

# Drought Information Statement for Central North Carolina

Valid July 5, 2024

Issued By: NWS Raleigh

**Contact Information:** 

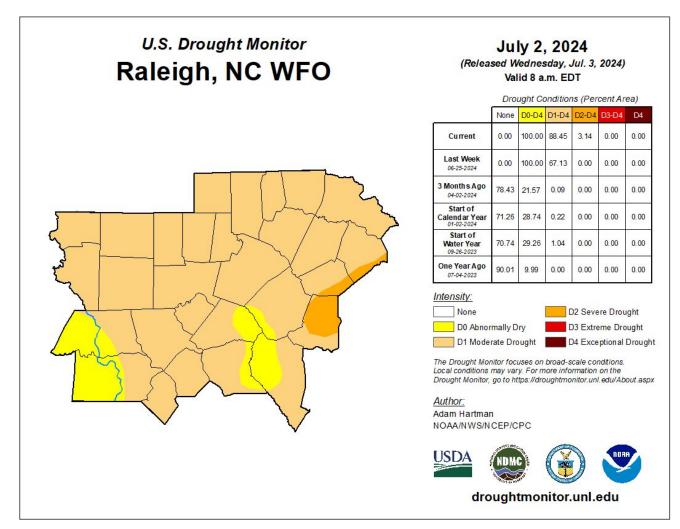
- This Drought Information Statement will be updated by July 18, 2024.
- Please see all currently available products at https://drought.gov/drought-information-statements.
- Please visit https://www.weather.gov/RAH/DroughtInformationStatement for previous statements.
- Questions or comments can be sent to barrett.smith@noaa.gov
- Severe Drought develops across portions of the North Carolina coastal plain.

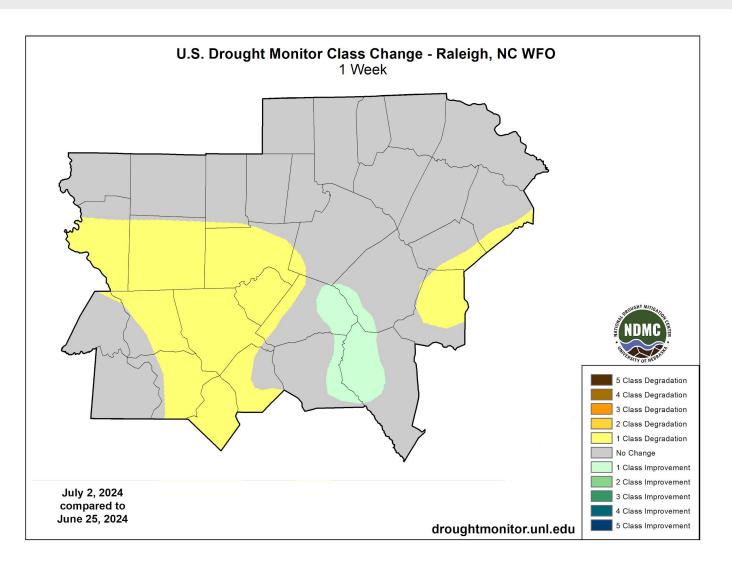




### **Current Drought Conditions**

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





#### Main Takeaways

- Moderate Drought (D1) has expanded across the southern Piedmont.
- Severe Drought (D2) has developed in Wayne County
- There has been some improvement around Fay and Clinton due to locally heavy rainfall.

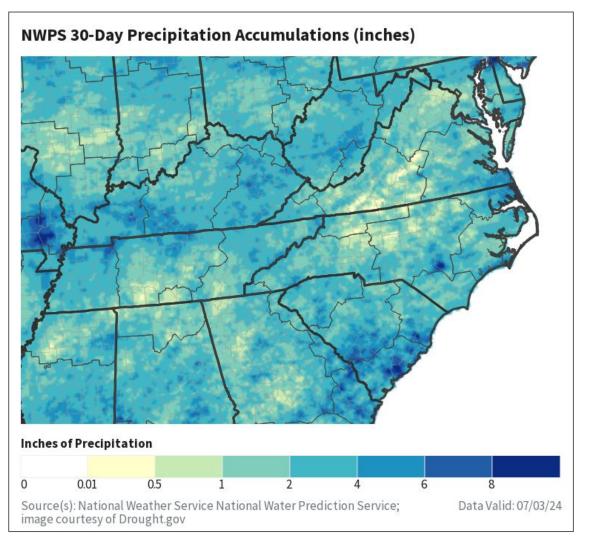
Image Caption:
2avy Left: U.S. Drought Monitor valid 8am EDT July 3, 2024
Right: U.S. Drought Monitor 4-week change map valid 8am EDT July 3, 2024

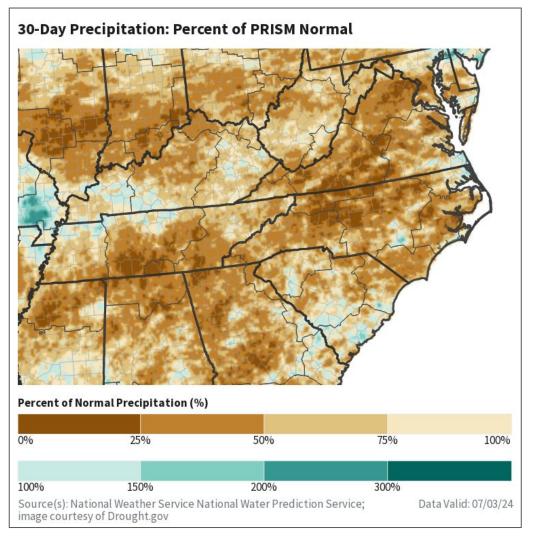




## **Observed Precipitation**

Latest 30-Day Rainfall and Percent of Normal Rainfall





#### LOCAL RAINFALL SUMMARY (INCHES)

#### RALEIGH-DURHAM INTERNATIONAL AIRPORT (RDU)

LAST 7 DAYS 06/26/2024 0.63 0.92 -0.29 68% LAST 14 DAYS 06/19/2024 0.63 1.84 -1.21 34% LAST 30 DAYS 06/03/2024 2.89 3.89 -1.00 74%

#### PIEDMONT TRIAD INTERNATIONAL AIRPORT (GSO)

LAST 7 DAYS 06/26/2024 0.14 0.88 -0.74 16% LAST 14 DAYS 06/19/2024 0.14 1.84 -1.70 8% LAST 30 DAYS 06/03/2024 0.82 4.04 -3.22 20%

#### **FAYETTEVILLE AIRPORT (FAY)**

LAST 7 DAYS 06/26/2024 1.93 1.20 0.73 161% LAST 14 DAYS 06/19/2024 2.28 2.40 -0.12 95% LAST 30 DAYS 06/03/2024 3.33 4.90 -1.57 68%

#### Main Takeaways

 Conditions have been very dry since early-June, with many areas receiving less than one inch of rain, which is 3-4 inches below normal.

#### **Image Captions:**

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 3, 2024

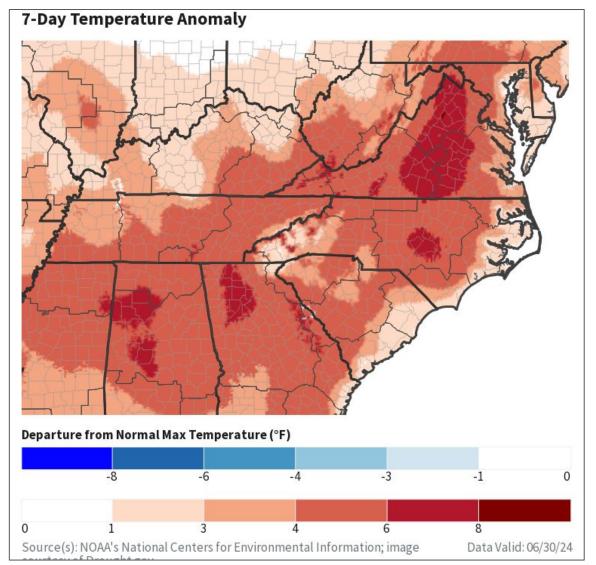


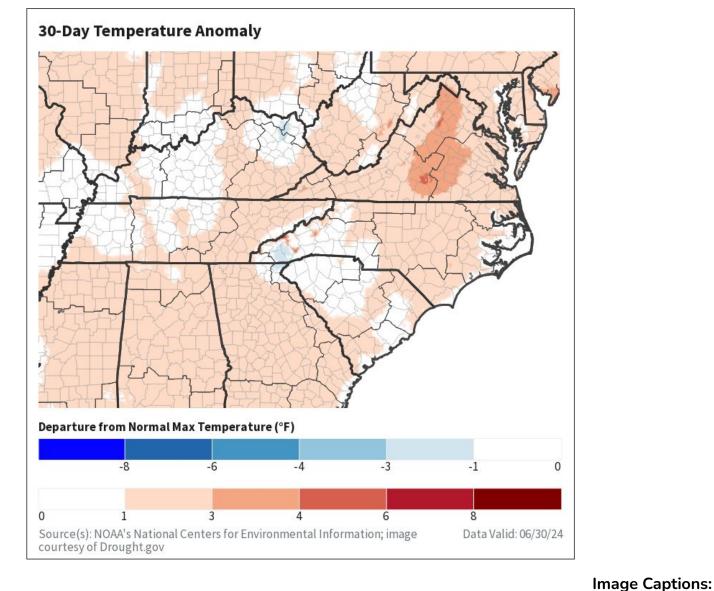
National Weather Service Raleigh, NC



## **Observed Temperature**

#### **Latest 30-Day Average Max Temperature and Departure from Normal**





#### Main Takeaways

• Temperatures have been above normal over the past 30 days, with particularly hot conditions in the past one to two weeks,

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 June 30, 2024





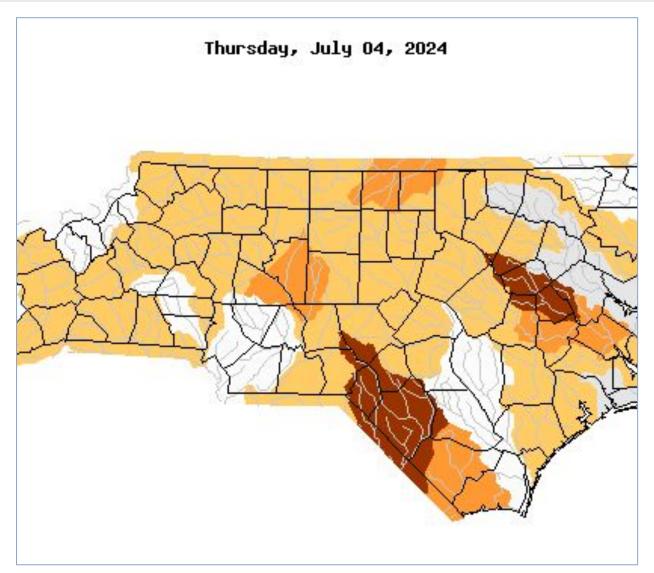
## **Hydrologic Conditions**

#### Main Takeaways

 Streamflow has been rapidly falling below normal since mid-June. Lower portions of the Cape Fear, Neuse and Tar River Basins are showing the most notable decline.

#### **Impacts**

 Below average streamflow is reducing inflow into some area reservoirs and lake levels continue to fall.



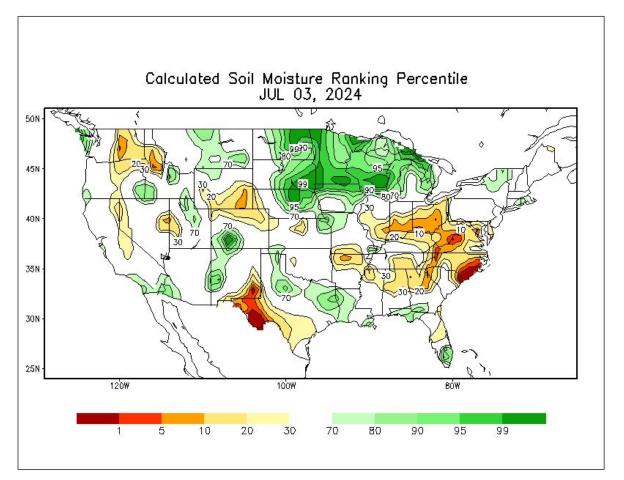
	Expl	anation	- Perce	ntile cla	asses		
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

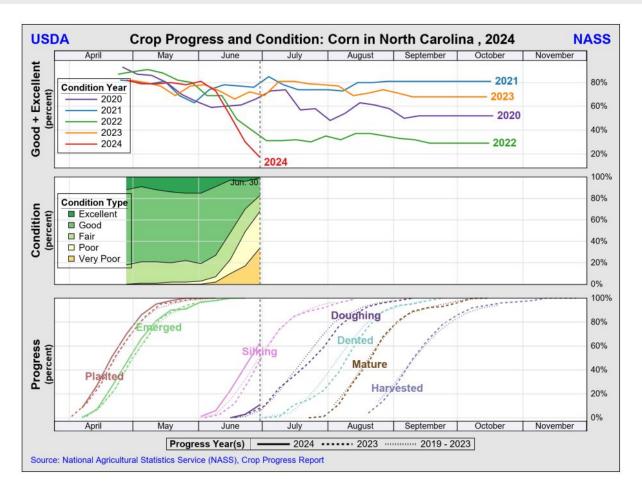
Image Caption: USGS 7 day average streamflow HUC map valid July 4, 2024





## **Agricultural Impacts**





#### Main Takeaways

 Soil moisture is rapidly drying across central North Carolina and have shown the most dramatic decrease in the coastal plain and northern Piedmont regions.

#### **Image Captions**

Left: CPC Calculated <u>Soil Moisture Ranking Percentile</u> valid July 3, 2024 Right: <u>USDA Crop Progress Report</u>.Valid June, 2024

#### **Impacts**

There have been significant impacts on agriculture, particularly in corn crops.





## Summary of Impacts

#### **Hydrologic Impacts**

• Streamflows continue to fall below normal area-wide. Below average streamflow is reducing inflow into some area reservoirs and lake levels continue to fall.

#### **Agricultural Impacts**

• Much of the agricultural community are reporting significant impacts. Corn crops are showing the most significant impact, with some complete losses, especially in sandier soils.

#### Fire Hazard Impacts

• There are no known significant impacts at this time, although the dry conditions have increased the danger of wildfire development.

#### Mitigation actions

Water Conservation Advisories have been issued in Johnston and Wilson Counties.





## Seven Day Precipitation Forecast

#### Next 7 days:

- Scattered afternoon showers and thunderstorms will increase this weekend into early next week.
- Rainfall will vary day-to-day, with the potential for 1-2 inches in the western and northern Piedmont regions.
- Some area may see slow moving or multiple rounds of storms and locally higher amounts.

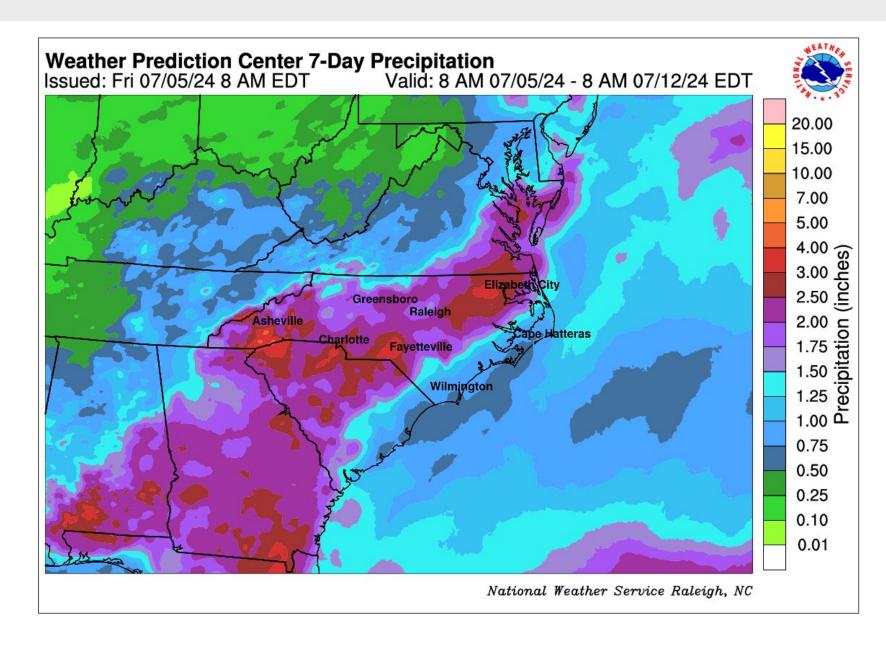


Image Caption:

Weather Prediction Center 7-day precipitation forecast valid July 5 to July 12, 2024





## 8-14 Day Outlook

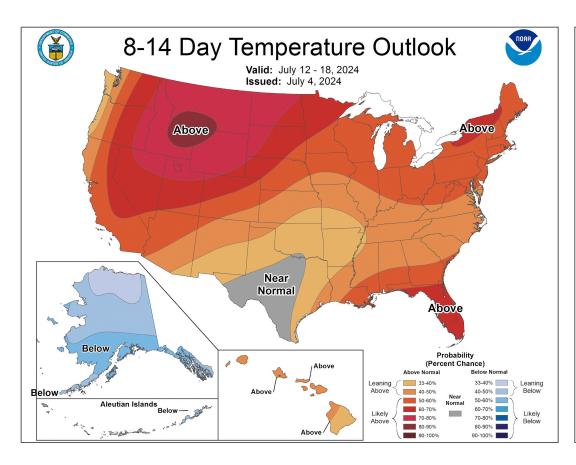
#### **Temperature and Precipitation Outlook**

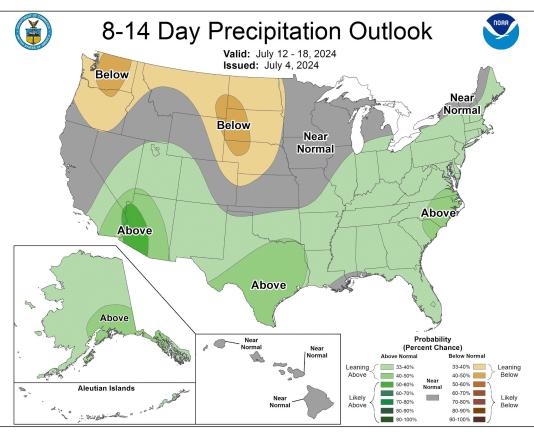
#### Main Takeaways

- There are increased probabilities of above normal temperatures in days 8-14 across central North Carolina.
- Precipitation in days 8-14 is most likely to be near normal.

#### **Possible Impact**

 Continued well above normal temperatures will cause drought to persist if rainfall remains only near normal.





#### **Image Captions:**

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

Valid July 12 - 18, 2024.





## Weeks 3-4 Outlook

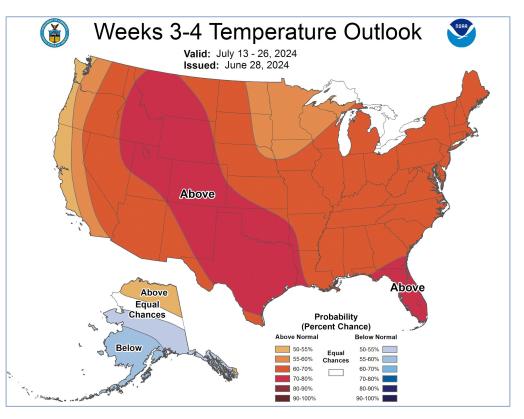
#### **Temperature and Precipitation Outlook**

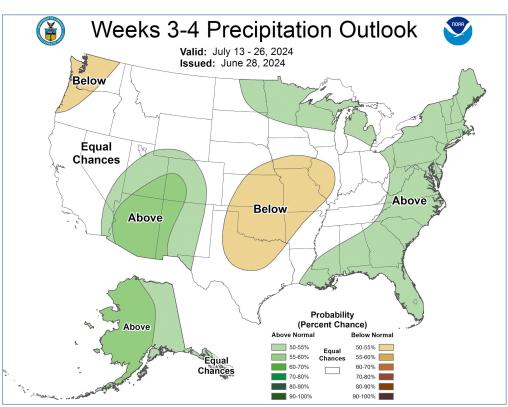
#### Main Takeaways

 There are increased probabilities of above normal temperatures and a slight lean toward above normal precipitation for mid to late July across central North Carolina.

#### **Possible Impact**

 While rain will be welcome, continued above normal temperatures for several more weeks will cause drought to persist and perhaps worsen if rainfall remains near normal.





#### **Image Captions:**

Left - <u>Climate Prediction Center Weeks 3-4 Temperature Outlook.</u>
Right - <u>Climate Prediction Center Weeks 3-4 Precipitation Outlook.</u>
Valid July 13 to 26, 2024.





## Seasonal (3-Month) Climate Outlook

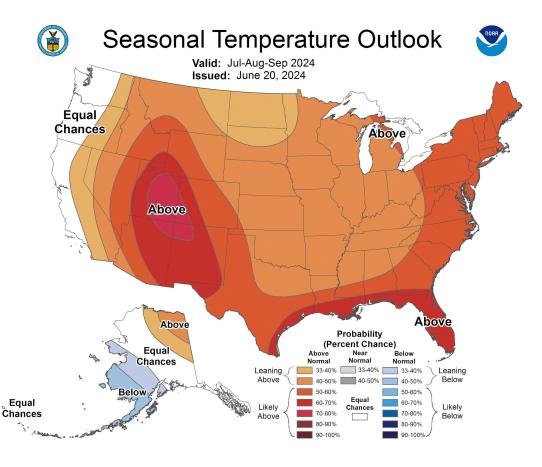
#### **Seasonal Temperature and Precipitation Outlook**

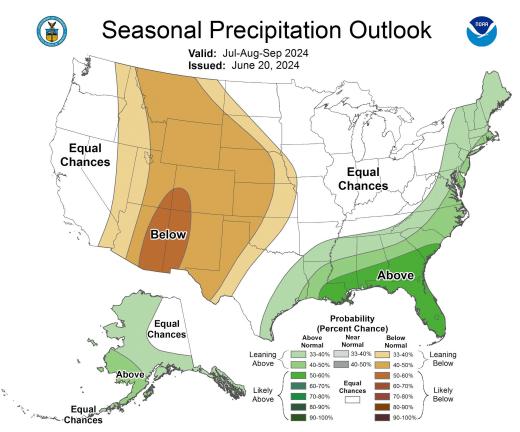
#### Main Takeaways

- The Seasonal Outlook through September leans toward above normal temperatures for the period across all of central North Carolina.
- The Seasonal Outlook also leans toward above normal rainfall, with higher probabilities over eastern North Carolina.

#### **Possible Impact**

 Seasonal above normal rainfall would help to mitigate some of the drought impacts, although above normal temperature and only near normal precipitation would likely cause drought to persist or worsen.





#### **Image Captions:**

Left - Climate Prediction Center Seasonal Temperature Outlook.

Right - Climate Prediction Center Seasonal Precipitation Outlook.

Valid July to September, 2024.

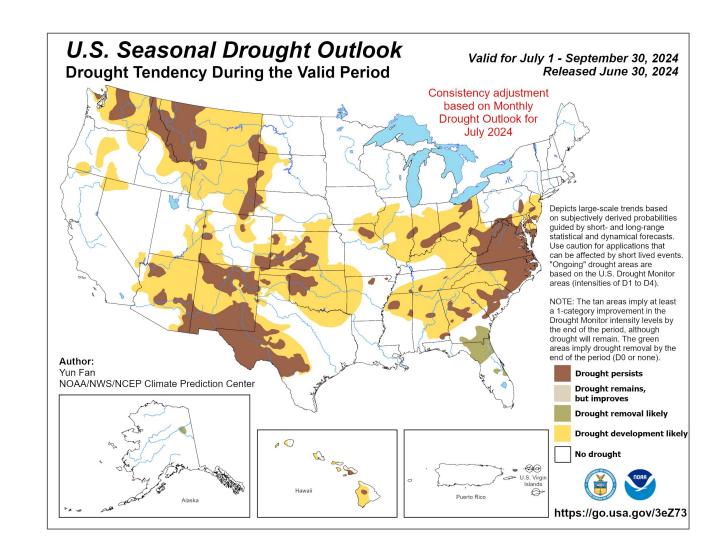




## **Drought Outlook**

#### **Main Takeaways**

- Overall, flash drought has caused significant early summer impacts on agriculture and impacts on water resources will worsen if drought continues to worsen.
- The short and long range rainfall outlooks call for a chance of above normal rainfall, which would improve drought conditions.
- However, even near-normal rainfall combined with above normal temperatures would result in drought persistence.
- Impacts may become very localized depending on where typical summertime storms occur week over week.



**Image Captions:** 

Climate Prediction Center Seasonal Drought Outlook

Released June 30, 2024 valid for July to September, 2024





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

