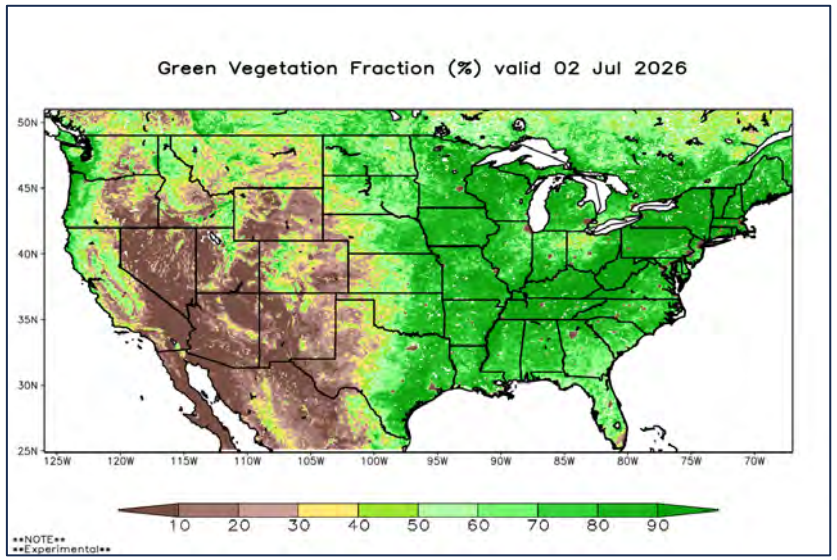
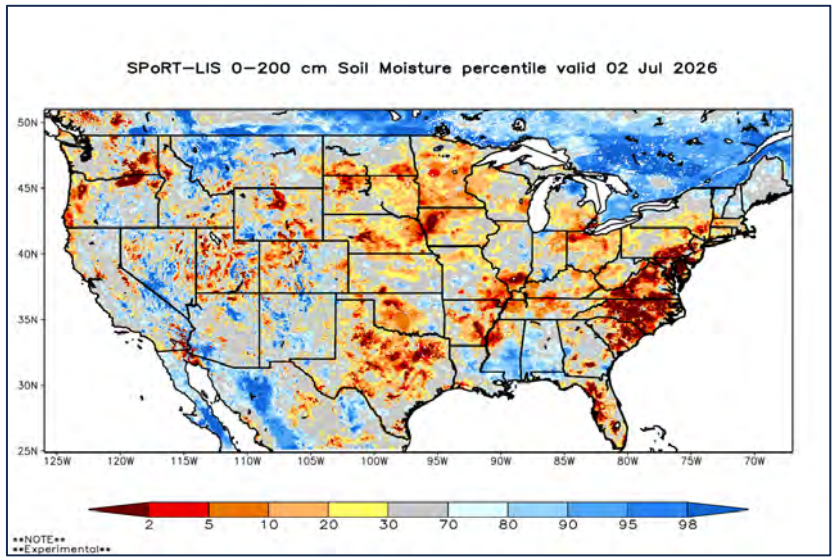
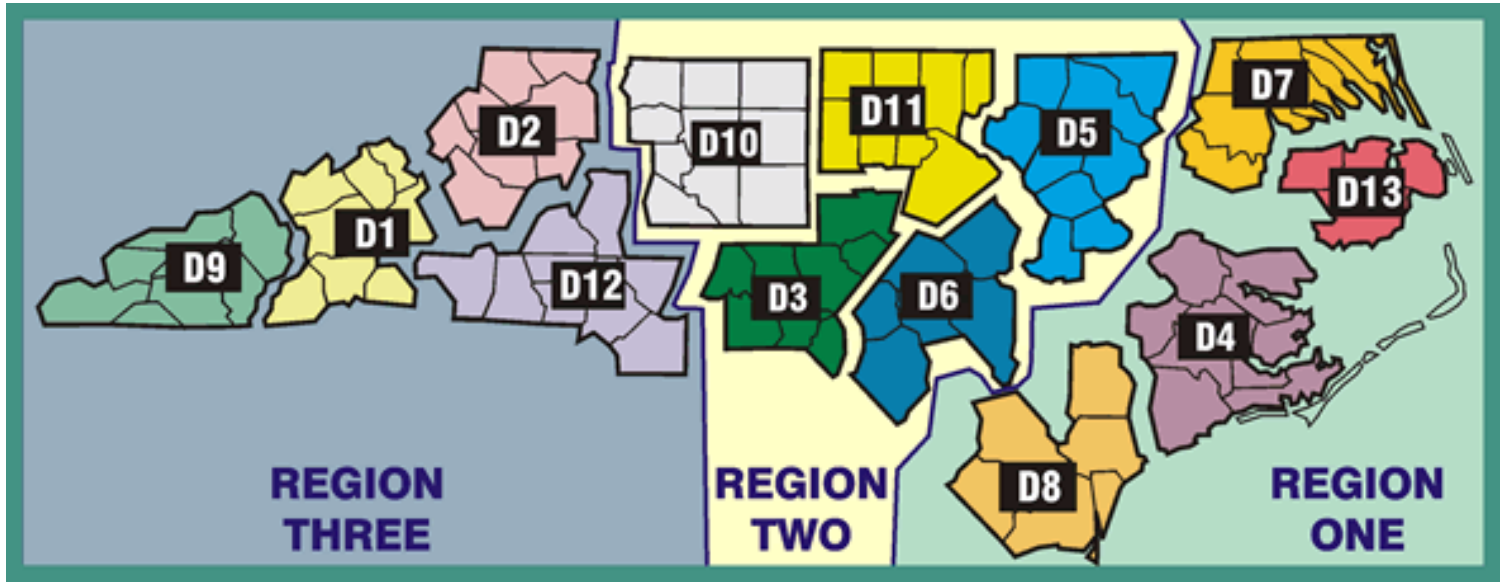
July - 2026

Monthly Fire Danger Assessment NCFS – All Regions







Date: July 2, 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

March: 1,418 incidents for 6,289 acres
April: 1,165 incidents for 2,503 acres
May: 566 incidents for 2,327 acres
June: 626 incidents for 2,332 acres

7-Day Activity: 57 incidents for 206 acres

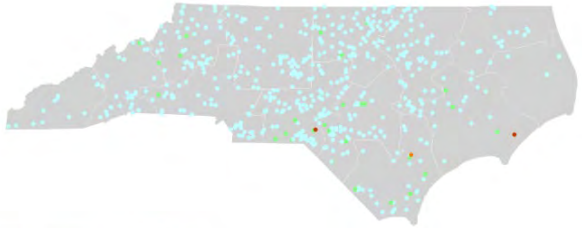
All wildfire activity data is preliminary
Does not include additional federal wildfires/acres
2016-2025 CY Average

**Largest incidents by discovery date, June Activity:
from fiResponse & preliminary reporting only

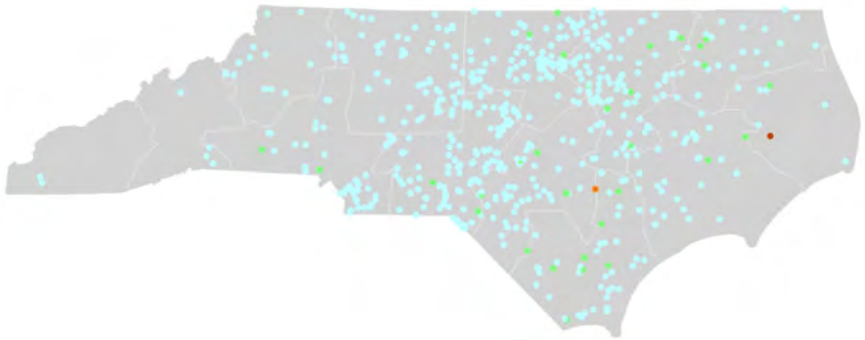
Incident Name	Discovery Date	Region	District	County	Acres
Rose Bay Canal Fire	6/2/2026	Region 1	District 13	Hyde County	662.00
Billy Matthews Lane	6/13/2026	Region 2	District 6	Sampson County	243.00
Batchlor Farm Lane	6/3/2026	Region 1	District 8	Duplin County	89.00
Laurel Lake rekindle	6/30/2026	Region 2	District 6	Sampson County	60.81
Watershed Rd	6/7/2026	Region 2	District 5	Greene County	60.00
Catfish	6/7/2026	Region 2	District 5	Edgecombe County	60.00
Lightwood Knot Rd	6/1/2026	Region 1	District 8	Bladen County	42.00
Big Wheat	6/4/2026	Region 2	District 5	Northampton County	40.00
Duplin/Pender County line	6/12/2026	Region 1	District 8	Duplin County	39.00
Flowers Rd	6/12/2026	Region 2	District 5	Wilson County	34.00
Titans Field	6/15/2026	Region 2	District 6	Harnett County	31.80
Laurel Lake Road	6/17/2026	Region 2	District 6	Sampson County	30.00
Columbus County - Hallsboro	6/27/2026	Region 1	District 8	Columbus County	30.00
First Street Fire	6/7/2026	Region 1	District 7	Hertford County	25.00

April 2026

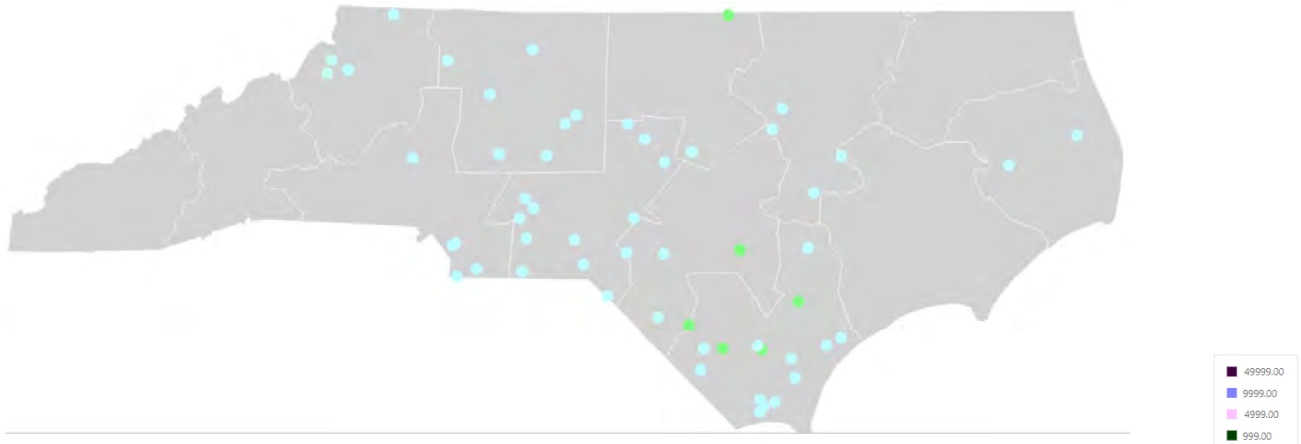
May 2026



June 2026

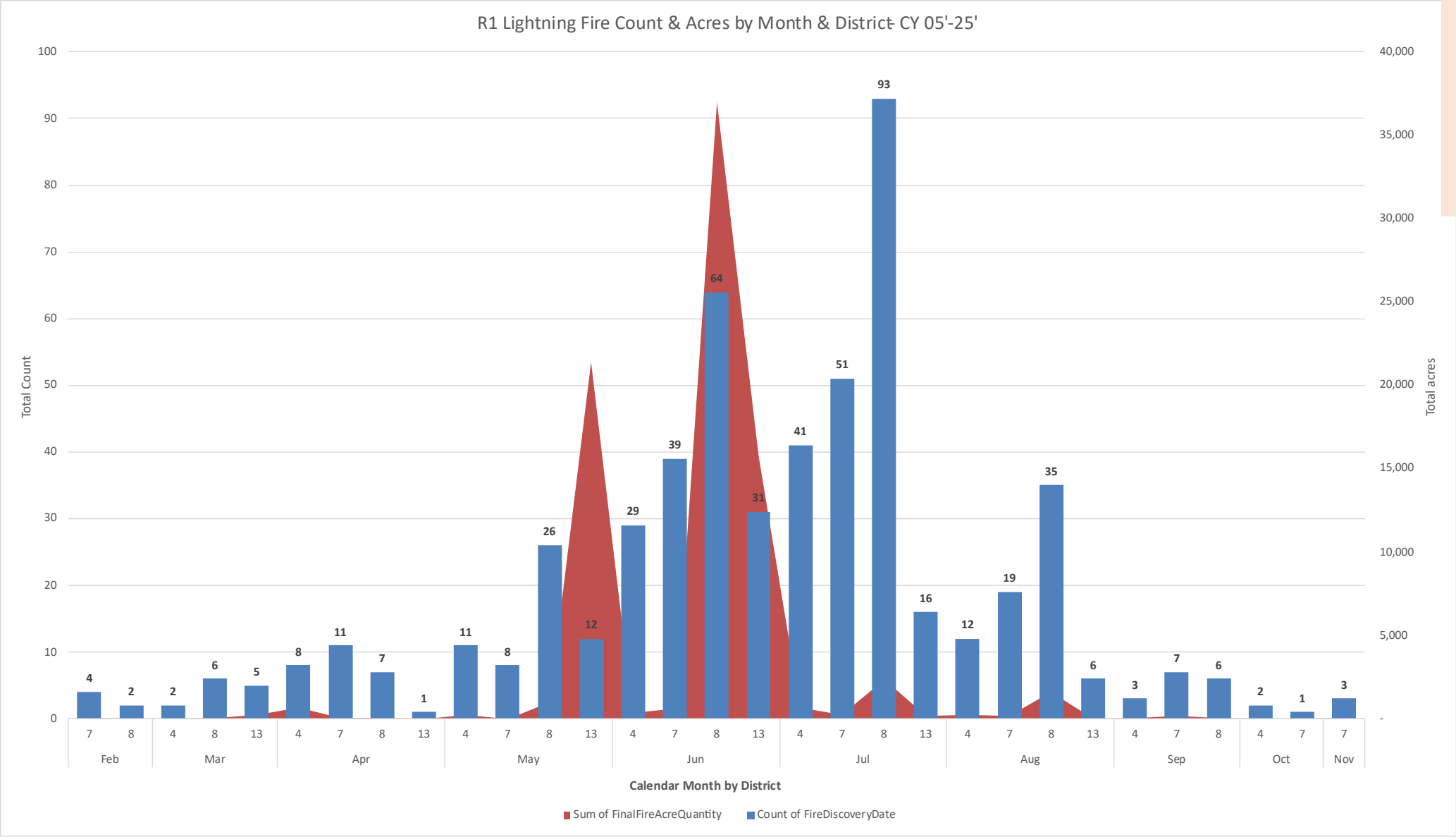


7-Day Activity (ending 7/2 am)



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

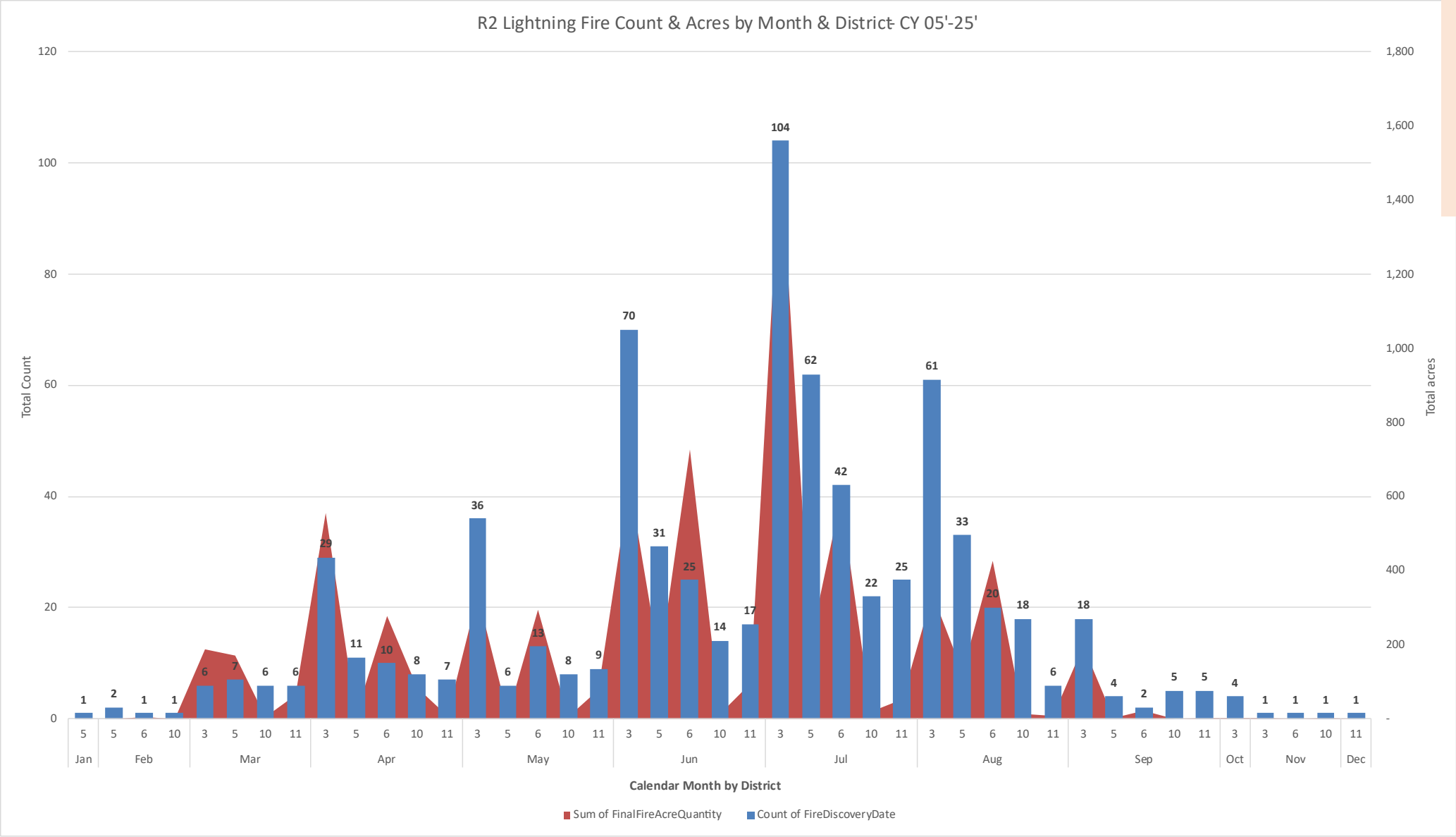
Distribution of Lightning Fires in R1 Fires & Acres by Month (discovery date)from 05’-25’



Note Acreage Scale

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

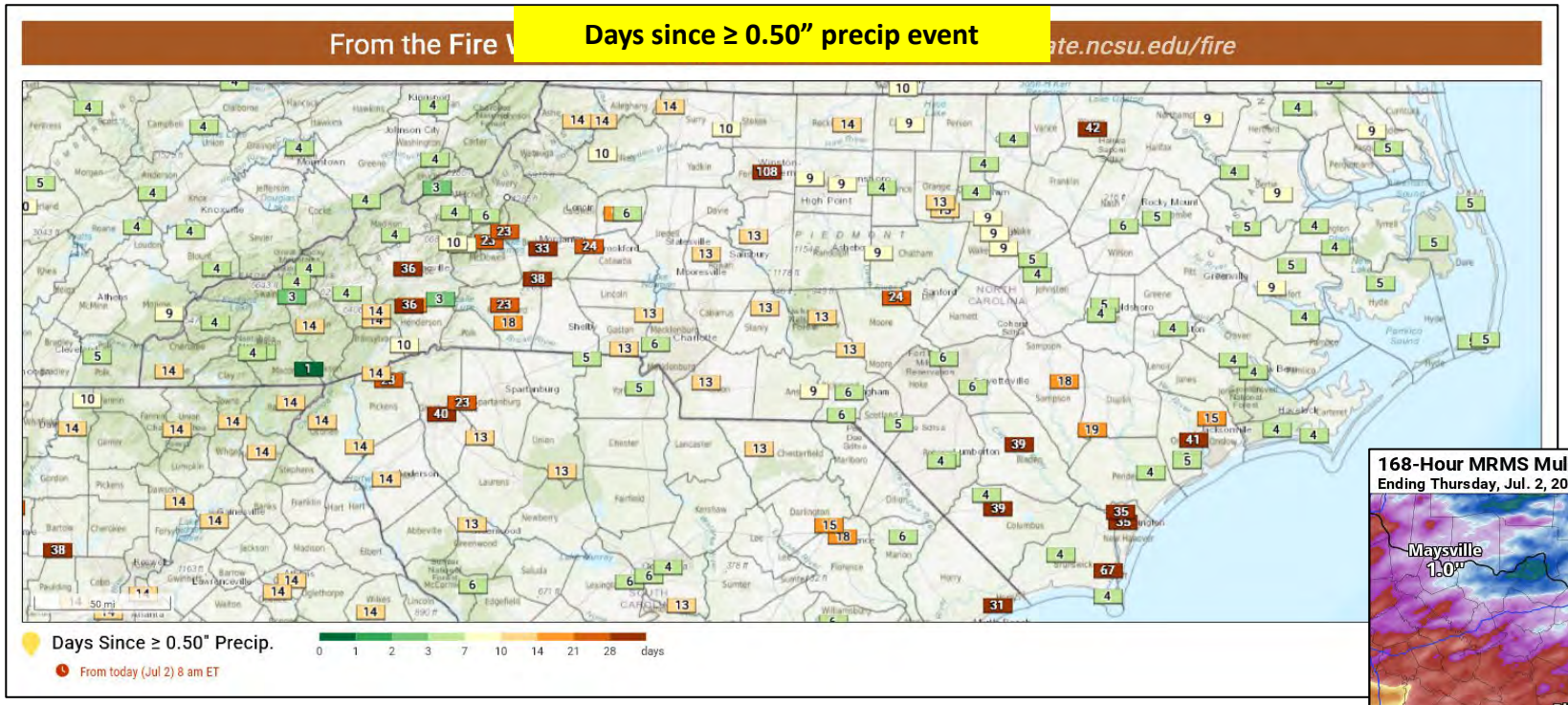
Distribution of Lightning Fires in R2 Fires & Acres by Month (discovery date)from 05’-25’



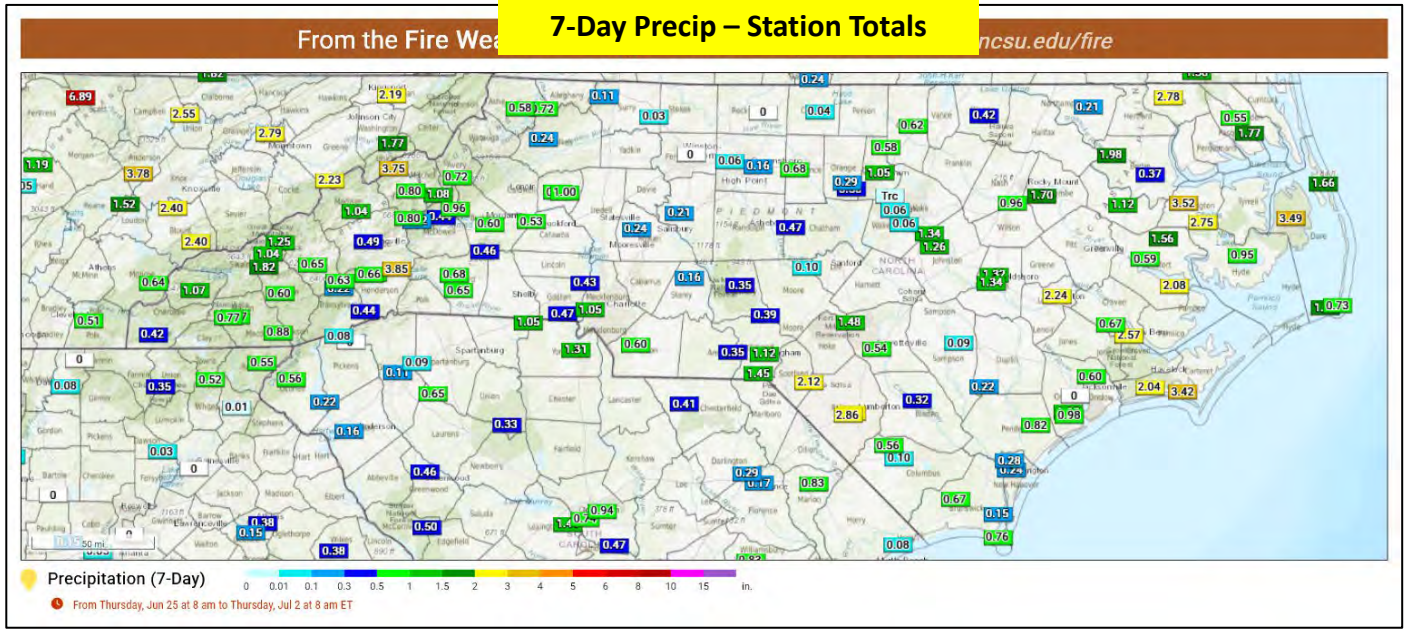
Note Acreage Scale

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

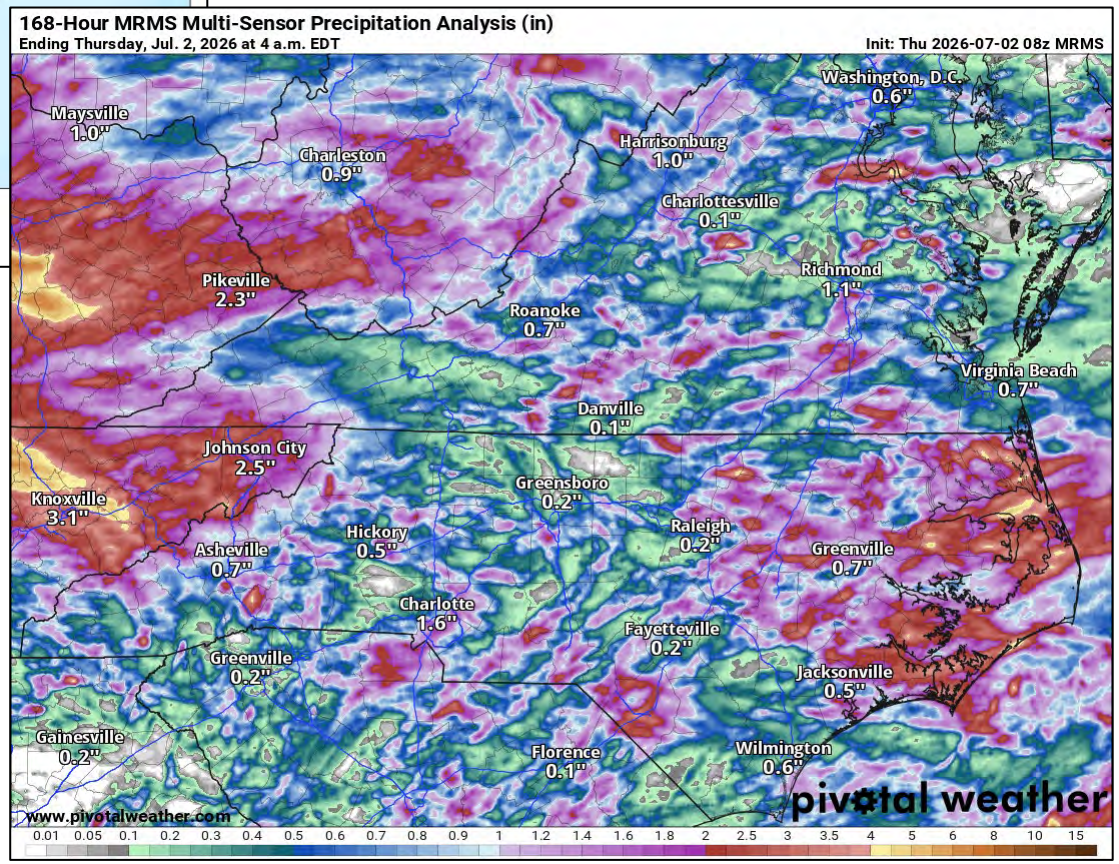
Days since ≥ 0.50” precip event



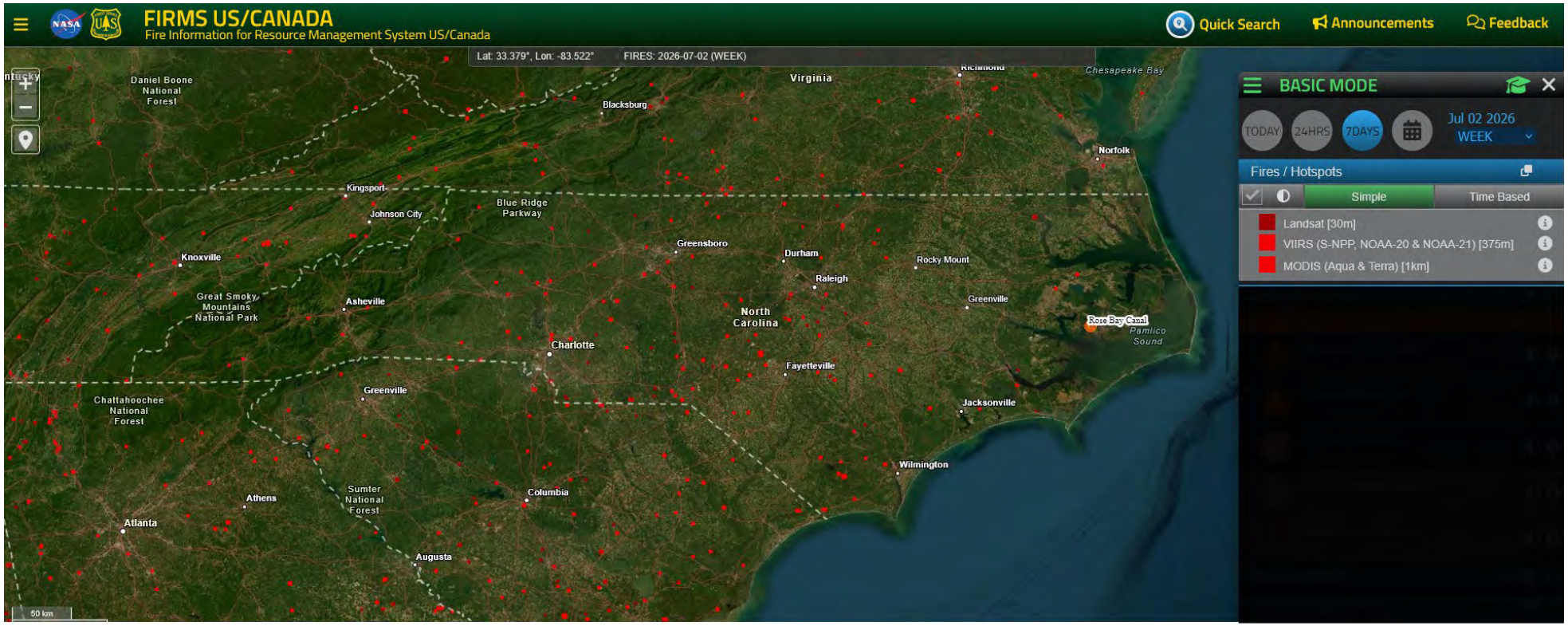
7-Day Precip – Station Totals



7-Day Precip Estimate

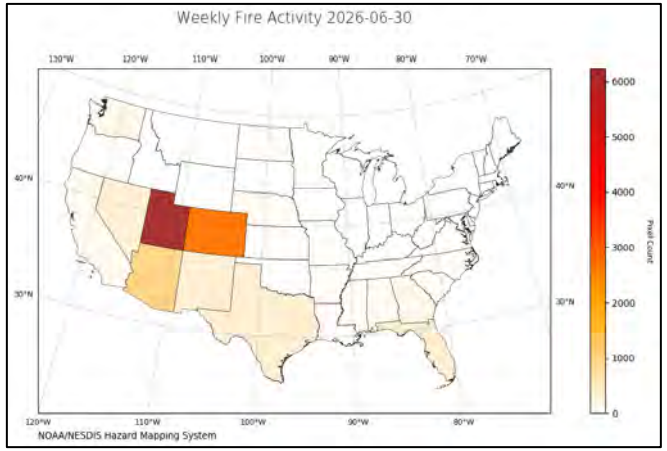


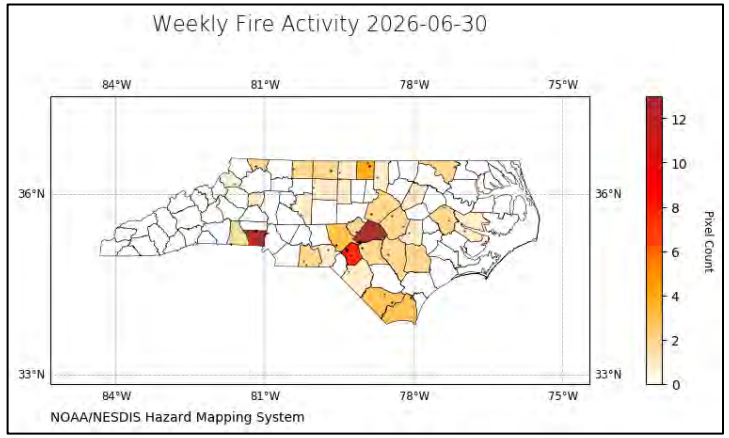
Weekly Heat Detects



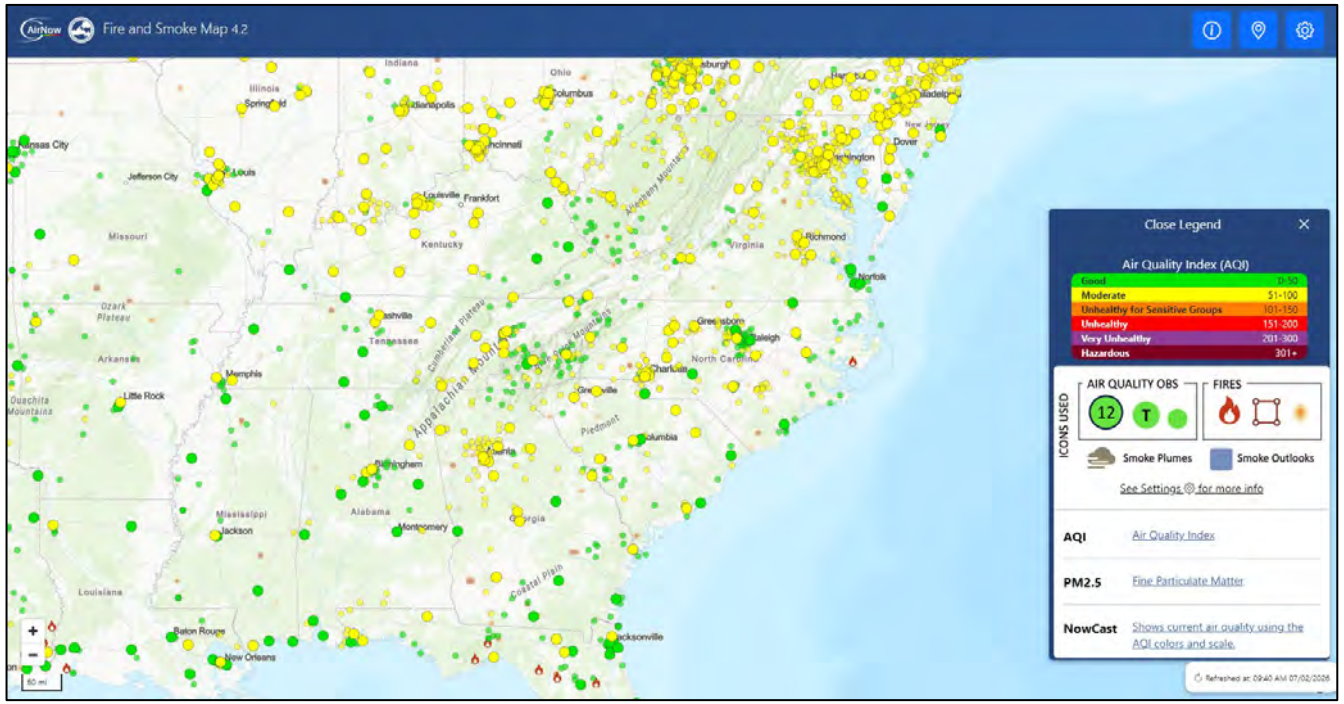
NC Map showing past week satellite detects from same source & bottom right maps display fire pixel counts. Note NC map below is Weekly, ending on 6/30/26) . Note that cloud cover, heat intensity, and other factors can limit detections, not all detects may be “forestry related”. Hazard Mapping System link:

https://www.ospo.noaa.gov/products/land/hms.html#maps

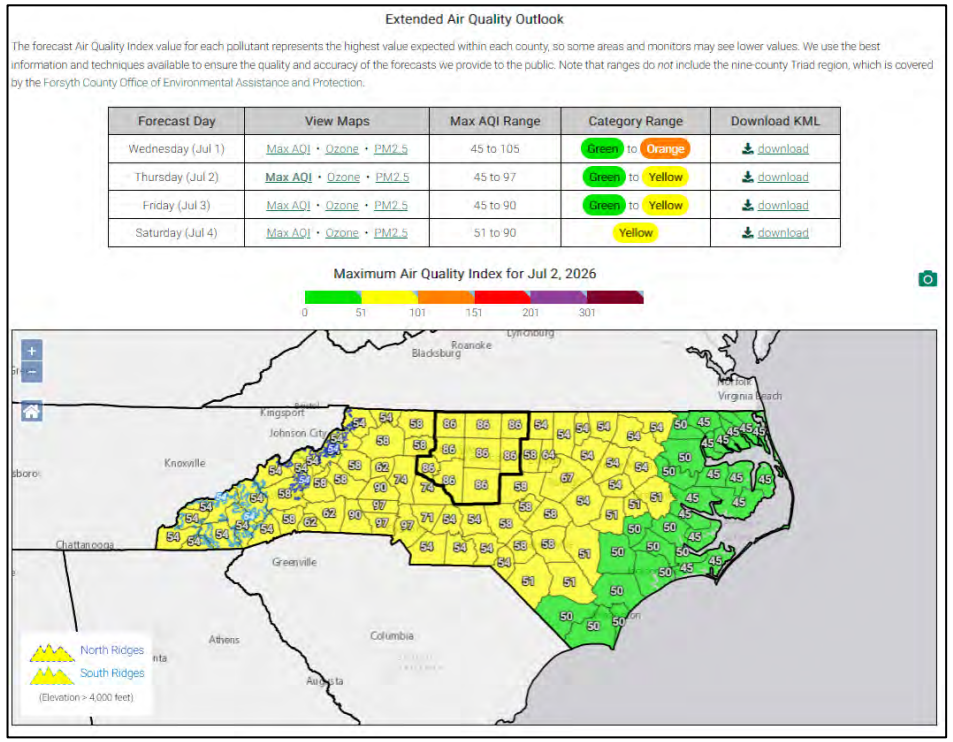




Air Quality Notes



https://fire.airnow.gov/#



Extended Air Quality Outlook

The forecast Air Quality Index value for each pollutant represents the highest value expected within each county, so some areas and monitors may see lower values. We use the best information and techniques available to ensure the quality and accuracy of the forecasts we provide to the public. Note that ranges do not include the nine-county Triad region, which is covered by the Forsyth County Office of Environmental Assistance and Protection.

Forecast Day	View Maps	Max AQI Range	Category Range	Download KML
Wednesday (Jul 1)	Max AQI • Ozone • PM2.5	45 to 105	Green to Orange	download
Thursday (Jul 2)	Max AQI • Ozone • PM2.5	45 to 97	Green to Yellow	download
Friday (Jul 3)	Max AQI • Ozone • PM2.5	45 to 90	Green to Yellow	download
Saturday (Jul 4)	Max AQI • Ozone • PM2.5	51 to 90	Yellow	download

Maximum Air Quality Index for Jul 2, 2026

0 51 101 151 201 301

North Ridges
South Ridges
(Elevation > 4,000 feet)

This forecast was issued on **Wednesday, July 1, 2026** at **2:21 pm**. This forecast is currently valid.

Today's Air Quality Conditions

NC DAQ has issued a Code Orange Air Quality Action Day for ozone for Gaston, Lincoln, and Mecklenburg Counties effective from 10 AM to 8 PM today. The latest hourly ozone readings have reached the mid Code Orange range in Mecklenburg County. Current daily average PM2.5 levels are in the Code Yellow range across most of the Mountains, Piedmont, and northern Coastal Plain.

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

Overview: A strong upper ridge is parked over the East coast through Friday but will begin weakening and shift slightly offshore on Saturday. This ridge paired with a persistent area of surface high pressure over the southeastern US has lead to a multi-day heat wave that will last through the weekend. The strong subsidence, lack of rain, plentiful sunshine, and light winds associated with these meteorological features will lead to air quality degradation as the week continues to progress. Two factors may exacerbate those issues: 1. Higher emissions of precursor pollutants due to higher demand on electric generating units to battle the heat and 2. higher emissions of PM2.5 from July 4th firework smoke. All these compounding factors will be closely monitored throughout the period.

Moderate (Code Yellow) air quality will expand across the state on Thursday as the airshed stagnates. However, the potential for slightly higher afternoon winds may allow for ozone to hold in the mid-to-upper Code Yellow range across the interior. DAQ is not issuing any alerts at this time; any necessary updates will be made tomorrow morning.

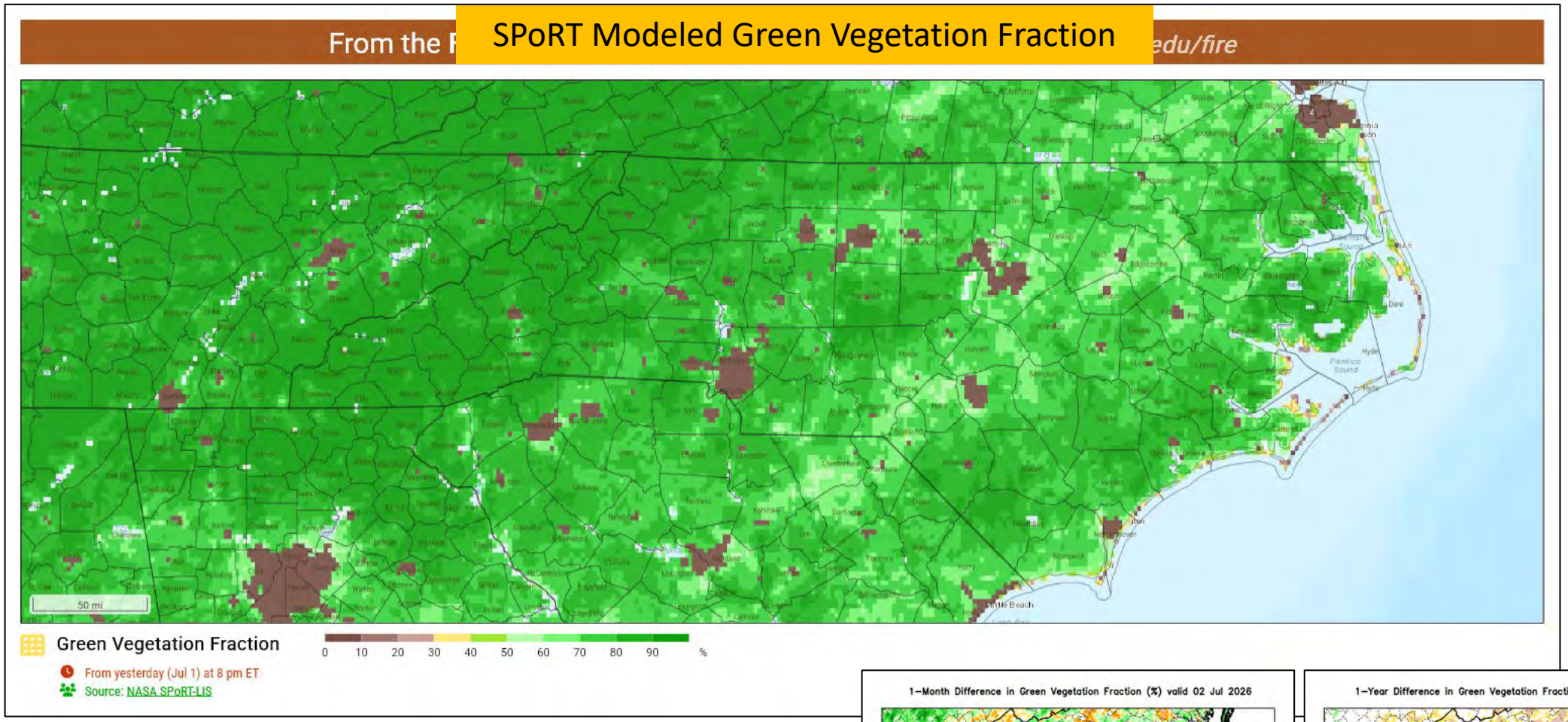
Outlook

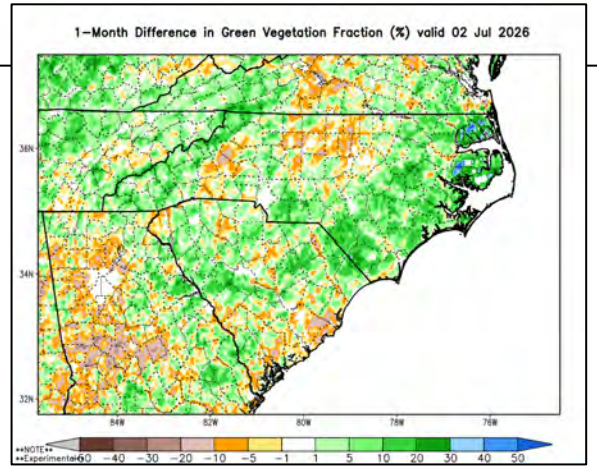
More of the same can be expected Friday and Saturday with widespread moderate air quality statewide. We are also anticipating an increase in PM2.5 levels on Saturday from July 4th firework smoke.

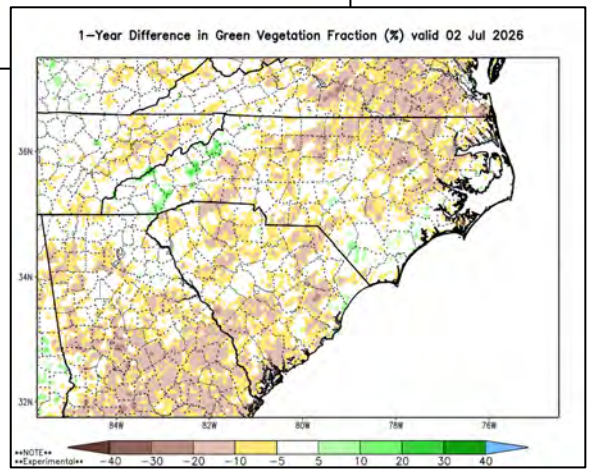
Author: *Sara Kreuser (sara.kreuser@deq.nc.gov) - NC Division of Air Quality*

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

SPoRT Modeled Green Vegetation Fraction



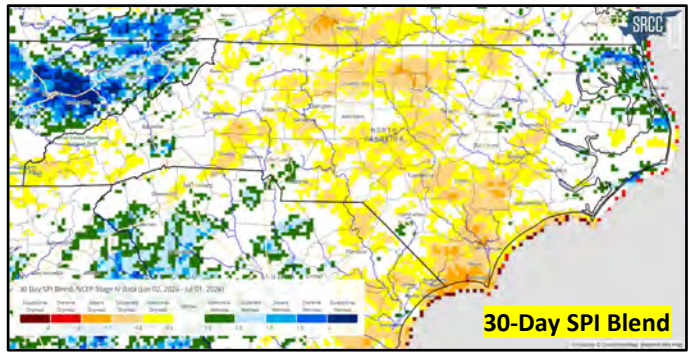


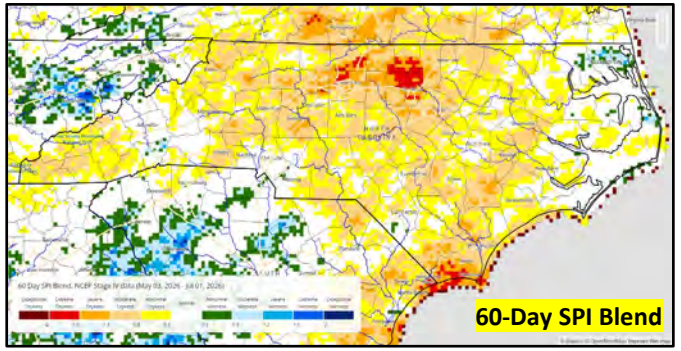


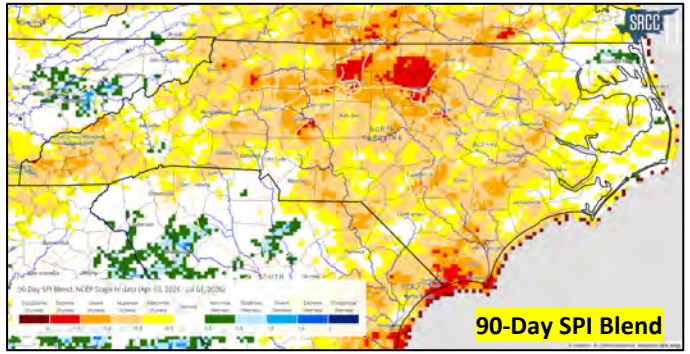
The daily GVF graphic show overall greenness across the state (top). The 1-month/1-year difference graphics help illustrate potential drought impacts & agricultural crop growth cycles. Actual greenness depends on species, aspect, and drought impacts.

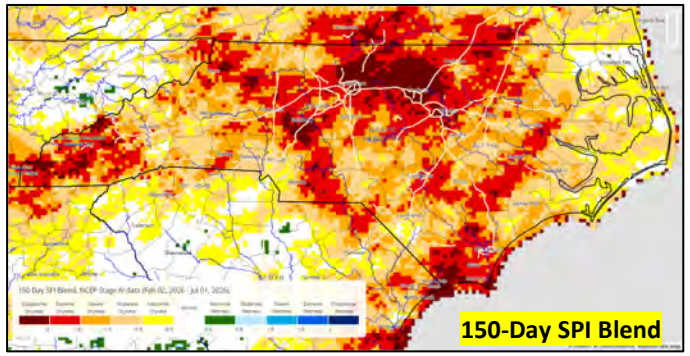
Drought impacts have an influence on herbaceous & woody shrub live fuel volatility, highly drought stressed species (especially waxy shrub and conifers) are much less resistant/contribute to spread in heaviest impacted areas. Higher GVF values **should not** always be interpreted as meaning "effective 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, organic soils, and conifer & waxy shrub species.**

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

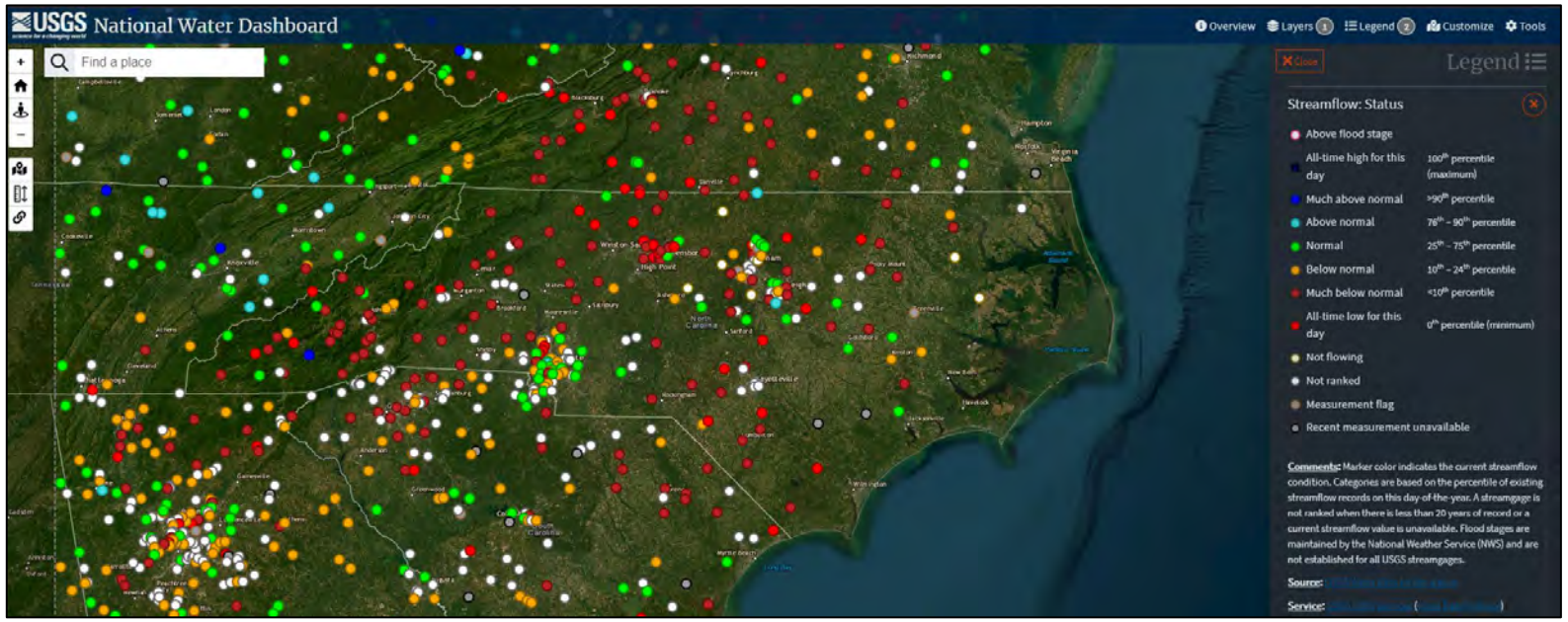








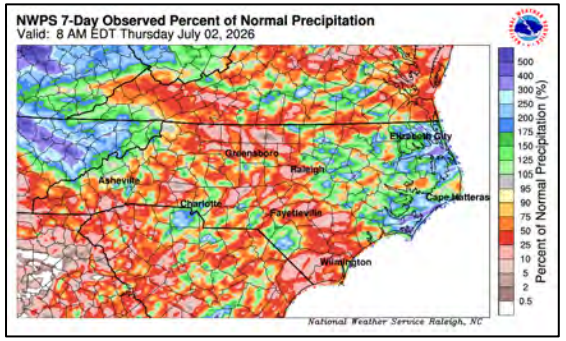
New USGS Streamflow Map: Real-time



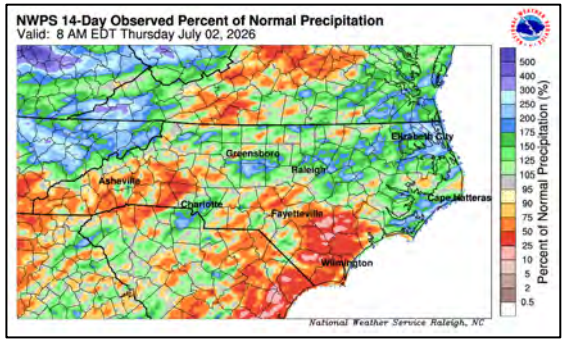
Improvements over shorter time scale SPI maps, most pronounced in NE D-7. Longer time scale SPI products continue to indicate entrenched conditions. As growing season advances it takes more rainfall to meet minimal evaporative demands, even in "normal" conditions.

Real-time streamflow from 7/2/26 shows "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 continue to see further decreases in water levels as summer growth progresses. Very high evaporative demands with wind/warm temps and low daily minimum rh's further impact evaporative demand.

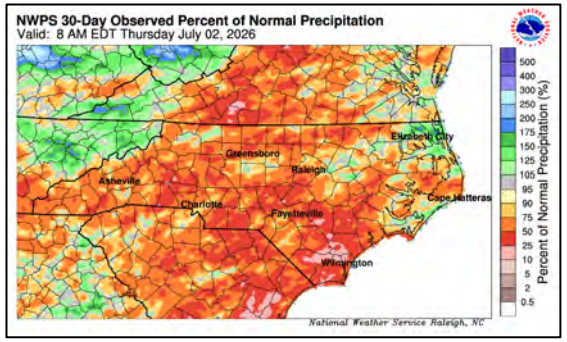
7-Day PNP



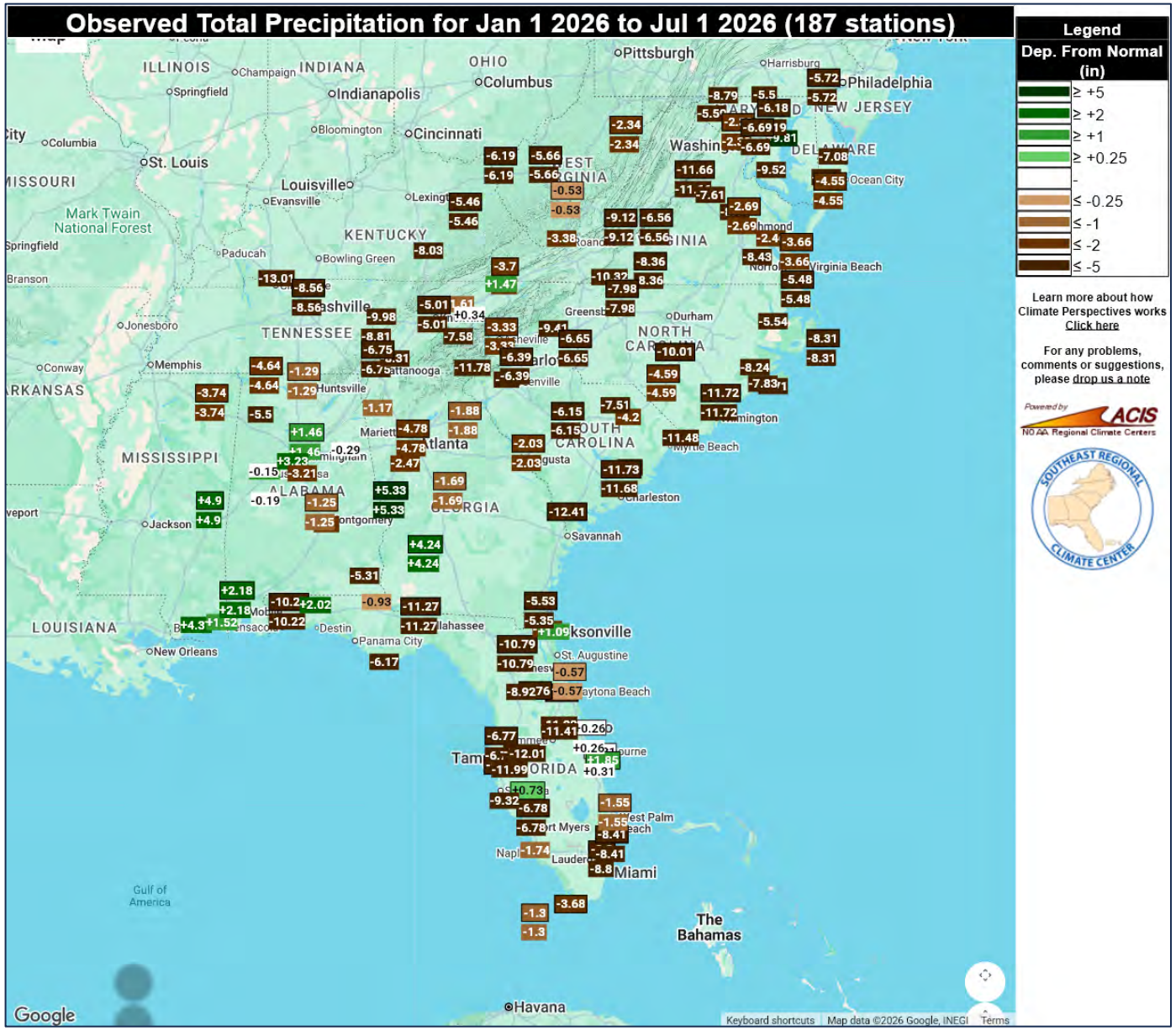
14-Day PNP



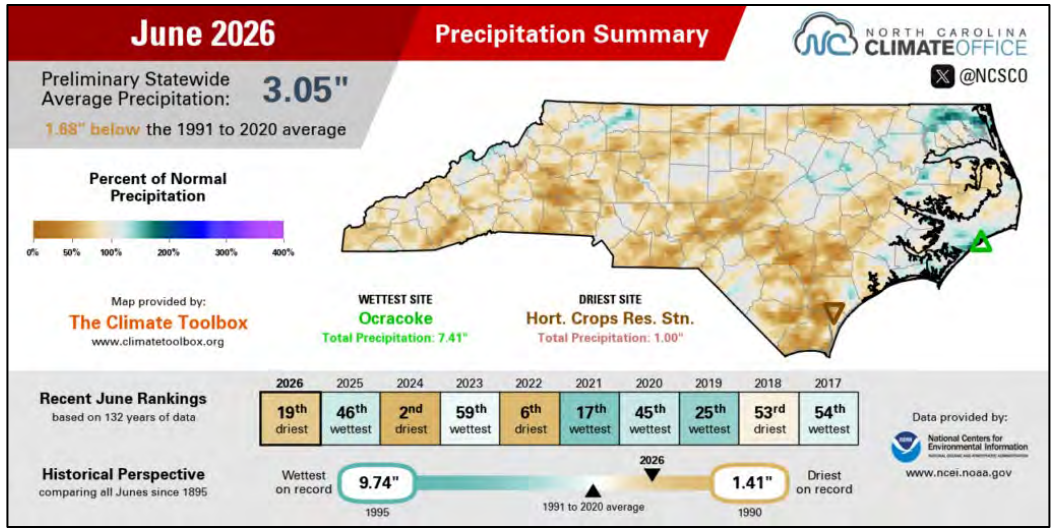
30-Day PNP

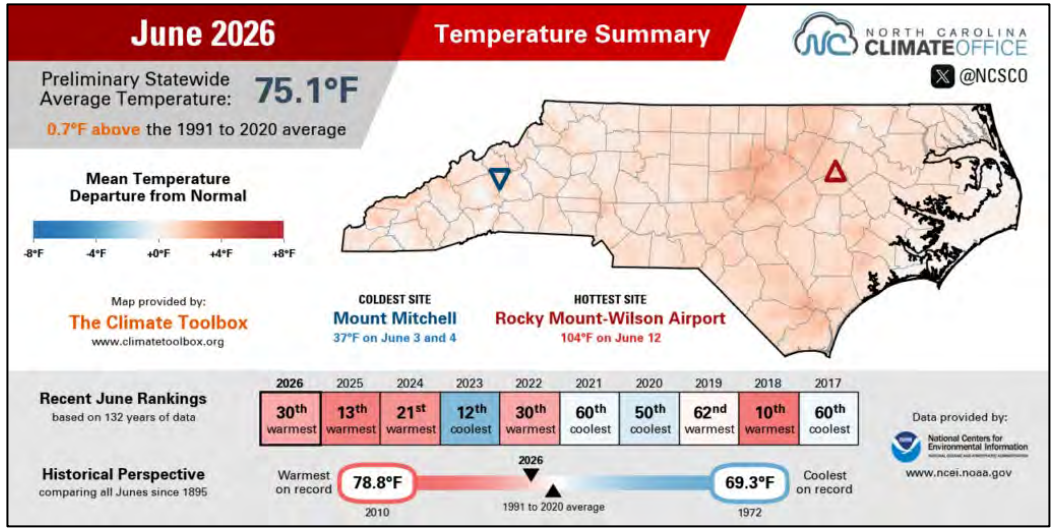


NC SCO – June 2026 Precip and Temp Summary



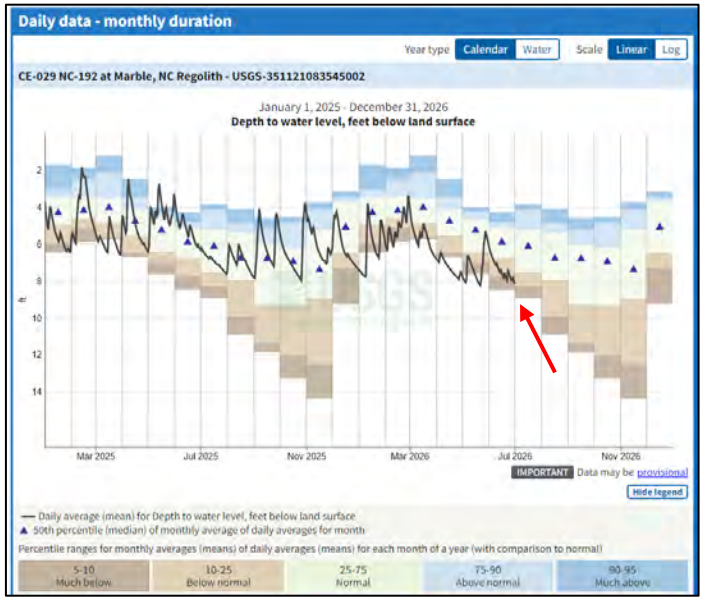
6-Month Station Departures from Normal (in.)
(1/1/26 - 7/1/26)



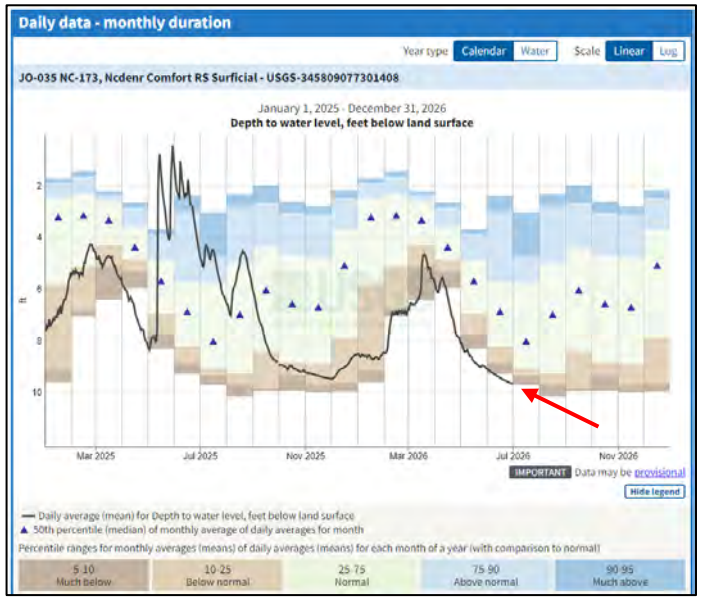


USGS Monitoring Wells - https://waterdata.usgs.gov/state/North%20Carolina/#dataTypes=72019

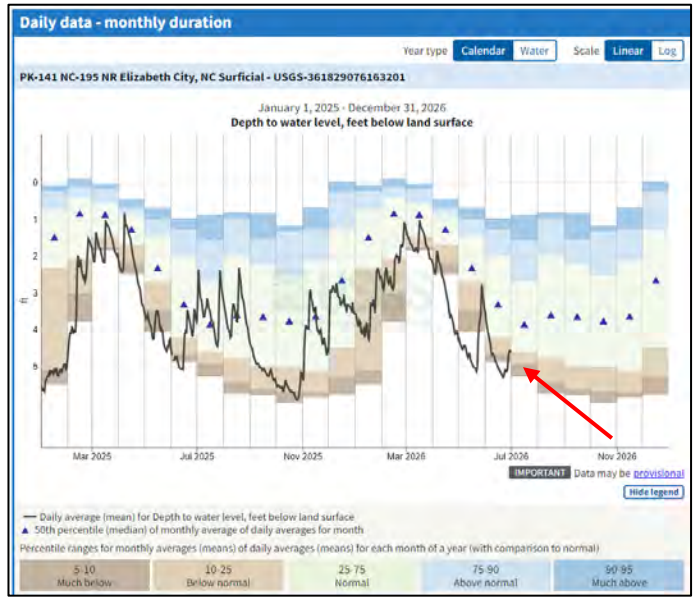
Marble Regolith – Cherokee Co.



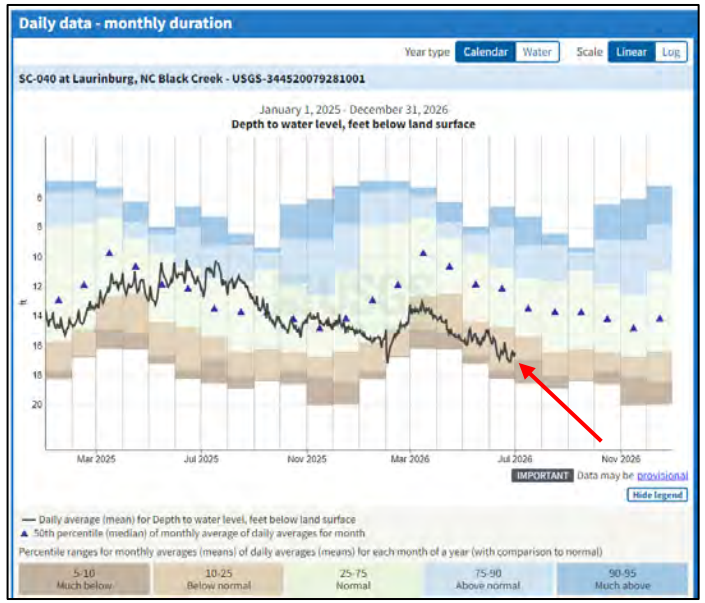
Comfort RS Surficial Well – Jones Co.



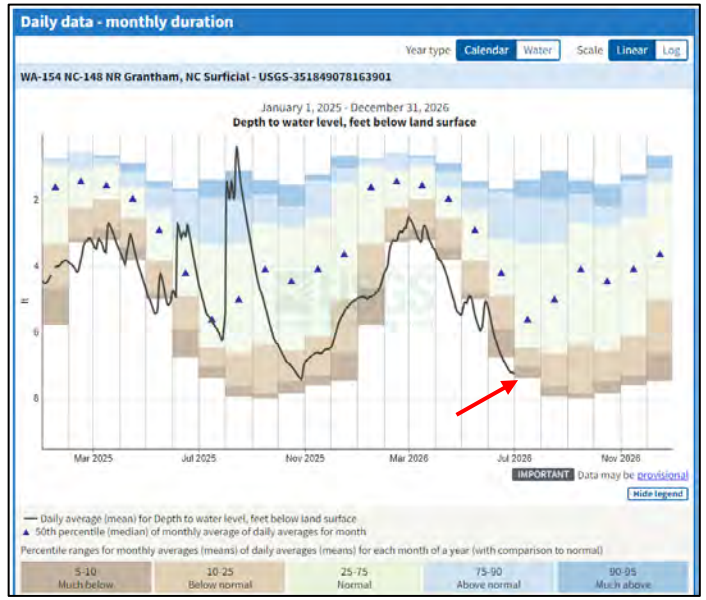
Elizabeth City Surficial Well – Pasquotank Co.



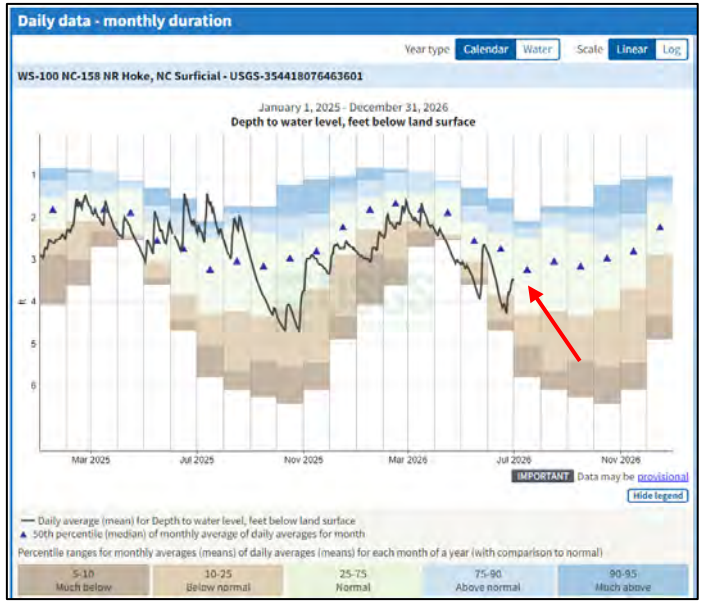
Black Creek – Scotland Co.



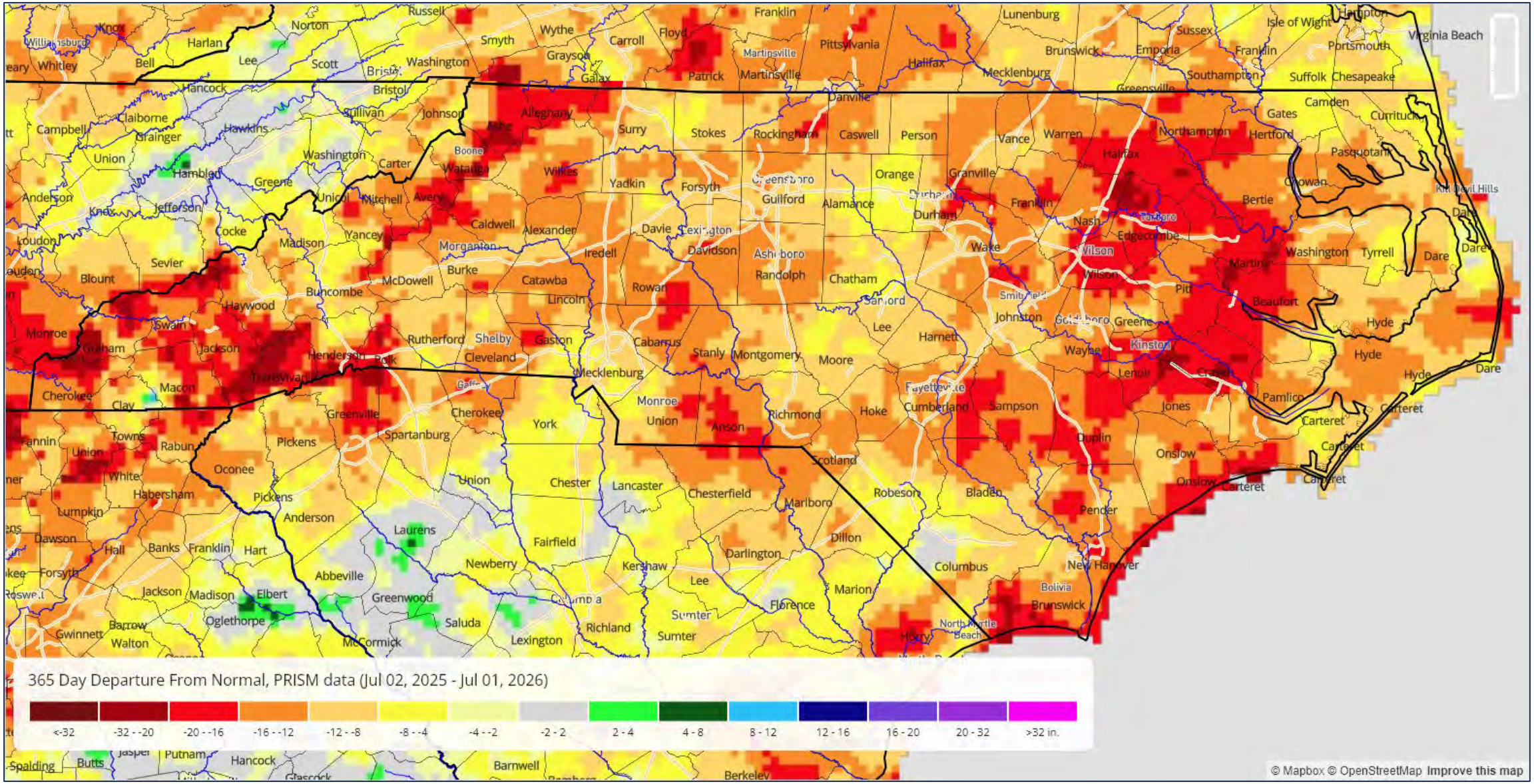
Grantham Surficial Well – Wayne Co.



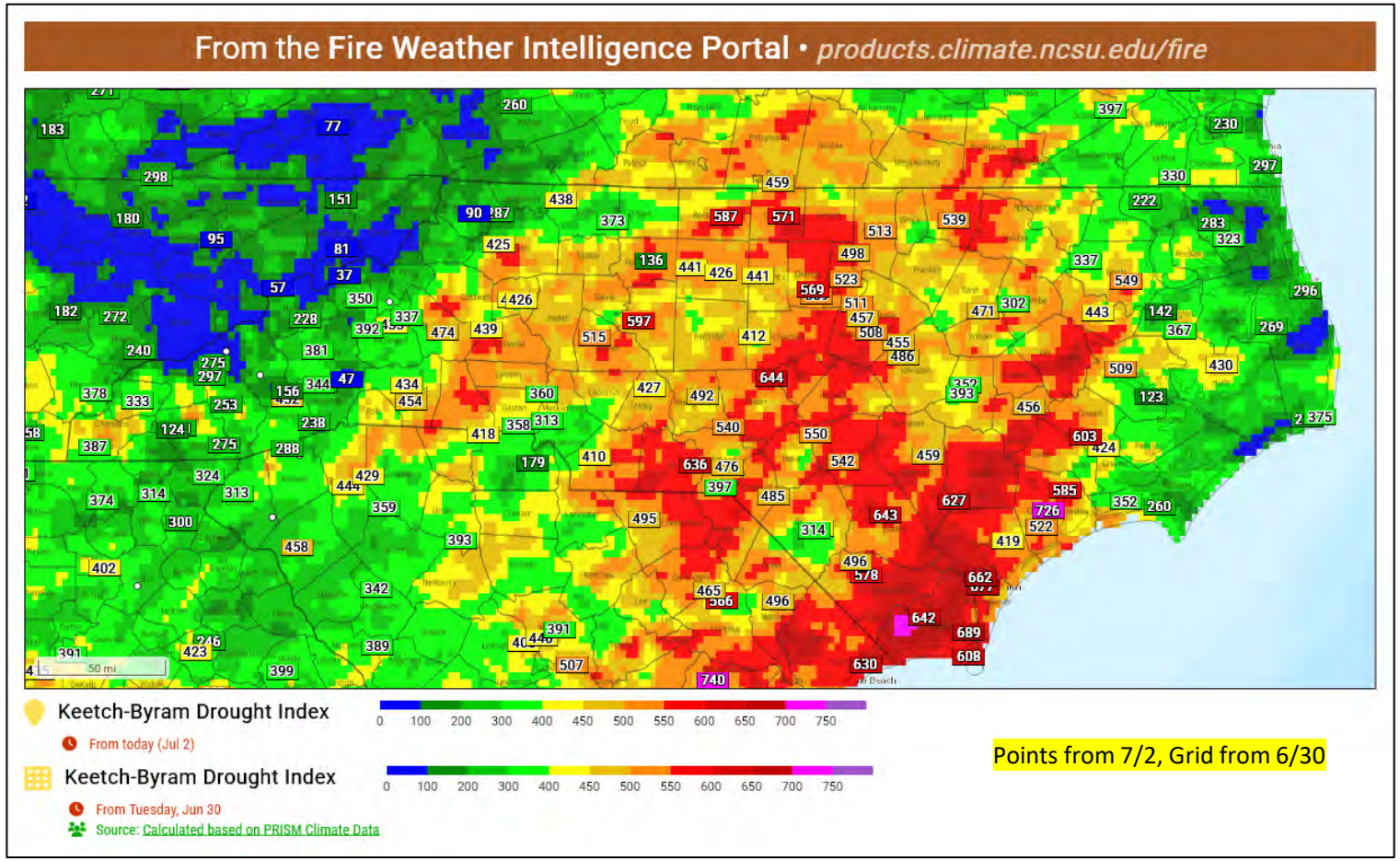
Hoke Surficial Well – Washington Co.

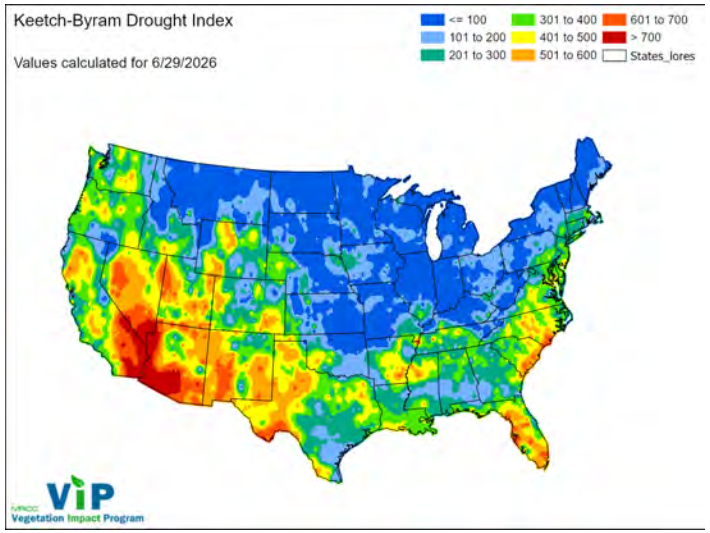


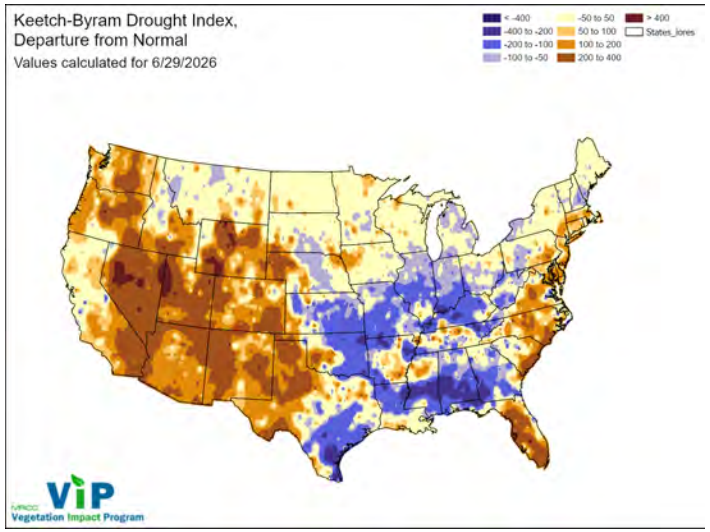
12-Month Departure From Normal (inches)



16”-20” deficits in bright red colored areas.





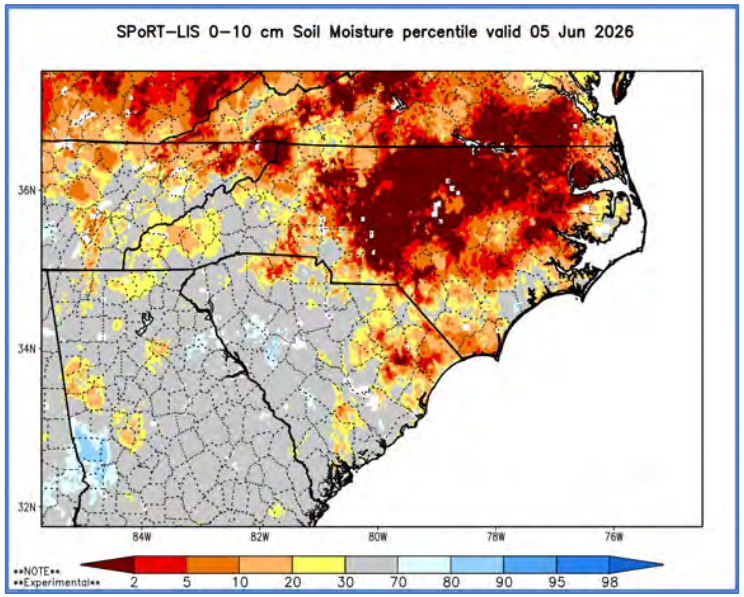


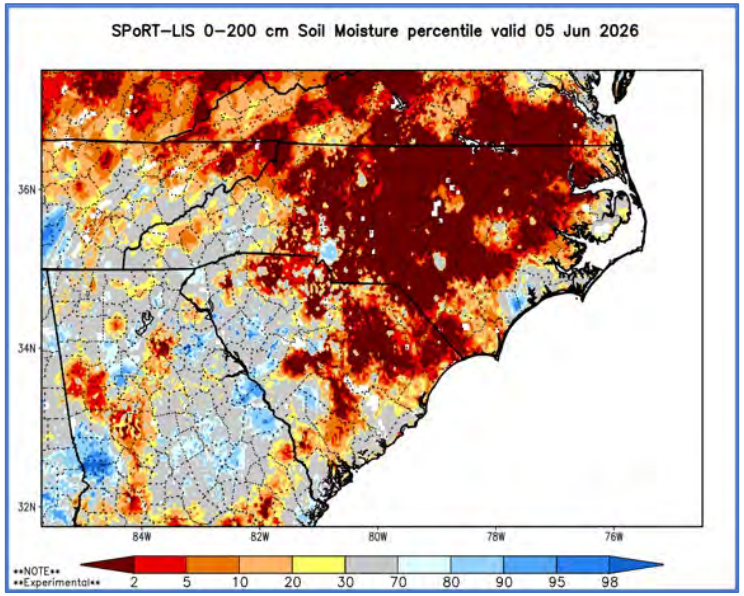
- KBDI values continue to climb with higher max daily temperatures & no significant widespread wetting rain for much of the state. Rainfall over the past several weeks has been generally convective/thunderstorm based, meaning that intense rainfall can quickly transition from 2”+ to < 0.20” over very small distances. Hence the popcorn effect being displayed. Of note - KBDI gridded outputs are coarse scale & can’t model site specific conditions such as artificial drainage impacts or runoff vs absorption. Point values are calculated via FEMS using station observations, with similar overall limitations noted above.

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

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

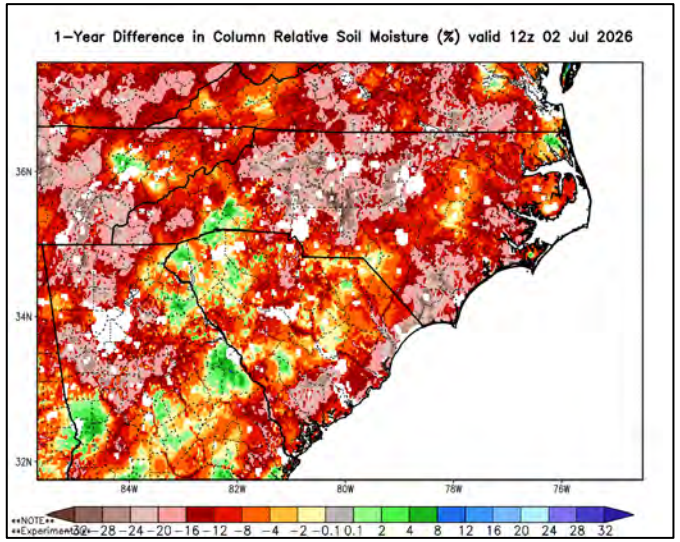
6/5/26





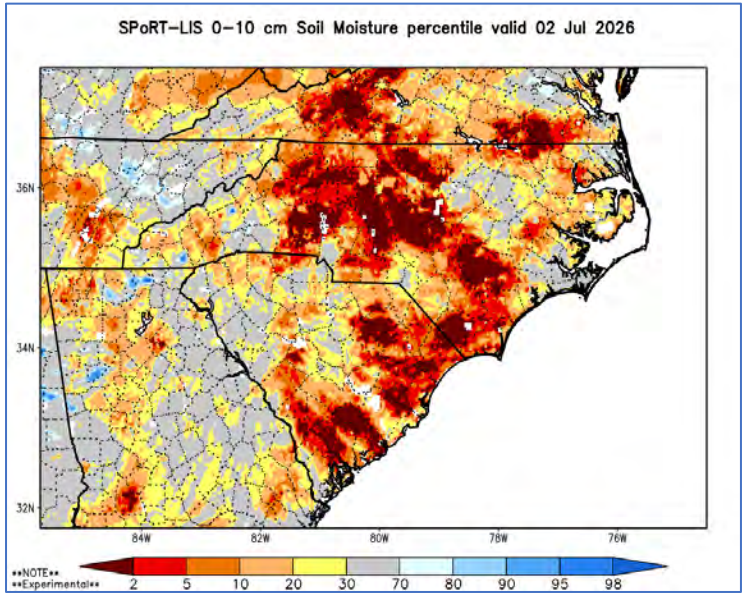
~ 4-Weeks ago Left, today on Right.

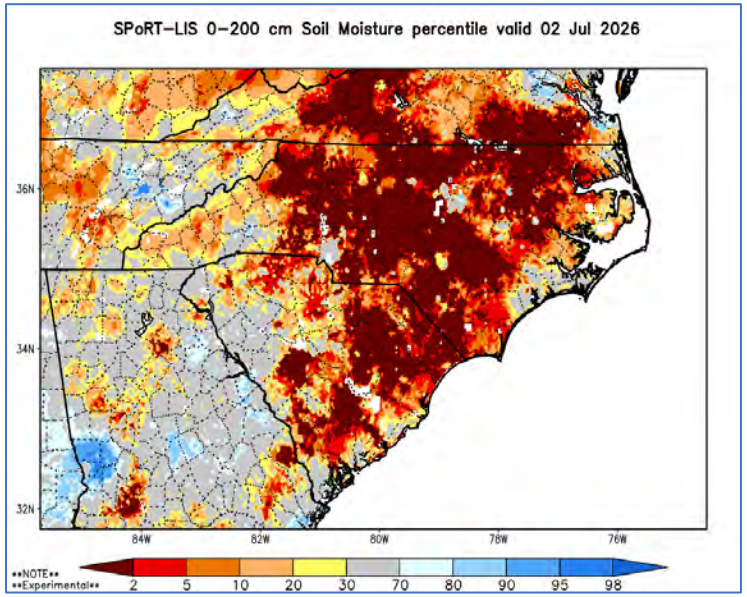
Scattered improvements especially west, but significant full profile dryness remains for much of the state. Active growing season will hasten soil moisture depletion, without adequate weekly precip.

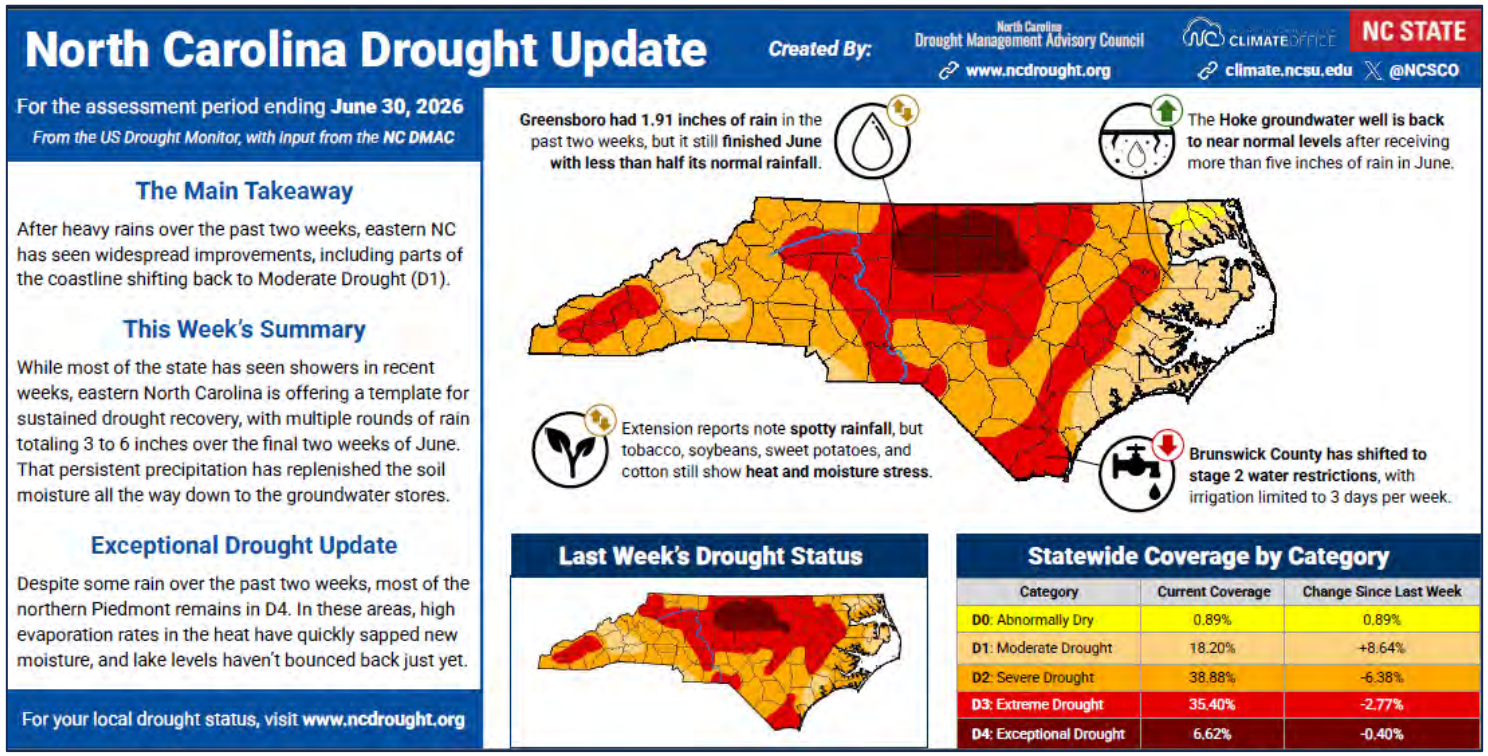


https://weather.ndc.nasa.gov/sport/case_studies/lis_NC.html

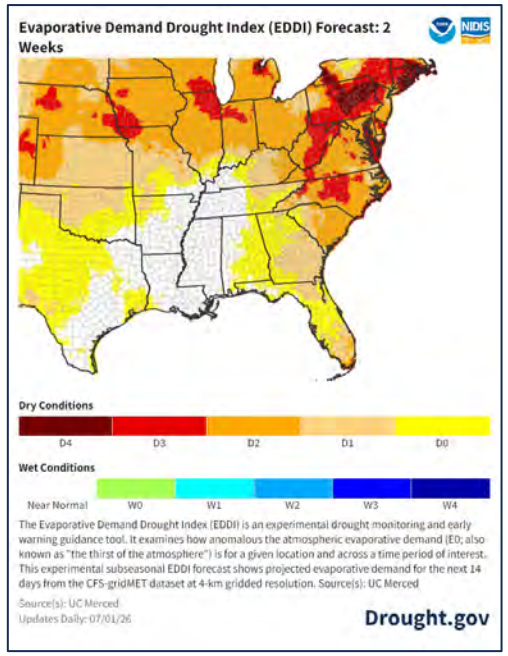
7/2/26

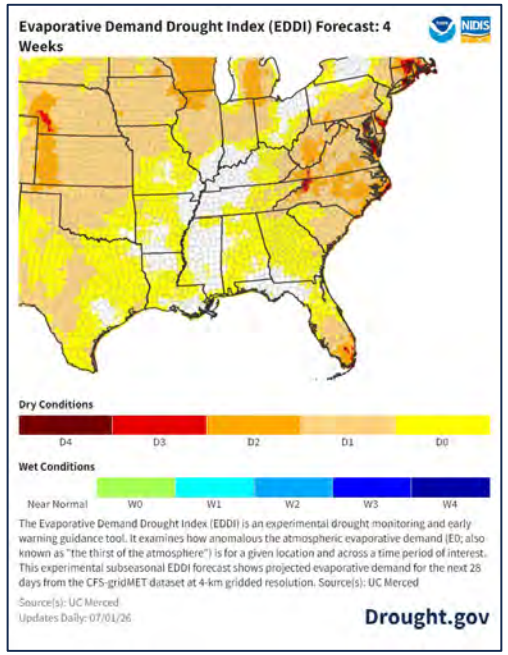






https://www.drought.gov/data-maps-tools/evaporative-demand-drought-index-eddi-subseasonal-forecasts



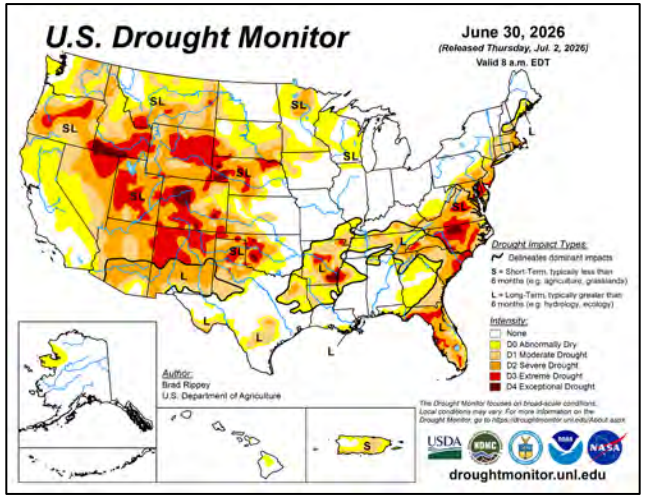


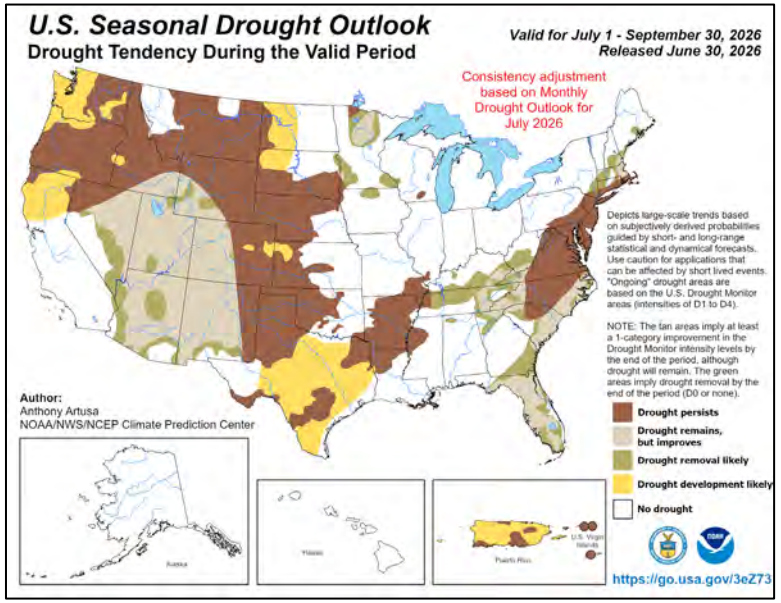
EDDI & Drought

EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week avg level. They are still trending 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.

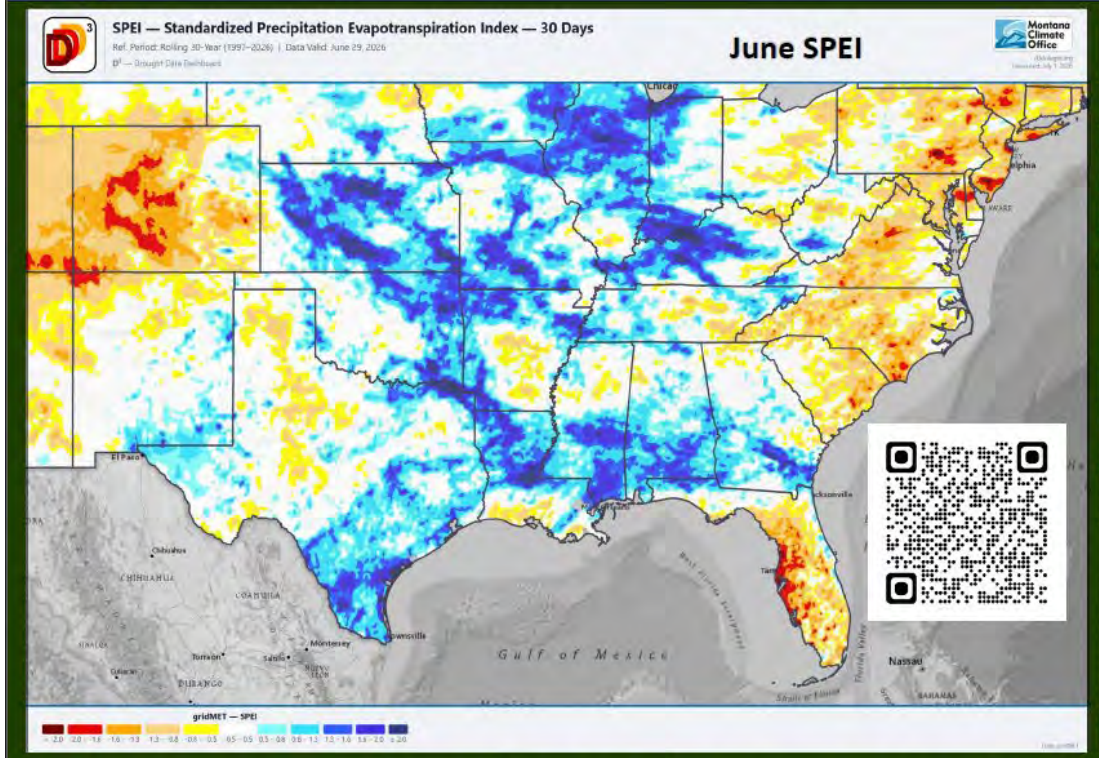
US Drought Monitor – Most recent USDM map release above (6/30/26). Overall, drought intensification continues to be probable as we move further into summer, should rainfall deficits continue.

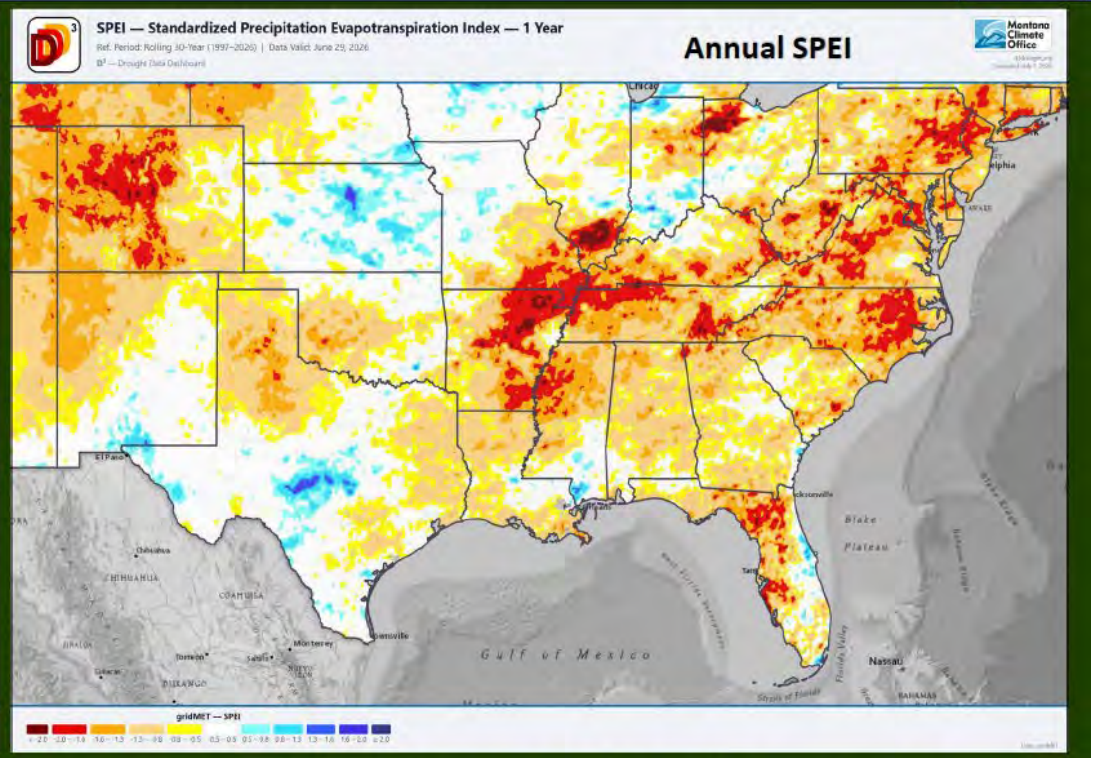
Seasonal Drought Outlook - See detailed state/regional discussions here.





Standardized Precipitation-Evapotranspiration Index



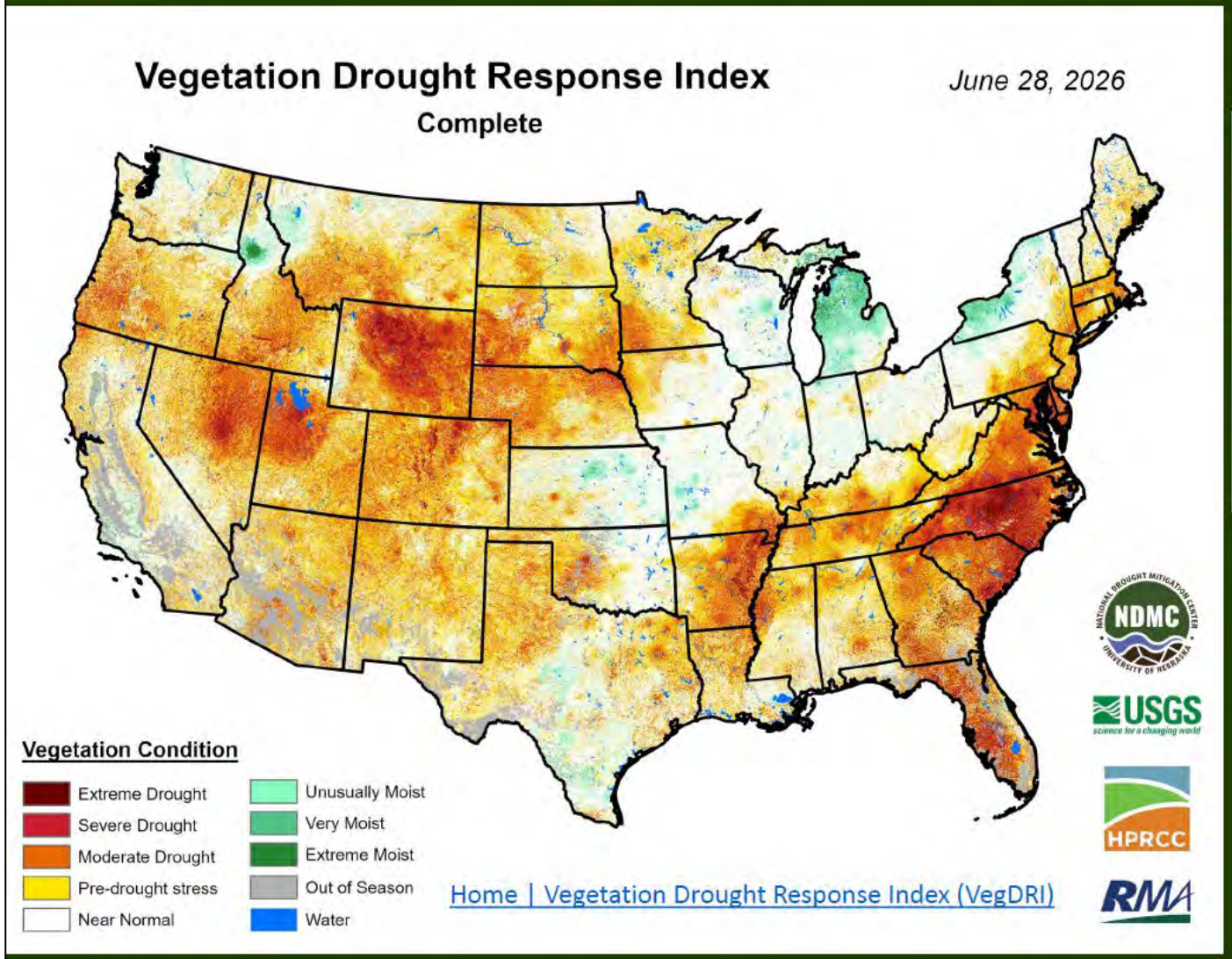


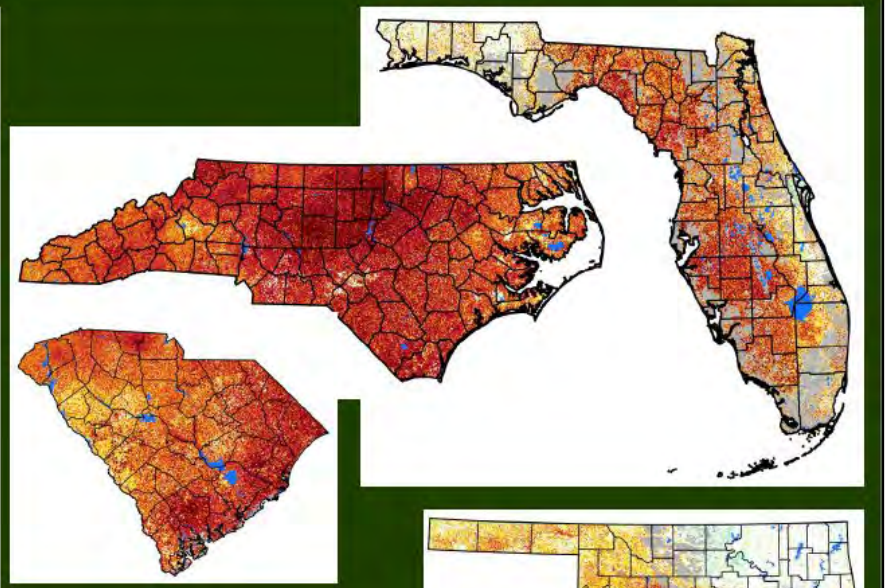
- Hot temperatures and areas of low rainfall maintained or exacerbated drought in parts of Florida, the Carolinas and Virginia
- Many areas continued to improve
- Watching some of the drying spots elsewhere heading into peak summer heat

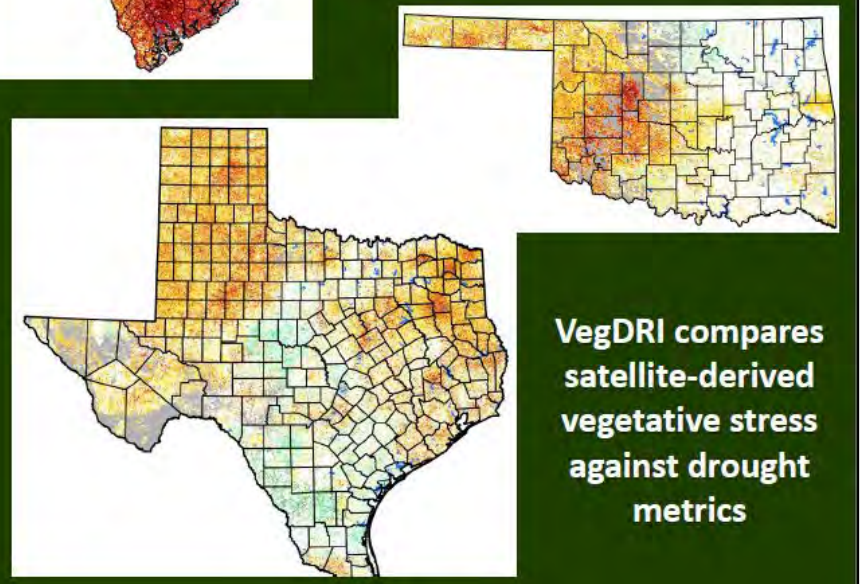
- Long-term rainfall deficits remain evident in the annual SPEI – would look worse if it had been a warm winter in the eastern states
- Particularly concerning in the Mississippi Valley, Appalachians and eastern states as hot weather returns this summer
- Lines up with vegetative stress

From SA Fire Environment Briefing 7/2/26

VegDRI Not Looking Great







VegDRI compares satellite-derived vegetative stress against drought metrics

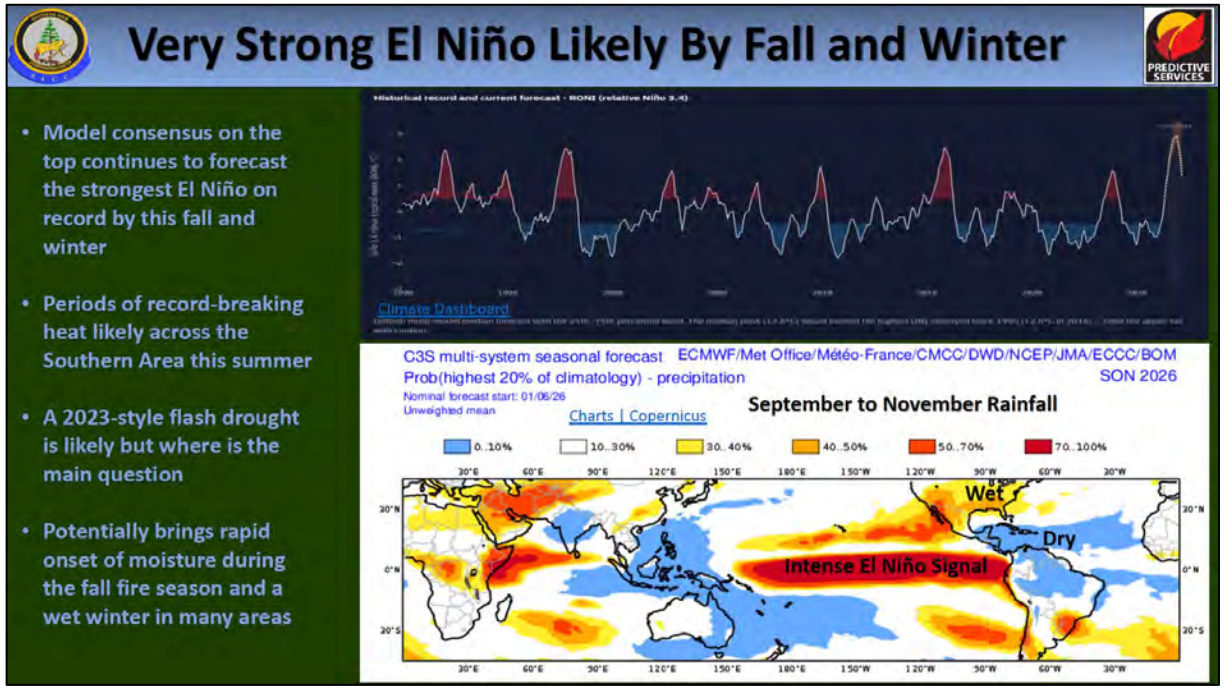
From SA Fire Environment Briefing 7/2/26

ENSO Notes from the CPC (6/29/26 Slide Update)

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

El Niño conditions are present and expected to strengthen into the Northern Hemisphere winter 2026-27.

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 (typically fall/winter – not summer), but less opportunity for tropical landfalls due to increased wind shear. Recent changes in defining either ENSO state can be found here.



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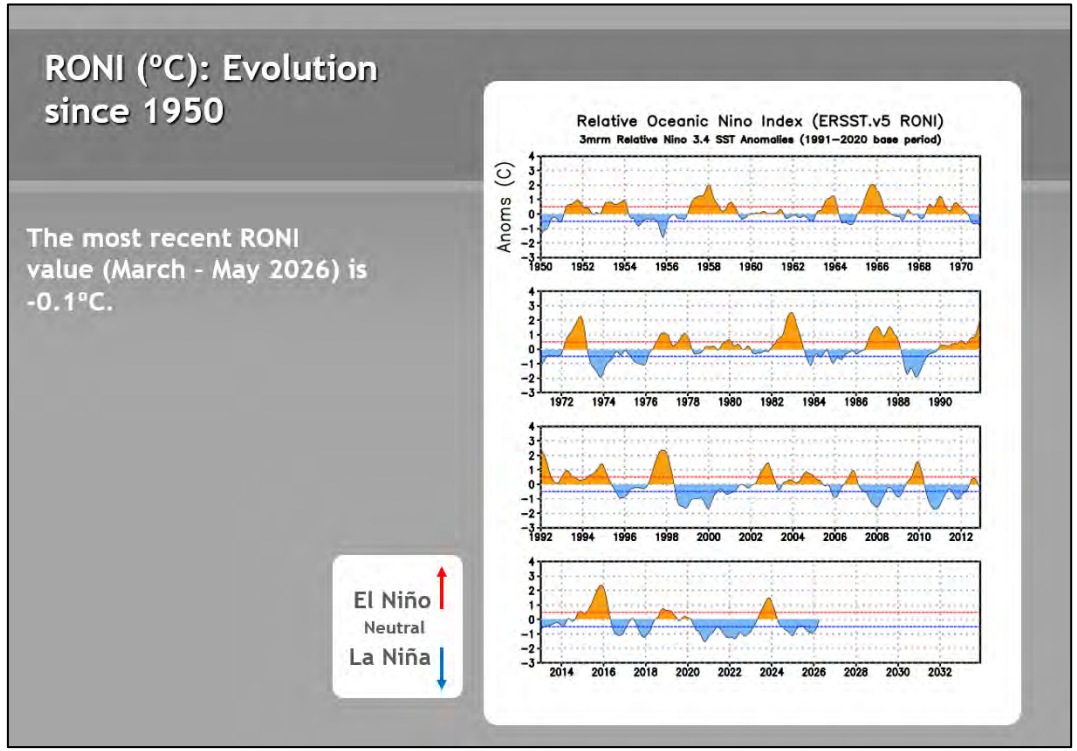


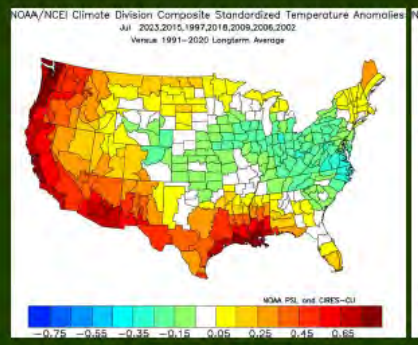
From the most recent CPC Diagnostic Discussion (ENSO Diagnostics Discussion):

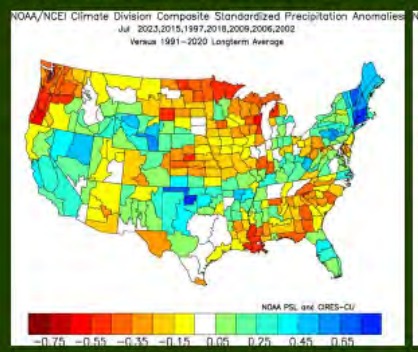
The North American Multi-Model Ensemble (NMME) average, including the NCEP CFSv2 (Fig. 6), forecasts El Niño to intensify into the Northern Hemisphere winter 2026-27. High confidence in El Niño (Fig. 7) is also linked to anomalously high oceanic heat content and expanding westerly wind anomalies across the equatorial Pacific Ocean. There is a 63% chance of a very strong El Niño during November-January (Fig. 8) that would rank among the largest El Niño events in the historical record going back to 1950. Even very strong El Niño events do not lead to the expected impact everywhere, but stronger events can more significantly tilt the odds in favor of expected outcomes (see CPC outlooks for probabilities of seasonal anomalies). In summary, El Niño conditions are present and expected to strengthen into the Northern Hemisphere winter 2026-27.

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

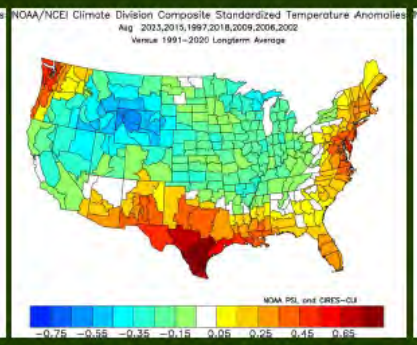
Analogs through the Rest of 2026

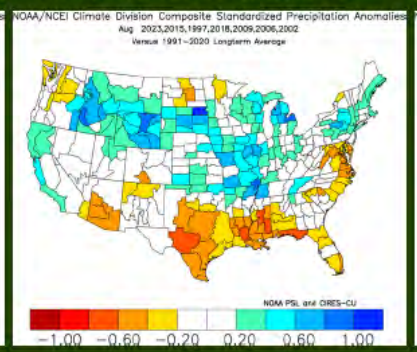
July Analogs



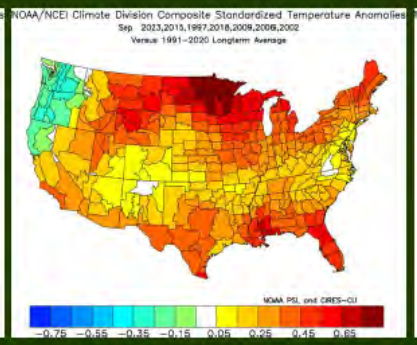


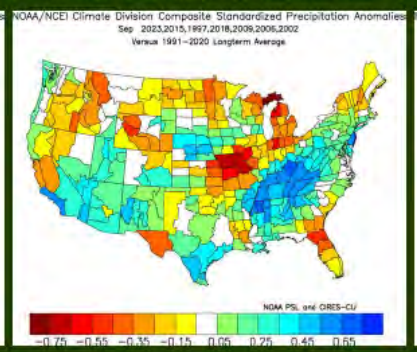
August Analogs



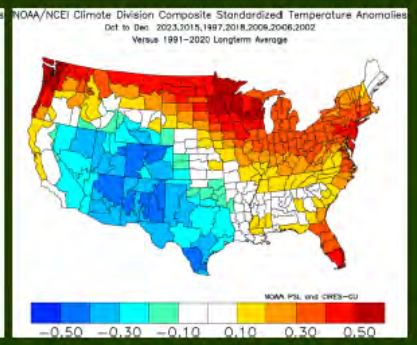


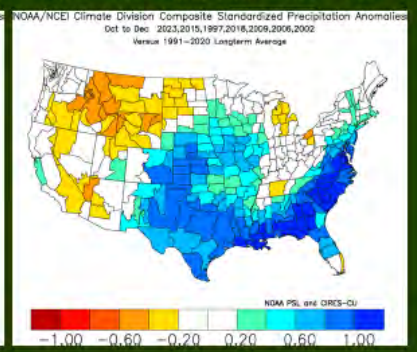
September Analogs



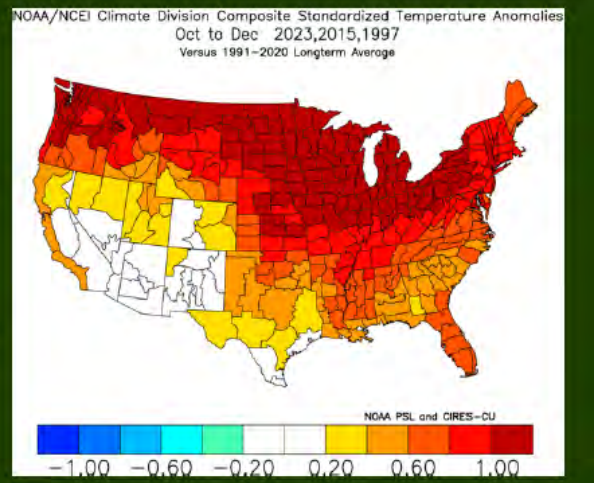


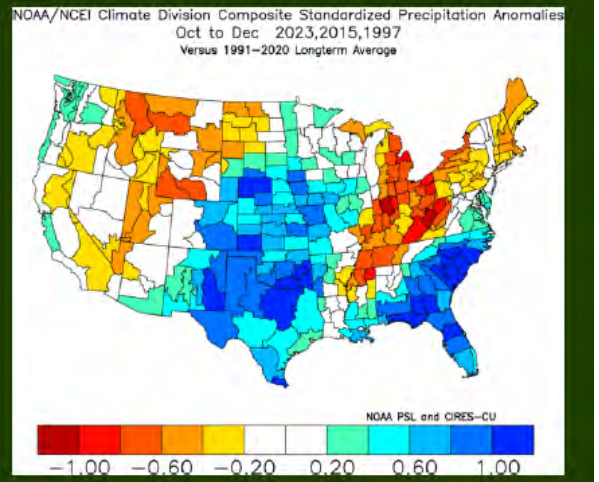
Oct-December Analogs





Oct-December Strong+ El Niño Analogs

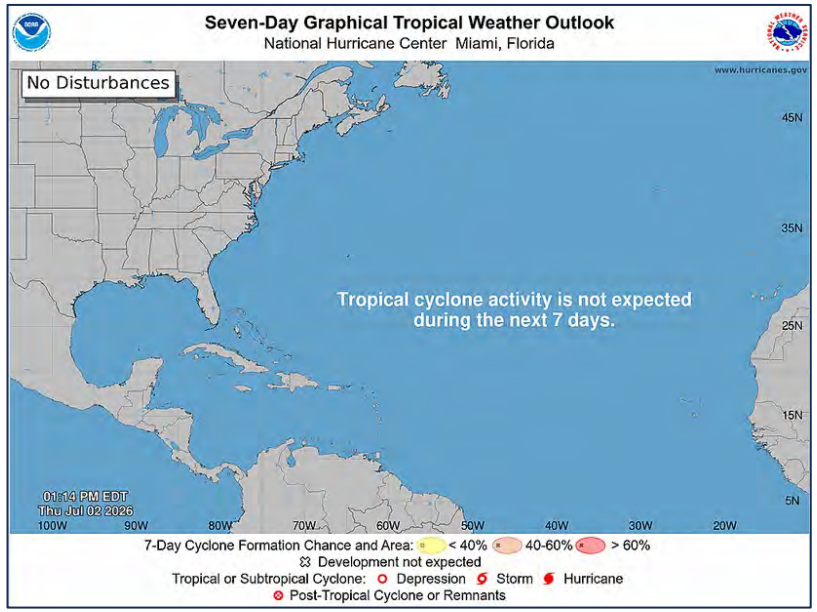


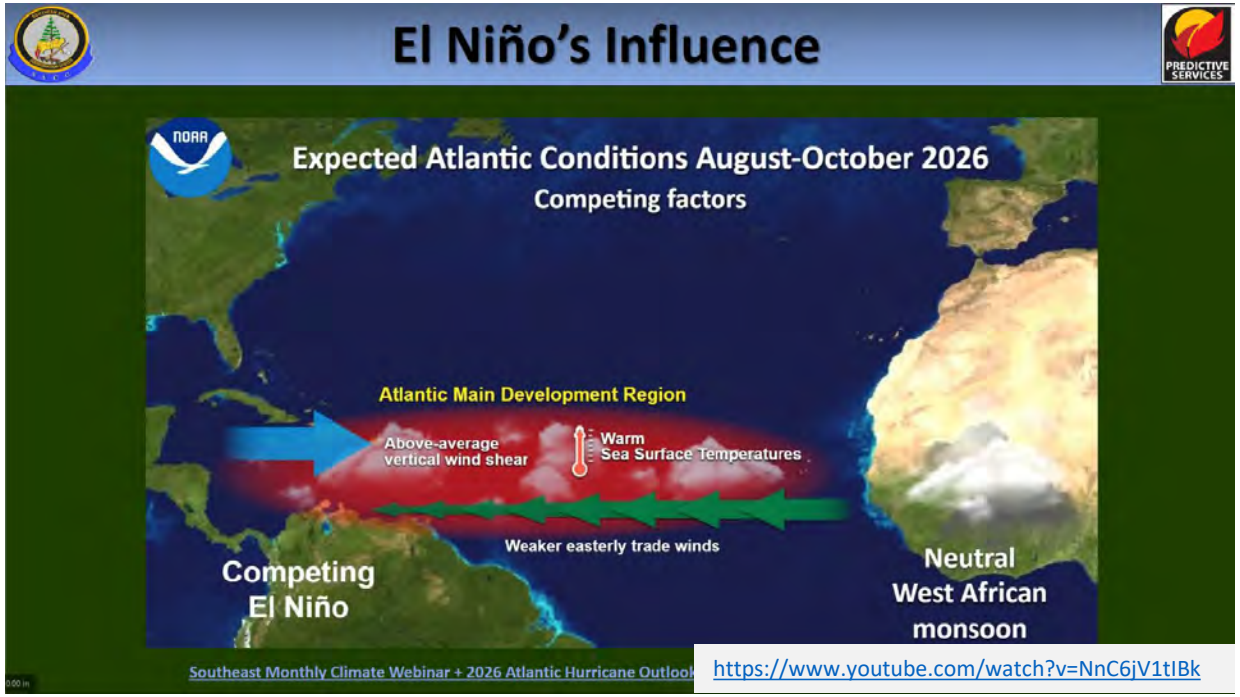


- Analogs in the left four blocks include La Niña to El Niño years and strong to very strong El Nino years, with temperatures on top and rainfall on the bottom
- Tropical activity can greatly sway blended rainfall maps when only using a few years of data
- Images on the right for October to December include the most likely conditions for the fall fire season

From SA Fire Environment Briefing 7/2/26

Tropical Discussion & Hurricane Outlook





https://www.youtube.com/watch?v=NnC6jV1tIBk

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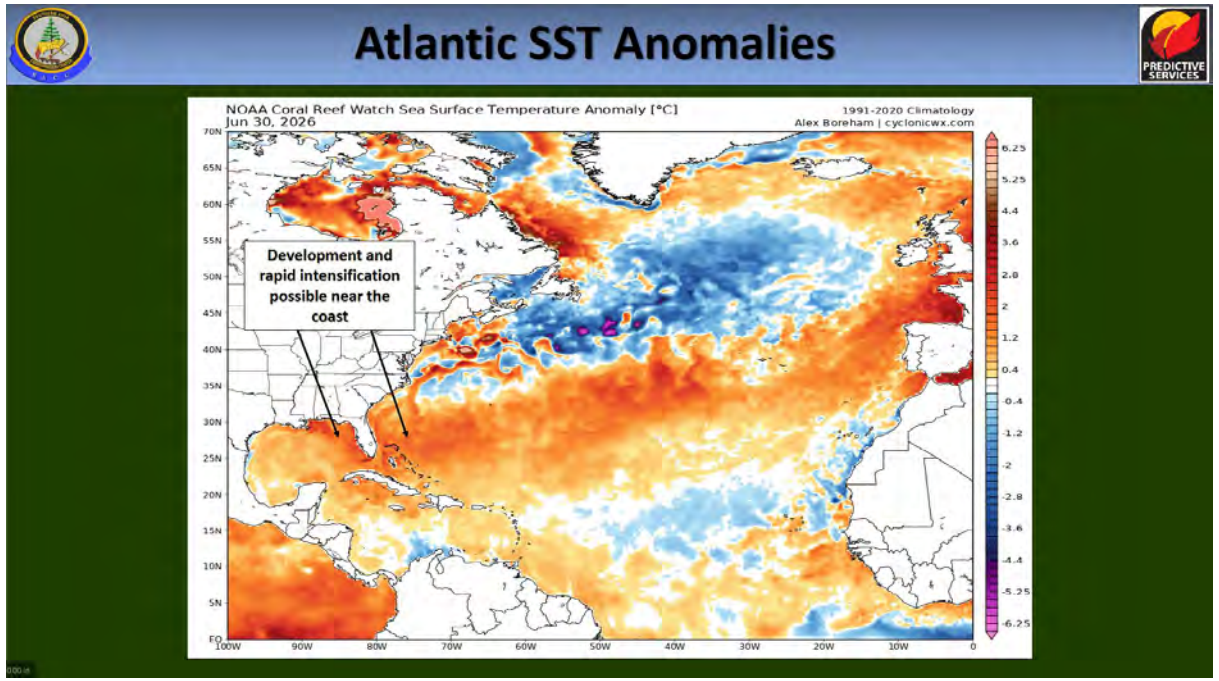
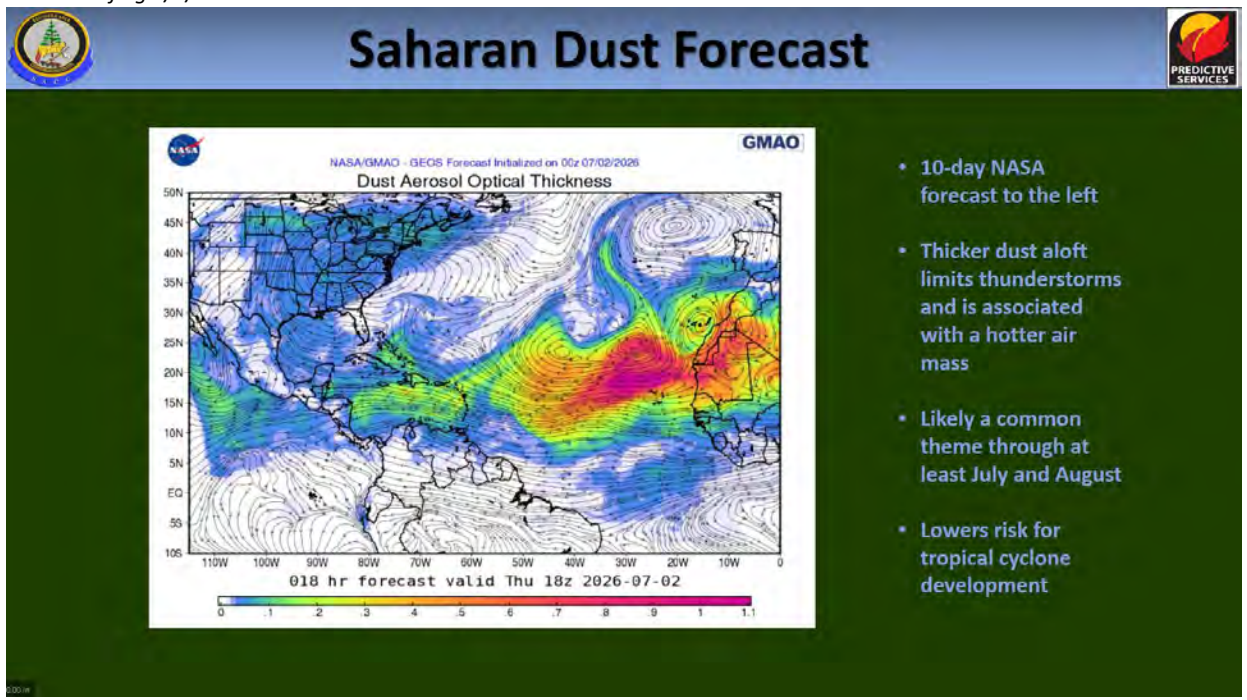
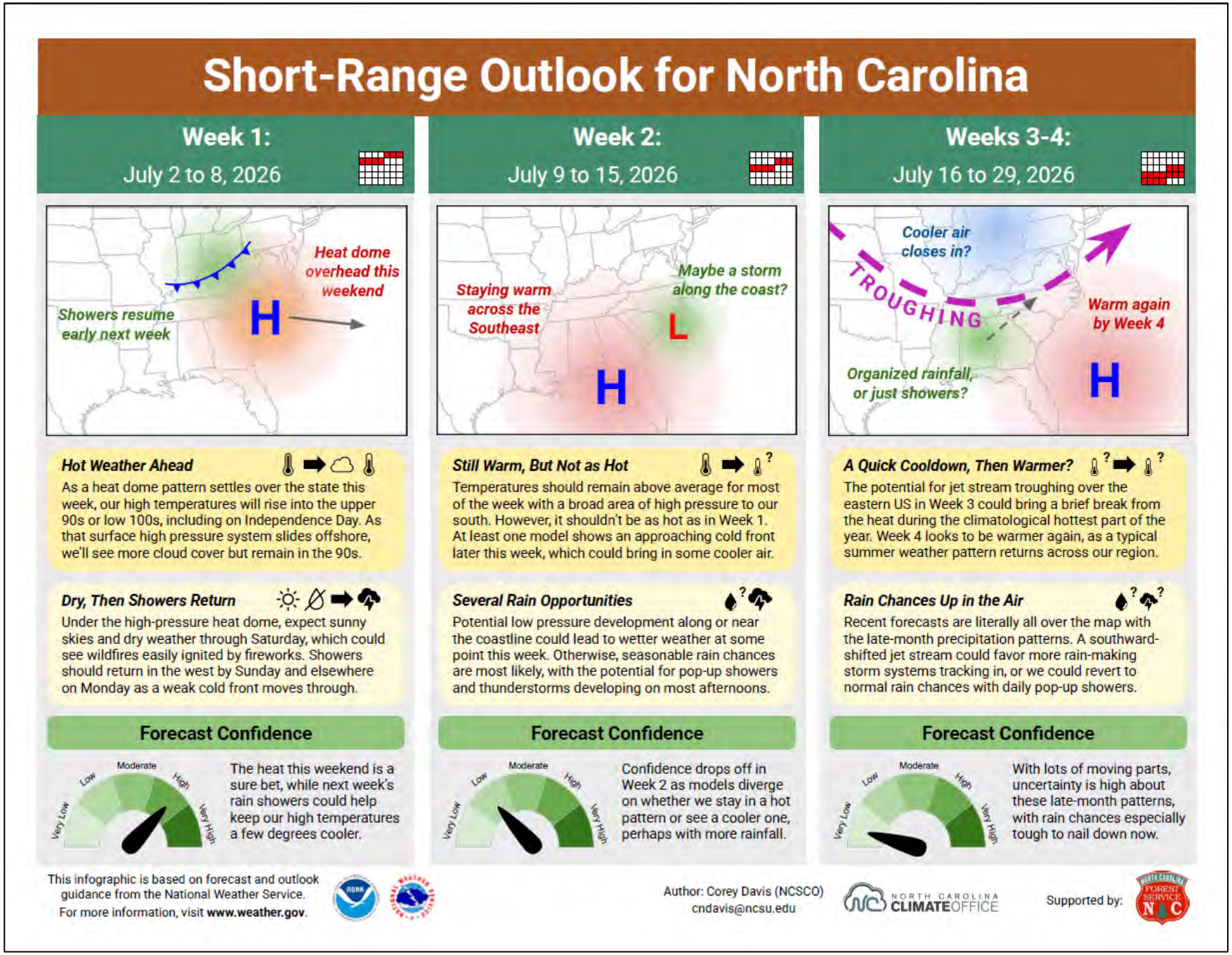




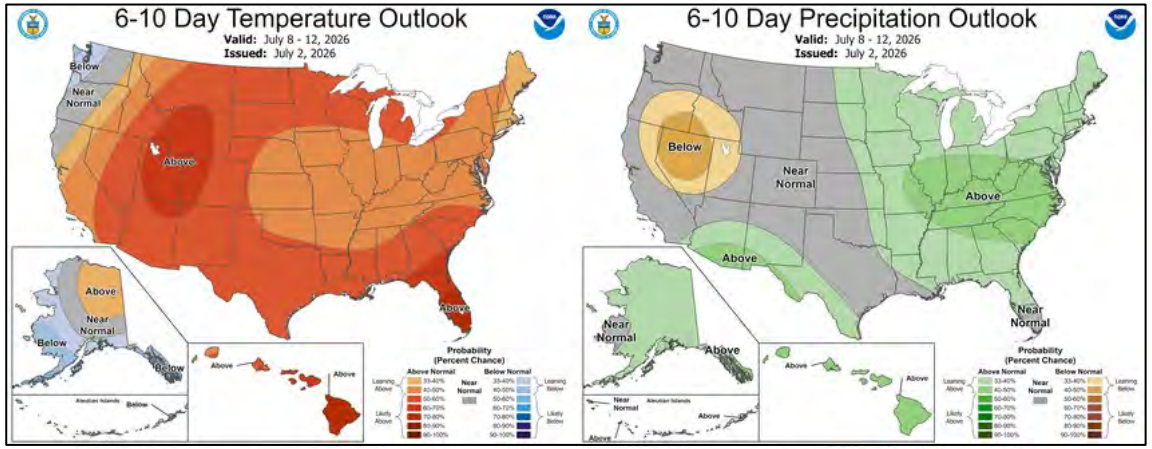
State Climate Office: Short-Range Monthly Outlook for NC

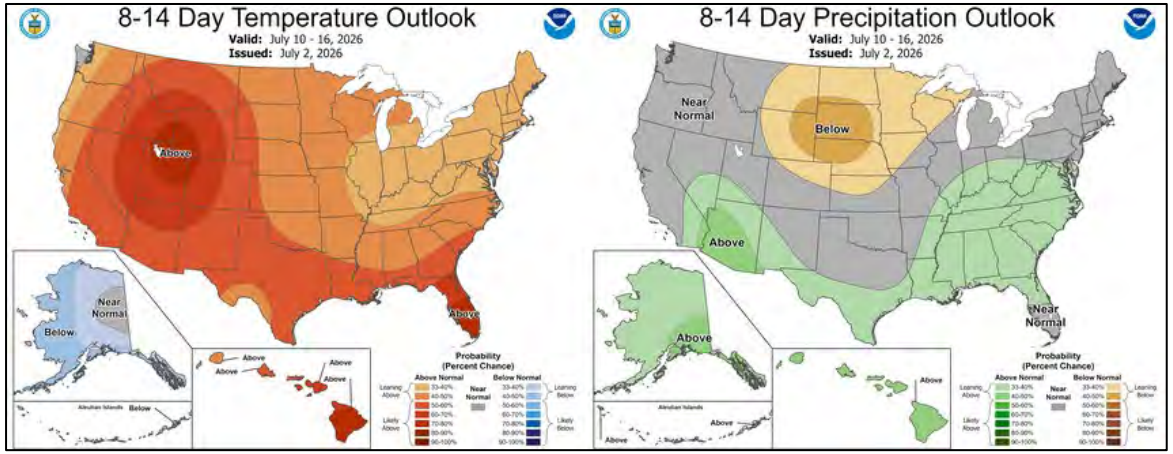
Released ***7/2/26***
Location: https://climate.ncsu.edu/fire/outlooks/



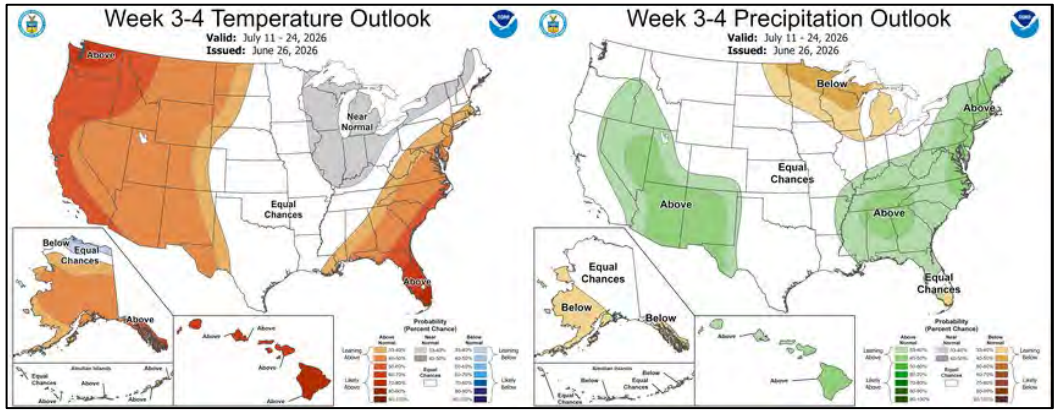
Temp & Precip Outlook

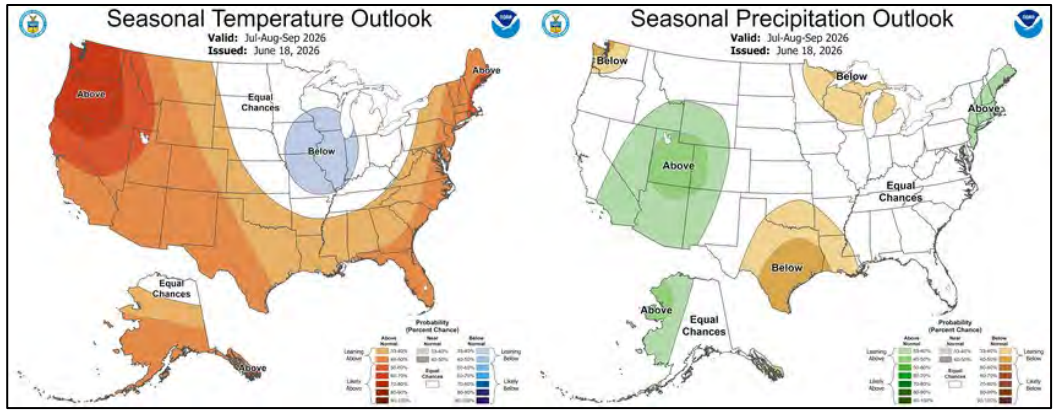
6-10 Day, 8-14 Day, Weeks 3-4, 3-Month July/Aug/Sept (released 6/18)





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



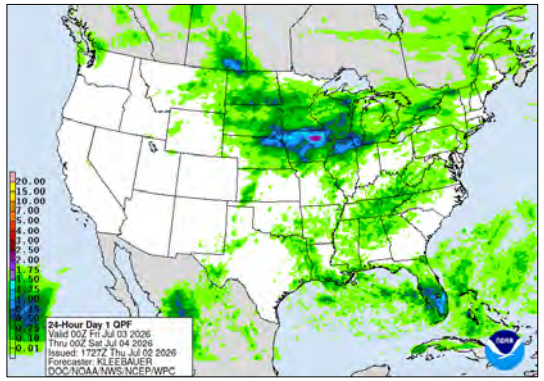


Keep the current deficits in mind at longer time scales. Trend remains promising, but long way to go & forecast uncertainty, mainly driven by isolated thunderstorms or tropical (in)activity as we move through summer.

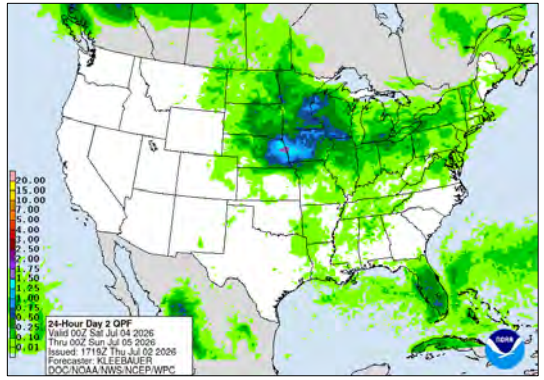
Quantitative Precipitation Forecast, 7-Day

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

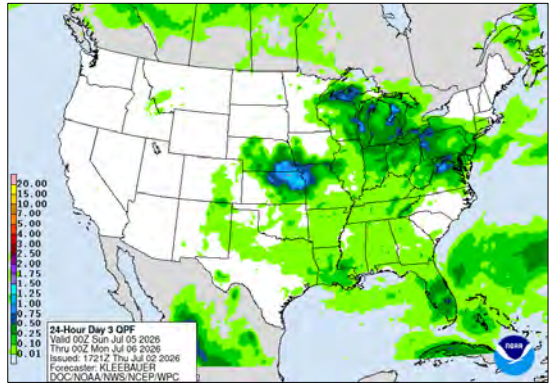
Day – 1 (8pm – 8pm)



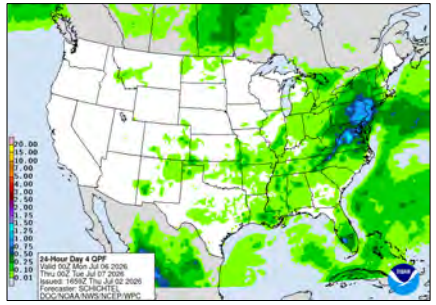
Day - 2



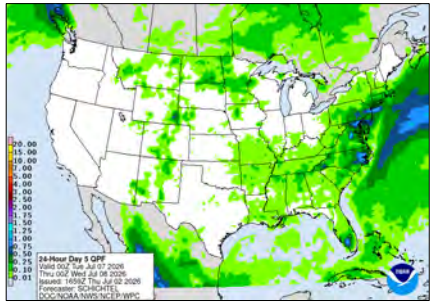
Day - 3



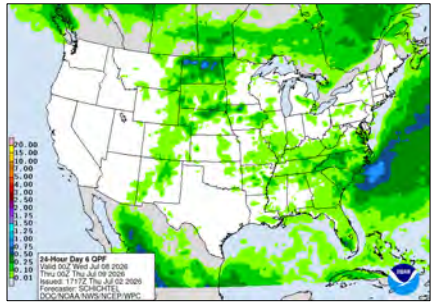
Day - 4



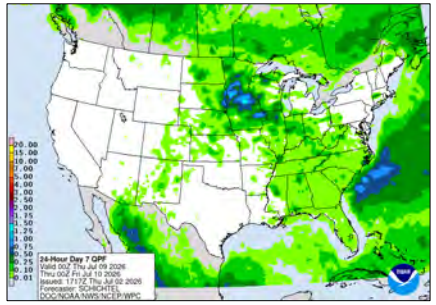
Day - 5



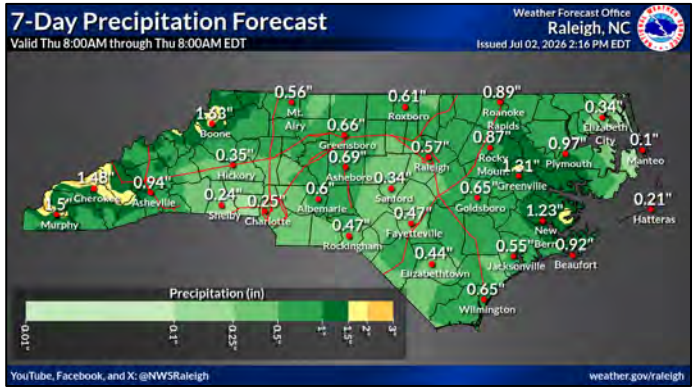
Day - 6



Day - 7

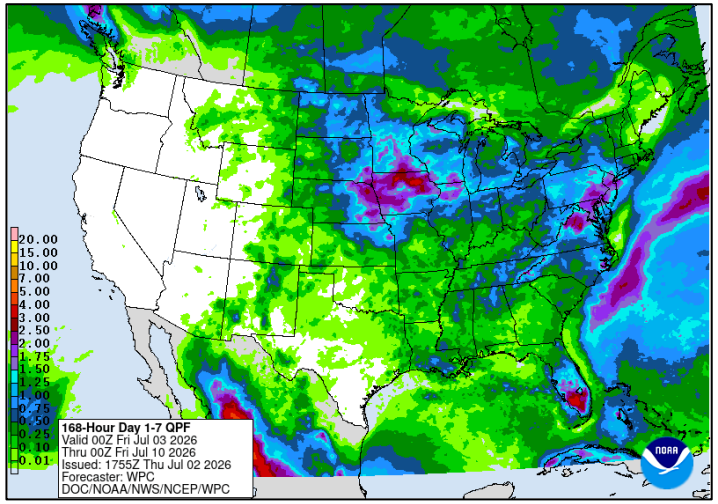


Zoom - Days 1 – 7 QPF

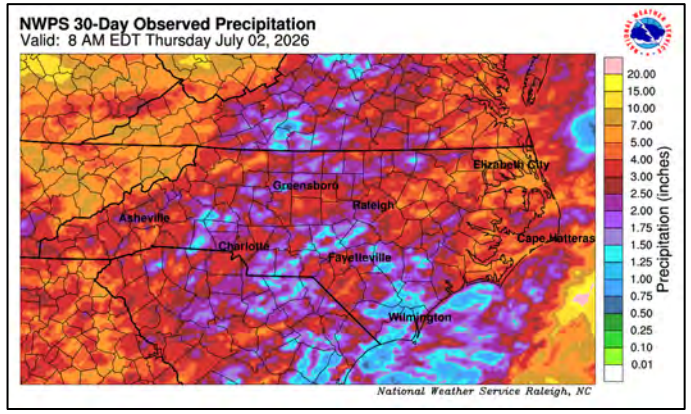


Better precip chances later in the period for the east, but subject to change. Lightning concerns continue.

Days 1 – 7 QPF

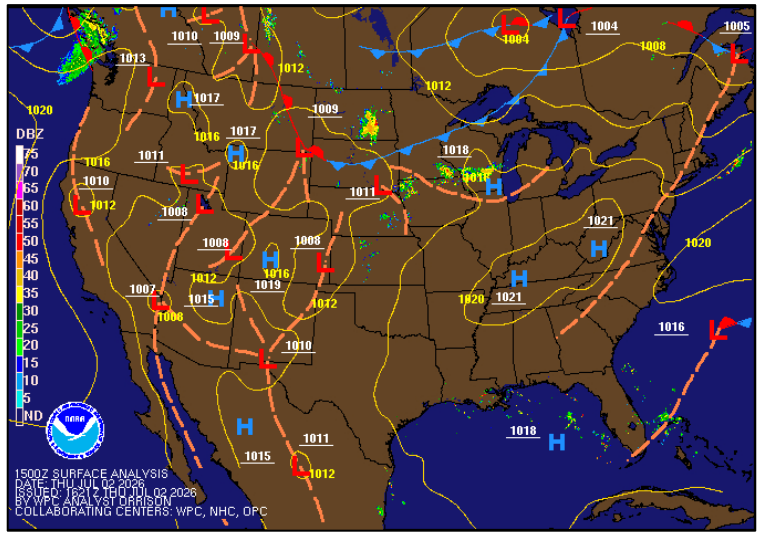


30-Day Observed Precip ending 7/2 am.

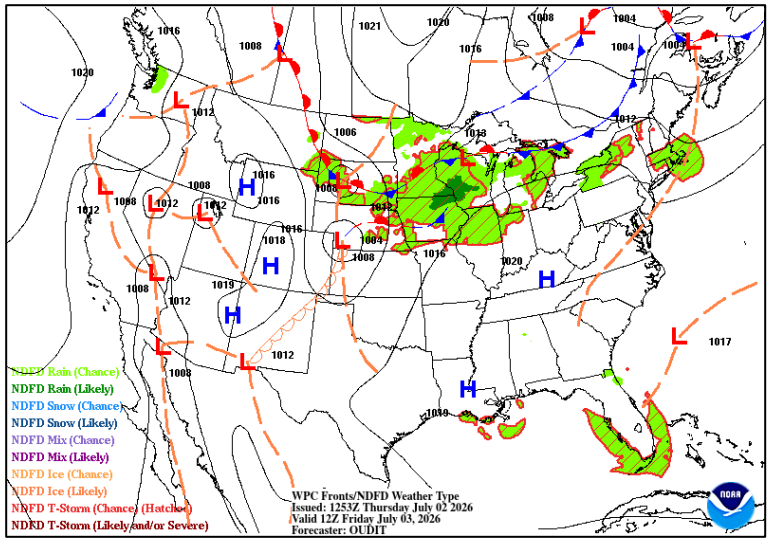


WPC Forecasted Surface Fronts & Sea-Level Pressures

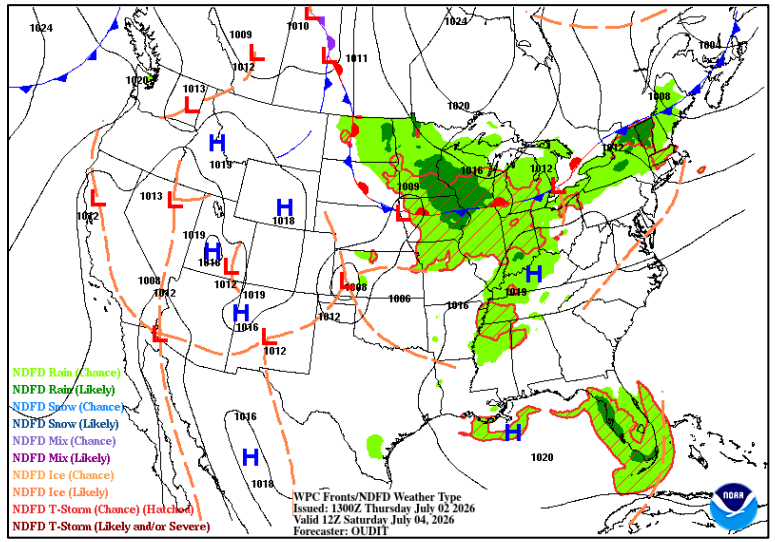
Day-1 @ 15Z Surface Analysis



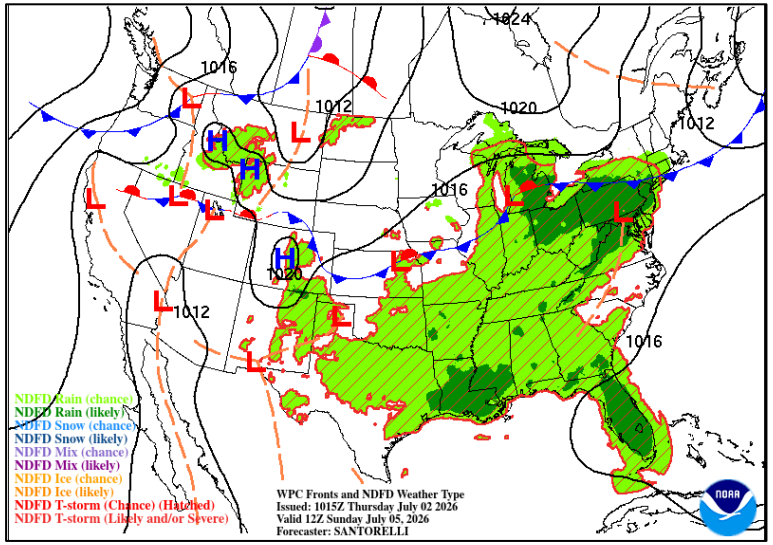
Day 2 - @ 12Z (0800 EDT)



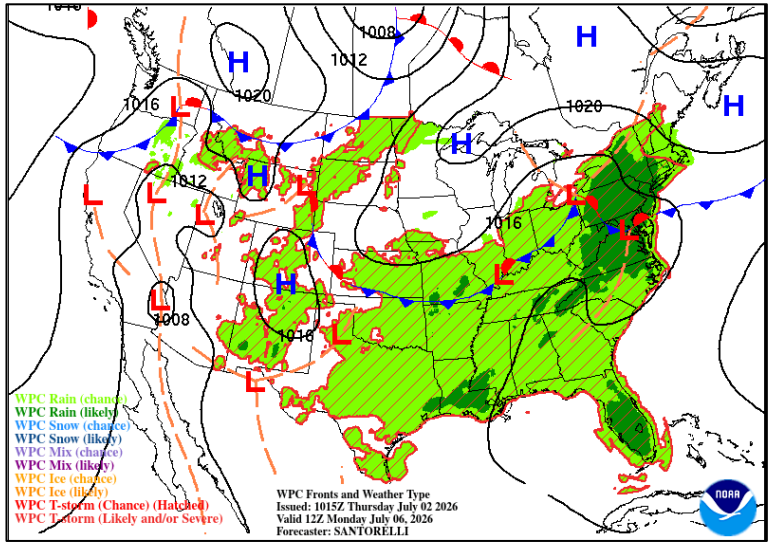
Day 3 @ 12Z (0800 EDT)



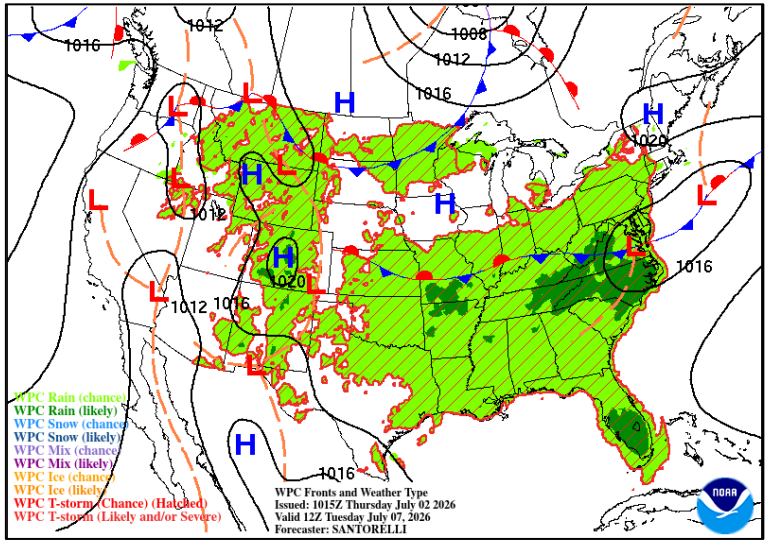
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



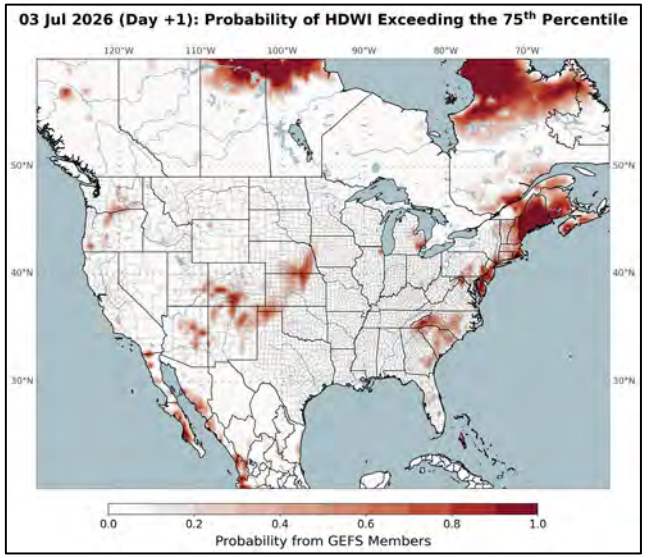
Day 6 @ 12Z (0800 EDT)



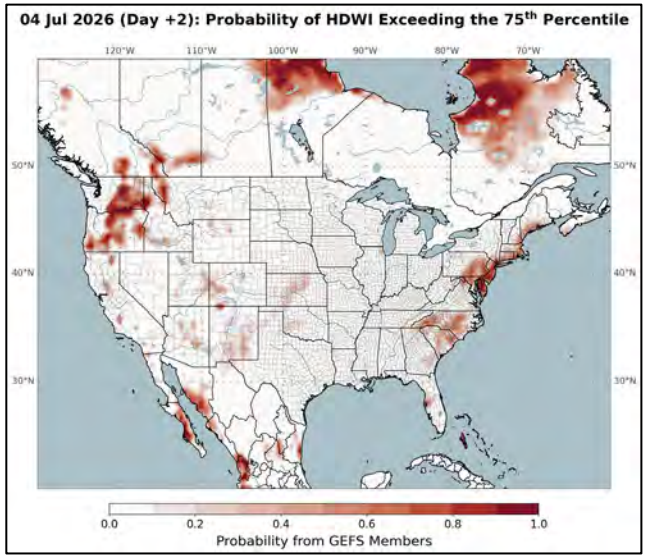
Location: https://www.wpc.ncep.noaa.gov/#

Hot-Dry-Windy Index (HDW)

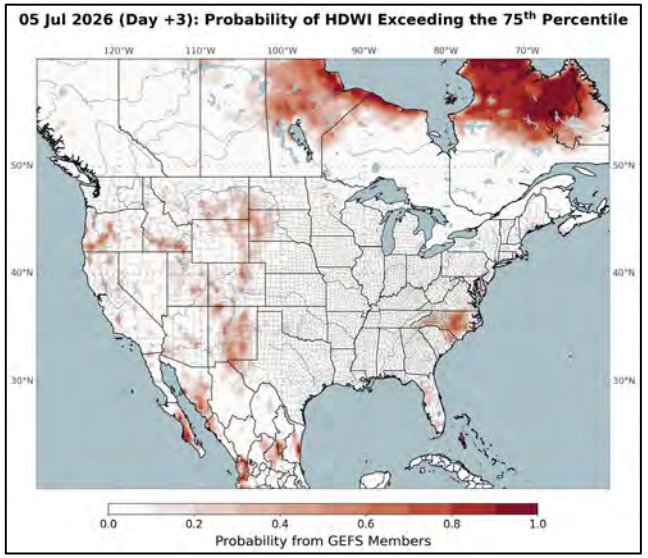
Friday > 75th Percentile



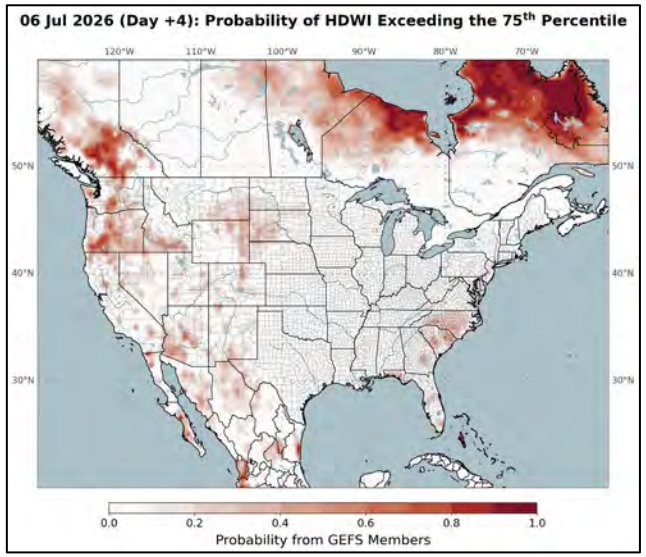
Saturday > 75th Percentile



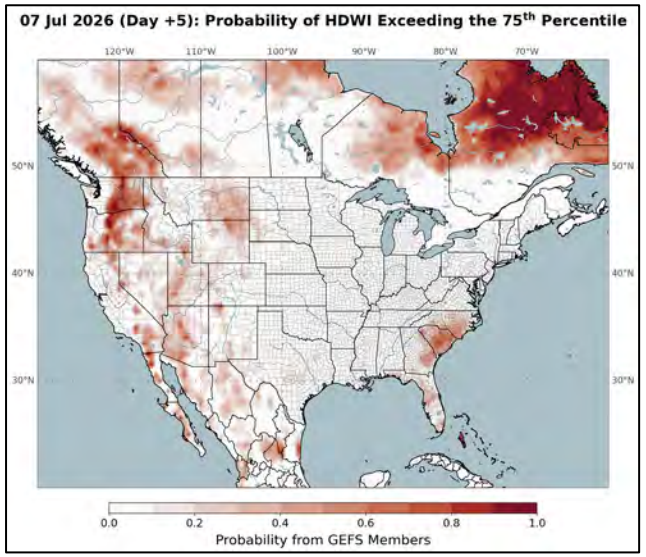
Sunday > 75th Percentile



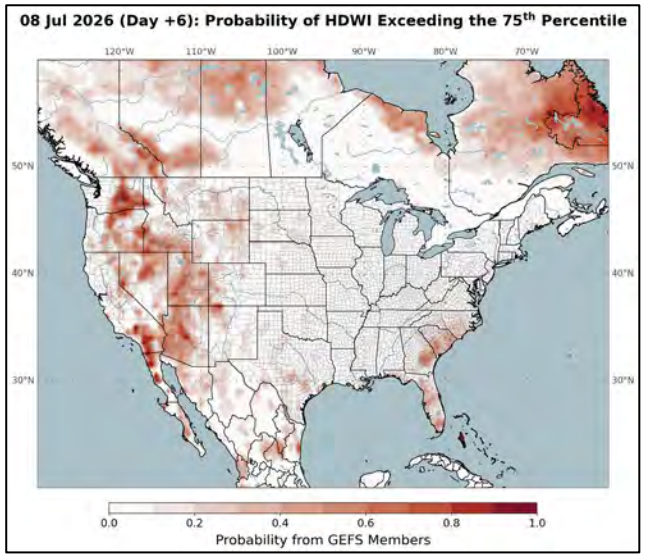
Monday > 75th Percentile



Tuesday > 75th Percentile



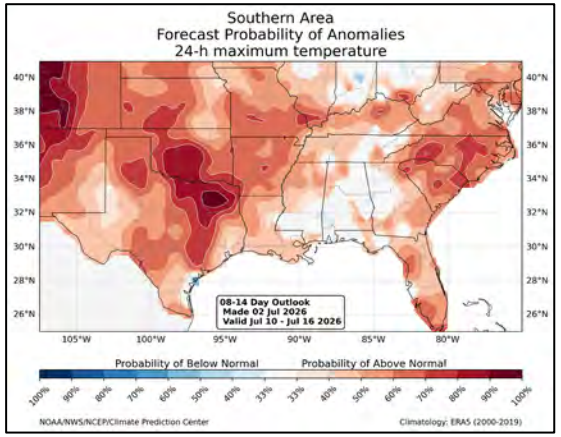
Wednesday > 75th Percentile

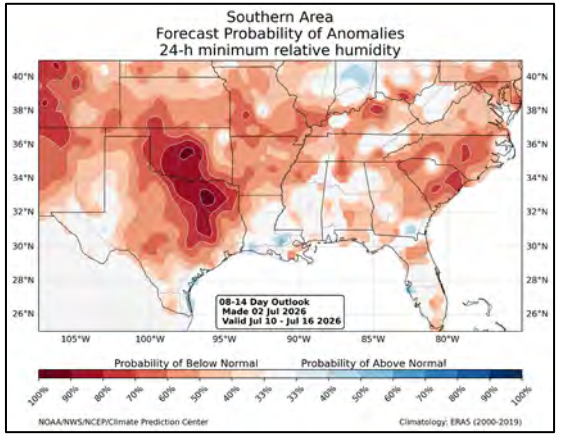


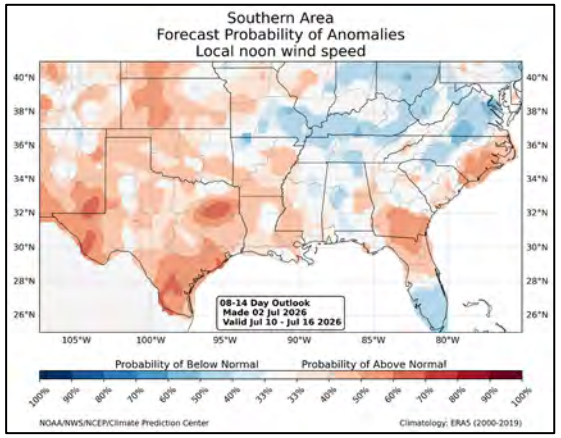
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

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

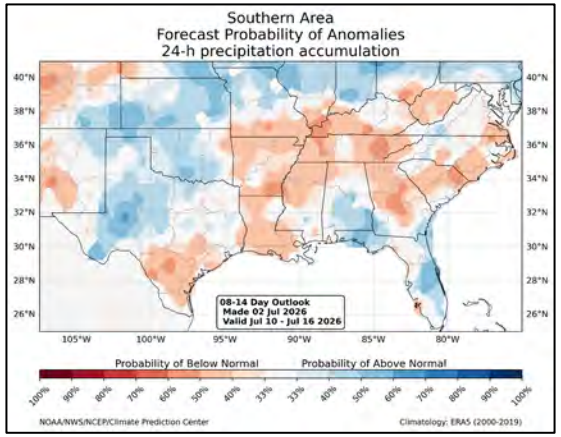
Week Two Forecast Anomalies: 7/10 – 7/16

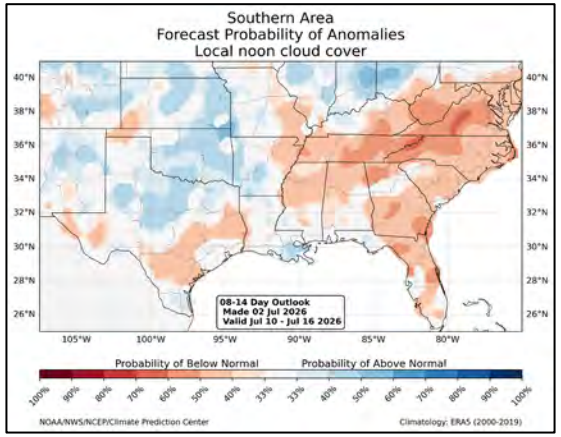






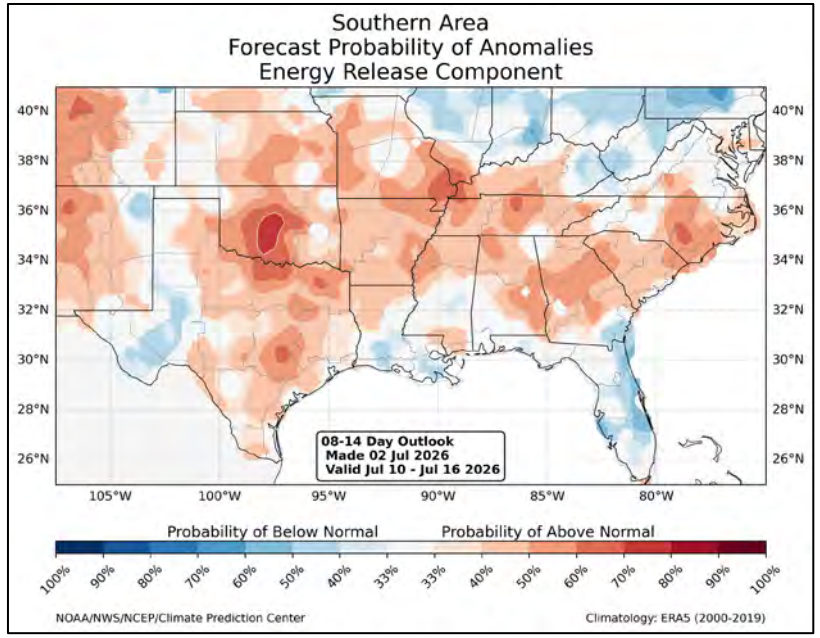
https://www.cpc.ncep.noaa.gov/products/extremes/fire-weather/cpc_wk2fw_index.html

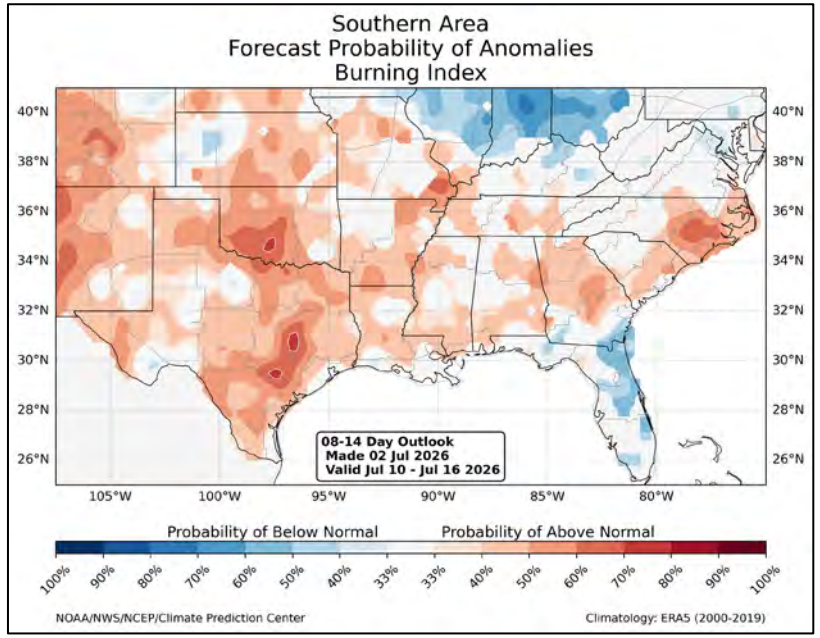




Important to note that there is significant forecast uncertainty as you go further out in time.

Models continue to favor warmer than normal temps/drier air, and near to below 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.

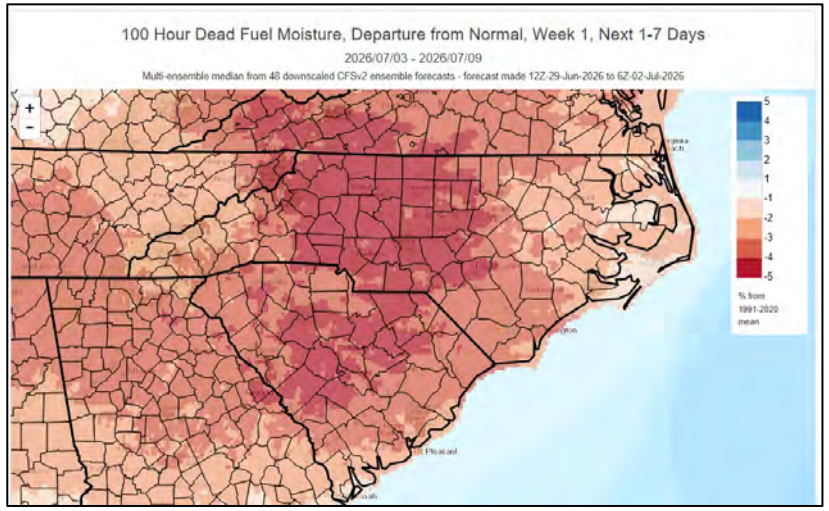




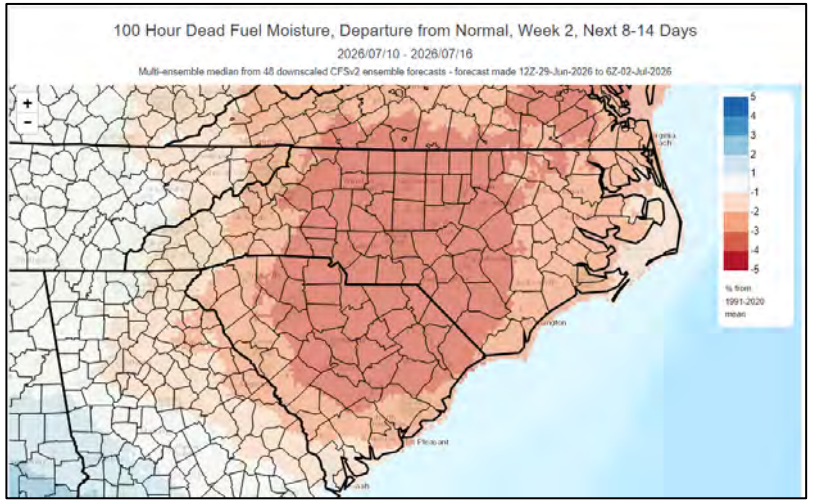
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1



Week-2

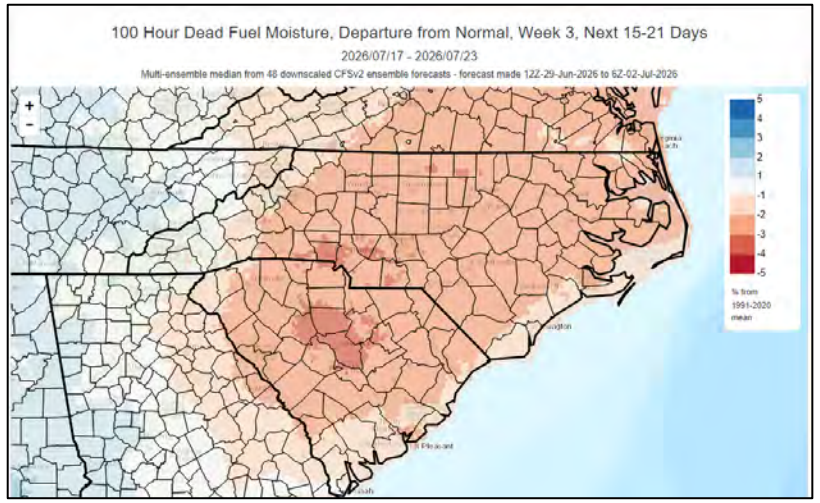


This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up or in drought conditions. Outputs relate to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration, wind and overnight RH recovery trends.

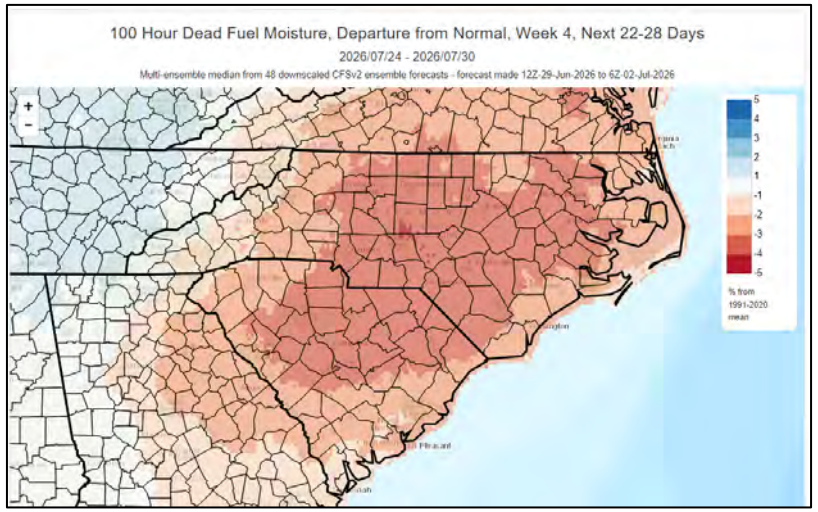
Note that <u>modeled</u> impacts of warmer/drier conditions (lower % mc or "worse") are forecast to be most significant during Week 1.

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

Week-3



Week-4



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

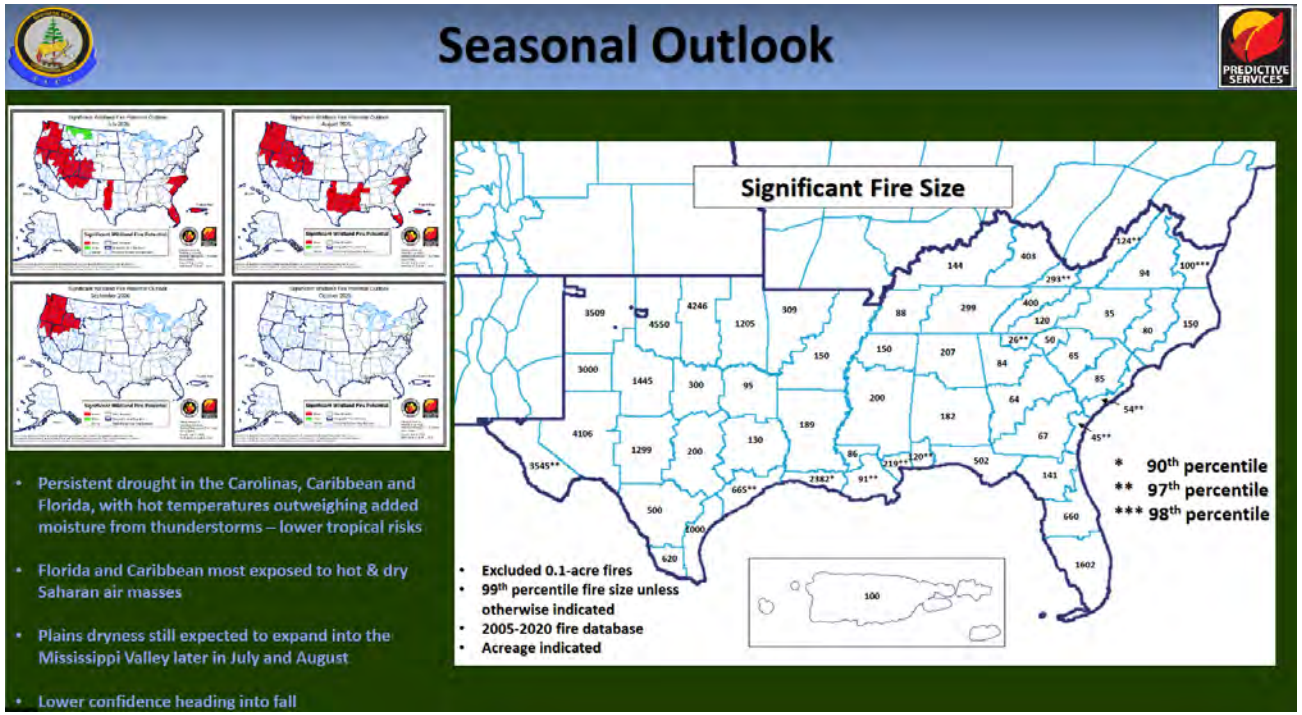
Significant Wildland Fire Potential Outlook: *Updated 7/1/26*

July

August

September

October



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:

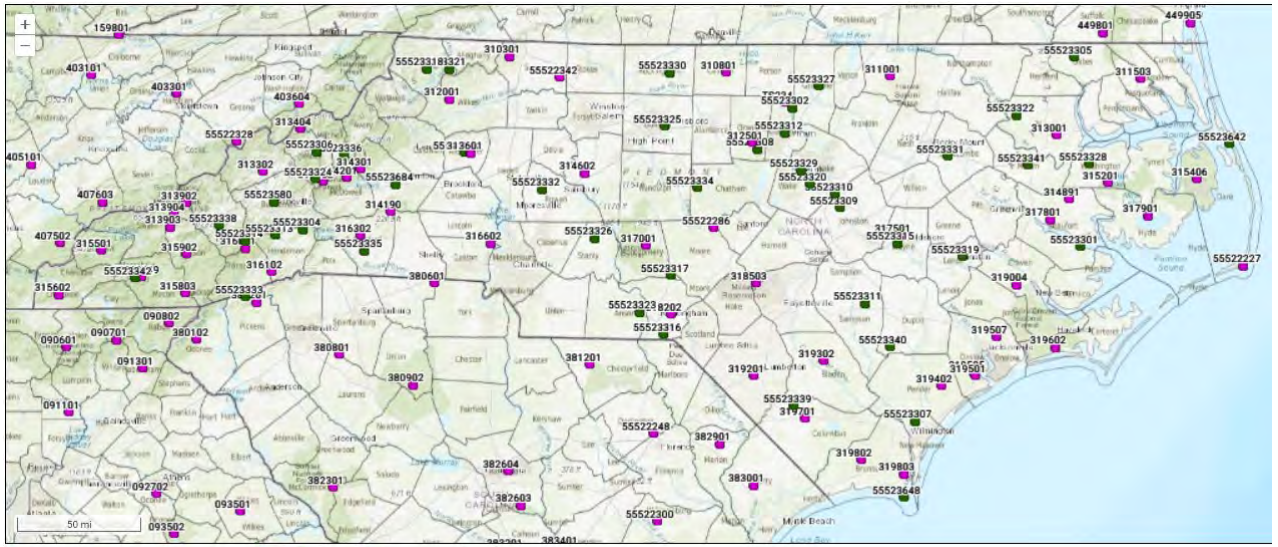
- Mesonet Stations lost on 10/1/25, added back to FEMS on 1/29/26 (no prior period of record), added back to our SIGS on 3/12/26 after models better aligned.
- **Live Fuel Moisture Model remains at national catalog settings** – does not match local conditions, especially as drought impacts build in Central 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.*



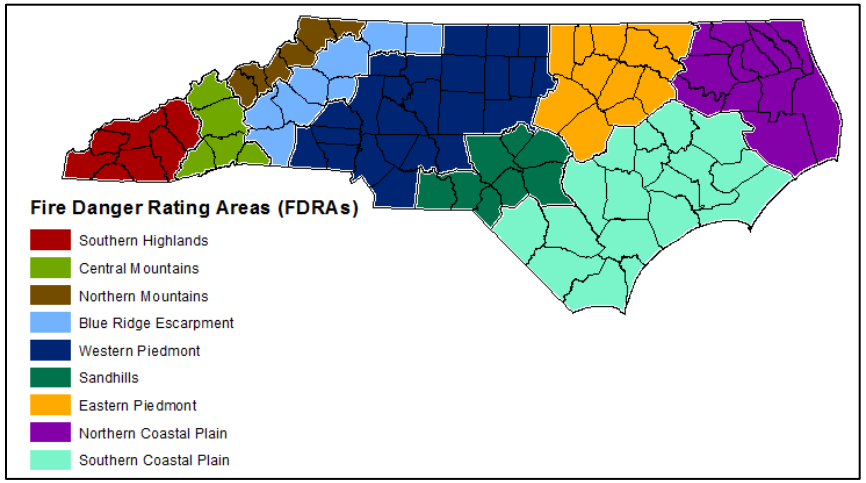
FDRA	Special Interest Group Stations (SIG Stations)	Missing SIG Stations
Northern Coastal Plain	Dare Bomb Range, Elizabeth City, Fairfield, Greens Cross, Pocosin Lakes NWR	0
Southern Coastal Plain	Beaufort, CL1 Sandy Run, New Bern, Turnbull Creek, Hofmann, Whiteville, Sunny Point, Finch's Station	0
Eastern 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

Important notes for next slide group:

Current ERC, KBDI, VPD-Max, 10-Hr, 100-Hr & 1000-Hr Graphics:

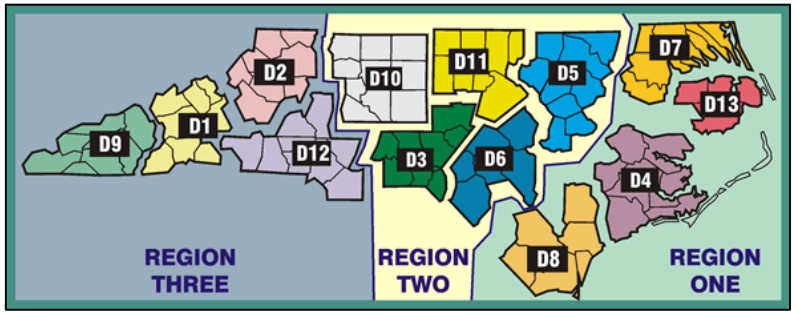
- These are extracts from FF+ using hourly observation data downloaded from FEMS
- Graphs run in calendar year format from Jan-Dec to stay consistent with FDOP and yearly Percentile process. Averages from SIG stations across each FDRA.
- Reference Slide #29 for FDRA SIG Station Lists
- Using 1/1/2010 to 7/1/26 Period of Record, FM-Z, FEMS Catalog Standards & set to Daily Extremes.
- East Piedmont FDRA has been included, using historical hourly data generated by NC-SCO (not FEMS since period of record starts in January of 2026 for mesonet stations).



Due to data & time constraints, the following FDRAs have slides this month:

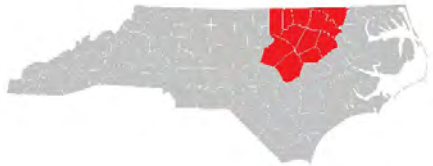
**(R2 = Region 2, R1 = Region 1)*

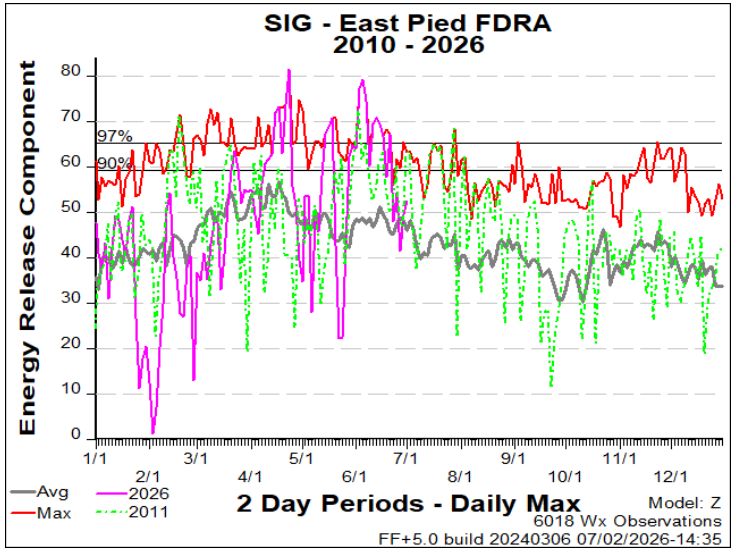
- Eastern Piedmont (R2)
- Sandhills (R2)
- North Coast (R1)
- South Coast (R1 & R2)

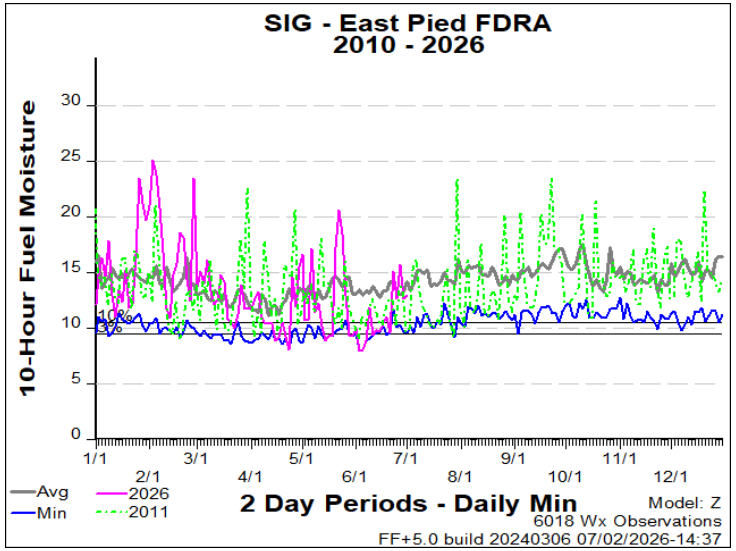


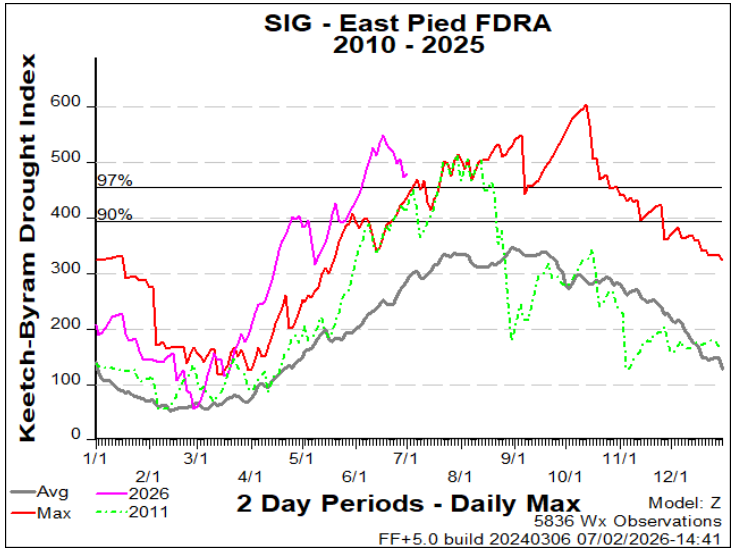
FDRA – Eastern Piedmont

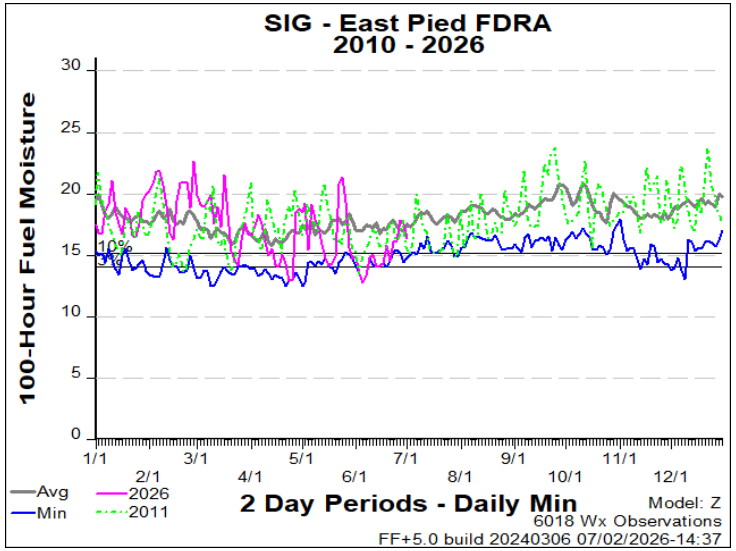
Reminder - these are averages of SIG stations outputs, some receiving much more precip than others recently. This leads to understating overall fire danger in drier locations.

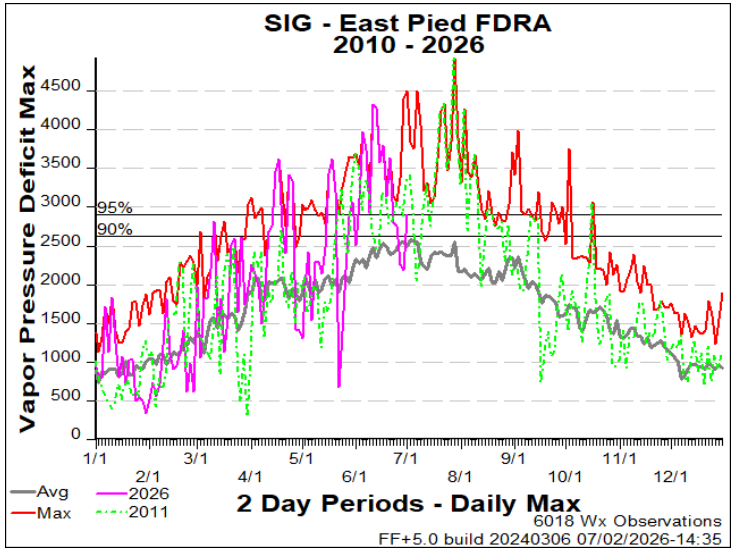


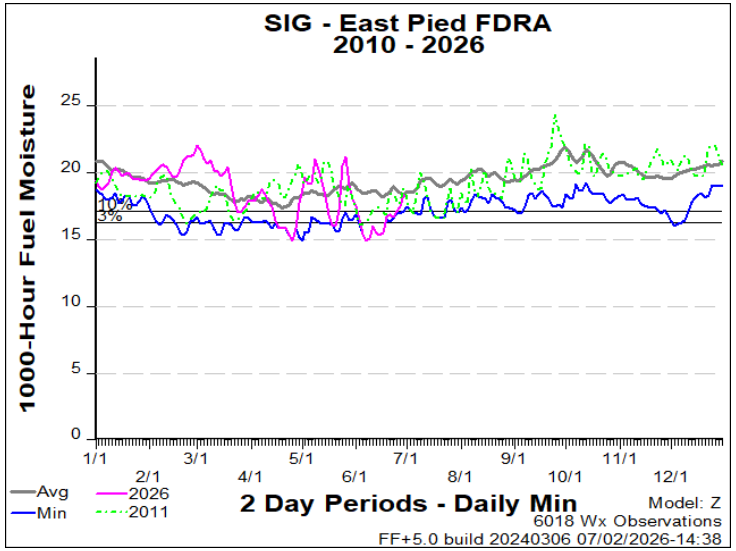






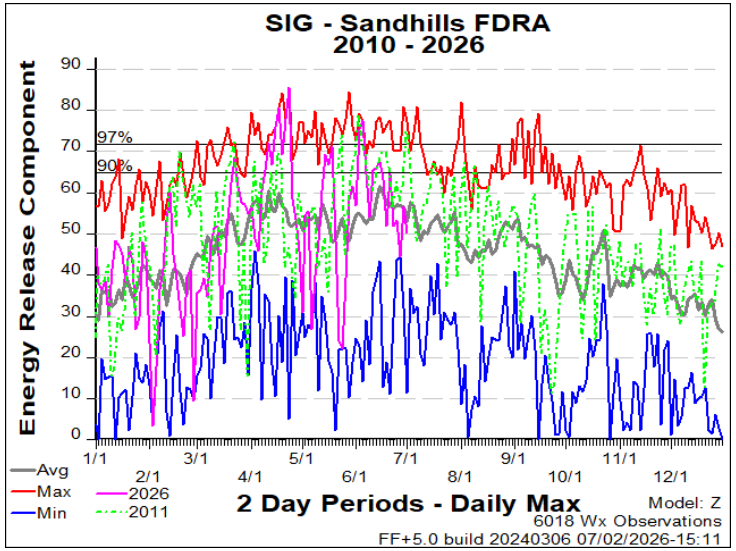


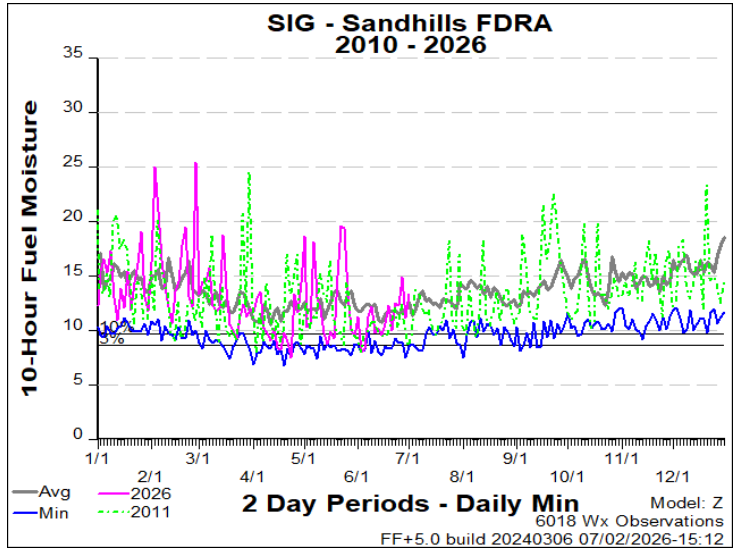


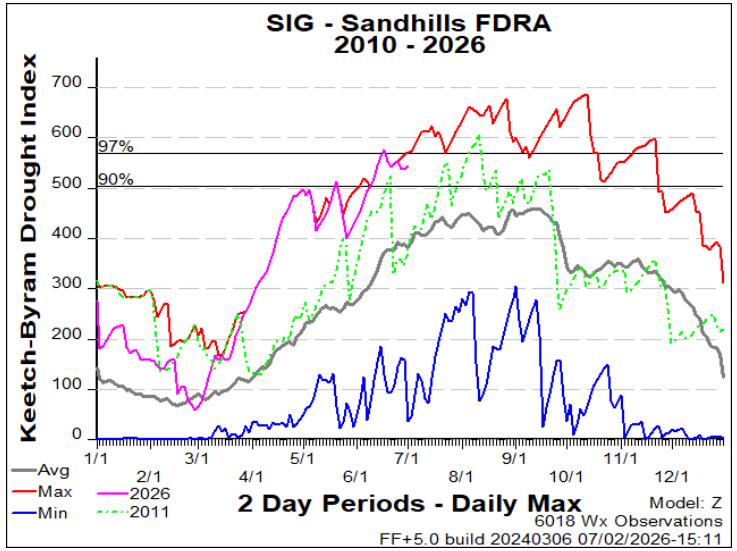


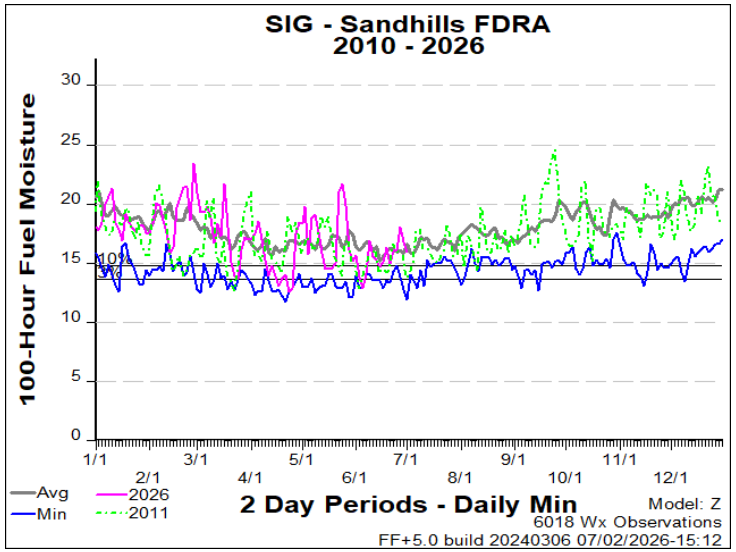
FDRA – Sandhills

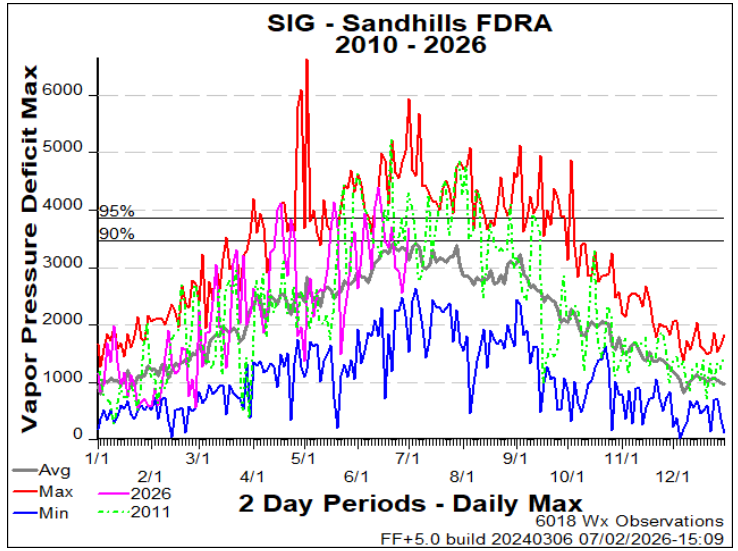
Reminder - these are averages of SIG stations outputs, some receiving much more precip than others recently. This leads to understating overall fire danger in drier locations.

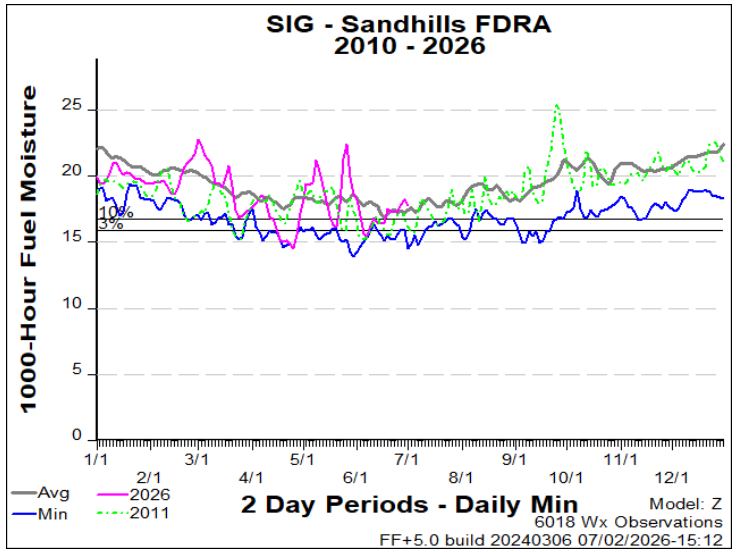






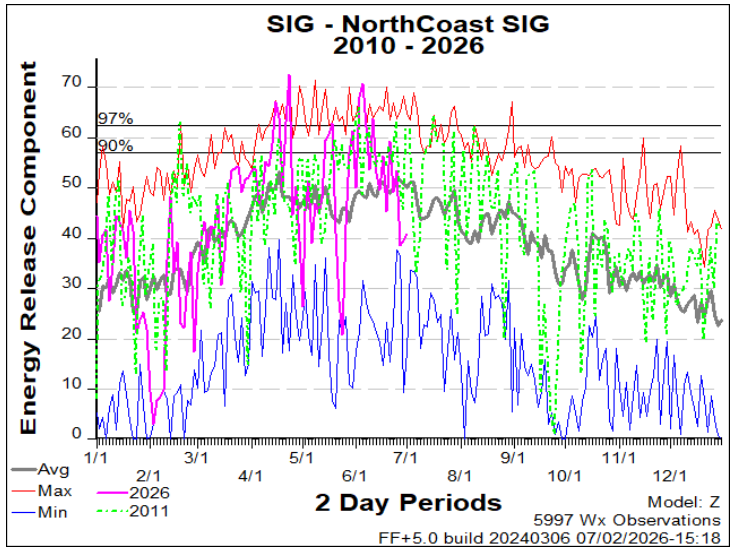


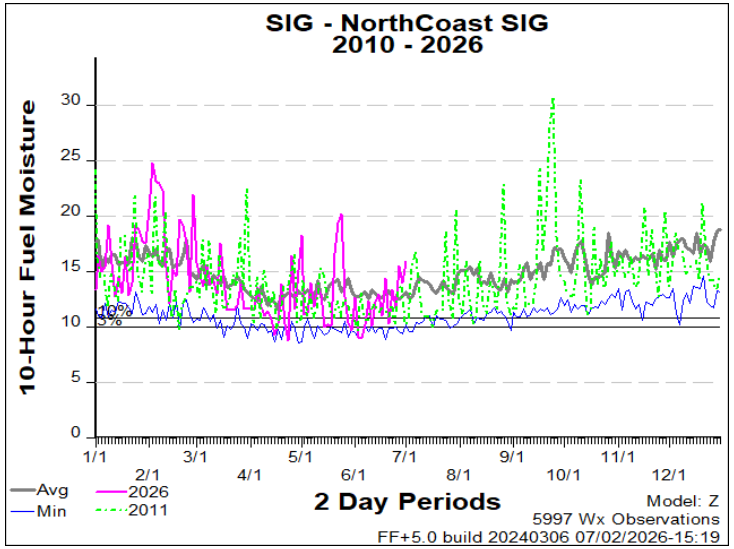


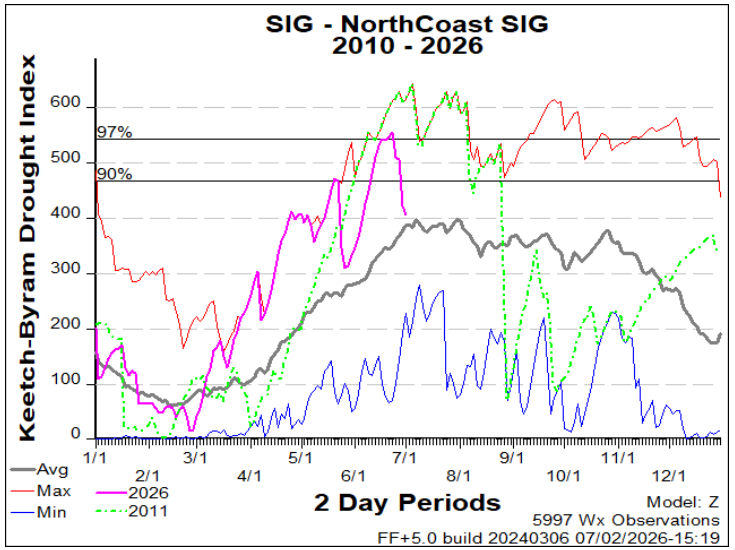


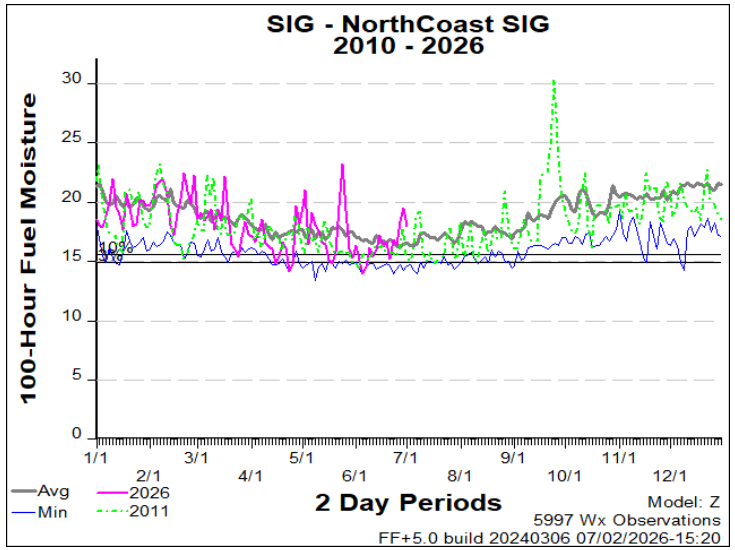
FDRA – North Coast

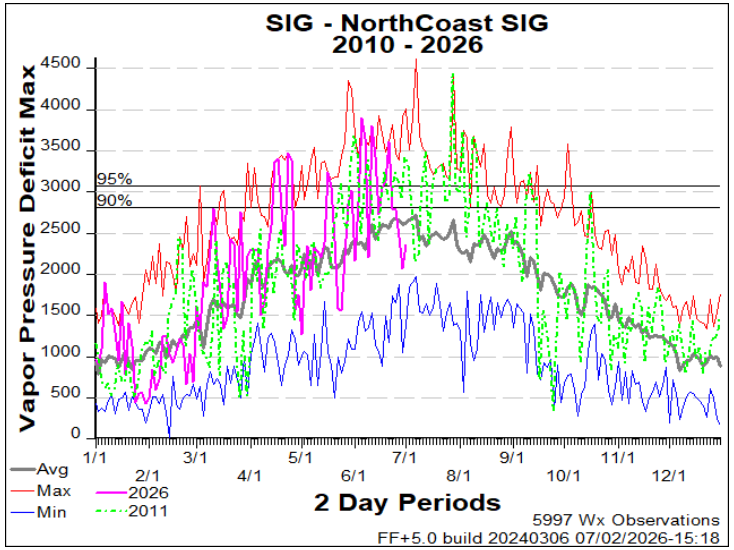
Reminder - these are averages of SIG stations outputs, some receiving much more precip than others recently. This leads to understating overall fire danger in drier locations.

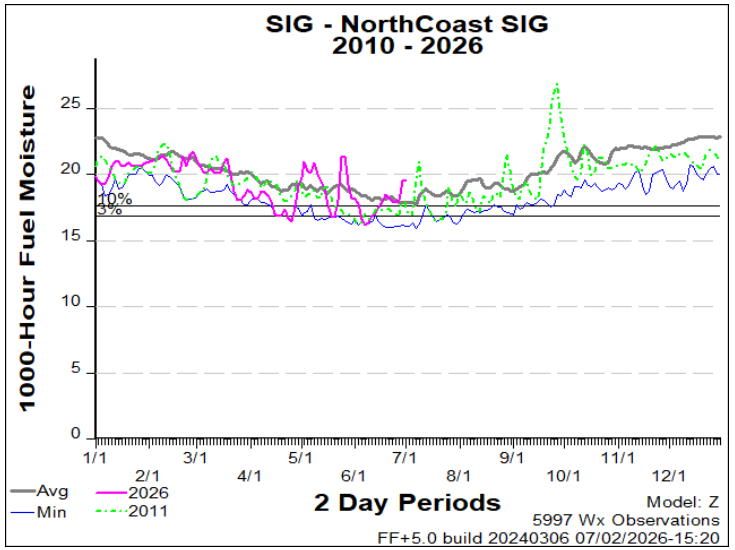






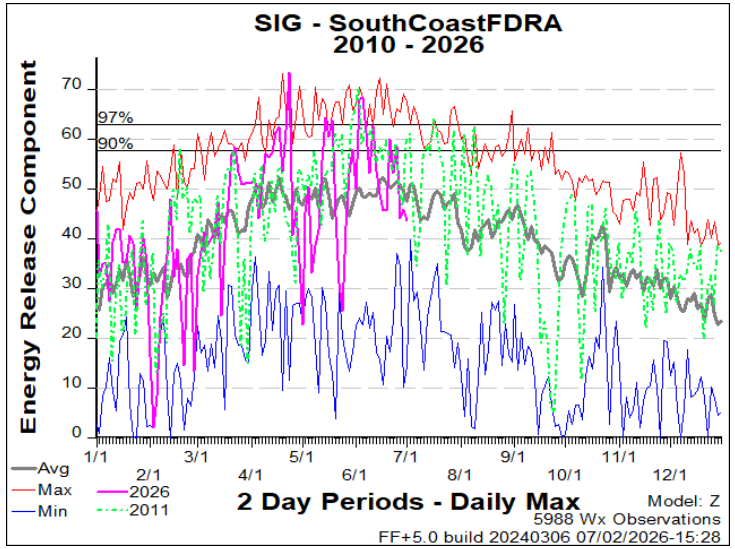


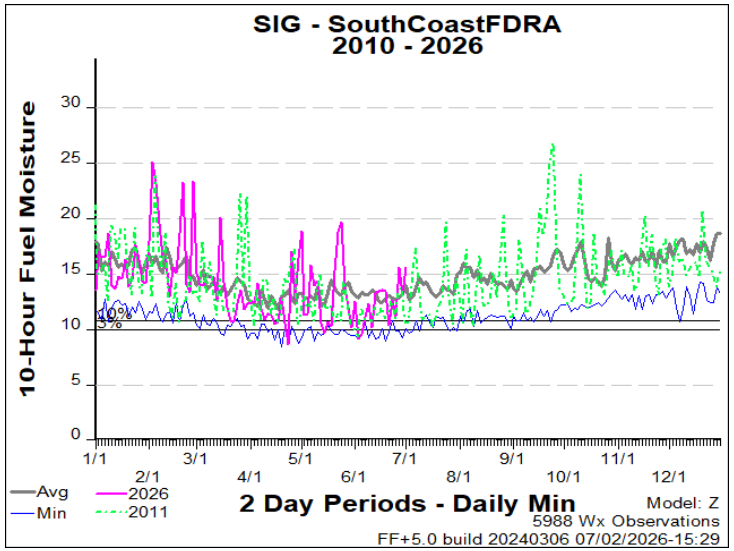


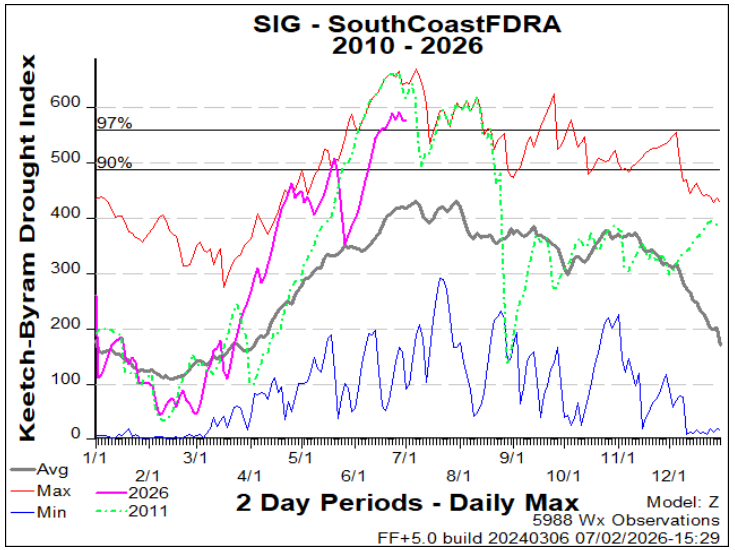


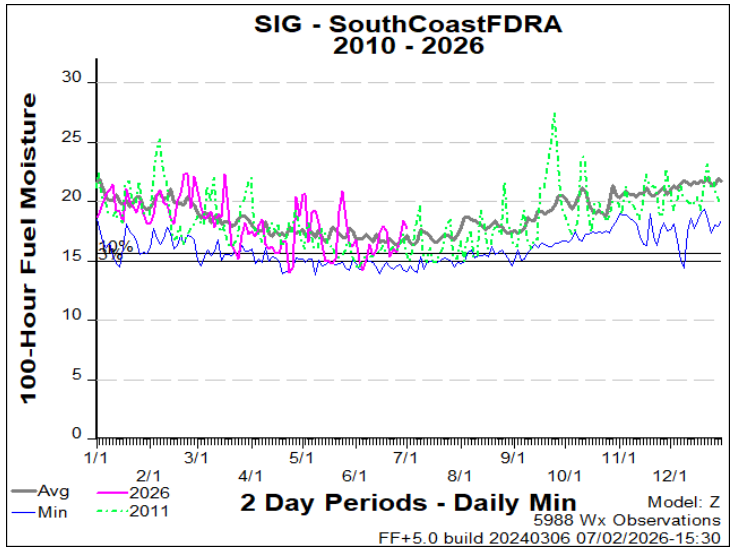
FDRA – South Coast

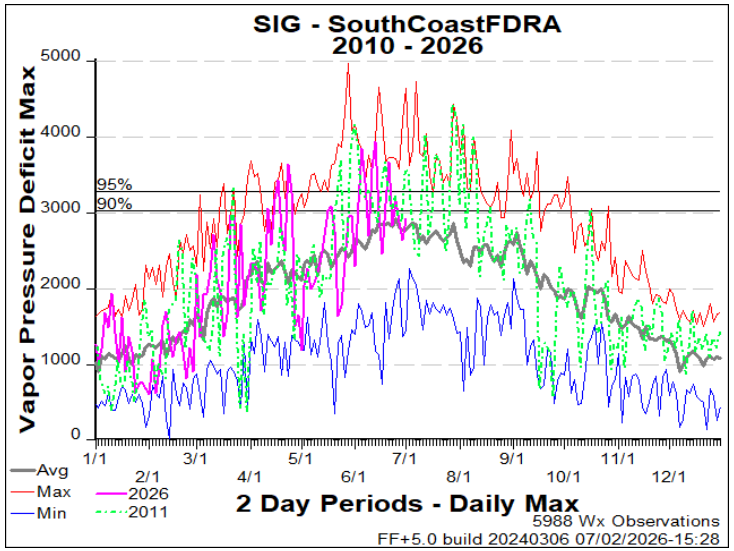
Reminder - these are averages of SIG stations outputs, some receiving much more precip than others recently. This leads to understating overall fire danger in drier locations.

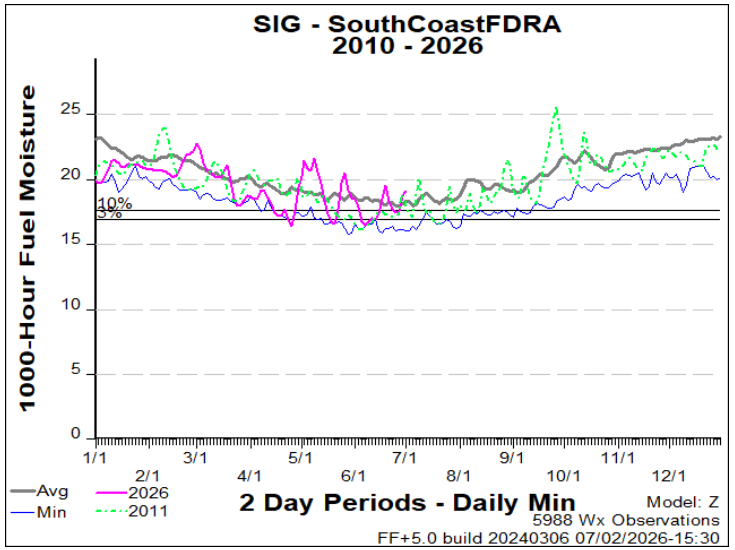












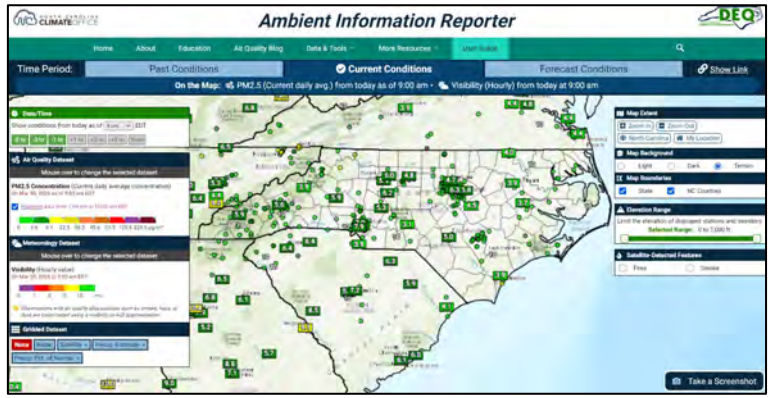
Fire Weather Intelligence Portal – Current Links & Notes

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.

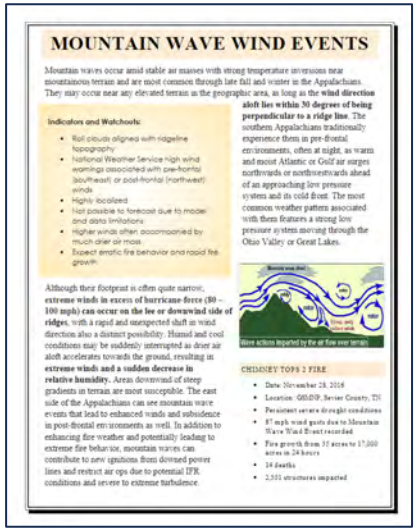
Other Resources:



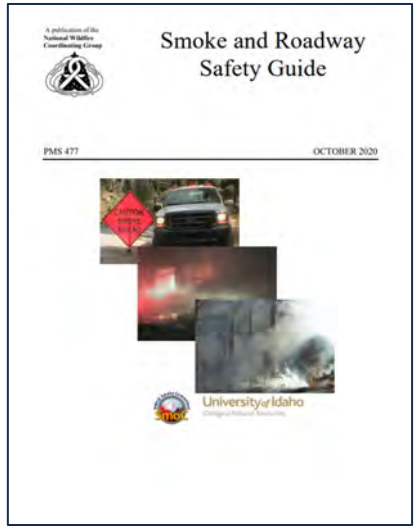
- https://airquality.climate.ncsu.edu/air/
- https://fire.airnow.gov/

"Fuels and Fire Management Considerations for Hurricane Damaged Areas"

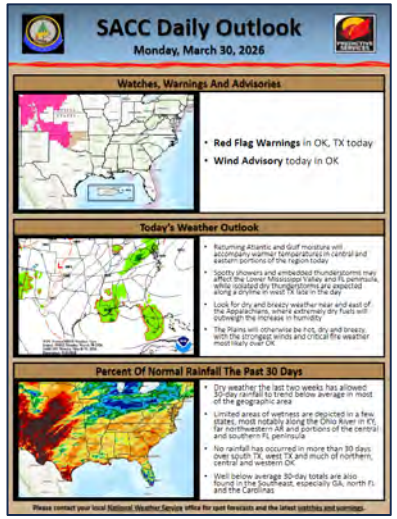
https://gacc.nifc.gov/sacc/resources/predictive/MaySpringRiskAssessment_20260506.pdf



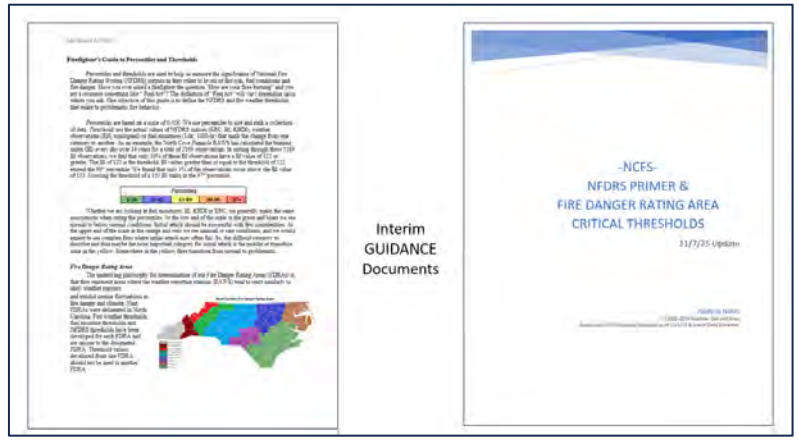
https://gacc.nifc.gov/sacc/predictive/outlooks/MountainWavesFactSheet.pdf



- 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



Interim GUIDANCE Documents

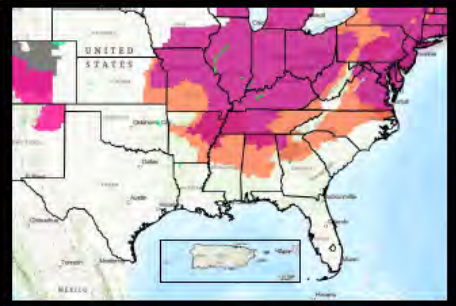
From SACC Daily Outlook – Thursday (7-2-26)

SACC Daily Outlook

Thursday, July 2, 2026

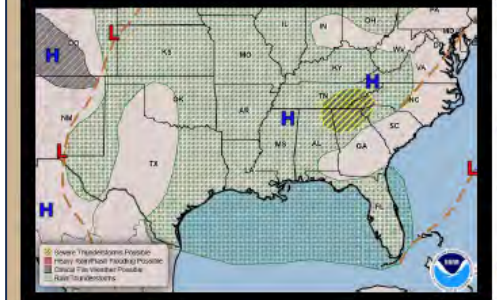
PREDICTIVE SERVICES

Watches, Warnings and Advisories



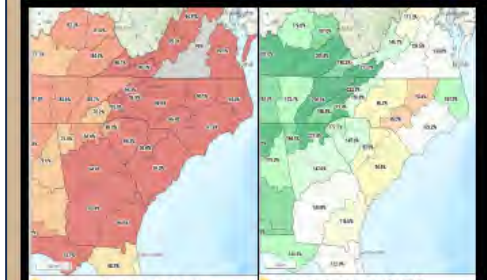
- **Extreme Heat Warnings** in AR, MS, AL, GA, TN, KY, VA
- **Extreme Heat Watch** in NC, AR
- **Heat Advisories** in AR, MS, AL, TN, GA, SC, NC, VA

Today's Weather Outlook



- Most of the region will see above average temperatures today, with triple-digit record heat in North Carolina and Virginia
- Scattered severe thunderstorms will develop over the southern Appalachians and Tennessee Valley similar to yesterday
- Look for scattered to numerous thunderstorms across south Florida and the Texas mountains, while storms depicted elsewhere will be more isolated
- Dry air accompanying the heat this afternoon will focus fire risks from drier parts of the central and northern Florida peninsula into the Carolinas, while the Caribbean islands will see dry, hot and breezy conditions, as well
- Record heat will persist in the eastern states into the weekend, peaking Friday and Saturday in most areas

ERC Percentiles and Live Fuel Moisture This Weekend



- Maximum ERC percentiles (left) and minimum herbaceous fuel moisture (right) for July 4th are depicted in the eastern states
- ERC-Y & Z do not account for live fuel moisture and are forecast to exceed the 97th percentile due to lingering drought, along with the hot and dry weather that will carry in many areas through the holiday weekend and locally into early next week
- Multiple RAWS are forecast to see near-record to record high ERCs for this time of year in the Carolinas and Virginia, along with record low 1000-hour dead fuel moisture
- Live fuel moisture is lowest where rainfall deficits and vapor pressure deficits due to hot & dry weather have been most extreme from late spring into early summer, focused on the eastern Piedmont, Carolina Sandhills and portions of the coastal plain
- Where the more extreme indices overlap, significant fire potential (SFP) will increase through early next week

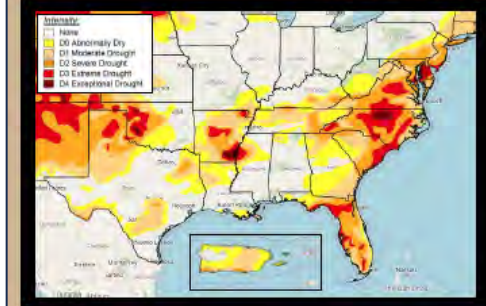
Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.

SACC Daily Outlook

Thursday, July 2, 2026

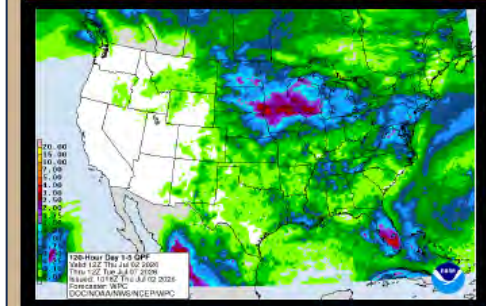
PREDICTIVE SERVICES

U.S. Drought Monitor Update



- This week's drought monitor maintained areas of exceptional drought in Oklahoma, Arkansas, Mississippi and North Carolina
- Extreme drought persisted or shifted a bit across the Texas High Plains into western Oklahoma, parts of Arkansas and Mississippi, in addition to large parts of Virginia, the Carolinas and Florida
- Extreme drought increased over south Florida but decreased in the north; rainfall led to some improvements over parts of the Carolinas and Mid-Atlantic, while drier areas saw one-category degradation
- Drought increased over the Caribbean islands, with severe drought continuing in southern Puerto Rico and all of the U.S. Virgin Islands
- One to two category improvement affected areas that saw flooding rainfall over the last one to two weeks, including from Oklahoma into the Mississippi Valley

Potential Rainfall Through Tuesday Morning



- The wettest areas into early next week will be over the southern Florida peninsula and perhaps northern Virginia
- Scattered thunderstorms will otherwise be the rule amid mostly drier conditions
- As thunderstorms return to the Mid-Atlantic and droughtier areas of the Southeast, lightning ignitions may be especially likely with the hot and dry holiday weekend ahead making fuels more receptive
- Wetter trends are forecasted just beyond this period in the coastal Carolinas, while Florida is likely to trend drier next week
- The highest chances for beneficial rain in the Caribbean islands will come with a tropical wave around the middle of next week

July Significant Fire Potential Outlook

- Above normal significant fire potential is forecasted for much of North Carolina, the South Carolina coastal plain, the Florida peninsula, the Texas Hill Country into the Rolling Plains and western Oklahoma, in addition to the Caribbean islands
- 30-day rainfall deficits are growing in the Plains, and developing hot and dry weather this month will likely lead to an increase in large fire risks for the latter half of the month, which will increase further during August
- Despite some rainfall in the Southeast, hot temperatures have outweighed the benefits in many areas; the overall pattern of above normal to record-breaking temperatures intermixed with thunderstorm activity should maintain higher than normal large fire risks where severe to exceptional drought persists
- After a wet winter and early spring in the Caribbean, abundant fine fuels are cured due to a lengthy stretch of hot and dry weather; above normal trade winds are expected, with intrusions of dry Saharan air likely to limit rainfall most of the month
- Flash drought impacts may increase the risk for a more expansive area of above normal significant fire potential heading into August

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

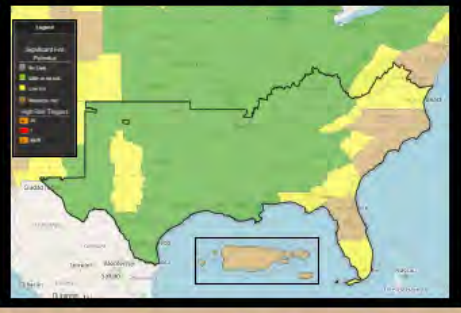
From SACC Daily Outlook – Thursday (7-2-26)

SACC Daily Outlook

Thursday, July 2, 2026

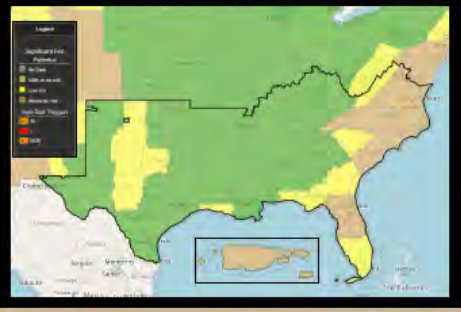
PREDICTIVE SERVICES

Significant Fire Potential Outlook Today



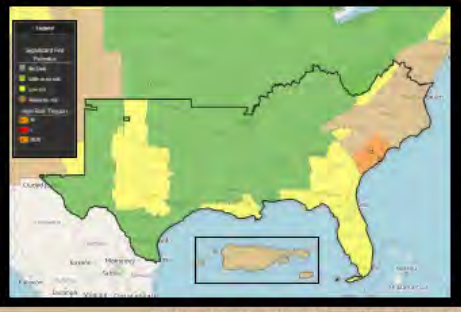
- Moderate SFP over central and north Florida will occur with hot conditions and RH as low as 30-40%, locally lower; most areas will be dry, but isolated storms are possible, which could lead to new ignitions and erratic outflow winds
- The Carolinas will see an increase in SFP today as hot and dry weather is followed by gusty sea breeze winds; isolated storms over the mountains could bring outflow boundaries into the Piedmont, as well; look for sea breeze wind shifts with gusts of 15-25 mph for the coastal plain PSAs
- The Caribbean islands will see an increase in fire risks today as hot, dry and breezy weather returns; isolated storms could still form, mainly on the northwest side of Puerto Rico
- Low SFP in the rest of the Southeast will occur as hot and dry weather continues, while isolated lightning ignitions are possible; Texas will see seasonably hot, dry and breezy conditions amid increasing rainfall deficits

Significant Fire Potential Outlook Friday



- Moderate SFP will continue to build in the Carolinas and Virginia as record highs in the upper 90s to mid-100s are accompanied by RH as low as 20-40%, lowest for the Piedmont and foothills; sea breeze winds will shift near the coast, bringing higher gusts in the afternoon
- A few pop-up storms will develop over the Appalachians, potentially leading to lightning ignitions in areas that have been unusually dry recently, while dead fuels associated with Helene will be most problematic
- Central and north Florida will continue to see hot and mostly dry conditions, with lightning holdovers possibly emerging and the potential for new ignitions as isolated storms develop
- Moderate SFP is forecasted for the Caribbean islands as drier trends continue

Significant Fire Potential Outlook July 4th



- **South Carolina**: a high-risk burn environment is expected in the coastal plain as fuels trend extremely dry amid very hot and unstable conditions; sea breeze winds are likely to increase, with gusts of 25-30 mph, which will extend into southern North Carolina, as well
- Moderate SFP is otherwise forecast in the Carolinas and Virginia as very hot and dry conditions continue; scattered storms will develop over Virginia, potentially bringing outflow winds and isolated lightning starts well away from any rainfall
- Hot, dry and breezy conditions will lead to drier fuels in the Caribbean, where moderate SFP is expected
- Florida will overall trend wetter, while low SFP will persist in coastal Louisiana and increase slightly over Texas

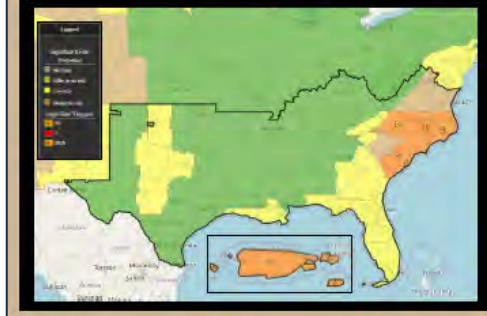
National 7-Day Significant Fire Potential Outlook High Risk Trigger Definitions

SACC Daily Outlook

Thursday, July 2, 2026

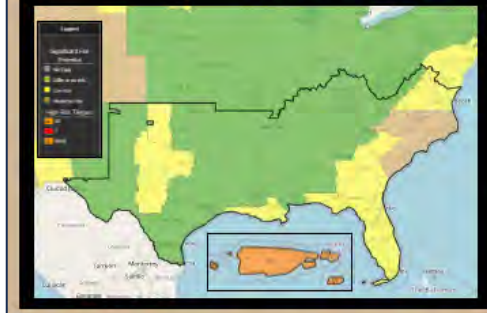
PREDICTIVE SERVICES

Significant Fire Potential Outlook Sunday



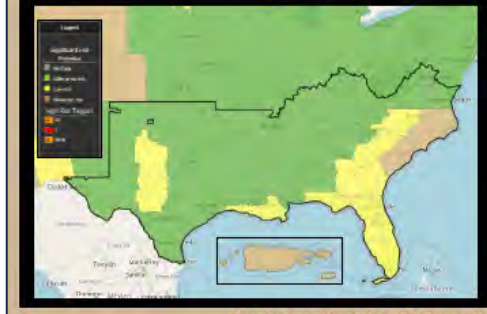
- **Carolinas**: high-risk SFP will expand in coverage Sunday as fuels become extremely dry amid persistent very hot and dry weather; sea breeze winds will trend even stronger, likely gusting from 25-30 mph over a larger area than on the 4th; ignitions sources will also increase due to holiday recreation and possibly an isolated thunderstorm along the sea breeze front
- **Caribbean**: high-risk SFP is expected as dry trade winds increase amid highly receptive fine fuels; risks for wind-driven fires will be highest over southern Puerto Rico, where near-record high fire danger indices are forecasted
- Hot temperatures, drought and potential lightning ignitions will otherwise continue over the coastal Southeast, while Texas will remain dry and seasonably hot

Significant Fire Potential Outlook Monday



- **Caribbean**: hot, dry and windy conditions will persist over the islands Monday, continuing a high risk for wind-driven fires
- At least moderate SFP is likely in the Carolinas again, and if the timing of a front holds steady, high-risk SFP will be likely in the same areas as Sunday; the potential for frontal or sea breeze thunderstorms after the hot and dry stretch could greatly increase the risk of lightning-ignited fires and erratic winds, as well
- Virginia may trend milder and stormier, while scattered storms will continue from south Georgia into Florida, extending west along portions of the Gulf Coast
- Texas will remain seasonably hot, while isolated dry storms are possible in Oklahoma and north Texas

Significant Fire Potential Outlook Tuesday

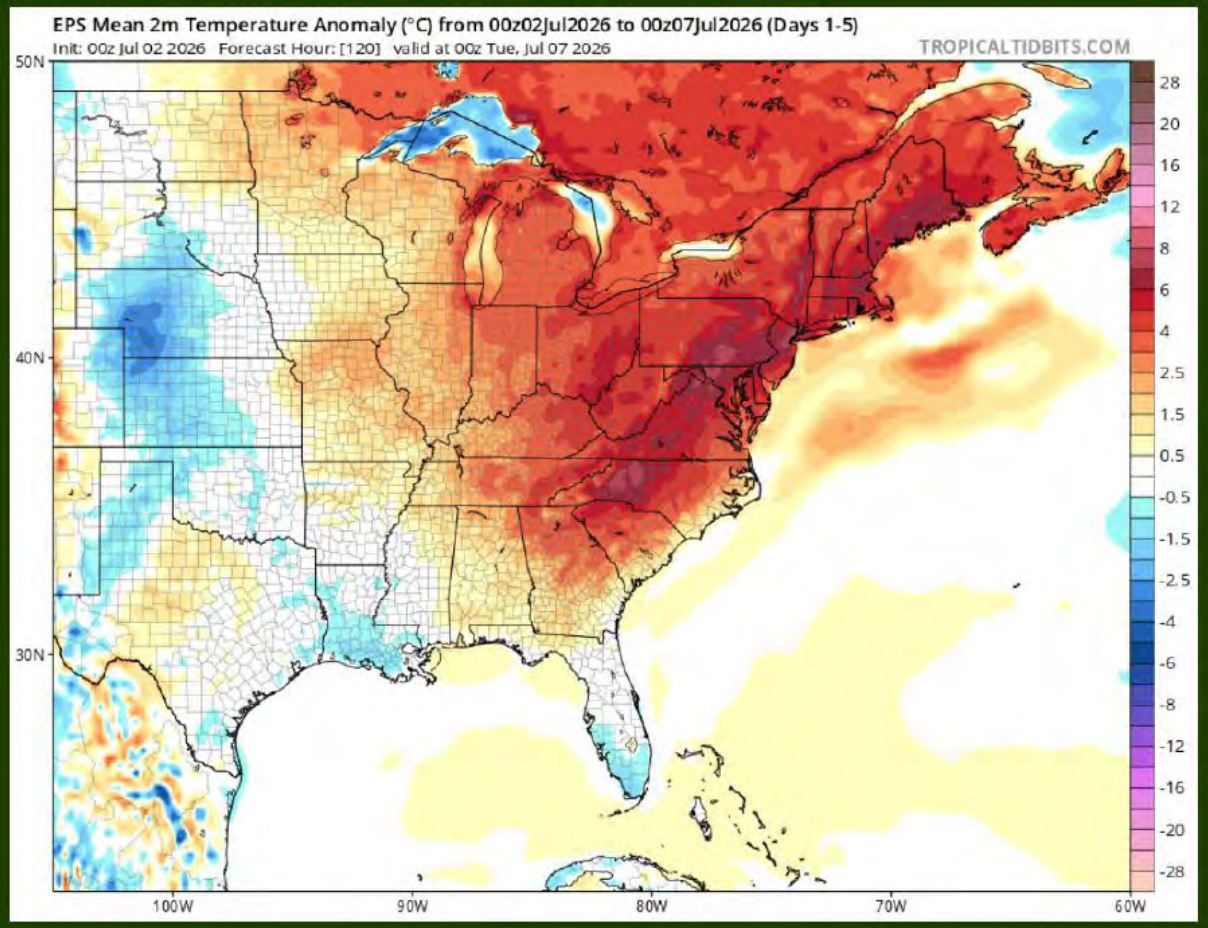


- Hot temperatures will likely persist in the Carolinas, but thunderstorm chances will be considerably higher as humidity increases and a front is stretched across the area; lightning high-risk triggers may be added if confidence increases early next week
- At least moderate SFP will continue in the Caribbean, but high-risk wind triggers may be required as burning indices and ERCs reach a peak prior to an increase in moisture that night or the following day; some models track this tropical wave in more rapidly, but the consensus is for a slower and drier day, with higher winds Tuesday
- Thunderstorm coverage will likely begin to decrease as a high pressure ridge builds over Florida Tuesday, but moisture through the holiday weekend should limit the areas of concern
- A decrease in SFP is expected for Puerto Rico and the Carolinas later next week, while activity will likely increase over Florida; heat is likely to intensify in the Plains, with large fire risks increasing there by mid-month

North Carolina State University Fire Weather Intelligence Portal

Record Heat in the East

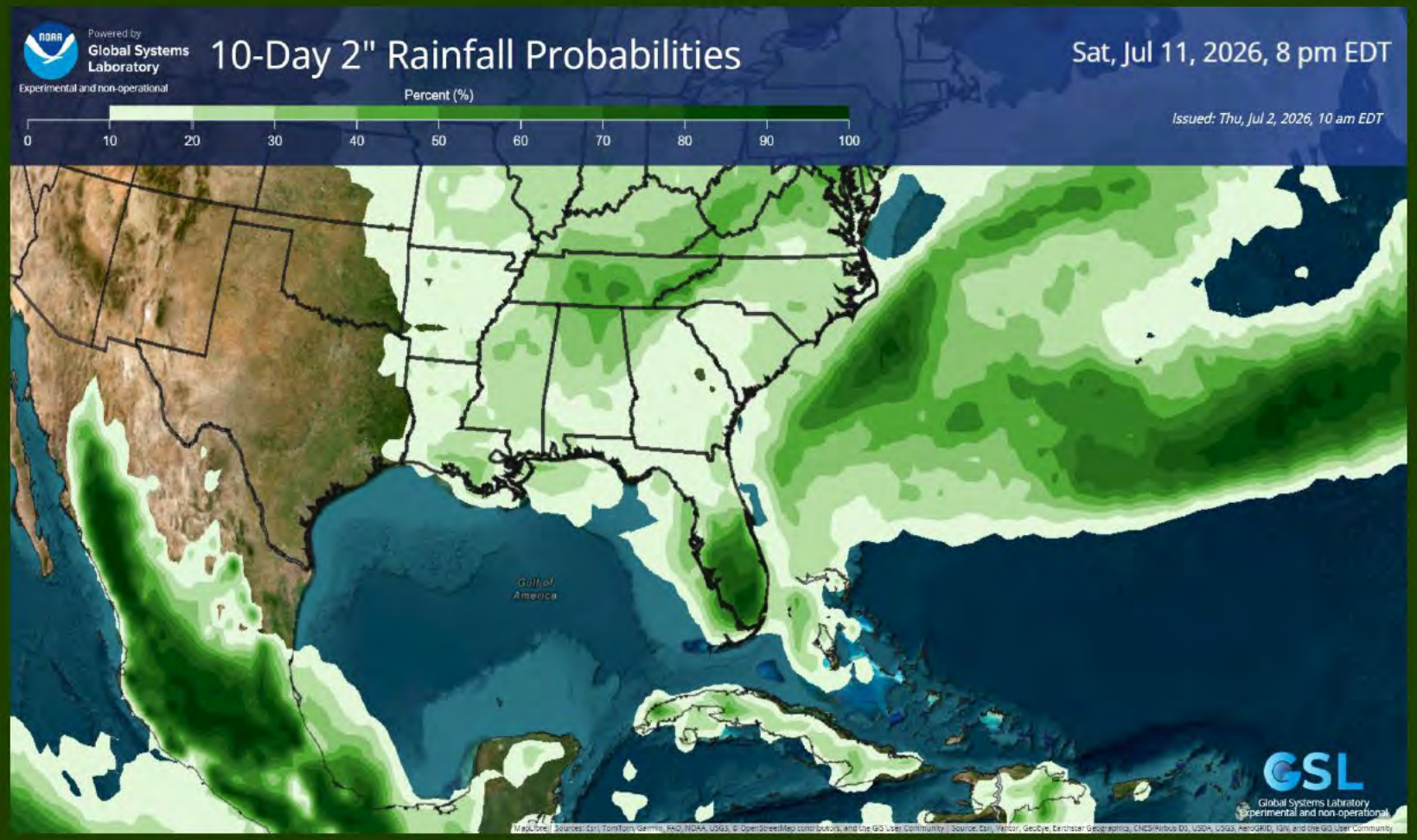
Temperature Anomalies Today through Monday



- Portions of the Appalachians to Mid-Atlantic coast will see the hottest start to July on record
- All-time high temperature records possible in Virginia and North Carolina today and tomorrow
- Heat most prolonged in the Carolinas into early next week
- Dry air each afternoon; sea breezes will bring relief
- Cooler areas possible but mainly associated with potential cloud cover from thunderstorms

From SA Fire Environment Briefing 7/2/26

Rainfall Trends



- Pattern changes next week, bringing a front and increasing rainfall chances to the coastal Southeast
- Multi-model mean focuses highest amounts offshore, but coastal Carolinas will see wetter conditions and abundant lightning
- Florida peninsula rainfall largely concentrated the next 4-6 days
- Some drought relief in the Appalachians, possibly the Mississippi Valley
- Watching a 2-day tropical wave for brief relief in the Caribbean the middle of next week

From SA Fire Environment Briefing 7/2/26

Overall Notes

- Soaking rain events have been beneficial, but scattered and highly variable, especially in the central and eastern parts of the state. Lightning has been abundant with most precip. Streamflow and monitoring well levels still show most sites remain well below normal. Portions of the Blue Ridge Escarpment and Central Mtns FDRAs are now at 23+ days since a ≥ 0.50" rainfall event. Portions of the South Coast FDRA have continued to miss rain events with 30+ days since a ≥ 0.50" rainfall event.

- The recent unsettled weather and better daily recoveries offered a temporary decrease in IA and difficulty of control for much of the state. However, hot & dry conditions have returned for the week leading into the 4th of July holiday weekend.

- 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 have trended near record maximums for the time period (FM-Z & Y). Use FWIP to compare station specific trends. Also see FF+ slides earlier displayed for specific FDRAs.

- 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 but slightly better precip chances moving into weeks 2-3, however the extent of this remains in question. 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 an even greater concern. Actionable lightning fire starts (acres/count) in R1 traditionally become most likely in May – July 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. South Coast and North Coast FDRAs have seen several larger lightning derived fires in the past week.

- 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. At the time of this report, it remains in monitor/mop-up status at 662 acres and 83% containment, having been turned back over to the local district.

- Record setting heat is on the way, along with much lower-than-normal daily min-rhs (especially for mtns & piedmont). Terrain influenced local winds including sea breeze wind gusts/shifts & related thunderstorms are possible, which will likely have significant lightning production. Saturday & especially Sunday (7/4-7/5) look to have the best alignment of fuels & fire effective weather overall within the current 7-day period.

- 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 related to superfog risk & associated roadway safety guidance.

Daily Hazard Level Outputs for each FDRA (ERC & BI or IC, from FM-Z)
(Reduced/Modified by Live Herb Fuel Moisture if modeled ≥ 130 % or ≥ 190%)

Current Statewide Hazard Summary for NC

Click on any daily Hazard Level to view the calculation details for that FDRA.

FDRA	Recent Hazard Levels (Based on the final forecasts for each date)							Forecasted Hazard Levels (Based on the latest forecasts)						
	THU JUN 25	FRI JUN 26	SAT JUN 27	SUN JUN 28	MON JUN 29	TUE JUN 30	WED JUL 1	THU JUL 2	FRI JUL 3	SAT JUL 4	SUN JUL 5	MON JUL 6	TUE JUL 7	WED JUL 8
Southern Highlands	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Central Mountains	1	1	1	1	1	1	1	1	2	2	1	1	1	1
Northern Highlands	2	1	1	1	1	1	1	2	2	2	1	1	1	1
Blue Ridge	3	2	1	1	1	1	1	3	4	4	3	2	1	1
Western Piedmont	4	3	2	1	2	2	3	3	4	4	4	3	2	1
Sandhills	4	3	2	2	2	3	3	4	4	4	4	2	2	2
Eastern Piedmont	4	4	2	1	2	2	3	3	3	4	4	3	2	2
Southern Coast	4	4	2	2	2	3	4	4	4	5	4	4	2	2
Northern Coast	3	4	1	1	1	2	3	3	3	3	3	2	1	1

*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. FEMS model settings are yielding LHFM values lower than they should be for several FDRAs, thereby there is no "step-down" in Adj Rating or Hazard Level to consider green's impact to the fire environment.

Forecast Averages (FM-Z) by FDRA for Saturday 7/4 Holiday

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	30.6 36%	51.0 78%	11.6 72%	3.1 16%	336 -1	9.0% 26%	12.2% 33%	17.5% 51%	18.4% 20%	85°F	49%	7 MPH	0.12 IN.
Central Mountains	4	Z	37.3 71%	59.3 93%	16.2 86%	4.3 48%	362 +64	8.0% 18%	10.6% 19%	15.9% 21%	17.4% 6%	87°F	46%	8 MPH	0.01 IN.
Northern Highlands	3	Z	37.8 78%	59.9 95%	15.9 91%	4.3 55%	284 +88	8.0% 12%	10.3% 6%	15.4% 7%	17.5% 5%	86°F	46%	9 MPH	0.00 IN.
Blue Ridge Escarpment	5	Z	42.9 75%	72.4 98%	23.5 92%	4.6 55%	456 +104	6.3% 6%	7.9% 2%	14.0% 7%	16.4% 5%	94°F	36%	9 MPH	0.00 IN.
Western Piedmont	4	Z	49.5 81%	74.3 100%	28.2 95%	6.3 54%	549 +143	6.1% 6%	8.0% 1%	13.8% 5%	15.8% 4%	97°F	37%	9 MPH	0.00 IN.
Sandhills	4	Z	49.5 79%	71.6 97%	26.3 90%	6.6 62%	576 +175	6.6% 20%	8.5% 8%	14.2% 8%	16.0% 8%	97°F	39%	10 MPH	0.00 IN.
Eastern Piedmont	5	Z	50.0 79%	69.6 99%	26.1 95%	6.9 52%	494 +128	6.8% 9%	8.7% 4%	14.3% 4%	16.2% 2%	97°F	41%	9 MPH	0.00 IN.
Southern Coast	8	Z	51.6 95%	63.9 98%	21.0 92%	8.0 83%	585 +193	8.1% 17%	9.8% 6%	14.2% 1%	16.5% 1%	96°F	48%	14 MPH	0.00 IN.
Northern Coast	5	Z	46.3 72%	61.3 97%	18.5 87%	6.7 50%	419 +62	8.5% 12%	10.0% 6%	14.6% 8%	16.9% 9%	95°F	50%	15 MPH	0.00 IN.