



Effingham County

Public Drinking Water Systems

Water Quality Report for January – December 2016

April 2017

County Drinking Water is Safe and Reliable

Effingham County is pleased to report to you that the County's drinking water supply is safe and meets federal and state safe drinking water standards. For more detailed information we have provided tables on the following page that summarize the number and type of water tests that we conduct to ensure residents on our systems have safe, clean and healthy drinking water.

It is important to remember that all drinking water sources may contain small amounts of substances. 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, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water include the following:

- 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, urban storm water runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organics, which are by-products of industrial processes and petroleum production, and can, come from gas stations, urban storm water runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the US EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

For more information visit these websites:

water.epa.gov/drink/ www.awwa.org
www.georgiaepd.org www.effinghamcounty.org
www.savannahga.gov

Sources of Water and Treatment

Effingham County supplies you with treated surface water purchased from the Savannah I & D System. At the City I & D Water Plant, alum and polymer are added to water taken from Abercorn Creek, a tributary of the Savannah River, to cause finely divided mud particles to clump together so that the mud and other particles will settle to the bottom of settling basins by gravity. The clear water is then filtered and disinfected with chloramines to make the water biologically safe. The pH is adjusted by adding lime. Phosphate is added to make the water less corrosive.

IF YOU HAVE A QUESTION ABOUT EFFINGHAM COUNTY'S DRINKING WATER SYSTEMS:

Please contact Toss Allen, County Administrator at 754-8060, or for water emergencies, call 754-2332.

Effingham County's Board of Commissioners meets the first and third Tuesdays of each month and all citizens are encouraged to attend and learn more about the County's drinking water plans.

Tips for Water Conservation

Plumbing – install low flow toilets and shower heads.

Efficient Landscapes – water at night, in early morning, or late evening to reduce evaporation; use drip or bubble irrigation; group plants with same water needs together.

Adjust Behaviors – turn off water while brushing teeth; adjust water settings on washing machines to fit load size; only run full dishwashers.

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 EPA's Safe Drinking Water Hotline (1-800-426-4791).

Some people may be more vulnerable to contaminants in drinking water than the general population. Immune-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 microbial contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

EFFINGHAM COUNTY SURFACE WATER DISTRIBUTION SYSTEM - CP1030131							
Detected Parameters							
Parameter Detected	Units	MCLG	MCL	Amount Detected	Range of Detection	Standard Met?	Probable Source
Chlorine	ppm	MRDLG = 4	MRDL = 4	2.76	0.03-2.76	Yes	Water additive used to control microbes
Chloramines	ppm	MRDLG = 4	MRDL = 4	1.92	0.01-1.92	Yes	Water additive used to control microbes
Copper*	ppb	1300	AL=1300	210 (90th percentile)	No sites above AL	Yes	Corrosion of Household plumbing
Lead*	ppb	0	AL = 15	2.5 (90th percentile)	No sites above AL	Yes	Corrosion of Household plumbing
TTHM'S (Total Trihalomethanes)	ppb	0	80	77	23.4-77	Yes	Byproduct of water chlorination
THAA'S (Total Haloacetic Acids)	ppb	0	60	67	27-67	Yes	Byproduct of water chlorination
Total Organic Carbon		Not Applicable	Treatment Technique	35-50% Removal	48.6-67% removal	Yes	Naturally in the environment
Turbidity		0 NTU	Treatment Technique=1 NTU or 95% of samples<0.3 NTU	0.45 NTU 99.98% samples	Not Applicable	Yes	Soil runoff

* -As authorized by Georgia EPD, our system has reduced monitoring requirements for certain contaminants to less often than once per year because the concentration of these contaminants are not expected to vary significantly from year to year. Some of our data, though representative, is more than one year old.

AL	Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
MCL	Maximum Contaminant Level: The highest level of a contaminant that is allowed in drinking water. MCL's are set as close to the MCLG's as feasible using the best available treatment technology.
MCLG	Maximum Contaminant Level Goal: 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.
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 microbiological contaminants.
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.
ppm	Parts Per Million: 1 part per 1,000,000 (same as milligrams per liter) and corresponds to 1 minute in 2 years or 1 penny in \$10 thousand.
ppb	Parts Per Billion: 1 part per 1,000,000,000 (same as microgram per liter) and corresponds to 1 minute in 2,000 years or 1 penny in \$10 million.
NTU	Nephelometric turbidity units.
90th Percentile	Level used to determine compliance with lead and copper MCL

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. Effingham County 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 drinking 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>.



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