Annual Water Quality Report

Butts County, et al. Water & Sewer Authority/City of Jackson/City of Jenkinsburg
PO Box 145, 100 West Second Street
Jackson, GA 30233
PWSID#: GA0350051

Test Data for Calendar Year 2016

We all need water. We need it to drink, cook and clean. We need it for sanitation, for fire protection, for watering our lawns and gardens, and for business and industry. We need it to live.

As partners in water supply, we at the Butts County Water & Sewer Authority, City of Jackson, and City of Jenkinsburg are working twenty-four hours a day to deliver high-quality water to our customers. Whether it is making sure that enough water is available when supply is low, or ensuring adequate pressure levels for fire protection and your morning shower, our staff members understand how critical water is to daily life.

This water quality report covers all testing performed between January 1 and December 31, 2016. Testing is done in conjunction with the Georgia Environmental Protection Division (EPD) and the U.S. Environmental Protection Agency (EPA) and confirms to schedules set by federal regulation. We are glad to report that with the thousands of samples taken throughout the year, there were NO violations of State or Federal Requirements. Both of our water treatment plants have been awarded the coveted 2016 Gold Award by the Georgia Association of Water Professionals for consistent conformance with all state and federal regulations.

We appreciate the opportunity to serve you. For questions, to arrange a tour of our facilities, or for more information, contact Marcie R. Seleb, Authority General Manager, at (770) 775-0042 or mseleb@buttswsa.com

Where Does My Water Come From?

We have a blended surface water supply from the Ocmulgee and Towaliga Rivers. Both rivers are a part of the Upper Ocmulgee watershed. Combined, our treatment facilities provide roughly 800 million gallons of clean drinking water every year.

The headwaters of the Ocmulgee basin are located in DeKalb and Gwinnett Counties and consist of the Alcovy, Yellow, and South Rivers, which drain the eastern and southeastern metropolitan Atlanta region. These rivers join at Jackson Lake. The Authority's intake is located near where the Ocmulgee River flows out of Jackson Lake dam in east Butts County. Water from the Ocmulgee River is treated at the Emerson L. Burford plant. This plant has a capacity of 4.0 million gallons per day. It is owned and operated by the Butts County Water & Sewer Authority and provides 90% of the water used in system overall.

The Towaliga Watershed is located within the larger Upper Ocmulgee watershed. The Towaliga River forms from smaller streams in southern Henry County and eastern Spalding County. This watershed has been impounded in several areas upstream from Jackson's intake for Henry County's water supply. The City of Jackson's intake is on the Towaliga in west Butts County. Water from the Towaliga River is treated at the Gerald L. "Buck" Stewart plant. This plant has a capacity of 1.0 million gallons per day. It is owned by the City of Jackson and operated by the Butts County Water & Sewer Authority.

Customers in the far southwest corner of Butts County on Chappell Mill Road, Fenner Road, and in the Brushy Creek subdivision receive their water supply through a purchase from the City of Griffin.

Regulated Substances Found in Water from our Water Treatment Plants

During the past year we have taken thousands of water samples in order to determine the presence of any radioactive, biological, inorganic, volatile organic or synthetic organic contaminants. The table that follows shows only those contaminants that were detected in the water.

We are required to show all detections of substances classified as contaminants. This is true even for substances like fluoride, that is added to water to fight tooth decay, and chlorine, that is added as a disinfectant to prevent disease.

The water quality information presented in the table is from the most recent round of testing done according to the regulations. All data shown were collected during the last calendar year unless noted in the table. The Georgia EPD has issued our system a waiver for monitoring for synthetic organic contaminants, asbestos, and cyanide because the source is not at risk for contamination.

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected in Our Water	Range Low-High	Does it meet standards?	Typical Source	Why Measured	Sampling Point
Residual Disinfectants									
Chlorine (ppm)	2016	4	4	1.73	.20 - 1.75	YES	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose or could experience stomach discomfort.	Water Plants and Multiple sites in Distribution System
Inorganic Chemicals									
Fluoride (ppm)	2016	4	4	.79	.70 - .91	YES	Water additive that promotes strong teeth; Also results from erosion of natural deposits and industrial discharges	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease. Fluoride in excess of 2 ppm could cause mottling of children's teeth.	Water Plants
Copper (ppm)	2016	1.3	1.3	.19	.004 -.25	YES	Corrosion of household plumbing systems; Erosion of natural deposits	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress.	Multiple sites in Distribution System
Lead (ppb)	2016	15	0	1.2	0-3.7	YES	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development.	Multiple sites in Distribution System
Nitrate	2015	10	10	.41	.25-.56	YES	Runoff from fertilizer use; leaking from septic tanks, sewage; Erosion of natural deposits	Infants younger than six months who drink water containing nitrate in excess of the MCL could bcome seriously ill.	Water Plants

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected in Our Water	Range Low-High	Does it meet standards?	Typical Source	Why Measured	Sampling Point
Volatile Organic Contaminants									
Haloacetic Acids (ppb)	2016	60	NA	23.1	10.1-41.0	YES	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer	Multiple sites in Distribution System
Total Trihalomethanes* (ppb)	2016	80	NA	76.0 (Highest Quarterly Local Running Annual Average; includes data from 2015)	35.6-68.9 (2016 data only)	YES	By-product of drinking water disinfection	Some people who drink water containing trihalomethanes acids in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer	Multiple sites in Distribution System
Treatment Technique									
Turbidity (NTU)	2016	TT	NA	.05	.03-.14	YES	Soil runoff	Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.	Water Plants
Turbidity (Lowest monthly percent of samples meeting limit)	2016	TT	NA	100%	100%	YES	Soil runoff		Water Plants
Total Organic Carbon (ppm)	2016	TT	NA	1.4	1.1 - 1.8	YES	Naturally present in the environment	Total organic carbon has no health effects, but provides a medium for the formation of disinfection byproducts	Water Plants
Microbiological									
Total Coliform (Number of Positive Samples)	2015	1 per month	0	0	0 positive samples out of 393 total samples tested during the year	YES	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other potentially-harmful, bacteria may be present	Multiple sites in Distribution System

Table Definitions

ppm (parts per million): One part substance per million parts water (or milligrams per liter). A part per million corresponds to one second in approximately 11.5 days.
ppb (parts per billion): One part substance per billion parts water (or micrograms per liter). A part per billion corresponds to one second in approximately 31.7 years.
NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
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. MCLs are set as close to the MCLGs 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. MCLGs allow for a margin of safety.

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.
MRDLG (Maximum Residual Disinfectant Level Goal): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLG's do not reflect the benefits of the use of disinfectants to control microbial contaminants.
NA: Not applicable
NR: Not reported
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.

Important Health Information

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised 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 may be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. The U.S. EPA/CDC (Centers for Disease Control and Prevention) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791 or http://water.epa.gov/drink/hotline.

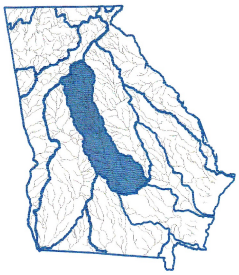
Substances That Could Be in Water

To ensure that tap water is safe to drink, the U.S. EPA prescribes regulations limiting the amount of certain contaminants in water provided by public water systems. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of these contaminants does not necessarily indicate that the water poses a health risk. Food and Drug Administration regulations establish limits for contaminants in bottled water which must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking 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, in some cases, radioactive material; and substances resulting from the presence of animals or from human activity. Substances 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, or wildlife;
*Inorganic Contaminants, such as salts and metals, which can be naturally occurring or may 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 may also come from gas stations, urban stormwater runoff, and septic systems;
*Radioactive Contaminants, which can be naturally occurring or may be the result of oil and gas production and mining activities.

Source Water Assessment


Ocmulgee River Basin

Georgia's Source Water Assessment Program is aimed at protecting public drinking water supplies at the source-- the rivers, lakes and streams all across Georgia. As part of this program, a source water assessment has been done for both our intakes on the Ocmulgee and Towaliga Rivers.

The Upper Ocmulgee River Basin has a large degree of urban activity from the metropolitan Atlanta area. While our watershed profile has identified a number of potential pollution sources to the north, it rates susceptibility of the Ocmulgee intake as "Low", due to the distance of intakes from potential pollution sites and the minimum likelihood of significant releases from those identified pollution sources. Copies of the Source Water Assessments are available for public review at the Authority's office at 100 West Second Street in Jackson.

The Authority has also developed a detailed Watershed Assessment and Plan for the Towaliga Basin because we have a wastewater treatment facility in that basin. We continue to test waters in the Towaliga River, Cabin Creek, and Brushy Creek to monitor for quality changes that may take place due to development in this basin.

We encourage our customers to become active in protecting the Ocmulgee River, the Towaliga River, and other local waterways by participating with groups in our area such as the Jackson Lake Homeowners Association, the High Falls/Towaliga Watershed Alliance, the Altamaha Riverkeeper, and the Georgia River Network.