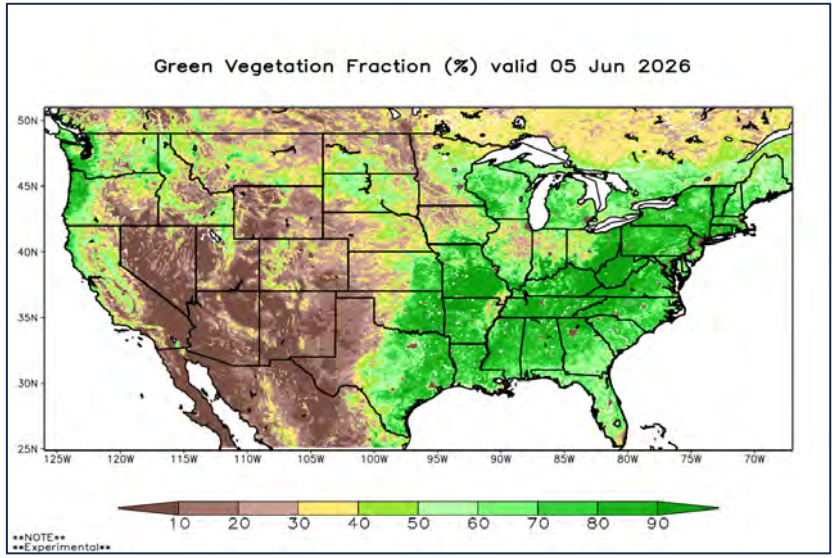
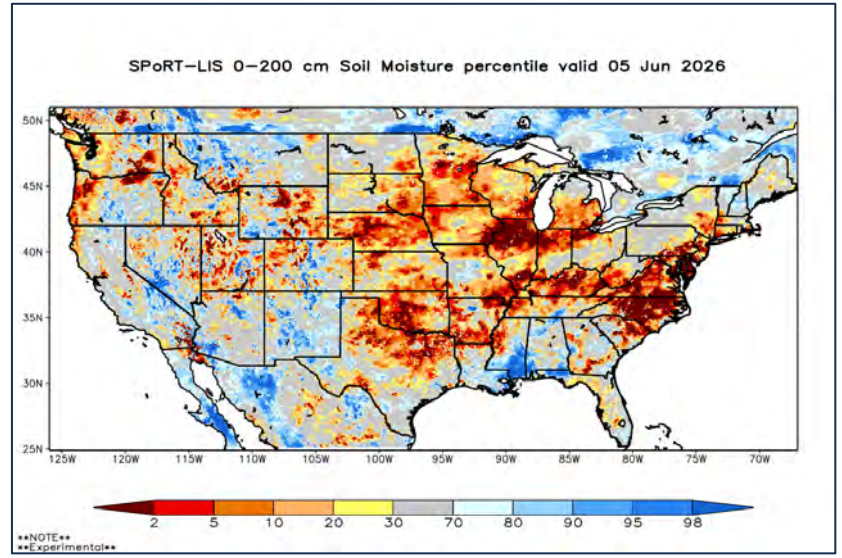
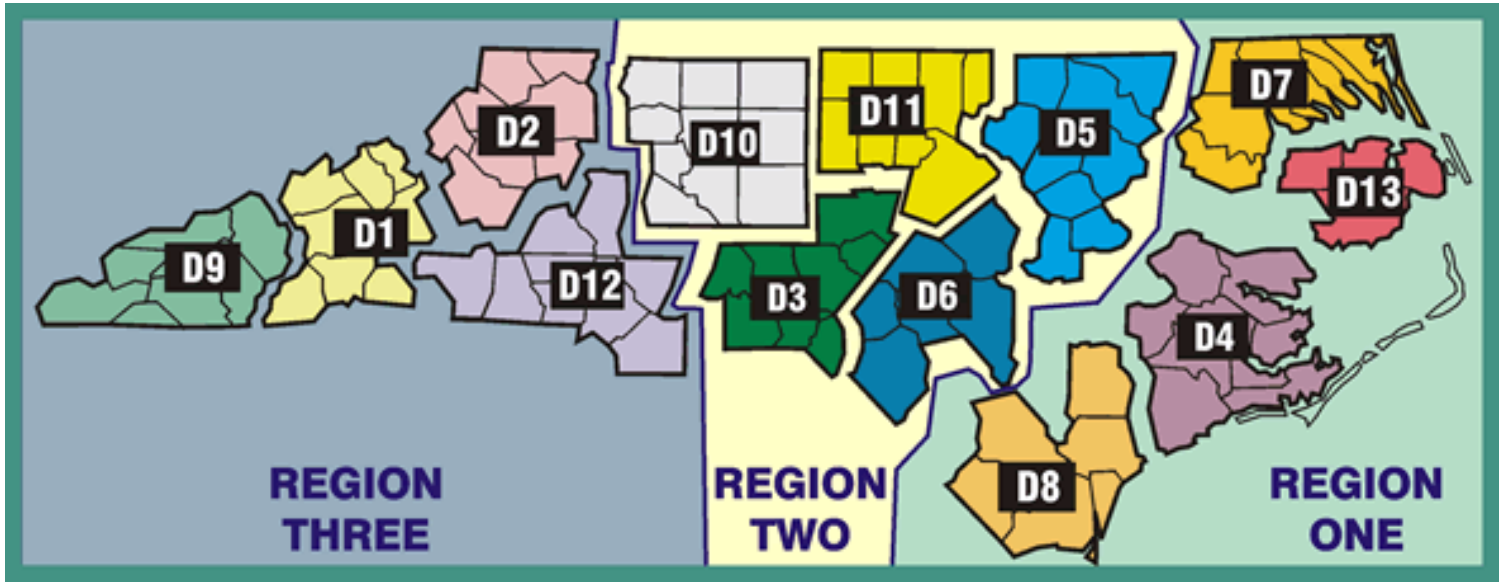
June - 2026

Monthly Fire Danger Assessment NCFS – All Regions







Date: June 5, 2026

Created by: Jamie Dunbar
Fire Environment Staff Forester
NC Forest Service

Statewide Wildfire Context

January: 10-yr avg is 339 fires for 702 acres
February: 10-yr avg is 639 fires for 1,683 acres
March: 10-yr avg is 1,009 fires for 6,401 acres
April: 10-yr avg is 627 fires for 6,803 acres
May: 10-yr avg is 283 fires for 1,298 acres
***June: 10-yr avg is 231 fires for 2,383 acres**
July: 10-yr avg is 182 fires for 551 acres
August: 10-yr avg is 126 fires for 420 acres
September: 10-yr avg is 194 fires for 422 acres
October: 10-yr avg is 265 fires for 1,996 acres
November: 10-yr avg is 534 fires for 6,173 acres
December: 10-yr avg is 372 fires for 733 acres

February: 829 incidents for 1,136 acres
March: 1,418 incidents for 6,289 acres
April: 1,165 incidents for 2,503 acres
May: 566 incidents for 2,327 acres

7-Day Activity (ending 6/4): 116 incidents for 601 acres

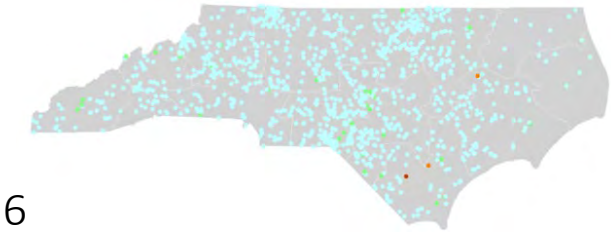
All wildfire activity data is preliminary
Does not include additional federal wildfires/acres
2016-2025 CY Average

**Largest incidents by discovery date, 7-Day Activity (ending 6/2 am):
from fiResponse & preliminary reporting only

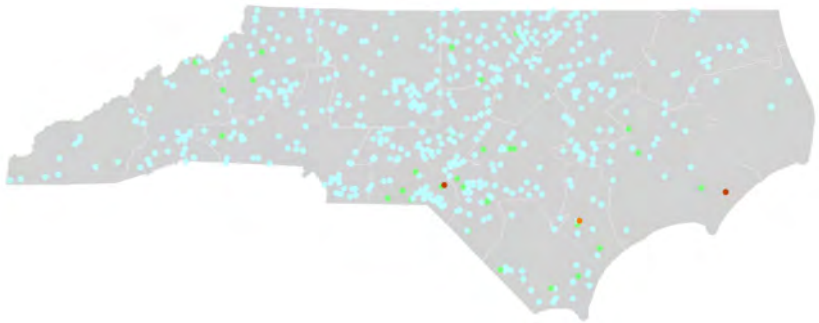
Incident Name	Discovery Date	Region	District	County	Acres
Rose Bay Canal Fire	6/2/2026	Region 1	District 13	Hyde County	373.00
Batchlor Farm Lane	6/3/2026	Region 1	District 8	Duplin County	89.00
Greene Farm	6/3/2026	Region 3	District 12	Cleveland County	20.00
Lightwood Knot Rd	6/1/2026	Region 1	District 8	Bladen County	15.00
Hertford County - Brickmill Road	6/2/2026	Region 1	District 7	Hertford County	15.00
Sparrow Avenue	6/3/2026	Region 1	District 4	Beaufort County	12.00
Hodhat	6/1/2026	Region 2	District 6	Cumberland County	6.00
St. James Fire	5/29/2026	Region 1	District 8	Brunswick County	5.00
Isom Lane	6/1/2026	Region 1	District 7	Bertie County	5.00
JM Pines 2	6/3/2026	Region 2	District 3	Anson County	5.00
Smith Dairy Road	6/4/2026	Region 3	District 1	Polk County	3.50

March 2026

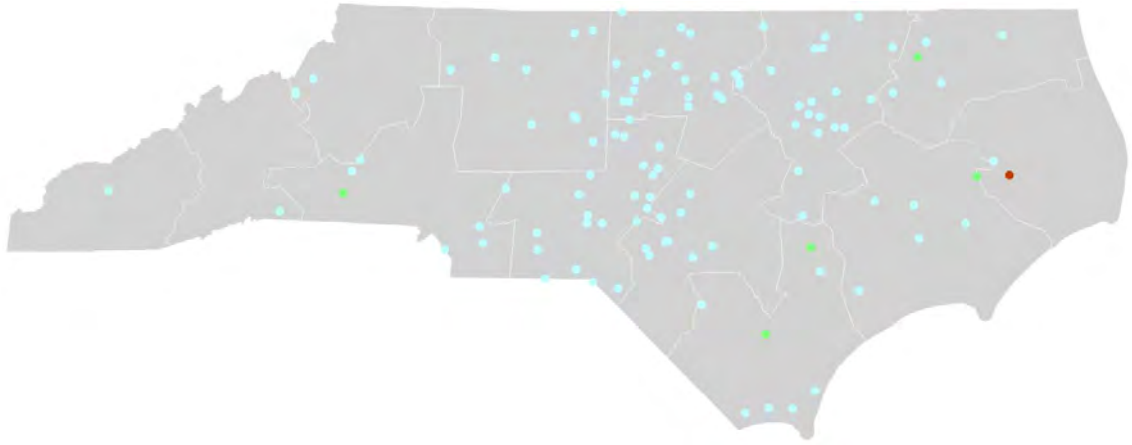
April 2026



May 2026

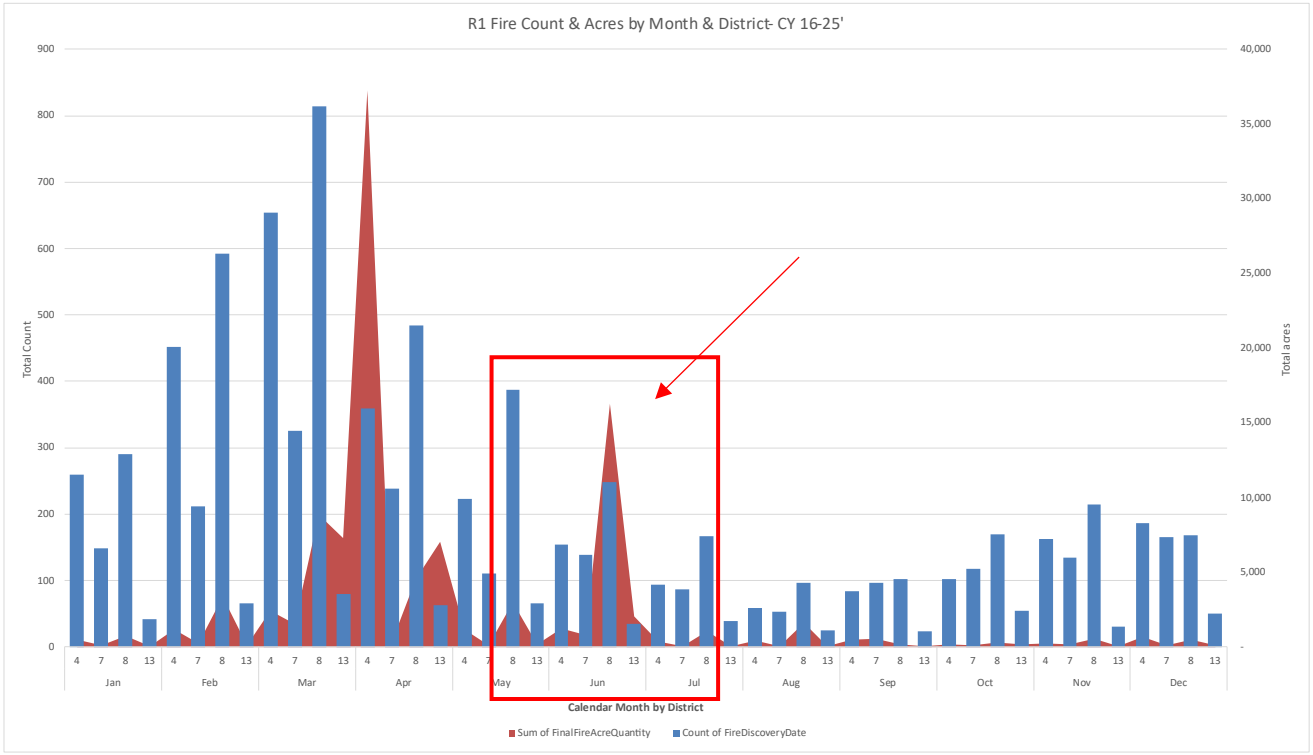


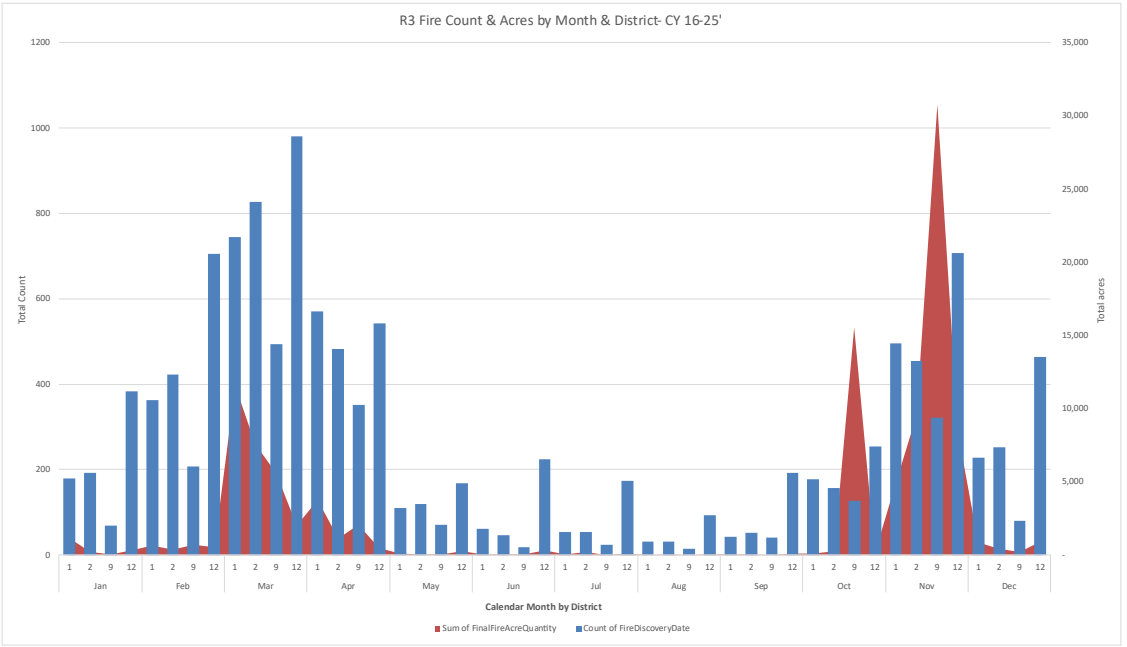
7-Day Activity (ending 6/4)

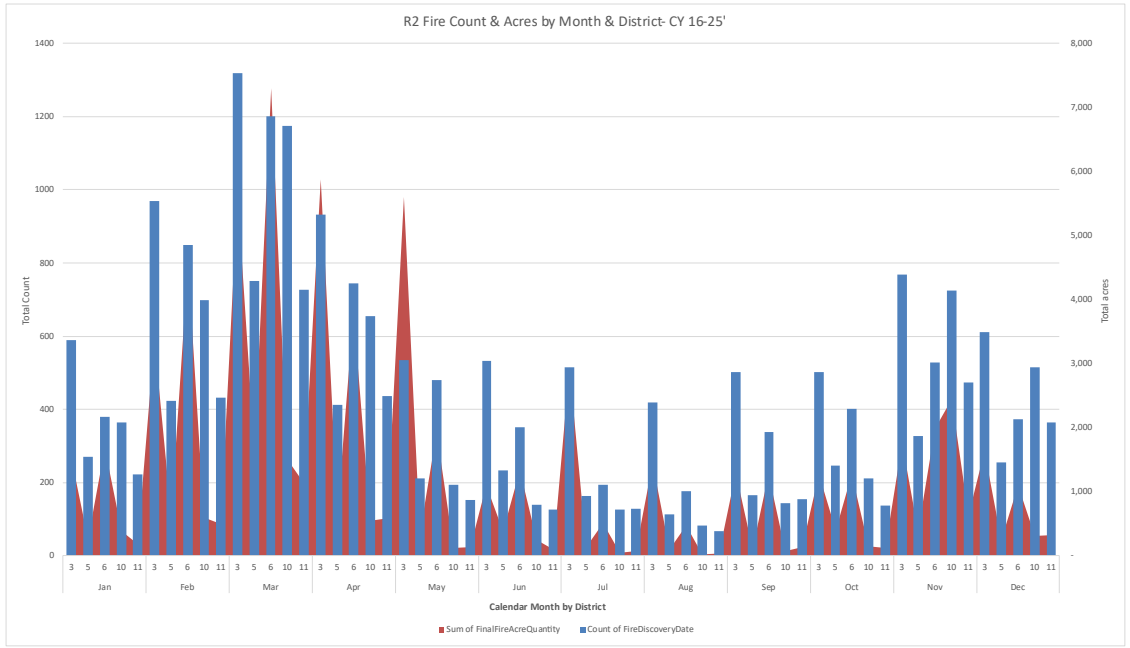


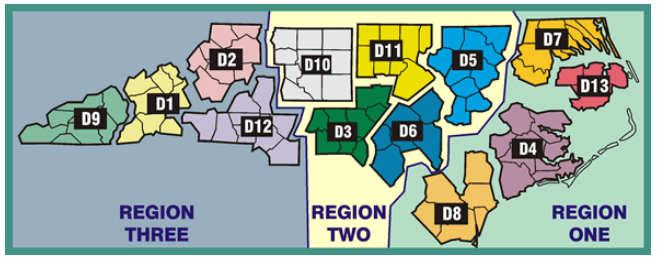
***Note: Dept. of War & other entirely federal ownership wildfires typically not shown on fiResponse, unless NCFS integrated into response.*

Seasonal Distribution of Regional Fires & Acres by Month from 2016-2025







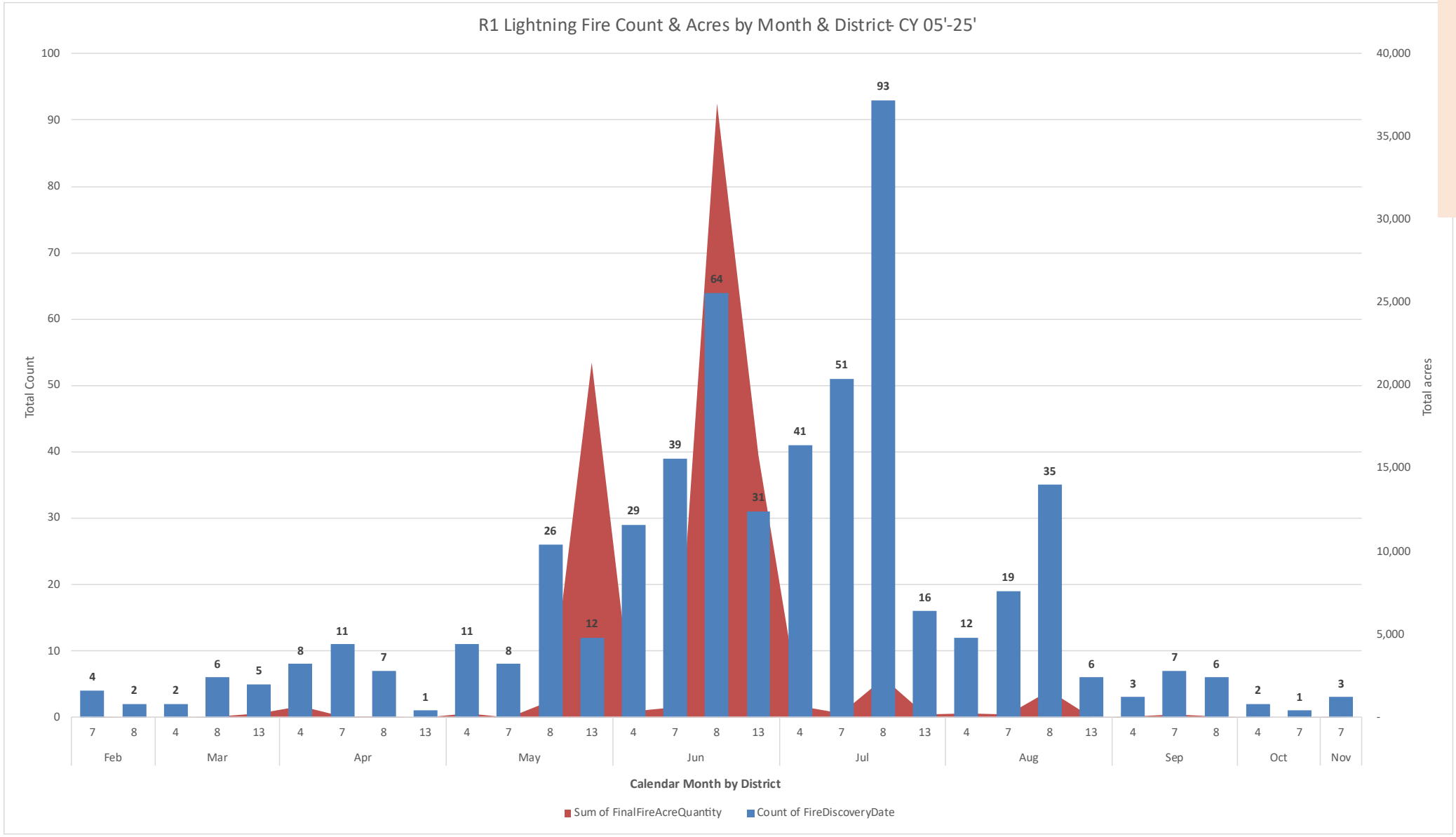


Peak Fire Count vs. Peak Acres (by Discovery Date)

- Fuel Dormancy?
- Live Fuel Volatility?
- Human Factor?
- Drought Influences?

Cause: All Cause Codes, Statewide, NCFS Reported Fires Only.
Preliminary Data from NASF Report Extract

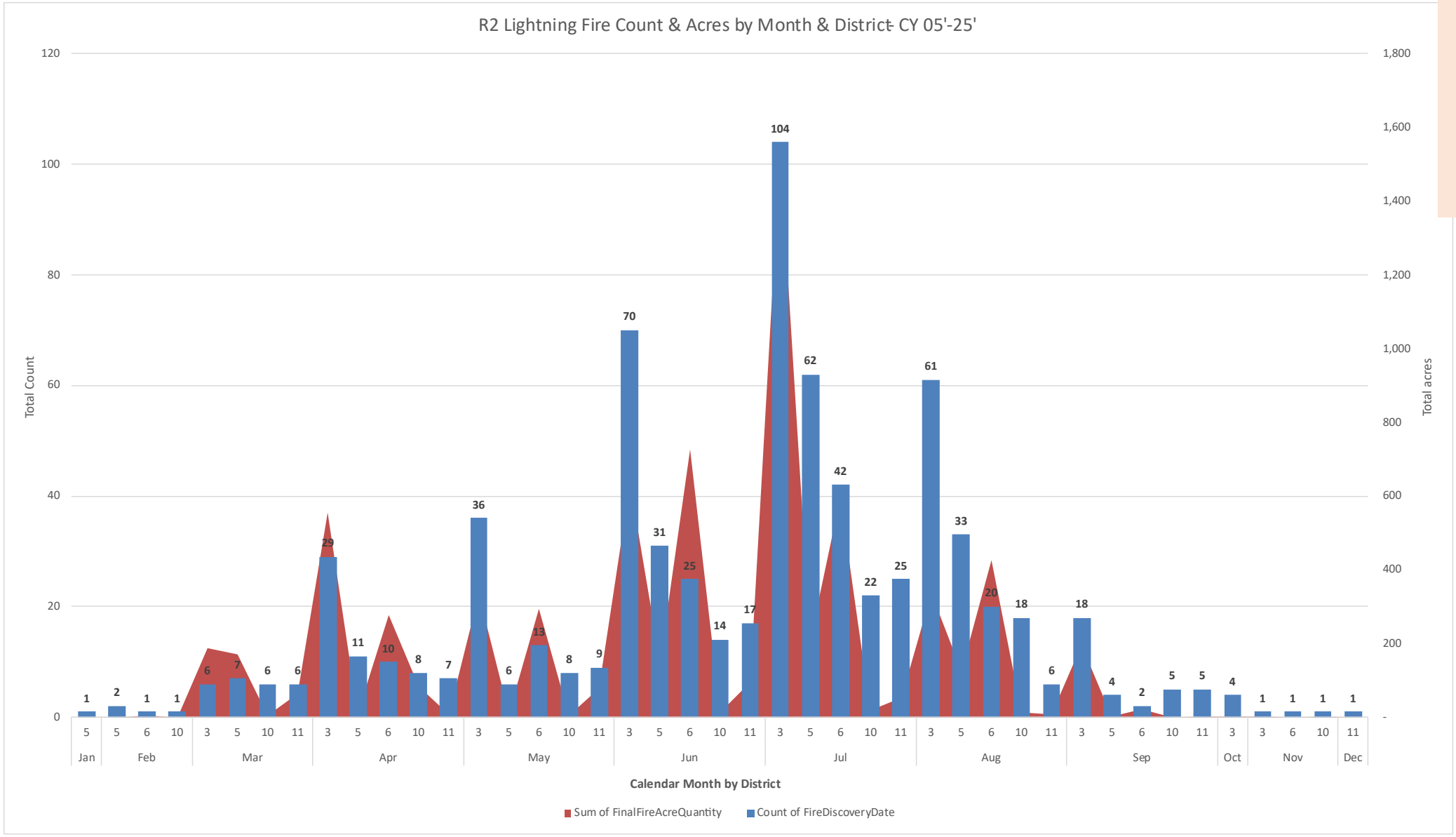
Distribution of Lightning Fires in R1 Fires & Acres by Month (discovery date)from 05’-25’



Note Acreage Scale

Cause: Lightning Cause Code, R1, NCFS Reported Fires Only. Preliminary Data.

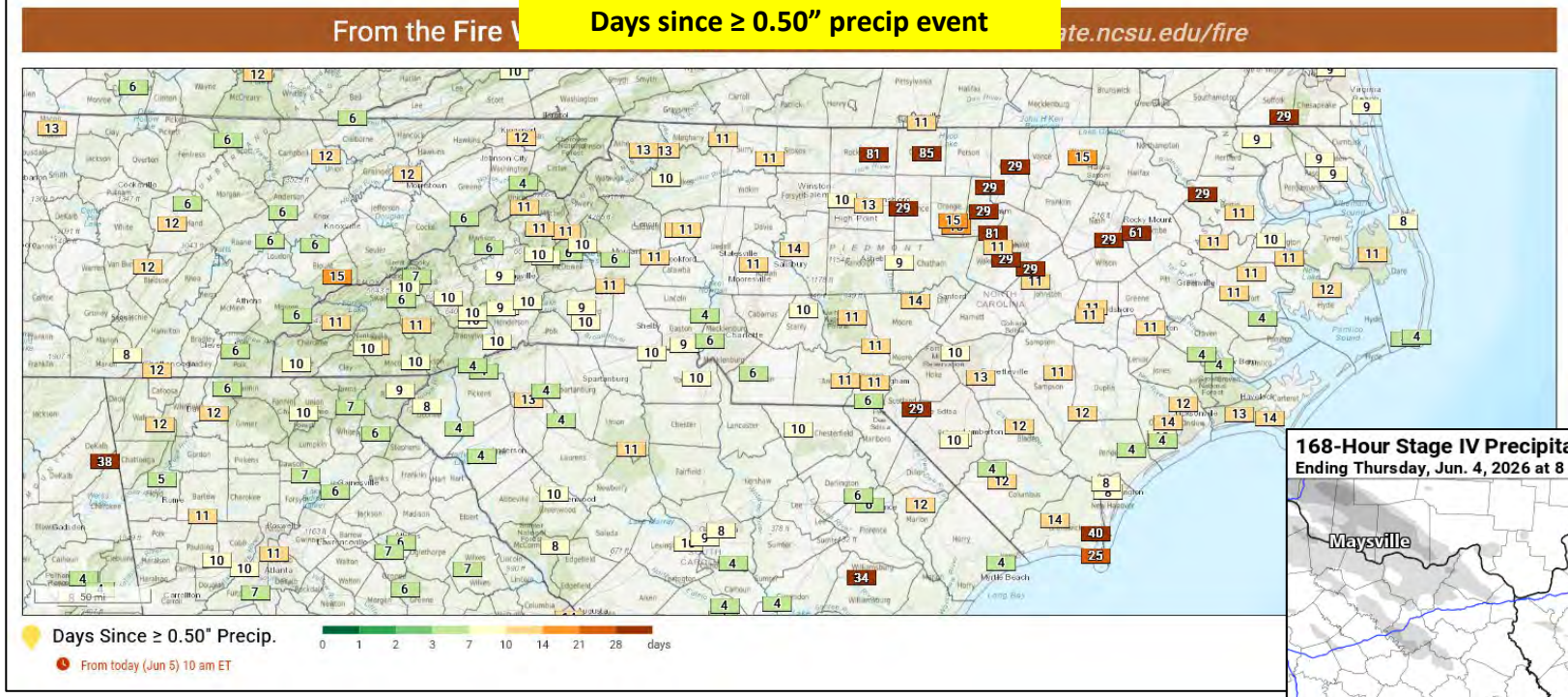
Distribution of Lightning Fires in R2 Fires & Acres by Month (discovery date)from 05'-25'



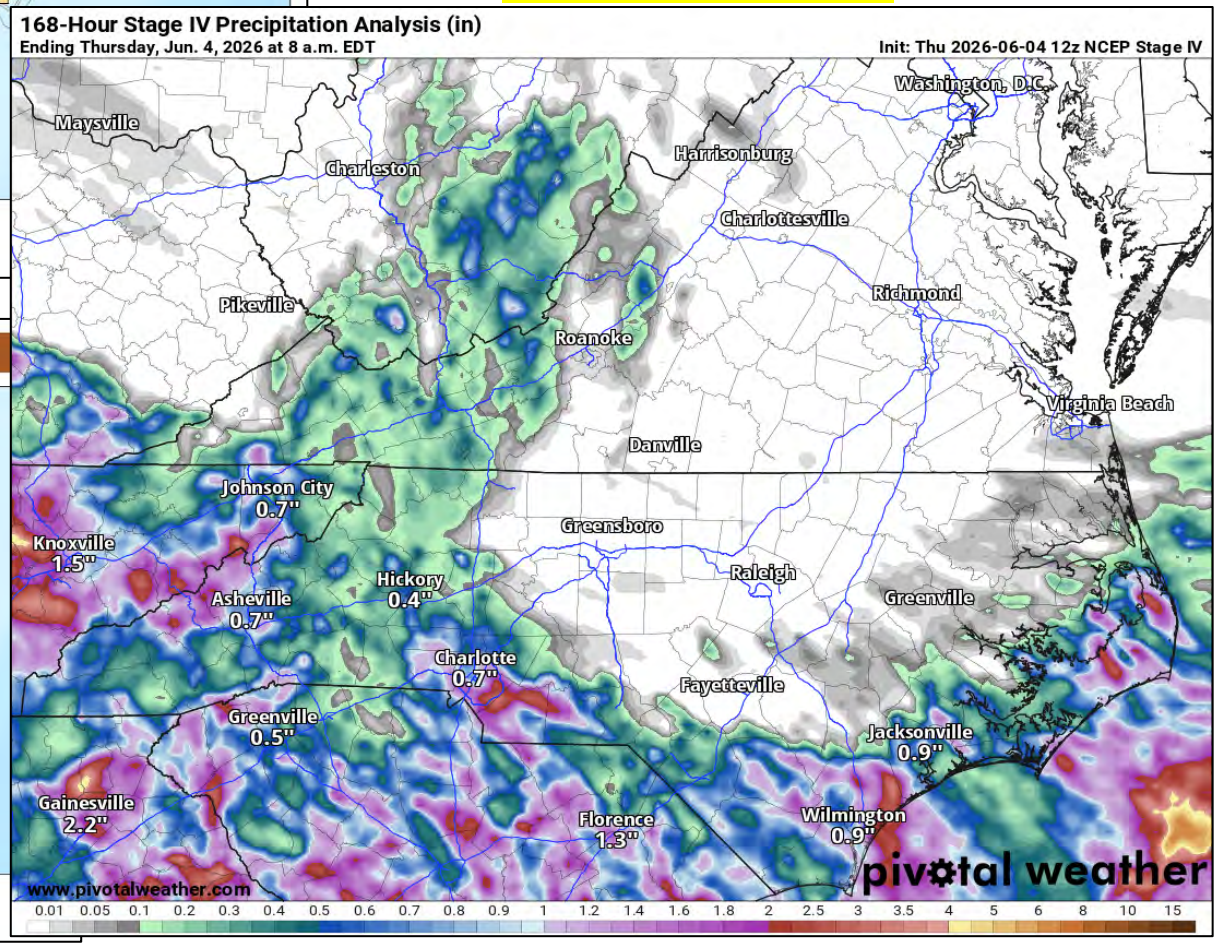
Note Acreage Scale

Cause: Lightning Cause Code, R2, NCFS Reported Fires Only. Preliminary Data.

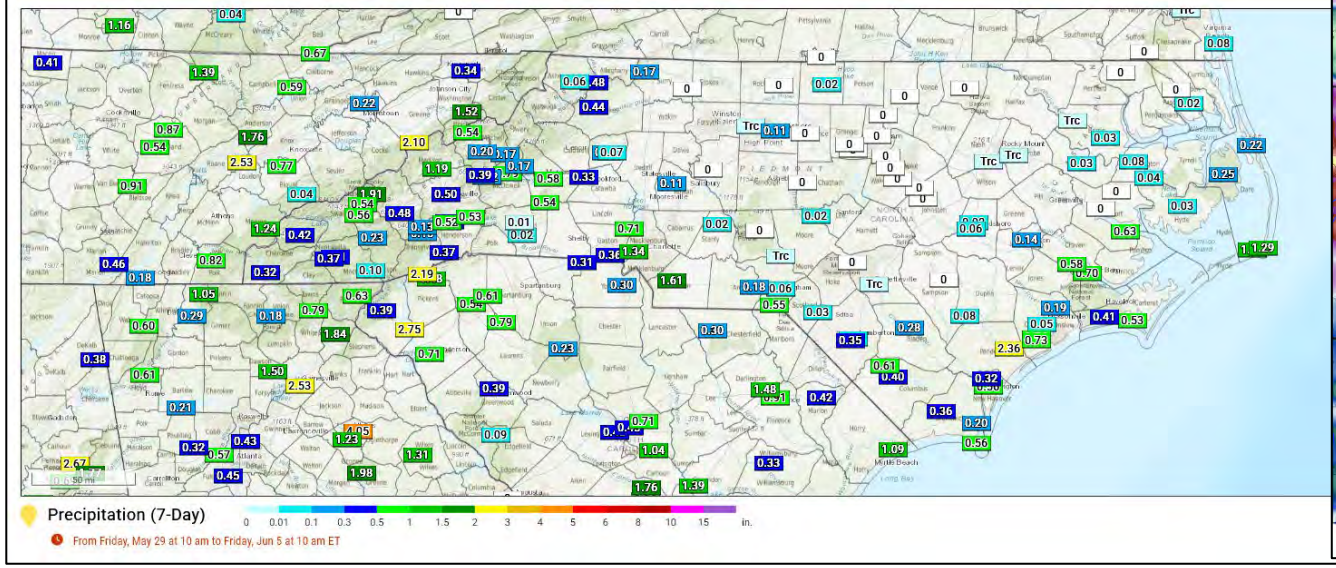
Days since ≥ 0.50” precip event



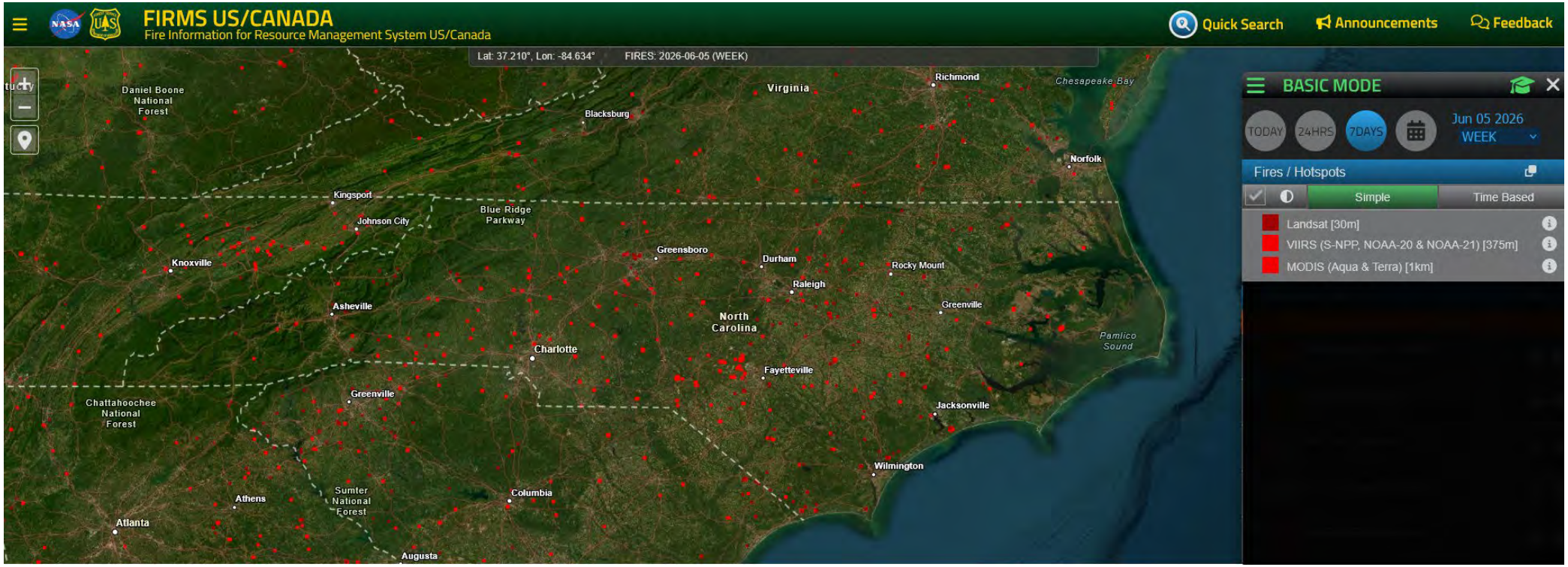
7-Day Precip Estimate



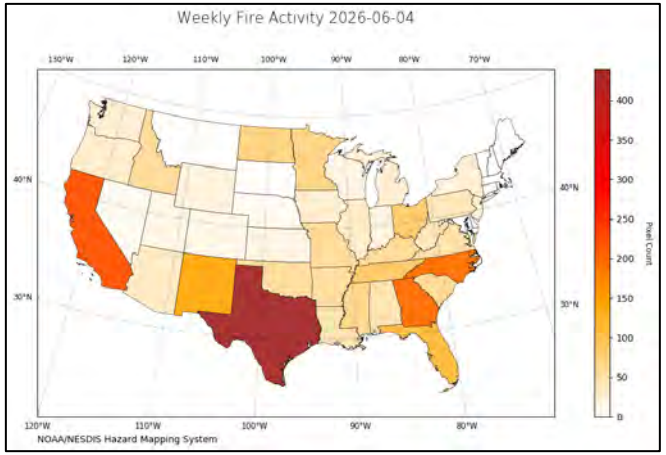
7-Day Precip – Station Totals

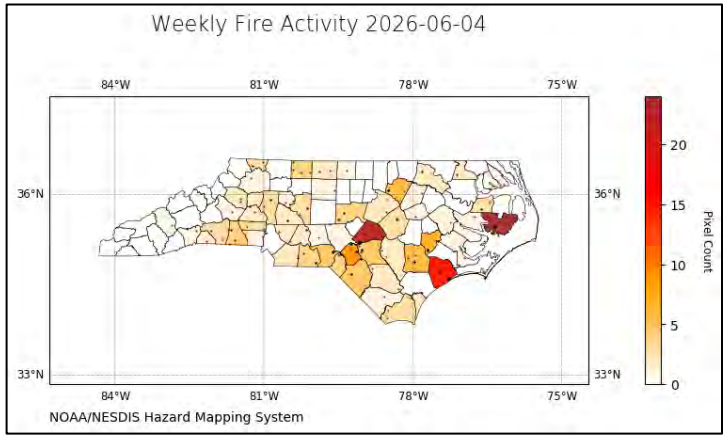


Weekly Heat Detects

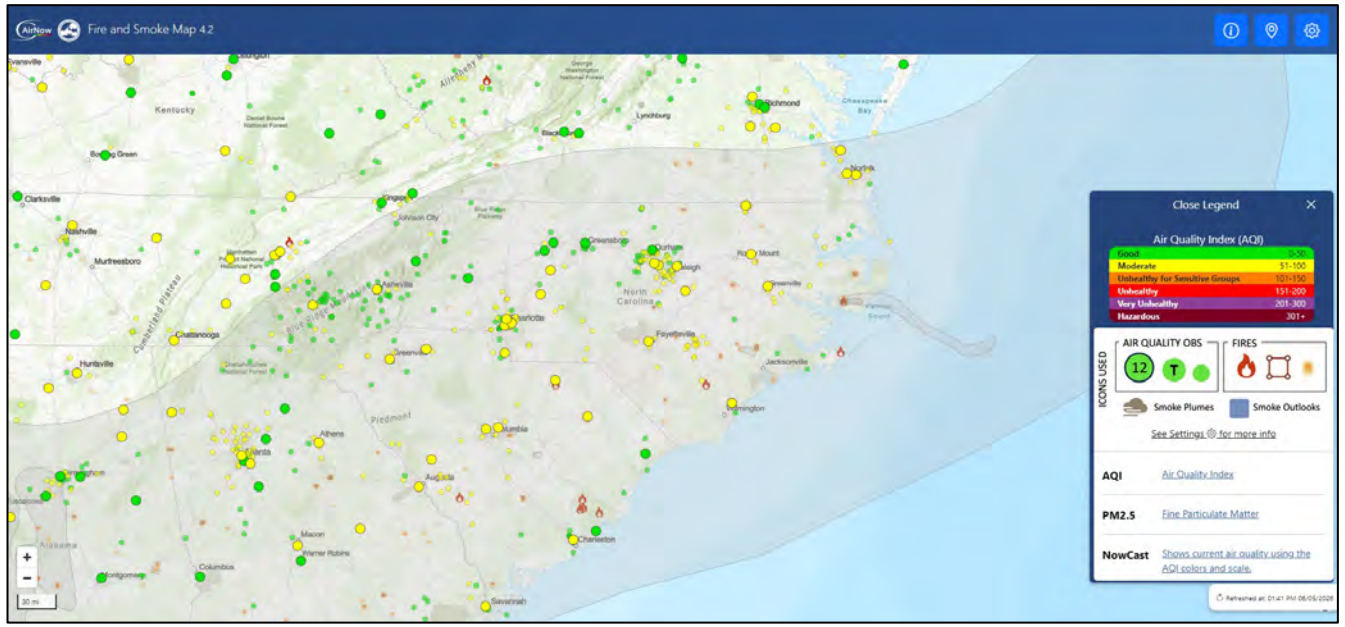


NC Map showing past week satellite detects from same source & bottom right maps display fire pixel counts. Note NC map below is Weekly, ending on 6/4/26) . Note that cloud cover and other factors can limit detections, not all detects may be “forestry related”. Hazard Mapping System link: https://www.ospo.noaa.gov/products/land/hms.html#maps

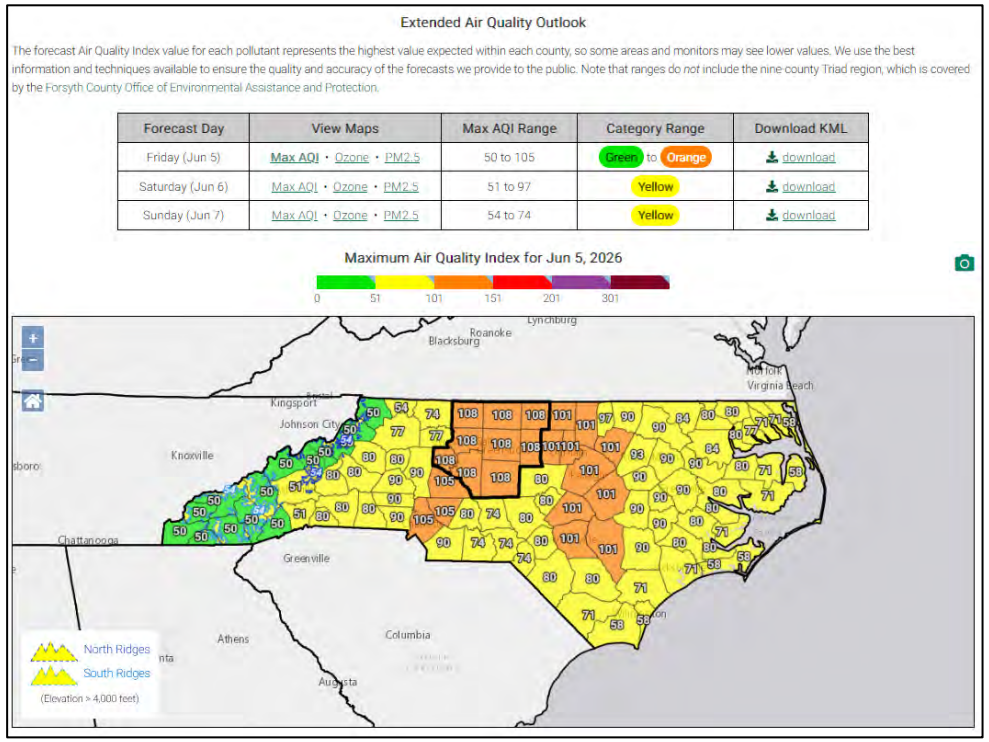




Air Quality Notes



Fire & Smoke Map heat detects from VIIRS (above). https://fire.airnow.gov/#



This forecast was issued on **Friday, June 5, 2026** at **10:25 am**. This forecast is currently valid.

Today's Air Quality Conditions

High pressure will be over the state again today which will lead to abundant sunshine and continued airmass stagnation across the state. Afternoon temperatures will be slightly warmer today and the airmass will remain dry. All these factors are favorable for ozone production. Also, yesterday (Thursday) saw an active ozone day across the state and with the airmass stagnant, there is likely precursor pollutants and ozone aloft that will contribute to today's ozone. Thus, we are increasing maximum 8-hour ozone averages across much of the state. In particular, we are issuing CODE ORANGE Air Quality Action Days for the Triangle and Fayetteville areas for today. CODE ORANGE Air Quality Action Days will remain in effect today for Mecklenburg, Cabarrus, and Rowan counties. Groups that are sensitive to ozone should reduce exposure by limiting prolonged or heavy exertion outdoors. The previous forecast discussion is provided below.

For a display of the most recent Air Quality Index (AQI) conditions throughout the day, visit the Ambient Information Reporter (AIR) tool.

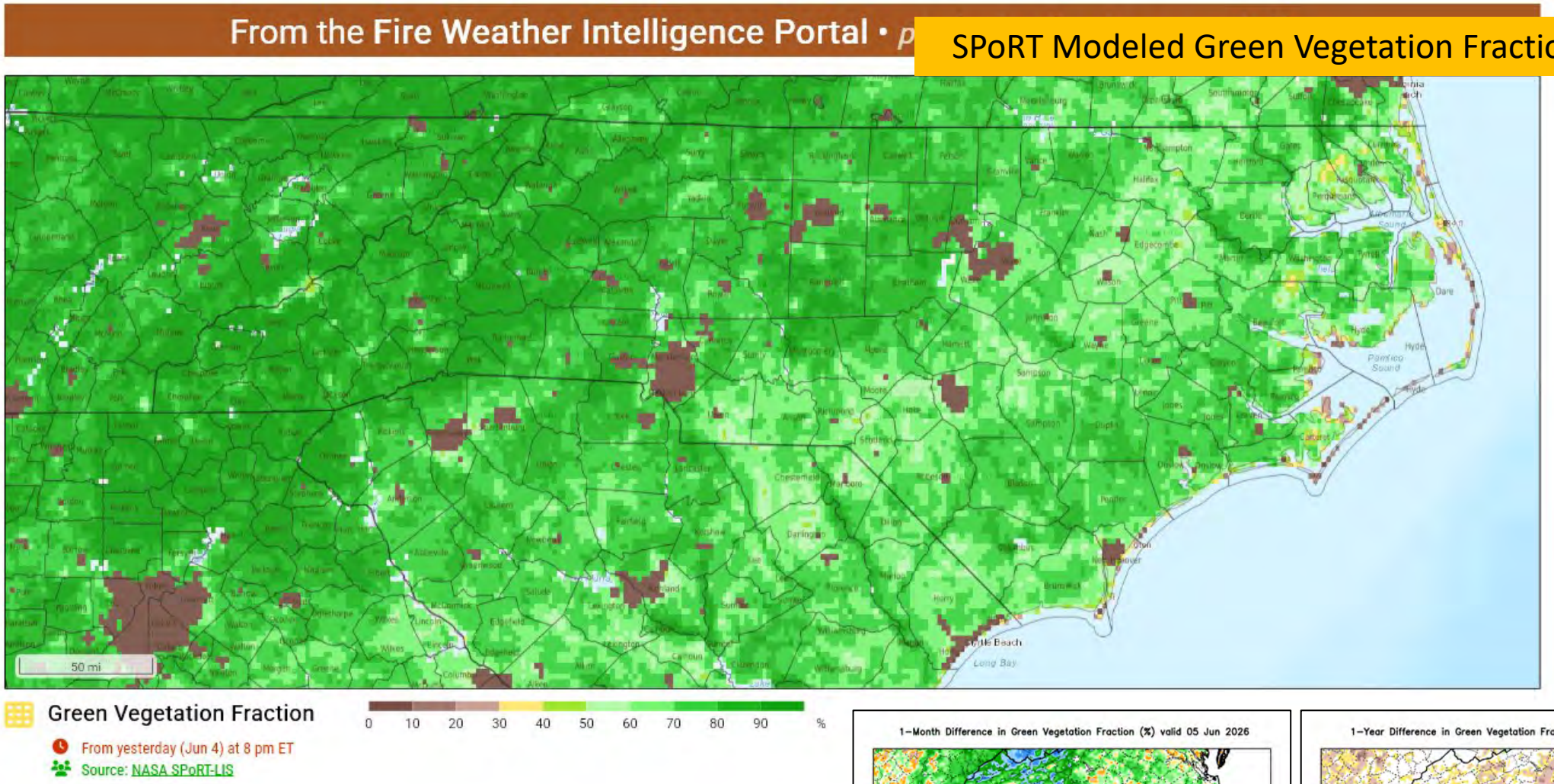
General Forecast Discussion

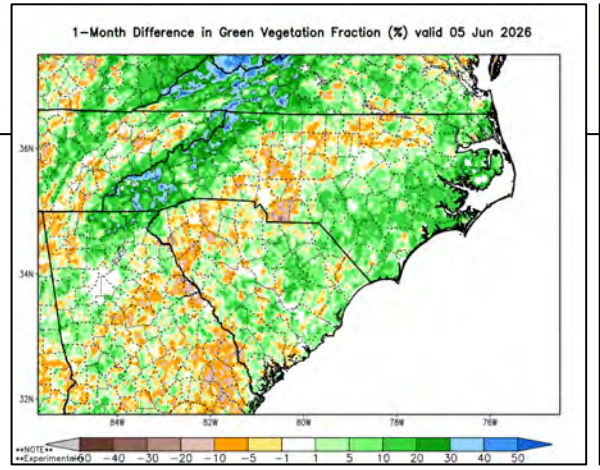
The stagnating pattern will remain in place Friday across the state as high pressure continues to rule the weather. Another day with widespread sunshine is expected, and afternoon temperatures will be even warmer along with a continued dry airmass in place. All are favorable ingredients for ozone formation. Winds will be light out of the southwest and with subsidence across the state due to the high pressure, dispersion and mixing will be limited so pollutants and ozone will be more concentrated. Also, with Thursday featuring elevated ozone concentrations and the stagnate airmass in place, we'll likely see some residual ozone influence concentrations on Friday as well. All of this points to another active ozone day across the state. As for fine particulates, continued stagnation will lead to slightly higher averages on Friday, with much of the state in Code Yellow range.

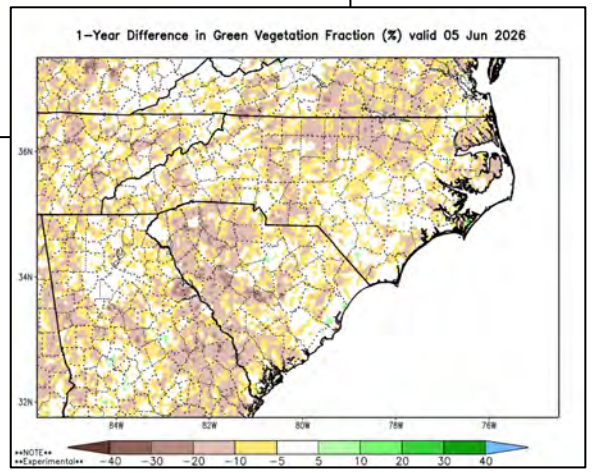
Author: *Jordan Root (jordan.root@deq.nc.gov) - NC Division of Air Quality*

https://airquality.climate.ncsu.edu/discussion/?view=latest

SPoRT Modeled Green Vegetation Fraction



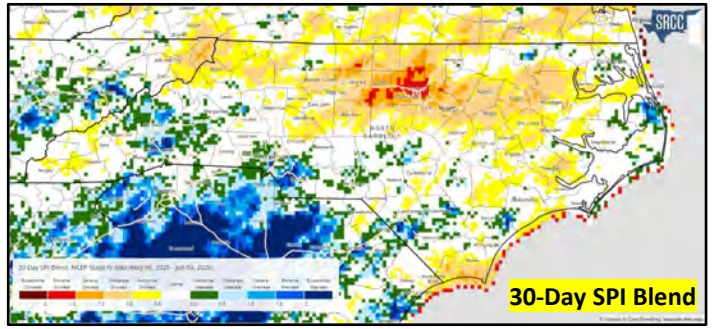


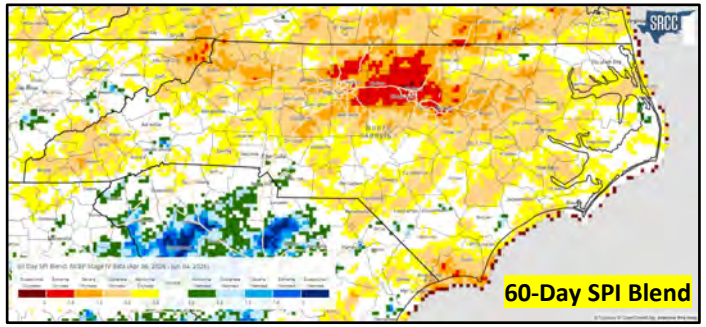


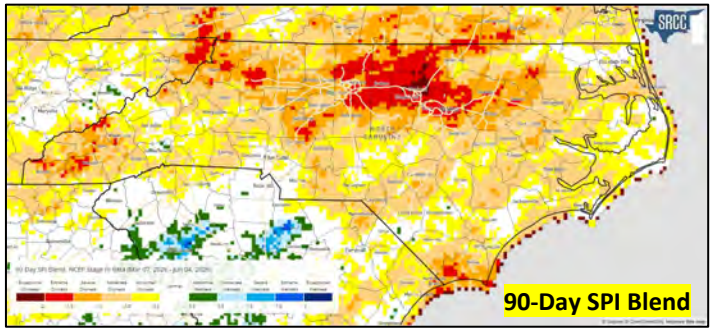
The daily GVF graphic show overall greenness across the state (top). The 1-month/1-year difference graphics help illustrate hardwood progression west. Actual greenness depends on species, aspect, and drought impacts.

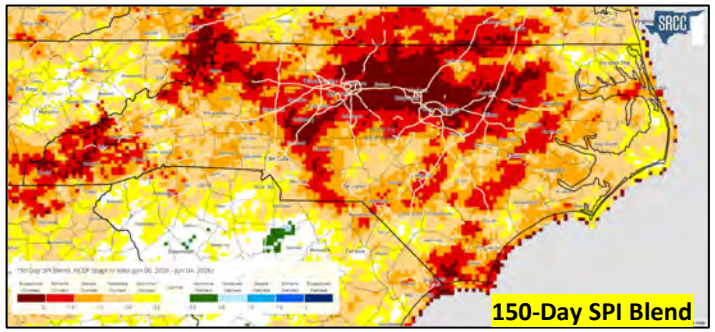
Drought impacts have an influence on herbaceous & woody shrub live fuel volatility, highly drought stressed species (especially waxy shrub) are much less resistant/contribute to spread in heaviest impacted areas. Higher GVF values **should not** be interpreted as meaning "effective green" and lower forest volatility due to drought/seasonal progression. **This is especially the case for coastal/sandhill plant communities with deep fluffy duff/litter, conifer & waxy shrub species.**

https://srcc.tamu.edu/water_portal/

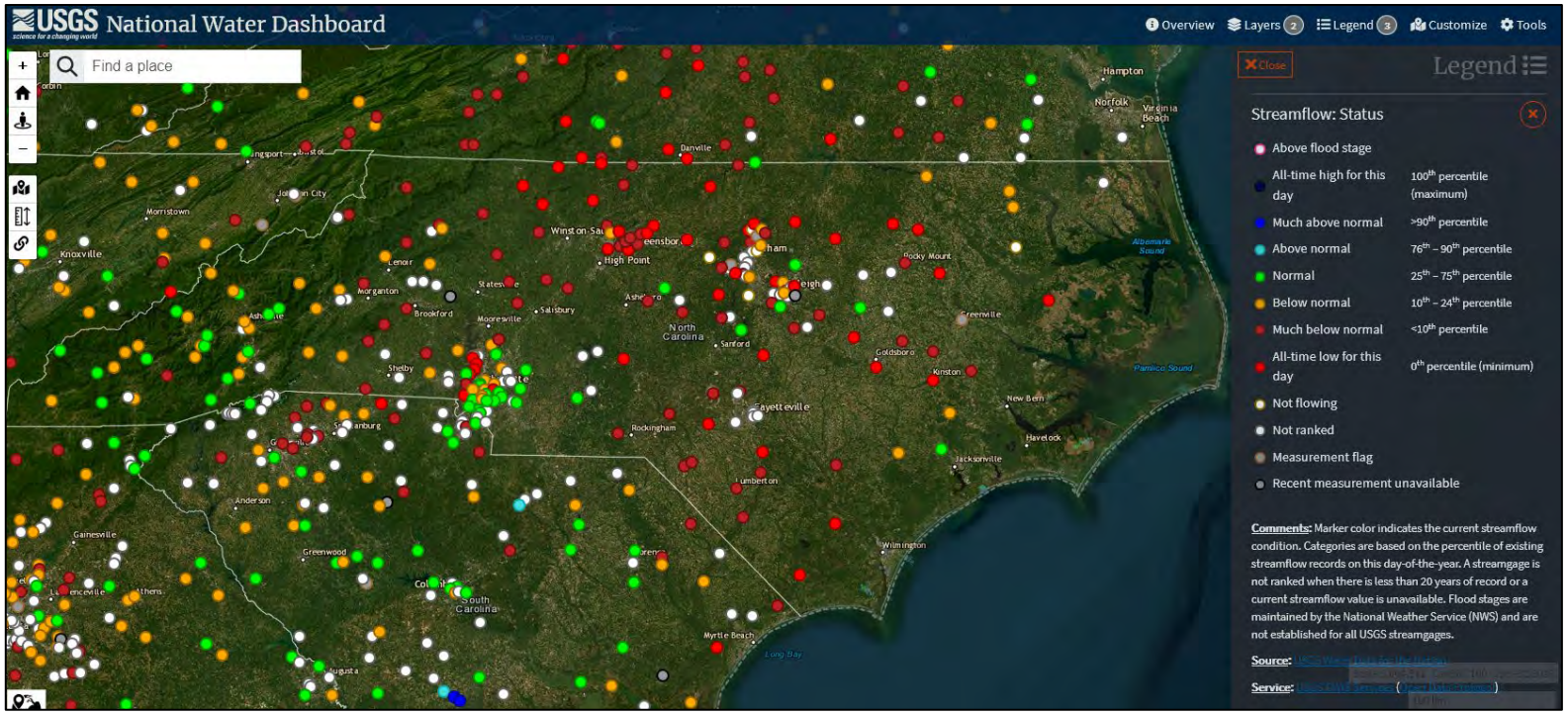








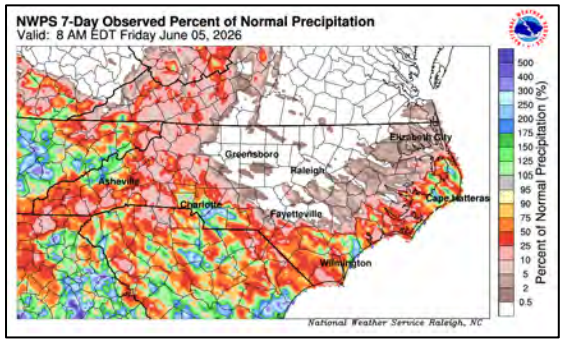
New USGS Streamflow Map: Real-time



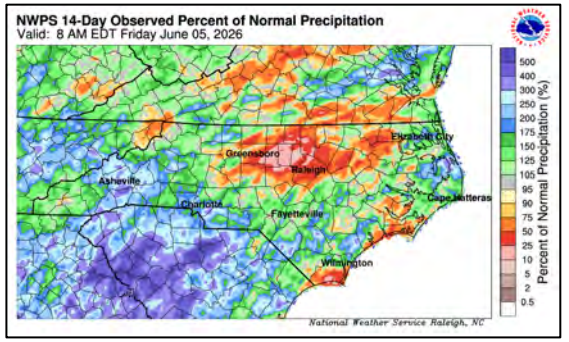
Some improvements over shorter time scale SPI maps. Longer time scale SPI products continue to indicate entrenched conditions. As growing season advances – expect further decreases in streamflow and lower duff/soil moisture.

Real-time streamflow from 6/5/26 shows return of “much below” to “all time” low flow conditions for most gauges in NC. This low-flow (especially in context of baseflow) trend continues to be very significant as we move further into the growing season. Many swamps & larger canal networks are seeing further decreases in water levels as green-up progresses. Very high evaporative demands with wind/warm temps and low daily minimum rh’s.

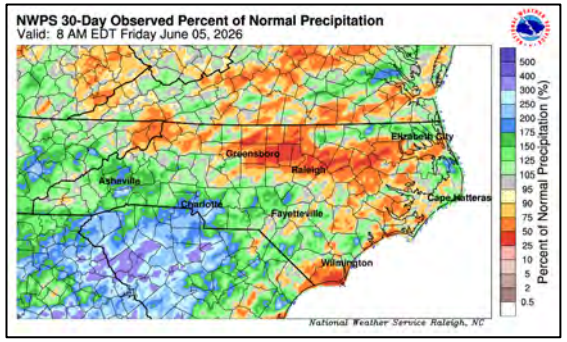
7-Day PNP

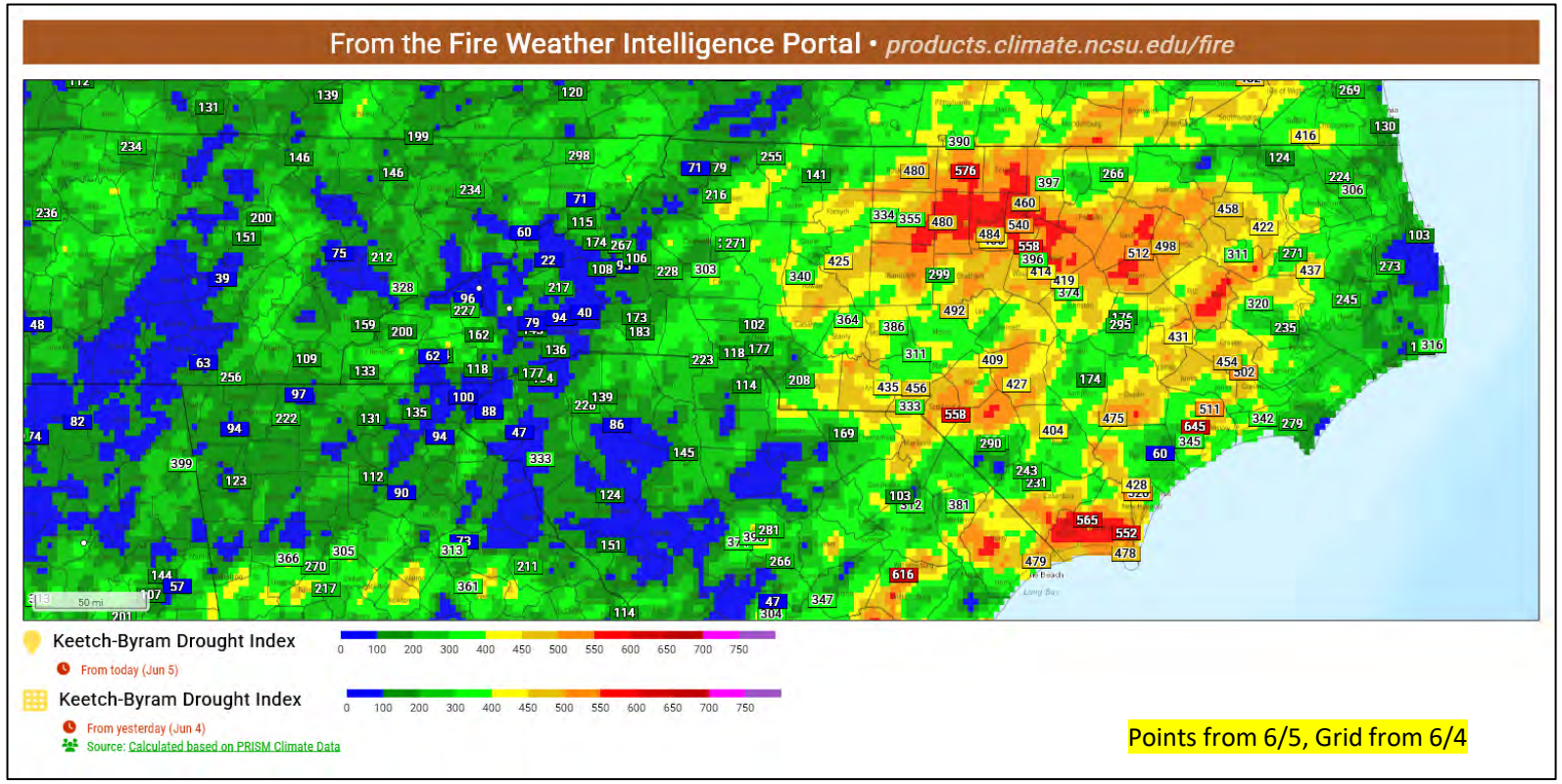


14-Day PNP

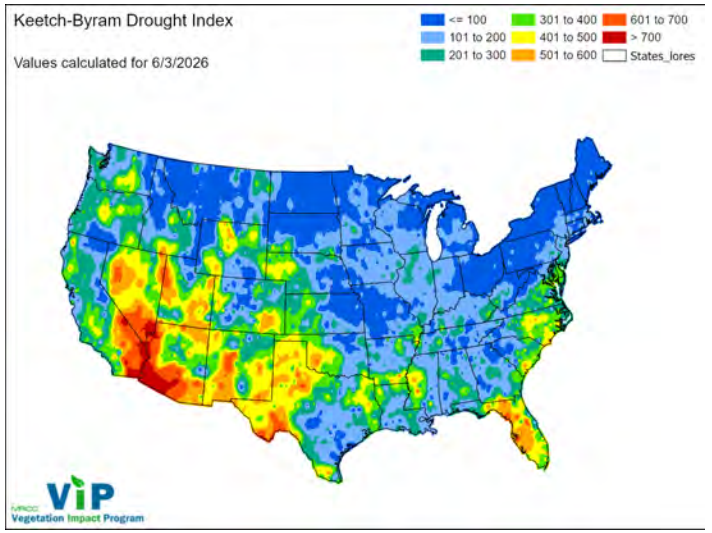


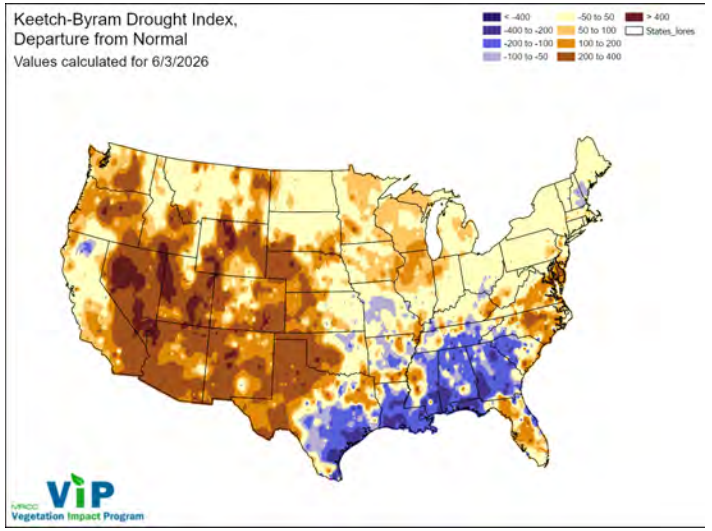
30-Day PNP





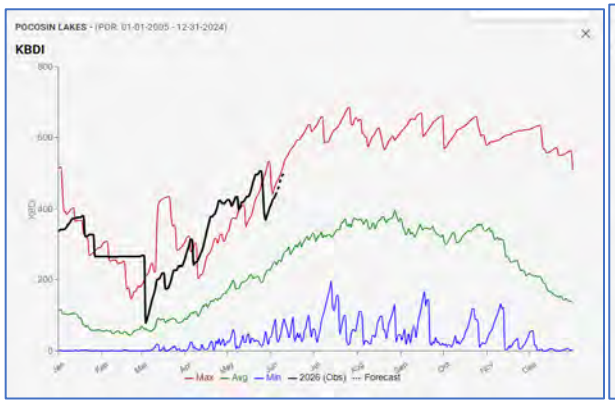
Points from 6/5, Grid from 6/4

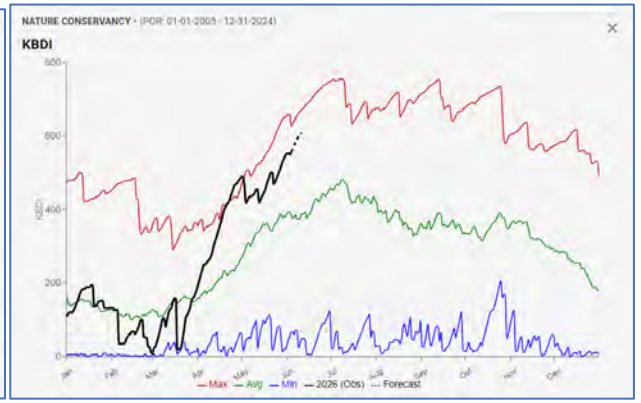




- KBDI values continue to climb with higher max daily temperatures & no significant widespread wetting rain for much of the state. Rainfall over the past several weeks has been generally convective/thunderstorm based, meaning that intense rainfall has quickly transition from 1"+ to < 0.20" over very small distances. Hence the popcorn effect being displayed. Of note - KBDI outputs can't model artificial drainage impacts or runoff vs absorption.

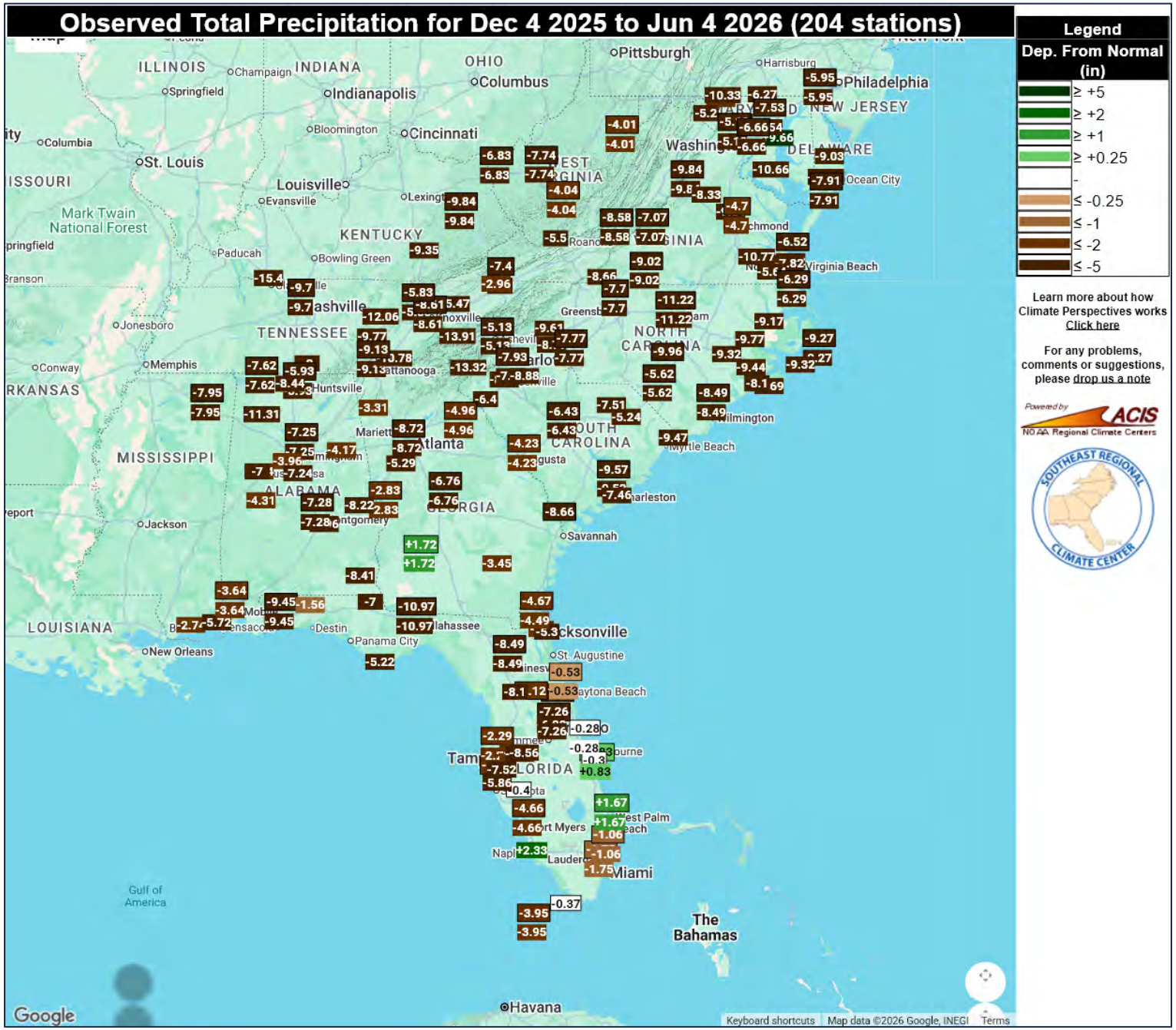
FEMS Examples from Pocosin Lakes & Nature Conservancy RAWS. KBDI Max/Min/Avg + 2026





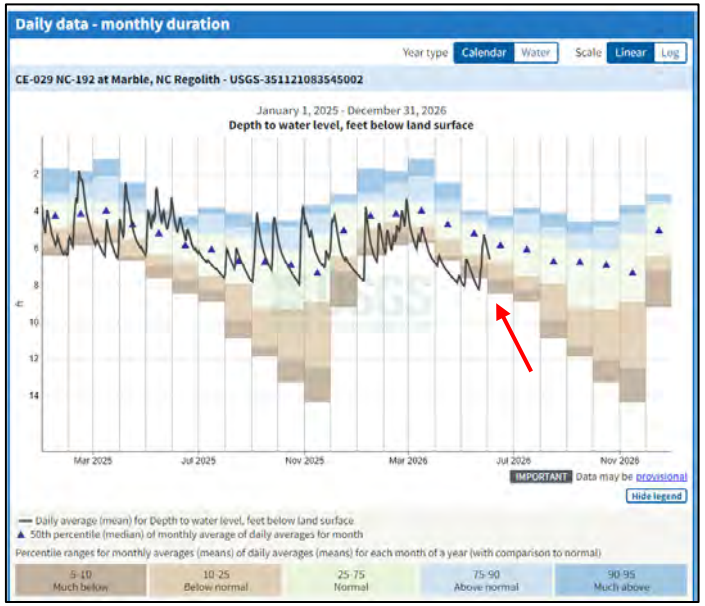
https://mrcc.purdue.edu/VIP/indexKBDI2

6-Month Station Departures from Normal (in.)
(12/4/25 - 6/4/26)

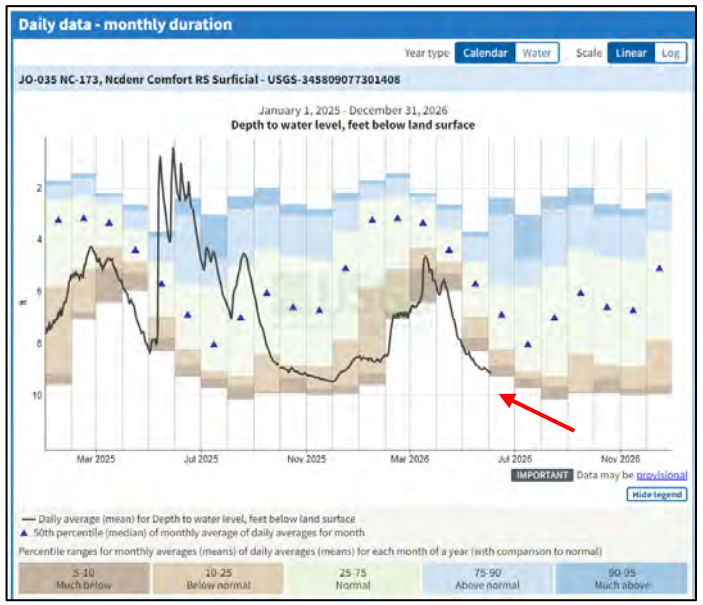


USGS Monitoring Wells - https://waterdata.usgs.gov/state/North%20Carolina/#dataTypes=72019

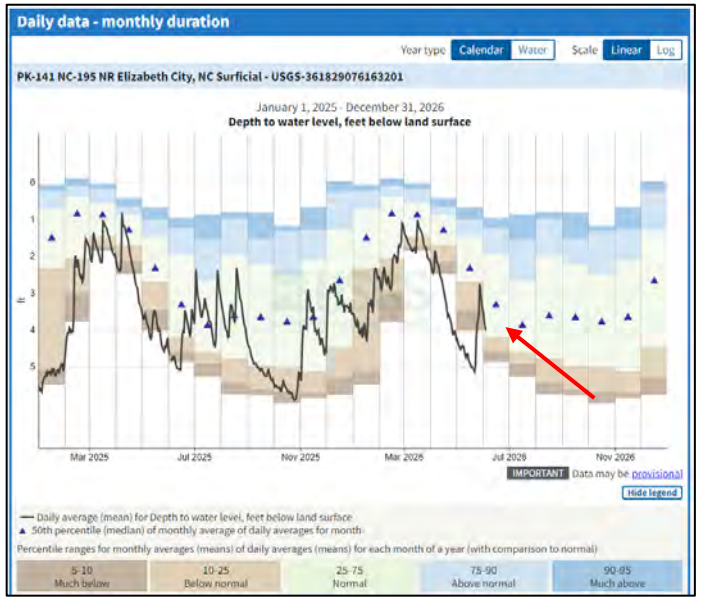
Marble Regolith – Cherokee Co.



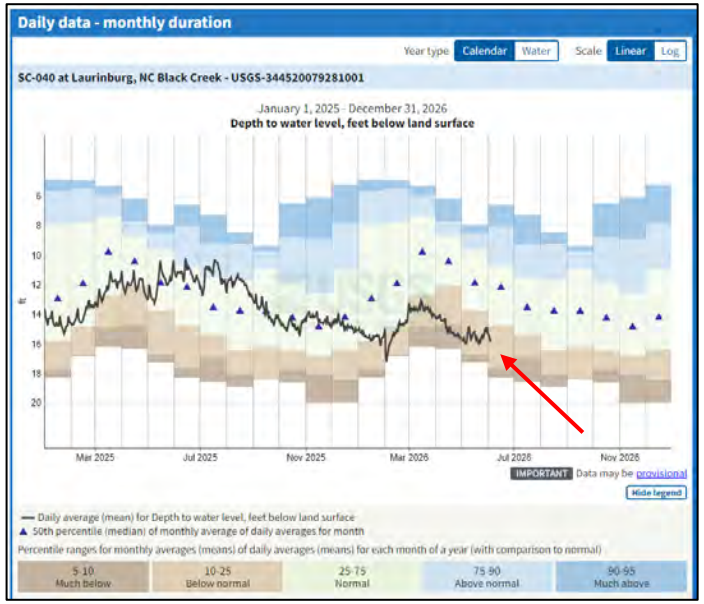
Comfort RS Surficial Well – Jones Co.



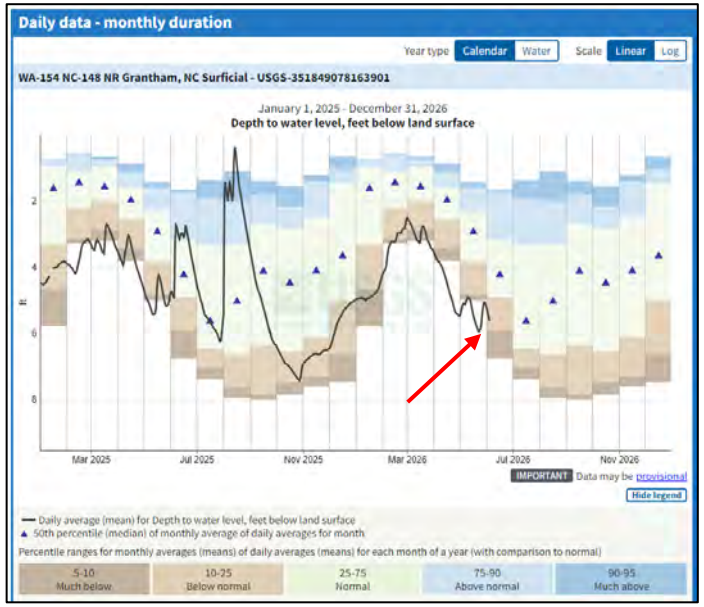
Elizabeth City Surficial Well – Pasquotank Co.



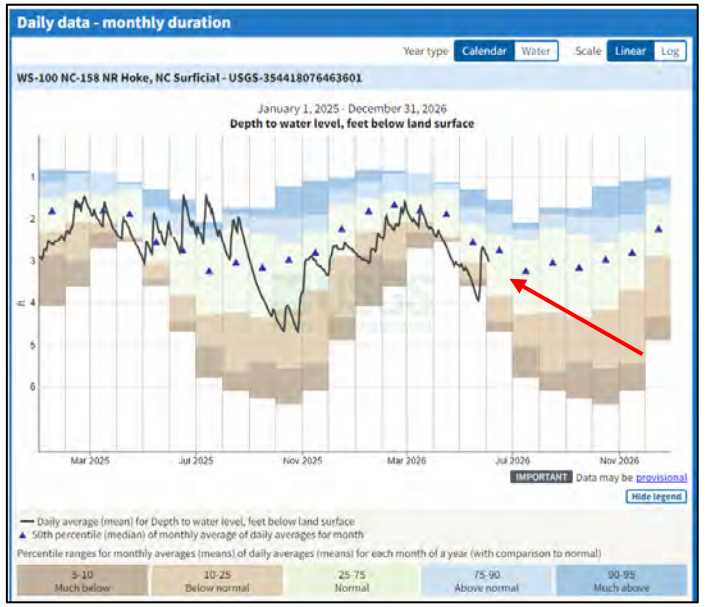
Black Creek – Scotland Co.



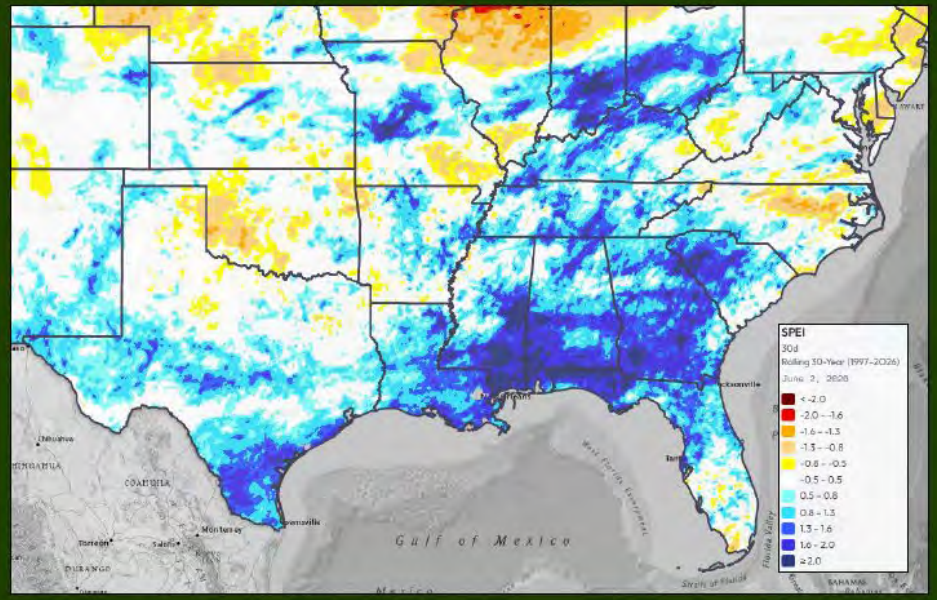
Grantham Surficial Well – Wayne Co.



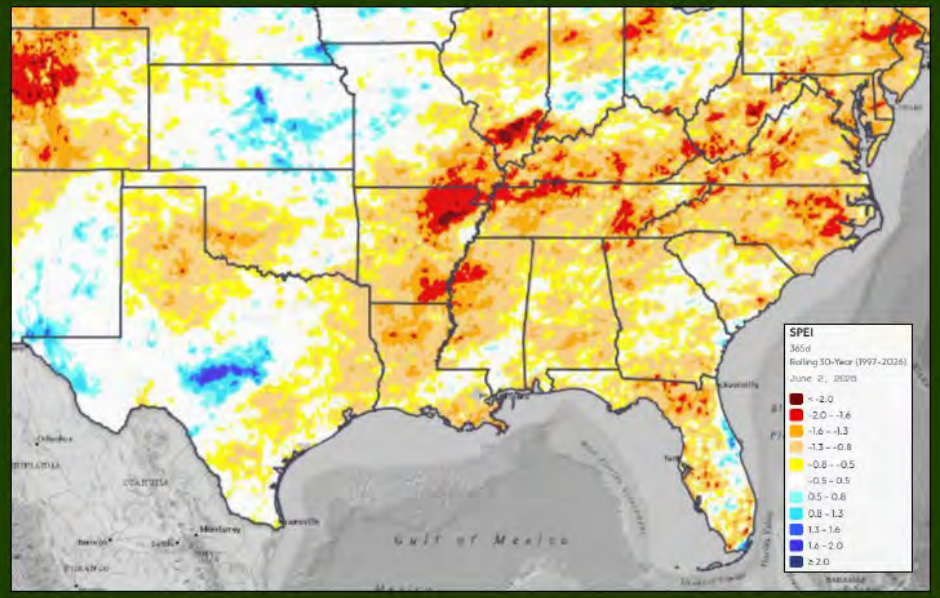
Hoke Surficial Well – Washington Co.



Standardized Precipitation-Evapotranspiration Index



- 30-day SPEI shows the extreme wetness in dark blue areas due to persistent rainfall and low evaporative demand
- Deteriorating conditions despite some rain in the Appalachian states, in addition to small areas of coastal SC and FL
- Drying in southwest OK and near the AR/OK border

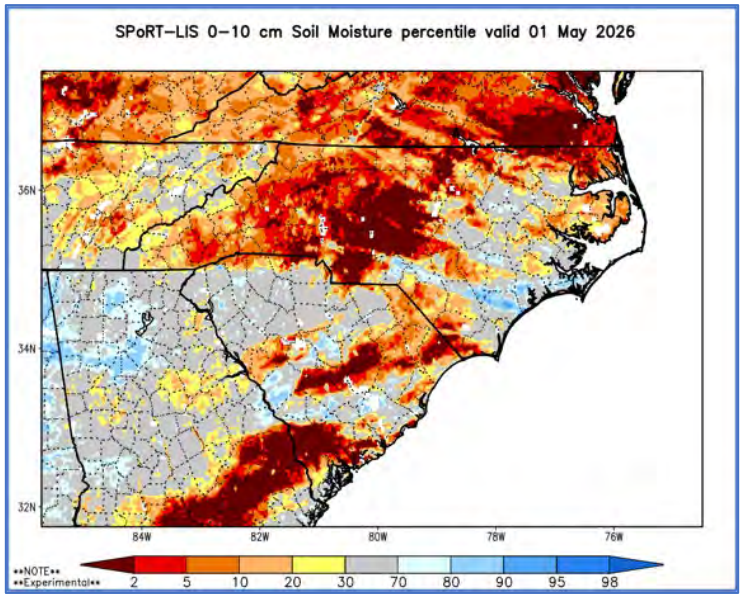


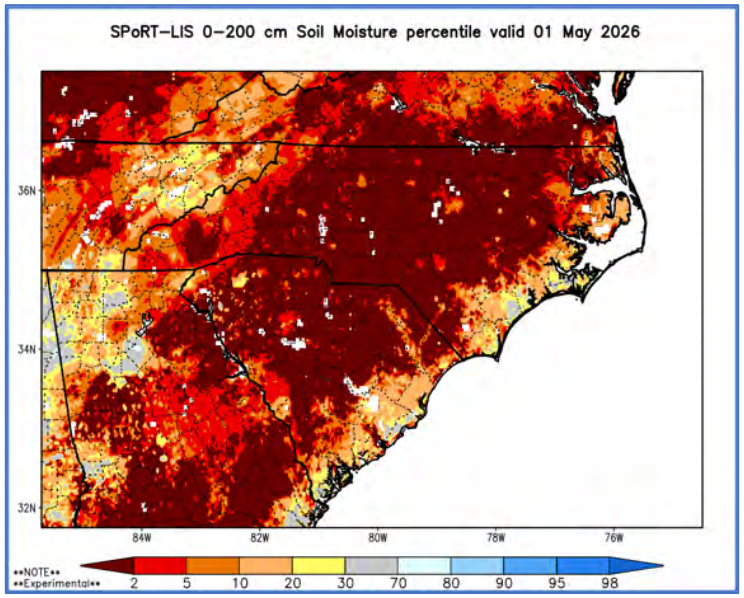
- One-year SPEIs continue to depict long-term drought impacts, especially in the Mid-Mississippi Valley, Appalachians, Mid-Atlantic and parts of the coastal Southeast
- Long-term rainfall and soil moisture deficits likely a product of the recent multi-year La Niña, lack of landfalling storms in 2025 and extra warm planet

From SA Fire Environment Briefing 6/5/26

SPoRT Modeled Soil Moisture Percentiles for ~4” and ~72” profile.

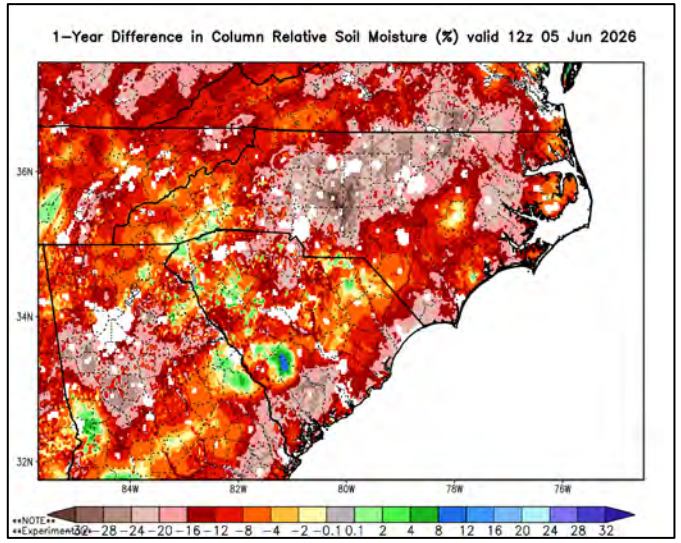
5/1/26





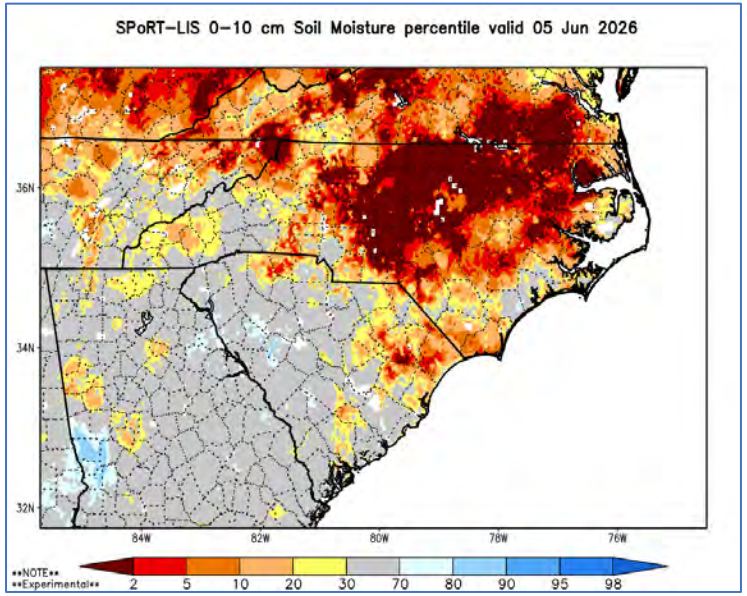
~ 4-Weeks ago Left, today on Right.

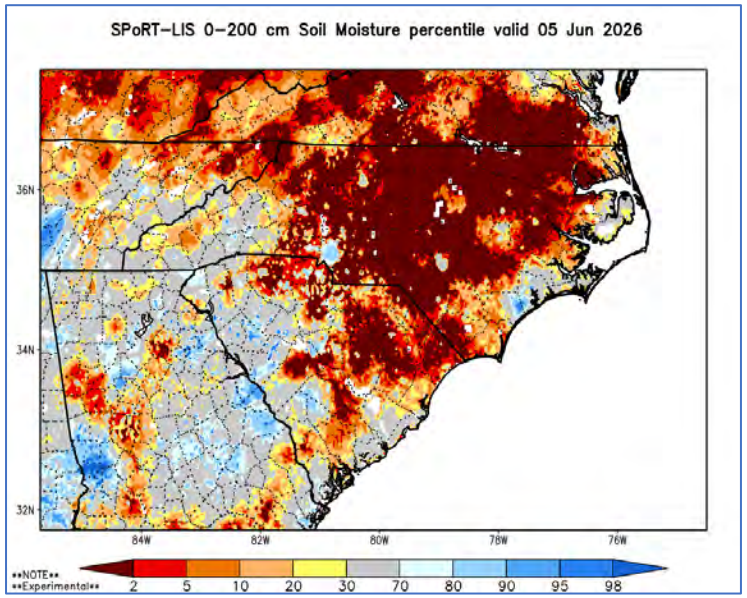
General improvements to the west, but significant full profile dryness remains for much of the state. Active growing season will hasten soil moisture depletion, without weekly precip.



https://weather.ndc.nasa.gov/sport/case_studies/lis_NC.html

6/5/26





North Carolina Drought Update

Created By: North Carolina Drought Management Advisory Council — www.ncdrought.org | NC CLIMATE OFFICE — climate.ncsu.edu | NC STATE — @NCSCO

For the assessment period ending **June 2, 2026**

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

The Main Takeaway

Moisture from our Memorial Day weekend rainfall, plus last week's lingering showers, have brought additional improvements especially in western North Carolina.

This Week's Summary

Several rounds of rain in the past two weeks have given the reinforcements we hoped for, with sustained gains in soil moisture and streamflow levels. That has erased some of the Extreme Drought (D3) and even seen a few areas shift back to Moderate Drought (D1) as we enter the summer. But totals have been lower in some spots, including the Triangle, and impacts continue there.

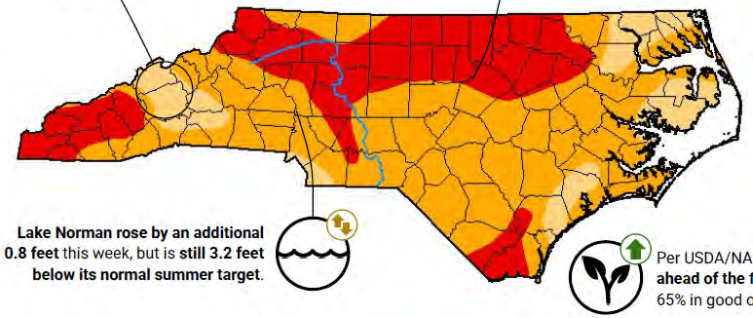
A Drought Deficit Update

Thanks to the May rainfall, Asheville and Elizabeth City are now less than 10 inches below normal since mid-August, while Raleigh's deficit is now almost 19 inches.

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

Streamflows across the lower French Broad River basin are near normal again after a soaking end to May.

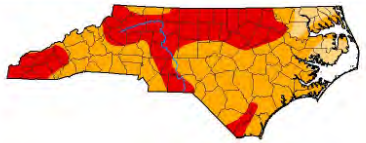
After another dry week in the northern Piedmont, **Raleigh has fallen below 50% of its normal precipitation** so far this year.



Lake Norman rose by an additional 0.8 feet this week, but is **still 3.2 feet below its normal summer target**.

Per USDA/NASS, **soybean planting is ahead of the five-year average**, with 65% in good or excellent condition.

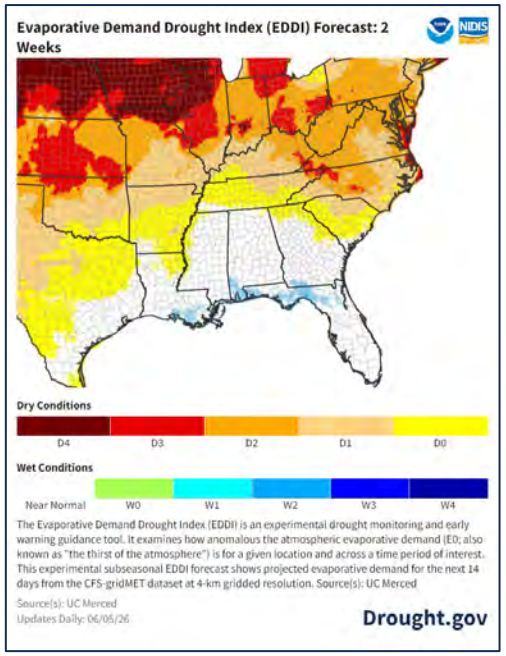
Last Week's Drought Status

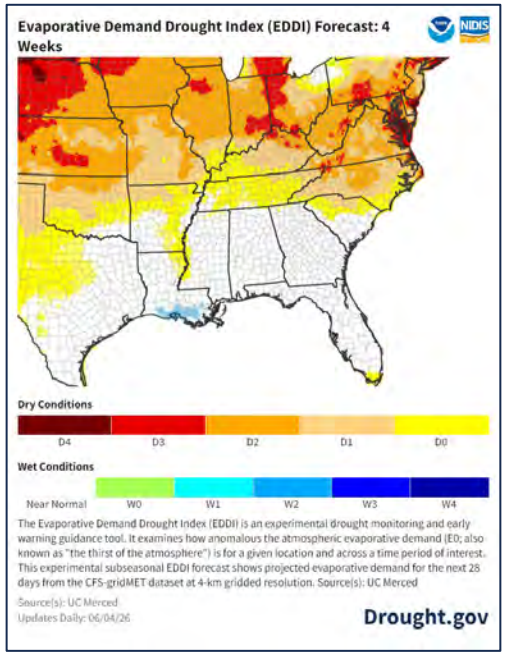


Statewide Coverage by Category

Category	Current Coverage	Change Since Last Week
D0: Abnormally Dry	0.00%	0.00%
D1: Moderate Drought	12.52%	+6.34%
D2: Severe Drought	56.08%	-1.09%
D3: Extreme Drought	31.40%	-5.24%
D4: Exceptional Drought	0.00%	0.00%

https://www.drought.gov/data-maps-tools/evaporative-demand-drought-index-eddi-subseasonal-forecasts



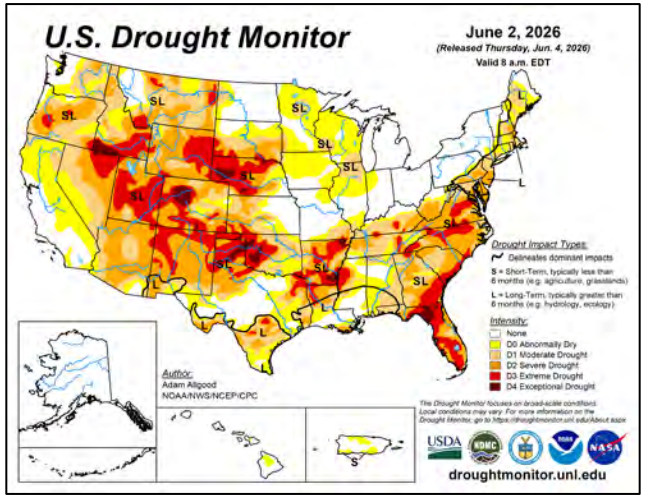


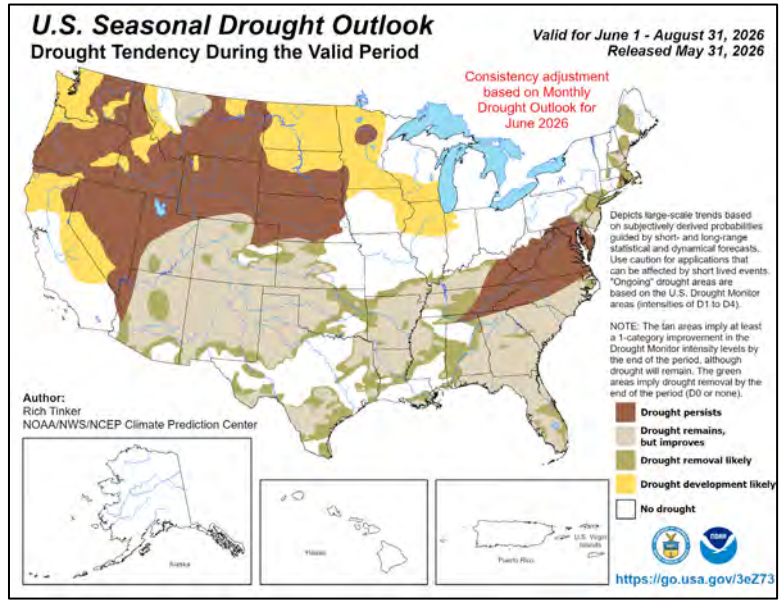
EDDI & Drought

EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week avg level. They are beginning to trend slightly above to much above normal for parts of NC in the 2 & 4-week time scale. Warmth, lack of precip and dry air accelerates this index.

US Drought Monitor – Most recent USDM map release above (6/2/26). Drought intensification continues to be probable as we move into the growing season, should rainfall deficits continue.

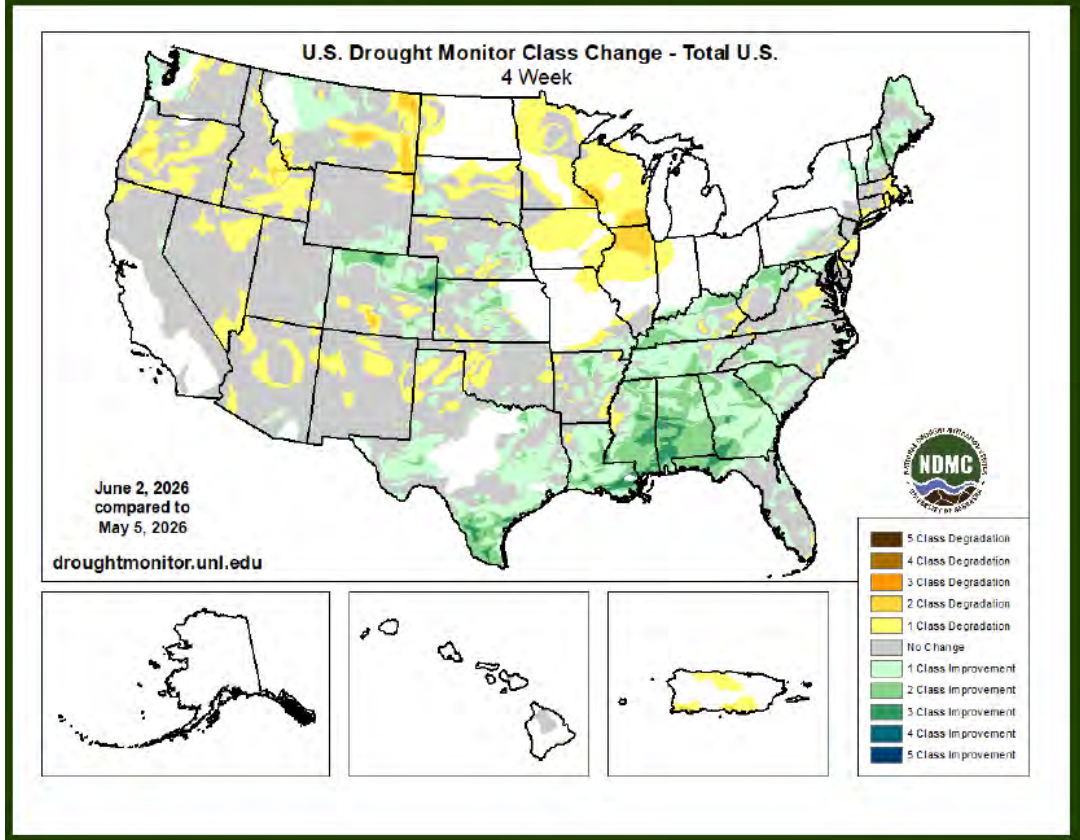
Seasonal Drought Outlook - See detailed state/regional discussions here.



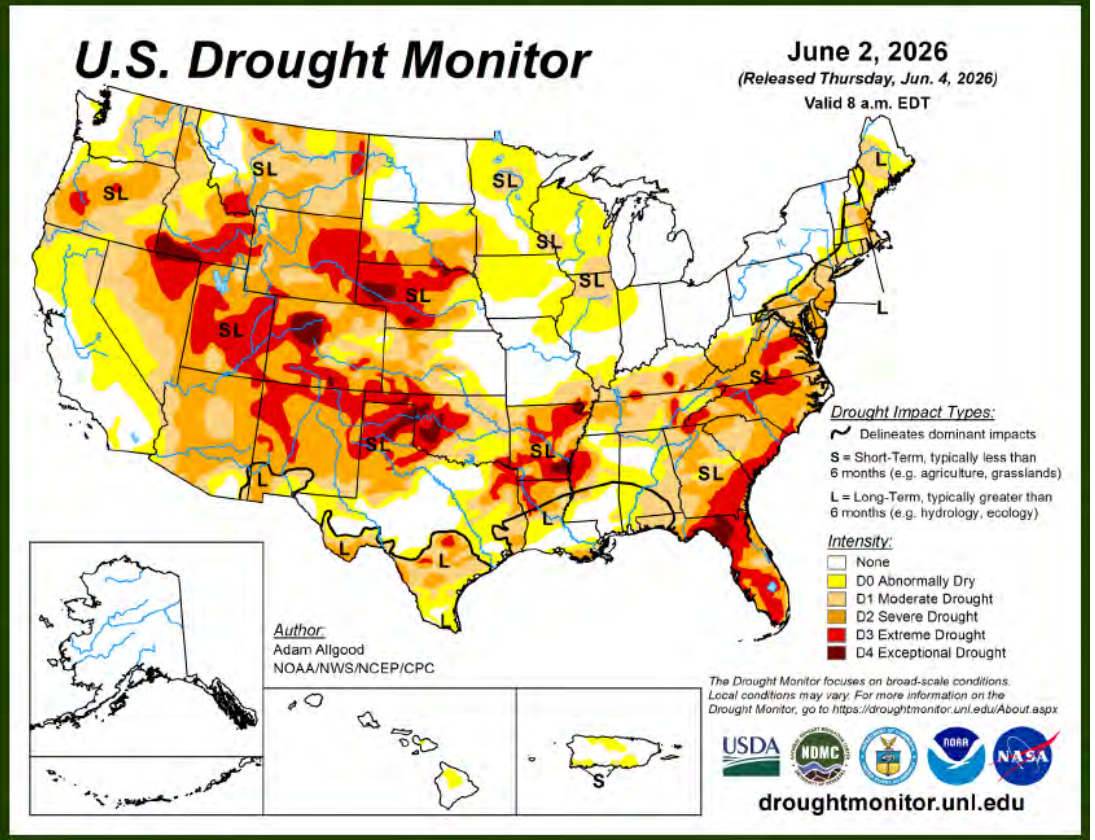


U.S. Drought Monitor

Four Week Change



June 2nd Drought Monitor



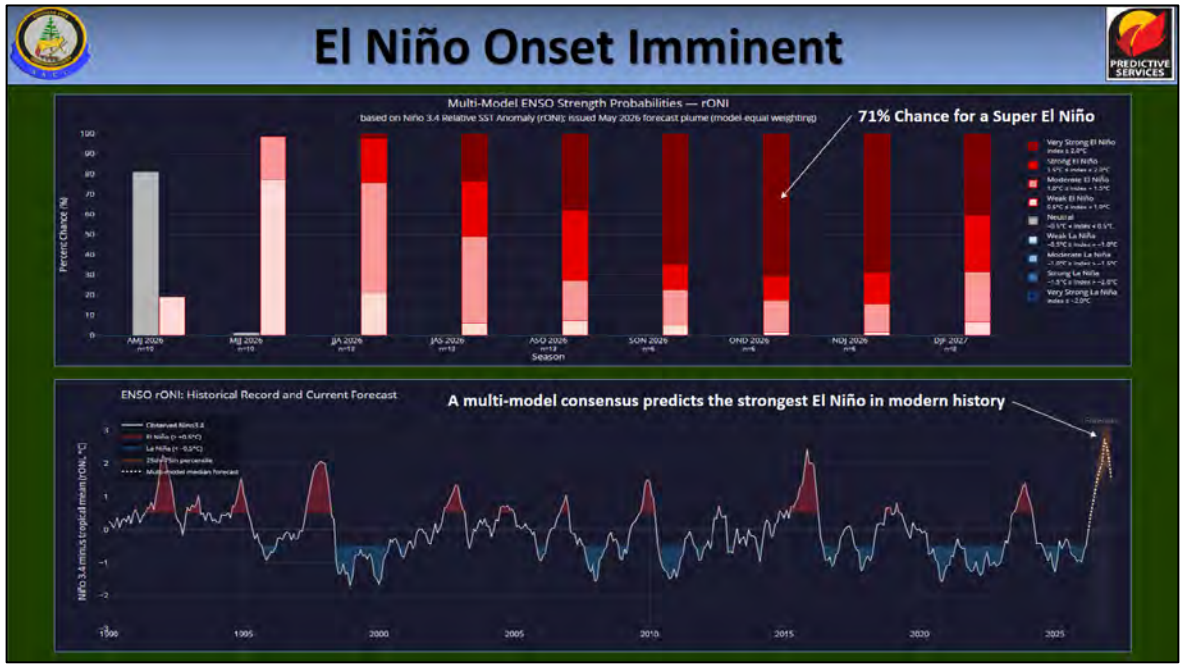
From SA Fire Environment Briefing 6/5/26

ENSO Notes from the CPC (5/14/26 Update)

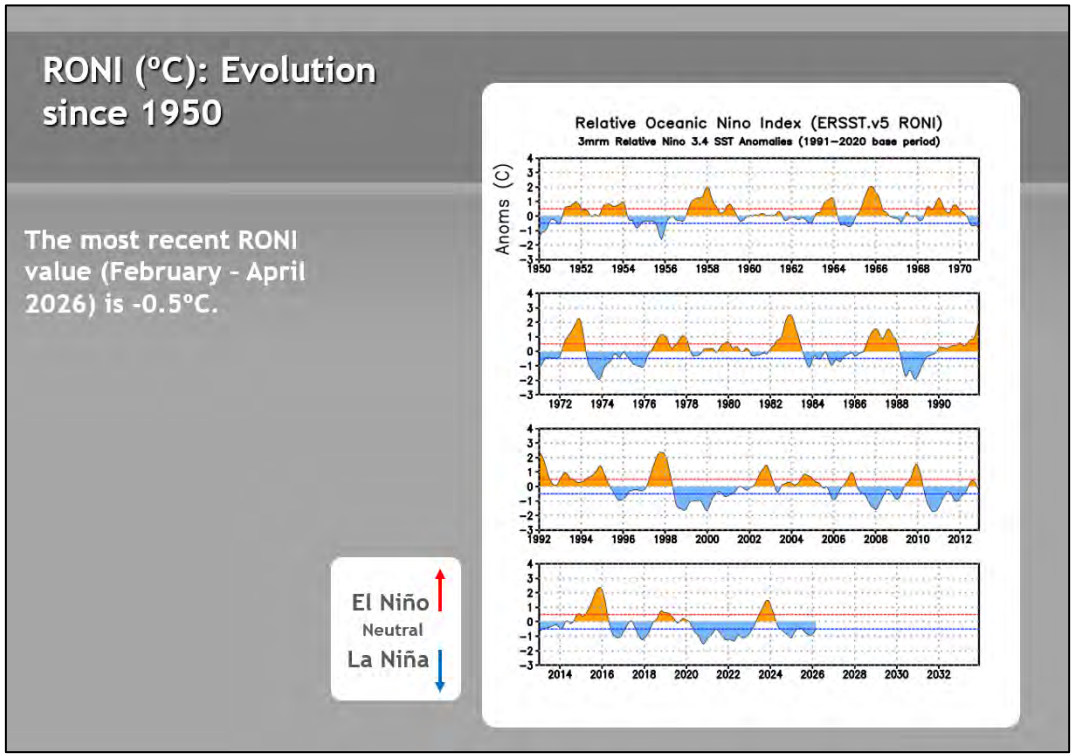
ENSO Alert System Status: **El Niño Watch**

El Niño is likely to emerge soon (82% chance in May-July 2026) and continue through Northern Hemisphere winter 2026-27 (96% chance in December 2026-February 2027).

ENSO, or El Nino Southern Oscillation, is a fluctuation in the sea surface temperature (SST) in the equatorial Pacific Ocean. Research has shown that even slight changes in the SST, particularly in area 3.4, can influence weather in North America. Generally, when SSTs are lower than normal, known as La Nina, NC has drier than normal conditions and can have more fire occurrence. However, La Nina also can lead to more tropical activity. El Nino, on the other hand, usually means wetter weather for NC, but less opportunity for tropical landfalls due to increased wind shear. Recent changes in defining either ENSO state can be found here.



From SA Fire Environment Briefing 6/5/26

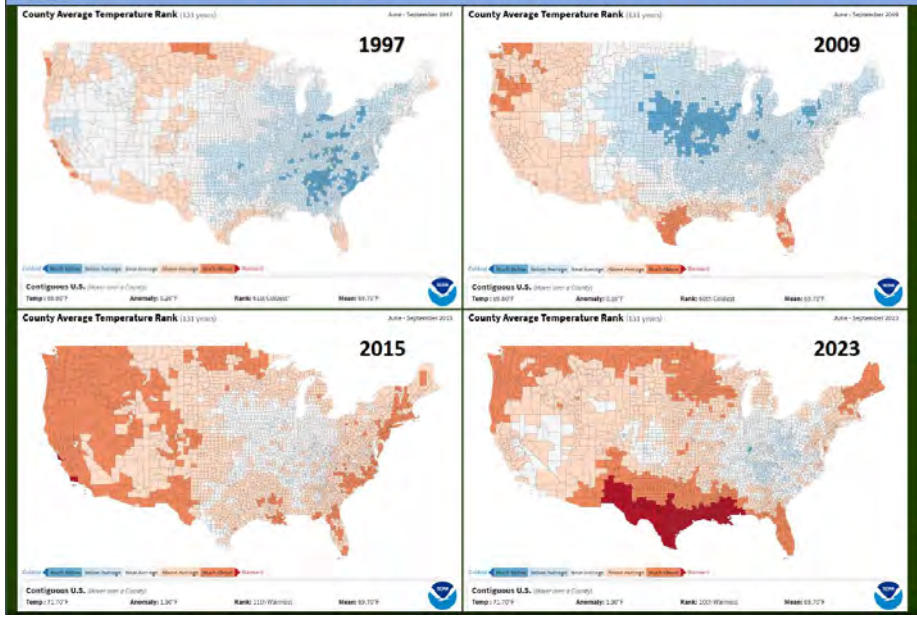


From the most recent CPC Diagnostic Discussion (ENSO Diagnostics Discussion):

The North American Multi-Model Ensemble (NMME) average, including the NCEP CFSv2 [Fig. 6], favors El Niño to form by next month and persist through Northern Hemisphere winter 2026-27. While confidence in the occurrence of El Niño has increased since last month, there is still substantial uncertainty in the peak strength of El Niño, with no strength categorization exceeding a 37% chance [Figs. 7 & 8]. The strongest El Niño events in the historical record are characterized by significant ocean-atmosphere coupling through the summer, and it remains to be seen whether this occurs in 2026. Stronger El Niño events do not ensure strong impacts; they can only make certain impacts more likely (see CPC outlooks for probabilities of seasonal anomalies). In summary, El Niño is likely to emerge soon (82% chance in May-July 2026) and continue through Northern Hemisphere winter 2026-27 (96% chance in December 2026-February 2027).

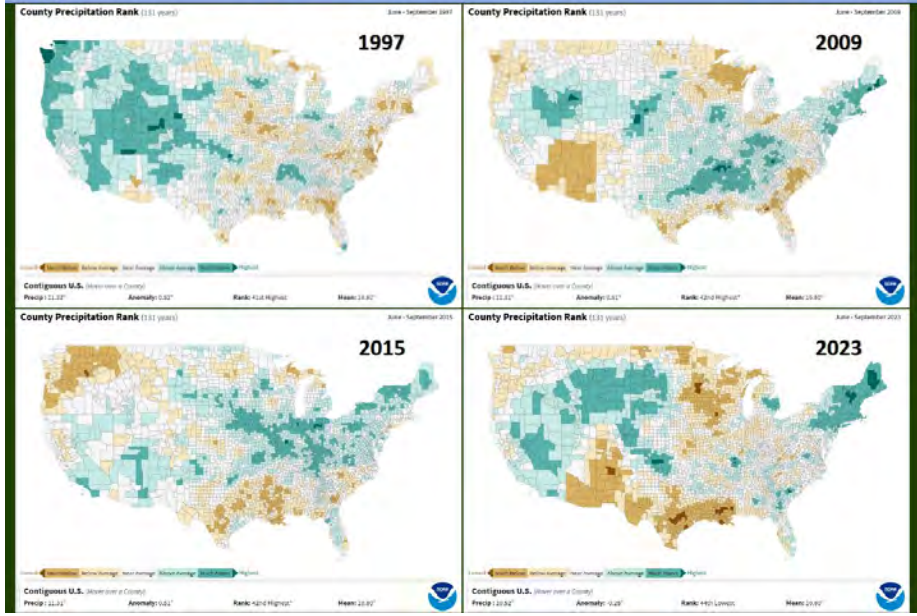
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

Strong to Super El Niño Analogs



- June through September average temperature rankings for select El Niño's the last 30 years with RONI ≥ 1.5°C (strong or super) by year's end
- 2009 and 2023 are the closest matches for a quick ENSO transition from La Niña to Neutral to El Niño
- Warmth along the Gulf Coast generally expanded north from 1997 to 2009, 2015 and was on steroids in 2023
- Trends suggest even more expansive and intense heat domes this year

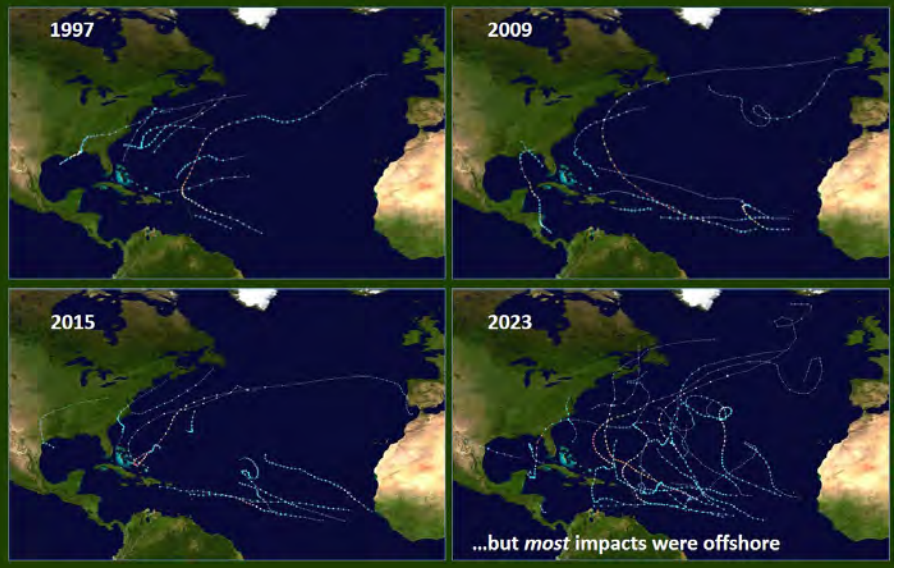
Strong to Super El Niño Analogs



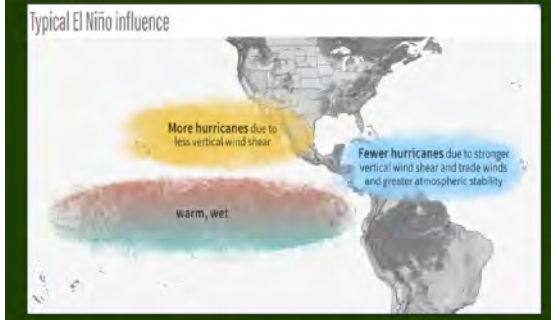
- June through September average rainfall rankings for select El Niño's with RONI ≥ 1.5°C (strong or super) by year's end
- The Gulf coastal plain is generally favored to be dry during summer, but variability creeps in
- Tropical systems can swing conditions much wetter in localized areas

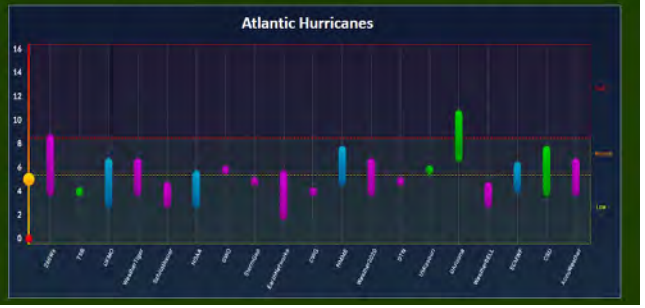
El Niño's Impact on the Hurricane Season

- Stronger, rapid onset El Niños tend to lower the number and intensity of Atlantic tropical systems
- Tropical waves may fail to intensify due to increased wind shear across the Atlantic basin
- Storms can still find the sweet spot, but overall numbers most El Niño years are lower
- 2023 was a major exception as the 4th busiest hurricane season on record…



2026 Atlantic Hurricane Season



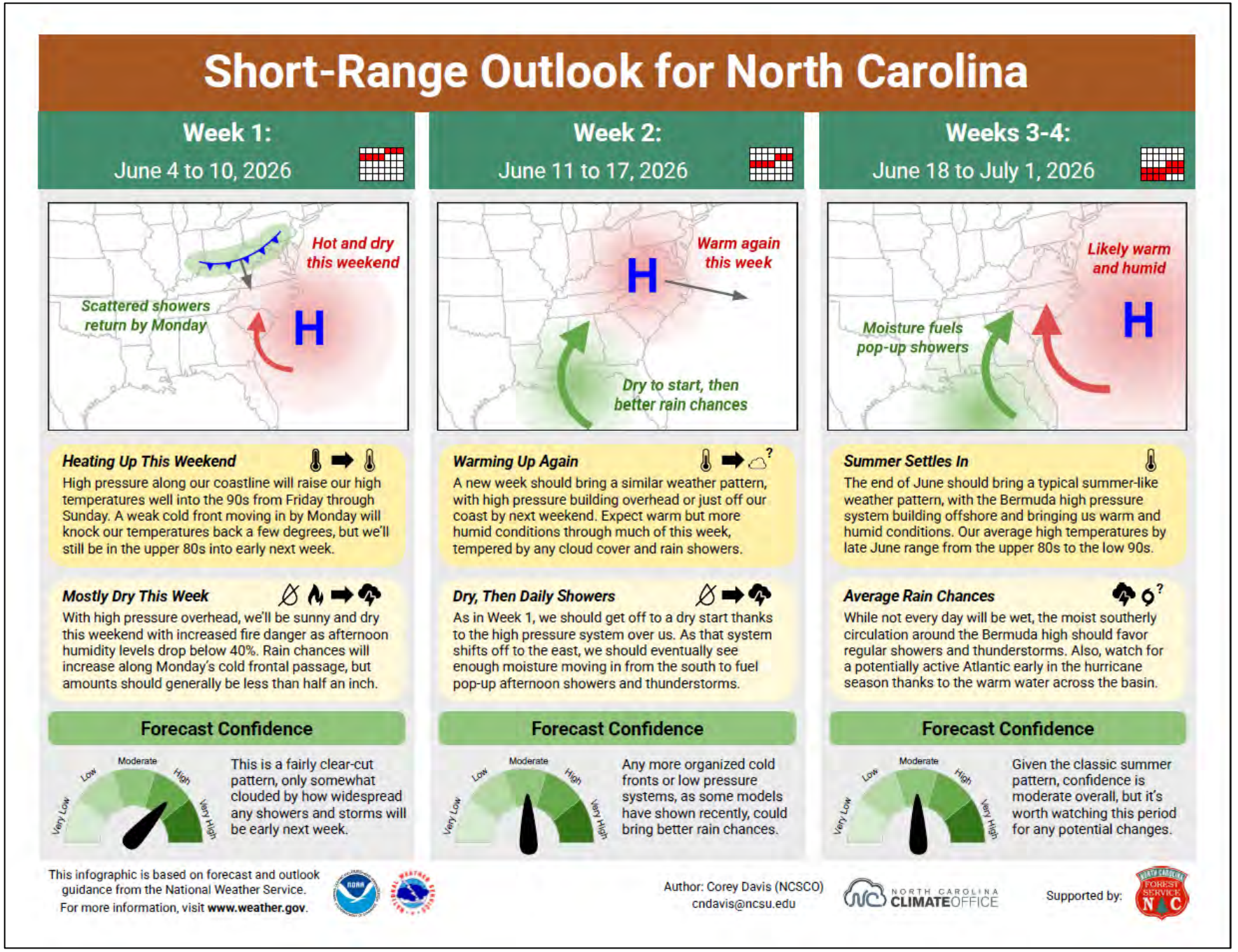


- El Niño increases the odds of a busy eastern Pacific and quiet Atlantic
- The consensus points towards near to below average numbers of storms, hurricanes and major hurricanes in the Atlantic
- Atlantic activity could be more front-loaded and then decrease during the typical peak season as shear increases with the strengthening El Niño impacts
- A busy eastern Pacific could affect the Western fire season, but in competing ways depending on the track of storms and moisture aloft

From SA Fire Environment Briefing 6/5/26

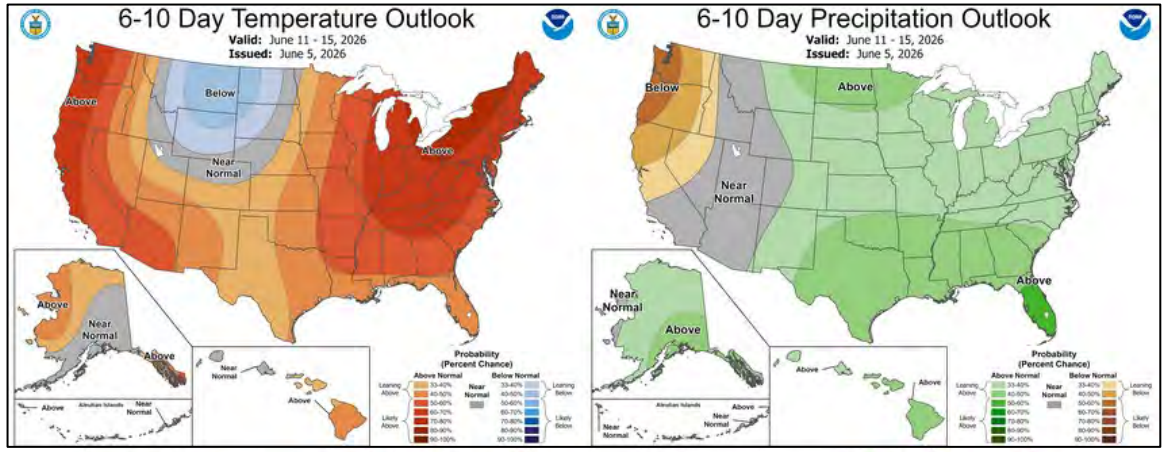
State Climate Office: Short-Range Monthly Outlook for NC

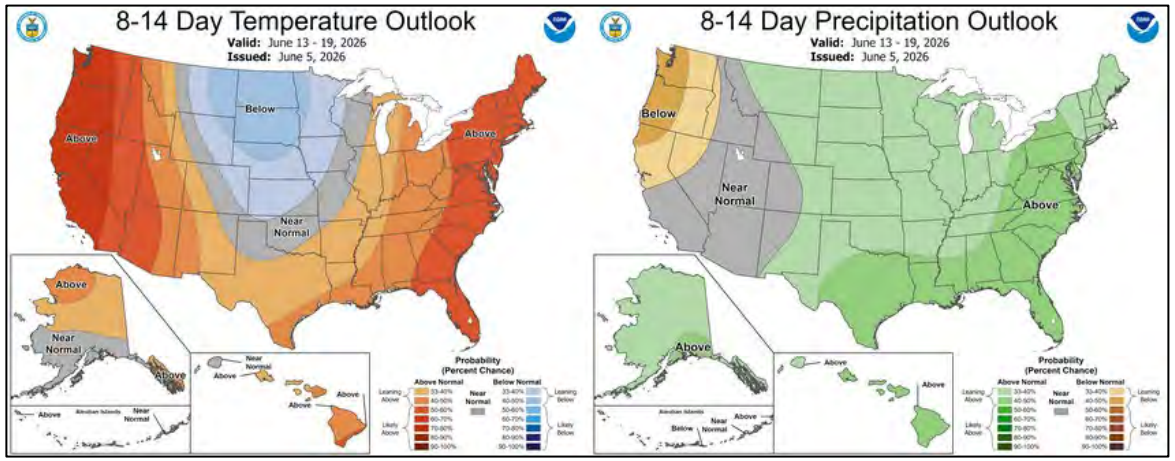
Released ***6/4/26***
Location: https://climate.ncsu.edu/fire/outlooks/



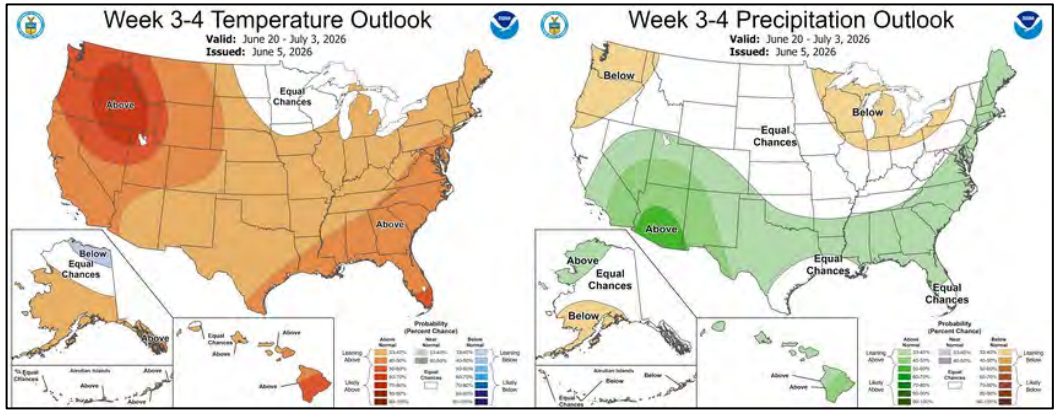
Temp & Precip Outlook

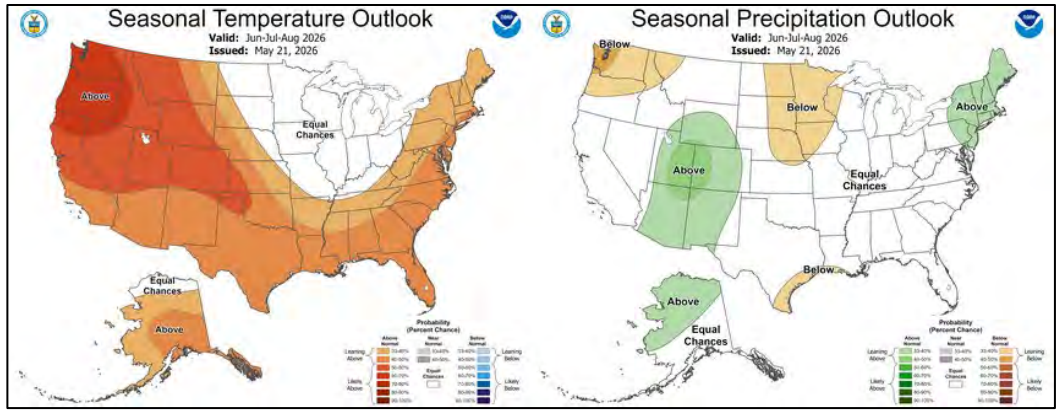
6-10 Day, 8-14 Day, Weeks 3-4, 3-Month Jun/July/Aug (released 5/21)





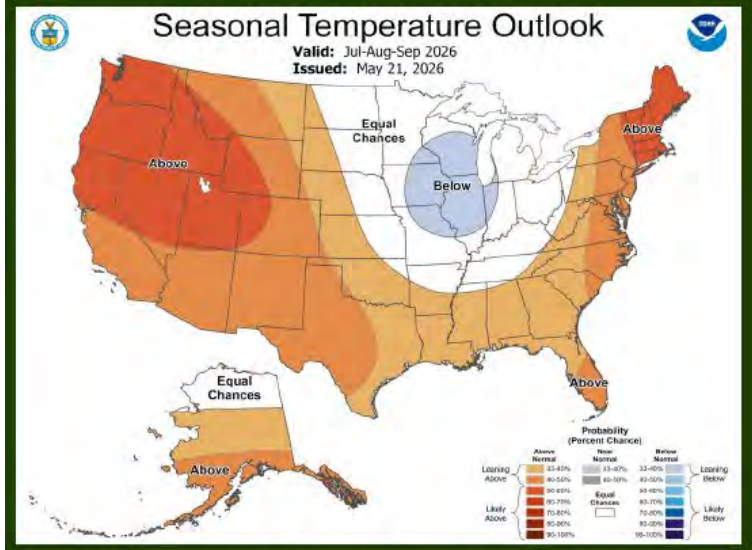
Source: https://www.cpc.ncep.noaa.gov/

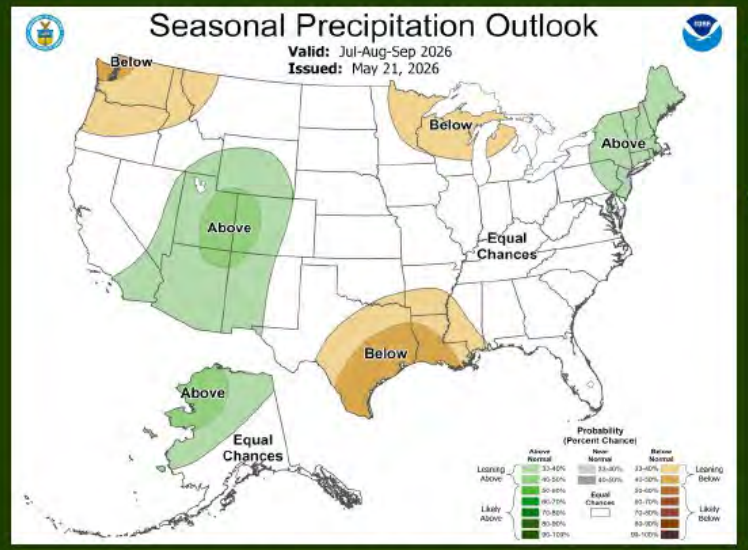


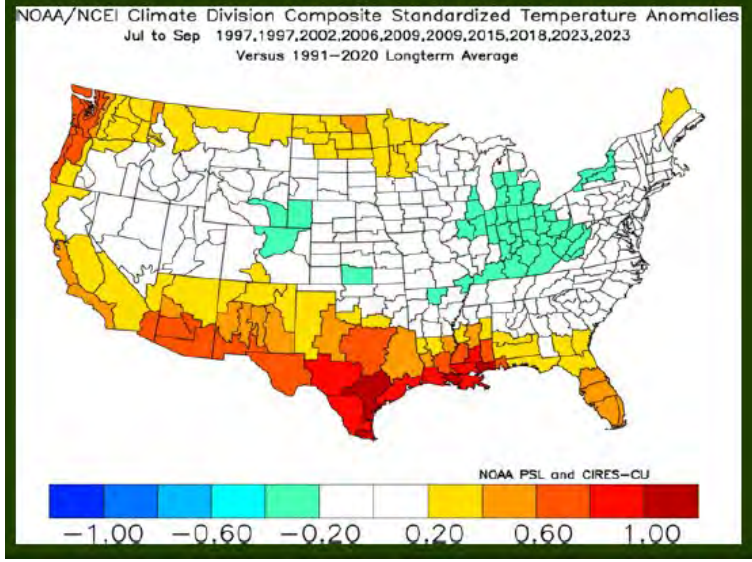


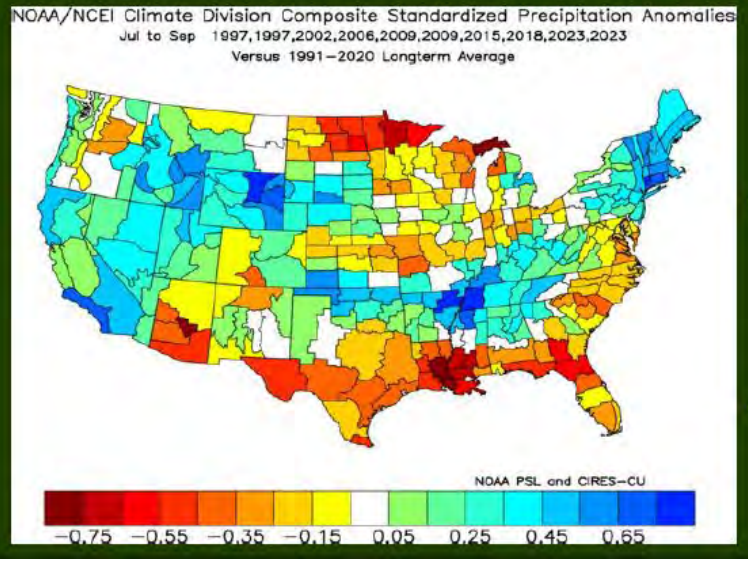
Keep the current deficits in mind at longer time scales. Trend remains promising, but long way to go & forecast uncertainty, mainly driven by isolated thunderstorms or tropical (in)activity as we move through summer.

July to September









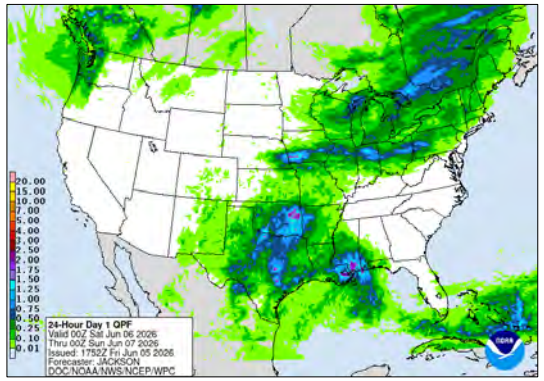
- Seasonal analogs and models generally support a hot and dry summer across the southern tier
- Rainfall will be dependent on tropical activity, but rainy season thunderstorms may taper off for extended periods as strong high pressure ridges and Saharan dust affect the Gulf Coast
- Robust new grass crop in parts of central Texas could drought cure and be available by mid-summer
- Residual drought impacts may be likely in the coastal Southeast through summer
- 2026 has told us to be prepared for extremes – get used to hearing "we've never seen this before"

From SA Fire Environment Briefing 6/5/26

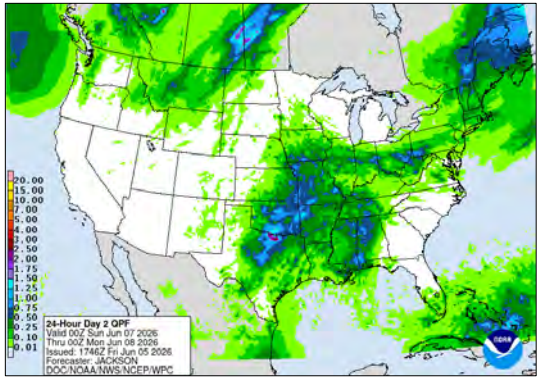
Quantitative Precipitation Forecast, 7-Day

Location: https://www.wpc.ncep.noaa.gov/#

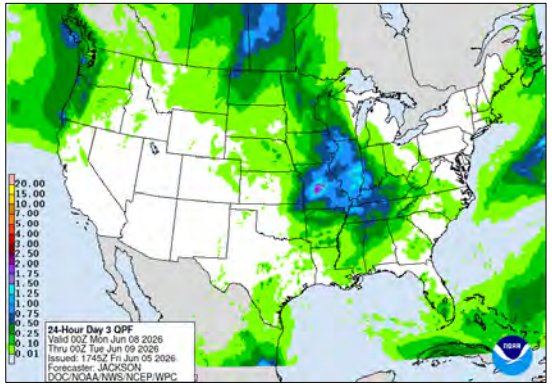
Day – 1 (8pm – 8pm)



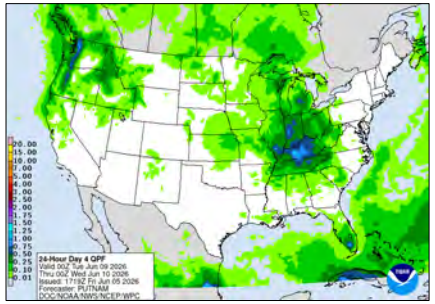
Day - 2



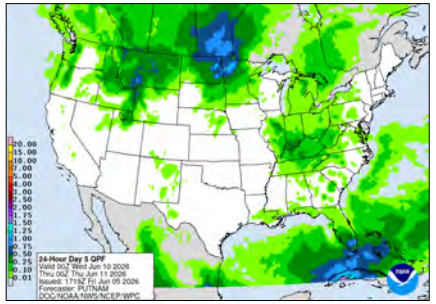
Day - 3



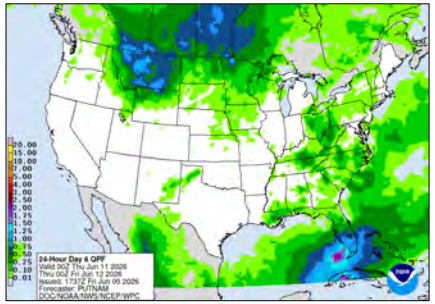
Day - 4



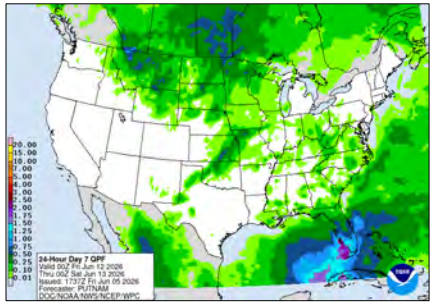
Day - 5



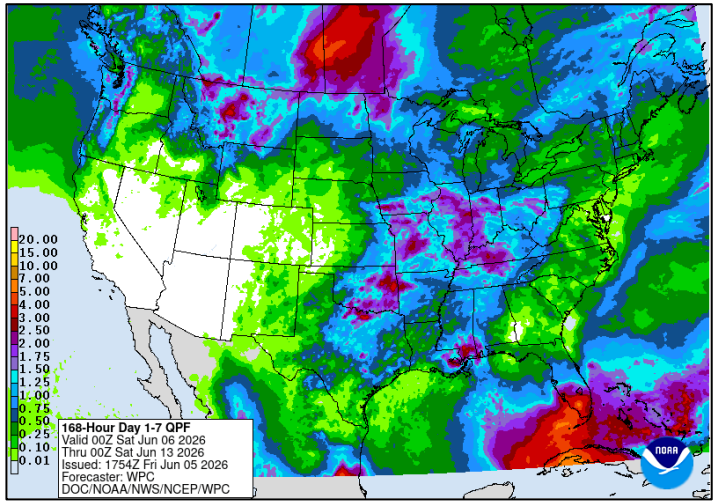
Day - 6



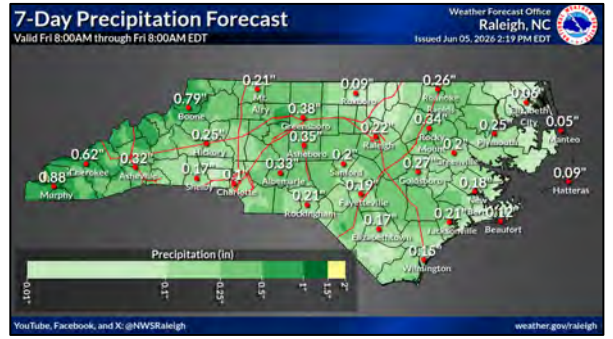
Day - 7



Days 1 – 7 QPF

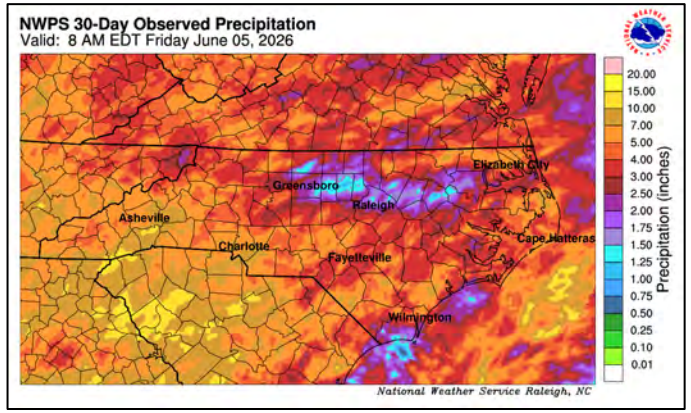


Zoom - Days 1 – 7 QPF



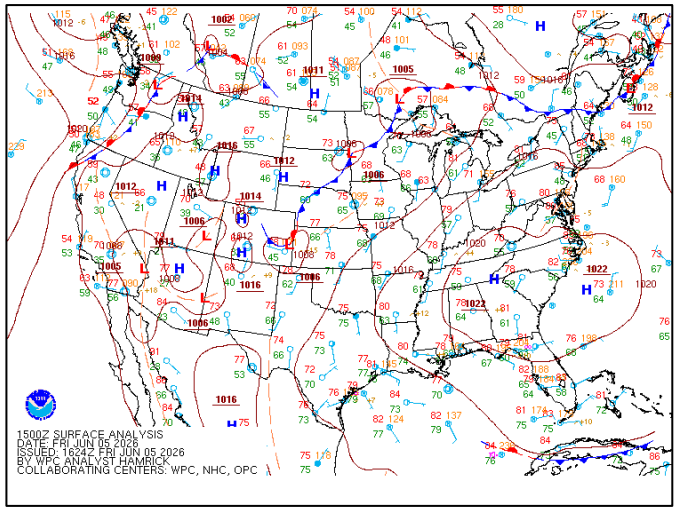
Very limited precip chances. Lightning concerns if isolated t-storms develop.

30-Day Observed Precip ending 6/5 am.

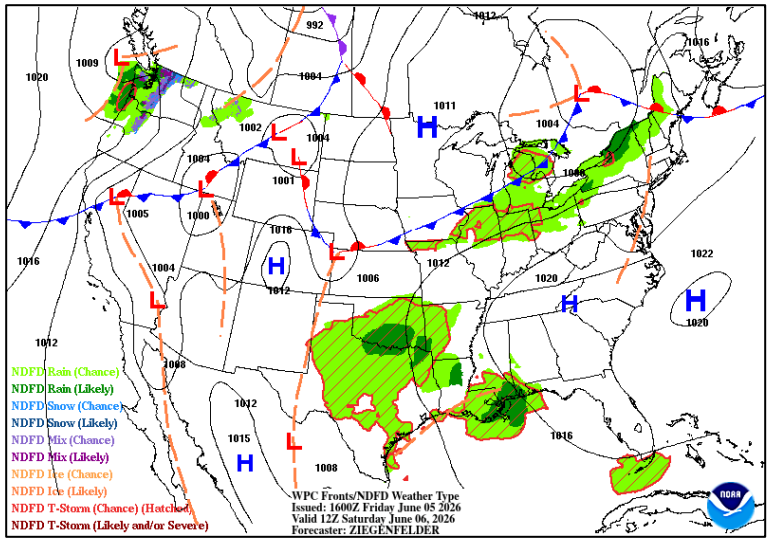


WPC Forecasted Surface Fronts & Sea-Level Pressures

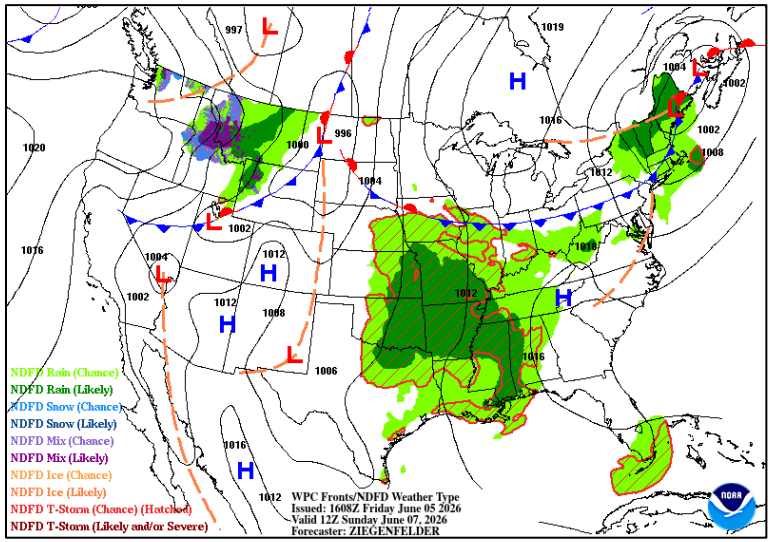
Day-1 @ 15Z Surface Analysis



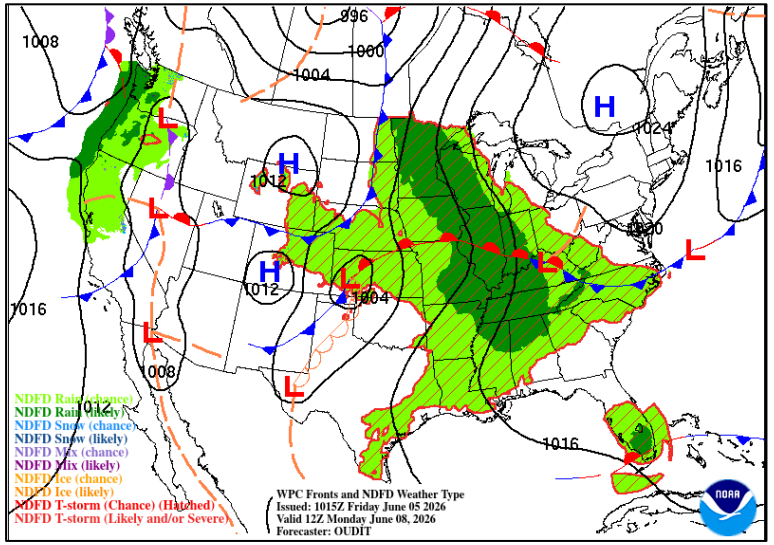
Day 2 - @ 12Z (0800 EDT)



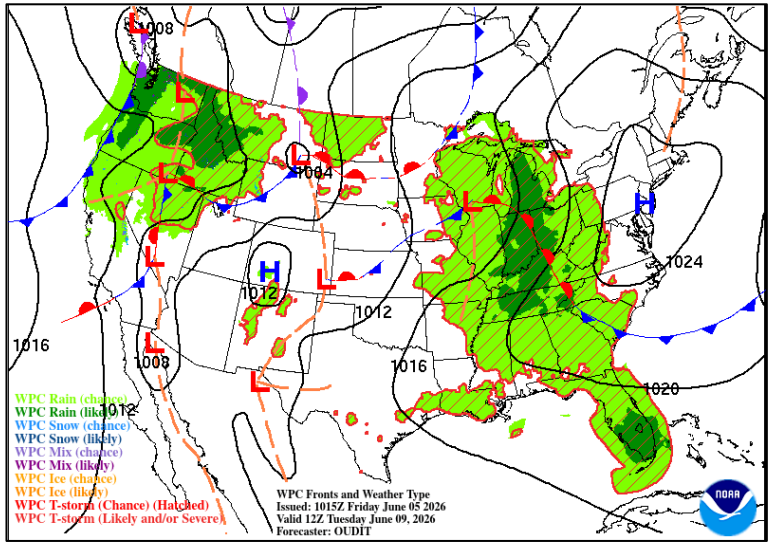
Day 3 @ 12Z (0800 EDT)



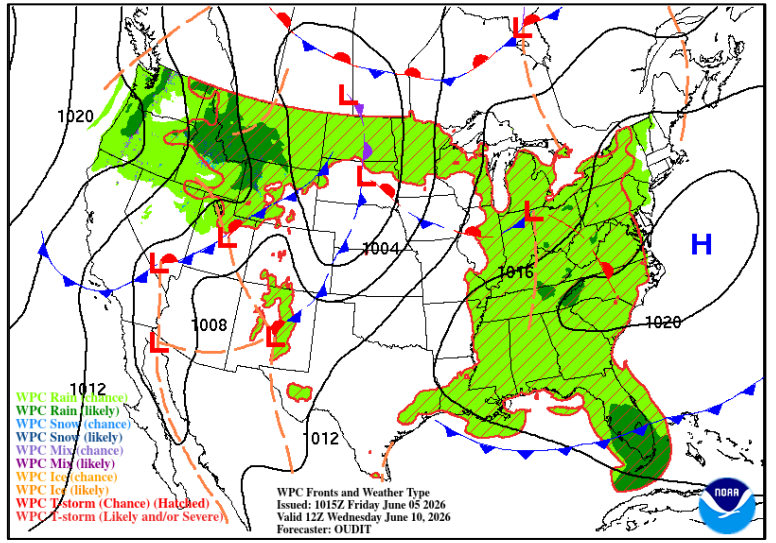
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



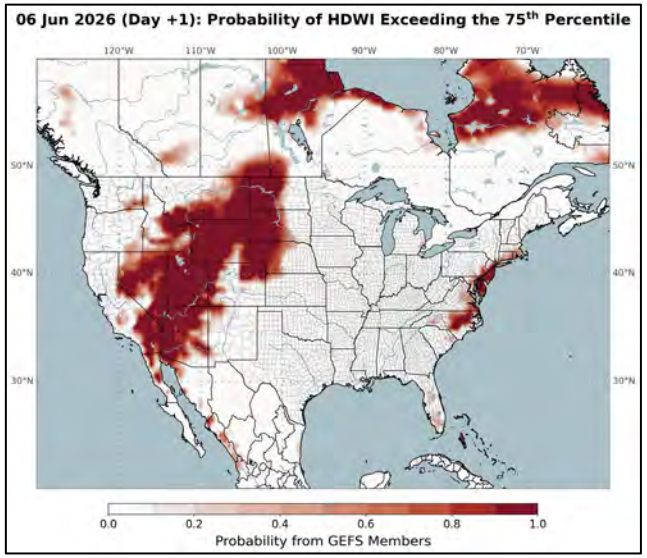
Day 6 @ 12Z (0800 EDT)



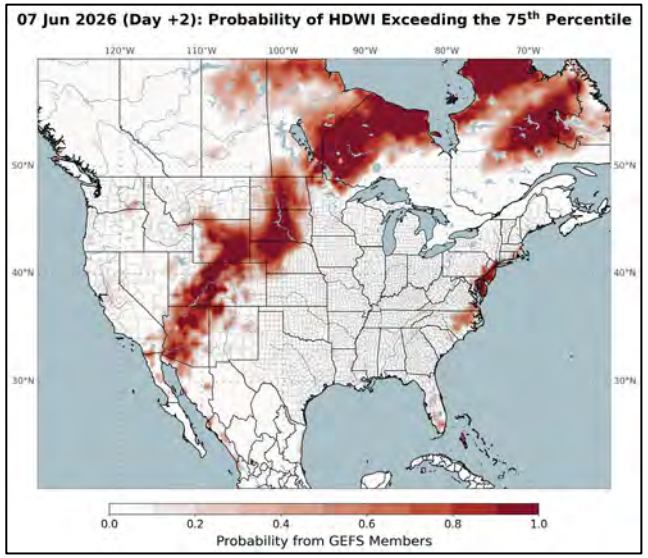
Location: https://www.wpc.ncep.noaa.gov/#

Hot-Dry-Windy Index (HDW)

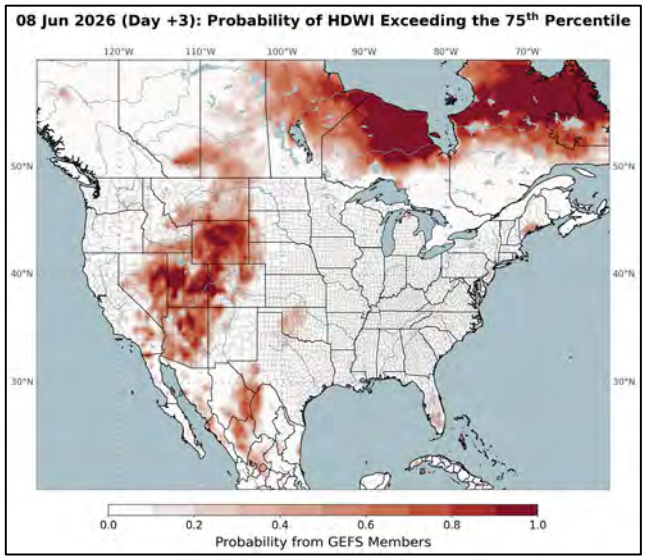
Saturday > 75th Percentile



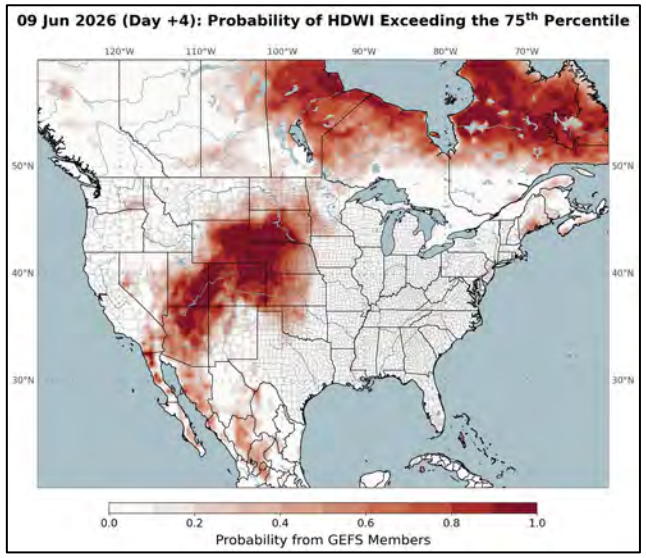
Sunday > 75th Percentile



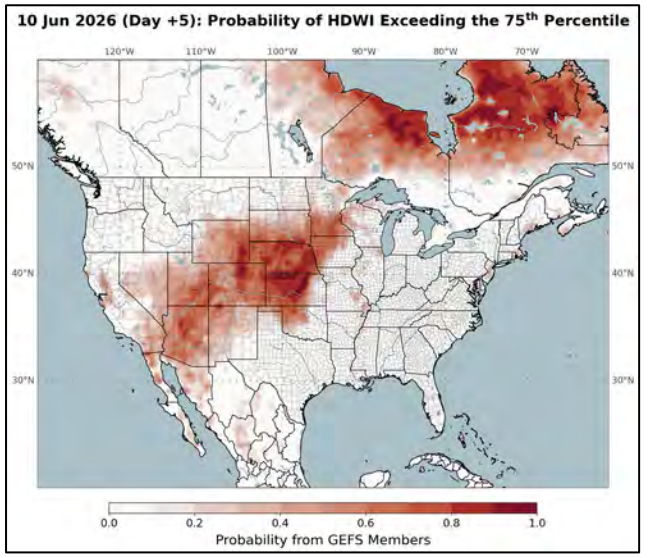
Monday > 75th Percentile



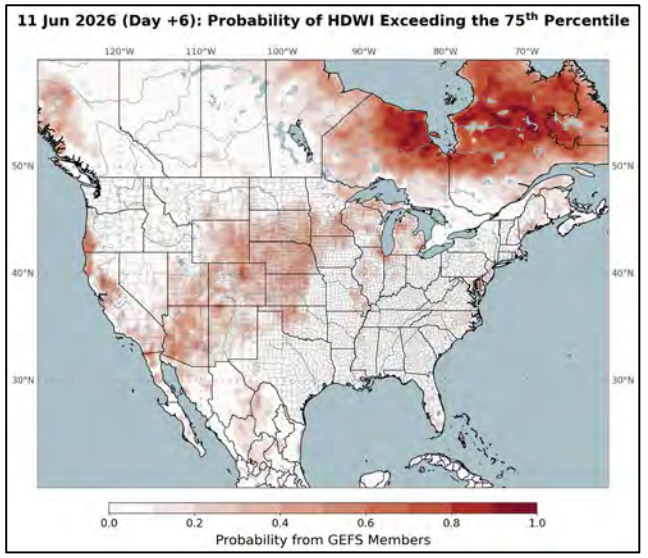
Tuesday > 75th Percentile



Wednesday > 75th Percentile



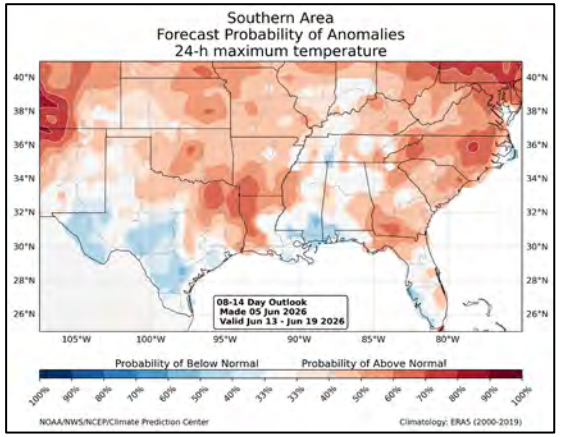
Thursday > 75th Percentile

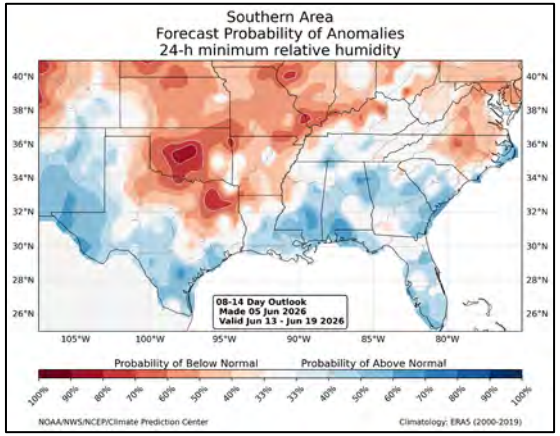


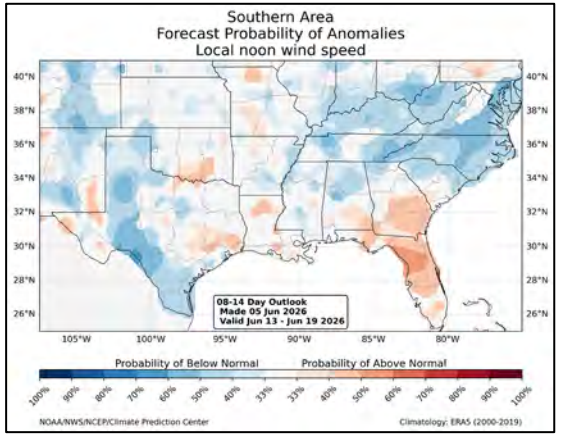
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

https://hdwindex.fs2c.usda.gov/probs.html

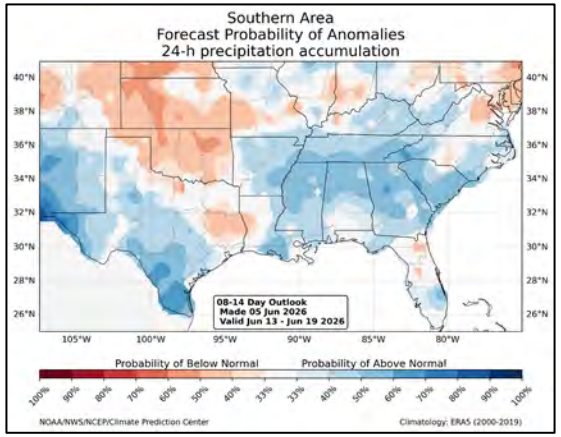
Week Two Forecast Anomalies: 6/13 – 6/19

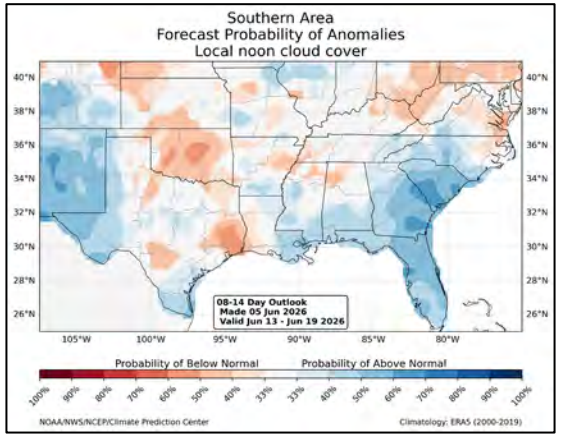






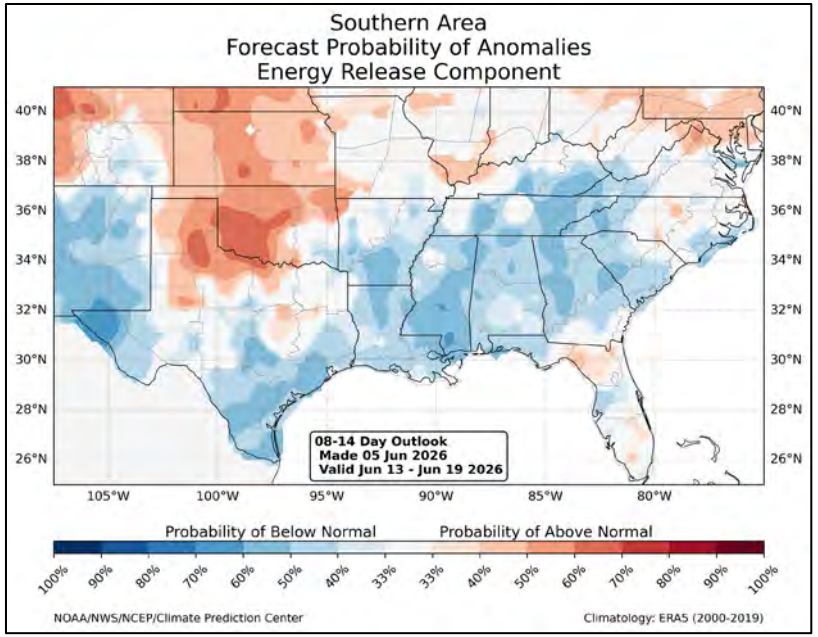
https://www.cpc.ncep.noaa.gov/products/extremes/fire-weather/cpc_wk2fw_index.html

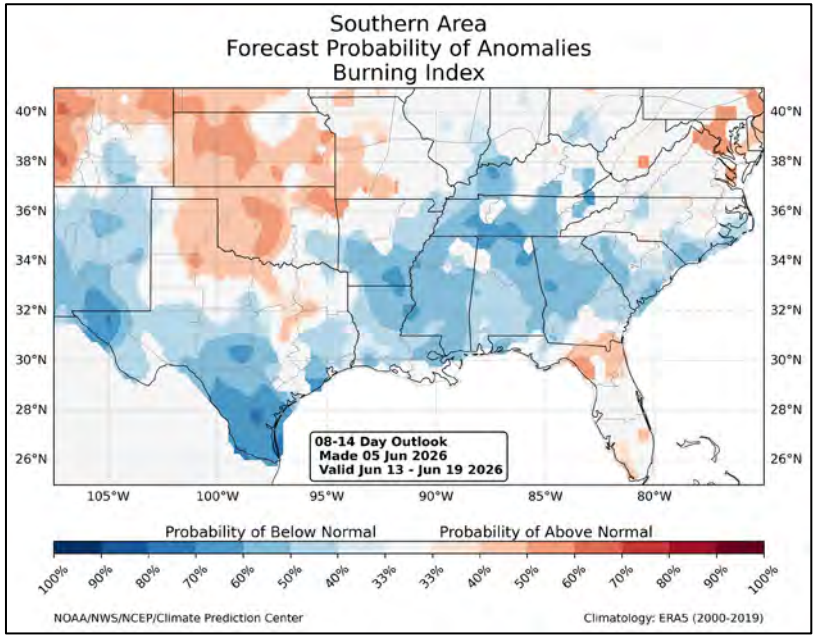




Important to note that there is significant forecast uncertainty as you go further out in time.

Models favoring warmer than normal temps/drier air, and near normal precipitation. Forecast then applies those weather variables to show potential for near normal BI & ERC at week two for much of NC. Remember to apply this in seasonal context.

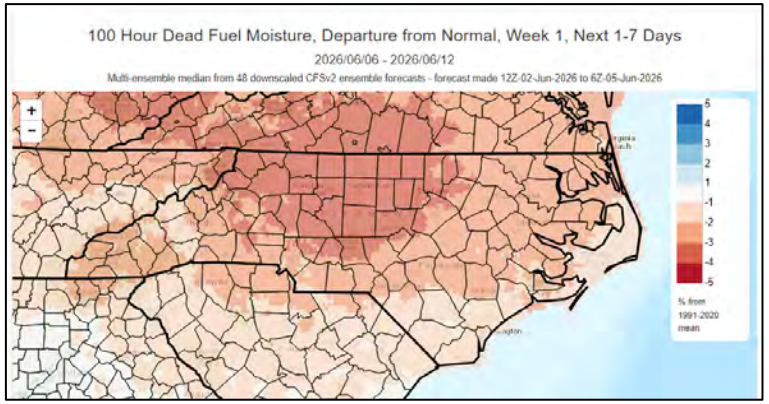




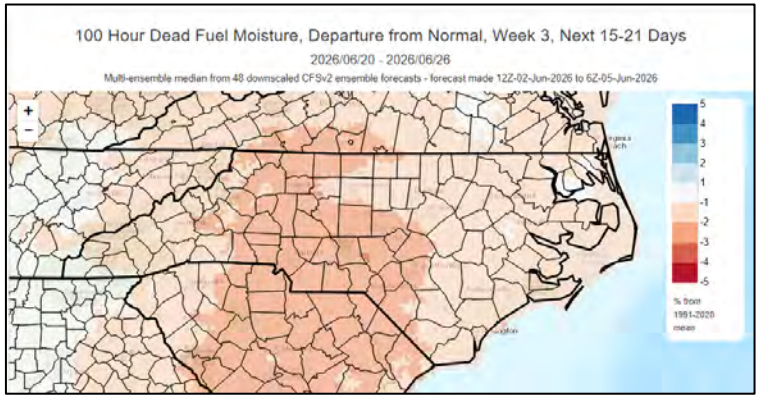
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1



Week-3

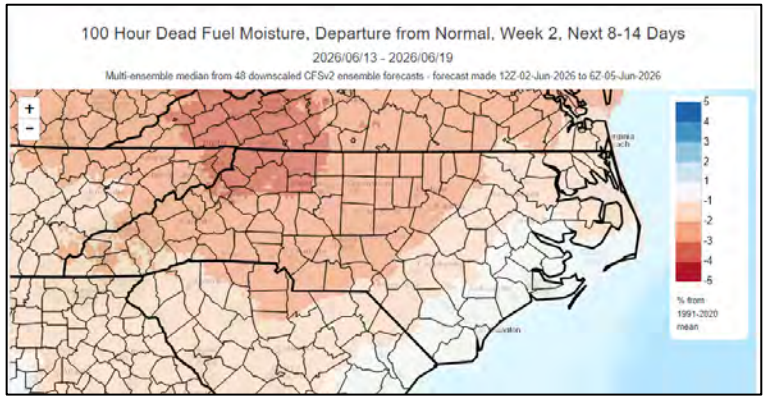


This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up or in drought conditions. Outputs relate to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration, wind and overnight RH recovery trends.

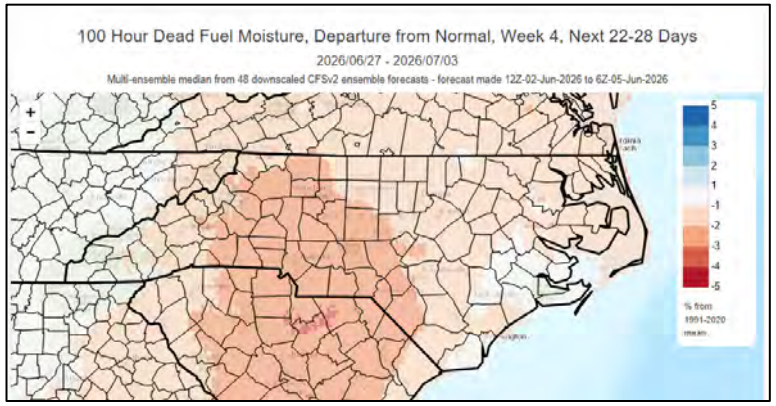
Note that modeled impacts of warmer/drier conditions (lower % mc or "worse") are forecast to be most significant in Weeks 1-2.

Important to note that there is significant forecast uncertainty as you go further out in time, especially relating to any potential storm tracks.

Week-2



Week-4



From: https://climatetoolbox.org/tool/Climate-Mapper

Significant Wildland Fire Potential Outlook: *Updated 5/1/26*

June

July

August

September

Drought intensification, especially at a smaller scale, can help push fuels to be more receptive, easily leading towards more/larger extended attack fires.

**A significant fire is one that requires resources from outside the district (other than aviation). IA potential is based more on shorter term weather factors. Just a few days of dry weather can increase IA activity considerably as we have consistently seen from year to year.*

https://www.nifc.gov/nicc-files/predictive/outlooks/monthly_seasonal_outlook.pdf

FEMS & NFDRS Notes:

- Mesonet Stations lost on 10/1/25, added back to FEMS on 1/29/26 (no prior period of record), added back to our SIGS on 3/12/26 after models better aligned.
- **Live Fuel Moisture Model remains at national catalog settings** – does not match local conditions, especially as drought impacts build in Central NC. FM-Z and FM-Y include only dead fuels.
- Data & modeling updates will occur after next data update – will redownload/process FF+ data when FEMS data is adjusted again.
- GSI derived herbaceous fuel moisture (HFM) being used to help temper Adj & Hazard Ratings in Growing Season
- Current working HFM thresholds to reduce FDRA specific Adj. Rating or Hazard Rating by 1 level is ≥ 130%, reduce by 2 levels is ≥ 190%; subject to adjustment as program updates occur.
- Period of Record (Fires + Weather) now: **2010-2024**
- Period of Record for new analysis: **2011-2025**
- FDOP edits to be completed when we get the new data, process it and coordinate with cooperators.

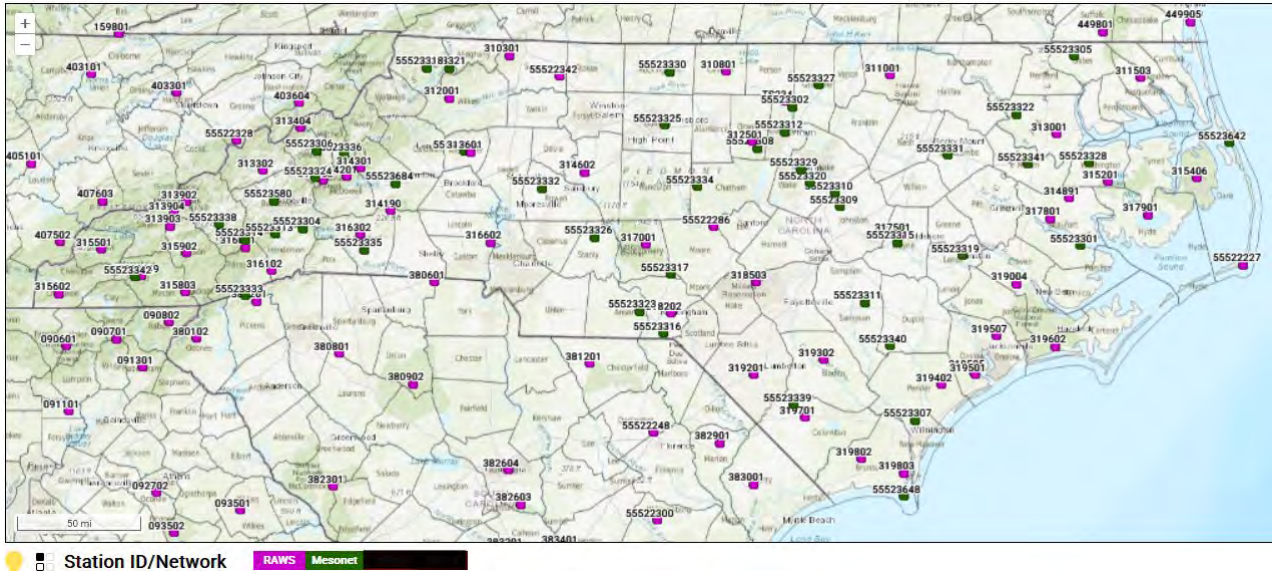
Fuel Model Z does not include live fuels

Fuel Load by Fuel Model

NFDRS Fuel Model	Fuel Loading (tons ac^{-1})						
	1-hr	10-hr	100-hr	1000-hr	Herbaceous	Woody	Drought
V	0.1	0	0	0	1	0	0
W	0.5	0.5	0	0	0.6	1	1
X	4.5	2.45	0	0	1.55	7	2.5
Y	2.5	2.2	3.6	10.16	0	0	5
Z	4.5	4.25	4	4	0	0	7

Note 1: *Drought fuel load is currently turned off in FEMS and is not added to the calculations.*

Note 2: *Herbaceous fuel transfers between live and dead herbaceous fuel classes. Dead herbaceous fuel takes on the fuel moisture of the 1-h fuel.*



FDRA	Special Interest Group Stations (SIG Stations)	Missing SIG Stations
Northern Coastal Plain	Dare Bomb Range, Elizabeth City, Fairfield, Greens Cross, Pocosin Lakes NWR	0
Southern Coastal Plain	Beaufort, CL1 Sandy Run, New Bern, Turnbull Creek, Hofmann, Whiteville, Sunny Point, Finch's Station	0
Eastern Piedmont	Central Crops RS**, Lake Wheeler**, Oxford Tob RS**, Upper Coastal RS**, Warrenton	0
Sand Hills	Fort Bragg, Horseshoe House, Rockingham, Sandhills RS**	0
Western Piedmont	Caswell Game Land, Duke Forest, Lexington, Mt Island Lake	0
Blue Ridge Escarpment	North Cove Pinnacle, Raven Knob, Redezvous Mtn, Rutherford Co Hq, Taylorsville (Lenior)	0
Central Mountains	Davidson River, Guion Farms, Mtn Hort RS**, Seven Mile Ridge	0
Northern Highlands	Busick, Jessen Station, Upper Mtn RS**	0
Southern Highlands	Highlands, Jackson County, Locust Gap, Tusquitee	0

Analysis Settings				Matrix Combinations	
FDRA	Time Range	Daily Extremes	FM	Staffing/Hazard Level	Adjective Rating
Northern Coastal Plain	2010-2024	Y	Z	ERC/BI	ERC
Southern Coastal Plain	2010-2024	Y	Z	ERC/BI	ERC
Eastern Piedmont	2010-2024	Y	Z	ERC/BI	ERC
Sand Hills	2010-2024	Y	Z	ERC/BI	ERC
Western Piedmont	2010-2024	Y	Z	ERC/BI	ERC
Blue Ridge Escarpment	2010-2024	Y	Z	ERC/IC	ERC
Central Mountains	2010-2024	Y	Z	ERC/IC	ERC
Northern Highlands	2010-2024	Y	Z	ERC/BI	ERC
Southern Highlands	2010-2024	Y	Z	ERC/IC	ERC

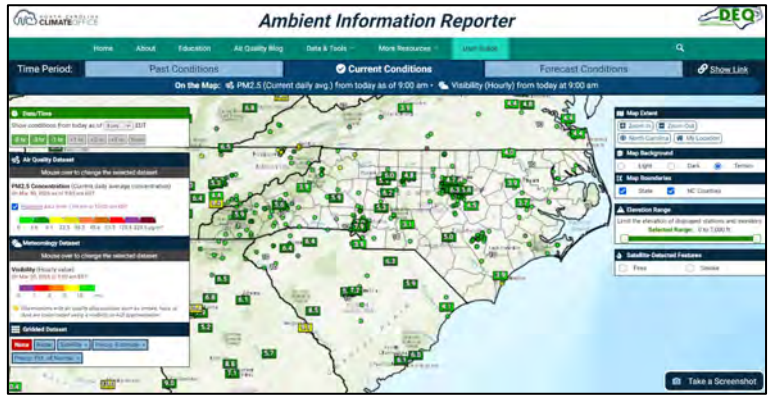
Fire Weather Intelligence Portal – Current Links & Notes

The interim breakpoints and percentiles based on FEMS implementation have been applied to the FWIP for North Carolina FDRAs. Content continues to be added and tools updated. Updated versions of the Hazard Assessment Tool, Adjective Fire Danger Rating Tool, and Daily Forecast/Observed Indices by Station have been implemented effective 3/12/26. The new versions automatically replaced the older versions. Additional features will be added (data analysis).

- Public Facing Fire Danger Page & Fire Danger Digest Table
  (NC ratings based on ERC-Z analysis)
- Station Viewer Portal
  (Past, Current, Forecast Conditions Tab)
  *HOURLY Station Fire Danger Observations have been added on the PAST and CURRENT Conditions Tabs, as of 3/6/26
- Hazard Assessment Tool
  (based on ERC-Z/BI-Z or ERC-Z/IC-Z depending on FDRA)
- FEMS Forecast NFDRS Indices by Station
- FEMS Observed NFDRS Indices by Station
- Quality Control Viewer Tool
- Summary Site – Supplemental Tools

The Weekly Outlook Tool is still offline – being revised to conform to new analysis/FEMS integration.

Other Resources:



- https://airquality.climate.ncsu.edu/air/
- https://fire.airnow.gov/

"Fuels and Fire Management Considerations for Hurricane Damaged Areas"

Fuels and Fire Management Considerations for Hurricane Helene Damaged Areas

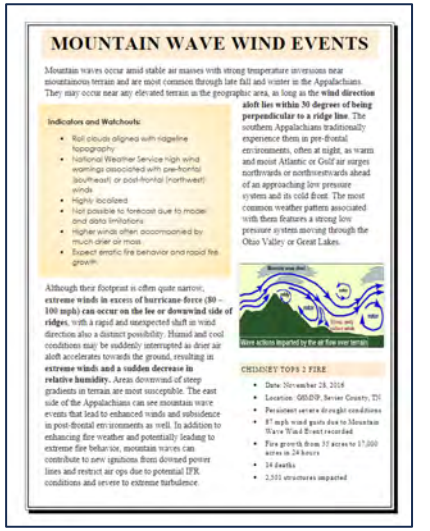
Executive Summary

Hurricane Helene has caused significant disruption to forested landscapes, resulting in widespread debris accumulation and altered fuel structure across the southeast particularly in the Southern Appalachians of southwest Virginia, western North Carolina, northeast Tennessee, northeast Georgia as well as the Piedmont of South Carolina, central Georgia and north Florida. The storm's high winds broke or toppled trees, and created extensive blowdown zones, transitioning fuel conditions from lighter models, such as grass and leaf litter, to heavy slash and debris typical of Fuel Models 12, 13, SB2, and SB3. This shift in fuel types presents substantial challenges for wildfire suppression efforts. The increased resistance to control, difficult access, and elevated potential for extreme fire behavior necessitates strategic adaptation of suppression tactics. The storm's aftermath has also introduced the need to reconcile older fire line production rates with the Scott and Burgan 40 fuel models used for modern fire behavior predictions, as the line production data for these newer models remains undeveloped. This report explores these challenges, provides practical insights for resource deployment, and outlines strategies for managing this complex landscape. The effects of Helene will be felt for some time. In a 2005 risk assessment for Hurricane Katrina, it was reported by the Mississippi Forestry Commission that debris from Hurricane Camille which struck in 1969 was still preventing access to certain areas.

This document provides fuel loading and modeling guidance, fire behavior expectations, and fire management considerations for both wildfire response and prescribed fire implementation for each of the hurricane damage severity categories described below.

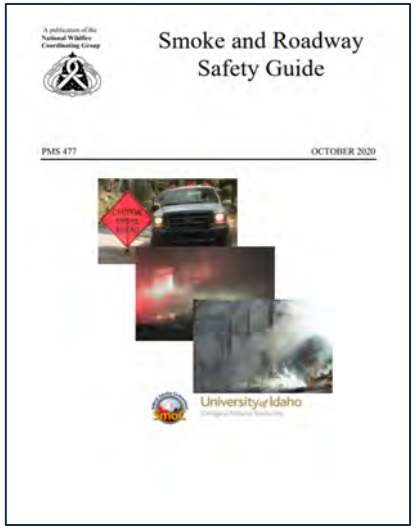
Damage Severity	% of overstory altered/damaged
Catastrophic	~50%
Severe	34-50%
Moderate	16-33%
Light	~25%

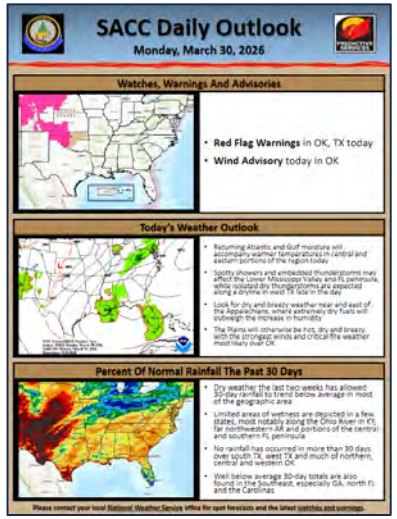
https://gacc.nifc.gov/sacc/resources/predictive/MaySpringRiskAssessment_20260506.pdf



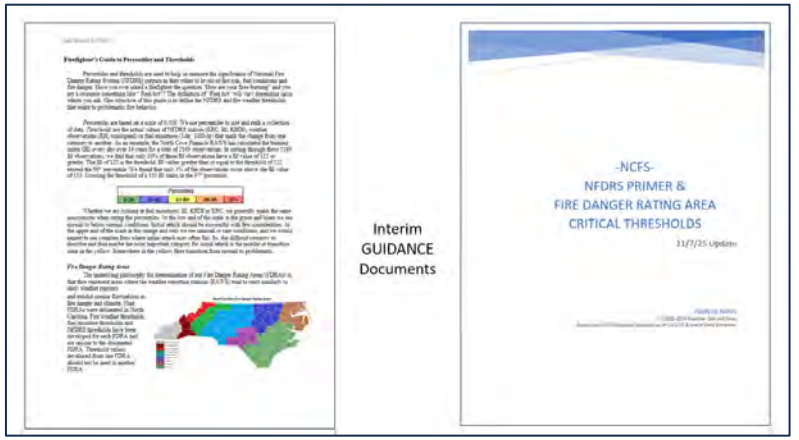
https://gacc.nifc.gov/sacc/predictive/outlooks/MountainWavesFactSheet.pdf

- Southern Fire Exchange Superfog Publication
- NWCG - Smoke and Roadway Safety Pocket Card
- NWCG – Smoke and Roadway Safety Guide





https://gacc.nifc.gov/sacc/resources/predictive/sacc-daily-outlook.pdf



From SACC Daily Outlook – Friday (6-5-26)

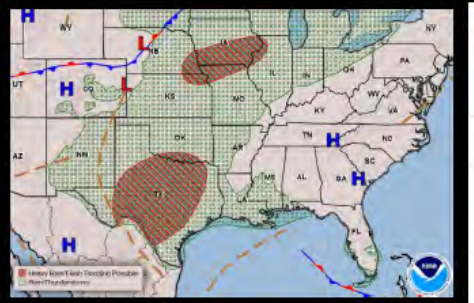
SACC Daily Outlook

Friday, June 5, 2026

Watches, Warnings and Advisories

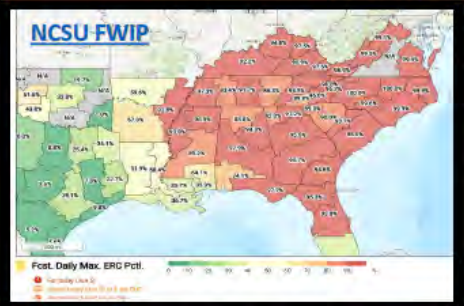
- **Air Quality Alerts** in GA, SC, NC, VA, KY
- **Coastal Flood Advisories** in LA, MS

Today's Weather Outlook



- Tropical moisture streaming into the Southern Plains today will lead to scattered areas of significant flash flooding, with the highest risk across the southern half of TX
- Storms will be more isolated farther north in OK and into the Lower Mississippi Valley
- Wildfire risks will continue to increase in the coastal Southeast, where several escapes occurred yesterday and unusually dry air will return this afternoon
- Isolated storms could affect south FL, but a drying and warming trend will be the rule

Forecasted ERC Percentiles



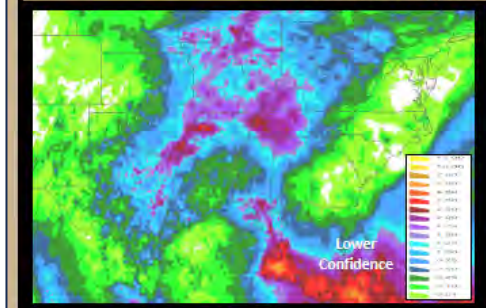
- Persistent and unusually dry air for this time of year will carry into the weekend across the eastern states, potentially extending in some areas well into next week
- As temperatures trend above average and limited rainfall occurs, ERCs will continue to increase, at least locally reaching historic levels for this time of year this weekend or early next week
- ERC percentiles forecasted today are depicted for fire danger rating areas in the region - most FDRAs use fuel model Y, but areas using fuel model Z have similar conditions
- The lack of live fuels in Y and Z limits the usefulness of these fuel models during the growing season, but herbaceous fuel moisture remains unusually low across eastern parts of the geographic area, with the worst conditions in the Carolina Sandhills, NC Piedmont and much of VA, in addition to central FL where rainfall deficits have been higher recently
- ERCs in south FL will likely trend higher than forecasted until rain returns next week, while the improvement depicted in the rest of the eastern states is unlikely and will depend on isolated to widely scattered wetting rain

Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.

SACC Daily Outlook

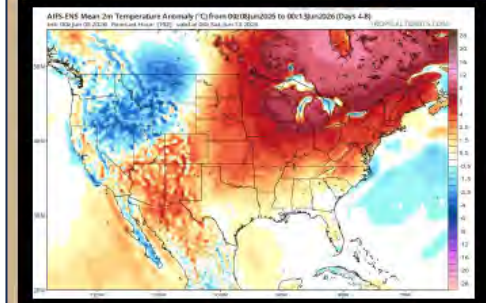
Friday, June 5, 2026

Forecast Precipitation the Next Week



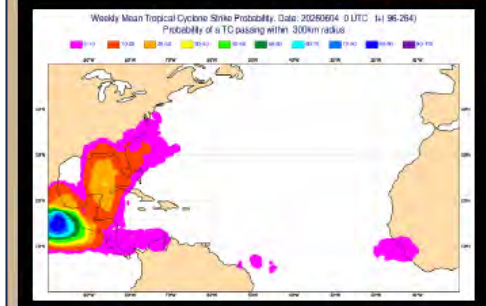
- Clusters of showers and thunderstorms across the Plains today will drift east into the weekend as an upper-level disturbance ejects northeast across the region
- By Tuesday into Wednesday, most of this activity will shift north of the region, leaving isolated thunderstorms, increasing heat and oppressive humidity
- Persistent dry air and high pressure aloft will limit rainfall in the eastern states, likely resulting in increasing drought impacts over the week ahead
- Confidence is relatively low in depicted rainfall over the FL peninsula, but rainy season thunderstorms will gradually return from south to north next week

Temperatures Next Week



- Heat will likely remain persistent next week in VA and the Carolinas, with highs occasionally approaching the century mark in the driest spots
- Well above average temperatures will encompass much of the rest of the region, especially across the northern tier as wet weather exits – combined with high humidity, heat indices will likely warrant the first widespread heat advisories of the year
- The Gulf coastal plain will likely see above average temperatures, though anomalies will be lower due to the potential of scattered thunderstorms along with moist soils
- Hot temperatures should be the rule over the FL peninsula most of the week unless widespread showers and thunderstorms return, which appears unlikely for now

Watching The Tropics Next Weekend



- Model guidance continues to show low confidence support for a tropical disturbance to develop near Central America late next week, with several tropical cyclones on the verge of developing in the eastern Pacific this weekend
- The ECMWF ensembles are depicted, but other guidance is similar in showing around a 30% chance for development in the far western Caribbean or Gulf – a slow northward track would occur if a system develops
- It is too early to say what impacts would occur, if any, but a range of outcomes from beneficial drought relief to flooding and tropical storm impacts can not be ruled out – a drier scenario with elevated fire weather on the periphery of any storm could also be in the cards
- Gulf sea surface temperatures are sufficient for a hurricane, but wind shear and dry air aloft would tend to prevent any system from strengthening significantly
- For the rest of June, Atlantic activity appears unlikely as a strong high pressure ridge aloft builds across the Gulf and southern tier of the U.S. – this may be the beginning of a rapid drying trend for the latter part of June, as well

Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.

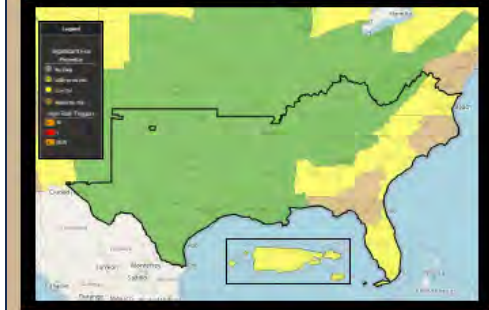
From SACC Daily Outlook – Friday (6-5-26)

SACC Daily Outlook

Friday, June 5, 2026

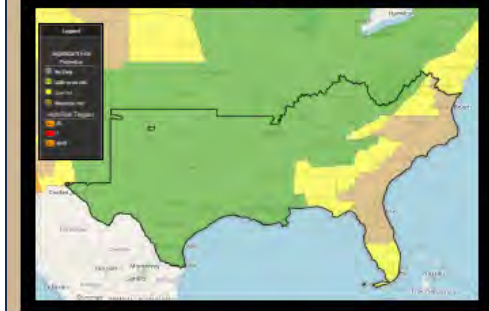
PREDICTIVE SERVICES

Significant Fire Potential Outlook Today



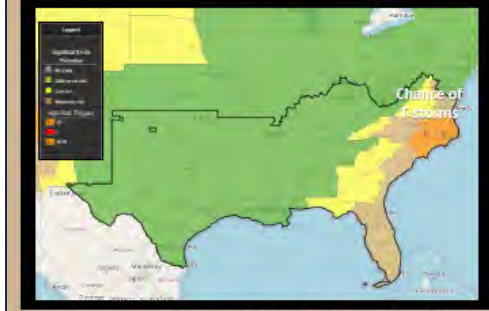
- Warmer temperatures and unusually dry air will maintain widespread elevated fire weather conditions across the Southeast today
- Eastern NC will see highs in the upper 80s to mid-90s, RH as low as 20-30%, locally lower, and W to SW winds gusting from 15-25 mph, highest near sea breezes that will turn winds more southerly late
- North FL into south GA will see unusually dry conditions, with RH as low as 25-40%, warmer highs in the upper 80s to low-90s and E wind gusts of 15-25 mph; sea breezes will bring wind shifts to most areas
- IA may increase elsewhere in the Southeast as growing season burns continue and fuels trend drier; lightning holdovers could emerge throughout the coastal plain into south FL

Significant Fire Potential Outlook Saturday



- Moderate significant fire potential (SFP) will expand through the coastal plain and drier parts of the Piedmont Saturday as temperatures trend hotter and fuels become historically dry; winds and dispersion will also increase ahead of a front moving towards northern VA late in the day
- Highs well into the 90s, RH as low as 18-30% and W/SW wind gusts of 15-25 mph will result in elevated to near critical fire weather in VA and NC; sea breeze wind shifts will occur near the coast, while outflow boundaries could bring erratic winds to far northern VA late
- The rest of the coastal Southeast will see hot and dry conditions followed by sea breeze wind gusts up to 25 mph; RH will reach as low as 25-35% over western and north-central FL into south GA and the SC coastal plain
- The NC mountains and other adjacent areas impacted by Helene could see fire activity increase where tree damage was most severe

Significant Fire Potential Outlook Sunday



- **HIGH RISK SFP** is forecast over eastern NC ahead of a front that may bring scattered storms to VA and far northern NC; look for highs in the 90s, RH as low as 25-40% and W/SW wind gusts from 15-25 mph, locally stronger at the immediate coast; any storms that form could result in lightning ignitions and erratic outflow gusts over 40 mph
- Similar conditions will generally continue elsewhere in the Southeast, though winds may decrease a bit over south GA and north-central FL, with the stronger sea breeze gusts over the FL peninsula and Atlantic coastal plain

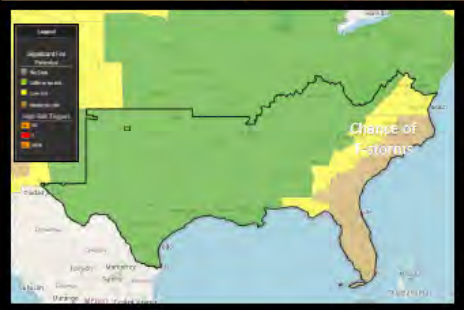
National 7-Day Significant Fire Potential Outlook High Risk Trigger Definitions

SACC Daily Outlook

Friday, June 5, 2026

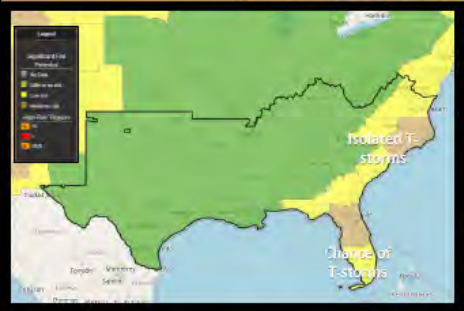
PREDICTIVE SERVICES

Significant Fire Potential Outlook Monday



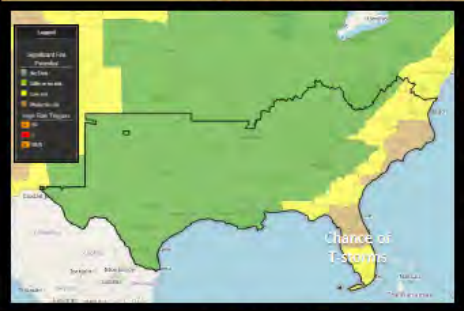
- Very hot and dry conditions will persist in the Carolinas ahead of scattered afternoon and evening thunderstorms; RH will be as low as 25-40% with highs surging well into the 90s again; outflow wind gusts over 45 mph will be possible, and lightning **HIGH RISKs** may be necessary as confidence increases
- Hot, dry and breezy conditions may warrant **HIGH RISK** upgrades across south GA into north and central FL as the burn environment trends more critical; near-record highs may approach the century mark across the western FL peninsula
- Hot, dry and breezy conditions will begin a drying trend in the High Plains

Significant Fire Potential Outlook Tuesday



- Overall hot and mostly dry weather will be the rule again in the eastern states, but RH will not be as low in most areas, and scattered storms will be possible
- Fuels will be driest in the western and northern FL peninsula and eastern NC, where additional lightning fires could emerge; new lightning starts may be more likely in the Carolinas if storms develop and remain scattered
- West TX and OK will continue to be hot, dry and windy, but spotty afternoon storms will be possible

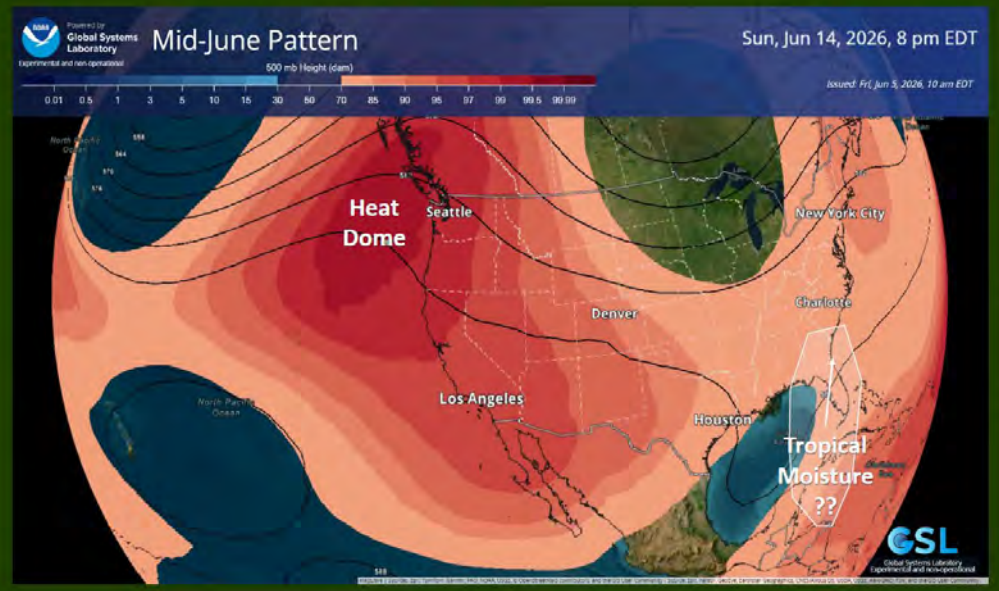
Significant Fire Potential Outlook Wednesday



- Well above normal to near record high temperatures are expected to continue in the coastal Southeast, maintaining unusually dry fuels where limited rainfall occurs through Wednesday
- Any storms that pop up could lead to new ignitions, while unstable conditions and sea breezes challenge any established or new starts
- A windier day is likely in western TX and OK, but fuels generally should not be as receptive as farther west; isolated thunderstorms may occur

North Carolina State University Fire Weather Intelligence Portal

Mid-June Pattern Change

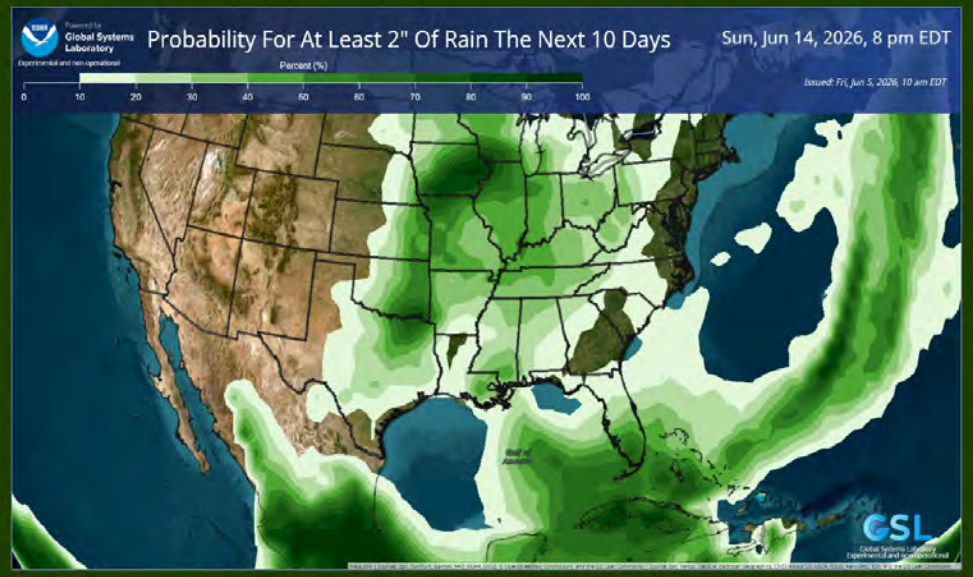


- Upper-level troughing moves into the Upper Midwest while an unusually strong heat dome develops near the Pacific Northwest
- Upper low over the Gulf could draw tropical moisture northwards, but confidence is very low
- Hot temperatures continue in the eastern states, but a cool down would eventually occur
- Watching Caribbean ridging later in June – could bring in Saharan dust and shut down rainy season thunderstorms

General trends as we move through June.

From SA Fire Environment Briefing 6/5/26

Rainfall Through Mid-June

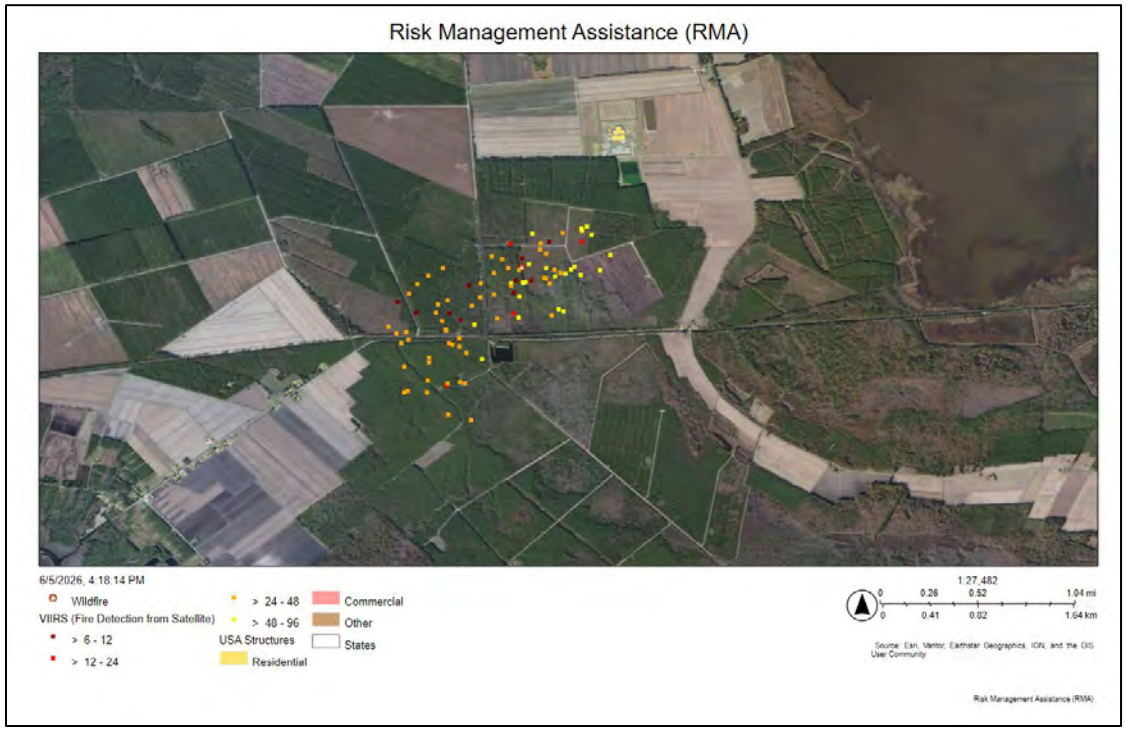


- Upper-low brings scattered but intense rainfall to the Plains today, extending into the Mississippi Valley this weekend and early next week
- Rainfall chances in the East limited aside from the weak front that stalls Sunday into Monday
- South Florida on a shorter drying trend, but tropical moisture should slowly increase next week from south to north
- Wetter pattern could return to the Plains next weekend as a trough ejects from the West
- Next week looks hot region wide

R1/D13/Hyde County: Rose Bay Canal Fire (NC-NCS-260058)

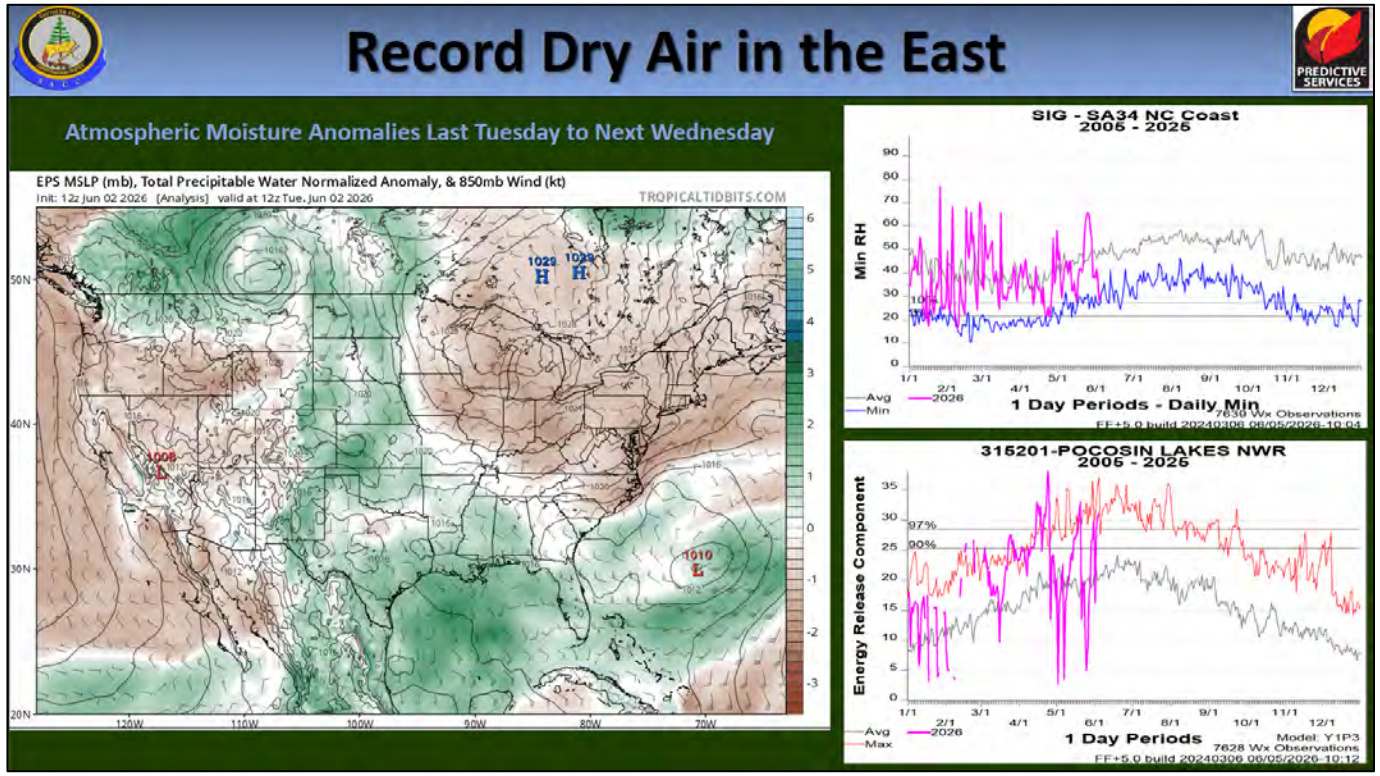
Discovery Date: 6/2/26
Approx acreage as of 6/5 am: 373 ac. at 20% containment
IMT3 set to take over fire this weekend.
Soils mainly include organic series such as Belhaven, Conaby, and Scuppernong Muck – with associated trafficability issues.
Noted fire behavior has included significant spotting, torching of mid and overstory pine canopy, active wind driven runs, groundfire, significant consumption of organics, heavy dead fuels & logging slash.

*Public RMA Dashboard Output showing recent heat detects. *Note background map is not a recent image**



Discussion from SA Fire Environment Briefing 6/5/26

"NC Coast" PSA SIG Group & Pocosin Lakes RAWS showing enhanced dead fuel drying and near record daily min RHs. Pocosin Lakes RAWS is ~19 miles northwest of the fire.



Overall Notes

- Soaking rain events have been scattered and highly variable, especially in the central and eastern parts of the state. Streamflow and monitoring well levels still show most sites remain well below normal. Many areas in the northcentral piedmont of the state have been 30+ days since ≥ 0.50" rain event.
- The recent unsettled weather and better daily recoveries offered a temporary decrease in IA and difficulty of control for most of the state. However, significant rain over the past few weeks ended up being focused along the Gulf & western states in the Southern Area.
- Historically, sustained drought impacts and interaction with fire effective weather in May/June often have the most profound impact on coastal fuels, related to live fuel volatility and extra availability of dead fuels (all size classes). See earlier slides about seasonality/trends by NCFS region.
- Areas that have experienced the recent string of warm, windy, and abnormally low daily min-rh days have seen all size classes of dead fuels dry and contribute to fire behavior when an ignition has time to establish in the right fuel bed (focus eastern/coastal fuels). ERC values for many eastern stations are near record maximums for the time period (FM-Z & Y). Use FWIP to compare station specific trends.
- For closed canopy hardwood forests - the full benefit of seasonally "green" conditions continue to be modified **at the local level** by drought, storm damage/canopy closure (Helene), and soil available moisture related to live fuels. Drought conditions are more directly impacting potential fire behavior in conifer/mixed conifer & shrub forests.
- **Statewide** – Where fires do establish, continue to expect enhanced difficulty of control & significant mop-up issues. Reburn risk remains on any smoldering fire footprints once browning and leaf-drop/needle cast occurs, especially in drought impacted areas.
- CPC outlooks continue to favor warmer and near normal/slightly better precip chances for the next several weeks, however emphasis remains west & south of NC. It will take many inches of precip to turn around longer-term drought impacts as we move into and through the growing season. We need both higher minimum daily RH's + repeated precip events to recharge fuels.
- If drought continues to intensify in coastal/sandhill forest ecosystems, lightning holdover fires will become much more of a concern. Actionable lightning fire starts (acres/count) in R1 traditionally become most likely in May – June as drought + heat builds. Larger examples can easily exhibit plume-dominated fire activity, relying less on large-scale wind event triggers such as frontal passages in early spring.
- The Rose Bay Canal fire is a recent example of drought influences on coastal fuel complexes when aligned with a triggering event + fire effective weather.
- Please refer to Appendix B in the Updated SA Spring Risk Assessment related to critical fire weather and environmental conditions such as sea breezes, thunderstorm outflow winds, tropical cyclone related conditions, etc. Also refer to links on slide 31 related to superfog risk & associated roadway safety guidance.

Daily Adjective Rating Outputs for each FDRA (ERC from FM-Z)
(Observed on Left, Forecast on Right)

Low | Moderate | High | Very High | Extreme

FDRA	Recent Data (Calculated from hourly estimates)							Forecast Data (Calculated using hourly forecasts)						
	FRI MAY 29	SAT MAY 30	SUN MAY 31	MON JUN 1	TUE JUN 2	WED JUN 3	THU JUN 4	FRI JUN 5	SAT JUN 6	SUN JUN 7	MON JUN 8	TUE JUN 9	WED JUN 10	THU JUN 11
Southern Highlands	L	L	L	L	L	L	M	M	M	L	L	L	L	L
Central Mountains	L	L	L	L	L	L	L	M	M	L	L	L	L	L
Northern Highlands	L	L	L	L	L	L	L	M	M	M	L	L	L	L
Blue Ridge	L	L	L	L	L	M	H	H	V	H	M	L	L	L
Western Piedmont	M	M	M	L	M	H	V	V	V	V	V	H	H	M
Sandhills	M	M	M	L	M	H	V	V	E	E	E	H	H	M
Eastern Piedmont	L	H	H	M	H	V	V	V	V	V	V	H	M	H
Southern Coast	L	L	L	L	L	H	V	V	V	V	H	M	M	L
Northern Coast	M	L	M	L	L	H	H	V	V	V	H	M	M	L

*Changes in actual precipitation amounts, min/max rh's and other weather variables have significant impact on the model as you go further out in forecast period. Sandhills FDRA Adj Rating output are overstated due to GSI issues previously discussed – hence "E"s through part of period.

Observed Averages by FDRAs for Thursday 6/4

Summary by Region — Permalink | Download Data | Screenshot

Note: FDRA averages include **only the SIG stations** in each region with data available today

Region Details			Fire Danger and Fuel Moisture Averages									Weather Averages			
FDRA	NUM STN	MOD	MAX BI	MAX ERC	MAX IC	MAX SC	KBDI	MIN 1HR	MIN 10HR	MIN 100HR	MIN 1000H	MAX TEMP	MIN RHUM	MAX GUST	TOTAL PRCP
Southern Highlands	4	Z	39.1 66%	61.8 96%	15.7 84%	4.7 47%	131 -119	7.7% 16%	9.3% 4%	15.4% 8%	19.1% 39%	79°F	37%	10 MPH	0.00 IN.
Central Mountains	4	Z	35.5 67%	56.1 88%	14.4 81%	4.3 48%	95 -129	7.8% 18%	10.3% 9%	16.5% 38%	20.2% 57%	80°F	36%	10 MPH	0.00 IN.
Northern Highlands	3	Z	41.1 85%	54.1 89%	13.7 87%	6.1 82%	127 -22	9.0% 19%	10.7% 14%	16.5% 30%	19.6% 49%	76°F	43%	10 MPH	0.00 IN.
Blue Ridge Escarpment	5	Z	40.3 67%	65.9 94%	19.8 88%	4.9 55%	198 -46	6.8% 14%	9.1% 7%	15.0% 17%	18.3% 34%	85°F	32%	10 MPH	0.00 IN.
Western Piedmont	4	Z	45.6 74%	73.5 100%	25.7 93%	5.7 54%	397 +113	5.7% 6%	8.7% 5%	14.3% 5%	16.9% 17%	88°F	25%	11 MPH	0.00 IN.
Sandhills	4	Z	52.4 83%	78.1 99%	29.7 94%	6.8 62%	412 +60	5.5% 2%	7.9% 3%	13.3% 3%	16.5% 19%	89°F	22%	12 MPH	0.00 IN.
Eastern Piedmont	5	Z	57.7 92%	79.6 100%	33.4 99%	8.7 74%	391 +119	5.3% 0%	7.8% 1%	13.2% 1%	16.2% 2%	88°F	23%	12 MPH	0.00 IN.
Southern Coast	8	Z	48.0 89%	69.2 100%	24.8 97%	7.1 71%	369 +28	6.0% 2%	9.2% 1%	14.6% 7%	17.5% 21%	88°F	26%	16 MPH	0.00 IN.
Northern Coast	5	Z	52.9 90%	70.4 100%	28.0 98%	8.3 63%	318 +33	6.1% 1%	9.0% 1%	14.5% 8%	17.4% 9%	85°F	26%	16 MPH	0.00 IN.