



ANNUAL WATER QUALITY REPORT

Water testing performed in 2003



Chief Plant Operator Herbert Head with his daughter, Allaysia

Butts County Water & Sewer Authority

City of Jackson, & City of Jenkinsburg

Report on Your Drinking Water

This is the sixth annual Water Quality Report prepared for our water users. We are happy to continue the tradition of bringing you good news about your drinking water. Your water, treated and delivered through a joint effort of the Butts County Water & Sewer Authority, the City of Jackson, and the City of Jenkinsburg, meets or exceeds all state and federal standards for safe drinking water.



Water customers in the City of Jackson, the City of Jenkinsburg, and most of unincorporated Butts County receive water supplied by the Ocmulgee River Water Treatment Plant through the Butts County, et al. Water & Sewer Authority.

The Water & Sewer Authority is an outstanding example of cooperation between Butts County, the City of Jackson, the City of Jenkinsburg, and the City of Flovilla. The Authority was formed in 1986 both to develop water supply for all of Butts County and to build a water distribution system to serve unincorporated Butts County. A five-person board of directors governs the Authority. The Butts County Board of Commissioners names two members to the board, and each city names one member.

The Ocmulgee River Water Treatment Plant pumps 2 million gallons per day to serve the 7,000 customers on the system. The plant has a current capacity of 4 million gallons per day, with expansion plans for up to 10 million gallons per day. The City of Jackson owns the Towaliga River Water Treatment Plant, which can supply another 1 million gallons per day if needed.

Certified operators employed by the City of Jackson staff the Ocmulgee River Water Treatment Plant. These operators, along with the certified staffs of each distribution system, collect thousands of water samples throughout the year, testing for more than 100 potential contaminants in your drinking water. Over the last three years, we have added extensive tests for by-products of chlorination in the distribution system and have added our own bacteria lab at the treatment plant. In 2003, we performed additional testing for *Cryptosporidium* and *Giardia*, with none detected. Drinking water standards are constantly being expanded to protect your health. Rest assured that we will continue to use the best available technology to meet drinking water standards now and in the future.

With more than 200 miles of water lines installed since 1986, nine out of ten residents in Butts County now have public water. Even so, there are still more than 100 road miles in Butts County without public water lines. The Authority remains committed to expanding its water distribution system to serve all residents in the county. A portion of Butts County's Special Purpose Local Option Sales Tax is used for water line extensions. Line extension priority is determined by the number of customers per mile. To update the priority list, the Authority invites petitions from residents on unserved roads that have had recent growth.

The Authority is currently completing a 50-year master plan for water and sewer needs in Butts County. Impact fees charged to new customers on the system are set aside to help finance system expansion to serve our growing population.

Security issues continue to be important in protecting water supply. A vulnerability assessment and emergency response plan will be completed this year. We also ask your help to inform us about anyone seen tampering with storage facilities, pump stations, fire hydrants, or service connections. Hydrants are to be used for non-fire purposes only under strict guidelines. If you see anyone other than a firefighter or water system employee using a fire hydrant, the hydrant should be equipped with one of our bright blue hydrant meters with backflow protection. The Authority is also developing an expanded program for cross-connection control and backflow prevention. This will provide further protection for the drinking water that arrives at your tap.



Superintendent Jimmy Saunders demonstrates an approved fire hydrant meter with backflow protection

If you have questions or comments, please give us a call at (770) 775-0042 or send an e-mail to mail@buttswsa.com. You are also invited to check out our Web site (www.buttswsa.com) for additional information and updates throughout the year.

Working Hard for You

Under the Safe Drinking Water Act (SDWA), the U.S. Environmental Protection Agency (U.S. EPA) is responsible for setting national limits for hundreds of substances in drinking water and also specifies various treatments that water systems must use to remove these substances. Each system continually monitors for these substances and reports their findings to the U.S. EPA. The U.S. EPA uses these data to ensure that consumers are receiving clean water.

This publication conforms to the regulation under SDWA requiring water utilities to provide detailed water quality information to each of their customers annually. We are committed to providing you with this information about your water supply because customers who are well informed are our best allies in supporting improvements necessary to maintain the highest drinking water standards.



Assistant Supt. Rus Nail digging trench for a new water line

Important Health Information

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 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.

Awards

The Ocmulgee River Water Treatment Plant has received the Gold Award from the Georgia Water and Pollution Control Association for the past four years. This award is conferred only on those facilities that have had no violations of state and federal permit requirements.

The Authority has also won top honors from both the Georgia Environmental Protection Division and the U.S. Environmental Protection Agency for excellence in the Water Quality Reports provided to you for the past two years.



Source Water Assessment Program

Gorgia's Source Water Assessment Program, mandated by 1996 amendments to the Federal Safe Drinking Water Act, 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 for the Ocmulgee River intake was prepared in 2003 by the Georgia Environmental Protection Division through the McIntosh Trail Regional Development Center. This Assessment is the first phase in developing a plan that identifies what efforts are necessary to ensure the future safety of our community's drinking water.

The Upper Ocmulgee River Basin has a large volume of activity from the ever-expanding metropolitan Atlanta area to our north. Our watershed profile identified a number of potential pollution sources but rated susceptibility of the Ocmulgee intake as "low," based on the distance of the intake from potential pollution sites and on the likelihood of significant releases. A copy of the 2003 Source Water Assessment Profile is available for review at the Butts County Water & Sewer Authority administrative office at 100 West Second Street in Jackson.

Community Participation

You are invited to participate in our regular meetings to give your input concerning drinking water. The Butts County Water & Sewer Authority's Board of Directors meets at 6:00 p.m. on the second Tuesday of each month at the Authority's office at 100 West Second Street in Jackson. The Jackson City Council meets on the first and third Tuesday of each month at 7:00 p.m. at the Municipal Court Building at 132 South Mulberry Street. The Jenkinsburg City Council meets on the second Thursday of each month at 7:30 p.m. at the Jenkinsburg City Hall at 211 Maple Drive.

For more information about this report, or for any questions relating to your drinking water, please call Marcie Seleb, General Manager, at the Butts County Water and Sewer Authority at (770) 775-0042. Your input is valued.

We encourage our customers to become active in protecting the Ocmulgee River by participating with groups in our area, such as the Jackson Lake Homeowners Association, the Georgia River Network, and the Altamaha Riverkeeper.

Where Does My Water Come From?

We have an abundant surface water supply from the Ocmulgee and Towaliga Rivers. Both rivers are a part of the Upper Ocmulgee watershed.

For the most efficient operation, the Authority's Ocmulgee River plant is the only water treatment plant currently operated. The Ocmulgee plant can supply 4 million gallons per day and may be expanded to supply 10 million gallons per day. The City of Jackson owns the Towaliga River water treatment plant. This plant can supply an additional 1 million gallons per day as needed.



Ocmulgee River near our intake

The City of Flovilla is part of the Water & Sewer Authority but supplies its customers' water from its own wells. Flovilla's customers will receive a separate water quality report from the City of Flovilla.

The Authority's customers on Chappell Mill Road, Fenner Road, and in Brushy Creek subdivision in southwestern Butts County are supplied water through a purchase contract with the City of Griffin. Those customers will also receive a City of Griffin water quality report.

How Is My Water Treated and Purified?

The water treatment process consists of a series of steps. Water is drawn directly from the Ocmulgee River and then travels to a cone-shaped clarifier. Alum and polymer are added to cause small particles to adhere to one another, making them heavy enough to settle into a sludge blanket. As water is drawn into the cone, it passes through the sludge blanket, removing almost all dirt and particles.

Water then goes on to a roughing filter to complete oxidation of any remaining minerals that are found in our raw water. Finally water passes through a multimedia sand filter. Cloudiness disappears and extremely clear water emerges.

Before water is placed into the distribution system, a small amount of chlorine is added as a precaution against any bacteria that may still be present. We also adjust pH with soda ash, and we add fluoride (used to prevent tooth decay) and a corrosion inhibitor (used to protect metal pipes) before water is pumped to your home or business.

Plant operators carefully monitor the treatment process around the clock, performing numerous lab tests throughout the day to fine-tune the treatment process.

Water Conservation Tips

Water conservation measures are an important first step in protecting our water supply. Such measures not only save the supply of our source water, but also can save you money by reducing your water bill. Here are a few suggestions:

Conservation measures you can use inside your home include:

- Fix leaking faucets, pipes, toilets, etc.
- Replace old fixtures; install water-saving devices in faucets, toilets and appliances.
- Wash only full loads of laundry.
- Do not use the toilet for trash disposal.
- Take shorter showers.
- Do not let the water run while shaving or brushing teeth.
- Soak dishes before washing.
- Run the dishwasher only when full.

You can conserve outdoors as well:

- Water the lawn and garden in the early morning or evening.
- Use mulch around plants and shrubs.
- Repair leaks in faucets and hoses.
- Use water-saving nozzles.
- Use water from a bucket to wash your car, and save the hose for rinsing.

Information on other ways that you can help conserve water can be found at www.epa.gov/safewater/publicoutreach/index.html.



Information on the Internet

The U.S. EPA Office of Water (www.epa.gov/watrhome) and the Centers for Disease Control and Prevention (www.cdc.gov) Web sites provide a substantial amount of information on many issues relating to water resources, water conservation and public health. Also, the Georgia Environmental Protection Division has a Web site (www.dnr.state.ga.us/dnr/environ) that provides complete and current information on water issues in our state. Local information on our drinking water can be found at the Butts County Water and Sewer Authority's Web site (www.buttswsa.com).

Sampling Results

The federal government requires all water systems to test for at least 124 different contaminants in drinking water, including inorganic chemicals, organic chemicals, and microorganisms. We monitor water quality continuously at the water treatment plant and also conduct testing throughout the distribution system. In the past year, our system and the Georgia Environmental Protection Division conducted thousands of laboratory tests on our drinking water with no violations.

The chart below shows the few contaminants found during testing of our treated water. Of the contaminants detected, all were below the established federal Maximum Contaminant Level (MCL).



REGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	MCL (MRDL)	MCLG (MRDLG)	AMOUNT DETECTED	RANGE (LOW-HIGH)	VIOLATION	TYPICAL SOURCE
Chlorine (ppm)	2003	(4)	(4)	1.55	1-2.2	No	Water additive used to control microbes
Fluoride (ppm)	2003	4	4	0.89	0.33-1	No	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories
Haloacetic Acids [HAAs] (ppb)	2003	60	NA	36.99	19.6-69.4	No	By-product of drinking water disinfection
Nitrate+Nitrite (ppm)	2003	10	10	0.49	0.49-0.49	No	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits
Total Coliforms (# of positive samples)	2003	1 positive sample	0	1	NA	No	Naturally present in the environment
Total Organic Carbon (ppm)	2003	TT	NA	1.425	1.0-2.0	No	Naturally present in the environment
TTHMs [Total Trihalomethanes] (ppb)	2003	80	NA	48.59	25.3-81.3	No	By-product of drinking water disinfection
Turbidity (NTU) ¹	2003	TT	NA	0.47	0.02-0.47	No	Soil runoff

Tap water samples were collected for lead and copper analyses from 20 homes throughout the service area

SUBSTANCE (UNITS)	YEAR SAMPLED	AL	MCLG	AMOUNT DETECTED (90 TH % TILE)	HOMES ABOVE AL	VIOLATION	TYPICAL SOURCE
Copper (ppm)	2003	1.3	1.3	0.19	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives
Lead (ppb)	2003	15	0	2.5	0	No	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservatives

UNREGULATED SUBSTANCES

SUBSTANCE (UNITS)	YEAR SAMPLED	AMOUNT DETECTED	RANGE (LOW-HIGH)	TYPICAL SOURCE
Bromodichloromethane (ppb)	2003	4.0	4.0-4.0	By-product of drinking water disinfection
Chlorodibromomethane (ppb)	2003	1.9	1.9-1.9	By-product of drinking water disinfection
Chloroform (ppb)	2003	3.6	3.6-3.6	By-product of drinking water disinfection

¹ 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. During the reporting year, a minimum of 99.9% of all samples taken to measure turbidity met water quality standards.

Table Definitions

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. 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. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contamination.

NA: Not applicable

NTU (Nephelometric Turbidity Units): Measurement of the clarity, or turbidity, of water.

ppb (parts per billion): One part substance per billion parts water (or micrograms per liter).

ppm (parts per million): One part substance per million parts water (or milligrams per liter).

TT (Treatment Technique): A required process intended to reduce the level of a contaminant in drinking water.



Substances That Might Be in Drinking 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. U.S. Food and Drug Administration regulations establish limits for contaminants in bottled water, which must provide the same protection for public health. 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 (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 can acquire 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 which 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.

For more information about contaminants and potential health effects, call the U.S. EPA's Safe Drinking Water Hotline at (800) 426-4791.



Rus Nail, Marlon Wilkes, and JJ Evans install a new water service tap

Naturally Occurring Bacteria

The simple fact is, bacteria and other microorganisms inhabit our world. They can be found all around us: in our food; on our skin; in our bodies; and, in the air, soil and water. Some are harmful to us and some are not. Coliform bacteria are common in the environment and are generally not harmful themselves. The presence of this bacterial form in drinking water is a concern because it indicates that the water may be contaminated with other organisms that can cause disease. Throughout the year, we tested more than 200 samples for coliform bacteria. In that time, one of the samples (0.5%) came back positive for the bacteria. Federal regulations now require that public water testing positive for coliform bacteria must be further analyzed for fecal coliform bacteria. Fecal coliform are present only in human and animal waste. Because these bacteria can cause illness, it is unacceptable for fecal coliform to be present in water at any concentration. Our tests indicate no fecal coliform is present in our water.

