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**IMPORTANT HEALTH INFORMATION**

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-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 microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791). Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer. 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.

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. The Spavinaw Water System 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>.

**Spavinaw Water System  
Annual Drinking Water Quality Report 2017  
(Consumer Confidence Report)**

The Spavinaw Water System is very pleased to provide you with this year's Drinking Water Quality Report. The water within the Spavinaw system is safe to drink and free of bacteria and harmful substances. We want to keep you informed about the water and services we have delivered to you over the past year. Our goal continues to be to provide a safe and dependable supply of drinking water.

The Environmental Protection Agency (EPA) prescribes regulations which limit the amount of certain contaminants in the public water supply after water treatment. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water sources (for both tap water and bottled water) can include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over and beneath the surface of the land to our source lakes, it dissolves minerals naturally found in rocks and soil. The water can also pick up harmful materials like inorganic or organic chemicals, pesticides, herbicides, radioactive contaminants, and microbial contaminants. These contaminants may be naturally-occurring, as a result of the presence of animals, or as a result of human activity.

The Tulsa Metropolitan Utility Authority routinely monitors for contaminants in Spavinaw's drinking water according to Federal and State laws. This report shows Spavinaw's water quality and a summary of test results of samples taken during 2016. Definitions of unfamiliar terms and abbreviations are provided within the table. If you have any questions about this report or concerning your water utility, please contact Jennifer Lindly at (918) 253-2155 or by email at [jlindly@cityoftulsa.org](mailto:jlindly@cityoftulsa.org). This report can also be found on the internet at <https://www.cityoftulsa.org/government/departments/water-and-sewer/water-supply/water-quality/>.

The water source for Spavinaw Water System is Spavinaw Lake, a surface water source, located in Mayes County. The Oklahoma Department of Environmental Quality has completed a Source Water Assessment of Spavinaw Lake and has determined that it is moderately susceptible to contamination. For more information about this study or how the ODEQ works to protect source water, contact ODEQ at (405) 702-8100, or visit their website at [www.deq.state.ok.us/wqdnew/sourcewater/index.html](http://www.deq.state.ok.us/wqdnew/sourcewater/index.html)

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**The Tulsa Metropolitan Utility Authority Invites You To Get Involved**

The Tulsa Metropolitan Utility Authority is the governing board that oversees Spavinaw's Water System. Meetings that deal with decisions about our water are held on the second and fourth Wednesdays of the month. Agendas are posted on the electronic marquee in the Tulsa City Hall entry at 2<sup>nd</sup> and Cincinnati, and online at: <https://www.cityoftulsa.org/government/meeting-agendas/>

We encourage our customers to participate in the decisions that affect the quality of our drinking water. For more information about meetings, call (918) 596-1824 or write to TMUA, 175 East 2<sup>nd</sup> Street Suite 1400, Tulsa, OK 74103.

**TMUA members**

- Richard Hudson, Chair
- Lauren Brooker
- Jim Cameron
- Jack Neely
- Lou Reynolds
- Richard Sevenoaks
- Mayor G.T. Bynum

<https://www.cityoftulsa.org/government/authorities-boards-and-commissions/>

## Spavinaw 2016 Water Quality Data

This table shows data collected during 2016. Analyses made by professionals after water treatment showed that the levels of all contaminants found were much less than the levels that are cause for concern.

**\*Definitions:**

**AL = Action Level:** the concentration of a contaminant which, if exceeded, triggers a treatment or other requirement which 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 contaminant in drinking water below which there is no known or expected health risk

**MRDL = Maximum Residual Disinfectant Level:** the highest level of disinfectant allowed in drinking water

**LRAA = Locational Running Annual Average:** average calculated at each monitoring location

**NTU = Nephelometric Turbidity Unit**

**s.u. = Standard Units**

**TT = Treatment Technique:** a required process intended to reduce the level of a contaminant in drinking water

**\*\*Data collected March 2013. Monitoring frequency is in compliance with regulation.**

**\*\*\* Data collected summer 2015. Monitoring frequency is in compliance with regulation.**

*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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).*

Regulated Contaminants	Level Found	Minimum	Maximum	Maximum Contaminant Level (MCL*)	MCLG*	Violation?	Likely Source of Contaminants
Turbidity Level found			1.06				
Lowest monthly % meeting regs.		89.4%		TT*=less than 0.3 NTU* 95 percent of the time.	n/a	Yes****	Soil runoff.
Total Coliform Bacteria within distribution system			0	Presence of coliform bacteria in more than 1 sample per month.	0	No	Naturally present in the environment.
Barium**	n/a	n/a	0.048	2 parts per million	2	No	Naturally present in the environment, drilling waste, metal refineries.
Chlorine	1.34	1.32	1.35	MRDL* = 4.0 parts per million annual average	4	No	Water additive to control microbes.
Copper***	0.061 ppm at the 90th percentile; 0 sites above AL			AL* = 1.3 parts per million at 90th percentile	1.3	No	Corrosion of household plumbing systems, erosion of natural deposits, leaching from wood preservatives.
Lead***	0.005 ppb at the 90th percentile; 0 sites above AL			AL* = 15 parts per billion at 90th percentile	0	No	Corrosion of household plumbing systems, erosion of natural deposits.
Nitrate – Nitrite	1.41	n/a	n/a	Nitrate=10 parts per million; Nitrite=1 part per million	10; 1	No	Naturally occurring, fertilizers, sewage treatment plants, leaching from septic tanks.
Total Organic Carbon	1.0	0.0	1.4	Results are parts per million. MCL is TT*=percent removal	n/a	No	Naturally found in the environment.
Haloacetic Acids	38	2.0	63	60 parts per billion LRAA*. Level found is highest LRAA; Minimum and Maximum are from individual readings.	n/a	No	By-product of drinking water disinfection.
Total Trihalomethanes	52	13	86	80 parts per billion LRAA*. Level found is highest LRAA; Minimum and Maximum are from individual readings.	n/a	No	By-product of drinking water disinfection.
Secondary Contaminants	Average	Minimum	Maximum	Recommended Level			Likely Source of Contaminants
pH	n/a	6.8	8.5	Aesthetic level 6.5-8.5 s.u.*		n/a	Measure of acidity. Naturally present, adjusted in drinking water treatment.
Sodium***	8.16	n/a	n/a	Standard has not been established		n/a	Naturally present, urban storm water runoff or discharge from sewage treatment plants.

### Violations and Exceedances

**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. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches. Due to significant rainfall, water samples taken in January 2016 showed that 11 percent of turbidity measurements were over 0.3 turbidity units - the standard is that no more than 5 percent of samples exceed 0.3 turbidity units per month. Additionally, on January 2, 2016 one sample was above the standard of 1.0 turbidity unit. A voluntary boil water order was issued and hand delivered to customers on December 31, 2015 chlorine residuals were increased at the water treatment plant to better aid in the disinfection process and the voluntary boil order was rescinded on January 6, 2016. An additional public notification regarding the violation was hand delivered in June 2016 to customers.