

Water Quality Report

2019



Phenix City
PROVIDES



Exceptional water for you!

We are pleased to present to you our Annual Water Quality Report. Last year, as in years past, your tap water met or exceeded all U.S. Environmental Protection Agency (EPA) and Alabama Department of Environmental Management (ADEM) drinking water health standards. We are committed to ensuring the quality of your water.

WATER SOURCE:

Our water source is surface water from the Chattahoochee River. Water is pumped almost continuously to the Water Filtration Plant for treatment and subsequent delivery to our approximately 14,400 taps.

WATER TREATMENT:

Coagulation/flocculation, sedimentation, chlorination, filtration, fluoridation and corrosion control. Please refer to the Water Treatment Diagram inside this report, adjacent to the Water Filtration Plant Excellence Awards, for more detail.

GET INVOLVED:

Protection of drinking water is everyone's responsibility. You can help protect your community's drinking water in several ways:

- Eliminate excess use of lawn and garden fertilizers and pesticides.
- Properly maintain septic systems
- Dispose of household chemicals properly (motor oil, household chemicals, paint).
- Report chemical spills or other polluting activities to the authorities
- Remember that storm water drains dump directly into your local water body.

We want our valued customers to be informed about their water utility. If you want to learn more, please attend one of our regularly scheduled City Council meetings. They are held at 9 a.m. on the 1st Tuesday and 6 p.m. on the 3rd Tuesday of each month in the Council Chambers of the Public Safety Building at 1111 Broad Street, Phenix City, Alabama.

QUESTIONS:

If you have any questions or concerns regarding your water or this report, please contact Steve Smith, Utilities Director, at the water office at 334-448-2880.



2019 Annual Water Quality Report

(Testing Performed January - December 2018)

PHENIX CITY DEPARTMENT OF PUBLIC UTILITIES

1119 Broad Street • Phenix City, Alabama 36867

Phone 334-448-2880 • Fax 334-291-4742

WATER QUALITY PROTECTION

Protecting the water supply at its source is the first step in achieving our goal of providing safe drinking water to its customers. In compliance with the Alabama Department of Environmental Management (ADEM), we have developed a Source Water Assessment plan that will assist in protecting our water sources. The assessment has been performed, public notification has been completed, and the plan has been approved by ADEM. A copy of the report is available in the utilities office for review during regular business hours.

We continuously monitor our facilities that deliver safe drinking water to you. We utilize a Bacteriological Monitoring Plan to ensure we sample for potential contamination from locations throughout our distribution system. Chlorine residual is routinely tested by our technicians and bacteriological tests are run to ensure adequate disinfection is available to protect your drinking water. We have also established a Cross-Connection Policy to insure safe drinking water for our customers.

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

We also monitor our source water 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 <https://www.epa.gov/ground-water-and-drinking-water> or from the Safe Drinking Water Hotline at 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 likely to contain higher levels of lead. 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.

Information on steps you can take to minimize lead exposure is available from the Safe Drinking Water hotline or from www.epa.gov/safewater/lead.



MONITORING RESULTS

Our water system monitors for contaminants according to a schedule assigned to us by the Alabama Department of Environmental Management (ADEM), using EPA approved methods and a State certified laboratory. This report contains results from the most recent monitoring which was performed in accordance with the State and Federal regulatory schedule. Note: 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.

As you can see by the Water Quality Data Table on the next page, our system had no violations. We have learned through our monitoring and testing that some constituents have been detected; however, Maximum Contaminant Levels (MCLs) are set at very stringent levels. The detection levels of contaminants listed to the right meet or exceed State and Federal regulations for drinking water.

The Water Quality Data Table includes only those contaminants that had some level of detection. The presence of contaminants in the water does not necessarily indicate that the water poses a health risk.

CONTAMINANTS MONITORED	YEAR
Inorganic Contaminants	2018
Lead/Copper	2016
Microbiological Contaminants	Monthly
Nitrates	2018
Radioactive Contaminants	2014
Synthetic Organic Contaminants (including herbicides & pesticides)	2018
Volatile Organic Contaminants	2018
Disinfection Byproducts	2018
Cryptosporidium	2017
Unregulated Contaminant Monitoring Rule 3 (UCMR3) Contaminants	2015

MONITORING NON-COMPLIANCE NOTICE

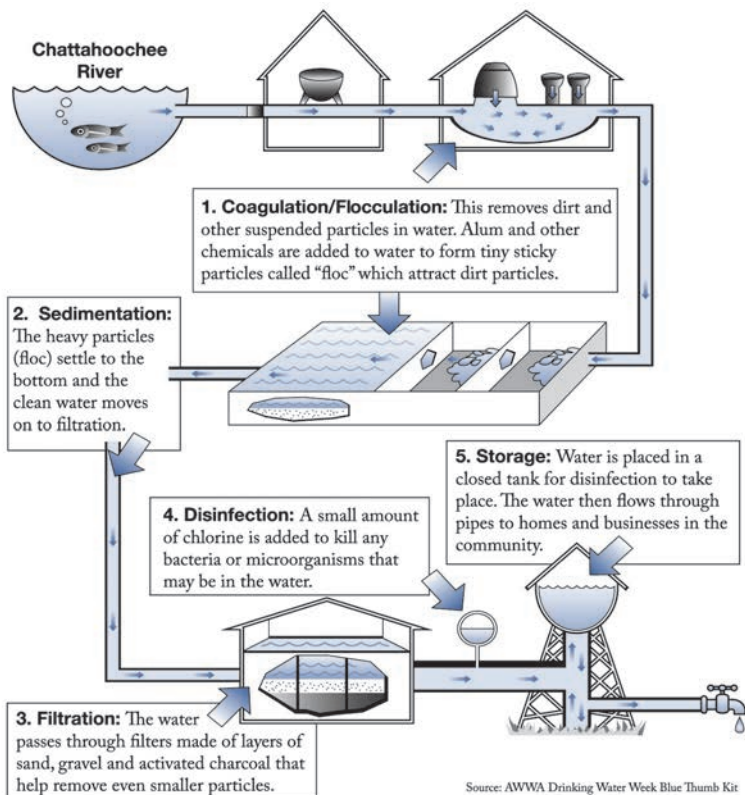
Phenix City utilities is required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not your drinking water meets health standards. During January – March 2018, we did not complete all monitoring for total organic carbon (TOC), and therefore cannot be sure of the quality of your drinking water during that time.

Please share this information with all other people who may not have received this notice directly (for example, people in apartments, nursing homes, schools and businesses). You can do this by posting this notice in a public place or distributing copies by hand or mail.

The March 2018 TOC sample was damaged during shipment to a commercial lab and therefore was unsuitable for testing. By the time Phenix City was notified of the damage it was too late to collect another sample for that testing period. The water plant has monitored for TOC's properly since the non-compliance occurred. Collecting procedures have been changed so that if a sample is broken in transit again there will be enough time to collect another sample to ensure that there is no violation.

Should you have any questions concerning this non-compliance or monitoring requirements, please contact:

Scott Bensema
 Lab Director
 1100 32nd street
 Phenix City, AL
 36867
 334-291-4757



WATER CONSERVATION TIPS

Did you know that the average U.S. household uses approximately 400 gallons of water per day or 100 gallons per person per day? Luckily small changes can make a big difference—try one today.

- Take short showers. A 5-minute shower uses four to five gallons of water compared to 50 gallons for a bath.
- Run your clothes washer and dishwasher only when they are full. You can save up to 1,000 gallons a month.
- Adjust sprinklers so only your lawn is watered, not sidewalks or driveways. Apply water only as fast as the soil can absorb it and during the cooler parts of the day to reduce evaporation.

Teach your kids about water conservation to ensure a future generation uses water wisely. Make a family effort to reduce next month's water bill!

Visit www.epa.gov/watersense for more information.

TABLE DEFINITIONS

AL	(Action Level): The concentration that, if exceeded, triggers treatment or other requirements.
DBP	(Disinfection Byproducts): Formed when disinfectants used in water treatment reacts with bromide and/or natural organic matter.
LRAA	(Locational Running Annual Average): Yearly average of all the DPB results at each specific site
MCL	(Maximum Contaminant Level): Highest level of a contaminant allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
MCLG	(Maximum Contaminant Level Goal): 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.
MRDL	(Maximum Residual Disinfectant Level): Highest level of a disinfectant allowed in drinking water
mrem/yr	(Millirems per year): Measure of radiation absorbed by the body.
n/a	(not applicable)
ND	(Non-Detect): Laboratory analysis indicates 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 secondary standards to water systems but does not require systems to comply.
NTU	(Nephelometric Turbidity Unit): Measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
ppm	(parts per million) Corresponds to one minute in two years or a single penny in \$10,000.
ppb	(parts per billion) Corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
ppt	(parts per trillion) Corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000
picograms/L	(Picograms per liter): Corresponds to one minute in 2,000,000,000 years, or a single penny in \$10,000,000,000,000.
mg/l	(milligrams per liter): Corresponds to one minute in two years or a single penny in \$10,000.
µg/l	(micrograms per liter): Corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
nanograms/L	(nanograms per liter): Corresponds to one minute in 2,000,000 years, or a single penny in \$10,000,000,000.
pCi/L	(Picocuries per liter): Measure of radioactivity
RAA	(running annual average): Average of DBP results in the water system
S.U.	(Standard Units): pH of water measures the water's balances of acids and bases. 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.
TT	(Treatment Technique): Required process intended to reduce the level of a contaminant in drinking water.
V&E	(Variances & Exemptions): State or EPA permission not to meet an MCL or a treatment technique under certain conditions.

WATER QUALITY DATA TABLE - CCR 2019

Contaminant	Results mg/L	Date Tested
Fluoride, as F	0.69	APR 2018
Lead, as Pb	<0.005	APR 2018
Nitrogen, Nitrate, as NO ₃ - N	0.73	APR 2018
Sulfate, as SO ₄	19.8	APR 2018
Alkalinity, Total as CaCO ₃	27.9	APR 2018
Chloride, as Cl	11.0	APR 2018
Hardness, as CaCO ₃	20.4	APR 2018
pH	7.32	APR 2018
Sodium, as Na	21.0	MAY 2018
Total Dissolved Solids	96.0	APR 2018
Chlorine, as Cl ₂	1.35 avg.	low 0.22 / high 2.17
Calcium, as Ca	5.03	MAY 2018
Carbon Dioxide	4.0	APR 2018
Magnesium, as Mg	1.91	MAY 2018
Manganese, as Mn	<0.010	MAY 2018
Specific Conductance	155	APR 2018
Zinc, as Zn	0.588	MAY 2018
TTHM	38.6	2018
HAA5	15.7	2018
Bromodichloromethane	0.00626	OCT 2018
Chloroform	0.0073	OCT 2018
Dibromochloromethane	0.00341	OCT 2018
Highest Filtered Turbidity	0.099	2018

Contaminant	TT	Percent Removal		
		AVG	Range	2017
Total Organic Carbon	15-35%	39.3%	0.0-51.4%	2018

	MCLG	AL	90 th %	#sites	violation	
Copper ²	0	1.3	0.142	0	NO	2016
Lead ³	0	15	<0.005	0	NO	2016

Source Water	Hi	Low	Avg.
Chlorine	1.88	0.21	1.25
Cryptosporidium ¹	0.09	0	0.03
Giardia	.09	0	.03

Cryptosporidium was detected in 1 source water sample Jan. 2017.

Giardia was detected in 1 source water sample in Jan. 2017. Cryptosporidium and Giardia were not detected in any other samples.

¹ Cryptosporidium was detected in 1 source water sample May 2016. Giardia was detected in 3 source water samples; in January, February, and March of 2016. Cryptosporidium and Giardia were not detected in any other samples.

² Figure shown is 90th percentile; number of sites greater than the Action Level (AL) of 1.3 ppm = 0

³ Figure shown is 90th percentile; number of sites greater than the Action Level (AL) of 15 ppb = 2



PHENIX CITY
DEPARTMENT OF PUBLIC UTILITIES
1119 Broad Street
Phenix City, Alabama 36867

PRSRT STD
U.S. POSTAGE
PAID
PERMIT NO. 800
GOLDSTREET
97301

