

2019 Annual Water Quality Report
(Testing Performed January - December 2018)

Weaver Water System

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We are pleased to present to you this year's Annual Water Quality Report. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. **Weaver Water System** is dedicated to maintaining a plentiful supply of excellent-quality water that is an asset to Weaver and to Calhoun County, while maintaining fair and equitable rates and policies. And we are committed to meeting the challenges of a rapidly changing water supply industry and the regulatory changes necessary to protect our water supply.

Water Sources	Three groundwater wells producing from the Conasauga aquifer	
	Interconnected with Anniston Water & Sewer Board for back-up	
Water Treatment	Chlorination for disinfection	
Storage Capacity	Two tanks with a total capacity of 850,000 gallons	
Distribution System	Approximately 60 miles of water mains	
Number of Customers	Approximately 2125	
Council Members	Wayne Willis, Mayor	Ellen Cole, Council
	Jeff Clendenning, Mayor pro tem	Tim Mcrae, Council
	Mike Warren, Council	Nick Bowles, Council
Council Meetings	Second and fourth Tuesdays of each month at 5:00 p.m. at City Hall	
Staff Members	Joey Conger, Director of Public Works	Jody Stephens, Office Mgr., Admin. Clerk
	Chasity Whetstone, City Clerk	Kim Bentley, Water Clerk
	Angie Johnson, License Clerk	Nathan Turner, Supervisor

Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), **Weaver Water System** has developed a Source Water Assessment plan that will assist in protecting our water sources. This plan provides additional information such as potential sources of contamination. It includes a susceptibility analysis, which classifies potential contaminants as high, moderate, or non-susceptible (low) to contaminating the water source. The ADEM-approved report is available in our office for review, or you may purchase a copy upon request for a nominal reproduction fee. In addition to the Source Water assessment, which is required by law, the Weaver Water System has gone above and beyond the standard requirement and has developed a Wellhead Protection Plan. This plan involves public education and outreach program among other things.

Questions?

If you have any questions about this report or concerning your water utility, please contact **Joey Conger** at the water office at 256-820-1121. 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 and fourth Tuesdays of each month at 5:00 p.m. at City Hall, 500 Anniston Street.**

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



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, 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 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, which 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 amount of certain contaminants in water provided by public water systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled 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.

Anniston Water and Sewer Board also monitors our source water for pathogens, such as *Cryptosporidium* and *Giardia*. These pathogens can enter the water from animal or human waste. All test results were well within state and federal standards. 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.

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.

Lead levels in your drinking water are likely to be higher if:

- Your home or water system has lead pipes, or
- Your home has faucets or fittings made of brass which contains some lead, or
- Your home has copper pipes with lead solder and you have naturally soft water, and
- Water often sits in the pipes for several hours.

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.

Monitoring Schedule

The Alabama Department of Environmental Management (ADEM) allows us to monitor for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. 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.

Constituent Monitored	Date Monitored
Inorganic Contaminants	2017
Lead/Copper	2016
Microbiological Contaminants	current
Nitrates	2018
Radioactive Contaminants	2016
Synthetic Organic Contaminants (including pesticides and herbicides)	2018
Volatile Organic Contaminants	2018
Disinfection By-products	2018

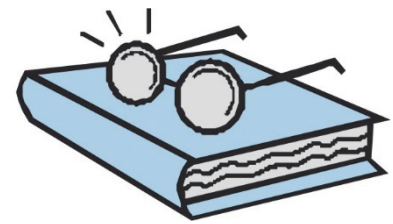
Monitoring Results

Our drinking water meets or exceeds federal and state standards. We have learned through our monitoring and testing that some constituents have been detected. Those detections are listed in the following table: however, we are pleased to announce that our system had no violations.

Table of Detected Drinking Water Contaminants						
Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Alpha Emitters	NO	6.9 ± 1.1	PCI/l	0	15	Erosion of natural deposits
Combined Radium	NO	4.5 ± 0.6	PCI/l	0	5	Erosion of natural deposits
Barium	NO	0.08	ppm	2	2	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits
Chromium	NO	ND	ppb	100	100	Discharge from steel and pulp mills; erosion of natural deposits
Copper	NO	0.131 * 0 > AL	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	NO	ND	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge
Nitrate (as Nitrogen)	NO	0.18-1.16	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
Secondary Contaminants						
Aluminum	NO	ND	ppm	n/a	0.2	Naturally occurring in the environment: discharge; runoff
Chloride	NO	4.49	ppm	n/a	250	Naturally occurring in the environment: discharge; runoff
Hardness	NO	148	ppm	n/a	n/a	Naturally occurring in the environment; water treatment
Iron	NO	0.06	ppm	none	0.30	Naturally occurring in the environment; erosion; leaching
Manganese	NO	ND	ppm	none	0.05	Erosion of natural deposits; leaching from pipes
pH	NO	6.89	S.U.	n/a	n/a	Naturally occurring in the environment; water treatment
Sodium	NO	3.85	ppm	n/a	n/a	Naturally occurring in the environment
Sulfate	NO	20.0	ppm	n/a	250	Naturally occurring in the environment: discharge; runoff
Total Dissolved Solids	NO	204	ppm	n/a	500	Naturally occurring in the environment: discharge; runoff
Zinc	NO	ND	ppm	none	5	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills

*Figure shown is 90th percentile and # of sites above Action Level (1.3 ppm) = 0

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 one-time 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

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.

NR (Not Reported)- laboratory analysis, usually Secondary Contaminants, not reported by water system. EPA recommends that secondary standards be reported but does not require systems to comply.

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.

Variations & Exemptions (V&E)- State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

The following table is a list of *Primary Drinking Water Contaminants*, *Unregulated Contaminants*, and *Secondary Contaminants* for which our water system routinely monitors according to our regulatory schedule. These contaminants were *not* detected in your drinking water unless they are listed in the *Table of Detected Drinking Water Contaminants*.

REGULATED CONTAMINANTS			
Bacteriological	Mercury	Dichloromethane	Simazine
Total Coliform Bacteria	Nitrate	1,2-Dichloropropane	Styrene
Fecal Coliform and E. coli	Nitrite	Di (2-ethylhexyl)adipate	Tetrachloroethylene
Fecal Indicators	Selenium	Di (2-ethylhexyl)phthalate	Toluene
Turbidity	Thallium	Dinoseb	Toxaphene
Cryptosporidium	Organic Contaminants	Dioxin [2,3,7,8-TCDD]	2,4,5-TP(Silvex)
Radiological	2,4-D	Diquat	1,2,4-Trichlorobenzene
Beta/photon emitters	Acrylamide	Endothall	1,1,1-Trichloroethane
Alpha emitters	Alachlor	Endrin	1,1,2-Trichloroethane
Combined radium	Benzene	Epichlorohydrin	Trichloroethylene
Uranium	Benzo(a)pyrene [PAHs]	Ethylbenzene	Vinyl Chloride
Inorganic Chemicals	Carbofuran	Ethylene dibromide	Xylenes
Antimony	Carbon tetrachloride	Glyphosate	Disinfection Byproducts
Arsenic	Chlordane	Heptachlor	Chlorine
Asbestos	Chlorobenzene	Heptachlor epoxide	Chlorine Dioxide
Barium	Dalapon	Hexachlorobenzene	Chloramines
Beryllium	Dibromochloropropane	Hexachlorocyclopentadiene	Bromate
Cadmium	o-Dichlorobenzene	Lindane	Chlorite
Chromium	p-Dichlorobenzene	Methoxychlor	HAA5 [Total haloacetic acids]
Copper	1,2-Dichloroethane	Oxamyl [Vydate]	TTHM [Total trihalomethanes]
Cyanide	1,1-Dichloroethylene	Polychlorinated biphenyls	
Fluoride	cis-1,2-Dichloroethylene	Pentachlorophenol	
Lead	trans-1,2-Dichloroethylene	Picloram	
UNREGULATED CONTAMINANTS			
1,1 – Dichloropropene	1,1 – Dichloropropene	1,1 – Dichloropropene	1,1 – Dichloropropene
1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane	1,1,1,2-Tetrachloroethane
1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane	1,1,2,2-Tetrachloroethane
1,1-Dichloroethane	1,1-Dichloroethane	1,1-Dichloroethane	1,1-Dichloroethane
1,2,3 - Trichlorobenzene	1,2,3 - Trichlorobenzene	1,2,3 - Trichlorobenzene	1,2,3 - Trichlorobenzene
1,2,3 - Trichloropropane	1,2,3 - Trichloropropane	1,2,3 - Trichloropropane	1,2,3 - Trichloropropane
1,2,4 - Trimethylbenzene	1,2,4 - Trimethylbenzene	1,2,4 - Trimethylbenzene	1,2,4 - Trimethylbenzene
1,3 – Dichloropropane	1,3 – Dichloropropane	1,3 – Dichloropropane	1,3 – Dichloropropane
1,3 – Dichloropropene	1,3 – Dichloropropene	1,3 – Dichloropropene	1,3 – Dichloropropene
1,3,5 - Trimethylbenzene	1,3,5 - Trimethylbenzene	1,3,5 - Trimethylbenzene	1,3,5 - Trimethylbenzene
2,2 – Dichloropropane	2,2 – Dichloropropane	2,2 – Dichloropropane	2,2 – Dichloropropane
SECONDARY CONTAMINANTS			
Alkalinity, Total (as CA, Co ₃)	Copper	Magnesium	Silver
Aluminum	Corrosivity	Manganese	Sodium
Calcium, as Ca	Foaming agents (MBAS)	Odor	Sulfate
Chloride	Hardness	Nickel	Total Dissolved Solids
Color	Iron	pH	Zinc