

# Annual Drinking Water Quality Report January—December 2025

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Last year, as in years past, your tap water met all U.S. Environmental Protection Agency (EPA) and the Alabama Department of Environmental Management (ADEM) drinking water health standards. Your Local Water officials vigilantly safeguard its water supplies and once again we are proud to report that our system has not violated a maximum contaminant level or any other water quality standards.

We're pleased to present to you this year's Annual Drinking Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water.

Our water source is Well #3 where we have one Iron and Manganese removal plant. Also, we purchase water from the 5-star Water District, who treats water from Lake Jordon. Chlorine is added to the water as disinfectant and the required residual is maintained to protect your drinking water from any possible outside contaminants. Aqua Mag is also added to the water for sequestration of Iron and Manganese and used for corrosion control.

Marbury Water System, Inc.  
 P.O. Box 180  
 Marbury, Alabama 36051

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, 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.

### A MESSAGE FROM THE BOARD

*Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding. We at The Marbury*

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

*John Parks,*

*President of the Board*

### General Information

As you can see by the tables, our system had no monitoring violations of allowable limits of contaminants in drinking water. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some contaminants have been detected.

**Total Coliform:** The Total Coliform Rule requires water systems to meet a stricter limit for coliform bacteria. Coliform bacteria are usually harmless, but their presence in water can be an indication of disease-causing bacteria. When coliform bacteria are found, special follow-up tests are done to determine if harmful bacteria are present in the water supply. If this limit is exceeded, the water supplier must notify the public by newspaper, television or radio. To comply with the stricter regulation, we have increased the average amount of chlorine in the distribution system. 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. Some people may be more vulnerable to contaminants in drinking water than the general population. People who are immuno-compromised such as cancer patients undergoing chemotherapy, organ transplant recipients, HIV/AIDS positive 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. 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). 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. **The Marbury Water System, Inc.** 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>.

To ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water. Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems

Our Lead Service Line Inventory was completed and submitted by the deadline of October 16, 2024 and a copy of it is in our office as required by EPA. If any would like to view it or has any questions, please feel free to contact our office. Radon is a naturally occurring gas present in some groundwater. Inhaled radon has been linked to lung cancer and may pose a health risk when inhaled after the release from water into the air. This inhalation could occur during showering, bathing, washing dishes, or washing clothes. The radon gas release from drinking water is a relatively small part of the total radon found in air. One major source of radon gas is from the soil, where the gas can seep through the foundations of homes. It is not clear whether ingested (i.e. taken through the mouth) radon contributes to cancer or other adverse health conditions. If you are concerned about radon in your home, tests are available to determine the total exposure level. For additional information on home testing contact your local health department

## Important Drinking Water Definitions:

**Disinfection Byproducts** – contaminants formed when chlorine is used as a disinfectant.

**Parts per million (ppm) or Milligrams per liter (mg/l)** - 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** - one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.

**Parts per trillion (ppt) or Nanograms per liter (nanograms/l)** - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.

**Parts per quadrillion (ppq) or Picograms per liter (picograms/l)** - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in \$10,000,000,000,000.

**Picocuries per liter (pCi/L)** - picocuries per liter is a measure of the radioactivity in water.

**Millirems per year (mrem/yr)** - measure of radiation absorbed by the body.

**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.

**Variances & Exemptions** - ADEM or EPA permission not to meet an MCL or a treatment technique under certain conditions.

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

**Maximum Residual Disinfectant Level Goal or 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.

**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 control of microbial contaminants.

**Variances and Exemptions** - The Department or EPA permission not to meet an MCL or a treatment technique under certain conditions

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

**Action Level** - The concentration of a contaminant that triggers treatment or other requirement a water system shall follow.

**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.

**Level 1 assessment**—a study of the system to identify potential problems and determine (if possible) why total coliform bacteria have been found in our water system.

**A Level 2 assessment** is 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.

**The Marbury Water System, Inc. routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2025. All 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. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).**

### Any Questions?

**Please attend our regularly scheduled meetings!**

**The 3rd Monday of every quarter at 5:00 p.m. at the Marbury Water Office located at 3056 Hwy 143.**

**Hope to See You There!**

**The Marbury Water System, Inc. utilizes a Bacteriological Monitoring Plan, and a Cross Connection Policy is in place to insure good safe drinking water for our customers. The Marbury Water System, Inc. has completed a Source Water Assessment Plan which is available for review at their office. A Source Water Assessment Plan provides information about potential sources of contamination and is set up to help protect our source.**

Marbury Water System

## Table of Primary Contaminants

At high levels some primary contaminants are known to pose a health risks to humans. This table provides a quick glance of any primary contaminant detections.

CONTAMINANT	MCL	Marbury	5-Star	CONTAMINANT	MCL	Marbury	5-Star	CONTAMINANT	MCL	Marbury	5-Star
<b>Bacteriological</b>											
Total Coliform Bacteria	< 5%	ND	ND	Selenium(ppb)	50	ND	ND	Epichlorohydrin	TT	ND	ND
Turbidity	TT	0.10	0.09	Thallium(ppb)	2	ND	ND	Ethylbenzene(ppb)	700	ND	ND
Fecal Coliform & E. coli	0	ND	ND	<b>Organic Chemicals</b>				Ethylene dibromide(ppt)	50	ND	ND
<b>Radiological</b>											
Beta/Photon emitters (mrem/yr)	4	ND	ND	Acrylamide	TT	ND	ND	Glyphosate(ppb)	700	ND	ND
Alpha emitters (pci/l)	15	2.63	ND	Alachlor(ppb)	2	ND	ND	Haloacetic Acids(ppb)	60	53.00	53.90
Combined radium (pci/l)	5	0.56	ND	Atrazine(ppb)	3	ND	ND	Heptachlor(ppt)	400	ND	ND
Uranium(pci/l)	30	ND	ND	Benzene(ppb)	5	ND	ND	Heptachlor epoxide(ppt)	200	ND	ND
<b>Inorganic</b>											
Antimony (ppb)	6	ND	ND	Benzo(a)pyrene[PHAs](ppt)	200	ND	ND	Hexachlorobenzene(ppb)	1	ND	ND
Arsenic (ppb)	10	ND	0.52	Carbofuran(ppb)	40	ND	ND	Hexachlorocyclopentadiene(ppb)	50	ND	ND
Asbestos (MFL)	7	ND	ND	Carbon Tetrachloride(ppb)	5	ND	ND	Lindane(ppt)	200	ND	ND
Barium (ppm)	2	ND	0.032	Chlordane(ppb)	2	ND	ND	Methoxychlor(ppb)	40	ND	ND
Beryllium (ppb)	4	ND	ND	Chlorobenzene(ppb)	100	ND	ND	Oxamyl [Vydate](ppb)	200	ND	ND
Bromate(ppb)	10	ND	ND	2,4-D	70	ND	ND	Pentachlorophenol(ppb)	1	ND	ND
Cadmium (ppb)	5	ND	ND	Dalapon(ppb)	200	ND	ND	Picloram(ppb)	500	ND	ND
Chloramines(ppm)	4	ND	ND	Dibromochloropropane(ppt)	200	ND	ND	PCBs(ppt)	500	ND	ND
Chlorine(ppm)	4	1.30	2.12	0-Dichlorobenzene(ppb)	600	ND	ND	Simazine(ppb)	4	ND	ND
Chlorine dioxide(ppb)	800	ND	ND	p-Dichlorobenzene(ppb)	75	ND	ND	Styrene(ppb)	100	ND	ND
Chlorite(ppm)	1	ND	ND	1,2-Dichloroethane(ppb)	5	ND	ND	Tetrachloroethylene(ppb)	5	ND	ND
Chromium (ppb)	100	ND	0.48	1,1-Dichloroethylene(ppb)	7	ND	ND	Toluene(ppm)	1	ND	ND
Copper (ppm)	AL=1.3	0.015	0.009	Cis-1,2-Dichloroethylene(ppb)	70	ND	ND	TOC	TT	ND	1.66
Cyanide (ppb)	200	ND	ND	trans-1,2-Dichloroethylene(ppb)	100	ND	ND	TTHM(ppb)	80	52.75	72.10
Fluoride (ppm)	4	0.10	0.81	Dichloromethane(ppb)	5	ND	ND	Toxaphene(ppb)	3	ND	ND
Lead (ppb)	AL=15	ND	ND	1,2-Dichloropropane(ppb)	5	ND	ND	2,4,5-TP (Silvex)(ppb)	50	ND	ND
Mercury (ppb)	2	ND	ND	Di-(2-ethylhexyl)adipate(ppb)	400	ND	ND	1,2,4-Trichlorobenzene(ppb)	70	ND	ND
Nitrate (ppm)	10	ND	0.216	Di(2-ethylhexyl)phthalates(ppb)	6	ND	ND	1,1,1-Trichloroethane(ppb)	200	ND	ND
Nitrite (ppm)	1	ND	ND	Dinoseb(ppb)	7	ND	ND	1,1,2-Trichloroethane(ppb)	5	ND	ND
Total Nitrate & Nitrite	10	ND	0.216	Dioxin[2,3,7,8-TCDD](ppq)	30	ND	ND	Trichloroethylene(ppb)	5	ND	ND
				Diquat(ppb)	20	ND	ND	Vinyl Chloride(ppb)	2	ND	ND
				Endothal(ppb)	100	ND	ND	Xylenes(ppm)	10	ND	ND
				Endrin(ppb)	2	ND	ND				

## Table of Secondary and Unregulated Contaminants

Secondary Drinking Water Standards are guidelines regulating contaminants that may cause cosmetic effects (such as skin or tooth discoloration) or aesthetic effects (such as taste, odor, or color) in drinking water. ADEM has Secondary Drinking Water Standards established in state regulations applicable to water systems required to monitor for the various components. 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.

CONTAMINANT	MCL	Marbury	5-Star	CONTAMINANT	MCL	Marbury	5-Star	CONTAMINANT	MCL	Marbury	5-Star
<b>Secondary</b>											
Aluminum	0.2	ND	ND	Foaming Agents	0.5	ND	ND	Silver	7	ND	ND
Chloride	250	ND	7.25	Iron	0.3	ND	ND	Sulfate	70	7	19.60
Color (PCU)	15	ND	ND	Magnesium	75	0.01	4.79	Total Dissolved Solids	500	131	68.00
Copper	1	0.018	0.009	Odor (T.O.N.)	5	ND	ND	Zinc	5	ND	0.00
<b>Special</b>											
Calcium	N/A	16.70	24.20	pH (SU)	N/A	7.80	7.96	Temperature (*C)	N/A	ND	60.20
Carbon Dioxide	N/A	ND	49.30	Sodium	N/A	12.40	3.76	Total Alkalinity	N/A	63.30	56.00
Manganese	0.05	0.012	0.005	Specific Conductance (umhos)	<500	159.00	166.00	Total Hardness (as CaCO3)	N/A	45.40	79.90
<b>Unregulated</b>											
1,1 - Dichloropropene	N/A	ND	ND	Bromobenzene	N/A	ND	ND	Hexachlorobutadiene	N/A	ND	ND
1,1,2,2-Tetrachloroethane	N/A	ND	ND	Bromochloromethane	N/A	ND	ND	Isopropylbenzene	N/A	ND	ND
1,1-Dichloroethane	N/A	ND	ND	Bromodichloromethane	N/A	ND	11.80	M-Dichlorobenzene	N/A	ND	ND
1,2,3 - Trichlorobenzene	N/A	ND	ND	Bromoforn	N/A	ND	ND	Methomyl	N/A	ND	ND
1,2,3 - Trichloropropane	N/A	ND	ND	Bromomethane	N/A	ND	ND	Metolachlor	N/A	ND	ND
1,2,4 - Trimethylbenzene	N/A	ND	ND	Butachlor	N/A	ND	ND	Metribuzin	N/A	ND	ND
1,2,4-Trichlorobenzene	N/A	ND	ND	Carbaryl	N/A	ND	ND	MTBE	N/A	ND	ND
1,3 - Dichloropropane	N/A	ND	ND	Chloroethane	N/A	ND	ND	N - Butylbenzene	N/A	ND	ND
1,3 - Dichloropropene	N/A	ND	ND	Chlorodibromomethane	N/A	ND	ND	Naphthalene	N/A	ND	ND
1,3,5 - Trimethylbenzene	N/A	ND	ND	Chloroform	N/A	ND	51.30	N-Propylbenzene	N/A	ND	ND
2,2 - Dichloropropane	N/A	ND	ND	Chloromethane	N/A	ND	ND	O-Chlorotoluene	N/A	ND	ND
3-Hydroxycarbofuran	N/A	ND	ND	Dibromochloromethane	N/A	ND	1.80	P-Chlorotoluene	N/A	ND	ND
Aldicarb	N/A	ND	ND	Dibromomethane	N/A	ND	ND	P-Isopropyltoluene	N/A	ND	ND
Aldicarb Sulfone	N/A	ND	ND	Dichlorodifluoromethane	N/A	ND	ND	Propachlor	N/A	ND	ND
Aldicarb Sulfoxide	N/A	ND	ND	Dieldrin	N/A	ND	ND	Sec - Butylbenzene	N/A	ND	ND
Aldrin	N/A	ND	ND	Fluorotrichloromethan	N/A	ND	ND	Tert - Butylbenzene	N/A	ND	ND

### PFAS Compounds

CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS	CONTAMINANT	RESULTS	UNITS	
11CI-PF3OUdS	BMRL	ug/L	Perfluorodecanoic Acid	BMRL	ug/L	Perfluorooctanoic Acid	0.021	ug/L	
9CI-PF3ONS	BMRL	ug/L	Perfluorohexanoic Acid		0.018	ug/L	Perfluorotetradecanoic Acid	BMRL	ug/L
ADONA	BMRL	ug/L	Perfluorododecanoic Acid	BMRL		ug/L	Perfluorotridecanoic Acid	BMRL	ug/L
HFPO-DA	BMRL	ug/L	Perfluoroheptanoic Acid		0.0069	ug/L	Perfluoroundecanoic Acid	BMRL	ug/L
NEIFOSAA	BMRL	ug/L	Perfluorohexanesulfonic Acid		0.0025	ug/L	Total PFAs	0.092	ug/L
NMeFOSAA	BMRL	ug/L	Perfluorononanoic Acid		0.0021	ug/L			ug/L
Perfluorobutanesulfonic Acid		0.07	ug/L	Perfluorooctanesulfonic Acid		0.022	ug/L		ug/L

The table below lists all of the drinking water contaminants that we detected during the calendar year of this report. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. 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.

## Table of Detected Drinking Water Contaminants

CONTAMINANT	MCLG	MCL	Range	Marbury	5-Star	Amount Detected	Likely Source of Contamination		
<b>Bacteriological Contaminants January - December</b>									
Total Coliform Bacteria	0	< 5%		ND	ND	Present or Absent	Naturally present in the environment		
Turbidity	0	TT		0.10	0.09	NTU	Soil runoff		
Fecal Coliform & E. coli	0	0		ND	ND	Present or Absent	Human and animal fecal waste		
Viruses, Giardia	0	TT		0	0	Present or Absent	Human and animal fecal waste		
Legionella	0	TT		0	0	Present or Absent	Found naturally in water, multiples in heating systems		
<b>Radiological Contaminants January - December</b>									
Beta particle and photon	0	4		ND	ND	mrem/yr	Decay of natural and man-made deposits		
Alpha emitters	0	15		2.63	ND	pCi/L	Erosion of natural deposits		
Combined Radium 226 & 228	0	5		0.56	ND	pCi/L	Erosion of natural deposits		
Uranium	0	30		ND	ND	pCi/L	Erosion of natural deposits		
<b>Inorganic Contaminants January - December</b>									
Arsenic	0	10	ND	-	ND	ppb	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes		
Barium	2	2	ND	-	ND	ppm	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits		
Chlorine	MRDLG 4	MRDL 4	ND	-	ND	ppm	Water additive used to control microbes		
Chromium	100	100	ND	-	ND	ppb	Discharge from steel and pulp mills erosion of natural deposits		
Copper	1.3	10 Sites AL=1.3	No. of Sites above action level 0		0.29	0.24	ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	
Fluoride	4	4	ND	-	ND	ppm	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories		
Lead	0	10 Sites AL=15	No. of Sites above action level 0		ND	ND	ppb	Corrosion of household plumbing systems, erosion of natural deposits	
Nitrate (as N)	10	10	ND	-	ND	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
Total Nitrate & Nitrite	10	10	ND	-	ND	ppm	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits		
<b>Organic Contaminants January - December</b>									
Haloacetic Acids (HAA5)	0	60	15.00	-	53.00	53.00	53.90	ppb	By-product of drinking water chlorination
Total Organic Carbon (TOC)	N/A	TT	ND	-	ND	ND	1.94	TT	Naturally present in the environment
Total trihalomethanes (TTHM)	0	80	29.00	-	100.00	52.75	72.10	ppb	By-product of drinking water chlorination
<b>Secondary Contaminants January - December</b>									
Chloride	N/A	250	ND	-	ND	ND	7.25	ppm	Naturally occurring in the environment or as a result of agricultural runoff
Copper	N/A	1	ND	-	ND	ND	0.01	ppm	Erosion of natural deposits; leaching from pipes
Magnesium	N/A	0.05	ND	-	ND	0.01	0.01	ppm	Erosion of natural deposits
Sulfate	N/A	250	ND	-	ND	7.00	19.60	ppm	Naturally occurring in the environment
Total Dissolved Solids	N/A	500	ND	-	ND	131.00	68.00	ppm	Erosion of natural deposits
Zinc	N/A	5	ND	-	ND	ND	0.00	ppm	Erosion of natural deposits
<b>Special Contaminants January - December</b>									
Calcium	N/A	N/A	ND	-	ND	16.70	24.20	ppm	Erosion of natural deposits
Manganese	N/A	N/A	ND	-	ND	0.01	0.01	ppm	Erosion of natural deposits
pH	N/A	N/A	ND	-	ND	7.80	7.96	SU	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	N/A	N/A	ND	-	ND	12.40	3.76	ppm	Naturally occurring in the environment
Specific Conductance	N/A	<500	ND	-	ND	159.00	166.00	umhos	Naturally occurring in the environment or as a result of treatment with water additives
Temperature	N/A	N/A	ND	-	ND	40.10	60.20	-C	Naturally occurring in the environment
Total Alkalinity	N/A	N/A	ND	-	ND	63.30	56.00	ppm	Erosion of natural deposits
Total Hardness (as CaCO3)	N/A	N/A	ND	-	ND	45.40	79.90	ppm	Naturally occurring in the environment or as a result of treatment with water additives