



CONSOLIDATED UTILITY DISTRICT
Rutherford County, Tennessee

A vibrant background image showing various fruits like strawberries, lemons, and oranges splashing in clear water, creating a dynamic and fresh visual effect.

2016
**WATER
QUALITY
REPORT**

CONSUMER CONFIDENCE REPORT



Is my drinking water safe?

Yes, our water meets all of EPA's health standards. Thanks to the hard work and dedication of the employees of the K. Thomas Hutchinson Water Treatment Plant, our water meets or exceeds all state and federal requirements for drinking water.

Is our water system meeting other rules that govern our operations?

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

Where is the source of my water?

The high quality and quantity surface water source is located at the 0.75-mile marker of East Fork of the Stones River (J. Percy Priest Lake). Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to potential contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving this water system. The SWAP Report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. Consolidated Utility District's sources rated as reasonably susceptible to potential contamination.

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.

Why are there contaminants in my water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Community water systems are required to disclose the detection of contaminants; however, bottled water companies are not required to comply with this regulation. 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 the **Safe Drinking Water Hotline (800-426-4791)**.

Contaminants that may be present in source water:

- 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.

- An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <http://www.tn.gov/environment/dws/dwassess.shtml> or you may contact the Water System to obtain copies of specific assessments.

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 naturally occurring or be the result of oil and gas production and mining activities.

Trihalomethanes:

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, although this has NOT been proven by any means.

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. Consolidated Utility District's water treatment processes are designed to reduce any such substances to levels well below any health concern. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Lead in Drinking Water:

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. Consolidated 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 (800-426-4791)** or at <http://www.epa.gov/safewater/lead>

Pharmaceuticals In Drinking Water:

Flushing unused or expired medicines can be harmful to your drinking water. Learn more about disposing of unused medicines at www.tn.gov/environment/sustainable-practices_unwanted-prescriptions.shtml

Cryptosporidium:

Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Monitoring of our source water indicated the presence of cryptosporidium in 3 out of 3 samples tested. While the most commonly used filtration methods cannot guarantee 100 percent removal, the treatment techniques employed at our water treatment facility minimize the probability of Cryptosporidium oocyst in your drinking water. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals are able to overcome the disease within a few weeks. However, immuno-compromised people have more difficulty and are at greater risk of developing severe, life threatening illness. Immuno-compromised individuals are encouraged to consult their doctor regarding appropriate precautions to take to prevent infection. For more information on Cryptosporidium, contact the Safe Water Hotline (800-426-4791).

Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets 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)**.

*** An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <http://www.tn.gov/environment/dws/dwassess.shtml> or you may contact the Water System to obtain copies of specific assessments.**

Consolidated Utility District 2016 Consumer Confidence Report

Contaminant	Test Date	Unit	MCL	MCLG	Detection	Range	Sources	Violation
Lead	6/17/14 - 7/1/14	ppb	AL=15	0	.001 (90th percentile)	0.5 to 1.6	Erosion of natural resources, household plumbing corrosion	NO
Copper	6/17/14 - 7/1/14	ppb	AL=1300	1300	.3 (90th percentile)	11 to 710	Household plumbing corrosion, erosion of natural deposits, leaching of wood preservatives	NO
Fluoride	Quarterly	ppm	4	4	.15 average	BDL to .313	Erosion of natural resources, additive to promote strong teeth, discharge from fertilizer and aluminum factories	NO
Nitrate	10/5/16	ppm	10	N/A	BDL	N/A	Run off from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	NO
Sodium	7/6/16	mg/l	N/A	N/A	13.9	13.9	Erosion of natural deposits	NO
Turbidity	Continuous	NTU	At least 95% of monthly samples must be below .3 NTU	N/A	Lowest monthly percentage was 99.46% below .3 NTU (highest level detected was 2.0 NTU)	.02 to 2.0	Natural river sediment. Turbidity is a measurement of water clarity, which aids in determining the effectiveness of our treatment process*	YES * CUD met the treatment technique for turbidity with 99.95% of monthly samples below the limit of .3 NTU
Total Trihalomethanes (TTHMs)	Quarterly	ppb	80 4 Quarter Locational Running Annual Average	N/A	77.8 Highest Locational Running Annual Average	6.74 to 147	By-products of water chlorination	NO
Haloacetic Acids (HAA)	Quarterly	ppb	60 4 Quarter Locational Running Annual Average	N/A	49.4 Highest Locational Running Annual Average	2.17 to 113	By-products of water chlorination	NO
Chlorine	Daily	mg/l	MRDL=4	MRDLG=4	1.41 Annual Average	.2 to 4.7	Disinfectant added to kill pathogens	NO
Total Organic Carbon ▲	N/A	TT	N/A	N/A	N/A	N/A	Naturally present in the environment	NO
Chlorine Dioxide	Daily	mg/l	0.8	MRDLG=.8	0.078 Average	0 to .78	Water additive used to control microbes	NO
Chlorites	Daily & Quarterly	mg/l	1	0.8	0.699 Average	0.02 to .99	By-products of water disinfection	NO
Coliform	Total Coliform: Tested Daily (MCL = 5% of total monthly samples)			0	Highest monthly # of positive total coliform samples. 3 of 120, August	0 to 3	Naturally present	NO
	E. Coli: (MCL = 0% samples)			0	0	0	Animal or human fecal waste	NO
100% of samples tested negative for E. Coli. Highest percentage of monthly positive total coliform samples was 2.5% in August. CUD immediately resampled above, below and at the same site where the positive coliform samples were collected. All repeat samples tested negative for Total Coliform and E. Coli bacteria.								

Key to Understanding the Table

AL: (Action Level) The concentration of a contaminant that, if exceeded, triggers treatment or other requirements that a water system must follow.

BDL: (Below Detection Limit)
MCL: (Maximum Contaminant Level) The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's 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. MCLG's 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 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 health risk. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.

NTU: (Nephelometric Turbidity Units) A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person. Turbidity does not present any risk to your health.

pCi/L: (picocuries per liter) A measure of radioactivity.

ppm: (parts per million) Milligrams per liter (mg/l), explained in terms of money as a single penny in \$10,000.

ppb: (parts per billion) or Micrograms per liter (ug/L), explained in terms of money as a single penny in \$10,000,000.

ng/L (parts per trillion) or Nanograms per liter (ng/l), explained in terms of money as one penny in \$10,000,000,000.

TT: (Treatment Technique) Required process intended to reduce the level of a contaminant in drinking water.

HAL: (Health Advisory Level) EPA's health advisory levels were calculated to offer a margin of protection against adverse health effects to sensitive populations.

* Turbidity is a measure of cloudiness in the water. We monitor turbidity because it determines the effectiveness of our filtration system.

On August 7, 2016, at approximately 2:55 p.m., a valve separating a sand filter from the clear well did not seal completely during a backwash. The result was that approximately 52 gallons of water exceeding the maximum turbidity limit of 1 NTU entered the clear well containing 2.75 million gallons. Although this volume is insignificant to public health and was verified by subsequent bacteriological samples, any volume above 1 NTU has to be reported to the consumer. Hence, you received the following notice:

▲ CUD met the treatment technique required for Total Organic Carbon in 2016.

UNREGULATED CONTAMINANT MONITORING

Unregulated contaminants are those for which 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. Our results are as follows:

Contaminant	Test Date	Unit	HAL	MCLG	Detection	Range	Sources	Violation
Bromodichloromethane	2/3/16	mg/l	N/A	0	0.00355	N/A	Discharge from industry	NO
Chlorodibromomethane	2/3/16	mg/l	N/A	0	0.00507	N/A	Discharge from industry	NO
Chloroform	2/3/16	mg/l	N/A	0	0.0157	N/A	Discharge from industry	NO
Perfluorobutanesulfonic acid (PFBS) *	Quarterly	ng/l	70	N/A	2.9 Average	BDL to 3.9	Discharge from industry	NO
Perfluoroheptanoic acid (PFHpA) *	Quarterly	ng/l	70	N/A	.73 Average	BDL to 2.2	Discharge from industry	NO
Perfluorooctanoic acid (PFOA) *	Quarterly	ng/l	70	N/A	5.5 Average	2.7 to 9.4	Discharge from industry	NO

▲ EPA has not established national primary drinking water regulations for PFOA and PFOS. EPA is evaluating PFOA and PFOS as drinking water contaminants in accordance with the process required by the Safe Drinking Water Act (SDWA). To regulate a contaminant under SDWA, EPA must find that it: (1) may have adverse health effects; (2) occurs frequently (or there is a substantial likelihood that it occurs frequently) at levels of public health concern; and (3) there is a meaningful opportunity for health risk reduction for people served by public water systems.

All other unregulated contaminants tested were either below the Minimum Reporting Level (MRL) or Below the Detection Limit (BDL).



CONSOLIDATED UTILITY DISTRICT
OF RUTHERFORD COUNTY

To be #1, CUDRC is committed to providing quality water and wastewater service, now and in the future, using the most cost effective, innovative and efficient methods and technologies available.

Other Information:

Water is considered the universal solvent and can be affected by anything that it contacts. As the body of knowledge grows about the world around us, new regulations and techniques to gauge and guard water purity are inevitable. Consolidated Utility District has and shall meet all regulations set forth by the United States Environmental Protection Agency and The Tennessee Department of Environment and Conservation.

CUD reads every water meter and bills each customer every month. In the event of an abnormally high meter reading, we will attempt to alert the customer. Payment may be made at our drive-up window, payment counter, by mail, by bank draft, personal check or debit/credit card via phone, online at www.cudrc.com or by night deposit.

CUD receives no tax revenue from City, State or Federal governments, but relies solely upon our rates and fees for operational funding.

Water System Security:

We urge the public to report any suspicious activities at any utility facilities, including treatment plants, tanks, fire hydrants, etc. to 615-893-7225.

How can I get involved?

Our Water Board meets at 1:00 p.m. on the fourth Tuesday of every month (unless otherwise advertised) at the utility office located at 709 New Salem Highway. Please feel welcome to attend.

Customer Complaints:

Any customer or potential customer of CUD shall have the right to voice a complaint and shall receive courteous consideration. If a customer is dissatisfied with a decision of District employees, staff and/or management, the customer may appeal to CUD's Board of Commissioners at the regular scheduled monthly board meeting. The Commissioners of Consolidated Utility District serve four year terms. Vacancies on the Board of Commissioners are filled by appointment by the Rutherford County Mayor from a list of three nominees certified by the Board of Commissioners to the Rutherford County Mayor to fill a vacancy. The next appointment nomination will be held at CUD's September 26, 2017 Board meeting. Decisions by the Board of Commissioners on customer complaints brought before the Board of Commissioners under the District's customer complaint policy may be reviewed by the Utility Management Review Board of the Tennessee Department of Environment and Conservation pursuant to Section 7-82-702(7) of Tennessee Code Annotated.

NOTICE OF VIOLATION - TURBIDITY TREATMENT TECHNIQUE VIOLATION - SINGLE EXCEEDANCE

Consolidated Utility District of Rutherford County recently violated a drinking water requirement. Although this was not an emergency, as our customers, you have a right to know what happened, what you should do, and what we did to correct this situation. We routinely monitor your water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. Normal turbidity levels at our plant are .03 to .41 turbidity units. A water sample taken August 7, 2016 showed levels of 2.0 turbidity units. This was above the standard of 1.0 units. Because of this high level of turbidity, there is a slight increased chance that the water might have contained disease-causing organisms. The issue occurred for less than ten minutes and was corrected.

Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

Consolidated Utility District of Rutherford County • 709 New Salem Highway, P.O. Box 249,
Murfreesboro, TN 37133-0249
615-893-7225 Fax: 615-225-3341

Visit our website at www.cudrc.com



or scan with your smart phone

If you have any questions about this report or treatment/testing procedures, contact Chris Forte (Treatment Plant Manager) at 615-895-4296.

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

