summer 2013

INSIDE: Annual Water Quality Report about your drinking water

waterSOURCE

a Publication of the Athens-Clarke County Public Utilities Department

Through the ACC Green Schools Program, the County's Public Utilities Department, Recycling Division, Stormwater Division, and Keep Athens-Clarke County Beautiful are helping local schools in efforts that focus on conservation, preservation and beautification of the environment. Every year, the program recognizes "Green Schools" – schools completing at least 25 environmental education activities.

2012–2013 ACC GREEN SCHOOLS:

Schools listed in blue are recogized as Green School for first time.

Athens Montessori

Barnett Shoals Elementary

Barrow Elementary

Burney-Harris-Lyons Middle School

Cedar Shoals High School
First public high school

Chase Street

Clarke Middle School

Cleveland Road Elementary

Fowler Drive Elementary

Howard B. Stroud Elementary

Hilsman Middle School

J.J. Harris Elementary Charter School

Lifespan Montessori
First pre-school

Monsignor Donovan Catholic High School

Oglethorpe Avenue Elementary

St. Joseph Catholic School

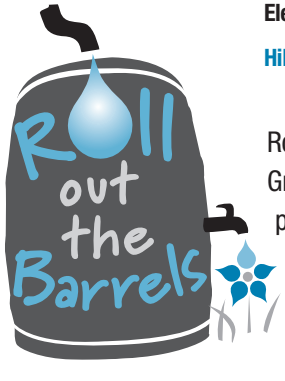
Timothy Road Elementary

Whit Davis Elementary

Whitehead Road Elementary

Winterville Elementary

W.R. Coile Middle School



Roll Out the Barrels is the largest fundraiser for the Green Schools Program. This year, 22 local artists painted rain barrels that were auctioned off raising almost $3,000. With these funds, schools are able to send their students on tours of the County's water, water reclamation, and solid waste facilities.

See photos of barrels painted by local artists at www.RollOuttheBarrels.org.

Water quality commitment rewarded

All three of the County's water reclamation facilities have earned a Gold Award from the Georgia Association of Water Professionals (GAWP). The J. G. Beacham Water Treatment Plant not only earned a Platinum Award, but also received the GAWP Plant of the Year Award in its size category. Plant Operator William Brooks has been selected Operator of the Year in the same category.

Thank you to our hardworking staff for their excellent commitment to your water service!

Hotel Indigo is a winner

Hotel Indigo has earned our 2013 Leadership in Water Conservation Award and is an excellent example of water use efficiency in our business community. The hotel is 35% more water efficient than a standard hotel because of low-flow faucets, showers, and toilets in every room. The hotel's landscaping does not use potable water – a water cistern in their outdoor courtyard collects condensation from air conditioning for irrigation.

¿HABLA ESPANOL?

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

drinking water

from source to tap...

Before arriving at your faucet, your drinking water travels through a complex treatment and delivery system. Our Quality Control Lab tests water at the source and throughout the treatment process. Our Water Quality Lab tests the water as it travels through pipelines and storage to you. Ongoing tests and adjustments help to ensure that your water is always safe to drink and pleasing in taste, odor, and color.

source

MIDDLE OCONEE RIVER, NORTH OCONEE RIVER AND BEAR CREEK RESERVOIR

– Tests are conducted hourly or even more frequently if quality of the source water is changing rapidly during withdrawal.

– Every three months, our Quality Control Lab collects samples and tests for a variety of contaminants. Samples are also analyzed for pH, color, conductivity, hardness, alkalinity, turbidity, temperature, and total dissolved solids.

The journey of your water is an interesting trip!

Get a behind-the-scenes look and learn more about your water. We are now offering quarterly tours of our state-of-the art water treatment and water reclamation facilities. For more information, visit www.athensclarkecounty.com/publicutilities or contact the Water Conservation Office, at 706-613-3729.

treatment

WATER TREATMENT PLANT

– Every hour of every day, our Quality Control Lab staff performs tests throughout the treatment process, checking pH and chlorine levels.

– Every three hours, turbidity is tested.

– Every four hours, water is tested for fluoride and ammonia levels.

– Daily tests are performed for alkalinity, carbon dioxide, iron, manganese, and dissolved oxygen.

– Additional weekly samples of raw and treated water are also tested for other regulated substances.

delivery

DISTRIBUTION SYSTEM

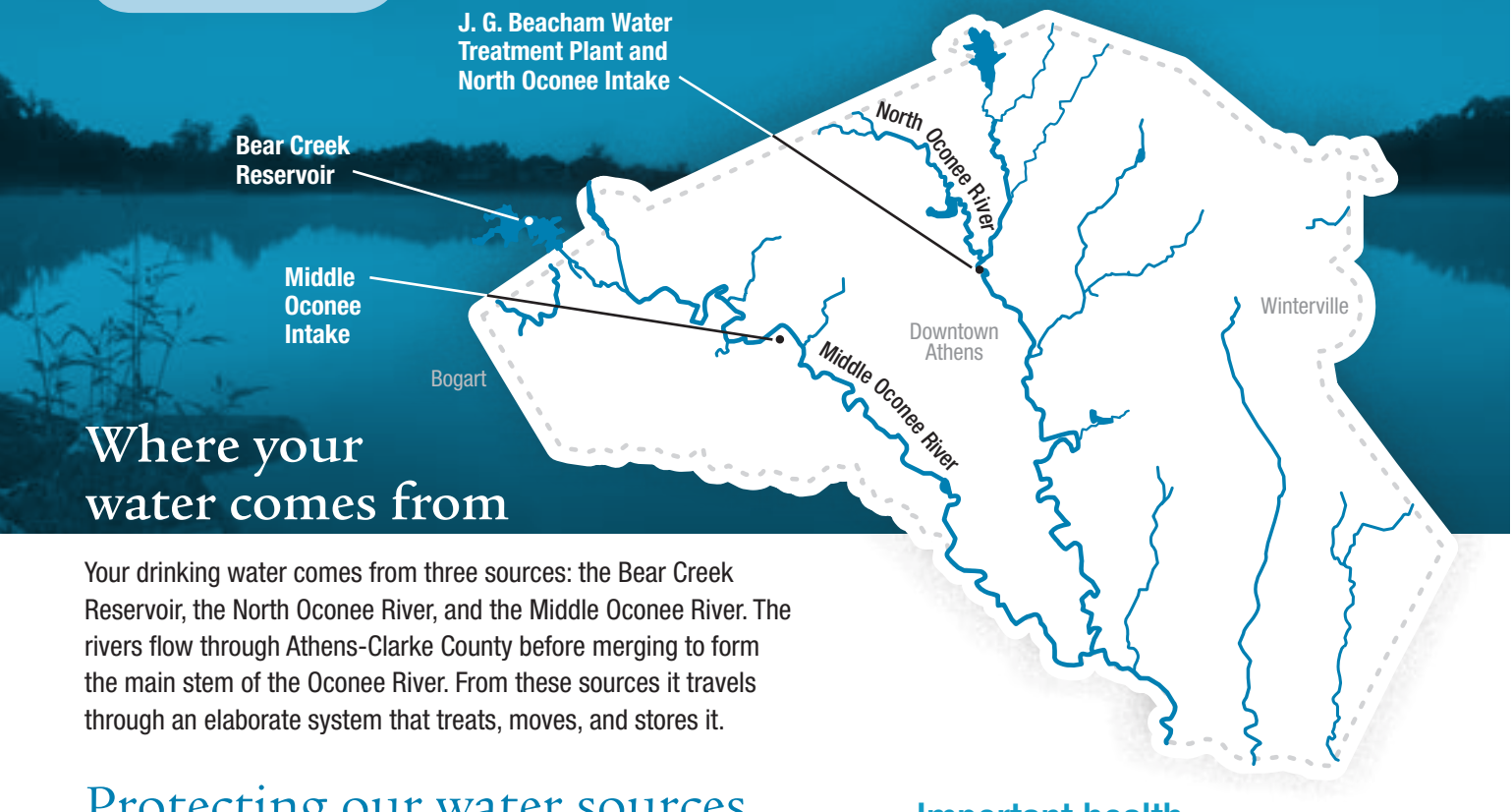
– Our Water Quality Lab tests daily samples of drinking water from three different sections of the distribution system for chlorine, pH, turbidity, fluoride, carbon dioxide, coliform and E. coli bacteria. In 2012, the lab conducted over 116,000 water quality tests.

– Monthly and quarterly, the EPD also tests for specific contaminants.

– New pipelines are sterilized, sampled, and tested for bacteria when installed.

This annual report, required by the EPA Safe Drinking Water Act, provides you with vital information on the quality of your drinking water.

2012 about your



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. Both rivers 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, 124 East Hancock Avenue in downtown Athens.

Athens-Clarke County helps to prevent pollution of our rivers through stream buffer requirements and stringent stormwater ordinances and controls. In addition, the County has a Watershed Protection Plan for safeguarding our water resources.

Your water, treated and delivered by Athens-Clarke County, meets or surpasses all state and federal standards for safe drinking 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. 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).

water test results

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	0.074 ppm 0 over AL
✓	Fluoride	Water additive that promotes strong teeth	4.0 ppm	4.0 ppm	0.88 ppm Actual range 0.65–0.88 ppm
✓	Lead	Corrosion of household plumbing systems	0.0 ppb	AL 15.0 ppb	2.5 ppb 0 over AL
✓	Nitrate (Nitrogen)	Runoff from fertilizer use	10.0 ppm	10.0 ppm	0.62 ppm
✓	Total Trihalomethanes (TTHMS)	By-product of drinking water chlorination	0.0 ppb	80.0 ppb (annual average)	39.33 ppb (annual average) Quarterly range 25.38–51.96 ppb
✓	Turbidity	Soil runoff	0.0	TT = 1 NTU	0.46 (highest single measurement)
				TT = 95% of samples ≤ 0.3 NTU	99.86% ≤ 0.3 NTU

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 required)	38.9%–57.6%	44.3%

Better than EPA Standard	Contaminant	Typical Source	EPA Ideal Goal (MRDLG)	Highest EPA Allowed Level (MDRL)	Detected Level (what we found)
✓	Chlorine	Water additive for disinfection	4.0 ppm	4.0 ppm	1.91 ppm

Terms to know

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.

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, reservoirs and wells, 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, radioactive material, and can pick up substances resulting from human activity or the presence of animals.

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 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.

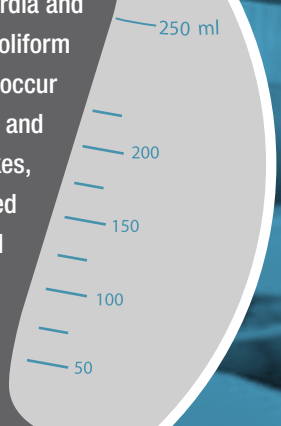
What about lead in drinking water?

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 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.



Want to know more?

All PUD 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 regulatory or environmental issues, contact Glenn Coleman at 706-613-3470 or email glen.coleman@athensclarkecounty.com

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.athensclarkecounty.com/publicutilities

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
http://water.epa.gov/drink

For Kids and Teachers
http://water.epa.gov/learn/kids/drinkingwater

waterSOURCE

124 East Hancock Ave., Athens, Georgia 30601
8:00 a.m.–5:00 p.m., Monday–Friday

Public Utilities
water. wastewater. conservation.

Administration
706-613-3470

Customer Service Center
706-613-3500

Water Conservation
706-613-3729

To Report a Water Leak
706-613-3495

Emergencies
706-613-3481

www.athensclarkecounty.com/publicutilities

www.thinkatthesink.com

Find us on facebook:
Water Conservation Office –
Athens-Clarke County

Printed locally on recycled paper.

News from Lily Anne Phibian

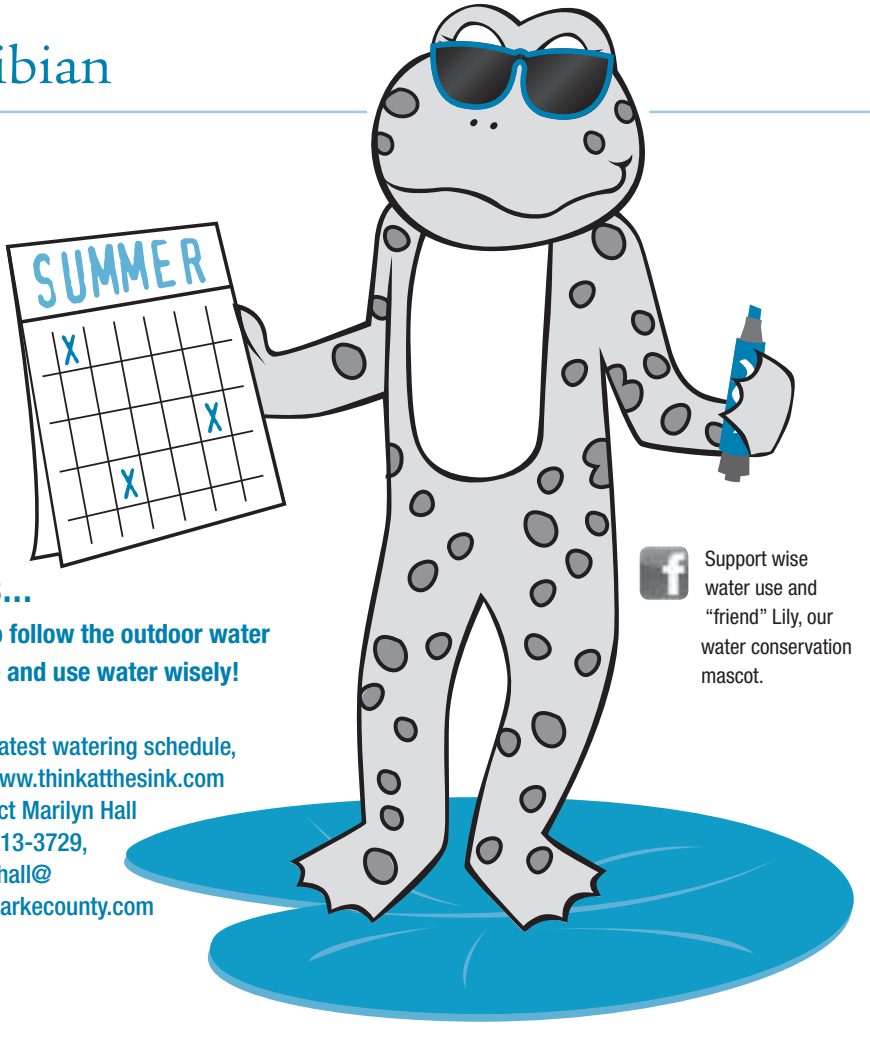
Mark your calendars – great events coming up!

Tuesday, June 25, 5:30 PM–7:00 PM
Vegetable Gardens, Water Wise Style!
ACC Snipes Water Resources Center

Saturday, July 13, 10 AM–Noon
Water Smart Landscapes
Workshop: Drip Irrigation
UGArden on South Milledge

Thursday, August 15, 9:00 AM
Public Tour
Middle Oconee Water
Reclamation Facility

Saturday, September 7, 10 AM–2 PM
4th Annual Athens Water Festival
Sandy Creek Park



Lily says...

Remember to follow the outdoor water use schedule and use water wisely!

For the latest watering schedule, check www.thinkatthesink.com or contact Marilyn Hall at 706-613-3729, marilyn.hall@athensclarkecounty.com

Support wise water use and "friend" Lily, our water conservation mascot.