



*City of White Oak*

*2018 Annual Drinking*

*Water Quality Report*

*(Consumer Confidence Report)*

*PWS ID TX0920006*

*January 1 to December 31, 2018*

**OUR DRINKING WATER MEETS or EXCEEDS ALL  
FEDERAL (EPA) DRINKING WATER REQUIREMENTS**

This report is a summary of the quality of the water we provide our customers for 2018. The analysis was made by using the data from the

most recent U.S. Environmental Protection Agency (EPA) required tests and is presented in the attached pages. We hope this information helps you become knowledgeable about what's in your drinking water.

### **En Espanol**

*Este reporte incluye informacion importante sobre el agua para tomar. Para asistencia en espanol, favor de llamar al telefono (903) 759-3936.*

### **SPECIAL HEALTH INFORMATION!!**

**"You may be more vulnerable than the general population to certain microbial contaminants, such as *Cryptosporidium*, in drinking water. Infants, some elderly, or Immuno-compromised persons such as those undergone 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."**

## How to Contact Us

Billing Questions or Water/Sewer Emergency: (903) 759-3936  
ext.7023

Water Quality Questions call Beaux Huey: (903) 759-3936 ext. 7036

*You can also check our website at [www.cityofwhiteoak.com](http://www.cityofwhiteoak.com)*

## Public Participation Opportunities

**Date:** Second Tuesday Each Month

**Time:** 5:00 PM

**Location:** City Hall

**Address:** 906 S. White Oak Rd.

**Phone No:** (903) 759-3936

### Sources of Drinking Water:

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 include:

- **Microbial contaminants:** such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations and wildlife.
- **Inorganic contaminants:** such as salts and metals, which can be naturally-occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- **Pesticides and herbicides:** which may come from a variety of sources such as agriculture, urban stormwater runoff and residential uses.
- **Organic chemical contaminants:** including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- **Radioactive contaminants:** which can be natural-occurring or be the result of oil and gas production and mining.

In order to ensure that tap water is safe to drink, the Environmental Protection Agency (EPA) prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. The Food and Drug Administration (FDA) regulations establish limits for

contaminants in bottled water that must provide the same protection for public health.

### **All drinking water may contain contaminants.**

Contaminants may be found in drinking water that may cause taste, color or odor problems. These types of problems are not necessarily cause for health concerns. 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 at 1-(800)-426-4791.

### **Where do we get our drinking water?**

Raw water is pumped from BIG SANDY CREEK into storage reservoirs at our water treatment plant. From there, the raw water is sent through the plant where it undergoes our treatment process, after which it's pumped into our distribution system, water tower and standpipe. The TCEQ completed an assessment of our source water and results indicate that our source water is susceptible to certain contaminants. The sampling requirements for our water system are based on this susceptibility and previous sample data. Any detection of these contaminants may be found in this Consumer Confident Report. TCEQ has updated a Source Water Susceptibility assessment of our source water. This information describes the susceptibility and types of constituents that may come in contact with our drinking water source based on human activities and natural conditions. This allows us to focus our source water protection

strategies. For more information on source water you may contact Beaux Huey at 903-759-3936 ext.7036. Further details about source-water assessments are available in Drinking Water Watch at the following URL: <https://dww2.tceq.texas.gov/DWW/>

### **About the Following Information.**

The pages that follow list all of the federally regulated or monitored contaminants which have been found in our drinking water.

### **TABLE DEFINITIONS**

**Maximum Contaminant Level Goal (MCLG)** – 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.

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

**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 contaminants.

**Maximum residual disinfectant level (MRDL)** – The highest level of a disinfectant allowed in drinking water. This is convincing evidence that

addition of a disinfectant is necessary for control of microbial contaminants.

**Level 1 Assessment** – A study of the water system to identify potential problems and determine why coliform bacteria have been found in the water.

**Level 2 Assessment** –A very detailed study of the water system to identify potential problems and determine why an E. coli MCL violation has occurred and/or why total coliform bacteria has been found in the water system on multiple occasions.

**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 a treatment or other requirement which a water system must follow.

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

**Locational Running Annual Average (LRAA)** – The arithmetic average of analytical results for samples taken at a specific monitoring location during the previous four calendar quarters.

- **mrem/year**– millirems per year (a measure of radiation absorbed by the body).
- **NTU** – Nephelometric turbidity units (a measure of turbidity).

- **ppm** – Parts per million, or milligrams per liter (mg/l)- or one ounce in 7,350 gallons of water.
- **ppb** – Parts per billion, or micrograms per liter (ug/l)- or one ounce in 7,350,000 gallons of water.
- **pCi/L**- Picocuries per liter (a measure of radioactivity).
- **ppt** – Parts per trillion, or nanograms per liter (ng/l).
- **ppq** – Parts per quadrillion, or pictograms per liter (pg/l).
- **MFL** – Million fibers per liter (a measure of asbestos).
- **Avg** – Regulatory compliance with some MCLs are based on running annual average of monthly samples.
- **NA** – Not applicable.
- **ND** – Not detected at testing limits.
- **TT or Treatment Technique** – A required process intended to reduce the level of a contaminant in drinking water.

- **TOC** – Total Organic Carbon

## Regulated Contaminants at Treatment Facility

Constituent	Year	Highest Level Detected	Detected Range	MCL	MCLG	Units	Typical Source
<b>Chlorite</b>	2018	0.738	0.12 – 0.738	1	0.8	ppm	By-products of drinking water disinfection
<b>Barium</b>	2018	0.025	0.025	2	2	ppm	Discharge from drilling wastes, Erosion of natural deposits
<b>Fluoride</b>	2018	0.032	0.032	4	4.0	ppm	Erosion natural deposits; Water additive which promoted strong teeth; Discharge from fertilizer and aluminum factories.
<b>Combined Radium 226/228</b>	2016	1.5	1.5	5	0	pCi/L	Erosion of natural deposits
<b>Gross Beta</b>		4.7	4.7	4	0	mrem/y	Decay of natural

<b>particles &amp; Photon emitters</b>	2016					r	and man-made deposits.
--	------	--	--	--	--	---	------------------------

*\*EPA considers 50 pCi/L to be the level of concern for beta particles.*

<b>Nitrate (As N)</b>	2018	0.247	0.247	10	10	ppm	Runoff from fertilizer use, Leaching from septic tanks, sewage; Erosion of natural deposits
-----------------------	------	-------	-------	----	----	-----	---

"Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask advice from your health care provider."

<b>Constituent</b>	<b>Year</b>	<b>Highest Single Measurement</b>	<b>Lowest % of Samples Meeting Limits</b>	<b>Turbidity Limits</b>	<b>Source</b>
<b>Turbidity (NTU)</b>	2018	0.21	100	0.3	Soil Runoff

Turbidity is a measurement of the cloudiness of the water caused by suspended particles. We monitor it because it is a good indicator of water quality and the effectiveness of our filtration.

**Total Organic Carbon:** The percentage of Total Organic Carbon (TOC) removal was measured each month and the water system met all TOC removal requirements. Total organic carbon provides a medium for the formation of disinfection by-products when water is disinfected. By-products of disinfection include

trihalomethanes (THMs) and haloacetic acids (HAA) which are reported elsewhere in this report.

## Regulated Substances in the Distribution System Disinfection By-products

### Locational Running Annual Averages

Constituent	Year	Location	LRAA	Range	MCL	Units	Source
Total Haloacetic Acids	2018	Distribution System	25	14.5-35.2	60	ppb	By-product of drinking water disinfection.

Some people who drink water containing Haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.

Constituent	Year	Location	LRAA	Range	MCL	Units	Source
Total Trihalomethanes	2018	Distribution System	23	7.8-23.7	80	ppb	By-product of drinking disinfection.

Some people who drink water containing Trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

## Regulated Substances at the Customer's Tap

Lead	Date	MCLG	Action	90 <sup>th</sup>	#	Units	Likely Sources of
------	------	------	--------	------------------	---	-------	-------------------

and Copper	Sampled		Level (AL)	Percentile	Sites Over (AL)		Contamination
Copper	2016		1.3	ND	0	ppm	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.
Lead	2016		15	ND	0	ppb	Corrosion of household plumbing systems; Erosion of natural deposits.

**“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 water for 30 seconds to 2 minutes before using tap 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>.”**

### Disinfectant Residual

Constituent	Year	Average Level	Detected Range	MRDL	MRDL G	Units	Typical Source
Chloramines	2018	3.19	2.6 – 3.8	4	4	ppm	Water additive used to control microbes

## Microbiological Contaminants

Constituent	Year	Highest No. of Positive Samples per Month	MCL	MCLG	Unit of Measure	Source
Total Coliform Bacteria	2018	1	1	0	Presence	Naturally present in the Environment
Fecal Coliform Bacteria	2018	0	0	0	Presence	Naturally present in the Environment

Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful bacteria may be present.

*\*Presence of Coliform in 5% or more of the monthly samples.*

## Additional Parameters Tested in Your Water System

This chart lists other items for which the water is tested. These items do not relate to public health but rather to the aesthetic quality. These parameters are often important to industrial water users or customers with special needs.

Constituent	Units of Measure	White Oak water	MCL
Aluminum	ppm	0.27	0.20
Manganese	ppm	0.0026	0.05

Chloride	ppm	24.3	300
Potassium	ppm	3.66	NA
Sulfate	ppm	40.8	300
pH	pH units	8.25-9.3	>7.0
Conductivity	µmhos/cm	223	NA
Dissolved Solids	ppm	117	1000
Calcium	ppm	5.42	NA
Magnesium	ppm	2.37	NA
Total Alkalinity	ppm	<20.0	NA
Bicarbonate Alkalinity	ppm	17.4	NA
Sodium	ppm	26.9	20,000
Total Hardness as CaCO <sub>3</sub>	ppm	23.3	NA

