Drought taught region painful

Growth, Pacific weather cycles may again stress area's water supply

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Worried faces of farmers meeting with Gov. Mark Sanford in Pickens last year are etched in Dennis Chastain's memory as the state Drought Response committeeman anticipates an El Nino weather pattern ahead.

A La Nina pattern "at the root" of the past three years of sub-normal precipitation "has finally disappeared. It is gone. So we can comfortably say that this drought cycle has ended," Chastain said.

The drought response committee has declared all of South Carolina out of a drought that lowered Lake Hartwell a previously unthinkable 22 feet, dried up homeowners' wells and had livestock owners frantically searching for hay.

As he met with the farmers and the governor last year, Chastain said he "honestly thought 'this thing is going to last forever.' It's been a dramatic turnaround."

lessons

However, the Climate Prediction Center of the National Weather Service recently reported that conditions are favorable for formation of an El Nino off the California coast.

An El Nino — a body of warm water as opposed to cold in La Nina — generally means colder and wetter weather but can be unpredictable, Chastain said. South Carolina has experienced drought during some El Nino years.

While the return to normal and above normal rainfall ended the recent three years of drought, state climatologist Hope Mizzell said South Carolina really has experienced "a decade of drought," with the exception of short recoveries in 2003, 2005 and 2006.

Residents "need to continue to be aware of this as our state continues to grow," Mizzell said. With growth, more "straws" will be in the water glass. As more demands are placed on South Carolina's water, "It will take shorter and shorter periods of limited rainfall before the impacts are felt."

Lessons have been learned and changes wrought by this drought, said Scott Willett, director of the Anderson Regional Joint Water System, which draws Lake Hartwell water for 14 member systems in Pickens and Anderson counties including Anderson, Clemson and Clemson University.

Area water providers "spent time revisiting their drought plans," instituted triggers to begin earlier drought action and became a more "cohesive."

"The severity of the drought forced everyone to act in a unified manner rather than as individuals. That will be helpful in the future," Willett said.

"We need to revisit water management plans," he said. "You learn a lot when there are problems out there. Problems teach you lessons."

Mike Massey, a Lake Hartwell Association board member, said there is work to do in terms of how the basin is managed — outflows and trigger points — and adoption of a new state water plan his group wants.

The Corps of Engineers allowed flow from Upstate lakes to be reduced this past winter and spring, and that action, with the rain, helped bring recovery, Massey said. He wants to see the Corps repeat that action in future years, or even better, lower outflows all through the year and set an earlier drought trigger to further stem the amount of water sent downstream from Upstate lakes.

After every drought of record, the Corps conducts a "lessons learned" study, said Billy Birdwell, a Corps spokesman. This has been a drought of record in that it was longer and deeper than any drought since the Corps dams were built, and "that kind of reflection will take place."

The Corps will analyze what worked and what didn't "and apply that to perhaps changing operations," Birdwell said.

A comprehensive Savannah Basin study, from above Hartwell to the ocean, has been requested for at least five years, but no money has been available, Birdwell said. An economic study of lake levels' impact has started, funded in part by the Corps and the six Georgia and South Carolina counties bordering the lake.

Last Friday, Lake Hartwell was 2.6 feet below full pool, Lake Jocassee was 2.2 feet below full pool, and Lake Keowee was 4.8 feet below full pool, according to U.S. Army Corps of Engineers and Duke Energy.