Annual Report on Drinking Water Quality

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2008

DOUGLASVILLE-DOUGLAS COUNTY WATER AND SEWER AUTHORITY

Consumer Confidence Report

The Douglasville-Douglas County Water and Sewer Authority (WSA) is pleased to report, once again, that your community's drinking water has met or exceeded all safety and quality standards set by the State of Georgia and EPA during this past year. WSA has been supplying Douglas County with the highest quality drinking water possible since 1986 and has never had a water quality violation in its history. This annual report, sometimes called a Consumer Confidence Report (CCR) or a Water Quality Report, gives us the opportunity to provide you with a detailed account of all the monitoring data gathered from water quality testing during 2007 which went into producing your award-winning drinking water.

Steps Being Taken to Ensure the Best Quality Drinking Water for Future Generations

Expansion of the Reservoir – Douglas County's drinking water supply is surface water drawn from the Dog River Reservoir located in western Douglas County and then treated at the Bear Creek Water Treatment Plant which is capable of producing up to 16 million gallons of drinking water a day. Currently, the reservoir has a surface area of approximately 225 acres and contains 1.2 billion gallons of water storage at its 750 ft. MSL water surface elevation. Construction work and clearing is underway to raise the elevation level an additional 10 feet to 760 ft. MSL, which will increase the storage volume to almost 2 billion gallons. This project, expected to be completed in 2010, will ensure sufficient drinking water for Douglas County through the next couple of decades.

Expansion of the Water Treatment Plant - Plans are underway to expand the Bear Creek Water Treatment Plant capacity from 16 million gallons per day to 23 million gallons per day and to upgrade the treatment process. The project is expected to be completed by 2010 and will cost in excess of $30 million.

Stormwater Management Responsibility – Because stormwater runoff is the major cause of pollution in our rivers and streams and ultimately in our drinking water supply, and because the quality of drinking water is WSA's primary concern, WSA has contracted with both the City of Douglasville and Douglas County for the stormwater management responsibility. WSA's stormwater management practices, driven by the commitment to protect our water sources and excel in water-quality production, have won an award for Best Stormwater Management Program in the State.

The Bear Creek Water Treatment Plant won the award for Best Tasting Water in the Metro Atlanta Area in 2007.

Public Involvement Opportunities

The public is invited to attend the WSA Board Meetings held at 5:30 p.m. on the 2nd and 4th Tuesdays of each month and the work sessions held at 5:30 p.m. on the last Monday of each month. For those interested in seeing firsthand how drinking water and wastewater are processed, free plant tours are offered. If a clean environment and watershed is a concern of yours, every October WSA partners with a local Boy Scout Troop to clean up trash along several miles of Dog River, and public participation is encouraged. WSA also, throughout the year, hosts seminars on such topics as rain barrel construction and rain garden construction. If you would like more information about this report, the quality of your drinking water, or any aspect of WSA's operations, please contact Water Plant Superintendent, Steve Green, at (770) 949-7617 or sgreen@ddcwsa.com with specific questions. Please visit our website at ddcwsa.com.

Source Water Assessments

WSA and the Atlanta Regional Commission (ARC) completed a source water assessment to identify potential sources of surface water pollution to the Dog River Reservoir and to the Bear Creek Reservoir, a supplemental water supply source. Land use in these watersheds is primarily open/forest or agricultural crop land. In the Dog River watershed, which is 5.6% impervious surface, 57 potential individual sources of pollution were identified, while in the Bear Creek watershed, which is 9.7% impervious surface, 8 were identified. More information about the overall results and MEDIUM ranking of this assessment can be found on ARC's website at http://www.atlantaregional.com/swap/ or you can request information by mail from the: Atlanta Regional Commission, Environmental Planning Division, 40 Courtland Street, NE., Atlanta, Georgia, 30303.

Testing the Quality of Drinking Water

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To ensure that tap water is safe to drink, the U.S. Environmental Protection Agency prescribes regulations that limit the amount of certain contaminants in water provided by public utility systems. Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water that must provide the same protection for public health. WSA tests your drinking water continuously 24 hours a day, 7 days a week. Tests are conducted for chemicals and disease-causing microorganisms (bacteria and protozoa) in compliance with requirements set by the EPA and the EPD and under the supervision of State-certified operators or laboratory analysts. The parasites, cryptosporidium and giardia are source water contaminants that are common in surface water and very difficult to kill. These intestinal disease-causing parasites have not been detected in your water supply, and WSA is working hard to ensure they never do.

For more information on giardia and cryptosporidium, and the diseases associated with these microorganisms, visit these websites: www.cdc.gov/ncidod/diseases/crypto/cryptos.htm and

www.cdc.gov/ncidod/dpd/parasites/giardiasis/factsht_giardia.htm

Test Results for Pharmaceuticals in the Water Supplies

While the concern about the detection of minute levels of pharmaceuticals in the drinking water sources (raw, untreated water) across the nation is new to the media, the drinking water industry has been monitoring it for some years now. Only recently has technology advanced to the extent that it is now possible to detect levels of 1 part per billion or trillion. Test results taken from water samples from the Dog River inflow to its reservoir in March, 2008, identified three of the suspect pharmaceuticals at very minute levels. One was trans-Testosterone, a steroid hormone of the androgen group, at a level of one ten-millionth of a milligram per liter of water. To put this into perspective, the normal dose of aspirin is 500 milligrams. To consume just one milligram of this steroid, a person would have to drink a half gallon of the raw water per day for 14,477 years. The other two contaminants found in levels large enough to register on the test were Fluoxetine (Prozac) and Cotinine, a metabolic product of nicotine. Treated water (drinking water) showed no detectable pharmaceuticals.

Proper Medication Disposal

Although flushing unused, unneeded, or expired prescription drugs was once thought to be the proper method of disposal, the FDA (Federal Drug Administration) guidelines for the proper disposal is as follows:

"Take unused, unneeded, or expired prescription drugs out of their original containers and throw them in the trash.

Mixing prescription drugs with an undesirable substance, such as used coffee grounds or kitty litter, and putting them in impermeable, non-descript containers, such as empty cans or sealable bags, will further ensure the drugs are not diverted.

Flush prescription drugs down the toilet *only* if the label or accompanying patient information specifically instructs doing so."

Why are There Contaminants in Drinking Water?

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 animal or human activity. This polluted water continues to travel into rivers, lakes, streams, ponds, reservoirs, springs, and wells, all of which are the sources of drinking water whether it's from the tap, wells, or out of a bottle. 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 Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

The Best Way to Ensure Safe Water at the Tap is to Keep Our Source Water Clean.

What May be Present in Source Water Before It's Treated .....

MICROBIAL CONTAMINANTS: include viruses and bacteria which may come from agricultural livestock operations, septic systems, wastewater treatment plants, and wildlife.

INORGANIC CONTAMINANTS: include salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

PESTICIDES AND HERBICIDES: may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

ORGANIC CHEMICAL CONTAMINANTS: include synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and also can come from gas stations, urban stormwater runoff, and septic systems.

RADIOACTIVE CONTAMINANTS: can be naturally occurring or be the result of oil and gas production and mining activities.

NOTICE: Although WSA's water meets all guidelines for quality, 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 from their health care providers about drinking water. 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 (800-426-4791).

Fats, Oils, and Greases — Sewer Enemy #1

One of the leading causes of blockages in the sewer system is the improper disposal of fats, oils, and greases. Fats, oils, and greases poured down kitchen drains or flushed down toilets cling to the insides of sewer pipes causing a build-up. Trash passing through the pipes clings to the build-up, until eventually the flow in the pipe is restricted. The result is untreated wastewater backing up on private property, in homes, and in the street. The clean-up is expensive and unpleasant and very often must be paid for by the homeowner.

Tips on proper disposal of fats, oils, and greases— **NEVER** pour grease down sink drains, garbage disposals, or into toilets. Instead, use an old glass jar or can as a grease receptacle and pour ALL grease and oil into it for disposal.

Use a paper towel to clean up excess grease residue left in pots, pans, and utensils.

Scrape food scraps from pots, pans, utensils, plates, and cooking surfaces

Into the trash.

Explain to family and friends the problems caused by the improper disposal of fats, oils, and greases.

Backups can be costly to homeowners, and the removal of sewer back-ups in the streets affects sewer service rates for everyone.

DID YOU KNOW? All food service establishments discharging into the sewer system must install, operate, clean, and maintain a sufficiently sized grease trap to prevent fats, oils, and greases from causing costly blockages in the sewer system, damage to equipment, and operational malfunctions at the wastewater treatment plant.

Reporting Illicit Discharges

An illicit discharge is any discharge not composed entirely of "stormwater" into a municipal sewer system. Many are unintentional household activities such as dumping yard waste, washing machine or dishwasher water, motor oil, kitchen grease, paint, weed killers, etc. into the yard or storm drain. These pollutants find their way into our streams and eventually into a drinking water supply causing health and water quality problems, harm to aquatic life, as well as destruction of the natural habitat.

Indications of an illicit discharge in stormwater:

Unusual color or cloudiness.

Strong pungent or musty odor.

Floating debris.

Surface scum or foam.

Oil sheen.

Algae.

Call (770) 949-7617 to report sources of pollution you witness along the roadside, rest areas, parking lots, etc., including dumping of waste/oil or other vehicle fluids and suspicious pipes outletting to ditches.

How to Contact Us

Main Office:	**(770) 949-7617**
After hours emergency:	**(770) 942-6633**
Customer Service Dept.:	**(770) 920-3823**
Web site:	**www.ddcwsa.com**

Lead and Your Water: If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. WSA is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds 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 *http://www.epa.gov/safewater/lead.*

While WSA tests for hundreds of contaminants in your water, only a few were detected in 2007 & none pose a significant health risk. WSA also monitors for unregulated parameters to assist EPA in determining where certain contaminants occur & whether additional regulations may be necessary. All laboratory testing results are available for public inspection. For more information call 770- 949-7617. The results in these tables are from tests performed in the WSA & Georgia Environmental Protection Division's laboratories. Results (except lead & copper) are based on blended WSA & Cobb/Marietta water.

HELPFUL HINTS

Maximum Contaminant Level (MCL): 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.

Maximum Contaminant Level Goal (MCLG): 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.

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

Milligrams per Liter (mg/L): one milligram per liter is equivalent to one minute in 2 years or one penny in 10 thousand dollars.

Micrograms per Liter (ug/L): one microgram per liter is equivalent to one minute in 2,000 years or one penny in 10 million dollars.

ND: none detected

NA: not applicable

NTU: Nephelometric turbidity unit

*MCL based on rolling 4QRT average for all sample points.

**Samples Collected June 1 - September 30, 2007.

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

TABLE OF CONTAMINANTS

INORGANIC CONTAMINANTS

CONTAMINANT (units)	MCL	MCLG	Average Level Detected/Range Detected	Pass?	Major Sources
Fluoride (mg/L)	4	4	0.96 (0.0 - 1.00) mg/L	Y	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
CONTAMINANT (units)	**MCL**	**MCLG**	**Highest Level Detected/Range Detected**	**Pass?**	**Major Sources**
Nitrate (mg/L)	10	0	1.3 mg/L (0.22 - 1.30 mg/L)	Y	Runoff from fertilizer use; leaching from septic tanks; sewage; erosion of natural deposits

LEAD AND COPPER MONITORING

CONTAMINANT (units)	AL***	MCLG	90th Percentile Value/Number of samples exceeding AL	Pass?	Major Sources
Lead (ug/L)	15***	0	2.5 ug/L (0 samples exceeded the AL)**	Y	Corrosion of household plumbing systems; erosion of natural deposits
Copper (ug/L)	1,300***	1,300	100 ug/L (0 samples exceeded the AL)**	Y	

VOLATILE ORGANIC CONTAMINANTS (UNREGULATED)

CONTAMINANT (units)	MCL	MCLG	Average and Level Detected	Pass?	Major Sources
Bromodichloromethane(ug/L)	NA	NA	3.0 ug/L	Y	By-product of drinking water chlorination
Chlorodibromomethane(ug/L)	NA	NA	0.72 ug/L	Y	By-product of drinking water chlorination
Chloroform (ug/L)	NA	NA	5.8 ug/L	Y	By-product of drinking water chlorination

VOLATILE ORGANIC CONTAMINANTS (REGULATED)

CONTAMINANT (units)	MCL	MCLG	Highest Rolling Average/Range Detected	Pass?	Major Sources
Total Trihalomethanes (ug/L)	80*	0	50.1 ug/L (12.8 - 99.4 ug/L)	Y	By-product of drinking water chlorination
Total Haloacetic Acids (ug/L)	60*	NA	27.7 ug/L (3.3 - 40.2 ug/L)	Y	By-product of drinking water chlorination
CONTAMINANT (units)	**MCL**	**MCLG**	**Average Level Detected/Range Detected**	**Pass?**	**Major Sources**
Total Organic Carbon	TT≥35%	NA	45% (35%-53%)	Y	Naturally present in environment, soil runoff

Percentage of total organic carbon removed.

TURBIDITY

PARAMETER	MCL	MCLG	Highest Level Detected/Lowest % of Samples < 0.30 NTU	Pass?	Major Sources
Turbidity (NTU)	TT	NA	0.28 100%	Y	Soil Runoff

Turbidity is the measure of the cloudiness of water and an indicator of water quality. High turbidity can hinder the effectiveness of disinfectants. Each month, 95 percent of turbidity samples must be less than or equal to 0.30 NTU. None may exceed 1 NTU.

MICROBIOLOGICAL CONTAMINANTS

CONTAMINANT	MCL	MCLG	Highest Monthly % of Positive Samples	Pass?	Major Sources
Total Coliform Bacteria	≤5% positive samples during a monthly testing period	0 positive samples during a monthly testing period	1.0%	Y	Coliform bacteria are naturally present in the environment

FREE CHLORINE RESIDUAL

CONTAMINANT (units)	MCL	MCLG	Average Value	Pass?	Major Sources
Free Chlorine (mg/L)	4	NA	1.08 mg/L	Y	Chemical added for disinfection