2023 Annual Water Quality Report

(Testing Performed January through December 2023)

NORTHEAST ETOWAH COUNTY WATER COOPERATIVE
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We are pleased to provide you, our customer, our annual Water Quality Report. This report presents our water quality data and other information about drinking water. We are committed to providing our customers with the highest quality drinking water possible.

Water Sources	Purchased surface water from Gadsden Water Works (Middle Coosa Basin)	
Storage Capacity	3 tanks with total capacity 400,000 gallons	
Number of Customers	Approximately 1400	
Board Members	President-Donnie Hale Vice President- Jeff Jones Director- Lesli Morrison Director- Ricky Frasier Director- Phillip Patterson	
Co-op Staff	Co-op Manager- David Rigby Maintenance- Woodrow Brown Hunter Wren	Office Manager- Lara Murray Office Clerk- Becky Martin

Our water source comes from the Middle Coosa Basin. This watershed contains 23 rivers and streams and 420 lakes. The basin is fed from the Upper Coosa Basin and multiple aquifers, including Pennsylvania aquifers, Valley and Ridge aquifers, and Valley and Ridge carbonate rock aquifers. You may find more information about the Coosa River watershed on the EPA's website at *https://cfpub.epa.gov/surf/huc.cfm?huc_code=03150106*.

Water Source Protection

In compliance with the Alabama Department of Environmental Management (ADEM), Gadsden Water Works and Sewer Board (GWWSB) developed a Source Water Assessment plan that assists in protecting our water sources. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible to contaminating the water source. The susceptibility analysis identified several contaminant sources that could potentially affect the quality of the source water. To help address these concerns, the GWWSB developed a Contingency Plan. You may request to review a copy during regular business hours, or you may purchase a copy upon request for a nominal reproduction fee.

In addition, the GWWSB monitors numerous sampling points around the lake each month to track the water quality in the lake and to identify contaminant sources. The GWWSB realizes that protection of our water resources is essential to providing high-quality drinking water to our community. In further efforts to protect our drinking water source, the GWWSB is an active member of the Coosa River Basin Clean Water Partnership, a group dedicated to protecting and restoring water quality and biological integrity in the Coosa River Basin.

Please help us make these efforts worthwhile by protecting our source of water. Carefully follow instructions on pesticides and herbicides you use for your lawn and garden, and properly dispose of household chemicals, paints, and waste oil. We ask that all our customers help us protect our valuable water sources, which are the heart of our community, our way of life, and our children's futures.

Questions?

If you have any questions about the information in this report or concerning your water utility, please contact David Rigby at 256-547-5133. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held every fourth Tuesday of each month at the maintenance board room at 4650 Old US Hwy 411 in Gadsden. Office number is 256-546-4884.

More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

General Information about Drinking Water

All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. MCL's, defined in a List of Definitions in this report, are set at very stringent levels. 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. 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 radioactive material, and it can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, 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 storm water run-off, 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, storm water run-off, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water 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 prescribes regulations which limit the number of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water. Based on a study conducted by ADEM with the approval of the EPA a statewide waiver for the monitoring of asbestos and dioxin was issued. Thus, monitoring for these contaminants was not required.

Your source water is also tested for pathogens, such as *Cryptosporidium* and *Giardia.* These pathogens can enter the water from animal or human waste. For people who may be immuno-compromised, a guidance document developed jointly by the Environmental Protection Agency and the Center for Disease Control is available online at www.epa.gov/safewater/crypto.html or from the Safe Drinking Water Hotline at 800-426-4791. This language does not indicate the presence of cryptosporidium in our drinking water.

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. People at risk should seek advice about drinking water from their health care providers. More information about contaminants to drinking water and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline at (1-800-426-4791).

Information about Lead

Lead in drinking water is rarely found in source water but is primarily from materials and components associated with service lines and home plumbing. Your water system is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components.

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Use *only* water from the cold-water tap for drinking, cooking, and *especially for making baby formula*. Hot water is more likely to cause leaching of lead from plumbing materials. 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. These recommended actions are very important to the health of your family. 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 www.epa.gov/safewater/lead.

Tap vs. Bottled

Thanks in part to aggressive marketing, the bottled water industry has successfully convinced us all that water purchased in bottles is a healthier alternative to tap water. However, according to a four-year study conducted by the Natural Resources Defense Council, bottled water is not necessarily cleaner or safer than most tap water. In fact, about 25 percent of bottled water is actually just bottled tap water (40 percent according to government estimates).

The Food and Drug Administration is responsible for regulating bottled water, but these rules allow for less rigorous testing and purity standards than those required by the U.S. EPA for community tap water. For instance, the high mineral content of some bottled waters makes them unsuitable for babies and young children. Further, the FDA completely exempts bottled water that's packaged and sold within the same state, which accounts for about 70 percent of all bottled water sold in the United States.

People spend 10,000 times more money per gallon for bottled water than they typically do for tap water. If you get your recommended eight glasses a day from bottled water, you could spend up to $1,400 annually. The same amount of tap water would cost about 49 cents. Even if you installed a filter device on your tap, your annual expenditure would be far less than what you'd pay for bottled water.

Water Main Flushing

Distribution mains (pipes) convey water to homes, businesses, and hydrants in your neighborhood. At times, we may need to flush the distribution mains. Water main flushing is the process of cleaning the interior of water distribution mains by sending a rapid flow of water through the mains. Flushing maintains water quality in several ways. For example, flushing removes sediments like iron and manganese. Although iron and manganese do not themselves pose health concerns, they can affect the taste, clarity, and color of the water. Flushing helps ensure the presence of fresh water with sufficient dissolved oxygen and disinfectant levels and an acceptable taste and smell. During flushing operations in your neighborhood, some short-term changes are possible. For instance, the water may run darker for a while due to the flushed sediment from the distribution pipes. Avoid tap water for drinking and washing white clothes at such times. If you do use the tap, allow your cold water to run for a few minutes at full velocity before use, and avoid using hot water, to prevent sediment accumulation in your hot water tank. Please contact us if you have any questions or if you would like more information on our water main flushing schedule.

Causes of Pink or Gray Stains on Fixtures

Gray or pink stains are sometimes noticed on moist surfaces of water fixtures. This condition is typically caused by an air borne bacteria that thrives in moist and otherwise favorable locations. These bacteria are generally "*serratia marcescens*" bacteria, although many other airborne bacteria can exist under these moist conditions. These bacteria are generally not hazardous to a healthy person. This discoloration easily wipes from the fixture surface and typically leaves no staining once cleaning is completed. The origin of these bacteria is airborne and NOT from the water in the water plumbing system.

Definitions

Action Level- the concentration of a contaminant that, if exceeded, triggers treatment or other requirements.
Coliform Absent (ca)- laboratory analysis indicates that the contaminant is not present.
Disinfection byproducts (DBPs)- formed when disinfectants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water. Disinfection byproducts for which regulations have been established include trihalomethanes (TTHM), haloacetic acids (HAA5), bromate, and chlorite.
Distribution System Evaluation (DSE)- a four-quarter study conducted by water systems to identify distribution system locations with high concentrations of THMs and HAAs.
Level 1 Assessment- a study of the water system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.
Level 2 Assessment- a very detailed study of the water system to identify potential problems and determine (if possible) why an E. coli MCL violation has occurred and/or why total coliform bacteria have been found in our water system on multiple occasions.
Maximum Contaminant Level (MCL)- 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.
Maximum Contaminant Level Goal- 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.
Maximum Residual Disinfectant Level (MRDL)- highest level of a disinfectant allowed in drinking water
Maximum Residual Disinfectant Level Goal- (MRDLG) 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.
Micrograms per liter (ug/L) – equivalent to parts per billion (ppb) since one liter of water is equal in weight to one billion micrograms.
Milligrams per liter (mg/L) – equivalent to parts per million
Millirems per year (mrem/yr)- a measure of radiation absorbed by the body.
Nephelometric Turbidity Unit (NTU)- a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Not Detected (ND)- laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.
Parts per billion (ppb) or Micrograms per liter (µg/l)- corresponds to one minute in 2,000 years, or a single penny in $10,000,000.
Parts per million (ppm) or Milligrams per liter (mg/l)- corresponds to one minute in two years or a single penny in $10,000.
Parts per quadrillion (ppq) or Picograms per liter (picograms/l)- corresponds to one minute in 2,000,000,000 years, or a single penny in $10,000,000,000,000.
Parts per trillion (ppt) or Nanograms per liter (nanograms/l)- corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.
Picocuries per liter (pCi/L)- a measure of the radioactivity in water.
Running Annual Average (RAA)- yearly average of all the DPB results at each specific sampling site in the distribution system. The RAA, along with a range, is reported in the Table of Detected Contaminants.
Standard Units (S.U.)- pH of water measures the water's balances of acids and bases and is affected by temperature and carbon dioxide gas. Water with less than 6.5 could be acidic, soft, and corrosive. A pH greater than 8.5 could indicate that the water is hard.
Treatment Technique (TT)- a required process intended to reduce the level of a contaminant in drinking water.
Variances & Exemptions (V&E)- State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

Monitoring Schedule and Results

Northeast Etowah County Water and Gadsden Water Works *routinely* monitor for constituents in your drinking water according to Federal and State laws. The EPA or ADEM requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule.

Constituents Monitored	Northeast Etowah	GWWSB
Inorganic Contaminants	Not required	2020
Lead/Copper	2022	2018
Microbiological Contaminants	current	current
Nitrates	Not required	2020
Radioactive Contaminants	Not required	2012
Synthetic Organic Contaminants (including herbicides & pesticides)	Not required	2020
Volatile Organic Contaminants	Not required	2020
Disinfection By-products	2020	2020
Cryptosporidium	Not required	2017
Distribution System Evaluation (DSE)	2017	2017
UCMR4 Contaminants	Not required	2018 [1]
PFAS Contaminants	Not required	2020 [2]

[1] UCMR4 results are on GWWSB's website www.gadsdenwater.org/files/GWWSB_CCR_2020.pdf

[2] GWWSB has been monitoring for PFAS since 2016. For PFAS results, see www.gadsdenwater.org/environmentalreporting.aspx

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TABLE OF DETECTED DRINKING WATER CONTAMINANTS
Northeast Etowah County Water

Contaminants	Violation Yes/No	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Copper	NO	0.063 *	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching
Lead	NO	0.001	ppm	0.15	AL=.15	Household plumbing corrosion; erosion; preservative leaching
TTHM [Total trihalomethanes]	NO	LRAA 24.37 20.0-30.0	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	LRAA 10.79 8.7-15.0	ppb	0	60	By-product of drinking water chlorination

TABLE OF DETECTED DRINKING WATER CONTAMINANTS
Gadsden Water Works and Sewer Board

Contaminants	Violation Yes/No	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Chlorine	NO	2.03	ppm	MRDLG=4	MRDL=4	ter additive used to control microbes
Total organic carbon (TOC)	NO	1.12	ppm	n/a	TT	oil runoff
Turbidity	NO	0.10	NTU	n/a	TT	Soil runoff
Alpha emitters	NO	0.1	PCi/l	0	15	Erosion of natural deposits
Copper (Consumer's tap)	NO	0.026 *	ppm	1.3	AL=1.3	Household plumbing corrosion; erosion; preservative leaching
Barium	NO	0.04	ppm	2	2	Drilling waste; refinery discharge; erosion of natural deposits
Nitrate (as Nitrogen)	NO	0.06	ppm	10	10	Erosion; water additive for tooth health; factory discharge
Fluoride	NO	0.71	ppm	4	4	Fertilizer runoff; septic tank leaching, sewage; erosion
Nitrite	NO	0.06	ppm	10	10	Fertilizer runoff; septic tank leaching, sewage; erosion
TTHM [Total trihalomethanes]	NO	LRAA 21.72 8.70-43.10	ppb	0	80	By-product of drinking water chlorination
HAA5 [Total haloacetic acids]	NO	LRAA 9.03 2.90-18.40	ppb	0	60	By-product of drinking water chlorination
Unregulated Contaminants						
Chloroform	NO	12.63	ppb	none	none	Naturally occurring in the environment or from runoff
Bromodichloromethane	NO	6.18	ppb	none	none	Naturally occurring in the environment or from runoff
Chlorodibromomethane	NO	3.10	ppb	none	none	Naturally occurring in the environment or from runoff
Secondary Contaminants						
Aluminum	NO	0.05	ppm	n/a	0.2	Naturally occurring in the environment or from treatment
Chloride	NO	24.9	ppm	none	250	Naturally occurring in the environment or from runoff
Hardness	NO	53.2	ppm	none	none	Naturally occurring or from water additives
pH	NO	7.47	S.U.	none	none	Naturally occurring or from water additives
Sodium	NO	16.2	ppm	none	none	Naturally occurring in the environment
Sulfate	NO	ND	ppm	none	250	Naturally occurring in the environment; erosion
Total Dissolved Solids	NO	108	ppm	none	500	Naturally occurring in the environment or from runoff
Zinc	NO	0.05	ppm	none	5	Erosion; factory & refinery discharge; runoff from landfills

* Figure shown is 90th percentile and # of sites above the Action Level (AL) = 0

Standard List of Drinking Water Contaminants

Following is a list of *Primary Drinking Water Contaminants* and a list of *Unregulated Contaminants* for which our water system routinely monitors according to the requirements of the Environmental Protection Agency and the Alabama Department of Environmental Management. These contaminants were *not* detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants.*

STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS					
Contaminant	**MCL**	**Unit of Msmt**	**Contaminant**	**MCL**	**Unit of Msmt**
Bacteriological Contaminants			trans-1,2-Dichloroethylene	100	ppb
Total Coliform Bacteria	<5%	present/absent	Dichloromethane	5	ppb
Fecal Coliform and E. coli	0	present/absent	1,2-Dichloropropane	5	ppb
Fecal Indicators	0	present/absent	Di (2-ethylhexyl)adipate	400	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)phthalate	6	ppb
Cryptosporidium	TT	Calc.organisms/l	Dinoseb	7	ppb
Radiological Contaminants			Dioxin [2,3,7,8-TCDD]	30	ppq
Beta/photon emitters	4	mrem/yr	Diquat	20	ppb
Alpha emitters	15	pCi/l	Endothall	100	ppb
Combined radium	5	pCi/l	Endrin	2	ppb
Uranium	30	pCi/l	Epichlorohydrin	TT	TT
Inorganic Chemicals			Ethylbenzene	700	ppb
Antimony	6	ppb	Ethylene dibromide	50	ppt
Arsenic	10	ppb	Glyphosate	700	ppb
Asbestos	7	MFL	Heptachlor	400	ppt
Barium	2	ppm	Heptachlor epoxide	200	ppt
Beryllium	4	ppb	Hexachlorobenzene	1	ppb
Cadmium	5	ppb	Hexachlorocyclopentadiene	50	ppb
Chromium	100	ppb	Lindane	200	ppt
Copper	AL=1.3	ppm	Methoxychlor	40	ppb
Cyanide	200	ppb	Oxamyl [Vydate]	200	ppb
Fluoride	4	ppm	Polychlorinated biphenyls	0.5	ppb
Lead	AL=15	ppb	Pentachlorophenol	1	ppb
Mercury	2	ppb	Picloram	500	ppb
Nitrate	10	ppm	Simazine	4	ppb
Nitrite	1	ppm	Styrene	100	ppb
Selenium	.05	ppm	Tetrachloroethylene	5	ppb
Thallium	.002	ppm	Toluene	1	ppm
Organic Contaminants			Toxaphene	3	ppb
2,4-D	70	ppb	2,4,5-TP(Silvex)	50	ppb
Acrylamide	TT	TT	1,2,4-Trichlorobenzene	.07	ppm
Alachlor	2	ppb	1,1,1-Trichloroethane	200	ppb
Benzene	5	ppb	1,1,2-Trichloroethane	5	ppb
Benzo(a)pyrene [PAHs]	200	ppt	Trichloroethylene	5	ppb
Carbofuran	40	ppb	Vinyl Chloride	2	ppb
Carbon tetrachloride	5	ppb	Xylenes	10	ppm
Chlordane	2	ppb	**Disinfectants & Disinfection Byproducts**		
Chlorobenzene	100	ppb	Chlorine	4	ppm
Dalapon	200	ppb	Chlorine Dioxide	800	ppb
Dibromochloropropane	200	ppt	Chloramines	4	ppm
o-Dichlorobenzene	600	ppb	Bromate	10	ppb
p-Dichlorobenzene	75	ppb	Chlorite	1	ppm
1,2-Dichloroethane	5	ppb	HAA5 [Total haloacetic acids]	60	ppb
1,1-Dichloroethylene	7	ppb	TTHM [Total trihalomethanes]	80	ppb
cis-1,2-Dichloroethylene	70	ppb			

UNREGULATED CONTAMINANTS			
1,1 – Dichloropropene	Aldicarb	Chloroform	Metolachlor
1,1,1,2-Tetrachloroethane	Aldicarb Sulfone	Chloromethane	Metribuzin
1,1,2,2-Tetrachloroethane	Aldicarb Sulfoxide	Dibromochloromethane	N - Butylbenzene
1,1-Dichloroethane	Aldrin	Dibromomethane	Naphthalene
1,2,3 - Trichlorobenzene	Bromobenzene	Dicamba	N-Propylbenzene
1,2,3 - Trichloropropane	Bromochloromethane	Dichlorodifluoromethane	O-Chlorotoluene
1,2,4 - Trimethylbenzene	Bromodichloromethane	Dieldrin	P-Chlorotoluene
1,3 – Dichloropropane	Bromoform	Hexachlorobutadiene	P-Isopropyltoluene
1,3 – Dichloropropene	Bromomethane	Isoprpylbenzene	Propachlor
1,3,5 - Trimethylbenzene	Butachlor	M-Dichlorobenzene	Sec - Butylbenzene
2,2 – Dichloropropane	Carbaryl	Methomyl	Tert - Butylbenzene
3-Hydroxycarbofuran	Chloroethane	MTBE	Trichlorfluoromethane