

Drought Information Statement for Central North Carolina

Valid August 1, 2024

Issued By: NWS Raleigh

Contact Information:

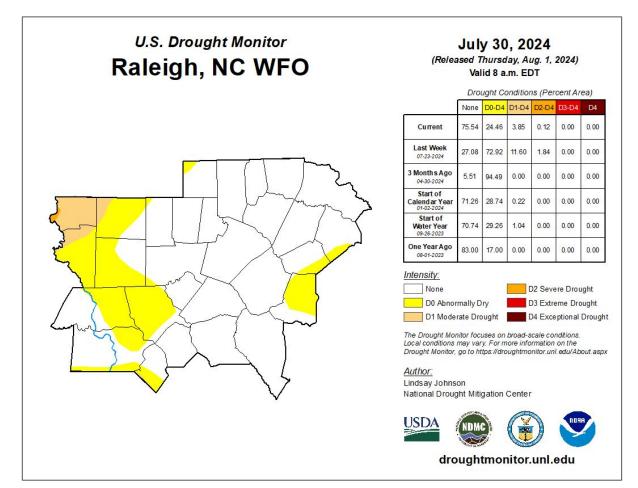
- This Drought Information Statement will not be updated unless Severe Drought (D2) redevelops...
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/RAH/DroughtInformationStatement for previous statements.
- Questions or comments can be sent to barrett.smith@noaa.gov
- Severe Drought (D2) continues across the far northwest Piedmont, including a portion of Forsyth County.
- Recent widespread and often heavy rainfall has drastically improved conditions in most other areas.

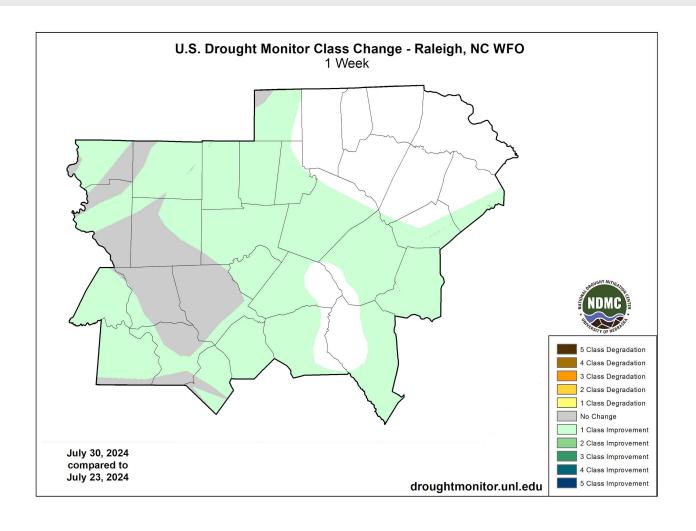




Current Drought Conditions

Latest U.S. Drought Monitor Map and One-Week Change





Main Takeaways

- While there has been significant rainfall over the past two to three weeks, portions of the northwest Piedmont did not receive as much rainfall as areas to the east and Severe Drought (D2) continues.
- Very beneficial rainfall in the Piedmont and Coastal Plain have resulted in widespread improvement in the drought.
 Left: U.S. Drought Monit

Image Caption:

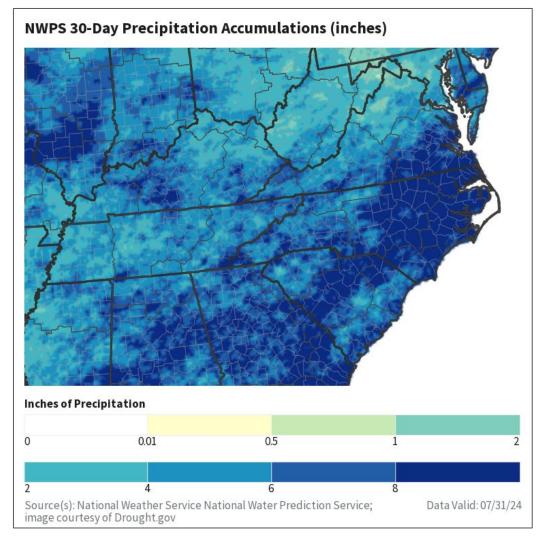
Left: <u>U.S. Drought Monitor valid 8am EDT July 30, 2024</u> Right: U.S. Drought Monitor 4-week change map valid 8am EDT July 30, 2024

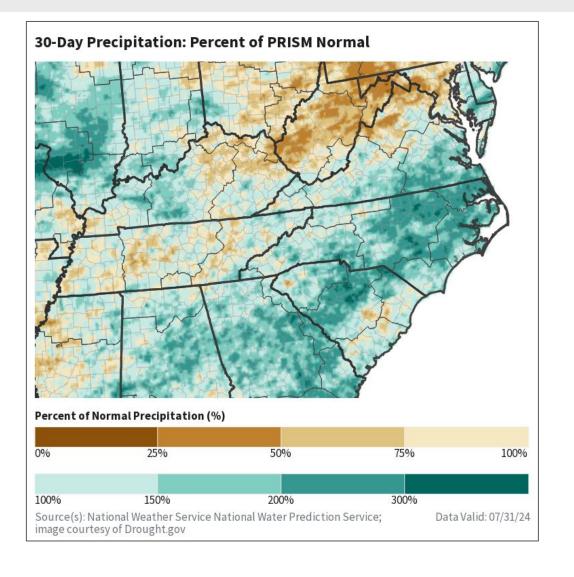




Observed Precipitation

Latest 30-Day Rainfall and Percent of Normal Rainfall





Main Takeaways

Well above normal rainfall has occurred over the past 30 days, and especially in the past two
to three weeks, with many areas receiving 10-15 inches of rain, which is as much as 500% of
normal.

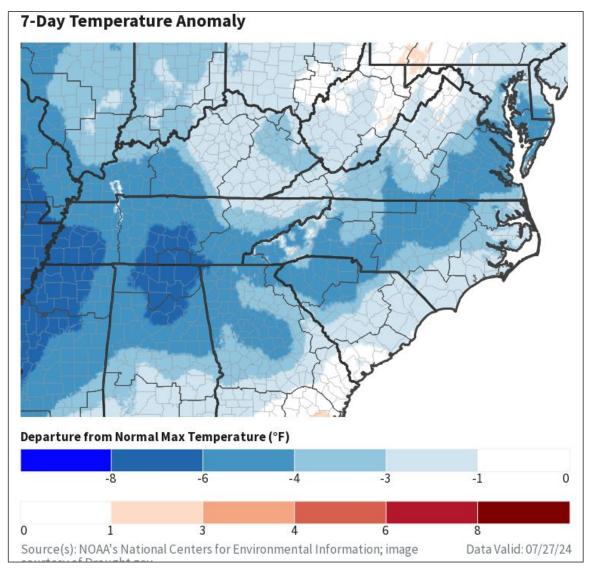
of
Left - Precipitation Amount for NC
Right - Percent of Normal Precipitation for NC
Data Courtesy NWS National Water Prediction Service
Data over the past 30 days ending July 30, 2024

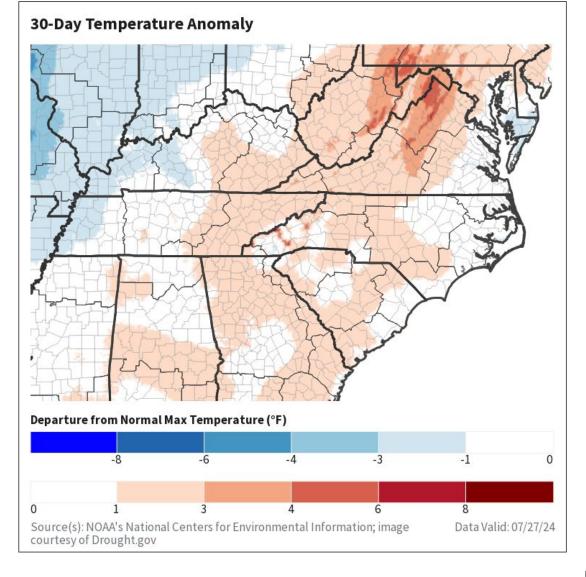




Observed Temperature

Latest 30-Day Average Max Temperature and Departure from Normal





Main Takeaways

• Temperatures were above normal in much of the Piedmont over the past 30s days, but a change in the overall weather pattern has resulted in a shift to near to below normal in the past one to two weeks overall.

Image Captions:

Left - 7-Day Departure from Normal Temperature for NC
Right - 30-Day Departure from Normal Temperature for NC
Data Courtesy NOAA's National Centers for Environmental Information
Data over the past 30 days ending July 27, 2024





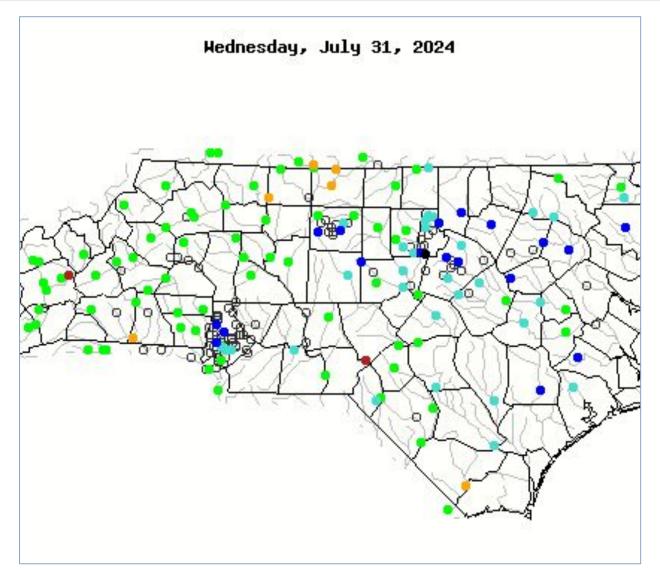
Hydrologic Conditions

Main Takeaways

- Rainfall in the eastern Piedmont and Coastal Plain have helped streamflow recovery significantly.
- 28-day streamflow shown to the right depicts above to much above average streamflow in the Neuse and Tar River Basins.
- Streamflow is not as high in the western Piedmont but is generally in the normal range.

Impacts

Reservoir operations in the eastern
Piedmont have benefited from increased
inflows and are able to maintain near
normal pools.



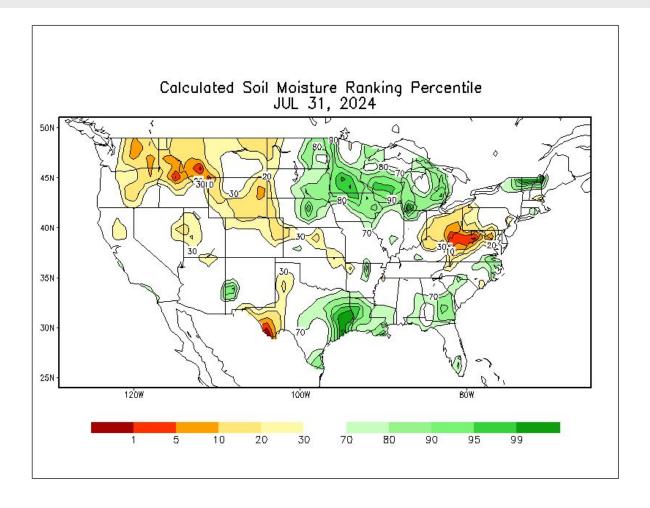
	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

USGS 28 day average streamflow map valid July 31, 2024





Agricultural Impacts



Main Takeaways

 Topsoil moisture has improved drastically with the recent rainfall, and a CoCoRaHS observer in Hoke County has reported standing water in soybeans fields.

Impacts

• Rainfall in the Coastal Plain has benefited farmers, although many corn crops may be too late to save.

Image Captions

Left: CPC Calculated <u>Soil Moisture Ranking Percentile</u> valid July 30, 202 Right: <u>USDA Crop Progress Report</u>.Valid July, 2024





Summary of Impacts

Hydrologic Impacts

• Hydrologic conditions have improved tremendously in the past two weeks with widespread well above normal rainfall.

Agricultural Impacts

The impacts of the flash drought were significant on agriculture, and especially on corn. Recent rainfall
has helped crops that were not too significantly damaged.

Fire Hazard Impacts

There are no known significant impacts at this time.

Mitigation

Water Conservation Advisories have been lifted in most areas.





Seven Day Precipitation Forecast

Next 7 days:

- A cold front moving into the region from the west-northwest will bring a chance of showers and thunderstorms through early next week.
- Rainfall will be variable and should generally be near normal overall, with some areas receiving below normal and some receiving above normal.
- The National Hurricane Center is monitoring an area of thunderstorms on the western Atlantic for tropical development. This could impact rainfall amounts across central North Carolina later next week, but confidence is low at this point.

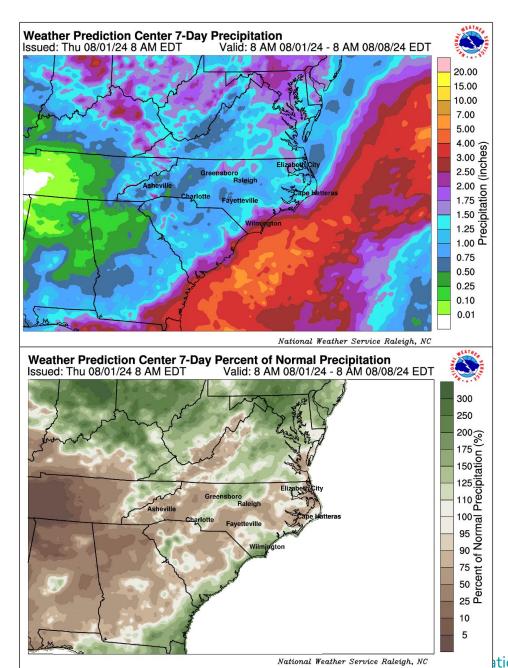


Image Caption: ation forecast valid July 18-25, 2024



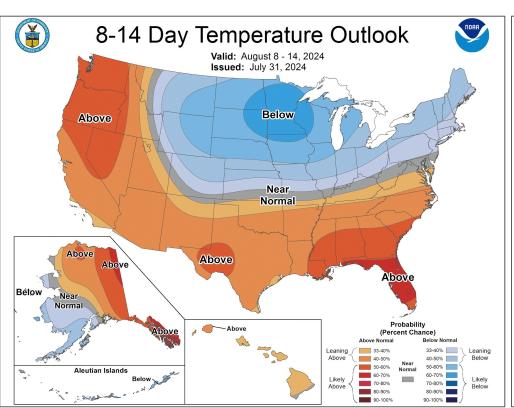


8-14 Day Outlook

Temperature and Precipitation Outlook

Main Takeaways

- The temperature forecast for August 8 through 14 is for increased probabilities of near to above normal readings.
- The precipitation forecast has a slight lean toward above normal rainfall.



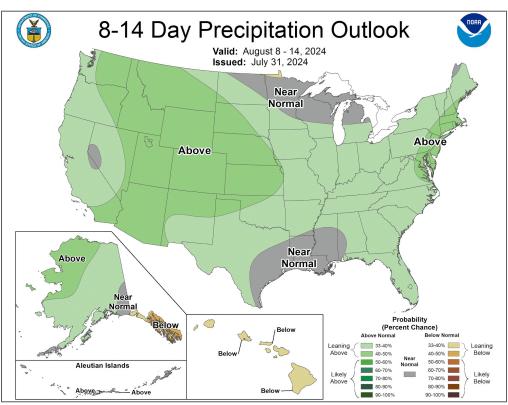


Image Captions:

Left - <u>Climate Prediction Center 8-14 Day Temperature Outlook.</u>
Right - Climate Prediction Center 8-14 Day Precipitation Outlook.

Valid July 25-31, 2024.



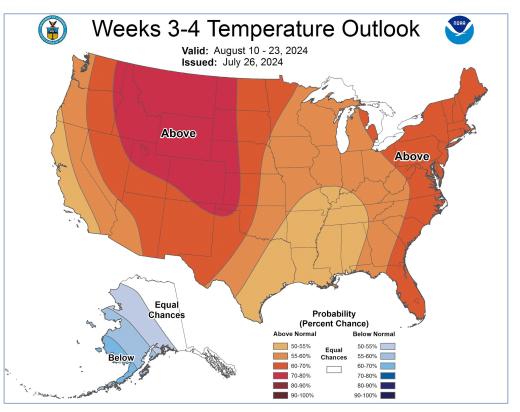


Weeks 3-4 Outlook

Temperature and Precipitation Outlook

Main Takeaways

- The Precipitation and Temperature
 Outlooks from the CPC for August
 10 through August 23 are shown to
 the right.
- The temperature forecast for August 10 through 23 favors above normal readings.
- The precipitation forecast favors above normal precipitation.



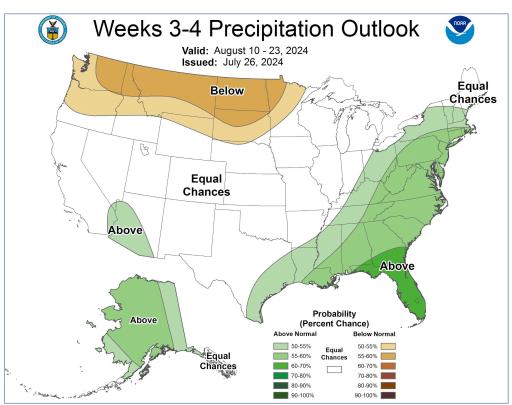


Image Captions:

Left - <u>Climate Prediction Center Weeks 3-4 Temperature Outlook.</u> Right - Climate Prediction Center Weeks 3-4 Precipitation Outlook.

Valid July 27- August 9, 2024.





Seasonal (3-Month) Climate Outlook

Seasonal Temperature and Precipitation Outlook

Main Takeaways

- The Seasonal Outlook through October leans toward above normal temperatures for the period across all of central North Carolina.
- The Seasonal Outlook also leans toward above normal rainfall.

Possible Impact

Seasonal above normal rainfall would help to mitigate some of the drought impacts given the reduction of rainfall deficits.

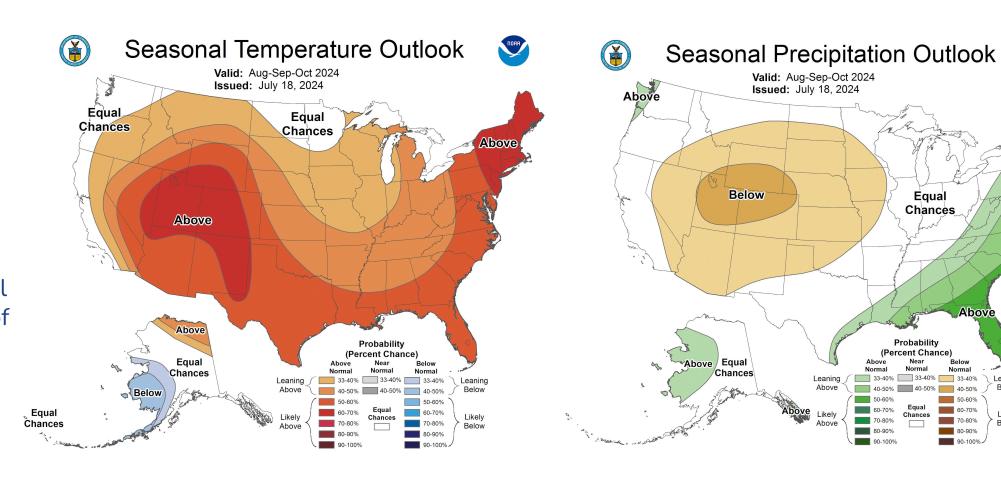


Image Captions:

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid August to Ocotber, 2024.

Above



Egual Chances



Drought Outlook

Main Takeaways

- Drought conditions have improved across most of central North Carolina
- The short and long range rainfall outlooks call for a chance of above normal rainfall, which would continue to help to alleviate some drought conditions.
- While the longer term forecasts favor above normal temperatures into mid-August, the overall pattern does not support the combination of excessive heat and dry conditions that we saw in late June and early July.

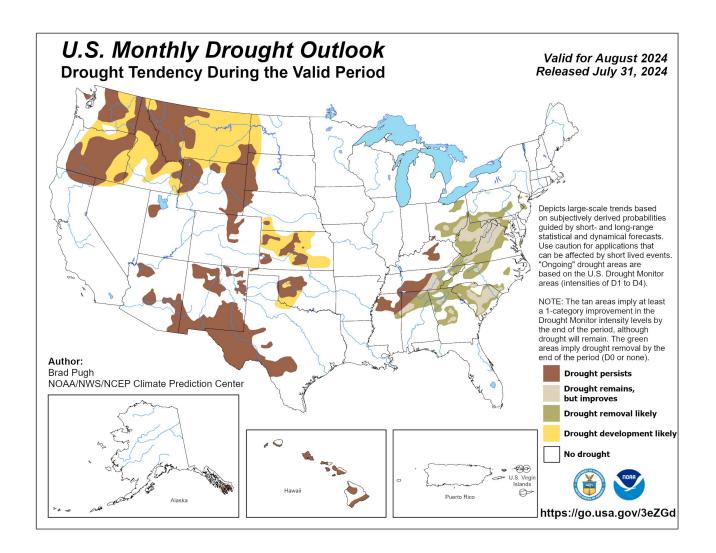


Image Captions:

Climate Prediction Center Seasonal Drought Outlook

Released July 18, 2024 valid for July to Ocotber, 2024





Questions or comments can be sent to barrett.smith@noaa.gov

