



waterworks

spring 2023

COMMISSIONERS' COMMENTS

Hixson Utility continues to search for ways that technology can improve the efficiency of our work. Since 2014, almost every water meter in the District has been replaced with AMR (Automated Meter Reading) endpoints, which allows our employees to read the meter without the need to leave their vehicle. These endpoints also keep a 90-day history of customer usage, and allow for leak alerts to be sent in a customer's bill if 24 hours of continuous usage has been registered at the time the meter is read. Since 2019, we've taken it one step further with newly installed meters. These meters are installed with cellular endpoints, allowing us

to see meter readings from the office. This allows our field staff to spend more time on other projects, and improves the efficiency of the billing process for office staff.

HUD continues to utilize GIS (Geographic Information Systems) both in the office and the field. GIS mapping allows our employees to see details about District infrastructure from a phone or a tablet, helping them to make quicker decisions when repairing an issue. In the past year, we have used GPS equipment to add several miles of water lines, meters, and hydrants from new construction. We also use GIS to automate certain tasks,

such as creating a map that informs our customer service representatives when and where online payments have been received.

Finally, we recently invested in drone technology, which you might see us using around one of our tank or well facilities. We are using high-resolution 4K video to assist us in maintenance, such as inspecting the tops of water tanks, or flying over a cross-country water main to investigate for any visible leaks. This will help the District prevent any costly issues.

Earlier this year, Hixson Utility said goodbye to Lloyd Jackson. Lloyd served the District for almost 50 years, in a variety of capacities. Lloyd spent time as a field technician before later serving as backflow inspector. He ended his career in 2015, retiring as Distribution Superintendent. Lloyd was a major contributor in the growth of the District's water system. After his retirement, Lloyd continued to visit the office on a regular basis. He was happy to share old memories or even give advice to current staff. He will be truly missed. Our condolences go out to Lloyd's family, friends, and to anyone who had the pleasure of knowing him.



Hixson Utility District 2022 Water Quality Report

Most of the data
presented in this table
is from testing done
between January and
December of 2022.



CONTAMINANT	VIOLATION Y/N	LEVEL FOUND	RANGE OF DETECTION	DATE OF SAMPLE	MCLG	MCL	TYPICAL SOURCE OF CONTAMINATION
Chlorine	N	1.6 ppm	0.7 to 1.6 ppm	2022	4 ppm	4 ppm	Drinking water disinfectant
Fluoride	N	1.75 ppm	0.50 to 1.75 ppm	2022	4 ppm	4 ppm	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Total Coliform Bacteria (1) (2)	N	3	0	2022	N/A	TT	Naturally present in the environment
Turbidity	N	0.70 NTU	0.1 to 1.0 NTU	2022	N/A	TT	Soil runoff
Lead	N	90% =BDL	BDL to 8.13 ppb	2020	AL= 15 ppb	AL= 15 ppb	Corrosion of household plumbing; erosion of natural deposits
Copper	N	90%= 0.593 ppm	0.0167 to 0.652 ppm	2020	AL= 1.3 ppm	AL= 1.3 ppm	Corrosion of household plumbing; erosion of natural deposits
Sodium	N	1.34 ppm	1.26 to 1.34 ppm	2021	N/A	N/A	Erosion of natural deposits; used in water treatment chemicals
TTHM (Total Trihalomethanes)	N	7.07 ppb	5.24 to 7.07 ppb	2022	N/A	80 ppb	By-product of drinking water chlorination
HAAS (Total Halocetic Acids)	N	1.43 ppb	1.38 to 1.43 ppb	2022	N/A	60 ppb	By-product of drinking water chlorination
Nitrate	N	0.780 ppm	0.482 to 0.780 ppm	2022	10 ppm	10 ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Alpha Emitters	N	1.4 pCi/l	1.36 to 1.4 pCi/l	2014	0	15 pCi/l	Erosion of natural deposits
Combined Radium	N	0.96 pCi/l	BDL to 0.96 pCi/l	2014	0	5 pCi/l	Erosion of natural deposits
Barium	N	0.025 ppm	0.0132 to 0.0250 ppm	2021	2	2	Discharge of drilling waste, discharge from metal refineries; erosion from natural deposits

(1) Less than 5% of all samples can test positive with no backup samples testing positive. 3 samples tested positive with all back up samples testing negative.

(2) 969 samples were taken for the year with three samples testing positive.

Abbreviations and Definitions

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 Levels, or the highest of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology.

AL: Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements that a water system must follow.

Parts per million (ppm) or Milligrams per liter (mg/l): Explained in relation to time and money, 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 (ug/l): Explained in relation to time and money, one part per billion corresponds to one minute in 2,000 years or a single penny in \$10 million.

Nephelometric Turbidity Unit (NTU): A measure of the clarity of the water. Turbidity in excess of five (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.

BDL: Below detectable level.

IRON CONTENT: Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. It shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.02 ppm. The aesthetic limit for iron is 0.3 ppm.

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 risk to health. MRDLGs do not reflect the benefits of disinfectant use to control microbial contaminants.

IS MY DRINKING WATER SAFE?

Yes, our water meets all Environmental Protection Agency (EPA) health standards. We have conducted numerous tests for over 80 contaminants that may be present in drinking water. As shown in the chart, only 10 of these contaminants were detected and all were at safe levels, well below the EPA limits.

WHAT IS THE SOURCE OF MY WATER?

Your water, which is true ground water, comes from the Chickamauga watershed, a Cambrian-Ordovician carbonate underground aquifer. 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 (high), moderately susceptible (moderate) or slightly susceptible (low) based on geologic factors and human activities in the vicinity of the water source. The Hixson Utility District Water System sources rate as reasonably susceptible (high) to potential contamination. 798 Mauldeth Rd.

An explanation of Tennessee's SWAP, the source of Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact Tom Bockman at Hixson Utility District at 423.877.3513 between 8 am and 4 pm Monday through Friday, or TDEC at 1.888.891.8332 to obtain copies of specific assessments.

Your water comes from natural underground sources owned by Hixson Utility District and is withdrawn at the two different well fields. The high natural water quality at both Cave Springs and Walker's Corner well fields meet EPA standards to avoid filtration. A Wellhead Protection Plan is available for your review by contacting Tom Bockman at 423.877.3513. 1993 Turnberry Cir.



Lead & Copper

In December 2021, the EPA announced the next steps to strengthen the regulatory framework on lead in drinking water. The State of Tennessee Department of Environment and Conservation will be incorporating new rules regulating lead and copper. In an effort to assist the EPA in further developing their regulatory framework, Hixson Utility will be sending out a Consumer Plumbing Survey to customers in the Fall of 2023. Responses from the survey will be used to help identify any private infrastructure that contains lead for research and planning purposes. Hixson Utility has not identified any of its infrastructure as lead. If you have concerns about lead contamination in your private service line or interior plumbing, 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 at (800) 426-4791 or at www.epa.gov/safewater/lead.

WHY ARE 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 the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at 1.800.426.4791.

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 land surface 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.

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.
- 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 volitalic 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 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 prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in the bottled water which must provide the same protection for public health. 5 Abelia Ln.

HOW CAN I GET INVOLVED?

We invite you to attend our Board of Commissioners' meeting on the third Wednesday of each month at 3pm at our office.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN ITS OPERATIONS?

Both the EPA and the TDEC require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements and want you to know that we pay attention to all the rules. 408 Blanche St.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as patients with cancer who are undergoing chemotherapy, people who have undergone organ transplants, those with HIV, AIDS or other immune system disorders, some elderly people and infants may be particularly at risk from infections. These people should seek advice from their healthcare providers about not only their drinking water, but food preparation, personal hygiene and precautions in Centers for Disease Control guidelines on the risk of infection by Cryptosporidium and other microbiological contaminants are available by calling

the EPA's Safe Drinking Water Hotline at 1.800.426.4791. 7731 Cove Ridge Dr.

WHAT ELSE DO I NEED TO KNOW?

We work around the clock to provide top-quality water to every tap. We ask that all our customers help us protect our water resources, which are the heart of our community, our way of life and our children's future.

WHAT ABOUT 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. Hixson Utility 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 two minutes before using water for drinking or cooking. If you are concerned about lead in the drinking water, testing methods, and steps you can take to minimize exposure, call the Safe Drinking Water Hotline at 1.800.554.1404 or see <http://www.epa.gov/safewater/lead>.



Nolan Moss, GIS Technician

NEW HIRE

Please join us in welcoming our newest staff member.

HOUSEHOLD LEAKS

The average household leak can account for nearly 10,000 gallons of water wasted every year and ten percent of homes have leaks that waste 90 gallons or more per day (source: epa.gov). The most common sources of leaks are running toilets, dripping faucets, and water heaters. Here are some tips from epa.gov on how to find leaks:

- Take a look at your water usage during a colder month, such as January or February. If a family of four exceeds 12,000 gallons per month, there may be serious leaks.
- Check your water meter before and after a two-hour period when no water is being used. If the meter changes at all, you probably have a leak.
- Identify toilet leaks by placing a drop of food coloring in the toilet tank. If any color shows up in the bowl after 10 minutes, you have a leak. (Be sure to flush immediately after the experiment to avoid staining the tank.)
- Examine faucet gaskets and pipe fittings for any water on the outside of the pipe to check for surface leaks.



For more tips check out www.epa.gov/watersense.

Customers are invited to follow the Utility on Twitter and/or Facebook for updates through social media.

Payment Options

Hixson Utility District offers the following payment options:

- **Automatic Bank Draft** (call office to enroll)
- **Online Payments:** third party convenience fee applies.
- **Internet Banking**
- **Credit Cards:** no fees when paying through the office.
- **Drive-thru Window**
- **Night Deposit Box**
- **Mail**

Please provide us with your email address by writing it on your payment stub, or by calling the business office. This information will be used for future communication and possible e-billing.

You could win \$100!

We have randomly selected the street addresses of five water customers and placed them somewhere within this newsletter. Read it thoroughly to see if your address is one of them. If it is, simply bring in proof of residency and photo identification for a \$100 prize!

Selecting Our Board of Commissioners

The Commissioners of Hixson Utility District serve four-year terms. Vacancies on the Board of Commissioners are filled by appointment by the Hamilton County Mayor from a list of three nominees certified by the Board of Commissioners. 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 State Comptroller's Office pursuant to Section 7-82-702(7) of Tennessee Code Annotated. This Board may be reached at 615-532-0472.

Hixson Utility District meets the third Wednesday of each month at 3:00 p.m. at the District Office.