

# 2017 Annual Water Quality Report

## City of Eufaula

PWS ID# OK1020514

We are once again pleased to present this year’s Annual Water Quality Report. This report is designed to inform our clients of all water testing results between January 1 and December 31, 2017. Our constant goal is to provide a safe and dependable supply of drinking water that meets all state and federal standards. We continually strive to improve water treatment methods and protect our water resources. We are committed to insuring the quality of your drinking water.

### Is my water safe?

Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and state drinking water health standards. Our source water is surface water drawn from Eufaula Lake, treated and supplied to your homes. We are required to test for bacteriological and other contaminants that may be present in the drinking water.

### Do I need to take special precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

### Why are there contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. The sources of drinking water include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up contaminants resulting from animals or human activity: Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that 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 storm water 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 storm water 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 storm water runoff, and septic systems;
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

Abbreviations:	
ppm	parts per million, or milligrams per Liter (mg/L)
ppb	parts per billion, or micrograms per Liter (µg/L)
pCi/L	picocuries per Liter ( a measure of radioactivity)
Mrem/ yr	Millirems per year (a measure of radioactivity)
MCLG	Maximum Contaminant Level Goal. The level of contaminant in drinking water below which there is no known or expected risks to health. MCLGs allow for a margin of safety.
MCL	Maximum Contaminant Level. The highest level of a contaminant that is allowed in drinking water.
NA	not applicable

### For More Information

For any questions relating to your drinking water please contact Jacob Foos, City Manager, at (918) 689-2534. More information about contaminants and potential health effects can be obtained by calling the Safe Drinking Water Hotline (800-426-4791). We want our valued customers to be informed about their water.

## 2017 Monitoring Results for The City of Eufaula

All test results are for the year 2017 unless otherwise noted

Contaminants	Sample Date	90 <sup>th</sup> Percentile	Action Level (AL)	MCLG	# Sites Over AL	Units	Violation	Likely Sources of Contamination
<b>Lead and Copper:</b> Action Level Goal (ALG) is 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. Action Level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.								
Lead	2017	0	15	0	1	ppb	No	Corrosion of household plumbing systems; Erosion of natural deposits.
Copper	2017	0.297	1.3	1.3	1	ppm	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems.

Contaminants	Sample Date	Highest Level Detected	Range	MCLG	MCL	Units	Violation	Likely Sources of Contamination
<b>Inorganic Contaminants</b>								
Barium	2012	0.0422	0.0422-0.0422	2	2	ppm	No	Discharged drilling and refinery waste; Erosion of natural deposits.
Nitrate (Measured as Nitrogen)	2016	0.33	0.33- 0.33	10	10	ppm	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.
<b>Radioactive Contaminants</b>								
Beta/photon Emitters	2013	3.48	3.48- 3.48	0	4	Mrem / yr	No	Decay of natural and man-made deposits.
<b>Disinfectants and Disinfection By-Products</b>								
Chlorine	2017	2	1 – 2	MRDLG = 4	MRDL = 4	ppm	No	Water additive used to control microbes
Haloacetic Acids (HAA5)	2017	74.1	36.6 – 74.1	NA	60	ppb	Yes	By-product of drinking water chlorination
Total Trihalomethanes (TTHM)	2017	159	73.2 - 159	NA	80	ppb	Yes	By-product of drinking water chlorination

### Violations Table

**Total Organic Carbon:** Total organic carbon has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include Trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health.

Violation Type	Begin	End	Violation Explanation
Inadequate DBP Precursor Removal	1/1/2017	3/31/2017	Our treatment plant failed to adequately reduce the total organic carbon content of our source water which is needed to properly minimize the amount of disinfection byproducts in our drinking water.
	4/1/2017	6/30/2017	
	7/1/2017	9/30/2017	
	10/1/2017	12/31/2017	

**Haloacetic Acids (HAA5):** Some people who drink water containing haloacetic acids in excess of the MCL over many years have an increased risk of getting cancer.

Violation Type	Begin	End	Violation Explanation
MCL, LRAA	10/1/2017	12/31/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.

<b>Violations Table</b>			
<b>Total Trihalomethanes (TTHM):</b> 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.			
Violation Type	Begin	End	Violation Explanation
MCL, LRAA	1/1/2017	3/31/2017	Water samples showed that the amount of this contaminant in our drinking water was above its standard (called a maximum contaminant level and abbreviated MCL) for the period indicated.
	4/1/2017	6/30/2017	
	7/1/2017	9/30/2017	
	10/1/2017	12/31/2017	
<b>Surface Water Treatment Rule (SWTR):</b> The Surface Water Treatment Rule seeks to prevent waterborne diseases caused by viruses, Legionella, and Giardia lamblia. The rule requires that water systems filter and disinfect water from surface water sources to reduce the occurrence of unsafe levels of these microbes.			
Violation Type	Begin	End	Violation Explanation
Monitoring, RTN/RPT Major (SWTR-Filter)	1/1/2017	6/30/2017	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
Res Disinfect Concentration (SWTR)	1/1/2017	6/30/2017	Measurements of disinfectants indicate that adequate disinfection did not occur for the monthly periods indicated. Adequate disinfection is required to ensure safe drinking water.
<b>Interim Enhanced SWTR:</b> The Interim Enhanced Surface Water Treatment Rule improves control of microbial contaminants, particularly Cryptosporidium, in systems using surface water, or ground water under the direct influence of surface water. The rule builds upon the treatment technique requirements of the Surface Water Treatment Rule.			
Violation Type	Begin	End	Violation Explanation
Monitoring, Routine (IESWTR/LT1), Major	1/1/2017	1/31/2017	We failed to test our drinking water for the contaminant and period indicated. Because of this failure, we cannot be sure of the quality of our drinking water during the period indicated.
	2/1/2017	2/29/2017	
	3/1/2017	3/31/2017	
	4/1/2017	4/30/2017	
	5/1/2017	5/31/2017	
	6/1/2017	6/30/2017	
	7/1/2017	7/31/2017	
	8/1/2017	8/31/2017	
Monthly Combined Filter Effluent (IESWTR/LT1)	1/1/2017	1/31/2016	Turbidity levels, though relatively low, exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.
Single Combined Filter Effluent (IESWTR/LT1)	2/1/2017	2/28/2017	One turbidity measurement exceeded a standard for the month indicated. Turbidity (cloudiness) levels are used to measure effective filtration of drinking water.

#### **Additional Information about 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. We are 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>.