**October 24, 2007**

**New to Being Dry, the South Struggles to Adapt**

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| **By SHAILA DEWAN and BRENDA GOODMAN** |

ATLANTA, Oct. 22 — For more than five months, the lake that provides drinking water to almost five million people here has been draining away in a withering drought. Sandy beaches have expanded into flats of orange mud. Tree stumps not seen in half a century have resurfaced. Scientists have warned of impending disaster. And life, for the most part, has gone on just as before.

The response to the worst drought on record in the Southeast has unfolded in ultra-slow motion. All summer, more than a year after the drought began, fountains sprayed and football fields were watered, prisoners got two showers a day, and Coca-Cola's bottling plants chugged along at full strength. On an 81-degree day this month, an outdoor theme park began to manufacture what was intended to be a 1.2-million-gallon mountain of snow. By September, with the lake forecast to run out of water in less than four months, the state imposed a ban on outdoor water use.

Gov. Sonny Perdue of Georgia declared October "Take a Shorter Shower Month." And Saturday, Mr. Perdue declared a state of emergency for more than half the state and asked for federal assistance, though the state has not yet restricted indoor water use or cut back on major commercial and industrial users, a step that could cause a significant loss of jobs.

These last-minute measures have been common in Georgia and across the South when it comes to managing and conserving water, even in the face of rapid growth. Between 1990 and 2000, water use in Georgia increased 30 percent. But the state has not yet come up with an estimate of how much water is available during periods of normal rainfall, much less a plan to handle the worst-case event — dry faucets.

"We have made it clear to the planners and executive management of this state for years that we may very well be on the verge of a statewide drought emergency," said Mark Crisp, a water expert in the Atlanta office of the engineering firm C. H. Guernsey.

But a sense of urgency has been slow to take hold. Last year, a bill died in the Georgia Legislature that would have required that low-flow water devices be installed in older houses before they are resold. Most golf courses are classified as "agricultural." Water permits are still approved first come first served. And Georgia is not at the back of the pack. Alabama, where severe drought is even more widespread, is even further behind in its planning.

A realistic statewide plan, experts say, would tell developers that they could not build if no water was available, and might have restricted some of the enormous growth in the Atlanta area over the last decade. Already, officials have little notion how to provide for a projected doubling of demand over the next 30 years. The ideas that have been floated, including piping in water from Tennessee or desalinating (*removing salt from*) ocean water, would require hundreds of billions of dollars. Law Center.

Instead, Georgia has engaged in never-ending arguments with neighboring states over dam releases and flow rates. The latest effort at mediation with Alabama fell apart just last month. And Georgia officials insist that Atlanta would have plenty of water were it not for the Army Corps of Engineers, which they say has released more water from its main source of water, Lake Lanier, than is necessary to protect three endangered species downstream.

"We are not here because we consumed our way into this drought, as some would suggest," said Carol Couch, Mr. Perdue's director of environmental protection. Those making that argument against Georgia include many people in Florida, the only state in the region to have adopted a water plan and home to the downstream end of the basin that includes Lake Lanier. An editorial Friday in the St. Petersburg Times said that the blame lay not with the corps but with "a record drought, unrestrained population growth and poor water-conservation habits."

Bruce A. Karas, vice president of sustainability for Coca-Cola, said no one from the City of Atlanta or its water-planning district had approached company officials to ask them to conserve water. Mr. Karas said the company had worked to reduce consumption on its own since 2004. "We're very concerned," Mr. Karas said. "Water is our main ingredient. As a company, we look at areas where we expect water abundance and water scarcity, and we know water is scarce in the Southwest. It's very surprising to us that the Southeast is in a water shortage."

Mary Kay Woodworth, executive director of the Metro Atlanta Landscape and Turf Association, said almost 14,000 workers in landscaping and other businesses that depend on planting and watering had lost their jobs. "This is a precious natural resource, and it has not been managed well," Ms. Woodworth said. "That's one of the reasons we're in this situation today. The infrastructure was not in place for the development."

Some environmentalists criticize the district, saying its requirements are weak and its progress unmeasured. The district's projections, they say, are based on an outdated estimate of water availability, provided by the state, which does not take into account climate change. Pat Stevens, chief environmental planner for the Atlanta Regional Committee, which provides employees to the water district, said the plan was being revised and the requirements would tighten.

"You can't just do this overnight," Ms. Stevens said. "Otherwise, you will close businesses." In January, the Legislature will consider a proposal to expand the planning process statewide. State officials defend their response, saying the drought got very bad very quickly.

And Georgia is not the only state in trouble. The drought has afflicted most of the Southeast, a region that is accustomed to abundant water and that tends to view mandatory restrictions as government meddling. Lake Lanier is part of the Apalachicola-Chattahoochee-Flint River system, which forms much of the border between Georgia and Alabama and then spills into Florida. There, the river provides a habitat for two types of mussel and a sturgeon that are endangered.

In response to Mr. Perdue's complaints, the Army Corps of Engineers has agreed to consult the federal Fish and Wildlife Service, which protects endangered species, about modifying flow requirements in the Apalachicola River.

With a public anxious over the possibility of running out of water, the corps has not been the only entity to shoulder blame. On Oct. 1, Stone Mountain Park began to make snow for a winter mountain, hoping to attract children who had not seen the real thing. The mountain was planned during the very wet summer of 2005, and the state and local governments were duly informed, said Christine Parker, a spokeswoman for the park.

The state announced a Level 4 drought response on a Friday and, after park officials reviewed the list of exceptions for businesses, snow-blowing began the following Monday, before much of the public had fully grasped the severity of the situation. After the project was ridiculed in *The Atlanta Journal-Constitution*, the park shut it down. Ms. Parker said that only then did the park hear from state environmental authorities.

Stone Mountain had never intended to take a uncaring attitude toward the drought, Ms. Parker said, but had not been given any guidance.

"A lot of businesses are having to go out and ask the right questions," she said, "so they can do the right thing."

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**Considering Human-Environment Interaction in the Real World:**

**“New to Being Dry, the South Struggles to Adapt” (*NY Times*, 2007)**

**As you read the attached *New York Times* article, consider the following questions:**

1. How does this article provide a real-world example of the geographic theme of human-environment interaction?
2. How did humans adapt to and/or modify the environment as a result of the 2007 drought in Atlanta? Provide specific examples from the article to support your claims.
3. According to the article, what factors are causing (or worsening the effects of) the drought?
4. How did the drought affect local businesses in Atlanta? How did the drought affect individuals?
5. This article identifies an environmental problem that had the potential to significantly affect the lives of those living in Atlanta, Georgia in 2007. As you read, the problem was complex, and there was no simple solution.
	1. According to the article, what solutions were proposed to lessen the effects of the drought and/or prevent future drought-related emergencies?
	2. How would YOU address the issue? Would you adapt to and/or modify the environment? What steps would you take to lessen the effects of the water shortage? Be sure that your strategy is specific and addresses the concerns discussed in the article.

**🡪 WRITE YOUR ANSWER TO #5 ON THE BACK OF THIS PAGE OR ATTACH LINED PAPER. 🡪**