2009

about your drinking water

Your water, treated and delivered by Athens-Clarke County, meets or surpasses all state and federal standards for safe drinking water. This annual report, required by the EPA Safe Drinking Water Act, provides you with vital information on the quality of your drinking water.

¿HABLA ESPAÑOL?

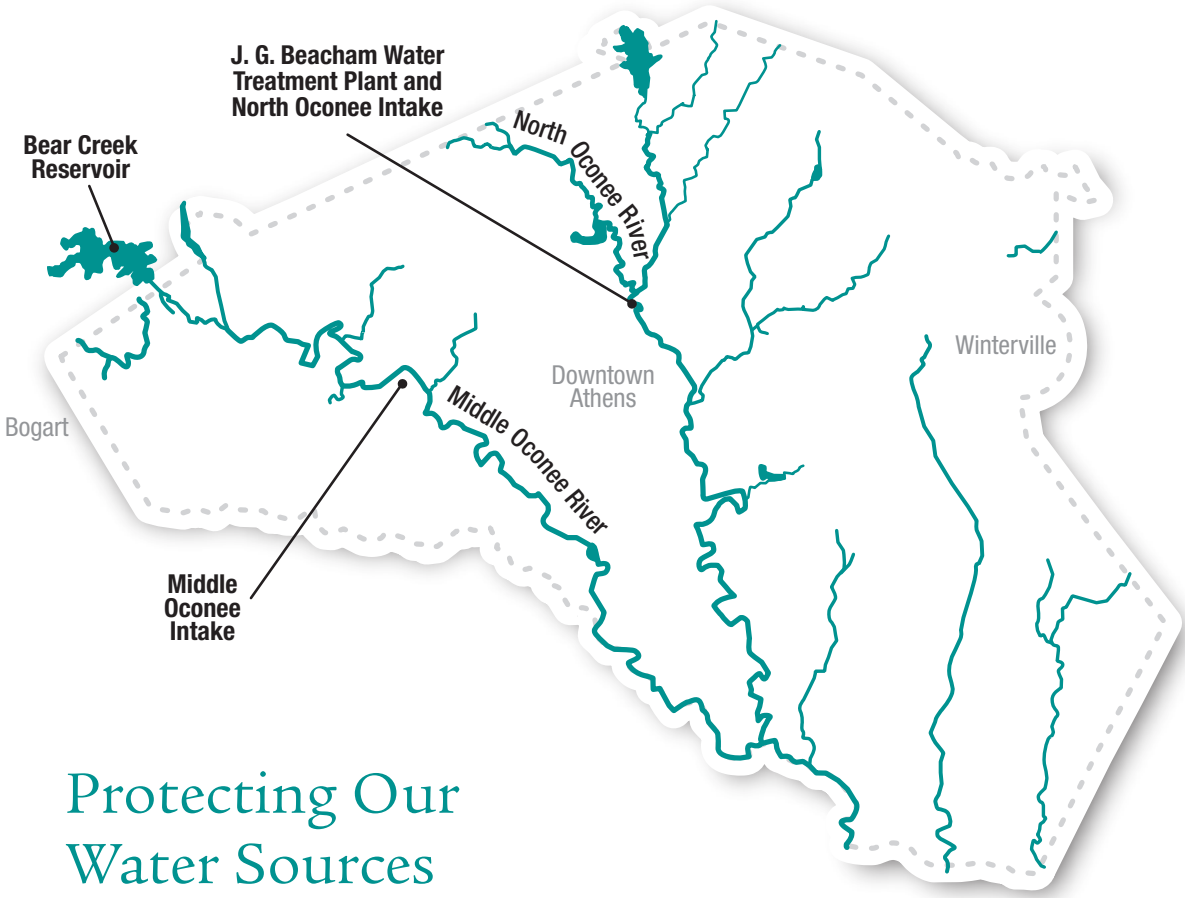
Este Informe contiene información muy importante sobre su agua beber. Tradúzcalo ó hable con alguien que lo entienda bien.

Athens Clarke County
Public Utilities Department

Water System #0590000, Director, L. Gary Duck, P.E.

Where Your Water Comes From

Your drinking water comes from three sources: the Bear Creek Reservoir, the North Oconee River, and the Middle Oconee River. The rivers flow through Athens-Clarke County before merging to form the main stem of the Oconee River. From these sources it travels through an elaborate system that treats, moves and stores it.



Protecting Our Water Sources

In order to protect public drinking water supplies at the source – our rivers, lakes and streams – the State of Georgia has established a Source Water Assessment Program. As part of this program, Athens-Clarke County and the Northeast Georgia Regional Development Center completed a source water assessment of the Middle Oconee and North Oconee Rivers. The assessment identified potential sources of pollution and the overall susceptibility of our water supply to contamination. The North Oconee River and Middle Oconee River have been ranked with a medium level of pollution susceptibility. Copies of the ACC Source Water Assessment Report are available at the Public Utilities Department Administration Office, 1865 West Broad Street, Suite C.

Athens-Clarke County is helping to prevent pollution of our rivers through increased stream buffer requirements and more stringent stormwater ordinances and stormwater controls. In addition, ACC has completed a countywide watershed assessment and a Watershed Protection Plan that outlines specific measures for safeguarding our water resources.

The Journey of Your Drinking Water

The journey of your drinking water begins when water is pumped into the J.G. Beacham Water Treatment Plant. Our plant staff closely monitors and maintains a computerized system as water travels through a complex treatment process.

We routinely collect and test water samples at many points throughout your water's journey – at the rivers and the Bear Creek Reservoir, at the water treatment plant, and in the distribution system.

The Water Laboratory reports test results to the Georgia Environmental Protection Division (EPD). Our Laboratory Technicians are state certified and must pass proficiency tests twice a year.

State-of-the-art technology and a committed staff results in safe, high quality drinking water delivered to the homes, organizations and businesses of Athens-Clarke County.

Schedule a Tour!

We'll take you through the J.G. Beacham Water Treatment Plant and Bob M. Snipes Water Resource Center to learn more about water treatment and testing. The journey of your water is an interesting trip!

Contact our Water Conservation Coordinator, Marilyn Hall, at 706-613-3729 or MarilynHall@co.clarke.ga.us

Why Are There Contaminants in Drinking Water?

As we learned in school, pure water is made up of hydrogen and oxygen. However, drinking water sources include streams, lakes, rivers and reservoirs, which are never purely hydrogen and oxygen. They are subject to potential "contamination" by a wide variety of substances that occur naturally or are man-made. As water travels over the surface of the land or through the ground, it dissolves natural minerals, and, in some cases, the water can pick up bacteria from livestock and human activities.

In order to ensure that tap water is safe to drink, 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.

Contaminants that may be present in source water before it is treated:

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 storm 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 septic systems

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

Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities

Terms to Know for Water Test Results

AL (Action Level) – The concentration of a contaminant, which if exceeded, triggers treatment or other requirements which a water system must follow.

ppm (parts per million) – the equivalent of one drop of water in 42 gallons

ppb (parts per billion) – the equivalent of one drop of water in 14,000 gallons

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.

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

Turbidity – A measure of the cloudiness of water. We monitor turbidity because it is a good indicator of the effectiveness of our filtration system. NTU (Nephelometric Turbidity Unit) is a measurement of the clarity of the water.

Water Test Results
after treatment

The charts below show the findings of our water testing after treatment and how it compares to national standards.

Better than EPA Standard	Contaminant	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL)	Detected Level (what we found)
✓	Copper	Corrosion of household plumbing systems	1.3 ppm	AL 1.3 ppm	0.06 ppm 0 over AL
✓	Lead	Corrosion of household plumbing systems	0 ppb	AL 15.0 ppb	2.5 ppb 0 over AL
✓	Fluoride	Water additive that promotes strong teeth	4.0 ppm	4.0 ppm	0.82 ppm Actual Range 0.73-0.87 ppm
✓	Nitrate (Nitrogen)	Runoff from fertilizer use	10.0 ppm	10.0 ppm	0.64 ppm
✓	Total Trihalomethanes (TTHMS)	By-product of drinking water chlorination	0 ppb	80.0 ppb (annual average)	39.96 ppb (annual average) Quarterly Range 27.28–51.15 ppb
✓	Turbidity	Soil runoff	0	TT = 1 NTU	0.51 (highest single measurement)
				TT = % of samples ≤ 0.3 NTU	99.52% ≤ 0.3 NTU

Better than EPA Standard	Contaminant	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL)	Detected Level (what we found)
✓	Chlorine	Water additive for disinfection	4.0 ppm	4.0 ppm	1.73 ppm

Better than EPA Standard	Contaminant	Typical Source	EPA Ideal Goal (MCLG)	Highest EPA Allowed Level (MCL)	Range of Removal	Annual Average Removal
✓	Total Organic Compounds	Naturally present in the environment	N/A	TT (>35% removal is required)	35%-62%	48%

What About Lead in Drinking Water?

Testing shows that the amount of lead in our drinking water is well below the EPA's allowed levels (see chart on left). However, lead in elevated levels can cause serious health problems, especially for pregnant women and young children. It is important to know that lead in drinking water is primarily from materials and components associated with water service lines and home plumbing. The Public Utilities Department is responsible for providing high quality drinking water, but cannot control the variety of materials used in private residential plumbing.

When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds up to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your 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 www.epa.gov/safewater/lead.

Other Important Tests

Athens-Clarke County tests for microscopic organisms known as Giardia and Cryptosporidium. We also test for total coliform bacteria, fecal coliform and E. coli, which occur naturally in the environment from human and animal waste and can be found in lakes, rivers, and streams. ACC has not detected any Cryptosporidium, Giardia, total coliform bacteria, fecal coliform or E. coli in your treated water.

Important Health Information from the EPA

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. For 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 public. Immuno-compromised individuals, such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, 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 by contacting the Safe Drinking Water Hotline (1-800-426-4791).

Want to Know More?

The Public Utilities Department provides opportunity for public comment on all projects, and all records are available to the public. The Mayor and Commission review and approve all major water and wastewater projects at regularly scheduled meetings. These commission meetings, held at City Hall, are open to the public and televised locally on ACTV Cable Channel 7. Commission meeting information is available at **www.athensclarkecounty.com**

For questions about this report or assistance with environmental or regulatory issues, contact Jeff Knight at 706-613-3470 or email jeffknight@co.clarke.ga.us

To report a water quality problem or to request water testing, call our water treatment plant at 706-613-3481.

ACC Public Utilities Department
www.accpublicutilities.com

Georgia Environmental Protection Division
www.georgiaepd.org

Water Resources of Georgia
U.S. Geological Survey (USGS)
http://ga.water.usgs.gov

EPA Safe Drinking Water
Hotline 1-800-426-4791
www.epa.gov/safewater

www.epa.gov/safewater/kids/health.html
A great site for kids and teachers

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