

# 2020 Annual Drinking Water Quality Report (Testing Performed January through December 2019)

## WATER WORKS OF THE TOWN OF SWEETWATER

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We are pleased to present to you this year's Annual Water Quality Report. This report is designed to inform you about the quality water and services we deliver to you every day. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources.

<b>Water Source</b>	One (1) groundwater well producing from the Nanafalia aquifer	
<b>Other Connections</b>	Myrtlewood Water System for emergency purposes	
<b>Water Treatment</b>	Chlorination	
<b>Storage Capacity</b>	One tank with a total capacity of 100,000 gallons	
<b>Number of Customers</b>	Approximately 155	
<b>City Council</b>	Chad Broussard, Mayor	Dorothy Ernest, Council
	Jimmy Davis, Mayor pro tem	Ken McClantoc, Council
	Sandra Etheridge, Council	Patrick Robison, Council

### Source Water Assessment

In compliance with the Alabama Department of Environmental Management (ADEM), Water Works of the Town of Sweetwater 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 to contaminating the water source. The assessment has been performed, public notification was completed on July 8, 2002, and the plan has been approved by ADEM. A copy of the report is available in our office for review during regular business hours, or you may purchase a copy upon request for a nominal reproduction fee.

Please help us make this effort worthwhile by protecting our source 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.

### 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. 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).

### 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](http://www.epa.gov/safewater/lead).

### Questions?

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 Mondays of each month at 5:30 p.m. at Town Hall. If you have any questions about this report or concerning your water utility, please contact Terry Tyson at 334-994-4120. 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).

### Monitoring Schedule

Waterworks of the Town of Sweetwater *routinely* monitors for constituents in your drinking water according to Federal and State laws. This report contains results from the most recent monitoring which was performed in accordance with the regulatory schedule. 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.

Constituents Monitored	Sweetwater
Inorganic Contaminants	2019
Lead/Copper	2017
Microbiological Contaminants	current
Nitrates	2019
Radioactive Contaminants	2019
Synthetic Organic Contaminants (including herbicides and pesticides)	2017
Volatile Organic Contaminants	2017
Disinfection By-products	2019
DSE Disinfection By-products	2019

The table below shows only those contaminants that had some level of detection. We are pleased to report that our drinking water meets federal and state requirements. This report shows our water quality and what it means.

TABLE OF DETECTED DRINKING WATER CONTAMINANTS						
Contaminants	Violation Y/N	Level Detected	Unit Msmt	MCLG	MCL	Likely Source of Contamination
Copper	NO	0.119 * 0>AL	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Nitrate (as Nitrogen)	NO	0.16	ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits
TTHM [Total trihalomethanes]	NO	65.7 (25.3-110)	ppb	0	80	By-product of drinking water chlorination.
HAA5 [Total haloacetic acids]	NO	10.8 (5.50-15.0)	ppb	0	60	By-product of drinking water chlorination
<b>Unregulated Contaminants</b>						
Chloroform	NO	1.48	ppb	70	none	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromodichloromethane	NO	2.36	ppb	0	none	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Chlorodibromomethane	NO	3.54	ppb	60	none	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Bromoform	NO	1.64	ppb	0	none	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>Secondary Contaminants</b>						
Chloride	NO	42.5	ppm	none	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Hardness	NO	65.5	ppm	none	none	Naturally occurring in the environment or as a result of treatment with water additives
Iron	NO	0.12	ppm	none	0.30	Naturally occurring in the environment; erosion of natural deposits; leaching from pipes
Manganese	NO	0.02	ppm	none	0.05	Naturally occurring in the environment or from runoff
pH	NO	7.87	S.U.	none	none	Naturally occurring in the environment or as a result of treatment with water additives
Sodium	NO	124	ppm	none	none	Naturally occurring in the environment
Sulfate	NO	22.2	ppm	none	250	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
Total Dissolved Solids	NO	228	ppm	none	500	Naturally occurring in the environment or as a result of industrial discharge or agricultural runoff
<b>DSE Disinfection Byproducts</b>						
TTHM [Total trihalomethanes]	NO	16.1-65.7	ppb	0	80	By-product of drinking water chlorination.
HAA5 [Total haloacetic acids]	NO	2.67-14.1	ppb	0	60	By-product of drinking water chlorination

\* Figure shown is 90<sup>th</sup> 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 which a water system must follow.

**Coliform Absent (ca)-** Laboratory analysis indicates that the contaminant is not present.

**Cryptosporidium-** a microscopic parasite that can cause disease, mainly diarrhea, if swallowed.

**Disinfection byproducts (DBPs)-** are formed when disinfectants used in water treatment plants react with bromide and/or natural organic matter (i.e., decaying vegetation) present in the source water. Different disinfectants produce different types or amounts of disinfection byproducts. Disinfection byproducts for which regulations have been established include trihalomethanes (THM), haloacetic acids (HAA5), bromate, and chlorite.

**Initial Distribution System Evaluation (IDSE)-**a one-time study conducted by water systems to identify distribution system locations with high concentrations of trihalomethanes (THMs) and haloacetic acids (HAAs).

**Locational Running Annual Average (LRAA)-**yearly average of all the DPB results at each specific sampling site in the distribution system. The highest distribution site LRAA is reported in the Table of Detected Contaminants.

**Maximum Contaminant Level-(mandatory language)** The Maximum Allowed (MCL) is 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 Contaminant Level Goal-(mandatory language)** The Goal (MCLG) is 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)-**the highest level of a disinfectant allowed in drinking water. Millirems per year (mrem/yr)-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.

**Non-Detects (ND)-** laboratory analysis indicates that the constituent is not present above detection limits of lab equipment.

**Not Reported (NR)-**laboratory analysis, usually Secondary Contaminants, not reported by water system. EPA recommends secondary standards to water systems but does not require systems to comply. Parts per billion (ppb) or Micrograms per liter (µg/l)-one part per billion 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)-one part per million corresponds to one minute in two years or a single penny in \$10,000.

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 a single penny in \$10,000,000,000,000.

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.

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

**RAA-**Running annual average

**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.

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

<b>STANDARD LIST OF PRIMARY DRINKING WATER CONTAMINANTS</b>					
Contaminant	MCL	Unit of Msmt	Contaminant	MCL	Unit of Msmt
<b>Bacteriological Contaminants</b>			trans-1,2-Dichloroethylene	100	ppb
Total Coliform Bacteria	<5%	present or absent	Dichloromethane	5	ppb
Fecal Coliform and E. coli	0	present or absent	1,2-Dichloropropane	5	ppb
Fecal Indicators	0	present or absent	Di (2-ethylhexyl)adipate	400	ppb
Turbidity	TT	NTU	Di (2-ethylhexyl)phthalate	6	ppb
Cryptosporidium	TT	calc.organisms/liter	Dinoseb	7	ppb
<b>Radiological Contaminants</b>			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
<b>Inorganic Chemicals</b>			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
<b>Organic Contaminants</b>			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	<b>Disinfectants &amp; Disinfection Byproducts</b>		
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			
<b>UNREGULATED CONTAMINANTS</b>					
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		Isopropylbenzene		Propachlor
1,3,5 - Trimethylbenzene	Butachlor		M-Dichlorobenzene		Sec - Butylbenzene
2,2 - Dichloropropane	Carbaryl		Methomyl		Tert - Butylbenzene
3-Hydroxycarbofuran	Chloroethane		MTBE		Trichlorofluoromethane