2023 Annual

CONSUMER CONFIDENCE REPORT

#1 Through Excellence and Innovation

Winner of the 2023 Award for Excellence – Large Water Treatment Plant Category – KY/TN Section of AWWA

CONSOLIDATED UTILITY DISTRICT

Rutherford County, Tennessee

www.cudrc.com • (615) 893-7225

WHAT IS A CONSUMER CONFIDENCE REPORT?

Consolidated Utility District (CUD) presents our annual Water Quality Report, also referred to as a Consumer Confidence Report (CCR). This document informs consumers about what contaminants, if any, were detected in drinking water — as well as related potential health effects. CCRs also include details about where your water comes from and how it is treated.

CUD is committed to being number one through excellence and innovation. Our mission statement is as follows: CUD 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.

KEY TAKEAWAYS

- **NO VIOLATIONS** – State and federal authorities have given the water produced by CUD a clean bill of health for 2023 based on the efforts of our workforce and the efforts of our award-winning water treatment plant.
- **LOOK FOR THE PHONE NUMBERS AND LINKS SHOWN IN BLUE TEXT IN THIS REPORT** – In various places throughout this document, you will see resources from the state and federal government that provide additional information across numerous topics about the quality of your water.
- **PFAS** – These are a group of more than 3,000 manufactured chemicals used in many household products and industrial applications that persist in the environment. CUD is developing practical and feasible strategies to monitor and reduce levels of PFAS as the Environmental Protection Agency (EPA) develops and finalizes its future drinking water standards.
- **VISUAL REFERENCES FOR SCIENTIFIC MEASUREMENTS** – If you've ever wondered how to measure parts per million, billion, or trillion – which are key increments for water quality – see page 5.

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About Your **Drinking Water**

WHERE IS THE SOURCE OF MY WATER?

The high quality and quantity surface water source is located at the East Fork of the Stones River (J. Percy Priest Lake). Our goal is to protect our water from contaminants, and we work 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 near 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. The high quality and quantity surface water source is located at the East Fork of the Stones River (J. Percy Priest Lake).

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DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunecompromised 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 personal sanitation, food preparation, handling infants and pets, personal lifestyle, bottled and tap drinking water from their healthcare providers. EPA/CDC guidelines on appropriate means to lessen risk of infection by Cryptosporidium and other microbial contaminants are available from the **Safe Drinking Water Hotline (800-426-4791).**

ARE THERE CONTAMINANTS IN MY WATER?

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. **For information about contaminants and potential health effects, call the Safe Drinking Water Hotline (800-426-4791).**

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

In order to ensure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation (TDEC) 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.

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. 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** https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water

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 www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html or you may contact the Water System to obtain copies of specific assessments.

CRYPTOSPORIDIUM

Cryptosporidium is a microbial parasite which is found in surface water throughout the U.S. Monitoring of our source water did not indicate the presence of cryptosporidium. While the most commonly used filtration methods cannot guarantee 100 percent removal, the treatment techniques employed at our water treatment facility minimizes 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 a 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 Drinking Water Hotline (800-426-4791).**

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.

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.

TERMS AND ABBREVIATIONS

These are terms that may appear in your report.

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.

NTU (Nephleometric Turbidity Units):
A measure of the turbidity of the water. Turbidity does not present any risk to your health. We monitor turbidity, which is a measure of the clarity of the water, because it is a good indicator that our treatment process is functioning properly. Turbidity in excess of 5 NTUs is just noticeable to the average person.

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

ppm (parts per million) or milligrams per liter (mg/l): One part substance per million parts water, or milligrams per liter.

ppb (parts per billion) or micrograms per liter (ug/l): One part substance per billion parts water, or micrograms per liter.

ng/L (parts per trillion) or nanograms per liter ng/l): One part substance per trillion parts water, or nanograms per liter

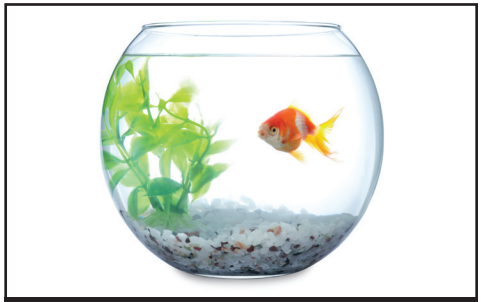
TT (Treatment Technique): Required process intended to reduce the level of a contaminant in drinking water.

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

WTP: Water Treatment Plant

CUD tests water on an ongoing basis to protect the safety and quality of the water supply. CUD also performs bacteriological testing a minimum of 120 times per month. The State of Tennessee and EPA require testing and reporting, and the results of our analyses are available upon request.

VISUAL REFERENCES



Parts Per Million

1 drop in a 10 gallon fish tank

Parts Per Billion

1 drop in a 10,000 gallon swimming pool

Parts Per Trillion

1 drop in 35 junior-sized Olympic swimming pools

Important Information About DRINKING WATER and PFAS

Per- and polyfluoroalkyl substances (known as PFAS) are a group of more than 3,000 manufactured chemicals used in many household products and industrial applications from carpets to cookware, clothing, food packaging, cosmetics, and other common products. These chemicals were first used in the 1940s, and they persist in the environment.

On April 10, 2024, **EPA announced the final National Primary Drinking Water Regulation** for six PFAS. This establishes legally enforceable levels, called Maximum Contaminant Levels (MCLs), for six kinds of PFAS in drinking water. EPA also finalized health-based, non-enforceable Maximum Contaminant Level Goals (MCLGs) for these PFAS.

The final rule requires:

- Public water systems must monitor for these PFAS and have three years to complete initial monitoring, followed by ongoing compliance monitoring. Water systems must provide the public with information on the levels of these PFAS in their drinking water beginning in 2027.
- Public water systems have five years (by 2029) to implement solutions that reduce these PFAS if monitoring shows that drinking water levels exceed these MCLs.
- Beginning in five years (2029), public water systems that have PFAS in drinking water which violates one or more of these MCLs must take action to reduce levels of these PFAS in their drinking water and must provide notification to the public of the violation.

CUD strives to maintain the highest level of quality in terms of water safety and reliability. Our work involves constant monitoring of our drinking water, and we are taking the following steps regarding PFAS:

- We are determining the levels of PFAS in our water with additional monitoring and identifying any patterns.
- We are working to research emerging treatment options, and we are developing practical strategies to reduce levels of PFAS.

For information on PFAS, visit the **Tennessee Department of Environment Conservation (TDEC).** You can also visit the **EPA** to learn more.

Water Quality RESULTS

LEAD AND COPPER MONITORING PROGRAM								
CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Lead	6/6/23 - 6/23/23	ppm	AL=0.015	0	0.0005 (90th percentile) All tests below Minimum Detection Limit of 0.002	N/A	Erosion of natural resources, household plumbing corrosion	NO
Copper	6/6/23 - 6/23/23	ppm	AL=1.3	1.3	0.104 (90th percentile)	.015 to .3100	Household plumbing corrosion, erosion of natural deposits, leaching of wood preservatives	NO

None of the homes tested for lead and copper exceeded the action level. All lead test results were below detection level.

DISINFECTION BY-PRODUCTS								
CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Total Trihalomethanes (TTHMs)	Quarterly	ppb	80 4 Quarter Locational Running Annual Average	N/A	53.7 Highest Locational Running Annual Average	19.3 to 85.6	By-products of water chlorination	NO
Haloacetic Acids (HAA)	Quarterly	ppb	60 4 Quarter Locational Running Annual Average	N/A	42.0 Highest Locational Running Annual Average	14.0 to 64.5	By-products of water chlorination	NO

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 contamints 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:

ADDITIONAL WATER PARAMETERS OF INTEREST								
CONTAMINANT	TEST DATE	UNIT	MRL	MDL	DETECTION	RANGE	SOURCES	VIOLATION
Perfluorooctanoic acid (PFOA)	Quarterly	ug/L	0.0040	0.0009	0.000975 average	BDL to 0.0029	Discharge from industry	NO
Perfluorohexanoic acid (PFHxA)	Quarterly	ug/L	0.003	0.0009	0.001650 average	BDL to 0.0054	Discharge from industry	NO
Perfluorobutanoic acid (PFBA)	Quarterly	ug/L	0.005	0.0009	0.001675 average	BDL to 0.0052	Discharge from industry	NO
Perfluorobutanesulfonic acid (PFBS)	Quarterly	ug/L	0.003	0.0009	0.00145 average	BDL to 0.0058	Discharge from industry	NO
Perfluoropentanoic acid (PFPeA)	Quarterly	ug/L	0.003	0.0009	0.00125 average	BDL to 0.0050	Discharge from industry	NO

EPA has not established national primary drinking water regulations for PFOA, PFHxA, PFBA, PFBS, and PFPeA. EPA is evaluating these substances 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 frequenty (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).**

TURBIDITY								
CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Turbidity	Continuous	NTU	At least 95% of monthly samples must be below .15 NTU	N/A	Lowest monthly percentage was 100.0% below 0.15 NTU.	0.02 to 0.14	Natural river sediment. Turbidity is a measurement of water clarity, which aids in determining the effectiveness of our treatment process.	NO

Turbidity is a measure of cloudiness in the water. CUD monitors turbidity because it determines the effectiveness of our filtration system.

TREATMENT BY-PRODUCTS PRECURSOR REMOVAL								
CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Total Organic Carbon	Monthly	TT	N/A	N/A	22.0% - 46.7% removal (15% required)	857 to 4680	Naturally present in the environment	NO

CUD met the treatment technique required for Total Organic Carbon (TOC) in 2023. The percentage removal is determined from the amount of TOC removed from the source water during the treatment process and the amount of TOC remaining in the finished water. The percentage required is the percentage removal required by regulation based on treatment technique. The percentage removal must be greater than or equal to the percentage required. Alternative compliance criteria was not used to determine TOC removal.

DISINFECTANTS - Collected in the Distribution System and at the Water Treatment Plant								
CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Chlorine	Daily	ppm	MRDL=4	MRDLG=4	1.74 Highest Quarterly Running Annual Average	0.5 to 3.1	Disinfectant added to kill pathogens	NO
Chlorine Dioxide	Daily	ppm	0.8	MRDLG=.8	0.049 Average	0 to 0.48 Daily Range at WTP	Water additive used to control microbes	NO
Chlorites	Daily and Quarterly	ppm	1	0.8	0.573 Distribution Sample Average	0.05 to 0.98 Daily Range at WTP	By-products of water disinfection	NO

NATURALLY OCCURRING WASTE CONTAMINANTS

CONTAMINANT	TEST DATE	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Coliform	Total Coliform: Tested Daily (MCL = 5% of total monthly samples)			0	Highest monthly # of positive total coliform samples. 2 of 120, July/December	0 to 1.7%	Naturally present	NO
	E. Coli: (MCL = 0% samples)			0	0	N/A	Animal or human fecal waste	NO

100% of samples tested negative for E. Coli. The highest percentage of monthly positive total coliform samples was 2.5%. CUD immediately resampled above, below, and at the same sites where the positive coliform samples were collected. All repeat samples tested negative for Total Coliform and E. Coli bacteria.

Bromodichloro-methane	2-9-23	ppm	N/A	N/A	0.00192	N/A Detection Limit .000500	Naturally present in the environment	NO
Chloroform	2-9-23	ppm	N/A	N/A	0.00659	N/A Detection Limit .000500	Naturally present in the environment	NO

REGULATED SUBSTANCES

CONTAMINANT	TEST	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Fluoride	Monthly	ppm	4.0	4.0	0.34 Average	0.02 to .71	Erosion of natural resources, additive to promote strong teeth, discharge from fertilizer and aluminum factories	NO
Nitrate	12/12/2023	ppm	10	N/A	0.265	N/A	Run off from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits	NO

OTHER SUBSTANCES OF INTEREST

CONTAMINANT	TEST	UNIT	MCL	MCLG	DETECTION	RANGE	SOURCES	VIOLATION
Sodium	11-22-23	ppm	N/A	N/A	45.5	N/A	Erosion of natural deposits	NO
2,4-D	Quarterly	ppb	70	70	0.00	N/A	Herbicide from agriculture, urban stormwater runoff, and residential uses	NO

HOW CAN I GET INVOLVED?

Our Board of Commissioners 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.

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. Customers can submit the names of qualified nominees. 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.

Customer Complaints

Any customer or potential customer of CUD will have the right to voice a complaint and shall receive courteous consideration. If a customer is dissatisfied with a decision of District employees or management, the customer may appeal to CUD's Board of Commissioners at the regularly scheduled monthly board meeting.

BASIC TRUTHS ABOUT CUD

- CUD has installed more than 1,500 miles of pipe in Rutherford County. That's greater than the distance from Murfreesboro to the state line of Arizona.
- Within our distribution network, we operate more than 25,000 valves and almost 6,000 fire hydrants.
- We test our water on an ongoing basis each month.The state of Tennessee and EPA require us to test and report on our water to ensure its safety.
- CUD is a nonprofit public utility and receives no continuing tax revenue from city, state or federal governments. We rely solely upon our rates and fees for operational funding. Any profits we generate are re-invested into capital improvements and debt reduction.
- State law allowed for the creation of CUD, and we are subject to all Tennessee state government meeting laws.

Other Information

Water is considered the universal solvent and can be affected by anything 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 shall meet all regulations set forth by the United States Environmental Protection Agency and the Tennessee Department of Environment and Conservation. **If you have any questions about this report or treatment/testing procedures contact Chris Forte (Director of Water Resources) at (615) 895-4296.**

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, through the myCUD app, or by night deposit.

Pharmaceuticals in Drinking Water

Flushing unused or expired medicines can harm your drinking water. Learn more about disposing of unused medicines at https://www.tn.gov/environment/sustainability/programs/pharmaceuticals-takeback.html

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. Visit our website at www.cudrc.com.

Este informe contieneinformación importante acerca de su agua potable. Haga que alguien lo traduzca para usted, o hablecon alguien que lo entienda.

Like us at "CUDRC"

Follow "Consolidated Utility District of Rutherford County"

Our Core Values Are S-P-I-R-I-T

SAFETY: We operate safely – protecting ourselves and our coworkers and using best industry practices.

PEOPLE: We respect one another, recognizing that our success depends upon the commitment, capabilities and diversity of our employees.

INTEGRITY: We are ethical and trustworthy in our relationships with coworkers and ratepayers.

RESPONSIBILITY: We are accountable for our actions. We are a good neighbor and citizen of Rutherford County.

INNOVATION: We anticipate change and respond with creative solutions. We are agile and responsive to the changing needs of ratepayers and embrace learning opportunities from our experience.

TEAMWORK: Our can-do spirit delivers top performance. We encourage collaboration, celebrate success, and build and nurture long-standing relationships.