Annual Water Quality Report

Butts County Water & Sewer Authority/City of Jackson/City of Jenkinsburg

PO Box 145, 100 West Second Street

Jackson, GA 30233

PWSID#: GA0350051

Test Data for 2012

Water is a constant in our daily lives. We need it to drink, cook and clean.
We need it for sanitation, fire protection, watering our lawns and washing our cars. 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 personnel understand how critical water is to daily life.

This water quality report covers all testing performed between January 1 and December 31, 2012. 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 proud to have been give the opportunity to serve you. For questions, to arrange a plant tour, or for more information, please 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.

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.

Sampling Results

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 below 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 State of Georgia requires us to monitor for certain substances less than once per year because the concentrations of these substances do not change frequently. In these cases, the most recent sample data are included, along with the year in which the sample was taken.

Regulated Substances

Substance (Unit of Measure)	Year Sampled	MCL [MRDL]	MCLG [MRDLG]	Amount Detected	Range Low-High	Violation	Typical Source	Sampling Point
Chlorine (ppm)	2012	[4]	[4]	2.0	.2 - 2.0	No	Water additive used to control microbes	Water Plants and Distribution System multiple sites
Fluoride (ppm)	2012	4	4	.79	.69 - .94	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Water Plants
Haloacetic Acids [HAA] (ppb)	2012	60	NA	28.4	24.8 - 41.9	No	By-product of drinking water disinfection	Distribution System multiple sites
TTHMs [Total Trihalomethanes] (ppb)	2012	80	NA	57.9	42.5 - 72.0	No	By-product of drinking water disinfection	Distribution System multiple sites
Total Organic Carbon (ppm)	2012	TT	NA	1.7	1.4 - 2.2	No	Naturally present in the environment	Water Plants
Turbidity (NTU)	2012	TT	NA	1.0	.03-1.0	No	Soil runoff	Water Plants
Turbidity (Lowest monthly percent of samples meeting limit)	2012	TT	NA	91.38%	91.38-100%	Yes*	Soil runoff	Water Plants
Copper (ppm)	2010	1.3	1.3	0.14	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits	Distribution System multiple sites
Lead (ppb)	2010	15	0	2.5	0/30	No	Corrosion of household plumbing systems; Erosion of natural deposits	Distribution System multiple sites

*More Information on Turbidity Violation – We routinely monitor water for turbidity (cloudiness). This tells us whether we are effectively filtering the water supply. Normal filtered turbidity levels at our plant are less than .1 NTU. However, on February 18, 2012, filtered water turbidity exceeded the standard of 1.0 NTU for approximately two hours of time at the Emerson Burford Water Treatment Plant. In this situation, plant operation staff did not properly adjust treatment chemicals during an increase in water treatment flow. Water was pumped into the system at turbidity exceeding 1.0 NTU for a period of approximately two hours. Once the chemical feed was properly adjusted, the turbidity returned to acceptable levels.

Turbidity itself has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. We do not know of any contamination from the February 18, 2012 violation, and none of our testing has shown any disease-causing organisms in the drinking water. If there is ever an imminent danger of water contamination, we will contact customers immediately through emergency public health announcements.

Source Water Assessment

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 was done for our intakes several years ago.

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.

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.

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.

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.

Table Definitions

ppm (parts per million): One part substance per million parts water (or milligrams per liter).
ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).
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
ND (Not detected): Indicates that the substance was not found by laboratory analysis.
TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.