Atlanta Water Quality Report 2002 WSID 1210001

The City of Atlanta Department of Watershed Management is pleased to provide the 2002 Water Quality Report (WQR). During 2002, your community's drinking water met or exceeded all safety and quality standards set by the State of Georgia and U.S. Environmental Protection Agency (EPA).

Annually, we collect over 12,000 samples of untreated (raw) and treated (finished) water and conduct over 50,000 tests, screening for more than 150 potential contaminants. The regulated substances that were detected are listed in the Water Quality Table. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The water also was tested for hundreds of undetected compounds.

Our Monitoring Program

The Safe Drinking Water Act (SDWA) requires water systems to monitor for unregulated parameters in order to assist the EPA in determining where certain contaminants occur and whether additional regulations may be necessary.

In 1998, the City of Atlanta participated in a monitoring program called the Information Collection Rule (ICR). Monitoring data from this program (WQ Table) shows the presence of disinfection byproducts as a result of the reaction between chlorine and naturally occurring organic matter in the water.

Based on the results from water systems throughout the United States, new regulations have gone into effect. Our current monitoring results meet the new regulations. (WQ Table Organic Contaminantes)

In 2002, the first round of monitoring was conducted for additional "unregulated parameters" under a program called the Unregulated Contaminant Monitoring Rule (UCMR). None of the "unregulated contaminants" for which the federal or state rules require monitoring were detected in our water system.

Sources of Your Water

Each day, the Atlanta water system provides approximately 120 million gallons of treated drinking water to nearly 1 million residents in the metropolitan Atlanta area.

All the water processed is surface water that is pumped from the Chattahoochee River. The raw water intake for the Chattahoochee and Hemphill Water Treatment Plants is located on the Chattahoochee River, north of Peachtree Creek.

The Chattahoochee Plant receives the water directly from the river. The Hemphill Plant processes raw water that has been pumped from the river to a reservoir.

These two plants supply about 75 percent of Atlanta's drinking water. The remaining water is supplied by the Atlanta-Fulton County Water Treatment Plant, which also processes water from the Chattahoochee River. This plant supplies treated (finished) water to the northeast area of our distribution system.

Although we experienced no violations related to water quality in 2002, new federal regulations require continuous monitoring of drinking water for turbidity at each of our 28 individual filters. On January 1, 2002, an overnight mechanical failure on one of the filters' continuous monitoring systems occurred.

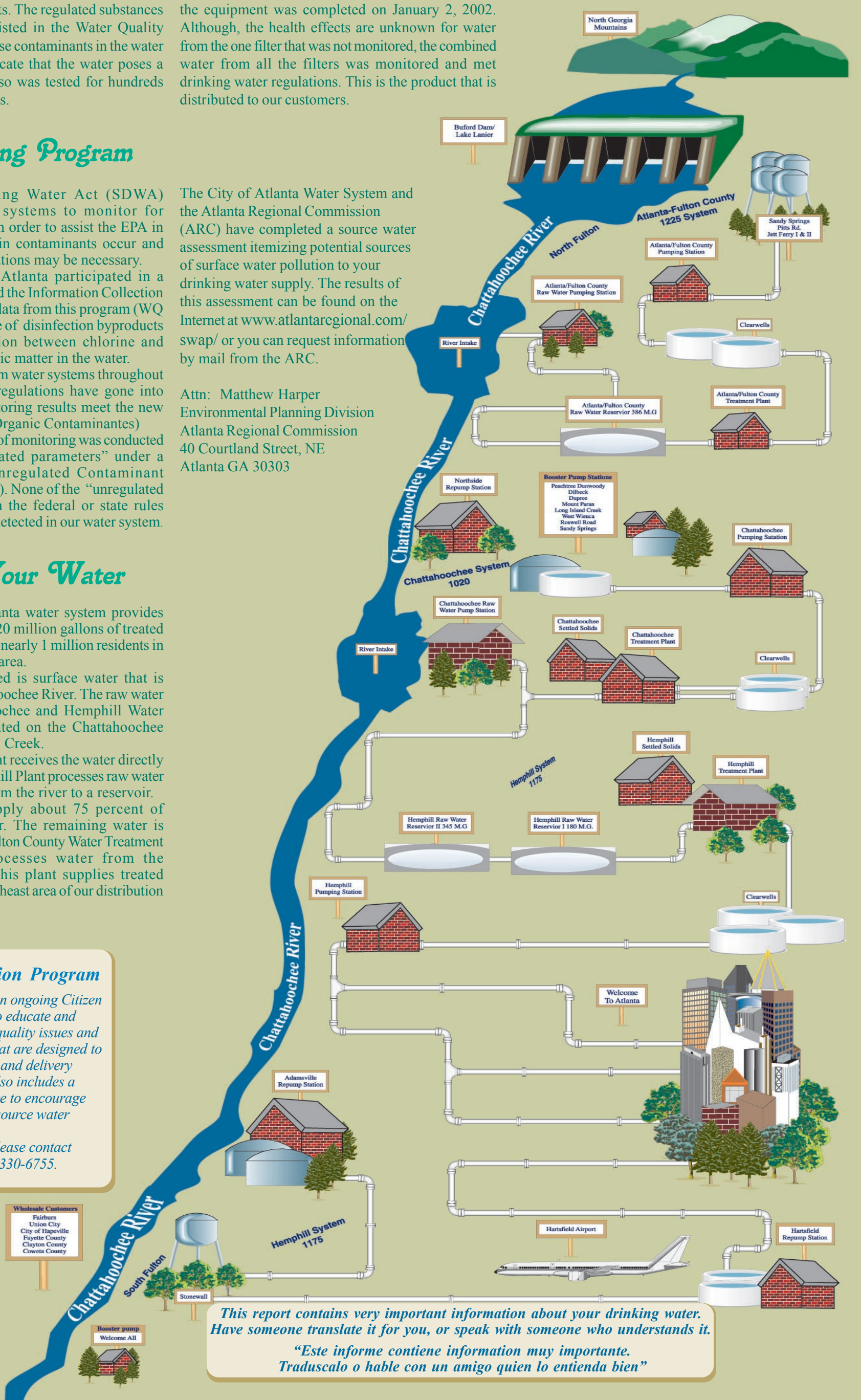
Manual monitoring in accordance with the new regulation was not conducted, and therefore, the monitoring requirement was not met. The repair on the equipment was completed on January 2, 2002. Although, the health effects are unknown for water from the one filter that was not monitored, the combined water from all the filters was monitored and met drinking water regulations. This is the product that is distributed to our customers.

The City of Atlanta Water System and the Atlanta Regional Commission (ARC) have completed a source water assessment itemizing potential sources of surface water pollution to your drinking water supply. The results of this assessment can be found on the Internet at www.atlantaregional.com/swap/ or you can request information by mail from the ARC.

Attn: Matthew Harper
Environmental Planning Division
Atlanta Regional Commission
40 Courtland Street, NE
Atlanta GA 30303

Notification of this incident was distributed to the public on July 1, 2002.

The City of Atlanta Bureau of Water is pleased to have the opportunity to serve you in the future. Our goal is to provide our customers with the level of water service they expect and deserve. The Bureau's mission is to provide high quality, dependable drinking water at the lowest possible cost.



Citizen Participation Program

The City of Atlanta has an ongoing Citizen Participation Program to educate and inform citizens of water quality issues and infrastructure projects that are designed to improve water treatment and delivery systems. The program also includes a public education initiative to encourage water conservation and source water protection.
For more information, please contact Marilyn Johnson at 404-330-6755.

This report contains very important information about your drinking water. Have someone translate it for you, or speak with someone who understands it.

"Este informe contiene information muy importante. Traduscalo o hable con un amigo quien lo entienda bien"

Government Regulation of Potential Contaminants

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 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.

Contaminants that may be present in source water before we treat it include:

- *Microbial contaminants*, such as viruses and bacteria, which 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 stormwater runoff, industrial or domestic wastewater discharges, oil and gas production and mining or farming.
- *Pesticides and herbicides,* which may come from a variety of sources such as agriculture, stormwater runoff and residential uses.
- *Organic chemical contaminants,* including synthetic and volatile organic chemicals, which are byproducts 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 results 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 contaminants in bottled water which must provide the same protection for public health.

Regulated Contaminants Sample Date 2002/ Water Quality Table

Microbiological Monitoring Results: Total coliform bacteria-highest percentage of positive samples collected in one month

PARAMETER	MCL	MCLG	DETECTED LEVEL	VIOLATION NO/YES	TYPICAL SOURCE
TOTAL COLIFORM BACTERIA (entire distribution system)	presence of coliform bacteria in 5.0% of monthly samples	0	3.1%	No	Naturally occurring

Turbidity: Highest single turbidity measurement, and lowest montly percentage of samples less than 0.3 NTU

WATER TREATMENT PLANTS	PARAMETER/UNITS	MCL	DETECTED LEVEL	VIOLATION NO/YES	TYPICAL SOURCE
Hemphill & Chattahoochee: (combined distribution system)	Turbidity (NTU) Turbidity (% of samples)	TT = 1 NTU TT=95% of samples <0.3 NTU	0.9 NTU 99%	No No	Soil runoff and erosion
Atlanta-Fulton County	Turbidity (NTU) Turbidity (% of samples)	TT = 1 NTU TT=95% of samples <0.3 NTU	0.02 NTU 100%	No No	

Inorganic Contaminants

WATER TREATMENT PLANTS	PARAMETER/UNITS	MCL	MCLG	DETECTED LEVEL	RANGE OF DETECTIONS	VIOLATION NO/YES	TYPICAL SOURCE
Hemphill & Chattahoochee: (combined distribution system)	Fluoride/ppm	4	4	1.0	0.9-1.0	No	Water additive
	Nitrate as Nitrogen/ppm	10	10	1.4	1.2-1.5	No	Fertilizer runoff
Atlanta-Fulton County	Fluoride/ppm	4	4	1.0	1.0-1.0	No	Water additive
	Nitrate as Nitrogen/ppm	10	10	0.31	N/A	No	Fertilizer runoff

Entire Distribution System

PARAMETER/UNITS	MCL	MCLG	DETECTED LEVEL	RANGE OF DETECTIONS	VIOLATION NO/YES	TYPICAL SOURCE
Copper/ppm	AL=1.3	1.3	0.3	52 samples, no sites were found above the AL	No	Household plumbing
Lead/ppb	AL=15	0	2.6	52 samples, 1 site was found above the AL	No	Household plumbing
Chlorine/ppm	4(MRDL)	4(MRDG)	0.7	<0.05-1.9	No	Water additive

Lead and Copper: 90th percentile value of samples collected from the most recent round of sampling

Organic Contaminants

PARAMETER/UNITS	MCL	MCLG	DETECTED LEVEL	RANGE OF DETECTIONS	VIOLATION NO/YES	TYPICAL SOURCE
Total Trihalomethanes (TTHM)/ppb	80	NA	40	15-90	No	Byproduct of drinking water chlorination
Haloacetic acids (HAA5)/ppb	60	NA	47	2-93	No	
Total Organic Carbon (TOC)/ppm Hemphill and Chattahoochee	TT	NA	1.5	1.1-2.1	No	Naturally present
Total Organic Carbon/ppm Atlanta-Fulton County	TT	NA	1.0	0.9-1.2	No	

Note: TOCs = Monthly Average: TTHMs and HAA5 = Annual averages for 2002

Unregulated Contaminants- ICR (Sample Date 1998)

SUBSTANCE (UNIT)	MCL	DETECTED LEVEL	RANGE OF DETECTIONS	TYPICAL SOURCE
Total Trihalomethanes (ppb)	NR	33	13-65	Treatment Process
Chloral hydrate (ppb)	NR	11.5	5.8-18	Treatment Process
Haloacetic acids (ppb)	NR	35	13-69	Treatment Process
Chloropicrin (ppb)	NR	0.6	0.5-0.8	Treatment Process
Haloacetonitriles (ppb)	NR	2.5	0.6-5.2	Treatment Process
Haloketones (ppb)	NR	4.5	ND-10.4	Treatment Process
Chlorine residual, free (ppm)	NR	0.69	0.1-2	Treatment Process
Chlorine residual, total (ppm)	NR	0.84	0.1-2.3	Treatment Process
Total organic halogens (ppb)	NR	106	ND-261	Treatment Process

AL=Action Level; ICR=Information Collection Rule; MCL=Maximum Contaminant Level; MCLG=Maximum Contaminant Level Goal; MRDL=Maximum Residual Disinfectant Level; MRDLG=Maximum Residual Disinfectant Level Goal; NA=Not Applicable; ND=Not detected at testing limit; NR=Not regulated; NTU=Nephelometric Turbidity Unit; ppb=Parts per billion or micrograms per liter (one part per billion is equivalent to one penny in 10 million dollars.); ppm=Parts per million or milligrams per liter (one part per million is equivalent to one penny in 10 thousand dollars.); TT=Treatment Technique

Table Definitions

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."*

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

Maximum Residual Disinfectant Level Goal (MRDLG): *"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."*

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

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

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

Our Results

We did not find any *Cryptosporidium* in our finished (treated) water, however, our source water monitoring indicated the presence of *Cryptosporidium* in the Chattahoochee River (raw water supply).

Cryptosporidium is a microbial parasite found in surface water throughout the United States. When ingested, it can cause nausea, diarrhea and abdominal cramps. *Cryptosporidium* must be ingested to cause disease; however, it may be spread through means other than drinking water.

Most healthy individuals are able to overcome the disease within a few weeks.

Immuno-compromised people have more difficulty and are at greater risk of developing severe, life-threatening illnesses and are encouraged to consult their doctor regarding appropriate precautions to prevent infection.

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 the 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).**

Contact:

City of Atlanta
Bureau of Water
Water Quality Laboratory
650 Bishop Street
Atlanta GA 30318
404-982-1458
To obtain a copy of this report, please visit
www.ci.atlanta.ga.us/citydir/water/wqr2002.pdf
Please send your comment & feedback
citywater@ci.atlanta.ga.us

Notice: "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 disorder, 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 (800-426-4791).

City of Atlanta
Department of Watershed Management
Protecting Our Future