

South Carolina Water Resources Monthly Summary

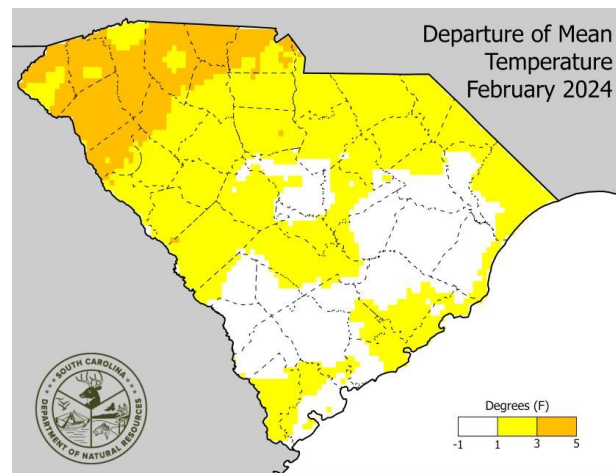
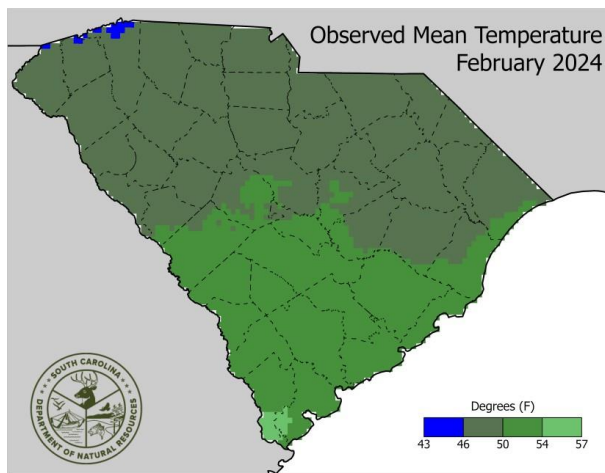
For February 2024

Provided by

The South Carolina Department of Natural Resources

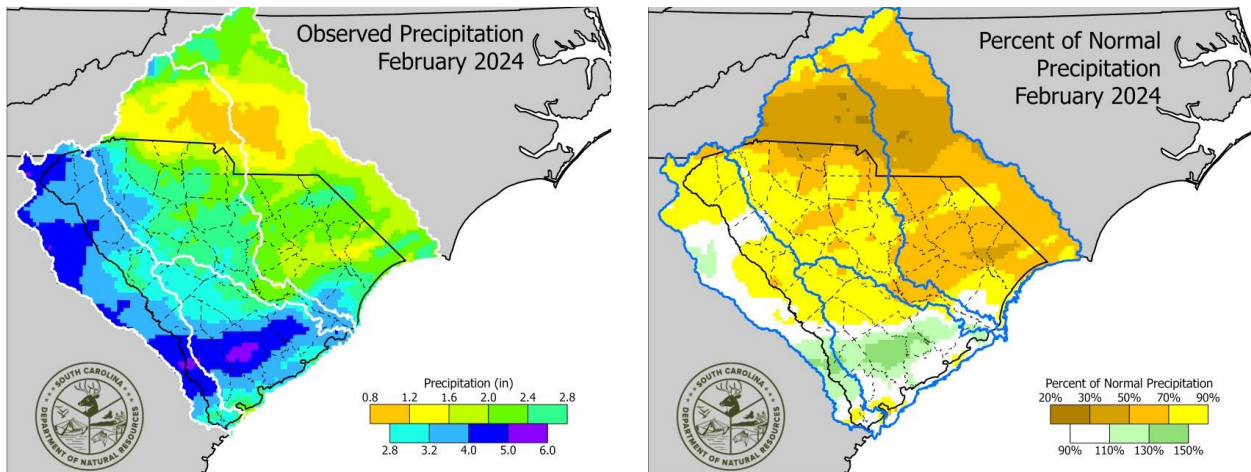
Temperature

Statewide, South Carolina had an average temperature of 50.3 degrees, 3.3 degrees above the long-term average (1895-2023) of 47.0 degrees for February. Most of the state experienced average temperatures that were above normal for the month. Although some areas in the Coastal Plain saw more normal average temperatures, most of the state experienced average temperatures of 1 to 3 degrees above normal, while portions of the Upstate experienced average temperatures of 3 to 5 degrees above normal. The highest daily maximum temperature recorded in February was 80 degrees at the Yemassee 1 N NWS station in Hampton County. The lowest daily minimum temperature recorded in February was 20 degrees at the Jocassee 8 WNW NWS station in Oconee County.



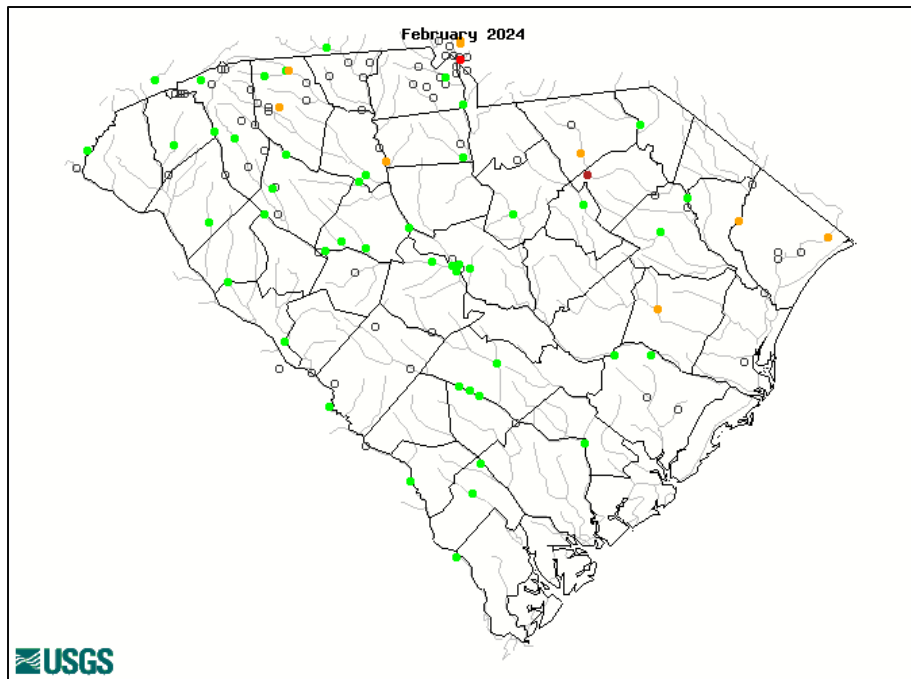
Precipitation

The statewide average precipitation for February 2024 was 2.70 inches, 1.19 inches below the long-term average for the month (1895-2023) of 3.89 inches. Most of the state received below normal precipitation for the month of February. The Pee Dee Region experienced the driest conditions, with monthly rain totals ranging from 30% to 90% of normal. Contrastingly, portions of the Lowcountry received above normal rain totals for the month, ranging 110% to 150% above normal. The highest recorded precipitation total for February was at the Walterboro 1 WS NWS station in Colleton County with 5.11 inches of rain. The lowest recorded precipitation total for February was at the Pontiac 2.1 NNW NWS station in Richland County with 1.19 inches of rain.



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. South Carolina received abundant rainfall in December and January. As observed on the map, February recorded some low streamflow levels at several gages in the Upstate counties- Spartanburg and Chester and in the eastern counties – Chesterfield, Darlington, Marion, Williamsburg, and Horry. The rest of the gages in the State continued to record normal streamflow conditions in February.

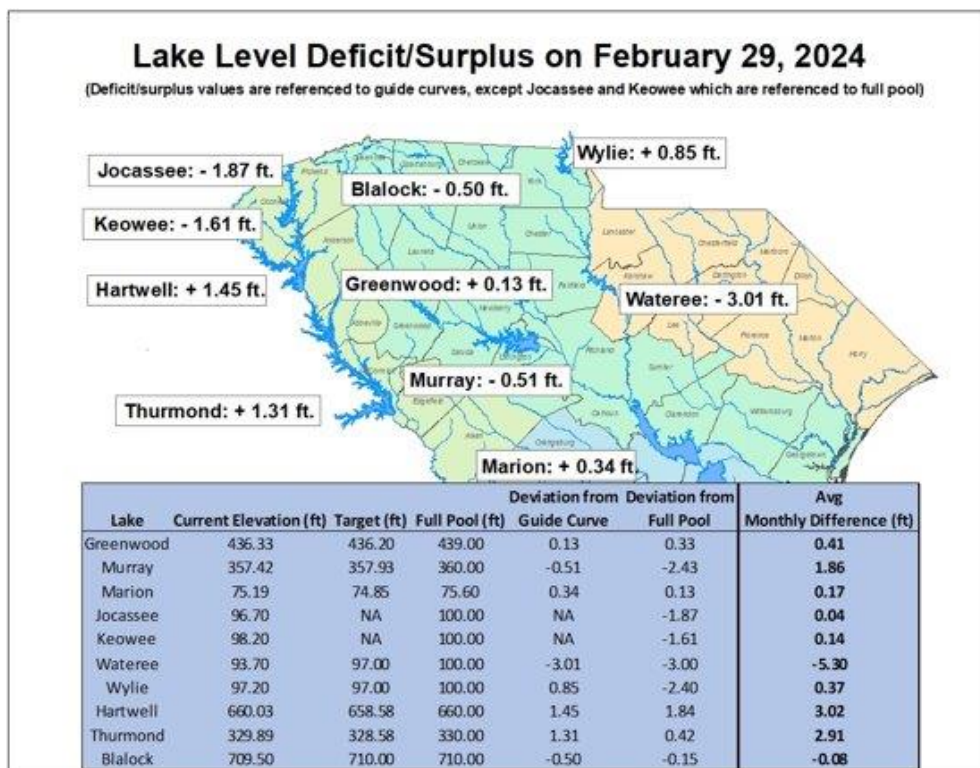


Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		



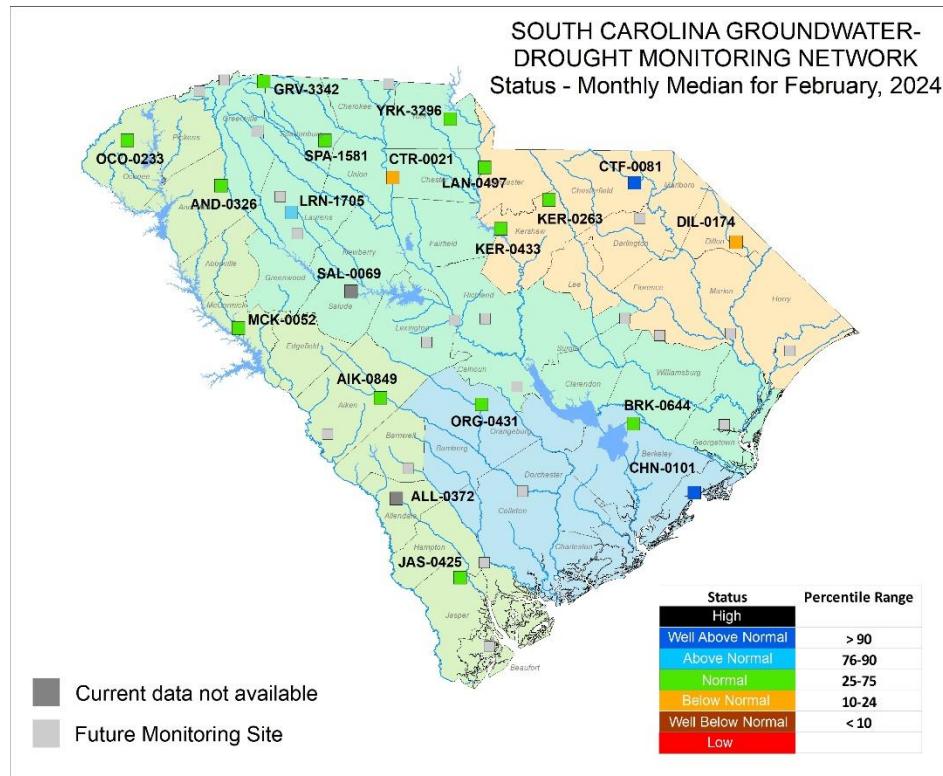
Reservoirs

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 February 29th. January brought some good recharge and relief from the past dry periods in the State. Lake Jocassee and Lake Keowee eased their Low Inflow Protocol (LIP) in January. Followed by the Catawba-Wateree lakes returning to their normal operations in second week of February. The USACE- Savannah lakes eased from drought trigger level 2 to level 1 in January as well. Although an official news release of the Savannah lakes returning to normal operations is not available on the USACE website yet, but the lake hydrographs shows the lake levels have recovered and have stayed above their guide curve level throughout February. The difference between the average monthly lake levels between January and February indicate that most of the lake levels continued to improve in February. The greater than 5 ft drop in lake Wateree levels is potentially related to high water levels being moved downstream through the Catawba-Wateree River system during heavy rain events in January, followed by maintenance work in February.



Groundwater

The groundwater condition map for February is based on the monthly medians for the data collected by the USGS and SCDNR. Multiple rain events in December and January improved recharge in the State. Only five of the nineteen wells observed a drop in the monthly medians from January to February, the rest of the groundwater wells observed some improvements. Although several rain events in the past couple of months brought beneficial recharge for most of the State, the monthly median for a couple of wells dipped below normal or continued to remain at below normal levels in February. Groundwater levels at the Chester well have been fluctuating below normal levels since November, with some improvements in December but continuing to remain below normal through January and February. Groundwater levels at Dillon well stayed below normal in February.



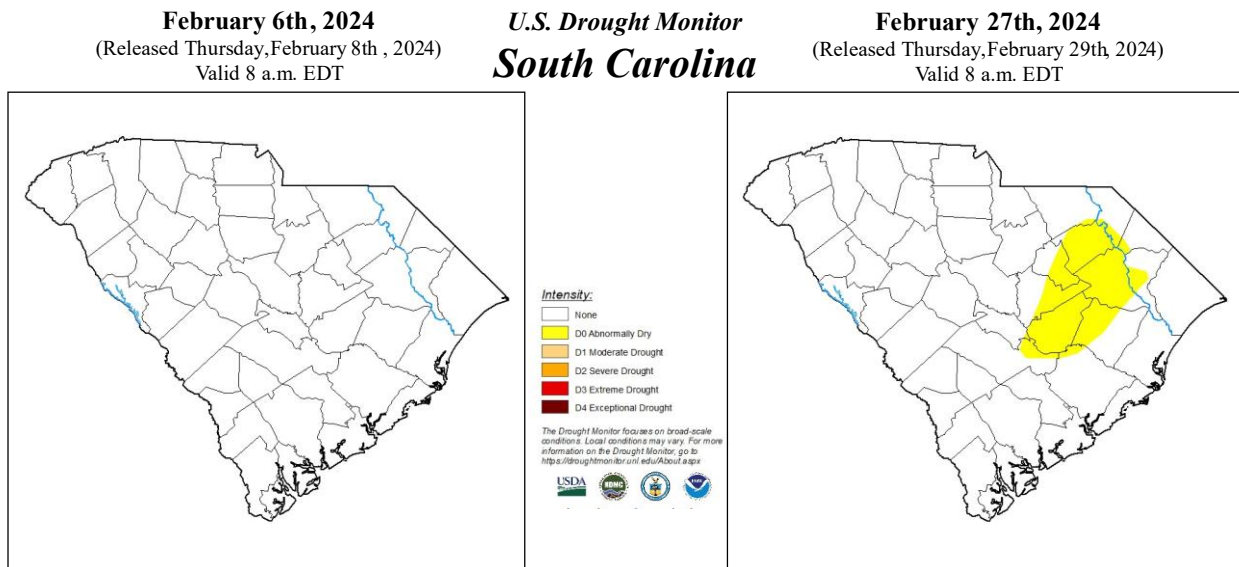
	USGS well sites											DNR Telemetry sites								
	MCK-0052	AND-326	OCO-233	KER-0433	SPA-1581	CTR-0021	YRK-3296	LAN-0497	JAS-0425	CHN-0101	DIL-0174	CTF-0081	GRV-3342	KER-0263	LRN-1705	SAL-0069	ORG-0431	AIK-0849	ALL-0372	BRK-0644
January 2024 Monthly median (ft, below land surface)	38.91	2.92	30.11	54.02	43.63	91.97	20.92	28.01	57.21	12.93	4.33	86.56	46.92	36.58	14.24	--	26.65	42.43	58.63	9.89
February 2024 Monthly median (ft, below land surface)	38.68	2.73	29.25	53.52	43.80	91.92	19.31	25.90	54.22	12.84	4.49	86.41	47.04	35.57	13.27	--	26.51	42.48	58.68	9.49
Difference in monthly median from past month (ft)	0.23	0.19	0.86	0.50	-0.17	0.05	1.61	2.11	2.99	0.09	-0.16	0.15	-0.12	1.00	0.97	--	0.14	-0.05	-0.05	0.40



Drought

Through most of February, the state stayed in normal conditions on the U.S. Drought Monitor (USDM). On the last map of the month (2/27), abnormally dry (D0) conditions were introduced in portions of the Coastal Plain, covering 10.75% of the state. The D0 coverage was based on below normal rain totals over a 3-month period, with totals ranging between 50% and 90% of normal. Although conditions in February were drier than normal, there were no reports of impacts to agriculture, forestry, or water systems.

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



Summary

South Carolina experienced a warm and dry February. Generally, average temperatures were above normal, while precipitation was below normal for most of the state. The driest portion of the state was the Pee Dee Region, which caused some streamflows to fall below normal. However, ground conditions remained in relatively good condition, as soil moisture values stayed near normal and there were no reports of impacts to agriculture. Abnormally dry (D0) conditions were added in portions of the Coastal Plain at the end of February, related to long-term (3-month) rain fall totals that were below normal.

]Looking Forward

As of March 15th, the entire state has received above normal rainfall, with totals ranging from 2.50 to 6.00 inches, ranging between 150% and 400% of normal. Soil moisture and streamflows are in good standing across the state. As of the first U.S. Drought Monitor (USDM) map of March (3/5) the entire state is back in normal conditions.

For the rest of the month, the entire state should receive rain with totals generally over 1.50 inches. Rain totals for the rest of the month should be near normal to above normal. Average temperatures should be near normal to slightly above normal. Given the conditions, it is unlikely that there will be any changes to the USDM in South Carolina for the rest of the month.

Contact

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