

Climate Overview

July 2024 to August 2025



Corey Davis

Asst. State Climatologist
NC State Climate Office

Big Weather Stories



Photo by NC Division of Aviation

Big Weather Stories



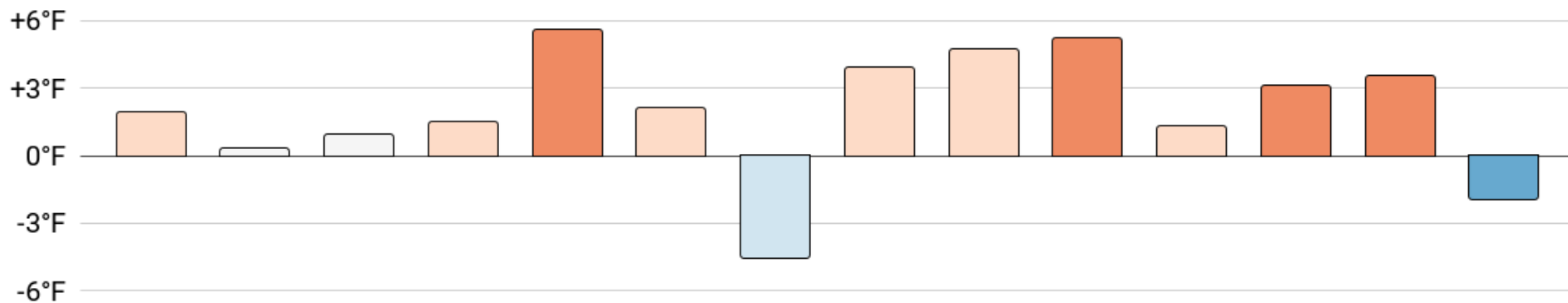
Photo by NC Division of Aviation



Photo by US Forest Service

Monthly Statewide Temperatures

Jul 2024	Aug	Sep	Oct	Nov	Dec	Jan 2025	Feb	Mar	Apr	May	Jun	Jul	Aug
20 th WARMEST	63 rd WARMEST	50 th WARMEST	43 rd WARMEST	3 rd WARMEST	42 nd WARMEST	17 th COOLEST	25 th WARMEST	15 th WARMEST	2 nd WARMEST	38 th WARMEST	12 th WARMEST	2 nd WARMEST	10 th COOLEST



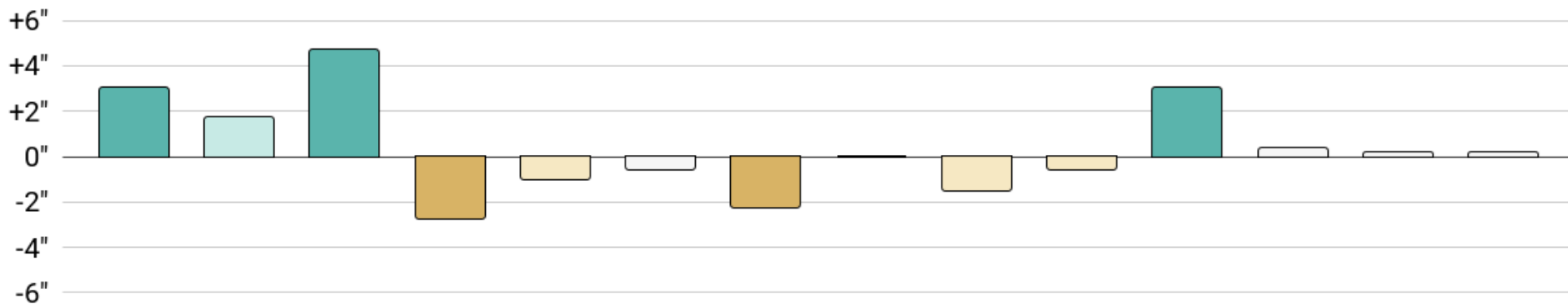
Departures compared to 1901 to 2000

Rankings based on data since 1895



Monthly Statewide Precipitation

Jul 2024	Aug	Sep	Oct	Nov	Dec	Jan 2025	Feb	Mar	Apr	May	Jun	Jul	Aug
8 th WETTEST	22 nd WETTEST	8 th WETTEST	3 rd DRIEST	35 th DRIEST	51 st DRIEST	7 th DRIEST	64 th DRIEST	22 nd DRIEST	41 st DRIEST	4 th WETTEST	46 th WETTEST	53 rd WETTEST	54 th WETTEST



Departures compared to 1901 to 2000

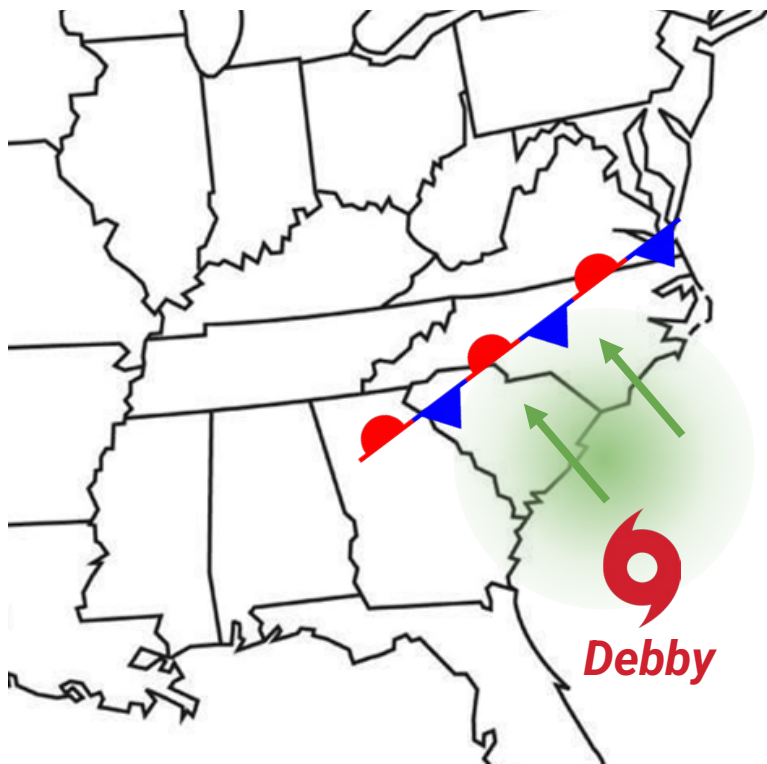
Rankings based on data since 1895



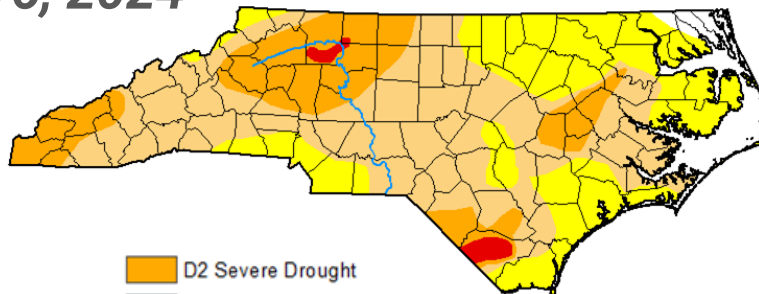
July/August 2024

28th
WARMEST

4th
WETTEST



Jul. 16, 2024



Intensity:

None

D0 Abnormally Dry

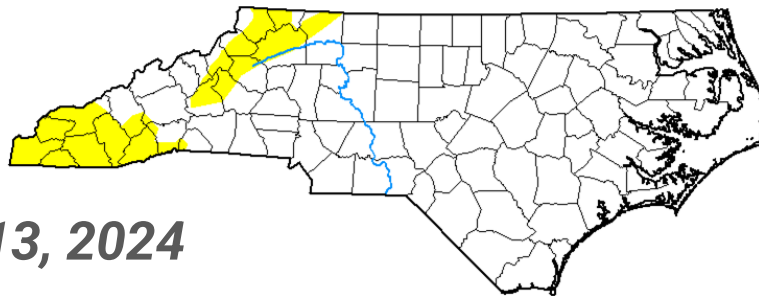
D1 Moderate Drought

D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought

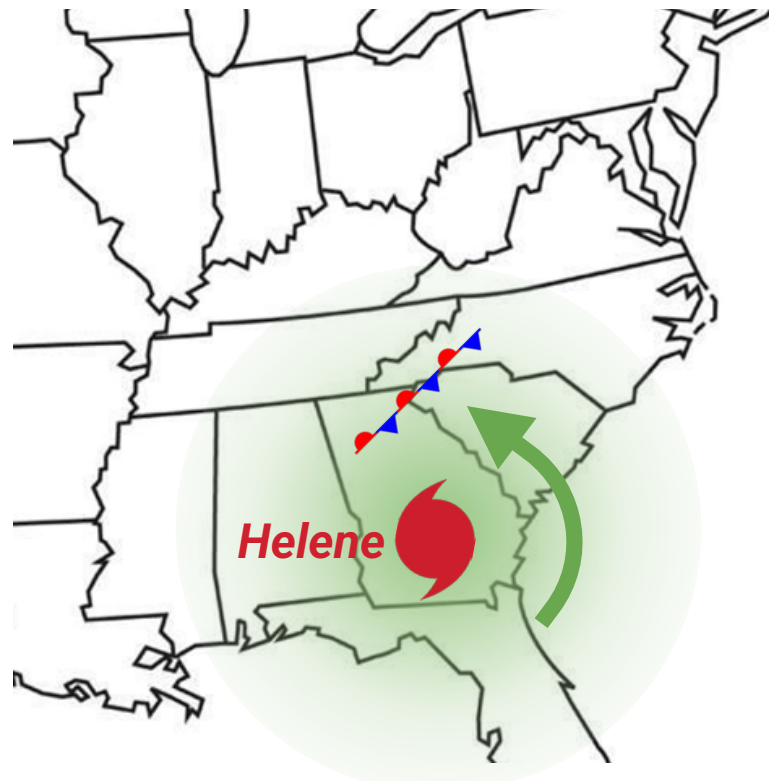
Aug. 13, 2024



Fall 2024: September Storms

10th
WARMEST

49th
WETTEST



Tropical Event Impacts

By the Fayetteville Observer



Tropical Event Impacts

By the Fayetteville Observer



By Southport Police Dept.

Tropical Event Impacts

By the Fayetteville Observer



By Old Marshall Jail Hotel

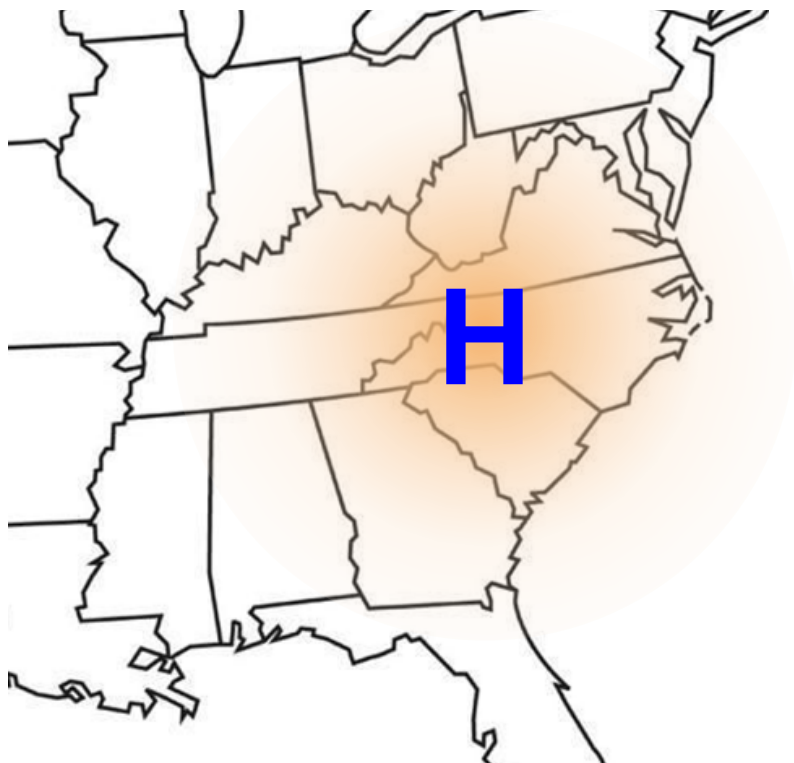


By Southport Police Dept.

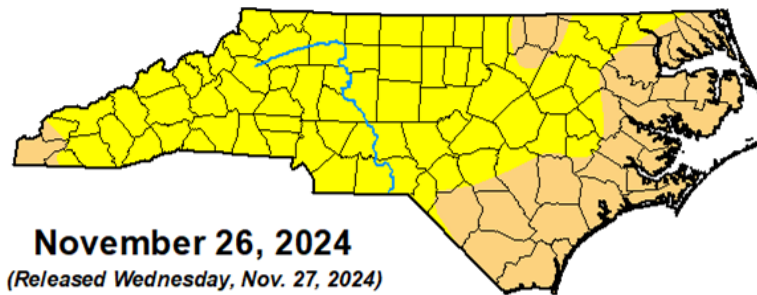
Fall 2024: Late-Season Dryness

10th
WARMEST

49th
WETTEST



U.S. Drought Monitor North Carolina



November 26, 2024

(Released Wednesday, Nov. 27, 2024)

Valid 7 a.m. EST

Intensity:

None

D0 Abnormally Dry

D1 Moderate Drought

D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought



Fall Drought Impacts



Low Groundwater
levels in the northeast



By the Howder Family



Delayed Planting
for winter wheat



By Ohio State Extension

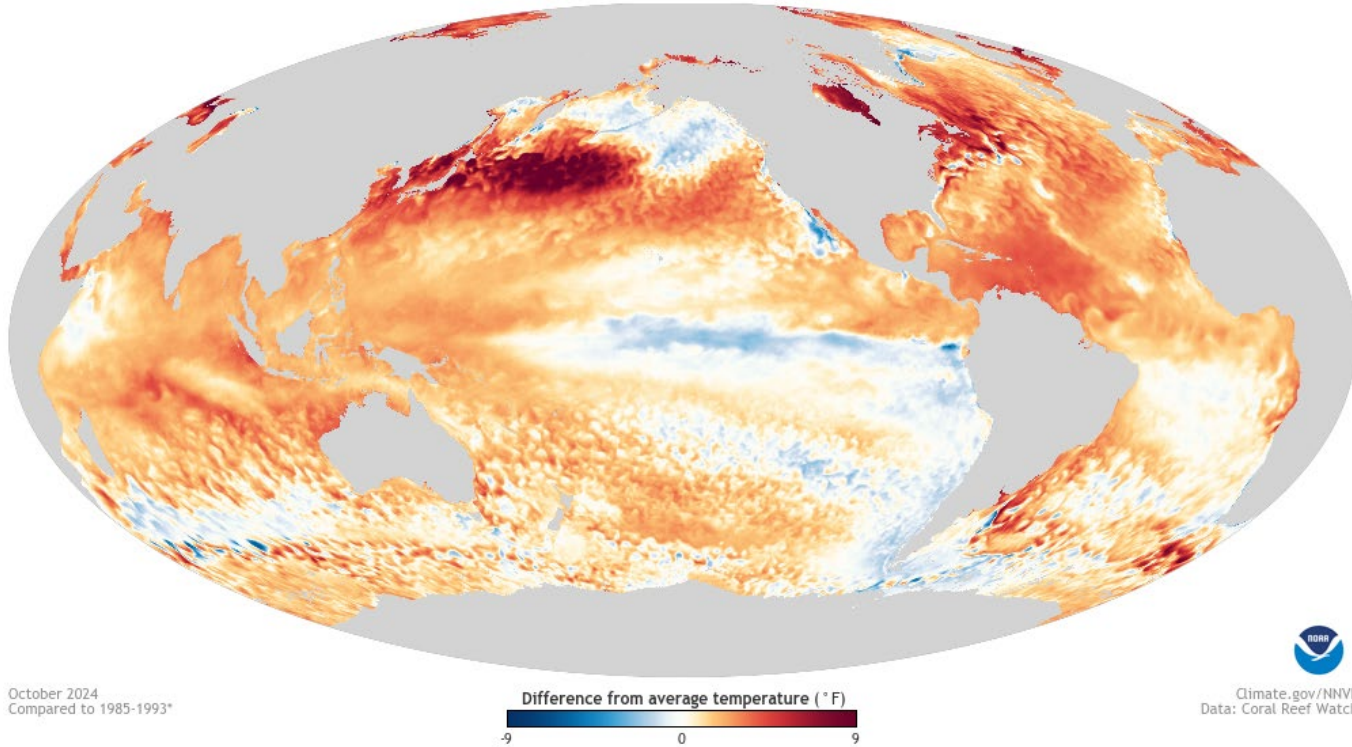


Wildfires Ignite
in western NC



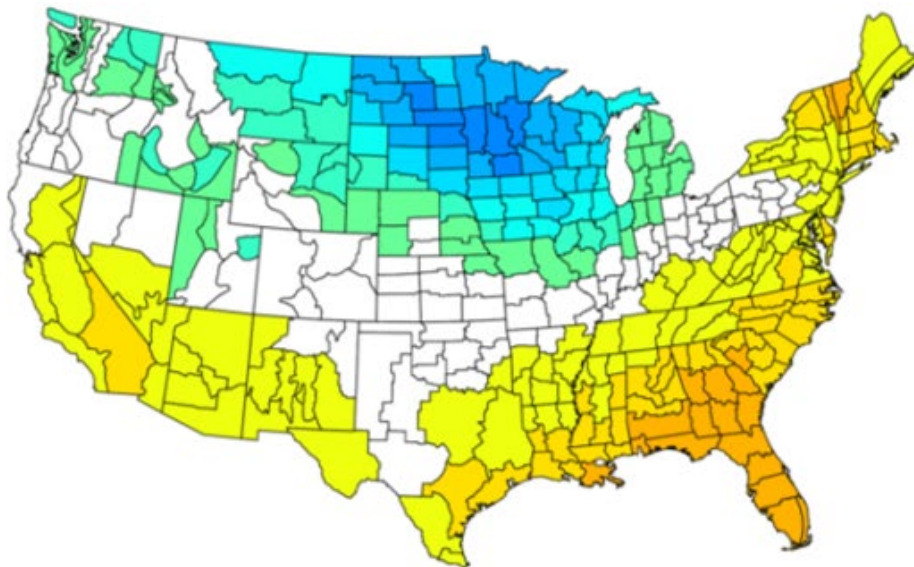
By Crystal Vander Weit

Entering a La Niña Pattern

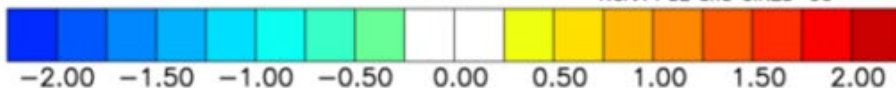


Weak La Niña Winters

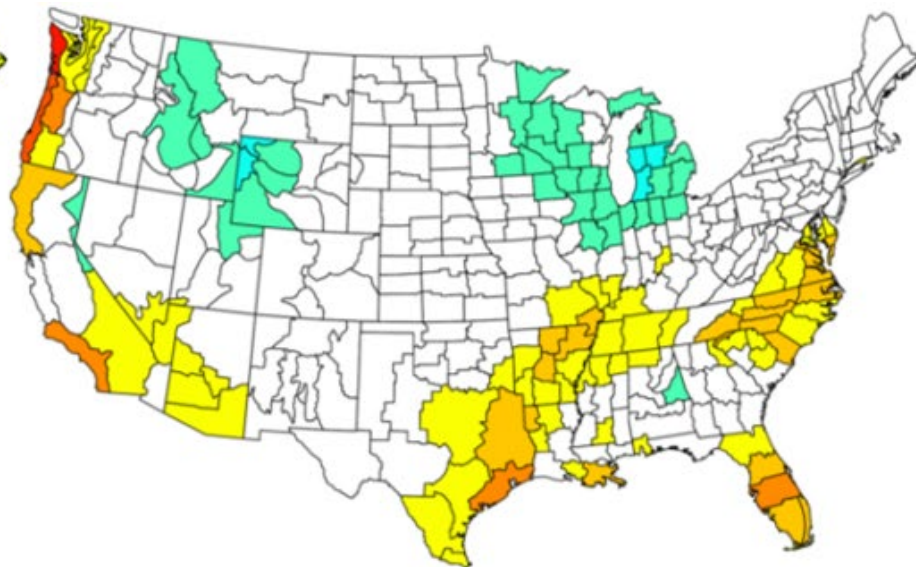
Average Temperature Anomalies



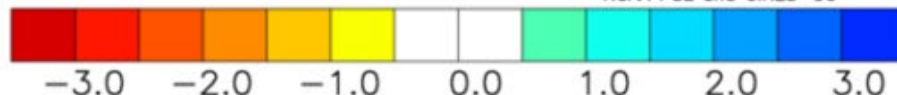
NOAA PSL and CIRES-CU



Average Precipitation Anomalies

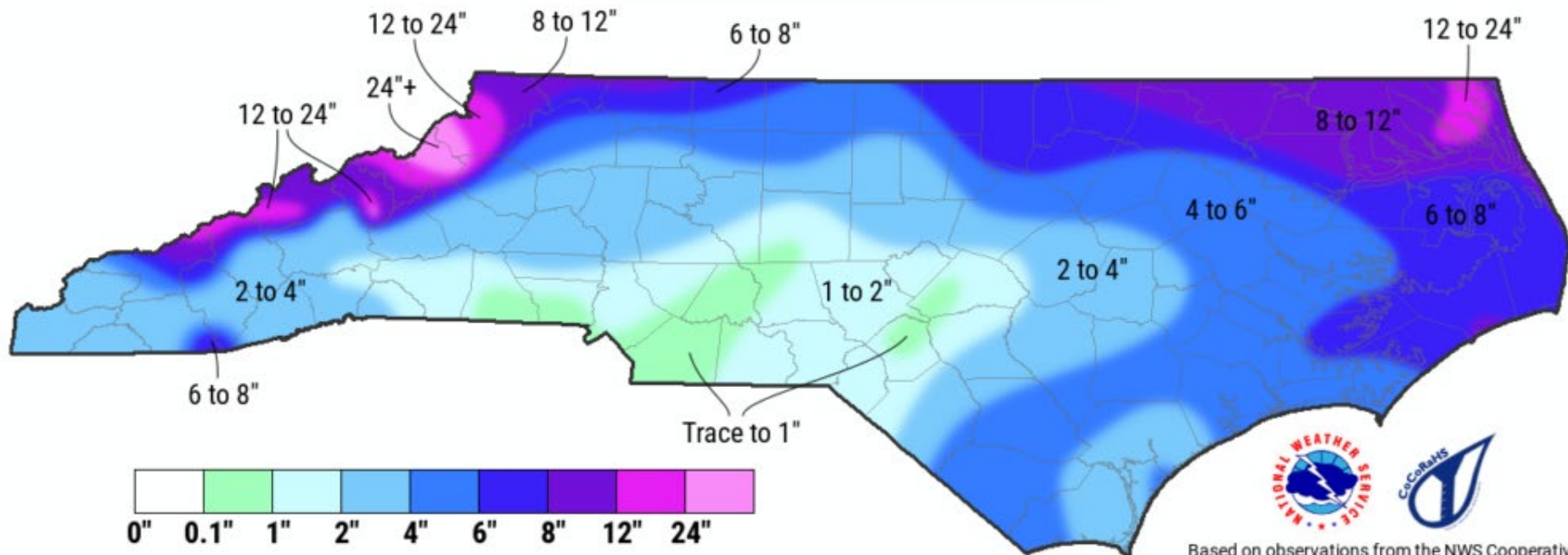


NOAA PSL and CIRES-CU



Total Snowfall

Nov. 2024 to Mar. 2025



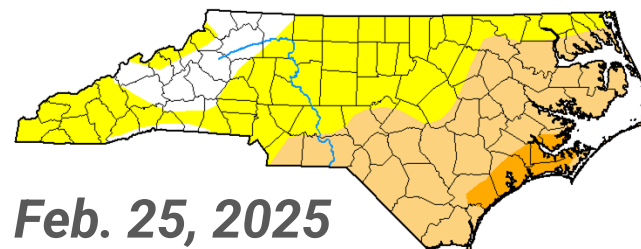
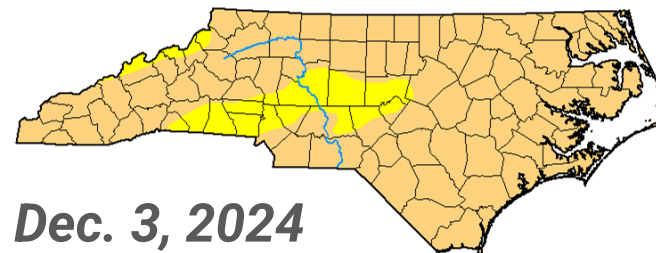
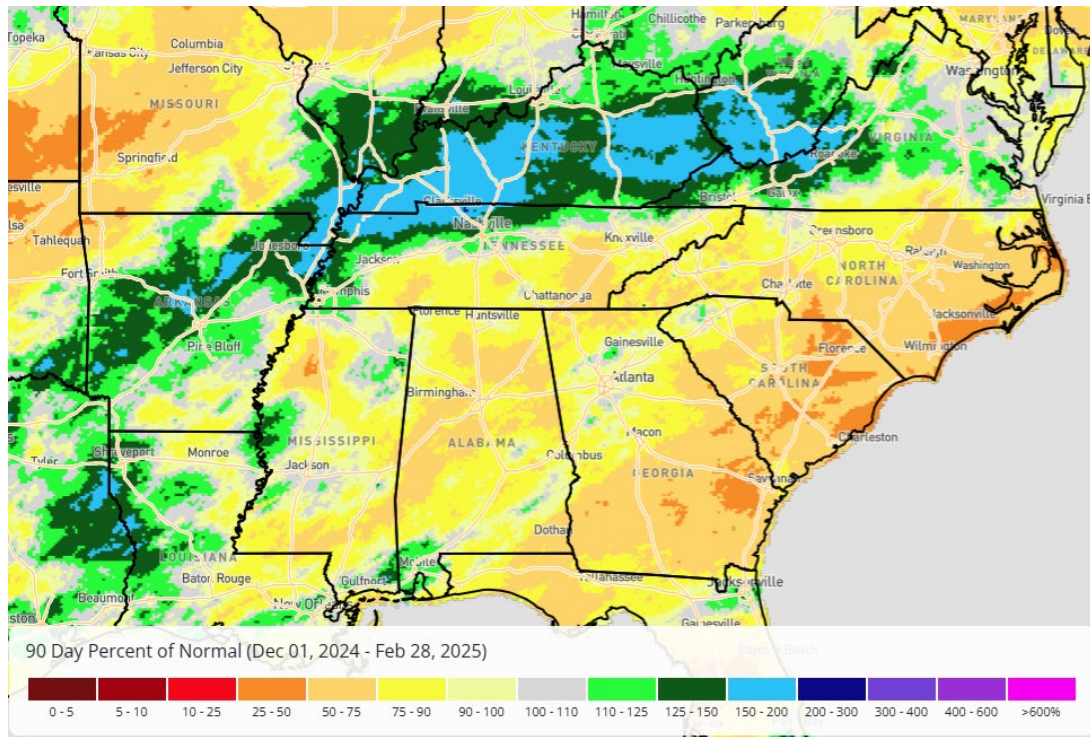
Based on observations from the NWS Cooperative Observer network and CoCoRaHS



Winter 2024-25

63rd
WARMEST

22nd
DRIEST



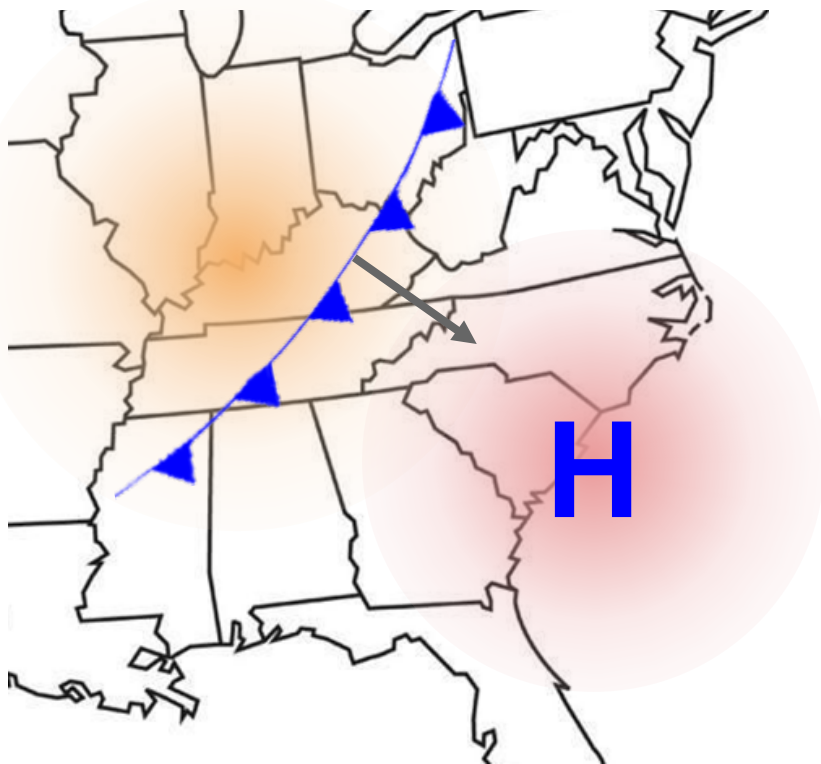
Intensity:



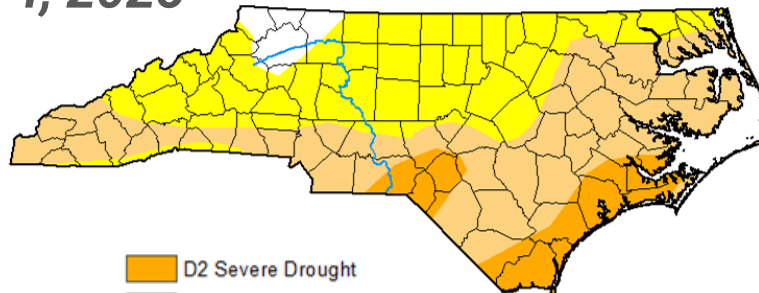
Spring 2025: Dryness Continues

2nd
WARMEST

41st
WETTEST



Mar. 4, 2025



Intensity:

None

D0 Abnormally Dry

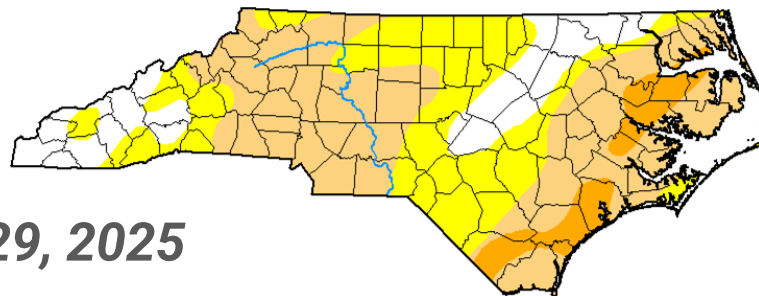
D1 Moderate Drought

D2 Severe Drought

D3 Extreme Drought

D4 Exceptional Drought

Apr. 29, 2025



Spring Drought Impacts



Poor Crop Conditions
including for oats



By Tim Scrivener



Water Conservation
along Catawba River



By Queen City News



Active Fire Season
especially in the west



By Thomas Mabry

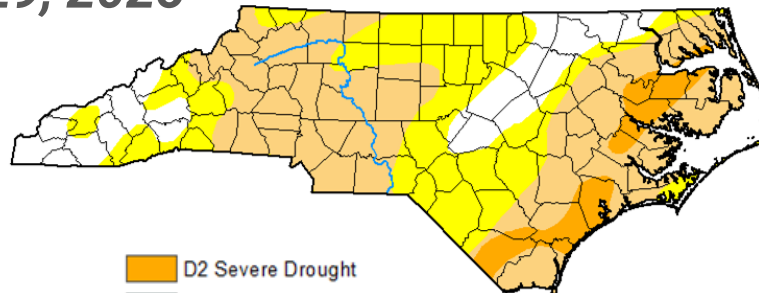
Spring 2025: A Wet May

2nd
WARMEST

41st
WETTEST



Apr. 29, 2025



Intensity:

None

D0 Abnormally Dry

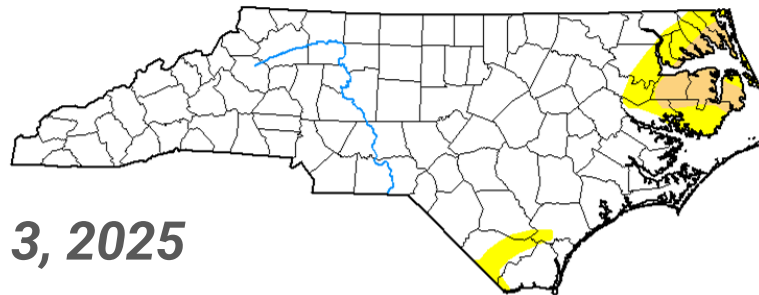
D1 Moderate Drought

D2 Severe Drought

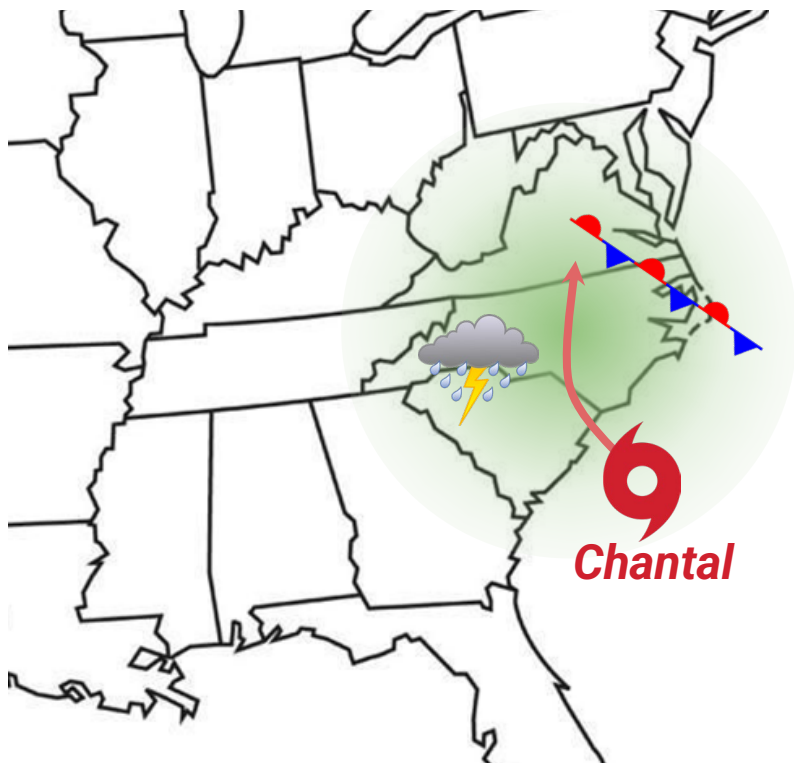
D3 Extreme Drought

D4 Exceptional Drought

Jun. 3, 2025



Summer 2025



13th
WARMEST

53rd
WETTEST

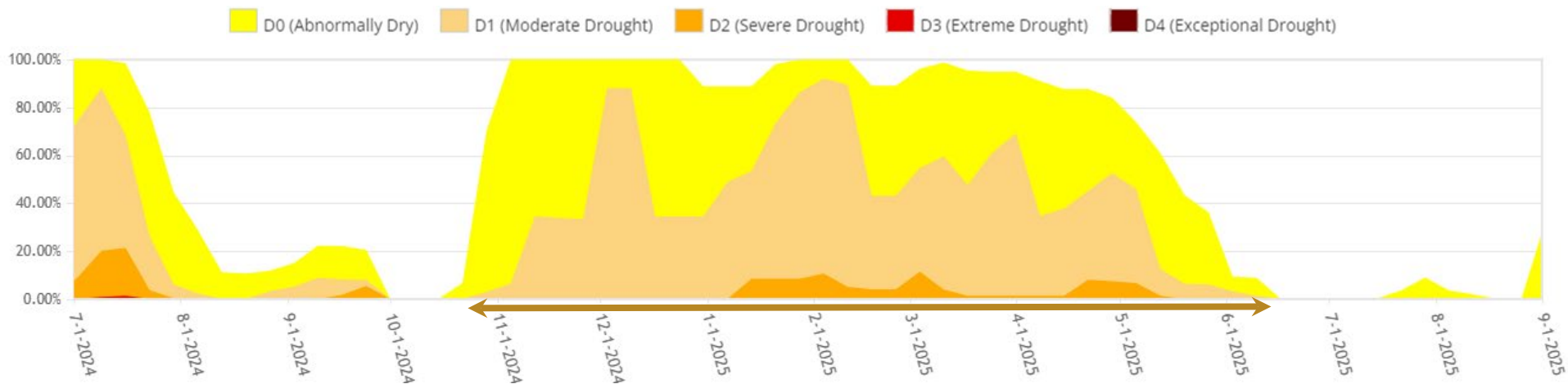


By WTVD News



By Southern States Coop

This Year's Drought Progression

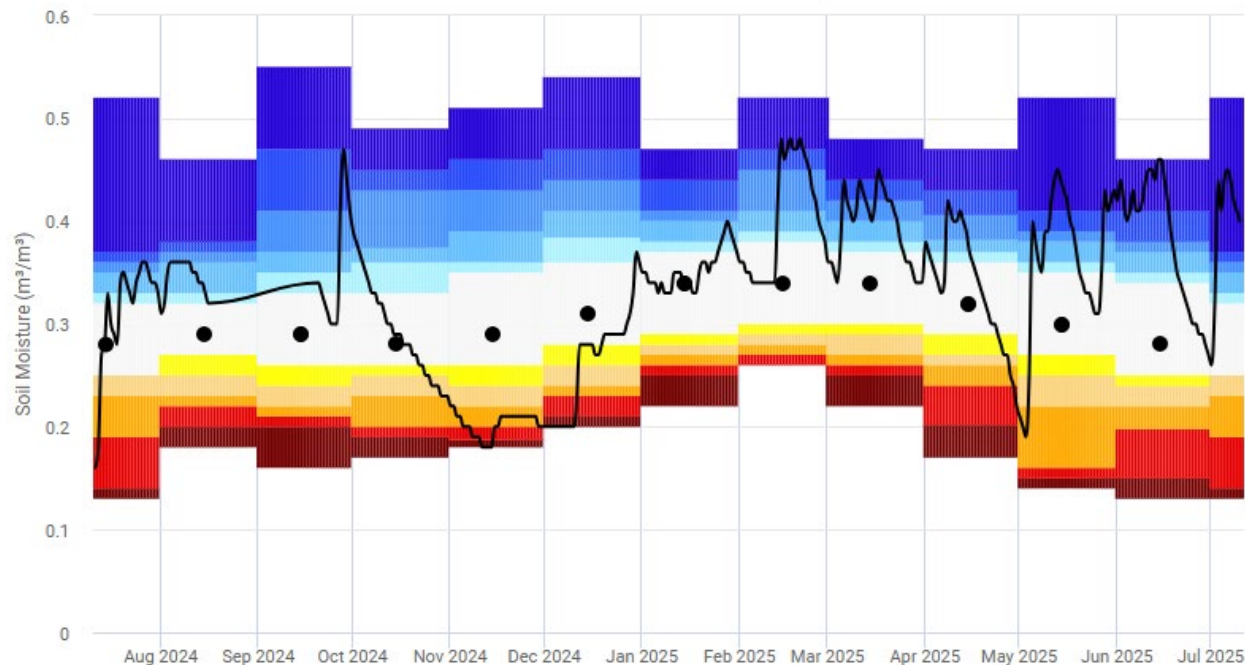


- **33 consecutive weeks** with drought in NC (*6th-longest since 2000*)
- **7 consecutive drier-than-normal months** from October to April (*longest streak since the 2007-09 drought*)

Soil Moisture Plots

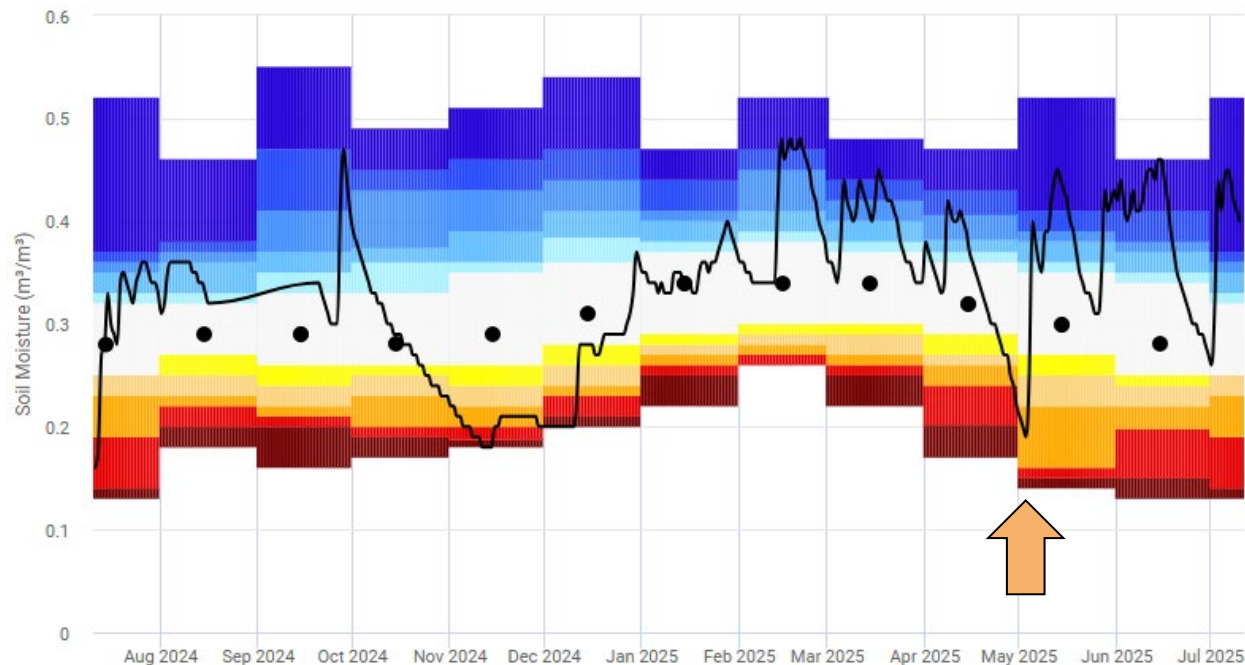
Soil Moisture Percentiles and 20cm Observations at WHIT from 07/10/2024 - 07/10/2025

Border Belt Tobacco Res Strn - Whiteville, NC



Soil Moisture Plots

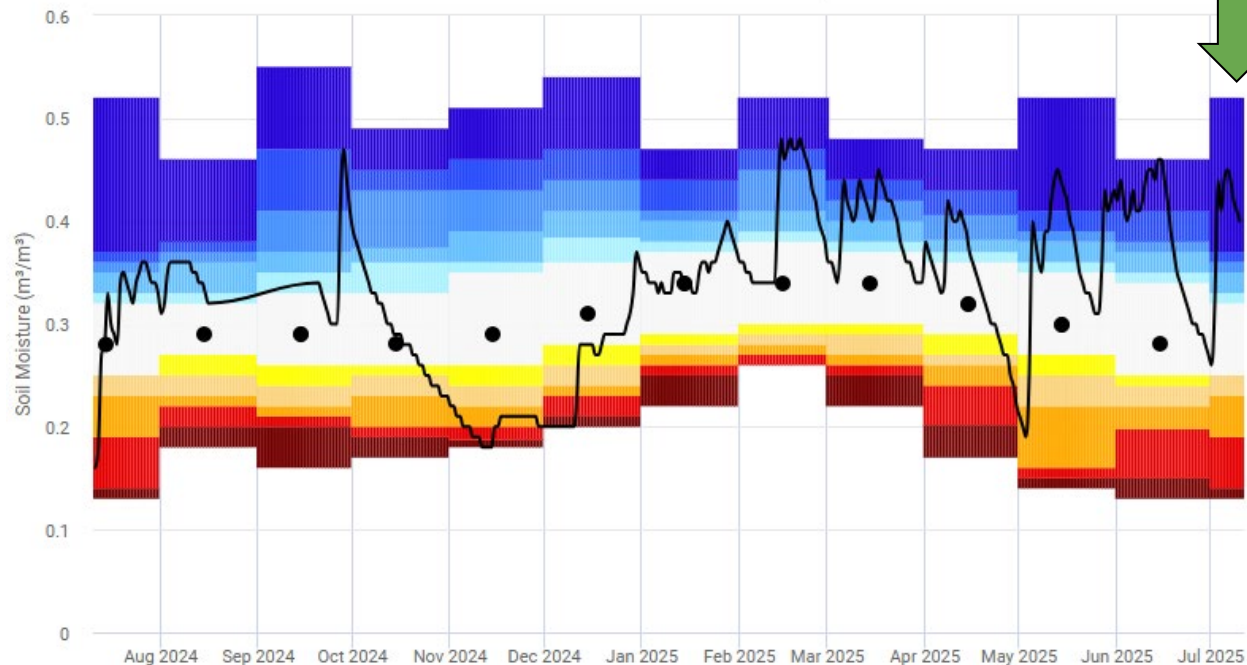
Soil Moisture Percentiles and 20cm Observations at WHIT from 07/10/2024 - 07/10/2025
Border Belt Tobacco Res Strn - Whiteville, NC



From Columbus County News

Soil Moisture Plots

Soil Moisture Percentiles and 20cm Observations at WHIT from 07/10/2024 - 07/10/2025
Border Belt Tobacco Res Strn - Whiteville, NC



From Columbus County News

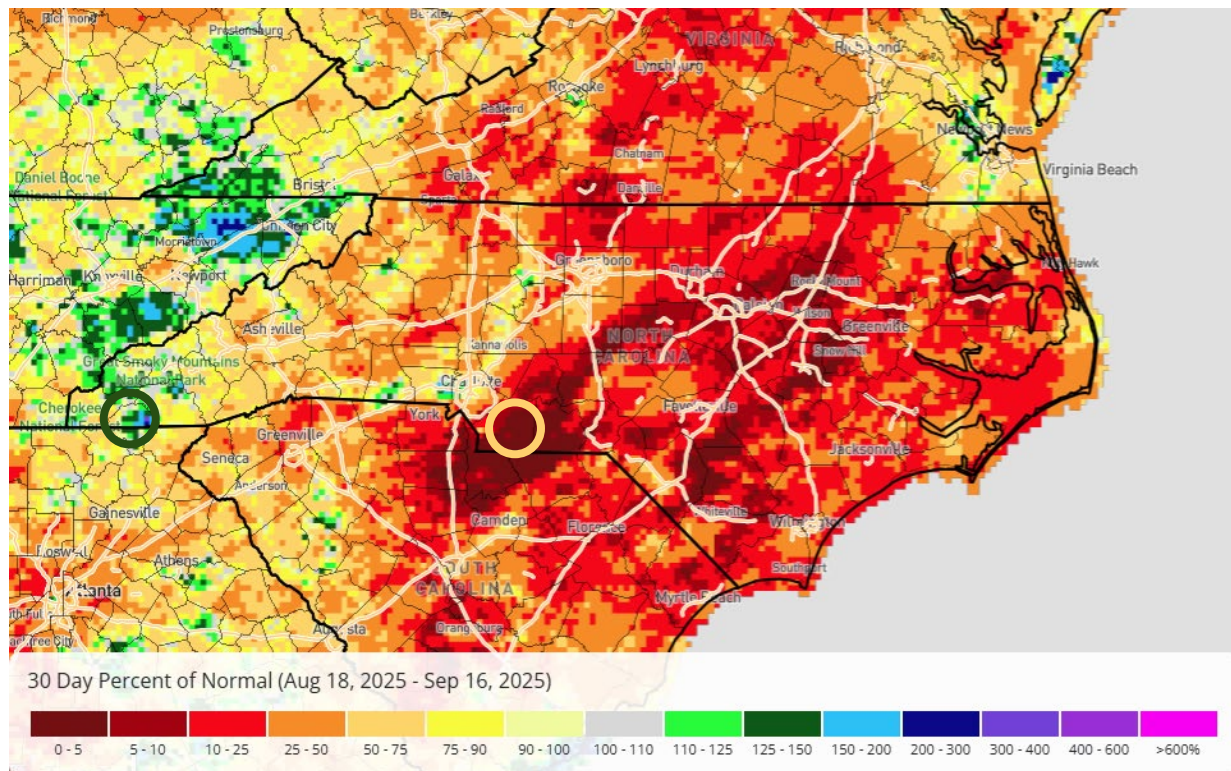
Past 30 Days (Aug. 18 to Sep. 16)

○ **Wettest Station:**
Hayesville

6.58" (119% of normal)

○ **Driest Station:**
Monroe 2 SE

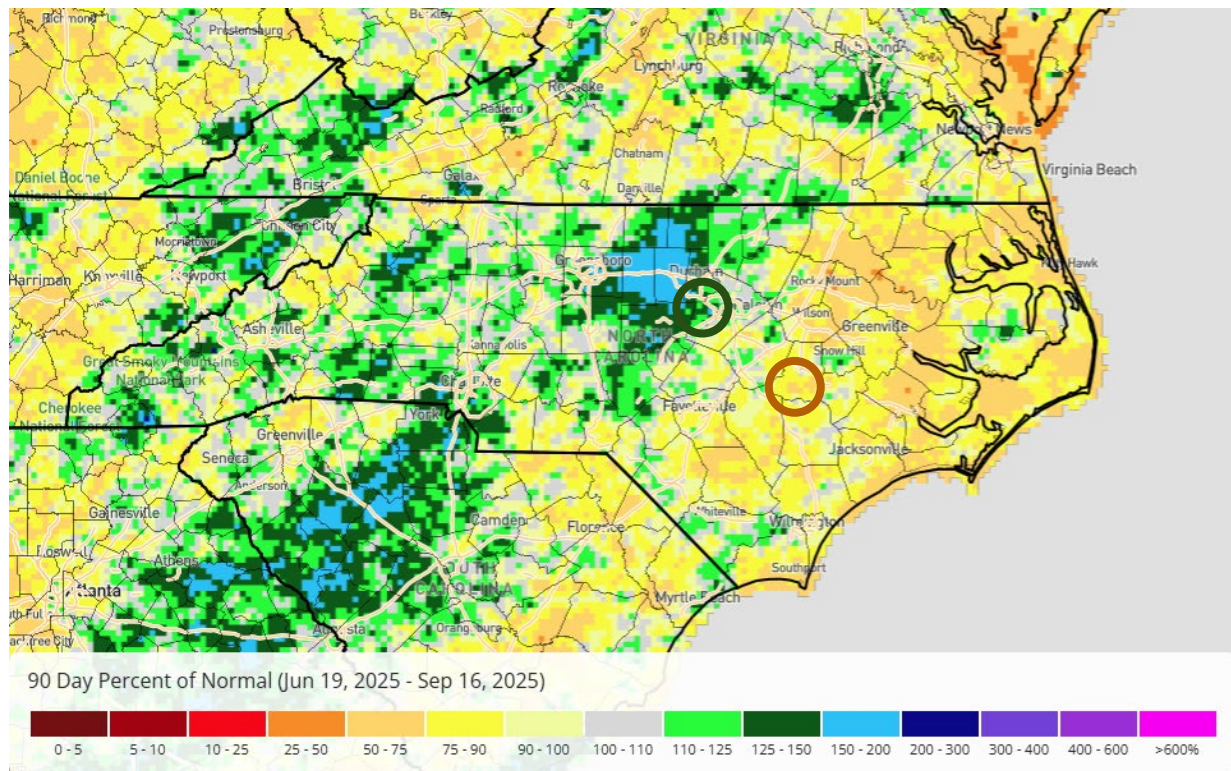
0.00" (0% of normal)



Past 90 Days (Jun. 19 to Sep. 16)

○ **Wettest Station:**
Reedy Creek Field Lab
27.28" (169% of normal)

○ **Driest Station:**
Mount Olive 6 SE
7.64" (46% of normal)



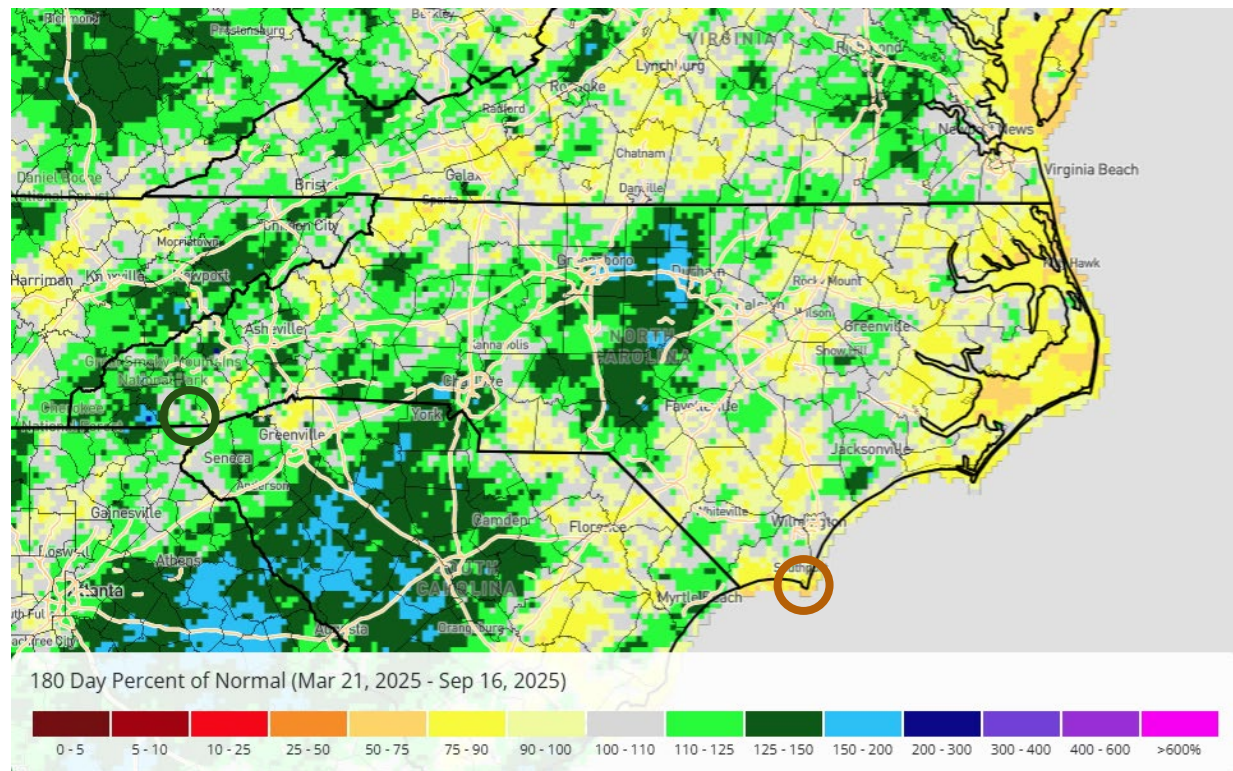
Past 180 Days (Mar. 21 to Sep. 16)

○ **Wettest Station:**
Highlands

48.52" (116% of normal)

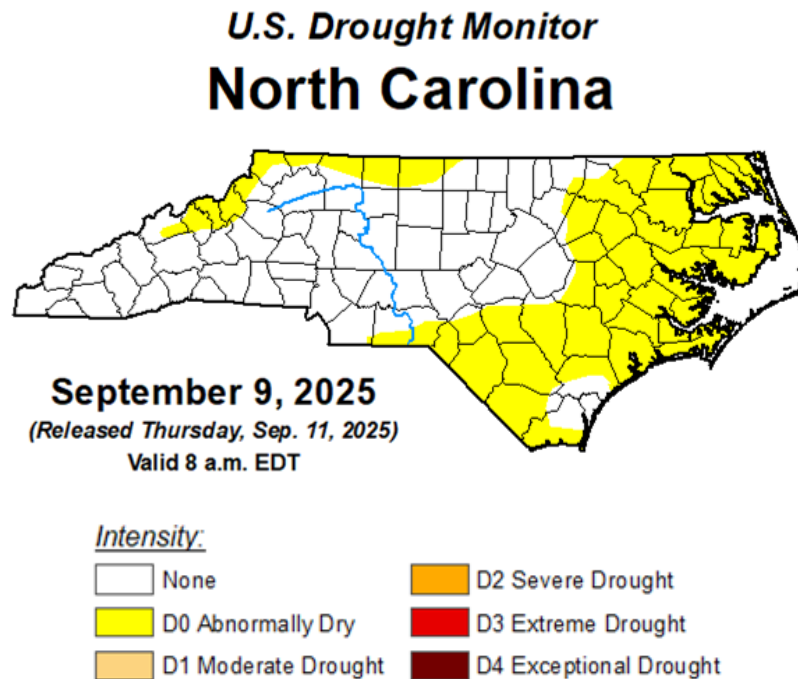
○ **Driest Station:**
Bald Head Island

20.56" (68% of normal)



In Summary

- Prolonged drought during our cool season, with fall and spring fire activity
- Multiple flood events, including Debby, PTC8, Helene, and Chantal
- Currently drier in the short term since mid-August



Any questions? Contact me: cndavis@ncsu.edu

North Carolina Drought Update

Created By:

North Carolina
Drought Management Advisory Council
www.ncdrought.org

NC STATE
CLIMATE OFFICE
climate.ncsu.edu

NC STATE
@NCSCO

For the assessment period ending **Sep. 9, 2025**

From the US Drought Monitor, with input from the NC DMAC

The Main Takeaway

Abnormally Dry (D0) conditions expanded across parts of the northern Piedmont and southern Coastal Plain after more than three weeks without significant rainfall.

This Week's Summary

Last week saw a few locally heavy rain showers, but much of the state had less than half an inch, and the northeastern corner of the state was essentially rain-free once again. While we're not yet in drought, dryness is becoming more entrenched, with declining soil moisture and surface water levels in eastern NC, plus reports of browning grass and leaves dropping early.

Next Week's Outlook

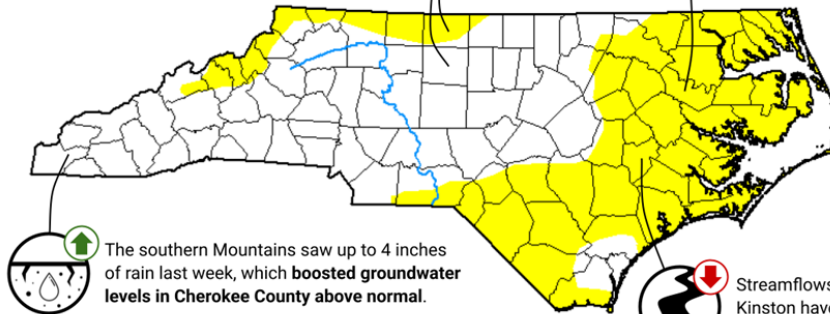
Expect more sunny weather and dry days in the next week as high pressure builds over the eastern US. Our high temperatures will be near normal for September.

For your local drought status, visit www.ncdrought.org

Rainfall was mixed last week in the Piedmont, with **up to 3 inches in Greensboro** but **less than a quarter-inch just to the north in Reidsville**.



Martin County Extension reports **cracked ground, dry pastures, and late-planted crops wilting or stunted**.

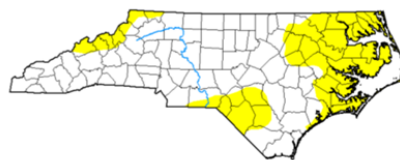


The southern Mountains saw up to 4 inches of rain last week, which **boosted groundwater levels in Cherokee County** above normal.



Streamflows on the Neuse River at Kinston have **fallen to the historical 5th percentile** over the past 7 days.

Last Week's Drought Status



Statewide Coverage by Category

Category	Current Coverage	Change Since Last Week
D0: Abnormally Dry	45.40%	+13.04%
D1: Moderate Drought	0.00%	0.00%
D2: Severe Drought	0.00%	0.00%
D3: Extreme Drought	0.00%	0.00%
D4: Exceptional Drought	0.00%	0.00%

