



# 2010 Water Quality Report

Spartanburg Water - ID No. 4210001  
Calendar Year 2010

## Spartanburg Drinking Water Surpasses All Standards

We at Spartanburg Water are pleased to present you with our 2010 Water Quality Report. We are proud to announce that we continue to meet and surpass all state and federal water quality standards under the Safe Drinking Water Act.

In order to protect you, our valued customer, the United States Environmental Protection Agency (EPA) and the South Carolina Department of Health and Environmental Control (DHEC) have established strict standards for drinking water. These standards protect consumers from waterborne disease organisms and harmful chemicals. On an annual basis, the EPA requires all public water systems to provide customers with information about water quality and compliance with environmental standards through Water Quality Reports.

Spartanburg Water meets standards significantly higher than current regulations. This notable performance is due in part to our participation in the South Carolina Area Wide Optimization Program (AWOP). Both the R.B. Simms and Lake Blalock Water Treatment Facilities participate in AWOP and were recognized by DHEC for achieving the program's goals. Spartanburg Water continues to partner with the EPA and the American Water Works Association (AWWA) as a member of the Partnership for Safe Water. The R.B. Simms and Lake Blalock Water Treatment Facilities received the Director's Award for this program.

As you examine this 2010 Water Quality Report, you will find detailed explanations of our testing and compliance records, facts about water, and the treatment processes. We invite you to learn more about us by visiting our Web site at [www.spartanburgwater.org](http://www.spartanburgwater.org).

## Where Does Our Water Come From?

At Spartanburg Water, surface water is drawn from three man-made lakes: **Lake William C. Bowen, Municipal Reservoir #1, and Lake H. Taylor Blalock.**

Lake Bowen, formed by the South Pacolet River and its tributaries, flows into Municipal Reservoir #1. The entire watershed for these lakes lies in Spartanburg and eastern Greenville Counties. The R. B. Simms Water Treatment Facility treats the water from these lakes.

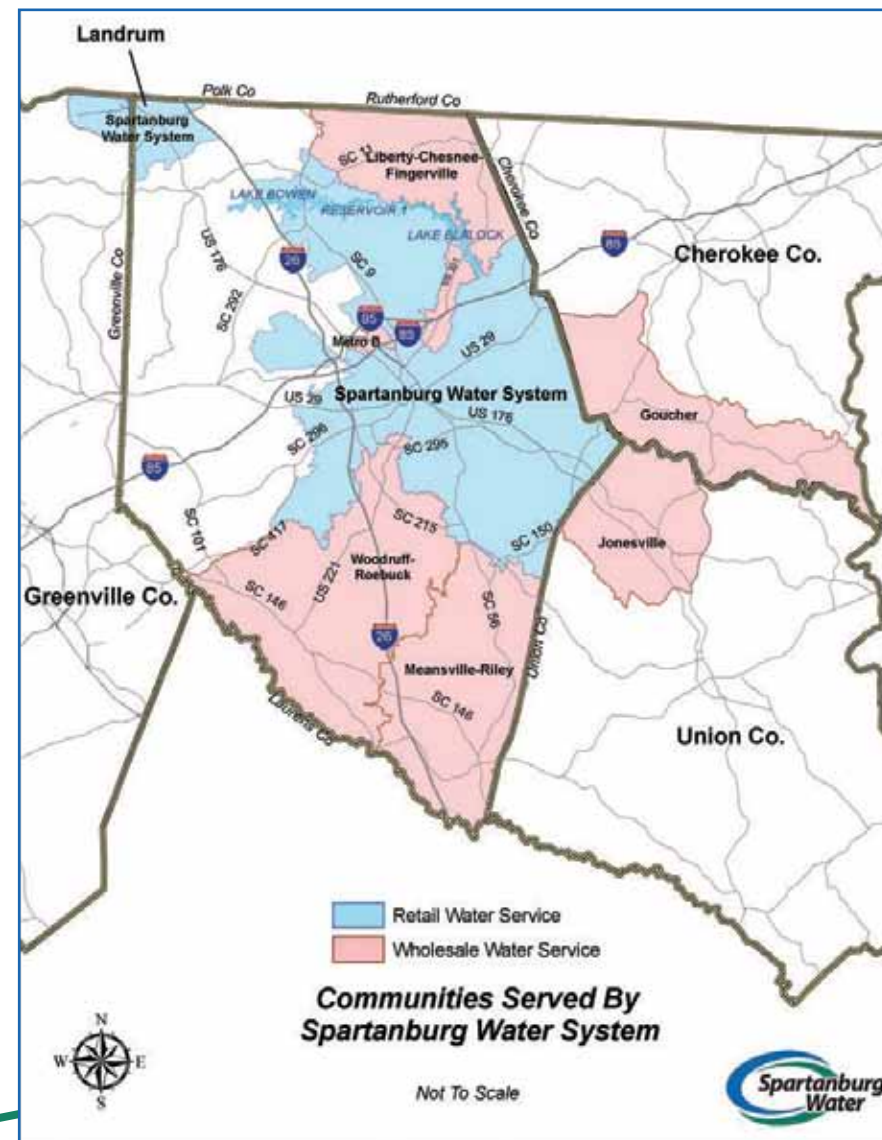
The North Pacolet River and its tributaries combine with the Lake Bowen/Reservoir #1 system to form Lake Blalock. The watershed for this lake lies in South Carolina and North Carolina. The Lake Blalock Water Treatment Facility treats the water from Lake Blalock. The Lake Blalock Water Treatment Plant was out of service during the entire 2010 calendar year for plant maintenance.

## Source Water Assessment

The Safe Drinking Water Act Amendments of 1996 require DHEC to perform a source water assessment for all drinking water supplies in South Carolina. This assessment consists of the following key elements: determining the geographic boundaries for each water supply, preparing a list of potential contamination sources within each area, and assessing the potential for pollutants to enter the water supply.

DHEC has completed the source water assessment for our water system. Potential contaminants identified in the report include volatile organic compounds

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(VOCs), petroleum products, metals, nitrates, pesticides/herbicides, and pathogens. Potential sources of these contaminants include gas stations, dry cleaners, agricultural areas, automobile repair shops, septic systems, and facilities where potential contaminants are used or stored.

For more information about the state’s source water assessment program and about watersheds, visit [www.scdhec.gov/environment/water/srcwtrreports.htm](http://www.scdhec.gov/environment/water/srcwtrreports.htm). Please contact Josh Smith at 864-582-3250, ext. 118, for more information about our source water assessment.

### Water Quality Terms

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

**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.

**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.

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

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

### What’s in Our Water?

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 it can pick up substances resulting from the presence of animals or from human activity. These substances are called “contaminants.”

#### Contaminants that can be present in water 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 storm water 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 storm runoff, and residential use;

**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 storm water runoff, and septic systems;

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

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). The EPA and DHEC prescribe strict regulations that limit the amount of certain contaminants allowed in tap water to ensure that it is safe to drink. The Food and Drug Administration establishes limit regulations for contaminants present in bottled water and also must provide protection for the public health.

We test our drinking water for more than 150 substances. Most of the results show that contaminants are not present in our drinking water, but there are some exceptions. The following tables list the contaminants that were found in our drinking water. State and federal regulations do not require us to examine the water for all contaminants during each calendar year. The information provided in these tables represents the most recent samples taken in accordance with the applicable regulations. Most samples were taken at the treatment plants at a position where the water enters into the distribution system, but coliform bacteria, trihalomethane, haloacetic acid, lead, and copper compliance samples were monitored from customer taps throughout the distribution system.

### Disinfectants and Disinfection By-products Measured in the Distribution System

Substance	MRDLG MCLG	MRDL MCL	Highest Level Found	Range of Levels Found	Date of Sample	Was MRDL or MCL Exceeded?	Typical Source
Chlorine	4	4 ppm	0.84 ppm	0.57 – 0.84	2010	No	Added for disinfection
Total Trihalomethanes	0	80 ppb	47 ppb	43 – 47	2010	No	By-product of disinfection
Total Haloacetic Acids	0	60 ppb	46 ppb	40 – 46	2010	No	By-product of disinfection

### Lead and Copper Measured in the Distribution System

Contaminant	Action Level (90%)	SWS 2010 (90%)	Number Over Action Level	Typical Source
Copper	1.3 ppm	0.19 ppm	0	Corrosion of household plumbing and erosion of natural deposits; leaching from wood preservatives
Lead	15 ppb	ND	0	Corrosion of household plumbing and erosion of natural deposits

### Coliform Bacteria Measured in the Distribution System

Substance	MCLG	MCL	Highest Level Found	Range of Levels Found	Date of Sample	Was MCL Exceeded?	Typical Source
Total Coliform	0	Present in no more than 5% of samples	.77 %	0 – .77 %	2010	No	Naturally present in the environment

### Regulated Substances Detected in SWS Finished Drinking Water

(Samples taken at the indicated treatment plant. The Lake Blalock Water Treatment Plant was out of service during calendar year 2010.)

Substance	MCLG	MCL	Highest Level Found	Range of Levels Found	Date of Sample	Was MCL Exceeded?	Typical Source
Fluoride* R. B. Simms	4 ppm	4 ppm	0.96 ppm	NA*	2010	No	Added to prevent tooth decay
Turbidity R. B. Simms	0	TT = 1 NTU TT = percentage of samples equal to or below 0.3 NTU	0.08 100%	0.02 – 0.08 NA	2010	No	Soil runoff
Total nitrate + nitrite R. B. Simms	1 ppm	1 ppm	ND	NA	2010	No	Naturally occurring and fertilizer runoff
Total Organic Carbon R. B. Simms	NA	TT = removal ratio of 1 or greater	Removal Ratio = 1.04	1.0 – 1.15	2010	No	Naturally occurring

\*Only fluoride results from samples taken by DHEC are given in the table. Daily monitoring of fluoride levels by Spartanburg Water’s certified laboratories during 2010 showed a range of 0.63-1.57 ppm for R.B. Simms.

### Substances Monitored for the Secondary Drinking Water Regulations

(Samples taken at the indicated treatment plant)

Substance	MCLG	MCL	Highest Level Found	Range of Levels Found	Date of Sample	Was MCL Exceeded?	Typical Source
Chloride R. B. Simms	No MCLG	250 ppm	4.9 ppm	3.0 – 6.1	2010	No	Naturally occurring
Fluoride R. B. Simms	No MCLG	2 ppm	0.94 ppm	.63 – 1.57	2010	No	Added to prevent tooth decay
pH R. B. Simms	No MCLG	6.5 - 8.5 SU	7.00	6.8 – 7.2	2010	No	Naturally occurring
Sulfate R. B. Simms	No MCLG	250 ppm	12.6 ppm	3.2 – 19.0	2010	No	Naturally occurring
Total Dissolved Solids R. B. Simms	No MCLG	500 ppm	62 ppm	43 – 76	2010	No	Naturally occurring
Zinc R. B. Simms	No MCLG	5000 ppm	36 ppb	10 – 110	2010	No	Added for corrosion control

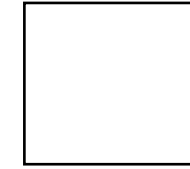
**Important Health Information** – Certain individuals can be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as persons with cancer and who are undergoing chemotherapy, persons who have undergone organ transplant, persons with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk for infections. These people should seek advice about drinking water from their health care providers. EPA/Center for Disease Control guidelines on the appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available by calling the Safe Drinking Water Hotline (1-800-426-4791).

**Lead Information** – 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. Spartanburg Water 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 are available from the Safe Drinking Water Hotline (1-800-426-4791) or at [www.epa.gov/safewater/lead](http://www.epa.gov/safewater/lead).

**Unregulated Contaminants** – Unregulated contaminants are those that don’t yet have a drinking water standard set by EPA. The purpose of monitoring for these contaminants is to help EPA decide whether the contaminants should have a standard. Spartanburg Water has been monitored for the Unregulated Contaminant Monitoring Regulation 2 (UCMR 2) in 2009. No detections were noted. If you would like to receive the list of contaminants monitored, please contact Josh Smith at 864-582-3250, ext. 118.



Spartanburg Water Main Office  
P.O. Box 251  
Spartanburg, SC 29304



## Do You Have Questions?

*Customer Service* – Please contact the Spartanburg Water Customer Service Department at 864-582-6375 if you have any questions about Spartanburg Water or this report.

*Web Site* – You can learn more about Spartanburg Water by visiting our Web site at [www.spartanburgwater.org](http://www.spartanburgwater.org).

*Commission Meetings* – The Commissioners of Public Works of the City of Spartanburg, SC, meet regularly throughout the year. The meetings are located at:

Spartanburg Water Main Office  
200 Commerce Street  
Spartanburg, SC 29306

For more information and a meeting schedule, please contact Susan Rimel at 864-580-5643.

### Other Sources of Information on Drinking Water

**EPA Safe Drinking Water Hotline**  
1-800-426-4791  
[www.epa.gov/drink/hotline/index.cfm](http://www.epa.gov/drink/hotline/index.cfm)

**National Sanitation Foundation**  
1-800-673-8010  
[www.nsf.org/consumer/drinking\\_water/index.asp?program=WaterTre](http://www.nsf.org/consumer/drinking_water/index.asp?program=WaterTre)

**DHEC**  
[www.scdhec.gov/environment/water](http://www.scdhec.gov/environment/water)

Este informe contiene informacion acerca del agua potable. Si usted desea recibir una copia de este informe en idioma esanol, comuniqués con Atencion al Cliente at 1-864-582-6375.

## Our Mission

The mission of Spartanburg Water is to provide quality water and wastewater services to our region in a reliable manner. We are proudly committed to protecting public health, being good stewards of the environment and supporting our community's desired quality of life.