South Carolina Water Resources Monthly Summary For April 2024

Provided by

The South Carolina Department of Natural Resources

Temperature

Statewide, South Carolina had an average temperature of 64.7 degrees, 2.6 degrees above the long-term average (1895-2023) of 62.1 degrees for April. Most of the state experienced average temperatures of 1 to 3 degrees above normal for April. Portions of the Northern Lowcountry experienced more normal average temperatures for April. The highest daily maximum temperature recorded in April was 93 degrees at the Barnwell 5 ENE NWS station in Barnwell County. The lowest daily minimum temperature recorded in April was 26 degrees at the Jocassee 8 WNW NWS station in Oconee County.





Average Temperature (°F): Departure from Mean April 1, 2024 to April 30, 2024



cli-MATE: MRCC Application Tools Environment Generated at: 5/16/2024 1:41:57 PM EDT



Precipitation

The statewide average precipitation for April 2024 was 2.62 inches, 0.75 inches below the longterm average for the month (1895-2023) of 3.37 inches. Most of the state received below normal precipitation for April. The driest portions of the state (the Upstate as well as portions of the Midlands and Pee Dee Region) received between 50% and 75% of normal rainfall for the month. The wettest portions of the state were along the southern Coast, where monthly totals ranged from 100% to 150% of normal. The highest precipitation total for April was recorded by the Okatie 7.6 NE CoCoRaHS observer in Beaufort County with 6.50 inches of rain. The lowest precipitation total for April was recorded by the Georgetown 13.3 NW CoCoRaHS observer in Georgetown County with 0.41 inches of rain.



Midwestern Regional Climate Center cli—MATE: MRCC Application Tools Environment Generated at: 5/16/2024 1:45:07 PM EDT





Streamflow

The USGS's monthly streamflow map compares the current monthly average streamflow to its historical monthly average streamflow conditions for the same month over the gage's period of record. As observed in the monthly map, South Carolina experienced a dry Spring month in April. Below-normal conditions were recorded at a couple of gages in the Pee Dee River basin, and several gages in the Catawba-Wateree, Broad, and Saluda River basin. The Twelve-mile Creek gage in the Upper Savannah basin also recorded below normal conditions. Most of the gages in the southern and coastal counties continued to maintain their normal levels in April. Overall, April was relatively drier than March. Although some rain events in the month helped streamflows in the southern part of the State to stay at normal, several gages in the northern part of the state recorded below normal conditions.



≊USGS

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



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 April 30th. Five out of the ten reservoirs are below their target or full pool elevations as of April 30th. April was a typical spring month with warm temperatures, dry, and parts of the State receiving some rain. The observed drop in monthly averages for seven of the ten lakes reflects the dry conditions. Duke Energy continued to maintain Lake Wateree at and around 95 ft for their maintenance work. Lake Jocassee and Keowee, also managed by Duke Energy are pump storage systems, and their levels fluctuate based on their power generation and maintenance requirements.





Groundwater

The groundwater condition map for April is based on the monthly medians for the data collected by the USGS and SCDNR. The state experienced a dry spring month in April. Due to the lack of statewide beneficial rain, some parts of the state received better recharge than the other. Overall, the monthly medians for ten out of the nineteen wells dropped from March to April. The rest of the wells observed some improvements. Groundwater levels at the Chester and Dillon wells continued to be below normal in April. The period of record for Dillon well is comparatively shorter than the other wells and lacks information on the record droughts. Therefore, the monthly median statistics for Dillon are not exactly comparable to that of the other wells.



USGS well sites									DNR Telemetry sites											
	MCK- 0052	AND- 326	0CO- 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	BRK- 0644
March 2024 Monthly median (ft, below land surface)	38.06	2.52	28.56	52.46	43.89	92.00	17.83	24.30	51.56	12.86	4.39	86.29	46.86	35.02	12.81	10.84	25.91	42.23	58.58	9.05
April 2024 Monthly median (ft, below land surface)	37.91	2.55	28.55	52.19	43.96	91.98	17.83	24.78	51.59	12.90	4.43	86.24	46.68	34.66	13.31		25.97	42.59	58.52	9.27
Difference in monthly median from past month (ft)	0.15	-0.03	0.01	0.27	-0.06	0.02	0.00	-0.48	-0.03	-0.04	-0.04	0.05	0.18	0.37	-0.50		-0.06	-0.36	0.05	-0.22



Drought

Through most of April, none of South Carolina had any U.S. Drought Monitor (USDM) designations. While rain was below normal for most of the month, ground conditions remained relatively normal due to wetter conditions through the previous month (March). On the last USDM map for the month (4/30), 21.38% of the state classified in abnormally dry (D0) conditions. This degradation from normal to D0 conditions was in areas that had the largest 30-day precipitation deficits, which had affected soil moisture and streamflow values. In addition, many counties reported mildly dry agricultural field conditions. Luckily, this short-term dryness did not lead to any impacts.

The South Carolina Drought Response Committee (DRC) did not meet in April but continued to monitor conditions.





Summary

South Carolina experienced a warm and dry April. Average temperatures were generally above normal across the state, while precipitation totals were generally below normal for the month (except the southern Coast, where precipitation totals were above normal). The dry conditions caused decreases in soil moisture and streamflows, allowing for abnormally dry (D0) conditions to be added to portions of the state on the last U.S. Drought Monitor map of the month (4/30). Luckily the dry conditions at the end of the month did not cause any impacts.

Looking Forward

As of May 15th, conditions have been warm and wet. Average temperatures have ranged from normal to 3 degrees above normal. To date, the entire state has received above normal rainfall, with totals ranging from normal to over 300% of normal. Due to the rainfall totals, there is currently no more abnormally dry (D0) conditions in the state on the U.S. Drought Monitor. The rain has improved soil moisture and streamflow values across the state and most counties have reported agricultural field conditions as normal or wetter than normal.

For the rest of the month, conditions are forecast to be warm and wet. The forecast and outlooks indicate that temperatures and precipitation totals are likely to be above normal. Given the conditions, it is unlikely there will be changes to U.S. Drought Monitor map in South Carolina before the end of May.

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