Water Quality Report

Clayton County Water Authority • 1600 Battle Creek Road, Morrow GA 30260 • (770) 961-2130

System Number GA0630000 • This report contains information collected between January 1 and December 31, 2008

A message from P. Michael Thomas
General Manager, Clayton County Water Authority

This Annual Report highlights the fact that the Clayton County Water Authority continues to provide you with high quality, safe drinking water. As a public water utility, we conduct significantly more testing on your water supply than a typical bottled water supplier.

The table inside reveals that the quality of your drinking water is excellent and meets or exceeds all drinking water standards. As health officials learn more about our environment and the effect of substances in the environment on human health, new standards will continue to be set and we will continue to work hard to exceed those standards.

The Water Authority develops strategic long-term plans to insure that we are able to provide safe drinking water at a reasonable cost whenever you open your faucet. We continue to work to improve the reliability of our water supply and the quality of our water by using mechanical, chemical and natural treatment methods. We take pride in knowing that our water utility is recognized as one of the best in the State. This was confirmed when we placed second in a recent statewide drinking water taste test!

This annual water quality report shows our water sources, lists test results, and contains important information about water and health. The tables show results of our water quality analyses. Every regulated contaminant detected in the water, even in very minute traces, is listed. The table contains the name of each substance tested, the highest level allowed by regulation (MCL – maximum contaminant level), the ideal levels, the actual amount detected and the usual sources of such contamination.

Clayton County Water Authority will notify the public immediately if there is ever any reason for concern about your water. You can learn more about the Clayton County Water Authority on the Internet at *www.ccwa.us*. If you have any questions about water quality, please call (770) 603-5611, ext. 13.

Maintaining your trust by supplying quality drinking water is our goal.

P. Michael Thomas

Testing, testing…

Clayton County Water Authority performed more than 200,000 water tests during 2008. These tests measure our drinking water quality and safety. The table on the next page lists regulated substances found in our water. All substances listed are well within regulated limits. Hundreds of additional substances were tested for and not found in our water.

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 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 from the Safe Drinking Water Hotline (1-800-426-4791).

You can learn more about the Clayton County Water Authority on the Internet at www.ccwa.us. Our Water Quality Section (770) 603-5611, ext. 13 will answer any questions you may have about Clayton County Water Authority and our water quality. Thank you for entrusting us with the safety of your water.

CCWA's testing goes beyond requirements to ensure a healthy, sparkling product every day.

As we learn more about the effects of environmental substances and human health, we implement more and better quality safeguards to ensure our water supply stays wholesome and pure.

Water everywhere

The sources of drinking water (both tap water and bottled water), include surface water (rivers, lakes, streams, ponds, reservoirs) and ground water (springs and wells). As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Substances that may be present in source water include:

(A) Microbial substances, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

(B) Inorganic substances, 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.

(C) Pesticides and herbicides, which may come from a variety of sources such as agriculture, stormwater runoff, and residential uses.

(D) Organic chemical substances, 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.

(E) Radioactive substances, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, EPA prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations establish limits for substances in bottled water, which must provide the same protection for public health.

Clayton County water sources

Clayton County's own water supply comes primarily from surface water. In fact, the majority comes from rainfall in Clayton and surrounding counties.

Although our lake water may contain some of the listed substances, it is important to know that these substances are either removed completely or reduced to a safe level before it arrives at your faucet. This ensures that our finished water meets or exceeds all standards set by the Federal and State Governments.

Treatment process

During the treatment process, alum is added to the lake water at each of the three water plants. The alum allows impurities in the water to be removed in the solids removal process. Solids removal takes out 95% of the impurities in the lake water. Water is then filtered and disinfected with ultraviolet light and chlorine (which removes the remaining impurities).

The pH is adjusted with lime; fluoride is added for tooth and bone development; and phosphoric acid is added for corrosion control. The water is tested for purity at each stage and only then is it ready to be delivered to your home. We also test the water at hundreds of locations as it flows through the water system each month.

Bottled water

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 at 1-800-426-4791.

Other concerns

Cryptosporidium is a microbial pathogen found in surface water throughout the U.S. Although filtration removes cryptosporidium, the most commonly used filtration methods cannot guarantee 100 percent removal. Our monitoring indicates the presence of these organisms in our source water.

Current test methods do not allow us to determine if the organisms are dead or if they are capable of causing disease. Ingestion of cryptosporidium may cause cryptosporidiosis, an abdominal infection. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. However, immuno-compromised people are at greater risk of developing a life-threatening illness.

We encourage immuno-compromised individuals to consult their doctor regarding appropriate precautions to take to avoid infection. Cryptosporidium must be ingested to cause disease, and may be spread through means other than drinking water. CCWA has added ultraviolet treatment after filtration to completely inactivate any cryptosporidium not removed during filtration.

More information

Call us for information about the next opportunity for public participation in decisions about our drinking water, or attend a CCWA Board meeting on the first Thursday of every month. Call (770) 961-2130 for specific times and dates.

You may also consult our Website at www.ccwa.us or for further information, refer to current U.S. Environmental Protection Agency water information at www.epa.gov/safewater.

In addition to the testing we are required to perform, our water system voluntarily tests for hundreds of additional substances and microscopic organisms to make certain our water is safe and of high quality.

If you are interested in a more detailed report, call the Water Quality Section at (770) 603-5611, ext. 13.

Regulated Substances

Substance Tested And Detected	Units	Goal (MCLG)	Maximum Allowed (MCL)	Amount Detected	Range Detected	Is It Safe? Does It Meet Standards?	Probable Source
Non-Disinfection Substances							
Copper (b)	ppm	1.3	AL=1.300	0.160	0 samples above AL ✱	Yes	corrosion of household plumbing systems
Lead (b)	ppb	0	AL=15	4.1	1 sample above AL ✱	Yes	corrosion of household plumbing systems
Fluoride (a)	ppm	4	4	0.85	0.24 - 1.14	Yes	water additive which promotes strong teeth
Nitrate	ppm	10	10	0.66	0.42 - 0.66	Yes	erosion of natural deposits
Turbidity (e)	NTU	TT	TT	Highest value of the year 0.270 ✱✱	% of samples <0.3 NTU 100% ✱✱	Yes	soil runoff
Total Organic Carbon (f)	N/A	TT	TT	1.0	.94 - 1.2	Yes	naturally present in the environment
Total Coliform (d)	%	0	5%	.5%	0% - 0.5%	Yes	naturally present in the environment
Disinfection Substances							
Substance Tested And Detected	Units	Goal (MRDLG)	Maximum Allowed (MRDL)	Amount Detected	Range Detected	Is It Safe? Does It Meet Standards?	Probable Source
Chlorine	ppm	4	4	2.16	0.00 - 2.19	Yes	water additive used to control microbes
Chlorine Dioxide	ppm	0.8	0.8	0.011	0.0 - 0.430	Yes	water additive used to control microbes
Chlorite	ppm	0.8	1	0.38	0.00 - .97	Yes	by-product of drinking water chlorination
Haloacetic Acids (c)	ppb	0	60	44.0	15.4- 73.2	Yes	by-product of drinking water chlorination
Total Trihalomethanes (c)	ppb	0	80	52.0	15.9 - 139.7	Yes	by-product of drinking water chlorination

Table Definitions And Footnotes

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.

AL Action Level: means the concentration of a substance that triggers a treatment or other requirement that a water system must follow.

✱ May have up to 5 samples above action level and remain in compliance.

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.

TT Treatment Technique: means a required treatment technique or process intended to reduce the level of a contaminant in drinking water.

✱✱ We must report highest monthly value plus the lowest percentage. Numbers below 95% would be a violation.

ml Milliliter or one-thousandth of a liter. 1 liter is slightly more than a quart.

ppm Parts Per Million: means 1 part per 1,000,000 (same as milligrams per liter) and corresponds to 1 minute in 2 years, or 1 penny in $10 thousand.

MRDL Maximum Residual Disinfectant Level: the highest level of disinfectant allowed in drinking water. There is convincing evidence that the addition of a disinfectant is necessary for control of microbiological 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 contaminants.

NTU Nephelometric Turbidity Unit: a measure of water clarity.

ppb Parts Per Billion: means one part per 1,000,000,000 (same as micrograms per liter) and corresponds to one minute in 2,000 years, or one penny in $10 million.

(a) Fluoride is added in treatment to bring the natural level to the EPD optimum of 0.8 parts per million (see definition of ppm).

(b) Water from the treatment plant does not contain lead or copper. However, under EPA test protocol, water is tested at the tap. Tap tests show that where a customer may have lead pipes or lead-soldered copper pipes, the water is not corrosive. This means the amount of lead or copper absorbed by the water is limited to safe levels.

(c) This level is based on a system-wide 4 quarter running average of several samples, as required by EPA testing protocol.

(d) From 150 to 180 samples are tested each month. No more than 5% may be positive for total coliform bacteria.

(e) Turbidity is a measure of the clarity of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

(f) Total Organic Carbon is a measure of the possible formation of harmful chlorine by-products. We monitor this substance three different ways to receive a complete picture of this substance in our water. Compliance with Federal law is determined by a ratio of all 3 methods and the ratio must be 1 or above.

NA Not Applicable

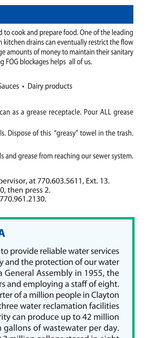
Source Water Assessment Plan

Each public water system is required by the 1996 Safe Drinking Water Act to perform extensive testing on our source water to determine our susceptibility to contamination. CCWA and the Atlanta Regional Commission have completed a source water assessment itemizing potential sources of surface water pollution to your drinking water supply. The complete results are available for public view at our Main Office, 1600 Battle Creek Road, Morrow, GA 30260 or an overview at *www.atlantaregional.com/swap*.

CCWA has three primary watersheds (Little Cotton Indian Creek, Shoal Creek & Pates Creek) that we produce water from directly and one secondary watershed (Flint River) that we use as a supplement to the three primary watersheds. The three primary sources received a susceptibility ranking from medium to low and the secondary source received a susceptibility ranking of medium to high.

These studies combined potential individual pollutant sources and non-point sources of pollution, including impervious surface, to determine the overall susceptibility of our watersheds. CCWA is using this information to develop contingency plans to address specific contamination possibilities.

For additional information regarding these studies, or if you suspect that someone is contaminating a CCWA watershed, please contact our Stormwater office at (678) 422-5145, ext. 210.



Clayton County Water Authority gets its water from five major surface water reservoirs and two wells.

Protect your pipes from FOG

FOG is an acronym for fats, oils and greases. FOG is composed of animal and vegetable fats and oils that are used to cook and prepare food. One of the leading causes of blockages in the sewer system is the accumulation of FOG inside sewer pipes. FOG that is poured down kitchen drains can eventually restrict the flow in the pipe and cause untreated wastewater to back up into homes and businesses. Counties and cities spend large amounts of money to maintain their sanitary sewer systems. FOG problems are so common that they have a large effect on wastewater rates. Thus, preventing FOG blockages helps all of us.

FOG is found in such things as:

• Meat fats • Lard • Cooking oil • Shortening • Butter and margarine • Food scraps • Baking goods • Sauces • Dairy products

Tips on Proper Disposal of FOG

• NEVER pour grease down sink drains, garbage disposals, or into toilets. Instead, use an old glass jar or can as a grease receptacle. Pour ALL grease and oil into this container for disposal.

• Use a paper towel to clean up the excess grease residue left on the inside of cooking pots, pans, and utensils. Dispose of this "greasy" towel in the trash.

• Scrape all food scraps from plates, pots, pans, utensils, and any cooking surfaces into the trash for disposal.

• Talk with your family, friends, and neighbors about these easy steps that they can take to help prevent fats, oils and grease from reaching our sewer system.

Contact Information:

For questions about this report, please contact Kendra Stanciel, CCWA Water Quality Supervisor, at 770.603.5611, Ext. 13.
For billing or service questions (8 a.m. - 5 p.m.), please call 770.961.2130, then press 2.
For after-hour emergencies (after 5 p.m. or on weekends), please call 770.961.2130.

About CCWA

The Clayton County Water Authority's mission is to provide reliable water services to our community through innovation, efficiency and the protection of our water environment. Created by an act of the Georgia General Assembly in 1955, the Authority began serving just over 450 customers and employing a staff of eight. Since then it has grown to serve more that a quarter of a million people in Clayton County. With three water production facilities, three water reclamation facilities and five raw water reservoirs, the Water Authority can produce up to 42 million gallons of potable water and treat 38.4 million gallons of wastewater per day. We have a potable water storage capacity of 30.2 million gallons stored in eight ground and nine elevated storage tanks. The award-winning Authority is recognized as an industry leader, with utility peers from all over the world visiting our system to learn more about process such as our water reuse, constructed wetlands and leak detection program.