4	N/A	Corrosion of household plumbing systems; erosion of natural deposits
Copper <sup>3</sup>	Ppm	Action Level = 1.3	0	0.626	N/A	

- Turbidity is a measure of the cloudiness of water. It is monitored because it is a good indicator of the effectiveness of the filtration system.
- 2. Total Organic Carbon is used to determine disinfection by-product precursors. Fort Worth was in compliance with all monitoring and treatment technique requirements for disinfection by-product precursors.
- 3. 90th percentile value: 90% of the samples were at or below this value. EPA considers the 90th percentile value the same as an "average" value for other contaminants. Lead and copper are regulated by a treatment technique that requires systems to control the corrosiveness of their water. If more than 10% of tap water samples exceed the action level, water systems must take additional samples. 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.

Contaminant	Unit	2015 Level	MCL	MCLG
Bromoform	Ppb	<1.0	Not regulated	N/A
Bromodichloromethane	Ppb	2.73	Not regulated	N/A
Chloroform	Ppb	9.7	Not regulated	N/A
Dibromochloromethane	Ppb	<1.0	Not regulated	N/A

#### **Common Sources**

By-product of drinking water disinfection; not regulated individually; included in Total Trihalomethanes

## <u>Abbreviations Used in Tables</u>

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

**MCL** - Maximum Contaminant Level; the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs 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; the highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

**MRDLG** - Maximum Residual Disinfectant Level Goal; 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 contaminants.

N/A - Not Applicable.

**NTU** - Nepholometric Turbidity Unit; a measure of water turbidity or clarity.

**pCi/L** - Picocuries per liter; a measure of radioactivity.

**ppb** - Parts per billion or micrograms per liter (μg/L).

**ppm** - Parts per million or milligrams per liter (mg/L).

**TT** - Treatment Technique; a required process intended to reduce the level of a contaminant in drinking water.



#### **Additional Parameters**

This chart lists other items for which the water is tested. These items do not relate to public health but rather to the aesthetic effects. These items are often important to industrial users.

Item	Measure	2015 Level
Bicarbonate	Ppm	96.4 - 120
Calcium	Ppm	33.3 - 42.1
Chloride	Ppm	12.5 - 25.9
Conductivity	µmhos/m	333 - 427
рН	Units	8.0 - 8.2
Magnesium	Ppm	3.55 - 6.79
Sodium	Ppm	12.3 - 28.5
Sulfate	Ppm	20.2 - 29.0
Total Alkalinity as CaCO3	Ppm	96.4 - 120
Total Dissolved Solids	Ррт	163 - 234
Total Hardness as CaCO3	Ррт	101 - 133
Total Hardness in Grains	grains/gallon	6 - 8



For questions or concerns regarding this Water Quality Report please contact Jarrod Greenwood, Public Works Director/Assistant to the Town Manager at jgreenwood@westlake-tx.org or (817) 490-5717.

Town of Westlake 1301 Solana Boulevard Building 4, Suite 4202 Westlake, Texas 76262 Town Hall Main Number: (817) 430-0941 Town Hall Office Hours: Monday – Friday, 8 a.m. – 5 p.m.



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## TCEQ Assessed Source Waters

A Source Water Susceptibility Assessment for your drinking water sources has been updated by the Texas Commission on Environmental Quality. This information describes the susceptibility and types of constituents that may come into contact with your drinking water source based on human activities and natural conditions. The information contained in the assessment allows us to focus our source water protection strategies. Some of this source water assessment information will be available on Texas Drinking Water Watch at http://dww.tceq.state.tx.us/DWW.

Fort Worth uses surface water from six lakes — Lake Bridgeport, Eagle Mountain Lake, Lake Worth, Benbrook Lake, Cedar Creek Lake and Richland-Chambers Reservoir, Clear Fork Trinity River. Fort Worth owns Lake Worth. The U.S. Army Corps of Engineers is responsible for Benbrook Lake. The other

four lakes are owned and operated by Tarrant Regional Water District (TRWD).

Fort Worth monitors water quality in Lake Worth and participates with TRWD to ensure the other lakes are regularly tested.

## -Special Notice-

## Health Information for Special Populations

You may be more vulnerable than the general population to certain microbial contaminants, such as Cryptosporidium, in drinking water. Infants, some elderly or immune-compromised persons, 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 from infections.

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.

## Substances Expected To Be In Drinking Water

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 the water poses a health risk.

More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's (EPA) Safe Drinking Water Hotline at 800-426-4791 or visiting the EPA Web site at www.epa.gov/safewater.

As water travels over the land or through the ground, it dissolves naturally occurring minerals and radioactive material. It also can pick up substances resulting from animal waste or human activity.

These contaminants could be bacteria, viruses, salts, metals or pesticides.

To ensure tap water is safe to drink, EPA and the Texas Commission on Environmental Quality (TCEQ) have regulations limiting the amount of certain contaminants in water provided by public systems.

The Food and Drug Administration (FDA) regulates limits for contaminants in bottled water. These limits must provide the same public health protection as tap water standards.

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. For more information on the taste, odor or color of drinking water, call the Water Department at 817-430-0941.