

Transcript: How Atlanta Outsmarted Its Drought

Reported by Laurie Howell

Anne Steinemann: Drought's often called the creeping disaster, because it develops very slowly and unlike other natural hazards, which tend to be very dramatic, such as hurricanes or earthquakes, it's often easy to ignore a drought until it's too late.

Kathy Nguyen: I don't have water for fire hydrants to fight fires or to serve basic public health and safety--it's not that I want to close this business, that I don't have a choice.

Mary Kay Woodworth: In 2005, there were about 8,000 companies throughout the state in the landscape--all kinds of related industries, with about, I'd say, 70,000 employees. By the end of 2007, it was half.

Anne Steinemann: Drought's been called one of the most costly natural disasters in America. The cost can be several billion dollars a year. Drought affects nearly everybody. There's no sector or region that's immune to drought.

Anne Steinemann: Even though many times drought starts out with a deficit in precipitation, you can nonetheless have a drought even if it's very rainy. Again, going back to the classic definition, it's when supplies are inadequate to meet demands.

Anne Steinemann: My name is Anne Steinemann. I'm a professor in civil and environmental engineering. I'm also professor in the School of Public Affairs here at the University of Washington, and my research is in water management and climate and looking at ways that science can help with decision making in preparing for and adapting to drought conditions.

[Clip from newscast: "From WABE News in Atlanta, I'm Steve Goss. State officials say Georgia is prepared to make it through another drought-stricken summer, but only if residents conserve enough water. From Georgia Public Broadcasting]

Anne Steinemann: One of the projects that I did was in the state of Georgia, and it was through a four-year process. I worked with more than 150 stakeholders in the state representing the different sectors. I worked with state water managers and government officials to try to understand how they viewed drought, what their pressing needs were, and how the science could help them reduce the impacts.

Anne Steinemann: What I developed was a drought-monitoring system with the indicators that used a system based on percentiles. So, for instance, precipitation in a certain region of the state was 25 percent of normal. That was something they could readily see and understand and use. We developed this system for all the indicators across the state.

Kathy Nguyen: I do think it gave us a framework, and so there was less chaos--there was a framework, there were indicators, there was a level declared in 64 counties, so you knew where you were and it was easier to communicate that to the citizens.

Kathy Nguyen: I'm Kathy Nguyen, and I'm the water efficiency manager for Cobb County Water System. We're one of the largest counties in metro Atlanta, and we serve about 650 000 people.

Kathy Nguyen: It's my job every day to make the decisions about drought management as it fits into the state drought plan. Most of the indicators are really hydrologic and climatological that triggers our plan. They are the soil moisture; they're stream flows, reservoir levels, groundwater tables, rainfall.

Kathy Nguyen: The drought got so severe here in Atlanta we went to what is unofficial Level 5, which is executive order by the governor for a mandated 10 percent reduction. March of 2008, the governor loosened up and allowed pools to be opened, and he allowed hand watering for 25 minutes--but we remained at Level 4.

Kathy Nguyen: It was very, very difficult with those who make their living in water-dependent businesses that were at that time automatically hierarched and said this is essential and this is not, but when you make your living doing that, it is essential.

Mary Kay Woodworth: Hello, this is Mary Kay with MALTA ...

Mary Kay Woodworth: I'm Mary Kay Woodworth, executive director of the Metro Atlanta Landscape and Turf Association.

Mary Kay Woodworth: Um, well let me ask you how you searched for that. Did you put in the county where you live? Okay.

Mary Kay Woodworth: We are a trade association for the landscape industry in Georgia and we educate and advocate and provide member services to the landscape industry.

Mary Kay Woodworth: When we went to Level 4 restriction in the end of September of 2007, businesses just closed down, laid people off--furloughed people. The industry between January of 2007 and the end of 2007 lost over [US] \$3 billion.

Mary Kay Woodworth: In the last two and a half years as we've had the drought and the water restrictions that are put in place because of the drought, I've learned tremendously where the water comes from, why we are in drought, the indicators that put you in different drought levels, and just the need for all users to have access, to have water, including businesses.

Anne Steinemann: That's where my research came in, is to be able to characterize these different indicators of drought scientifically, and provide that information to decision makers so that they know when and how to take early action to try to reduce future impacts. So they can not only see a drought coming and characterize its severity but also have some understanding of the likely progression of the drought, if it's going to get more severe or if it's going to be ameliorated.

[Clip from newscast: From WABE News, I'm Dennis O'Hare. After reviewing a pattern of improved water conditions, the head of Georgia's Environmental Protection Division today said the state's almost three-year-long drought is finally over, and that means you can go back to watering, without restrictions]