

**For the past 63 years,** First Utility District has been providing clean water to citizens and businesses in the communities of West Knoxville and beyond. Since our founding in 1954, we've kept our commitment to a high standard for community health and wellbeing.

From the moment those first 700 customers turned on their faucets, our goal has been to provide quality service and create consumer confidence in what we do. Today we proudly serve more than 35,000 customers around the district.

Last year, FUD provided 3.9 billion gallons of water to area residents and businesses at one of the lowest rates in the state. Our water is monitored 24 hours a day through an advanced computer system, with samples being lab tested regularly to comply with all state and federal regulations. We strive to produce the cleanest possible water in the most cost effective way for our community.

### Our Commitment to Water Safety

Not only does FUD's water meet all of the EPA's health standards, but we have also conducted numerous tests for more than 80 contaminants that may be present. Of the small number of contaminants detected, all are within an acceptable level as determined by regulatory mandates.

### Water Source & Consumer Confidence

FUD's water source is Ft. Loudoun Lake of the Tennessee River. As part of our efforts to maintain consumer confidence, we are working with the State to assess our water source for potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for untreated water sources that serve our water system. This report looks at untreated water sources to assess whether they might be susceptible to potential contamination.

To ensure safe drinking water, all public water systems treat and routinely test their water. Based on geologic factors and human activities in the vicinity of the water source, each is rated as reasonably susceptible, moderately susceptible or slightly susceptible. The First Utility District of Knox County source is rated as moderately susceptible to potential contamination.

Visit <http://www.tn.gov/environment/> to see an explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to the Environmental Protection Agency (EPA). Specific assessments may also be obtained by contacting the Water System.

### FUD in the Community - Get Involved

We encourage the public to engage with our Board by attending our meetings. The FUD Water Board typically meets on the fourth Tuesday of each month at 2 p.m. at our utility office, at 122 Durwood Rd. Please call our main office to confirm meeting times, as they may change.

### FUD Leadership

FUD has three Commissioners who each serve four-year terms. Vacancies on the Board of Commissioners are filled by the Knox County Mayor from a list provided by the remaining Commissioners in office. Decisions by the Board on customer complaints brought under the District's customer complaint policy may be reviewed by the TN Comptrollers Office.

**For more information about your drinking water, please call Craig Mayes at 966-9741.**

Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.

*Where community comes first.*

## What's in My Water?

Drinking water (both tap and bottled) comes from a variety of sources, including rivers, lakes, streams, ponds, reservoirs, springs and wells. As water makes its way over the surface of the land or through the ground, it mixes with naturally occurring minerals and, in some cases, radioactive materials. It can also pick up substances that result from the presence of animals or human activity.

All drinking water, including that bottled water may reasonably contain at least small amounts of some contaminants. Community water systems are required to disclose whether contaminants are present while bottled water companies are not.

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

It's important to remember that contaminants do not necessarily indicate the water posing a health risk. For more information about contaminants and potential health effects, call the EPA's Safe Drinking Water Hotline (800-426-4791).

### Contaminants that may be present in source water:

What is it?	Examples	What causes it?
Microbial contaminants	viruses and bacteria	sewage treatment plants, septic systems, agricultural livestock operations, and wildlife
Inorganic contaminants	salts and metals	Can be naturally occurring or result from urban stormwater, runoff, industrial and domestic wastewater discharges, oil and gas production, mining, or farming
Pesticides and herbicides	chemicals used to control pests or weeds	Agriculture, urban stormwater, runoff and residential uses
Organic chemical contaminants	synthetic and volatile organic chemicals (VOCs)	byproduct of industrial processes and petroleum production, gas stations, urban stormwater runoff, septic systems
Radioactive contaminants		naturally occurring or the result of oil and gas production and mining activities

The State and EPA require us to test and report about our water on a regular basis to ensure its safety. We have met all of these requirements for 2016. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules and are committed to our community's health and wellbeing.

We realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, pumping stations, etc. by calling us at (865) 966- 9741 or call 911.

### Resources for At-Risk Consumers

Some people may be more vulnerable to contaminants in drinking water than the general population. Individuals with compromised immune systems resulting from cancer or chemotherapy, organ transplants, HIV/AIDS, and even sometimes the elderly and infants can be more susceptible. These individuals should not only seek the counsel of their healthcare provider about drinking water, but also food preparation, personal hygiene, and precautions in handling infants and pets.

EPA/CDC guidelines on appropriate means to decrease the risk of infection by Cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

# Water Quality Data

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform (% positive Samples) <sup>1</sup>	No	1	Nd-1%	6/2016	% pos	0	Presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment
Turbidity <sup>2</sup>	No	0.24	0.03-0.24	2016	NTU	n/a	TT-95% < 0.3	Soil runoff
Asbestos	No	BDL	n/a	2011	MFL	7	7	Decay of asbestos cement water mains; erosion of natural deposits
Copper <sup>2</sup>	No	90th percent 0.0333	BDL-0.09	2016	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.597	0.483-0.717	2016	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead <sup>2</sup>	No	90th percent 0.0005	BDL-.05	2016	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium <sup>5</sup>	No	8.96	n/a	2016	ppm	n/a <sup>5</sup>	n/a	Erosion of natural deposits; used in water treatment
Total Trihalomethanes TTHM <sup>3</sup>	No	LRAA 45.5	19-53	2016	ppb	n/a	80 RAA	By-product of drinking water chlorination
Haloacetic Acids (HAA <sub>5</sub> )	No	LRAA 29	13-39	2016	ppb	n/a	60 RAA	By-product of drinking water disinfection
Sulfate <sup>5</sup>	No	10.0	n/a	2012	ppm	n/a <sup>5</sup>	n/a	
Total Organic Carbon (TOC) <sup>4</sup>	No	1.43	1.27-1.57	2016	ppm	TT	TT	Naturally present in the environment
Gross Alpha	No	1.41	<1.3-3.9	12/2016	pCi/l	0	15pCi/l	Erosion of natural deposits
Radium 226	No	0.116	<0.2-2.6	12/2016	pCi/l	0	5pCi/l	Erosion of natural deposits
Chlorine <sup>7</sup>	No	1.32	0.5-2.2	2016	ppm	4	4	Water additive used to control microbes
Nitrate	No	0.836	0.836	2016	ppm	10	10	Runoff from fertilizer use

**1.** Not a violation of the MCL for total coliform, the presence of total coliform were found in only 1% of samples in the month of September. Repeat sampling was negative for total coliform. **2.** During the most recent round of Lead and copper testing, 0 out of 30 households sampled contained concentrations exceeding the action level. 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. First Utility District 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>. **3.** Compliance is determined by a running annual average (RAA) of all sample results obtained quarterly at required sampling sites. Current monitoring meets requirements. 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. **4.** The treatment technique for Total Organic Carbon was met for 2015. **5.** Not applicable - sulfate is a secondary standard, and sodium has no MCL. **6.** The treatment technique for Turbidity was met in 100 % of samples for 2015. **7.** On June 16 and 17, 2014 First Utility District's computer system failed to archive chlorine data, which resulted in a monitoring violation. While an operator was staffed at all times and the chlorine level was being monitored the computer system did not store the information for a 22 hour period. Corrective measures have since been taken to ensure all chlorine information is being collected and stored adequately. This technical glitch in no way had any effect on the water quality or the water treatment process. First Utility is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During June 16 and 17, 2014 we did not complete all monitoring or testing for chlorine and therefore cannot be sure of the quality of your drinking water during that time. Please share this information with all the other people who drink this water, especially those who may not have received this notice directly (for example, people in apartments, nursing homes, schools, and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail. **8.** First Utility is required to monitor its source water for the presence of cryptosporidium in order to meet requirements for its removal. Monitoring of the Source water has revealed 3 oocysts out of 15 samples. Cryptosporidium is a microbial parasite which is found in surface waters throughout the U.S. Although Cryptosporidium can be removed by filtration, the most commonly used filtration methods cannot guarantee 100 percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immune-compromised people are encouraged to consult a doctor regarding appropriate precautions to take to prevent infection. For more information on Cryptosporidium, contact the Safe Drinking Water Hotline (800-426-4791).

Parameter	Range/ level detected
Strontium	72-90 ppb (avg. 80)
Hexavalent Chromium	0.05-0.11 ppb (avg. 0.08)
Chlorate	66-300 ppb (avg. 166)
1,4 Dioxane	0.11-0.29 ppb (0.20)
Vanadium	0-0.3 ppb (0.075)

Unregulated contaminants are those that EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. **For additional information call the Safe Drinking Water Hotline at (800) 426-4791**

## What does this chart mean?

**MCLG** - Maximum Contaminant Level Goal, or 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.

**MCL** - Maximum Contaminant Level, or 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. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

**MRDL**: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the 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.

**AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow. Non-Detects (ND) - laboratory analysis indicates that the contaminant is not present.

**Parts per million (ppm)** or Milligrams per liter (mg/l) – explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.

**Parts per billion (ppb)** or Micrograms per liter - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Million Fibers per Liter (MFL)** - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.

**Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

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

**pCi/l** - Radiological units in pico Curries per liter.

**BDL** - Below Detectable Limits.