

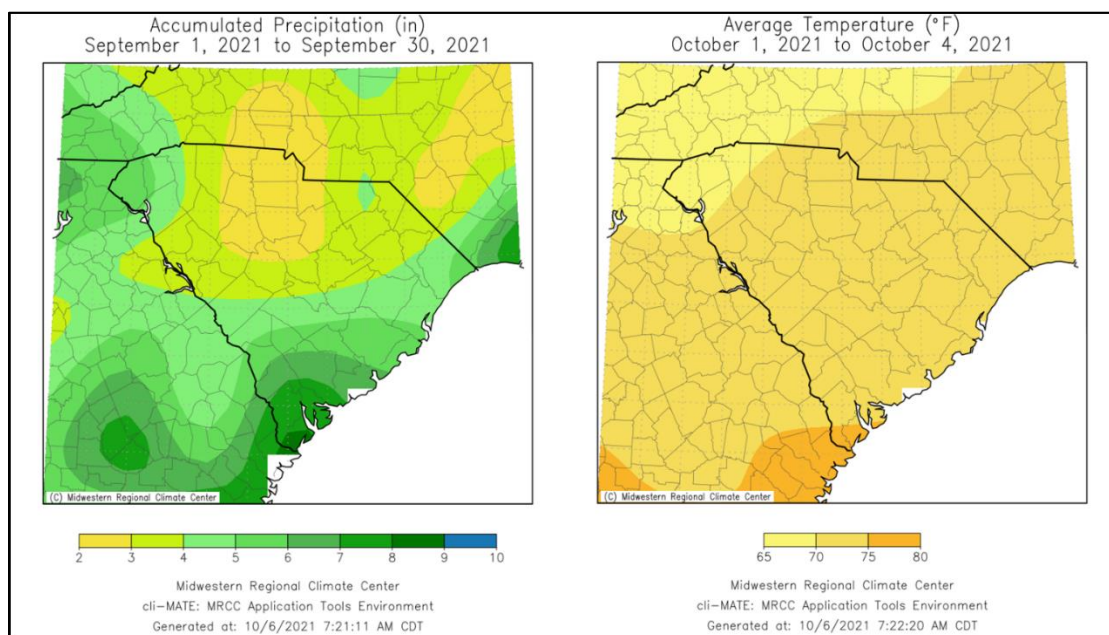
South Carolina Water Resources Monthly Summary For September 2021

Provided by
The South Carolina Department of Natural Resources

Precipitation and Temperature

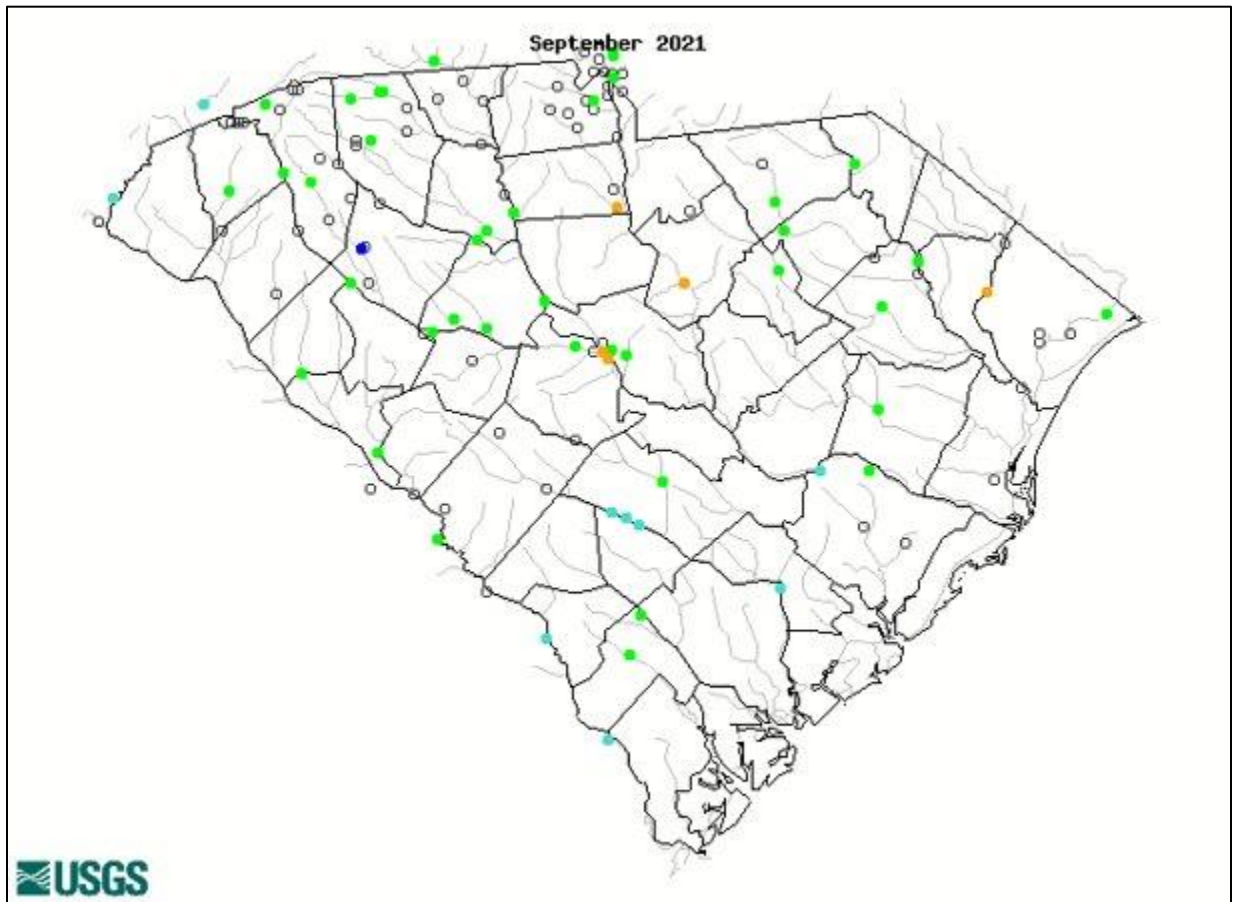
Overall, September's temperatures were near average, and precipitation was varied. Statewide, South Carolina had an average temperature of 73.7 degrees, 0.3 degrees below the long-term average (1895-2020) of 74 degrees. While average temperatures were near normal, isolated areas in the Central Savannah River Area and Midlands were 2 degrees below normal, and average temperatures were 2 degrees above normal along the coastal Lowcountry.

The statewide average precipitation for September was 4.18 inches, which is the long-term average for the month (1895-2020). During the month, only areas along the Lowcountry and Savannah River received rainfall totals above normal, with some sites in these regions recording more than 150% of the normal monthly rainfall. Portions of Beaufort, Dorchester, and Jasper counties received eight or more inches, and a CoCoRaHS observer in Beaufort County measured 15.71 inches for the month. More than five inches of rain was observed in the mountains, and the NWS station near Jocassee reported a monthly total of 11.23 inches. Outside of these areas, most locations received less than four inches. The Catawba and Pee Dee regions reported less than 75% of the normal monthly precipitation. The NWS station at the North Myrtle Beach Airport measured 2.46 inches in September, 4.19 inches less than the monthly normal.



Streamflow

The USGS's monthly streamflow map compares the current monthly average streamflow at each gage for a given month to each gage's historical monthly average streamflows for the same month over the gage's period of record. While most of the gages on the map showed a normal status, at least six gages displayed above normal to much above normal conditions. About five gages on the map show below normal status. Some of the dryness recorded at these gages could be a response to the actual dryness experienced in different regions of the state in September, while others could be in response to heavy regulations. Overall, streamflows across the state remained at or above normal levels and are in good standing.

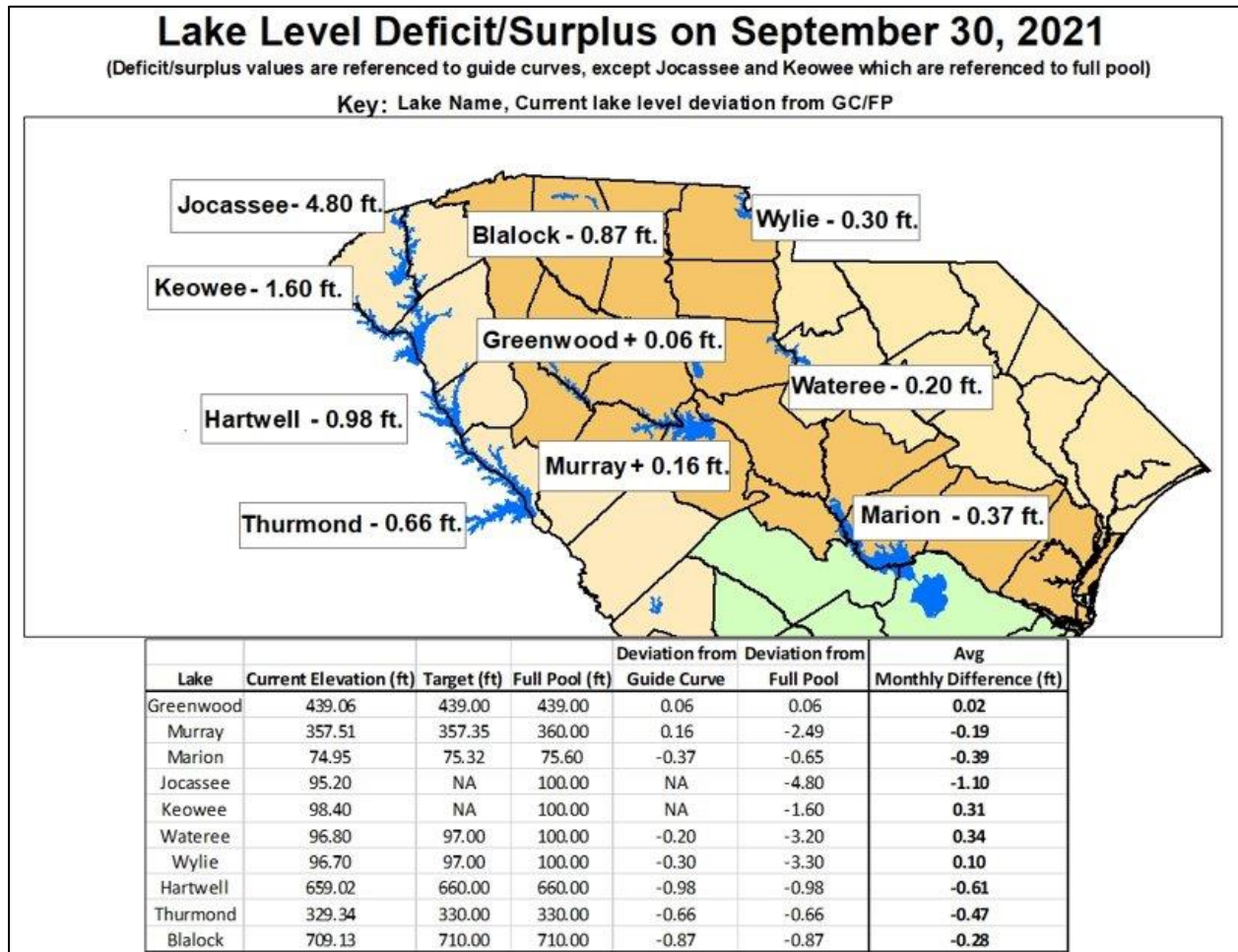


| Explanation - Percentile classes | | | | | | | |
|----------------------------------|-------------------|--------------|--------|--------------|-------------------|------|---------|
| | | | | | | | |
| Low | <10 | 10-24 | 25-75 | 76-90 | >90 | High | No Data |
| | Much below normal | Below normal |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



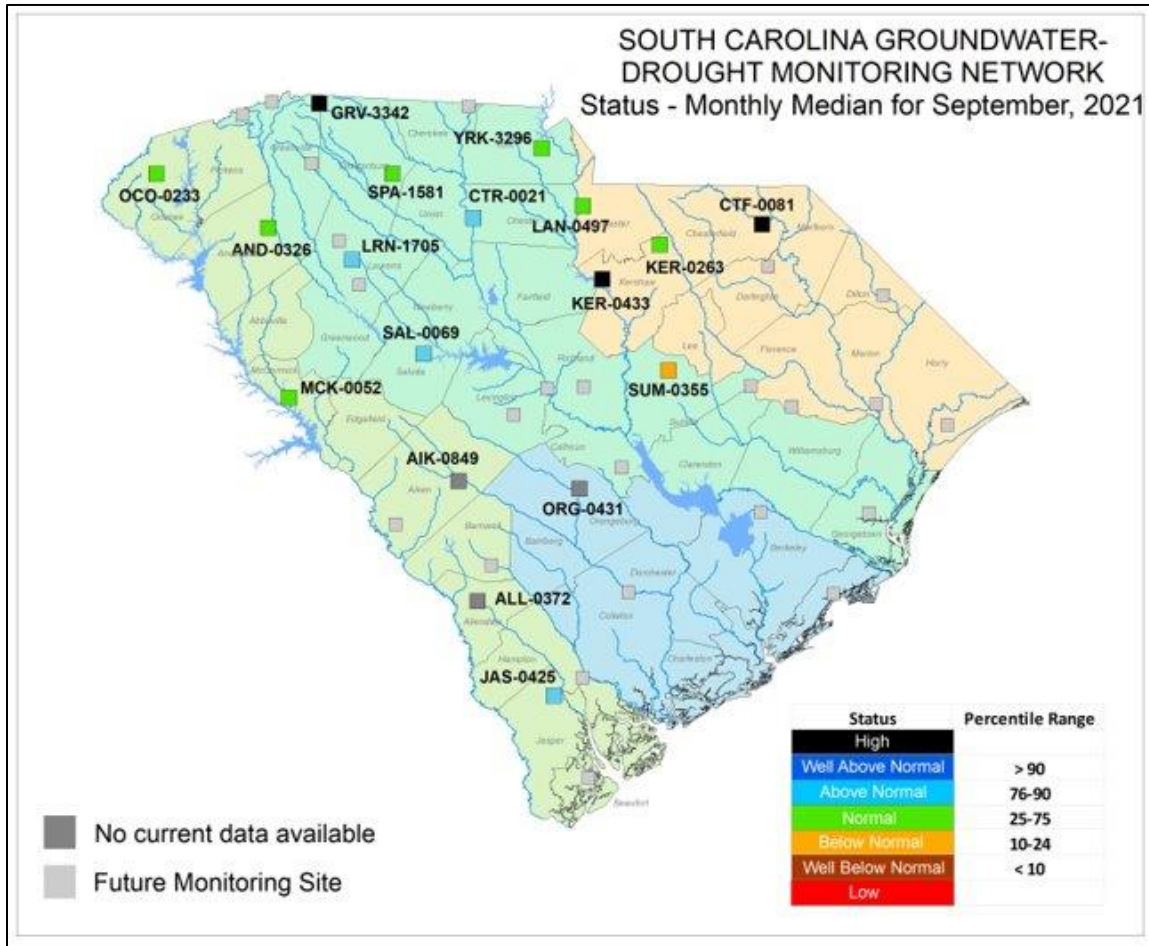
Reservoirs

The map below shows the reservoir level surplus or deficit for each major reservoir and is based on conditions for September 30th. Eight of the ten major reservoirs in South Carolina are below their target or full pool elevation but within their normal fluctuation ranges for the summer months. For most of the reservoirs, the average lake levels for September were lower than those observed in August but are still within the expected range of summer fluctuations. As of September, lake elevations throughout the state are in good standing.



Groundwater

The groundwater conditions map for September is based on data collected by both the USGS and the SCDNR. Groundwater levels at most of the wells shown on the map are at normal to above normal conditions. As noted in the table below, eleven out of the fifteen wells show a slight drop in the monthly median levels from August to September. Winter recharge has helped groundwater levels remain at or above normal through the summer months, and the slight decrease from the past month is consistent with seasonal declines typically observed with groundwater levels at this time of year. Overall, the groundwater levels at the wells shown on the map are in good standing for September.



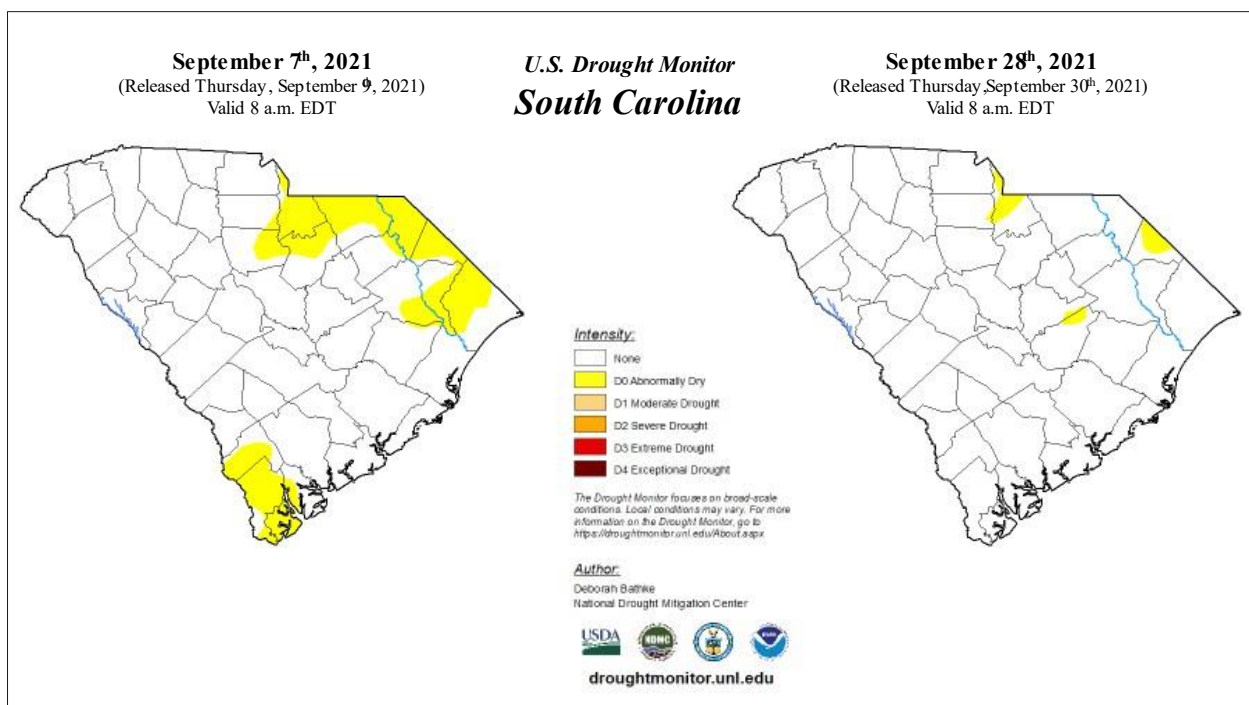
| | SUM-0355 | MCK-0052 | AND-326 | OCO-233 | KER-0433 | SPA-1581 | CTR-0021 | YRK-3295 | LAN-0497 | JAS-0425 | CTF-0081 | GRV-3342 | KER-0263 | LRN-1705 | SAL-0069 |
|---|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| July 2021 Monthly median (ft, below land surface) | 13.93 | 37.65 | 2.95 | 27.51 | 44.51 | 40.57 | 85.60 | 22.36 | 29.12 | 54.85 | 86.22 | 39.05 | 32.87 | 15.01 | 16.36 |
| August 2021 Monthly median (ft, below land surface) | 14.33 | 37.85 | 3.49 | 28.03 | 44.69 | 40.38 | 85.52 | 23.31 | 30.61 | 55.07 | 87.03 | 39.57 | 33.87 | 15.41 | 17.13 |
| Difference in monthly median from past month (ft) | -0.40 | -0.20 | -0.54 | -0.52 | -0.18 | 0.19 | 0.08 | -0.95 | -1.49 | -0.22 | -0.81 | -0.52 | -1.00 | -0.40 | -0.78 |



Drought

The first U.S. Drought Monitor (USDM) in September had 16.11% of the state in abnormally dry (D0) conditions. The D0 conditions in the state were due to 30- and 60-day precipitation deficits and soil moisture deficits. Rain throughout the month helped to remove the D0 conditions across most of the state. D0 conditions were removed from the Lowcountry for the USDM map for September 21st and the following map (September 28th) saw further reduction of D0 conditions across the Pee Dee and Midlands regions due to rain totals and improved soil moisture values. The USDM map of September (28th) categorized only 1.59% of the state in D0 conditions.

Due to the conditions of South Carolina for September, the South Carolina Drought Response Committee did not convene in September.



Summary

South Carolina, in general, had near normal precipitation and temperatures for September, however, there was variation for regional conditions. Precipitation was more varied at the local level than temperature. The Pee Dee and Midlands regions received below normal precipitation, ranging from 0.5 to 2 inches below normal, while the Lowcountry and portions of the Upstate received above normal precipitation, ranging from 0.5 to 3.5 inches above normal.

Water resources, in general, for South Carolina were in good standing for the month of September. Although there are some streams, reservoirs, and groundwater sites that are below normal conditions, these areas are not yet raising any concern for action. DNR will continue to monitor conditions for water resources across the state for any change in status.

Looking Forward

The first five days of October have been dry and warm, following the pattern of the last week of September. Most of the state has seen little rain and has experienced average temperatures 1 to 5 degrees above normal. The models for the next two weeks have confidence that temperatures will be above normal, while precipitation will be near normal. The forecast is that a pattern of above normal temperatures and near normal precipitation will be likely for most of October. Water resources for South Carolina are in good standing as of right now, but a month of above normal temperatures and near normal precipitation could cause a reduction in available water resources due to above normal evapotranspiration for this time of year.

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