

# South Carolina Water Resources Monthly Summary

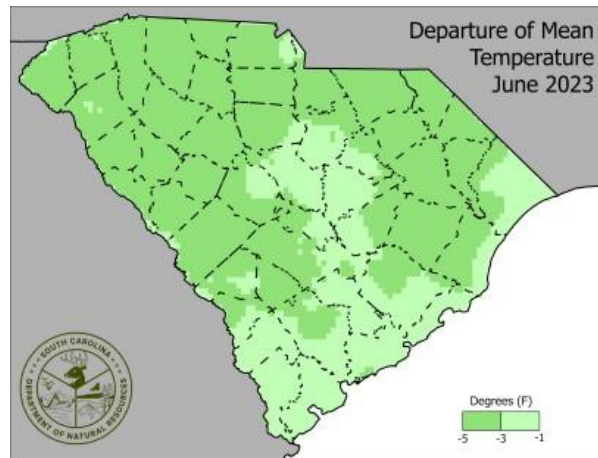
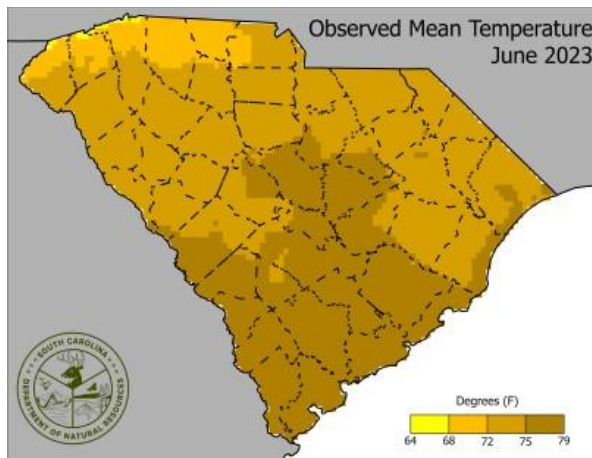
## For June 2023

Provided by

The South Carolina Department of Natural Resources

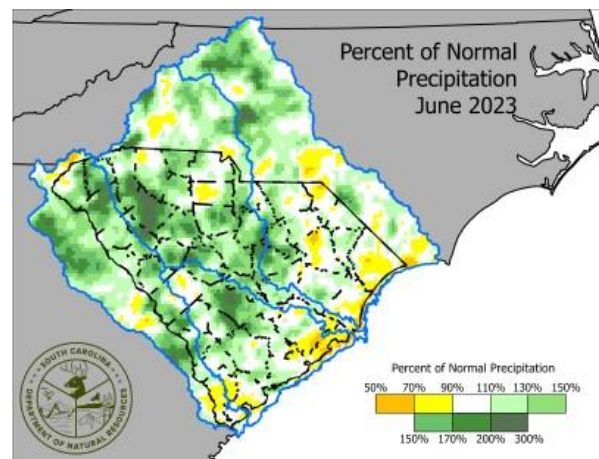
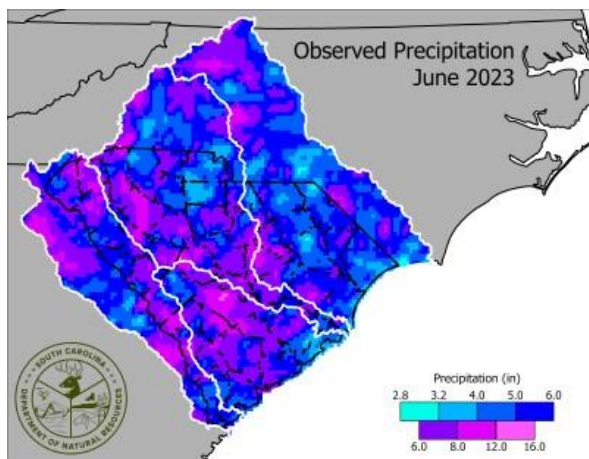
### Temperature

Statewide, South Carolina had an average temperature of 77.4 degrees, 2.9 degrees below the long-term average (1895-2022) of 77.3 degrees for June. The entire State experienced average temperatures of 1 to 5 degrees below normal. June 2023 was the 12<sup>th</sup> coldest June on record and the coldest June since 1997. The highest daily maximum temperature recorded in June was 95 degrees at the NWS Yemassee 1 N Station in Hampton County. The lowest daily minimum temperature recorded in June was 41 degrees at the NWS Jocassee 8 WNW Station in Oconee County.



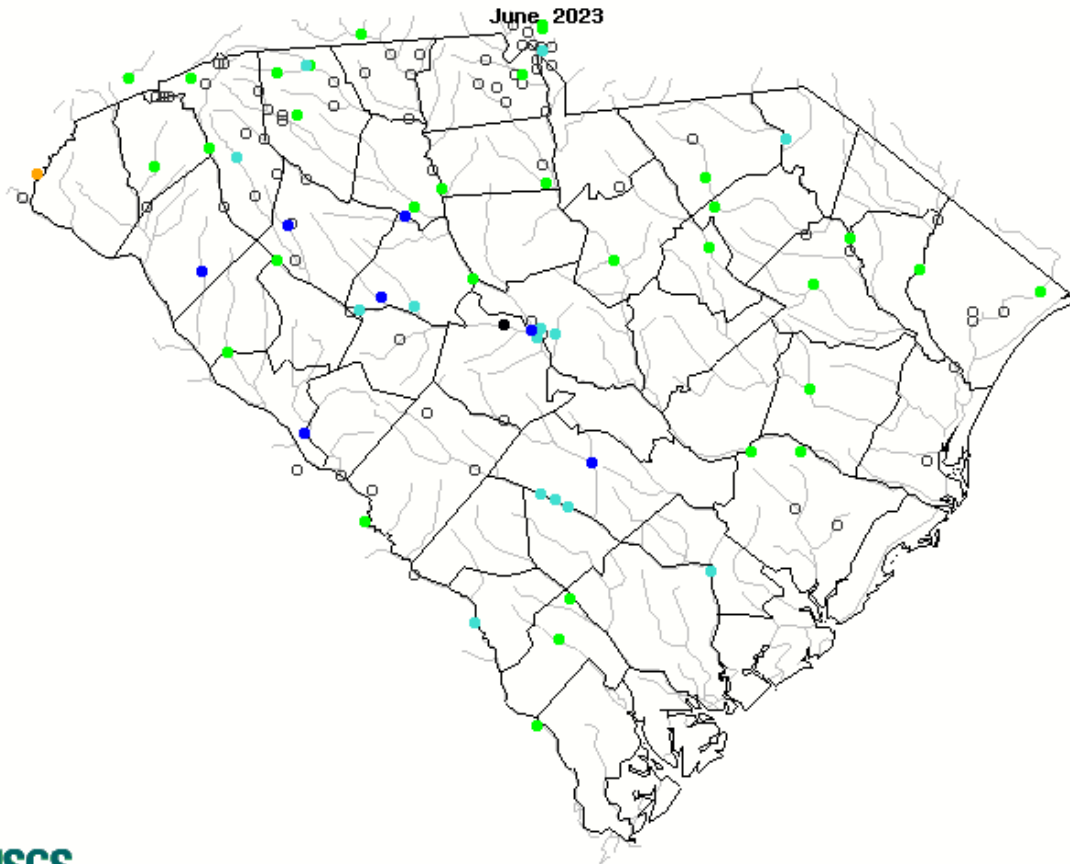
## Precipitation

The statewide average precipitation for June 2023 was 6.05 inches, 1.34 inches above the long-term average for the month (1895-2022) of 4.71 inches. Most of the State received near normal or above normal precipitation, ranging from 90% to 300% of normal. Some areas, such as portions of the Pee Dee Region, the Coast, and Upstate saw below normal precipitation, generally ranging from 70% to 90% of normal. The Orangeburg 3.2 NW CoCoRaHS reporter in Orangeburg County recorded 15.72 inches for June 2023, the highest recorded total for the month. The Surfside Beach 1.0 NE CoCoRaHS reporter in Horry County recorded only 2.63 inches for June, the lowest recorded total for the month.



## 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 streamflow for the same month over the gage's period of record. The beneficial rain received through the month of June and in the past couple of months has helped the streamflow gages in most parts of the state to continue to remain at normal or above normal conditions. A few gages in the Savannah, Saluda, and Edisto River basin have recorded much above normal conditions as well.



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		



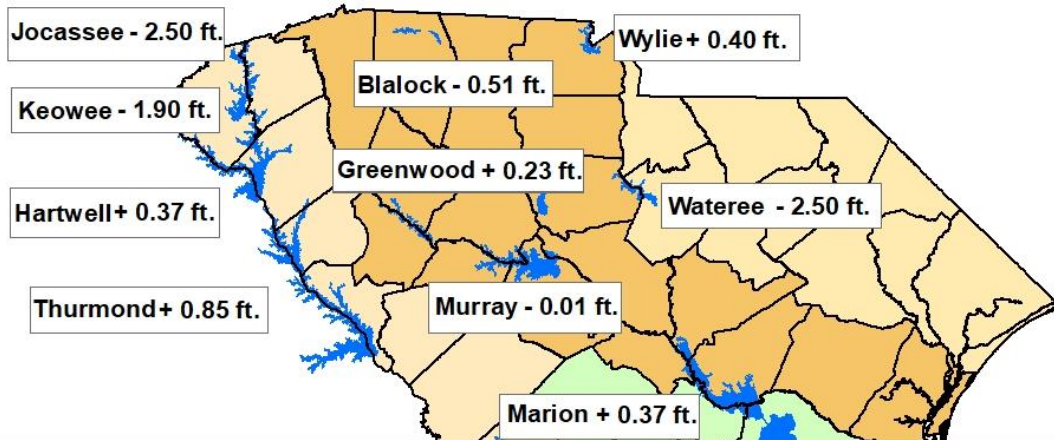
## Reservoirs

The map below shows a surplus or deficit from the guide curves or full-pool elevations for the major reservoirs in the State, based on conditions for June 30th. Five out of ten reservoirs were below their target or full-pool elevations. Duke Energy has started a Fish Habitat Enhancement Project at Lake Wateree in May and during this process the lake will be managed between 93 to 94 ft for about five months. As of the end of June, the monthly average lake elevations of five out of the ten lakes dropped from the last month. Overall, the lakes were maintained close to their target or full pool elevations and the deviation from target or full pool is within the expected range for this time of the year.

### Lake Level Deficit/Surplus on June, 2023

(Deficit/surplus values are referenced to guide curves, except Jocassee and Keowee which are referenced to full pool)

Key: Lake Name, Current lake level deviation from GC/FP

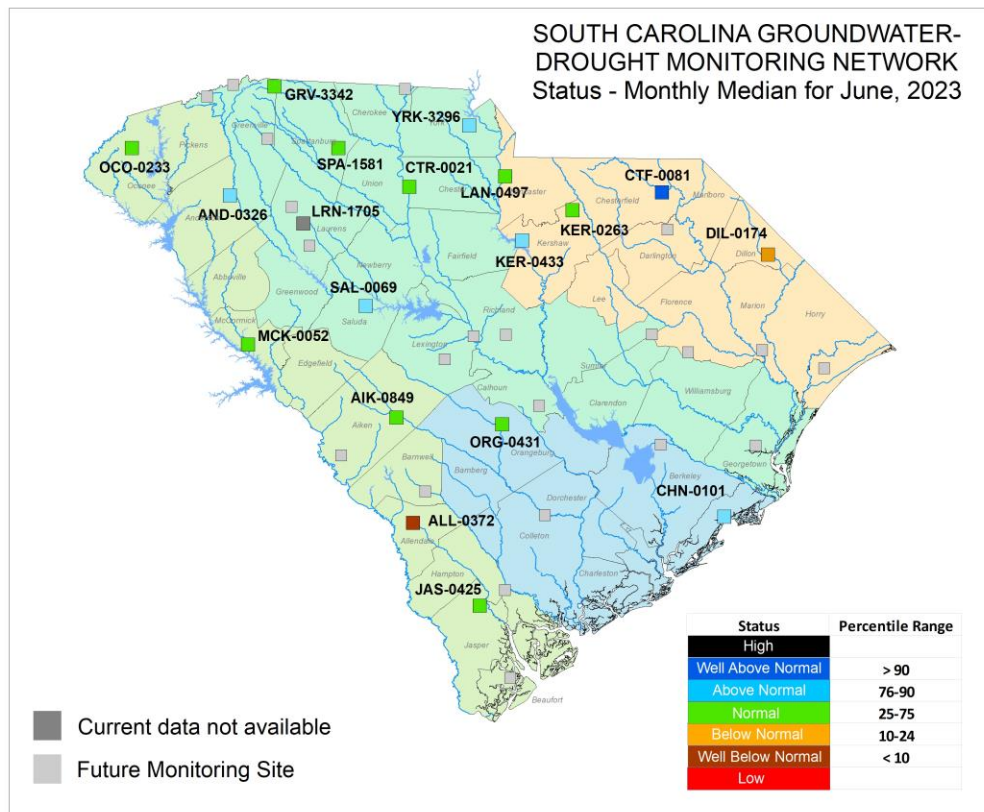


Lake	Current Elevation (ft)	Target (ft)	Full Pool (ft)	Deviation from		Avg Monthly Difference (ft)
				Guide Curve	Full Pool	
Greenwood	439.23	439.00	439.00	0.23	0.33	-0.04
Murray	357.99	358.00	360.00	-0.01	-2.43	0.43
Marion	76.06	75.69	75.60	0.37	0.13	0.55
Jocassee	97.50	NA	100.00	NA	-2.50	0.18
Keowee	98.10	NA	100.00	NA	-1.90	-0.36
Wateree	94.50	97.00	100.00	-2.50	-3.00	0.15
Wylie	97.40	97.00	100.00	0.40	-2.40	-0.04
Hartwell	660.37	660.00	660.00	0.37	1.84	1.02
Thurmond	330.85	330.00	330.00	0.85	0.42	-0.53
Blalock	709.49	710.00	710.00	-0.51	-0.15	-0.39



## Groundwater

The groundwater condition map for June is based on the monthly medians for the data collected by the USGS and SCDNR. The beneficial rain in past couple of months have maintained the groundwater levels at most of the wells within normal or above normal range. Eleven of the eighteen wells observed a drop in the monthly medians from May to June. The Dillon and Allendale wells continued to stay below normal and much below normal conditions in June. Some of these wells are slower to recover and respond to rainfall events, once they dry. The Dillon well has recorded data only from 2014 onwards and is missing some of the record droughts of the past. Therefore, its percentile values are not exactly comparable to other wells with long periods of record. As of the end of June, most wells have groundwater levels at or above normal.



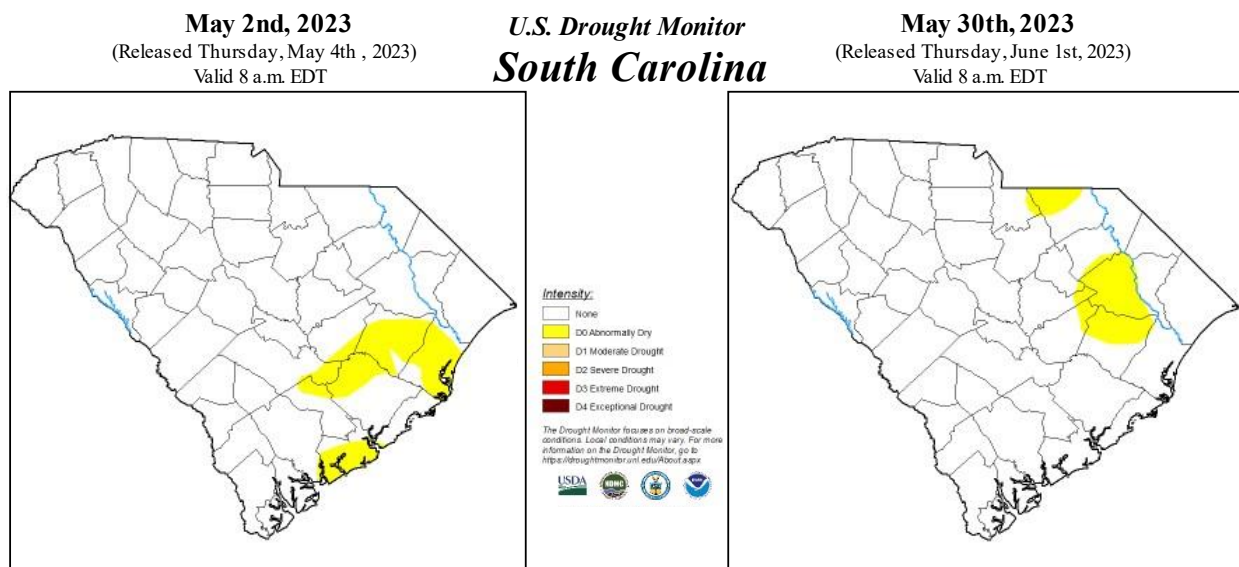
	USGS well sites										DNR Telemetry sites								
	MCK-0052	AND-326	OCO-233	KER-0433	SPA-1581	CTR-0021	YRK-3296	LAN-0497	JAS-0425	CHN-0101	DIL-0174	CTF-0081	GRV-3342	KER-0263	LRN-1705	SAL-0069	ORG-0431	AIK-0849	ALL-0372
May 2023 Monthly median (ft, below land surface)	38.58	2.47	27.80	51.63	43.79	90.28	19.14	26.52	55.96	13.43	4.61	86.35	44.97	34.36		13.50	26.78	42.36	57.65
June 2023 Monthly median (ft, below land surface)	38.13	2.54	28.56	51.63	43.61	90.47	17.99	27.69	55.15	13.34	5.10	86.40	44.91	34.65		14.40	27.00	42.54	57.99
Difference in monthly median from past month (ft)	0.45	-0.07	-0.75	0.00	0.18	-0.19	1.16	-1.17	0.81	0.09	-0.49	-0.05	0.06	-0.29	0.00	-0.90	-0.22	-0.17	-0.34



## Drought

For most of the month of June, there were not many changes to the U.S. Drought Monitor (USDM) in South Carolina. Small pockets of abnormally dry (D0) conditions existed in the Pee Dee Region and along the mountains in the Upstate. These pockets of D0 never totaled more than 7.23% of the entire state. However, by the last USDM map of June (6/27), the entire state was classified in normal conditions. This was due to improved precipitation totals, soil moisture, and streamflow values.

The South Carolina Drought Response Committee (DRC) did not meet in June of 2023.



## Summary

June was cool for the entire state, while precipitation totals were mixed. While most of the state received normal to above normal rainfall, some areas in the Pee Dee Region, along the Coast, and Upstate received below normal precipitation. However, enough rain fell in these areas in the latter half of the month to remove the lingering dry conditions on the U.S. Drought Monitor.

## Looking Forward

To date, (7/17) July, average mean temperatures have been near normal to 3 degrees above normal, with the warmer conditions generally south of the Fall Line. Precipitation totals have been mixed. Areas below the Fall Line generally have received above normal precipitation (110% to 170%) and areas above the Fall Line have received below normal precipitation (50% to 90%). Currently, all of South Carolina is in normal conditions on the U.S. Drought Monitor.

The forecast for the rest of July indicates both temperatures and precipitation ranging from near normal to above normal. If these conditions hold, increased temperatures could negatively impact agricultural production if rain totals do not verify or are unequally distributed across the state and the timeframe of the forecast.

## Contact

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