South Carolina Water Resources Monthly Summary For July 2021

Provided by

The South Carolina Department of Natural Resources

Precipitation and Temperature

For July, South Carolina had an average temperature ranging from 70°F to 85°F and precipitation totals ranging from 3 inches to 12 inches. Average Temperatures across the state ranged from near normal to 3°F degrees below normal, with more normal temperatures in the Upstate area and below normal temperatures in the Lowcountry, Midlands, and Pee Dee regions. Precipitation for July was generally well above normal, where most of the state received between 1 to 2 inches above normal and portions of the southern Lowcountry received 3 to 5 inches above normal. However, portions of the Upstate region recieved lower precipitation values than the rest of the state. This equates to much of the state receiving 125% to 175% of normal precipitation. Overall, July's temperatures were below normal and precipitation was above normal.





Streamflow

Streamflows for July were near to above normal across the state. Eleven gauges reported monthly average streamflows outside the normal conditions. Ten stream gauges reported above-normal conditions, and one stream gauge reported below normal conditions. The Saluda River near Columbia had a monthly average flow of 21%, however, this is a regulated guage meaning that low flows do not necessarily indicate below normal conditions. For July, streamflows across the state were in good standing.



Explanation - Percentile classes									
Low	<10	10-24	25-75	76-90	>90	High			
	Much below normal	Below normal	Normal	Above normal	Much above normal		No Data		



Reservoir

Based on the last reservoir storage map created in July, five of the ten reservoirs in South Carolina are below target or full pool elevation. Comparing the average storage values for June and July for each reservoir, many saw a decrease in average storage. However, none of these averages have declined more than a foot. Even though some of the reservoirs are below target or full pool, and most saw a decline in average monthly storage between June and July, water storage in the reservoirs across South Carolina is still in good standing.



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Lake	Current Elevation (ft)	Target (ft)	Full Pool (ft)	Guide Curve	Full Pool	Monthly Difference (ft)		
Greenwood	439.09	439.00	439.00	0.09	0.09	0.05		
Murray	358.09	358.00	360.00	0.09	-1.91	-0.15		
Marion	75.58	75.67	75.60	-0.09	-0.02	-0.13		
Jocassee	98.70	NA	100.00	NA	-1.30	1.44		
Keowee	97.70	NA	100.00	NA	-2.30	-0.02		
Wateree	96.80	97.00	100.00	-0.20	-3.20	-0.22		
Wylie	96.70	97.00	100.00	-0.30	-3.30	-0.10		
Hartwell	661.06	660.00	660.00	1.06	1.06	-0.72		
Thurmond	330.30	330.00	330.00	0.30	0.30	-0.50		
Blalock	710.22	710.00	710.00	0.22	0.22	0.24		



Groundwater

The median groundwater storage values for July are all in the normal or above-normal range. Comparing the monthly median well averages between June and July, seven of the fourteen wells saw a decrease in average storage values. The Jasper well came online in July and cannot be compared to June. Even though seven wells saw a drop in storage from June to July, all wells across the state are in good standing for July.



	SUM- 0355	GRV- 3342	SAL- 0069	CTF- 0081	KER- 0263	LRN- 1705	OCO- 233	AND- 326	SPA- 1581	CTR- 0021	JAS- 0425	KER- 0433	MCK- 0052	YRK- 3295	LAN- 0497
June 2021 Monthly median in ft (ft,															
below land surface)	13.6	38.7	16.3	86.2	32.2	14.5	26.9	2.9	40.9	85.8		44.6	37.7	21.2	27.8
July 2021 Monthly median in ft (ft,															
below land surface)	13.9	39	16.3	86.2	32.9	15	27.5	3	40.6	85.6	54.9	44.5	37.7	22.4	29.1
Difference in monthly median															
from past month	-0.3	-0.4	0.1	0	-0.6	-0.5	-0.6	-0.1	0.3	0.2		0.1	0	-1.1	-1.3



Drought

The first U.S. Drought Monitor (USDM) map in July (7/6/2021) had 24.76% of South Carolina in abnormally dry (D0) conditions. The abnormally dry conditions in the eastern half of the state were remnants of the drought conditions during May and early June. Abnormally dry conditions in the Upstate region and Beaufort County were due to longer-term precipitation and soil moisture deficits. By the end of July (7/27/2021), abnormally dry conditions only existed in the Northern Portion of Greenville and Spartanburg Counties, covering 0.19% of the state. Precipitation totals across the state in July were able to remove most of the state's longer-term precipitation and soil moisture deficits. Due to rainfall totals and the status of water resources throughout July, the South Carolina Drought Response did not need to convene to discuss any potential drought declarations.





Summary

Across the state, July followed similar climatic conditions to June: below normal temperatures and above normal precipitation. For both June and July, there has not been a maximum temperature in the state that has hit 100°F (not including heat index). Below normal tempeatures and above normal precipitaion contributed to streamflow values staying in the normal to above normal range across the state. The conditions also contributed to removing almost all the U.S. Drought Monitor conditions across the state, with only 0.19% being in abnormally dry conditions by the end of July. Given the status of streamflows, reservoir levels, and groundwater across the state, water resources in South Carolina are in good standing for July.

Looking Forward

Currently, the models indicate that the rest of August will have below to near normal temperatures and the chance for above normal precipitation. If the forecast holds and these conditions occur through August, water resources across the state should continue to stay in good standing.

Contact

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