

Houston County, Georgia – 2020 Annual Water Quality Report

Feagin Mill 1530021, Elko 1530003, Hayneville 1530004, Henderson 1530005

Is my water safe? We are pleased to present this year's Annual Water Quality Report (Consumer Confidence Report) as required by the Safe Drinking Water Act (SDWA). This report is designed to provide details about where your water comes from, what it contains, and how it compares to standards set by regulatory agencies. This report is a snapshot of last year's water quality. We are committed to providing you with information because informed customers are our best allies.

Do I need to take special precautions? 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/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Water Drinking Hotline (800-426-4791).

Where does my water come from? The Cretaceous Sand Aquifer supplies Groundwater to four Houston County Water Systems. The largest, The Feagin Mill System, has fourteen deep wells and 10 Water Treatment Plants (WTP's) that serve areas around Warner Robins. Three small systems south of Perry are also operated by Houston County. The Elko System has one WTP and one well. This well has been pulled for an upgrade and the Elko system is being consolidated into The Haynesville Water System. The Haynesville System currently has two Wells, and two WTP's. The Henderson System also has two wells and two WTP's.

Source water assessment and its availability
Water sources are inspected on a schedule determined by the Georgia Environmental Protection Division (EPD). To obtain information concerning the latest report available, contact John Bell, M-F 9:00 - 5:00, at the Houston County Lakeview Water Treatment Facility, located at 1601 Feagin Mill Road, Warner Robins, GA 31088, (478) 953-1110.

Why are contaminants in my drinking water?

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. Customers may regularly flush taps and clean faucet aerators to reduce 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 Environmental Protection Agency's (EPA) **Safe Drinking Water Hotline (800-426-4791)**. The sources of drinking water (tap and bottled) 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: microbial contaminants, such as viruses and bacteria, that 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 stormwater 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 stormwater runoff, 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 stormwater runoff, and septic systems; and radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities. To ensure that tap water is safe to drink, the EPA limits 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 which must provide the same protection for public health.

How can I get involved? The Houston County Commissioners meet on the 1st and 3rd Tuesdays of each month. Additional information regarding these meetings can be obtained by calling (478) 542-2115. Your participation is welcome.

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2020 FM CCR – The Feagin Mill Water System 1530021

Contaminants	MCLG or MRDLG	MCL TT or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
(There is convincing evidence that the addition of a disinfectant is necessary for control of microbial contaminants.)								
Chlorine (mg/L)	MRDLG 4 ppm	4 mg/L	.99 Avg.	.2	1.33	2020	No	Water additive used to control microbes
Total HAA5 (ug/L)	NA	60 ug/L	0.66 Avg.	0	3.8	2020	No	Organic and Chlorine Combinations
Inorganic Contaminants								
Fluoride (ppm)	4	4	.80 Avg.	.15	1.14	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [Meas. as Nitrogen] (ppm)	10	10	.78 Avg.	0	3.2	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper- Action level at consumer taps (ppm)	1.3	1.3 ppm	90 th % .19	.0064	.640	2018	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead (ppb) Action level	15 ppb	15 ppb	90 th % 0	0	2.5	2018	No	Corrosion of household plumbing systems; erosion of natural deposits at consumer taps.

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CONTINUED: 2020 Feagin Mill CCR - 1530021

Contaminants	MCLG or MRDLG	MCL TT or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Microbiological Contaminants								
E. coli (RTCR) in the distribution system	0	* 0	0	NA	NA	2020	* No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
* A violation is triggered if routine and repeat samples are total coliform positive, and either is E. coli – positive, or if the system fails to take repeat samples following an E. coli positive routine sample or if the system fails to analyze total coliform positive repeat sample for E. coli.								
Radiological Contaminants								
Radium (combined 226/228) (pCi/L)	0	5	1.05	0	1.05	2020	No	Erosion of natural deposits
Volatile Organic Contaminants								
Xylenes (ppm)	10	10	.00055	0	.00055	2019	No	Discharge from petroleum and chemical factories
Unregulated Contaminants – UCMR4								
As part of an The Unregulated Contaminants Program the EPA has required us to monitor some additional contaminants / chemicals. Information collected through the monitoring of these contaminants/chemicals will help to ensure that future decisions on drinking water standards are based on sound science.								
UCMR4 Analyte			Detection			Low		High
Manganese (ug/L)			7.0 ug/L Average			2.4 ug/L		14.3 ug/L
Dichloroacetic Acid (ug/L)			.13 ug/L Average			<.067 ug/L (Detection Limit)		.42 ug/L

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2020 EK CCR – The Elko Water System 1530003

Contaminants	MCLG or MRDLG	MCL TT or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants								
Chlorine (mg/L)	MRDLG 4 ppm	4 mg/L	1.01 Avg.	.58	1.46	2020	No	Water additive used to control microbes
Total HAA5 (ug/L)	No Goal	60 ug/L	1.1	1.1	1.1	2018	No	Organic and Chlorine Combinations
TTHMs [Total Trihalomethanes] (ppb)	No Goal	80	4.1	4.1	4.1	2018	No	By-product of drinking water disinfection
Inorganic Contaminants								
Fluoride (ppm)	4	4	0.80 Avg.	.59	1.04	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [Meas. as Nitrogen] (ppm)	10	10	2	1.5	1.5	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper -Action level at consumer taps ppm	1.3 ppm	1.3 ppm	90 th % .1205	.022	.18	2019	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead - action level at consumer taps (ppb)	15 ppb	15 ppb	0	0	0	2019	No	Corrosion of household plumbing systems; erosion of natural deposits
Microbiological Contaminants								
E. coli (RTCR) in the distribution system	0	* 0	0	NA	NA	2020	*No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

* A violation is triggered if routine and repeat samples are total coliform positive, **and** either is E. coli – positive, **or** if the system fails to take repeat samples following an E. coli positive routine sample **or** if the system fails to analyze total coliform positive repeat sample for E. coli.

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2020 HA CCR – The Hayneville Water System 1530004

Contaminants	MCLG or MRDLG	MCL TT or MRDL	Detect In Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants								
Chlorine (mg/L)	MRDLG 4 ppm	4 mg/L	1.08 Avg.	.7	1.42	2020	No	Water additive used to control microbes
Total HAA5 (ug/L)	No Goal	60 ug/L	9.8	2.6	7.2	2020	No	Organic and Chlorine Combinations
TTHMs [Total Trihalomethanes] (ppb)	No Goal	80 ug/L	12.5 ug/L	2.3	6.9	2020	No	By-product of drinking water disinfection
Inorganic Contaminants								
Fluoride (ppm)	4	4	0.81 Avg.	.40	1.09	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [Meas. as Nitrogen] (ppm)	10	10	ND	NA	NA	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper -Action level at consumer taps (ppm)	1.3 ppm	1.3 ppm	90 th % .23	.01	.68	2019	No	Erosion of natural deposits; Leaching from wood preservatives; Corrosion of household plumbing systems
Lead - action level at consumer taps (ppb)	15 ppb	15 ppb	90 th % 1.9	0	2.6	2019	No	Corrosion of household plumbing systems; erosion of natural deposits
Microbiological Contaminants								
Total Coliform (RTCR)	NA	NA	NA	NA	NA	2020	No	Naturally present in the environment
E. coli (RTCR) in the distribution system	0	* 0	0	NA	NA	2020	* No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
* A violation is triggered if routine and repeat samples are total coliform positive, and either is E. coli - positive or system fails to take repeat samples following E. coli positive routine sample or system fails to analyze total coliform positive repeat sample for E. coli.								
Radioactive Contaminants								
Gross Alpha excluding radon uranium (pCi/L)	0	15 (MCL)	3.1	3.1	3.1	2020	No	Erosion of natural deposits

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2020 HE CCR - The HENDERSON Water System 1530005

Contaminants	MCLG or MRDLG	MCL TT or MRDL	Your Water	Range		Sample Date	Violation	Typical Source
				Low	High			
Disinfectants & Disinfection By-Products								
There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants								
Chlorine (as Cl ₂) (ppm)	4	4	1.01 Avg.	.53	1.34	2020	No	Water additive used to control microbes
Total HAA5 (HAA5) (ppb)	No Goal for the total	60	ND	NA	NA	2020	No	By-product of drinking water chlorination
TTHMs [Total Trihalomethanes] (ppb)	No goal for the total	80	ND	NA	NA	2020	No	By-product of drinking water disinfection
Inorganic Contaminants								
Fluoride (ppm)	4	4.0	.78 Avg.	.22	1.12	2020	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Nitrate [measured as Nitrogen] (ppm)	10	10	.21	<.2	.21	2020	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Copper - action level at consumer taps (ppm)	1.3 ppm	1.3 ppm	90 th % .28	.016	.42	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
Lead - action level at consumer taps (ppb)	0	15ppb	90 th % 2.2	0	9.4	2019	No	Corrosion of household plumbing systems; Erosion of natural deposits
Microbiological Contaminants								
Total Coliform (RTCR)	NA	NA	NA	NA	NA	2020	No	Naturally present in the environment
E. coli (RTCR) in the distribution system	0	* 0	0	NA	NA	2020	* No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits

* A violation is triggered if routine and repeat samples are total coliform positive, and either is E.-coli positive; or If repeat samples are not analyzed following an E. coli positive routine sample; or If a total coliform positive repeat sample is not analyzed for E. coli.

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Water Quality Data Table

In order to ensure that tap water is safe to drink, EPA prescribes regulations which limit the amount of contaminants in water provided by public water systems. The tables above list all the drinking water contaminants that we detected during the calendar year of this report. Although more contaminants were tested for, those listed were detected in your water. All sources of drinking water contain some naturally occurring contaminants. At low levels, these substances are generally not harmful in our drinking water. Removing all contaminants would be extremely expensive, and in most cases, would not provide increased protection of public health. A few naturally occurring minerals may actually improve the taste of drinking water and have nutritional value at low levels. Unless otherwise noted, the data presented in this table is from testing done in the calendar year of the report. The EPA or the State requires us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not vary significantly from year to year, or the system is not considered vulnerable to this type of contamination. As such, some of our data, though representative, may be more than one year old. In this table you will find terms and abbreviations that might not be familiar. To aid in better understanding these terms, we have provided the definitions below.

Unit Descriptions	
Term	Definition
ug/L (or ppb)	ug/L : micrograms per liter, or ppb: parts per billion
mg/L (or ppm)	mg/L: milligrams per liter, or ppm: parts per million
pCi/L	pCi/L: picocuries per liter (a measure of radioactivity)
NA	NA: not applicable
ND	ND: not detected
NR	NR: Monitoring not required but recommended.
positive samples	positive samples/yr: The number of positive samples taken that year
Important Drinking Water Definitions	
Term	Definition
MCLG	MCLG: 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.
MCL	MCL: Maximum Contaminant Level: 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.
TT	TT: Treatment Technique: A required process intended to reduce the level of a contaminant in drinking water.
AL	AL: Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Variances and Exemptions	Variances and Exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
MRDLG	MRDLG: Maximum residual disinfection level goal. 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.
MRDL	MRDL: Maximum residual disinfectant level. The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.
MNR	MNR: Monitored Not Regulated
MPL	MPL: State Assigned Maximum Permissible Level
RTCR	RTCR: Revised Total Coliform Rule
<p>For more information, contact John Bell 1601 Feagin Mill Road, Warner Robins, GA 31088, 478-953-1110</p>	