

## West Etowah County Water Authority

### Annual Drinking Water Quality Report

West Etowah County Water Authority (WECA) is very pleased to provide you with this year's Annual Quality Water Report. We want to keep you informed about the services we have delivered to you over the past year. Our goal is and always has been, to provide to you a safe and dependable supply of drinking water. We want you to understand the efforts we make to maintain and continually improve the water you receive and to protect our water supply.

Our water source is the City of Gadsden, Big Wills Water Authority, Douglas Water Authority and groundwater drawn from the Cove Spring and the Jones well. Each water system must complete a Source Water Assessment Program (SWAP). The SWAP is comprised of four distinct activities: delineation of the source water assessment area, contaminant inventory, susceptibility analysis and public awareness. WECA has completed each required component of the source water assessment. A copy of WECA's source water assessment is available for your review at the office in Attalla.

WECA is delighted to report that our drinking water is safe and meets federal and state requirements. If you have any questions about this report or concerning your water utility, please contact Jim Mayo at 538-5947. 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 on the second Tuesday night of each month at 6:00 p.m. in the conference room of WECA's office located at 596 Gallant Road in Attalla.

This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2018. It's important to remember that the presence of these constituents does not necessarily pose a health risk. This table has many abbreviations you might not be familiar with. To help you better understand these abbreviations we've provided the following definitions:

- Non-Detects (ND) – laboratory analysis indicates that the constituent is not present.
- 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 ug/l – micrograms per liter – one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/l) – picocuries per liter is a measure of radioactivity in water.
- Millirems per years (mrem/yr) – measure of radiation absorbed by the body.
- Nephelometric Turbidity Units (NTU) – a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- Maximum Contaminant Level – The “Maximum Allowed” (MCL) is the highest level of a contaminant that is allowed in drinking water.
- Maximum Contaminant Level Goal – The “Goal” (MCLG) is 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.
- AL – Action Level – the concentrations of a contaminant, which if exceeded, triggers, treatment or other requirements which a water system must follow.
- TT – Treatment Technique – A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

**Table of Detected Contaminants**

Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination
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<b>Microbiological Contaminants</b>						
Turbidity	No	.57	NTU	n/a	TT	Soil runoff
<b>Radioactive Contaminants</b>						
Alpha emitters	No	1.3+/-0.6	pCi/l	0	15	Erosion of natural deposits
Combined radium	No	.3+/-1.0	pCi/l	0	5	Erosion of natural deposits
<b>Inorganic Contaminants</b>						
Barium	No	.014	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Cadmium	No	.06	ppb	5	5	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints
Chromium	No	5.81	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	No	.632	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	1.13	ppm	4	4	Water additive which promotes strong teeth; erosion of natural deposits; discharge from fertilizer and aluminum factories
Lead	No	1.09	ppb	0	AL=15	Corrosion of household plumbing systems; erosion of natural deposits
Nitrate	No	2.17	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
<b>Organic Contaminants</b>						
Chlorine	No	2.12	ppm	4	4	Water additive used to control microbes.
TTHM [Total trihalomethanes]	No	1.4	ppb	0	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	4.3	ppb	60	60	By-product of drinking water chlorination

<b>Table of Primary Contaminants</b>					
At high levels some primary contaminants are known to pose a health risk to humans. This table provides a quick glance of any primary contaminant detections.					
Contaminant	MCL	Amount Detected	Contaminant	MCL	Amount Detected
<b>Bacteriological</b>			Endothall	100 ppb	ND
Total Coliform Bacteria	< 5 %	ND	Endrin	2 ppb	ND
Turbidity	TT	.57	Epichlorohydrin	TT	ND
<b>Radiological</b>			Glyphosate	700 ppb	ND
Beta/photon emitters (mrem/yr)	4	ND	Heptachlor	400 ppt	ND
Alpha emitters (pCi/l)	15	.6	Heptachlor epoxide	200 ppt	ND
Combined radium (pCi/l)	5	.3+/-1.0	Hexachlorobenzene	1 ppb	ND
Uranium	30 ppb	ND	Lindane	200 ppt	ND
<b>Inorganic Chemicals</b>			Methoxychlor	40 ppb	ND
Antimony	6 ppb	ND	Oxamyl [Vydate]	200 ppb	ND
Arsenic	10 ppb	ND	PCBs	500 ppt	ND
Asbestos (MFL)	7	ND	Pentachlorophenol	1 ppb	ND

Barium	2 ppm	.014	Picloram	500 ppb	ND
Beryllium	4 ppb	ND	Simazine	4 ppb	ND
Cadmium	5 ppb	.06	Toxaphene	3 ppb	ND
Chromium	100 ppb	5.81	Benzene	5 ppb	ND
Copper	AL=1.3 ppm	.632	Carbon tetrachloride	5 ppb	ND
Cyanide	200 ppb	ND	Chlorobenzene	100 ppb	ND
Fluoride	4 ppm	1.13	Dibromochloropropane	200 ppt	ND
Lead	AL=15 ppb	1.09	o-Dichlorobenzene	600 ppb	ND
Mercury	2 ppb	ND	p-Dichlorobenzene	75 ppb	ND
Nitrate	10 ppm	2.17	1,2-Dichloroethane	5 ppb	ND
Nitrite	1 ppm	ND	1,1-Dichloroethylene	7 ppb	ND
Selenium	50 ppb	ND	cis-1,2-Dichloroethylene	70 ppb	ND
Thallium	2 ppb	ND	trans-1,2-Dichloroethylene	100 ppb	ND
<b>Organic Chemicals</b>			Dichloromethane	5 ppb	ND
2,4-D	70 ppb	ND	1,2-Dichloropropane	5 ppb	ND
2,4,5-TP(Silvex)	50 ppb	ND	Ethylbenzene	700 ppb	ND
Acrylamide	TT	ND	Ethylene dibromide	50 ppt	ND
Alachlor	2 ppb	ND	Styrene	100 ppb	ND
Atrazine	3 ppb	ND	Tetrachloroethylene	5 ppb	ND
Benzo(a)pyrene [PAHs]	200 ppt	ND	1,2,4-Trichlorobenzene	70 ppb	ND
Carbofuran	40 ppb	ND	1,1,1-Trichloroethane	200 ppb	ND
Chlordane	2 ppb	ND	1,1,2-Trichloroethane	5 ppb	ND
Dalapon	200 ppb	ND	Trichloroethylene	5 ppb	ND
Di (2-ethylhexyl)adipate	400 ppb	ND	TTM	80 ppb	1.4
Di (2-ethylhexyl) phthalates	6 ppb	ND	Toluene	1	ND
Dinoseb	7 ppb	ND	Vinyl Chloride	2 ppb	ND
Diquat	20 ppb	ND	Xylenes	10 ppm	ND
Dioxin [2,3,7,8-TCDD]	30 ppq	ND	TOC	TT	ND
Chloramines	4 ppm	ND	Chlorine	4 ppm	2.12
Chlorite	1 ppm	ND	Chlorine dioxide	800 ppb	ND
HAA5	60 ppb	4.3	Bromate	10 ppb	ND

The table below list the contaminants that are not regulated by the EPA or ADEM but are tested for in your drinking water. These contaminants pose many of the same health risk as the regulated contaminants but their presence in most drinking water is not frequent enough to warrant regulation. Unregulated contaminants are tested for to provide historical data on components presence in drinking water over time.

<b>Test Results – Unregulated Contaminant Table</b>					
<b>Monitoring results in ppm</b>					
<b>CONTAMINANT</b>	<b>Low Result</b>	<b>High Result</b>	<b>CONTAMINANT</b>	<b>Low Result</b>	<b>High Result</b>
1,1 – Dichloropropene	ND	ND	Chloroform	<1.0	1.4

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

As you can see by the table, our system had no violations of allowable limits of contaminants in your 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 constituents have been detected. The EPA has determined that your water IS SAFE at these levels.

The sources of drinking water (both tap and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs and wells. As water travels over the surface of 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.

WECA wants you to be aware that there is not a problem with lead in your 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. WECA 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>.

MCL's 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.

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. These people 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 (1-800-426-4791). All drinking water, including bottled water, may be

reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

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 is not required.

The distribution of safe, clean water requires professional training and expertise. WECA is a member of the Alabama Rural Water (ARWA). ARWA offers a variety of training programs for managers, operators and administrative personnel. This training is important to keep our operators informed of regulatory and compliance issues.

EPA and the Alabama Department of Environmental Management (ADEM) have mandated that each water system will provide an annual quality report to consumers. This report is designed to inform consumers about the quality of water from their water supplier. WECA strives to provide a dependable and safe supply of water to all consumers. We ask that you be considerate when accidents or mother-nature hinder our efforts to supply your water. Regardless of the time, or weather, water works personnel are on call and working to keep your water flowing. Please help us protect our water sources, which are a vital part of our lives, and our children's future.

**West Etowah Water Authority**

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