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Engineers official says

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HARTWELL — U.S. Army Corps of Engineers spokesman Billy Birdwell said Hartwell Lake is close to reaching full pool — something unthinkable the past three years during the record-breaking drought that hit South Carolina and virtually the entire Southeast.

Birdwell said Hartwell Lake is presently at 657.23 feet above mean sea level and 660 feet is considered full pool or maximum capacity. In comparison, the lake was at 650.23 this time a year ago.

"We would like to be at 660, and we're still rising," Birdwell said, adding that September 2005 was the last time Hartwell Lake was at full pool.

Hartwell Lake is among the largest and most popular public recreation lakes in the Southeast. Built by the U.S. Army Corps of Engineers between 1955 and 1963 as part of a flood control, hydropower and navigation project, authorized purposes now include recreation, water quality, water supply and fish and wildlife management. The lake borders Georgia and South Carolina on the Savannah, Tugaloo and Seneca rivers.

The lake, whose full pool power was designated by the Corps to be 660 feet above mean sea level, comprises nearly 56,000 acres of water with a shoreline of 962 miles.

In order to maintain balance, the Corps will lower lake levels at Hartwell to raise the levels at Lake Russell and Lake Thurmond, the final place where the Corps can control water outflow before it goes into the lake system.

As was the case with other lakes, Hartwell was severely impacted by the record-breaking drought.

Level 1 was triggered at the end of June 2007, resulting in a flow reduction to a maximum weekly average release of 4200 cubic feet per second (cfs) at Thurmond Dam. Drought Level 2 was triggered in mid-August 2007, resulting in a flow reduction to a maximum weekly average release of 4000 cfs at Thurmond Dam and, as an additional conservation measure, the district was able to gain agreement from other federal and state resource agencies to reduce the minimum daily discharge from Lake Thurmond temporarily back from 3800 to 3600 cfs in October 2007.

The release reductions at Thurmond impacted flow reductions at Hartwell due to the necessity of keeping the pools near balance.

Due to continued drought conditions and record low inflow, the reservoir system entered Drought Level 3 in mid-August 2008. Earlier that year, a proposal was developed by Georgia and South Carolina to release below 3600 cfs as a temporary measure in order to slow the rate of decline in the pools and reduce the chance of running out of conservation storage while balancing potential downstream impacts.

In November 2008, a release reduction plan went through an Environmental Assessment process and was approved as a temporary deviation as the minimum daily average discharge target from Thurmond Dam targeted 3100 cfs from Dec.1 through Jan. 31 of this year. After consultation with the National Oceanic and Atmospheric Administration (NOAA) fisheries revealed that maintaining the reduced river depth could adversely impact shortnose sturgeon spawning habits, the Corps returned the discharges from Thurmond Dam to 3600 cfs on Feb. 1.

As rainfall began to occur during the winter months, the Hartwell and Thurmond pool began to transition to a less severe drought state while keeping the pool at two feet above their respective trigger level elevations. The system transitioned from Level 3 to Level 2 drought in March as Hartwell reached 648 feet and down to Level 1 in May as Hartwell reached 656 feet.

Birdwell said it took awhile for the lakes to reap the benefits of the rain once it returned.

"During the drought, the ground got very, very dry and so, when it would rain, it would soak it up," Birdwell said. "However, once the ground became saturated, the rain would then run off into the streams and reservoirs and that enabled the lake levels to come up quickly."

State climatologists declared an official end to the drought earlier this month, and Birdwell said the impact on Hartwell has slowed as it nears full capacity.

"It takes more rain to raise it one foot than it did when it was low due to the drought because it's spread out a whole lot more," he said.

While Hartwell Lake nears the magic 660-foot mark, Birdwell said Lake Thurmond stands at 326.88 feet today, as compared to 319.48 a year ago, while Lake Russell dropped slightly from 473.2 feet last year to 472.6 in 2008. Birdwell said the record drought not only left its mark on area lakes, but also on its management.

"Whenever we have a new drought of record, which this was based on how long it was and how deep it was, we start reviewing our operations to see what we did right, what we did wrong and what we improved," Birdwell said. "This gives us something to consider if and when we need to update our drought management plan. That takes awhile — it's not something that occurs overnight."

In order to safeguard against future drought conditions, Birdwell said the Corps has chosen to remain conservative in flow discharge. Although acknowledging that the summer months "tend to be dry," he added, "We're significantly better than we were a year ago."

Birdwell said swimming areas and boating ramps are now open and that individuals are enjoying the reservoir. While NOAA weather officials say there is an even chance of above normal rainfall, he added that hurricane season predominant in the fall tends to produce remnants of heavy rain and thunderstorms in this area.

"One major storm like that would adequately meet our needs," Birdwell said, quickly adding, "I'm not wishing for a hurricane, but that's just the reality of it."