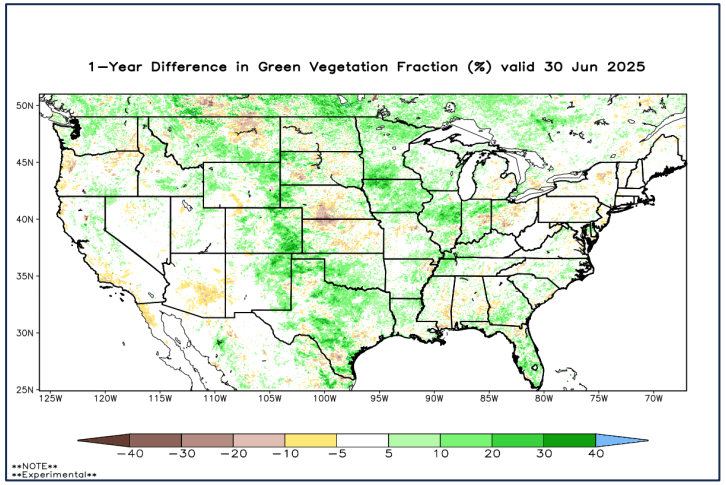
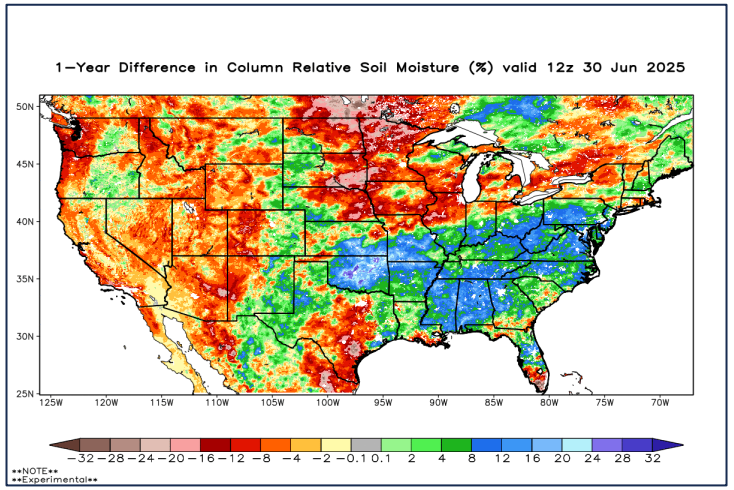
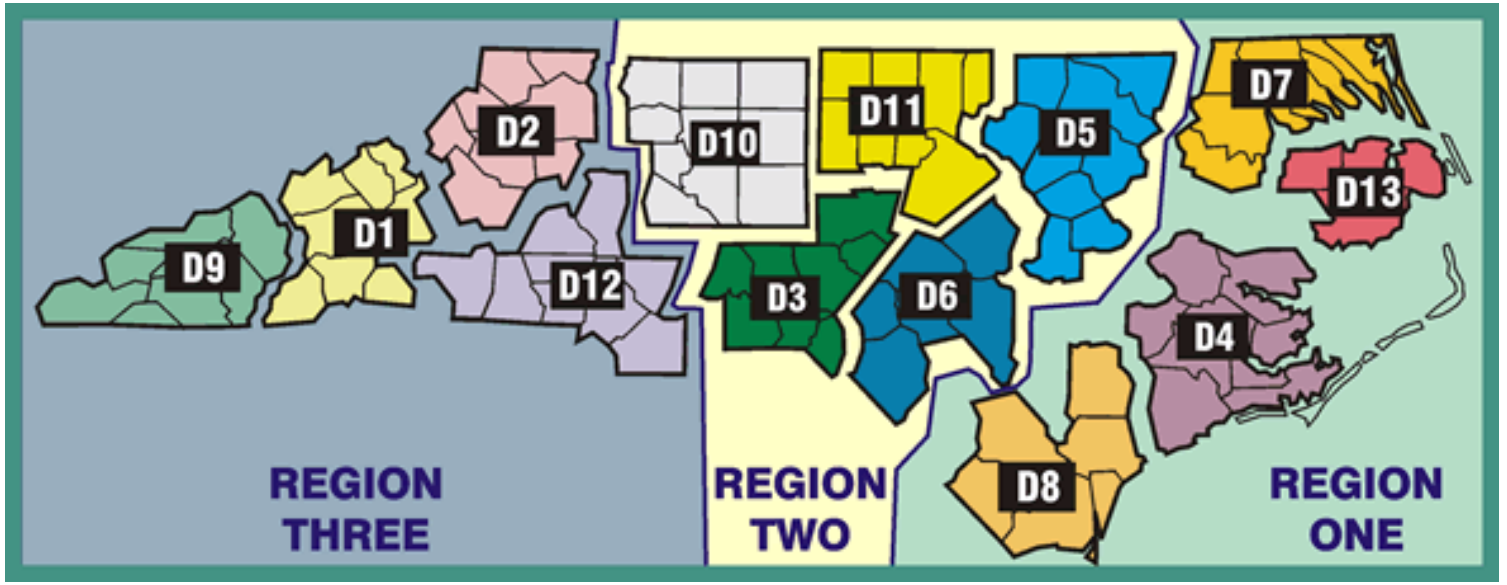
July - 2025

Monthly Fire Danger Assessment NCFS – All Regions







Date: July 1, 2025

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

Statewide Wildfire Context

January: 10-yr avg is 309 fires for 530 acres
February: 10-yr avg is 618 fires for 1,598 acres
March: 10-yr avg is 891 fires for 4,784 acres
April: 10-yr avg is 629 fires for 6,546 acres
May: 10-yr avg is 293 fires for 1,161 acres
June: 10-yr avg is 243 fires for 2,424 acres
***July: 10-yr avg is 193 fires for 645 acres**
August: 10-yr avg is 138 fires for 395 acres
September: 10-yr avg is 173 fires for 377 acres
October: 10-yr avg is 236 fires for 1,962 acres
November: 10-yr avg is 462 fires for 6,035 acres
December: 10-yr avg is 305 fires for 580 acres

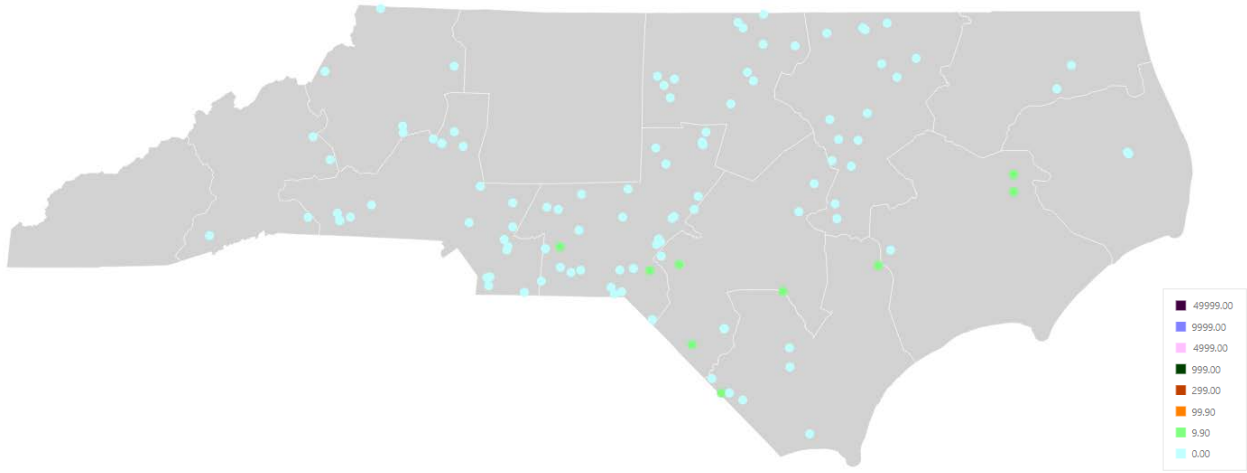
June MTD: 115 incidents for 272 acres
7-Day Activity: 45 incidents for 41 acres

All wildfire activity data is preliminary
Does not include additional federal wildfires/acres
2015-2024 CY Average

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

Incident Name	Discovery Date	Month	Region	District	County	Acres
Shirley Farm Road	6/3/2025	6	Region 1	District 4	Beaufort County	50.00
Peoples Rd	6/10/2025	6	Region 1	District 4	Beaufort County	40.00
Strasburg	6/21/2025	6	Region 2	District 3	Scotland County	37.00
Sidney-Cherry Grove Rd	6/11/2025	6	Region 1	District 8	Columbus County	27.00
Randall Wheat Field	6/24/2025	6	Region 2	District 3	Anson County	15.22
Duplin County - Potters Hill	6/5/2025	6	Region 1	District 8	Duplin County	12.00
565 fairgrove rd	6/7/2025	6	Region 2	District 6	Robeson County	11.12
Boykin Bridge Rd	6/8/2025	6	Region 2	District 6	Sampson County	10.00
Backwoods	6/17/2025	6	Region 2	District 6	Hoke County	10.00
Spring Hill	6/26/2025	6	Region 2	District 3	Richmond County	8.89
Backwoods	6/20/2025	6	Region 2	District 6	Hoke County	7.00

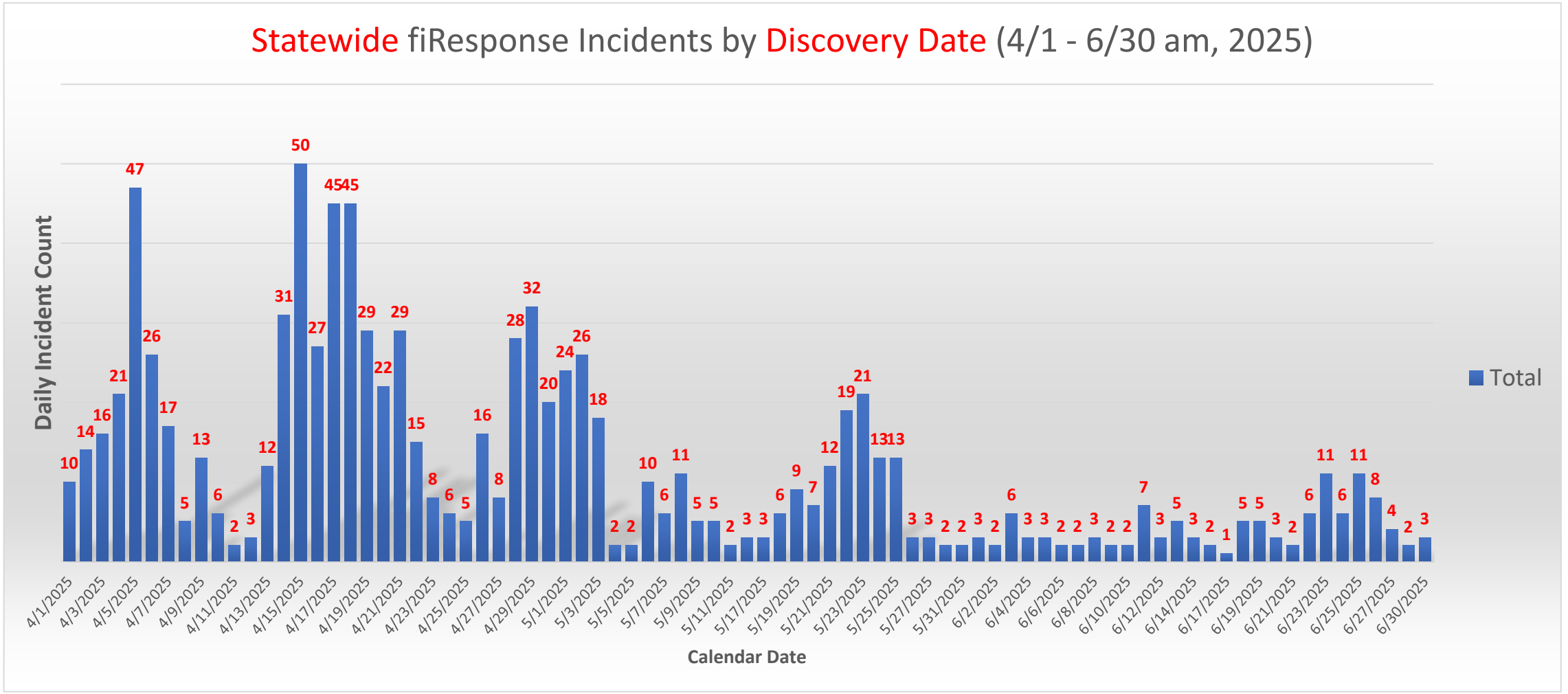
June MTD (ending 6/30 am)



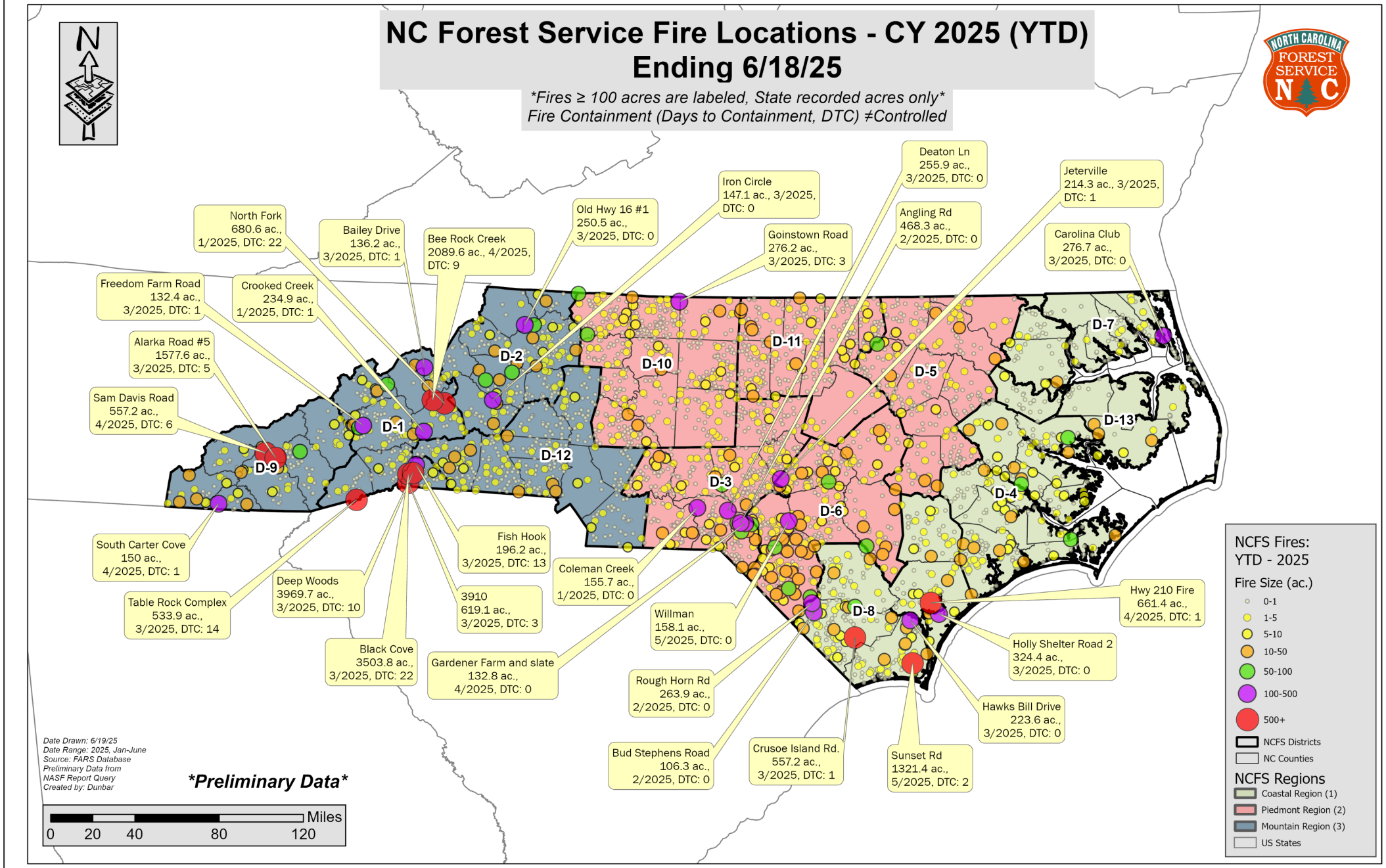
Last 7-Days (6/23 – 6/29)

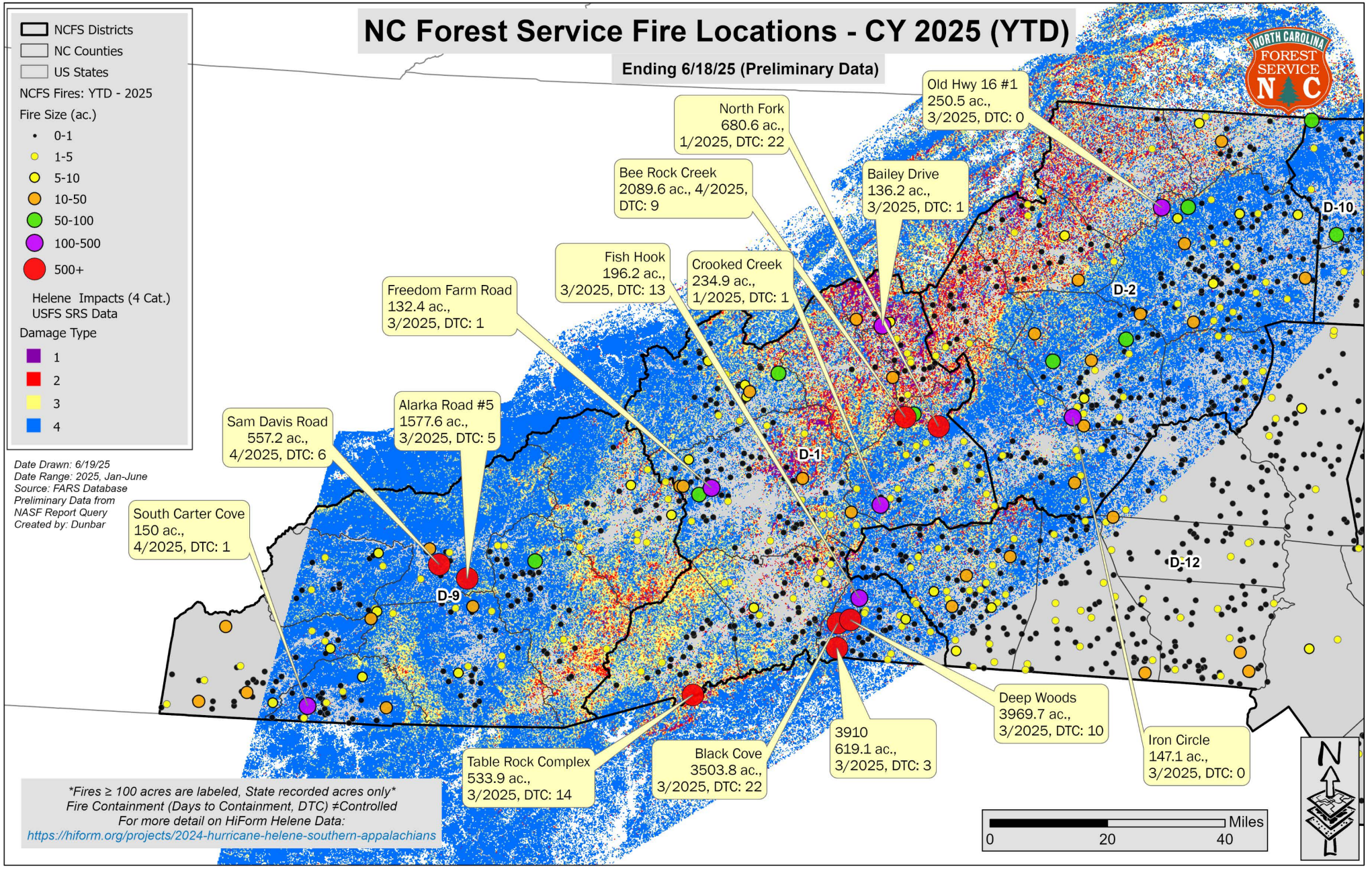
***Note: DOD & other entirely federal ownership wildfires not shown on fiResponse*

Daily **Statewide** Occurrence Count BY Discovery Date
April - June 2025



All wildfire activity data shown should be considered preliminary


NC Forest Service Fire Locations - CY 2025 (YTD)
Ending 6/18/25
Fires ≥ 100 acres are labeled, State recorded acres only
Fire Containment (Days to Containment, DTC) ≠Controlled
N
NORTH CAROLINA FOREST SERVICE NC
North Fork 680.6 ac., 1/2025, DTC: 22
Bailey Drive 136.2 ac., 3/2025, DTC: 1
Bee Rock Creek 2089.6 ac., 4/2025, DTC: 9
Old Hwy 16 #1 250.5 ac., 3/2025, DTC: 0
Iron Circle 147.1 ac., 3/2025, DTC: 0
Deaton Ln 255.9 ac., 3/2025, DTC: 0
Jeterville 214.3 ac., 3/2025, DTC: 1
Angling Rd 468.3 ac., 2/2025, DTC: 0
Goinstown Road 276.2 ac., 3/2025, DTC: 3
Carolina Club 276.7 ac., 3/2025, DTC: 0
Freedom Farm Road 132.4 ac., 3/2025, DTC: 1
Crooked Creek 234.9 ac., 1/2025, DTC: 1
Alarka Road #5 1577.6 ac., 3/2025, DTC: 5
Sam Davis Road 557.2 ac., 4/2025, DTC: 6
D-1
D-2
D-3
D-4
D-5
D-6
D-7
D-8
D-9
D-10
D-11
D-12
D-13
South Carter Cove 150 ac., 4/2025, DTC: 1
Table Rock Complex 533.9 ac., 3/2025, DTC: 14
Deep Woods 3969.7 ac., 3/2025, DTC: 10
Black Cove 3503.8 ac., 3/2025, DTC: 22
Fish Hook 196.2 ac., 3/2025, DTC: 13
3910 619.1 ac., 3/2025, DTC: 3
Gardener Farm and slate 132.8 ac., 4/2025, DTC: 0
Coleman Creek 155.7 ac., 1/2025, DTC: 0
Willman 158.1 ac., 5/2025, DTC: 0
Rough Horn Rd 263.9 ac., 2/2025, DTC: 0
Bud Stephens Road 106.3 ac., 2/2025, DTC: 0
Crusoe Island Rd. 557.2 ac., 3/2025, DTC: 1
Sunset Rd 1321.4 ac., 5/2025, DTC: 2
Hawks Bill Drive 223.6 ac., 3/2025, DTC: 0
Holly Shelter Road 2 324.4 ac., 3/2025, DTC: 0
Hwy 210 Fire 661.4 ac., 4/2025, DTC: 1
Date Drawn: 6/19/25
Date Range: 2025, Jan-June
Source: FARS Database
Preliminary Data from NASF Report Query
Created by: Dunbar
Preliminary Data
Miles
0 20 40 80 120
NCFS Fires: YTD - 2025
Fire Size (ac.)
0-1
1-5
5-10
10-50
50-100
100-500
500+
NCFS Districts
NC Counties
NCFS Regions
Coastal Region (1)
Piedmont Region (2)
Mountain Region (3)
US States



Distribution of
All Fires & Acres for 2025
YTD ending 6/18
with HiForm overlay, see weblink for further details on HiForm analysis products

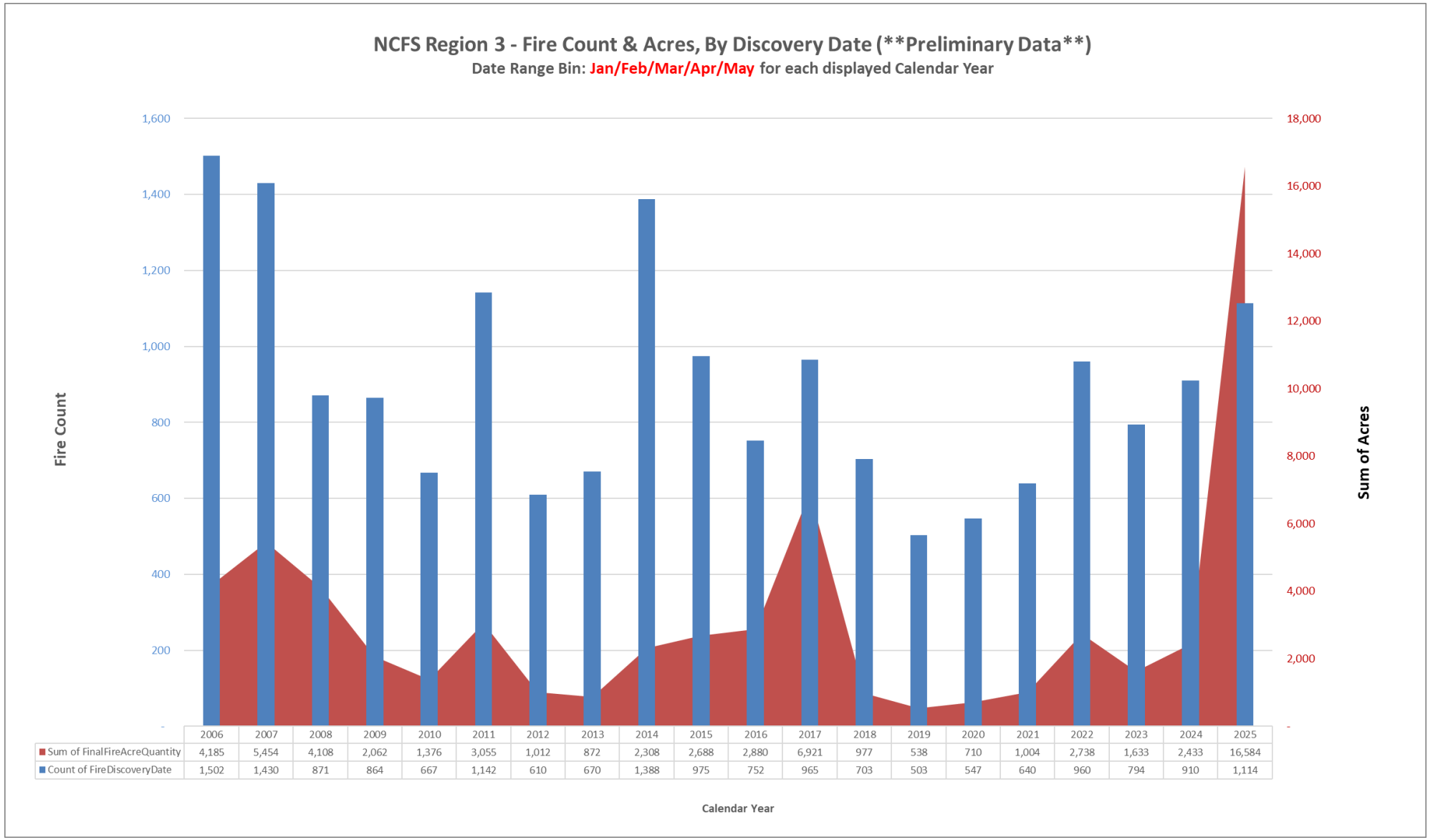
R3 - Top 10 Years by acres (from 1970-2025)

FARS NASF Report Query:
Region 3 Counties by Calendar Year, binned for Jan-May.

****Preliminary Data****

Calendar Year (Jan-May)	Count of Fires by Discovery Date (Jan - May)	Sum of Final Acreage by Discovery Date (Jan-May)
2025	1,114	16,584
1985	1,460	12,158
1971	1,220	8,650
2017	965	6,921
1981	1,464	6,779
2007	1,430	5,454
2001	1,482	4,885
1999	1,276	4,706
2006	1,502	4,185
2008	871	4,108

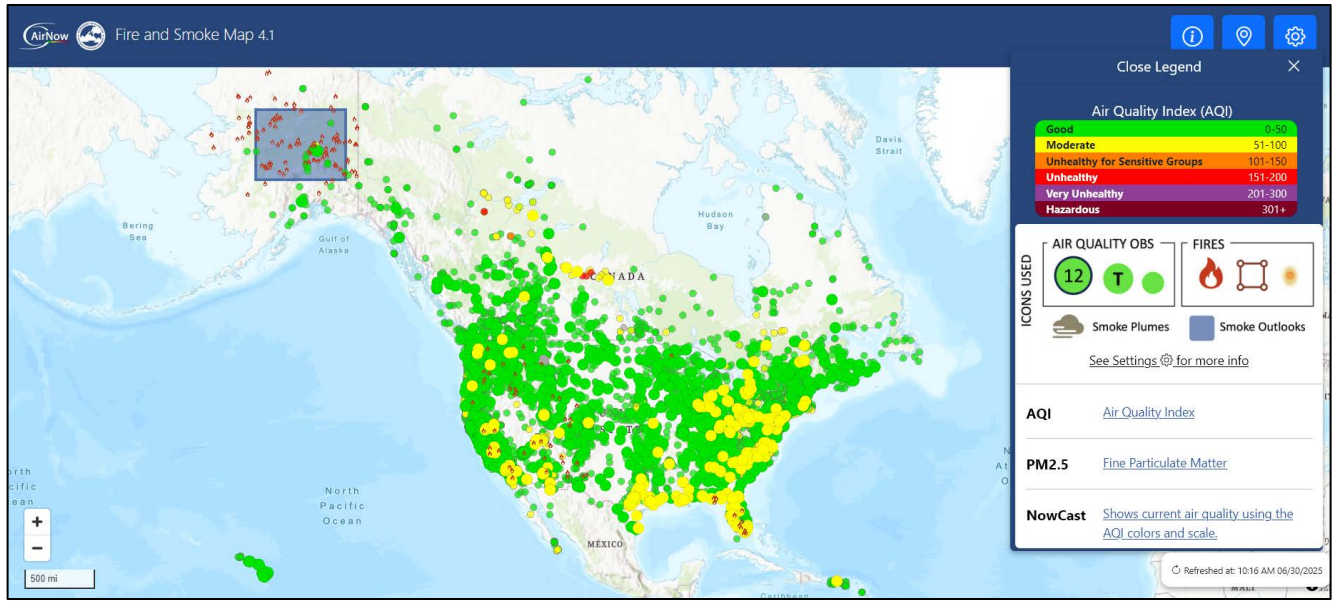
R3 Distribution of All Fires & Acres for Jan-May from 2006 - 2025



	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Sum of FinalFireAcreQuantity	4,185	5,454	4,108	2,062	1,376	3,055	1,012	872	2,308	2,688	2,880	6,921	977	538	710	1,004	2,738	1,633	2,433	16,584
Count of FireDiscoveryDate	1,502	1,430	871	864	667	1,142	610	670	1,388	975	752	965	703	503	547	640	960	794	910	1,114

Cause: All Cause Codes, Region 3, NCFS Reported Fires Only using FARS NASF Query. Preliminary Data!

Air Quality Notes



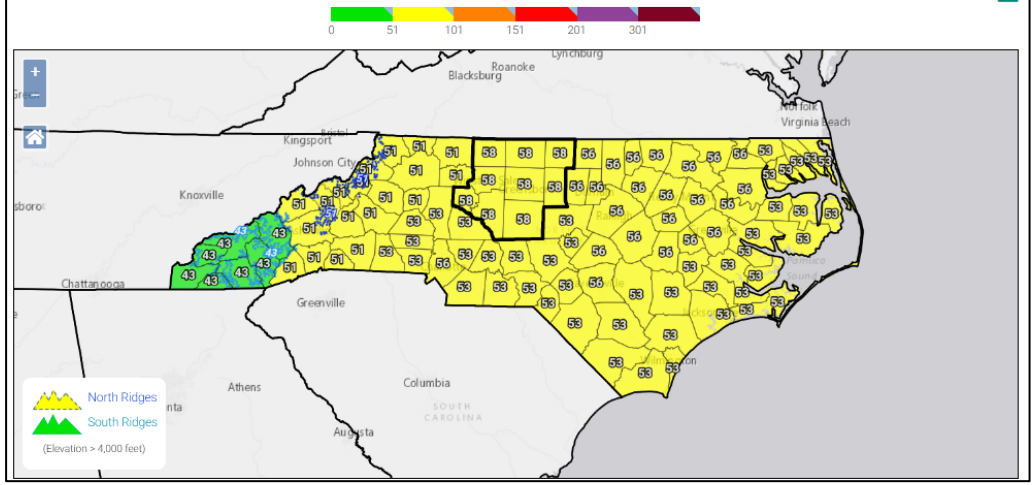
https://fire.airnow.gov/#

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
Sunday (Jun 29)	Max AQI · Ozone · PM2.5	45 to 61	Green to Yellow	download
Monday (Jun 30)	**Max AQI** · Ozone · PM2.5	43 to 56	Green to Yellow	download
Tuesday (Jul 1)	Max AQI · Ozone · PM2.5	43 to 58	Green to Yellow	download
Wednesday (Jul 2)	Max AQI · Ozone · PM2.5	40 to 58	Green to Yellow	download

Maximum Air Quality Index for Jun 30, 2025



This forecast was issued on **Sunday, June 29, 2025** at **2:24 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Current ozone readings are holding in the Code Green range statewide. Current daily average fine particulate concentrations are in the Code Yellow range in a swath running from the southeastern Piedmont up through the Sandhills, Triangle 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

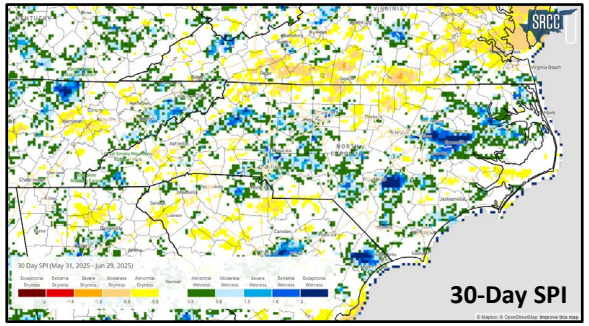
Another hot and humid day expected Monday with gradually improving air quality, as our stagnant synoptic pattern persists for another day or so. Fine particulate levels will continue to hover in the low-to-mid Code Yellow range for large portions of the state. Plenty of moisture and cloud cover, however, should finally hold ozone production down in the Code Green range statewide.

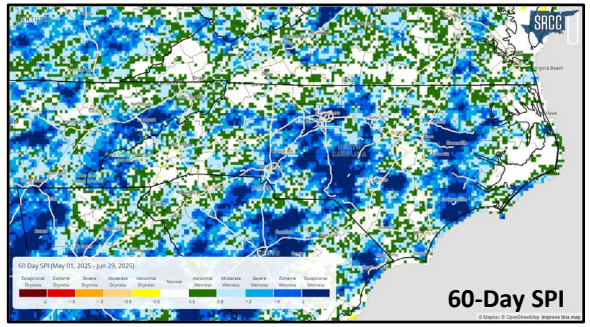
Outlook

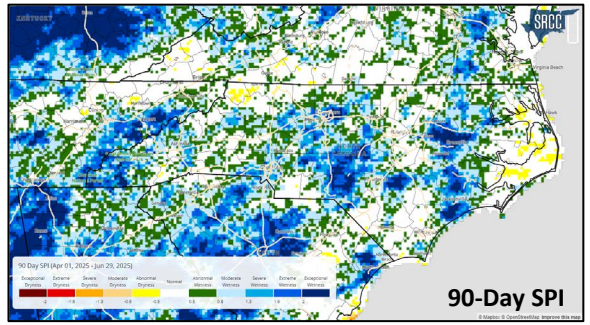
On Tuesday, a cold front trailing from a surface low lifting over the Great Lakes will be approaching slowly from the northwest and then looks to stall/wash out somewhere in the central Piedmont on Wednesday. Fine particulates will continue to net out in the moderate range for mostly the eastern part of the state, influenced by both a light layer of Saharan dust moving north along the coast that may mix down, and transport of moderate surface pollution from our source region to southwest. Ozone should be in good shape through mid-week thanks to the rain and clouds associated with the front.

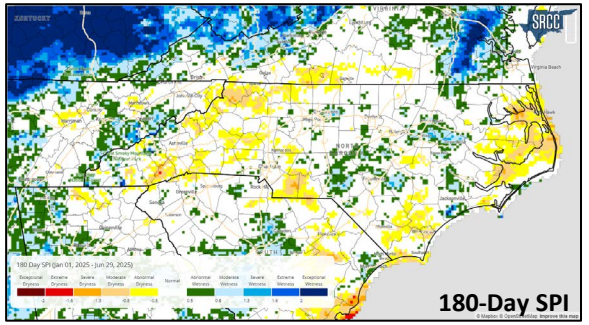
Author: *Sara Kreuser (sara.kreuser@deq.nc.gov) - NC Division of Air Quality*

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

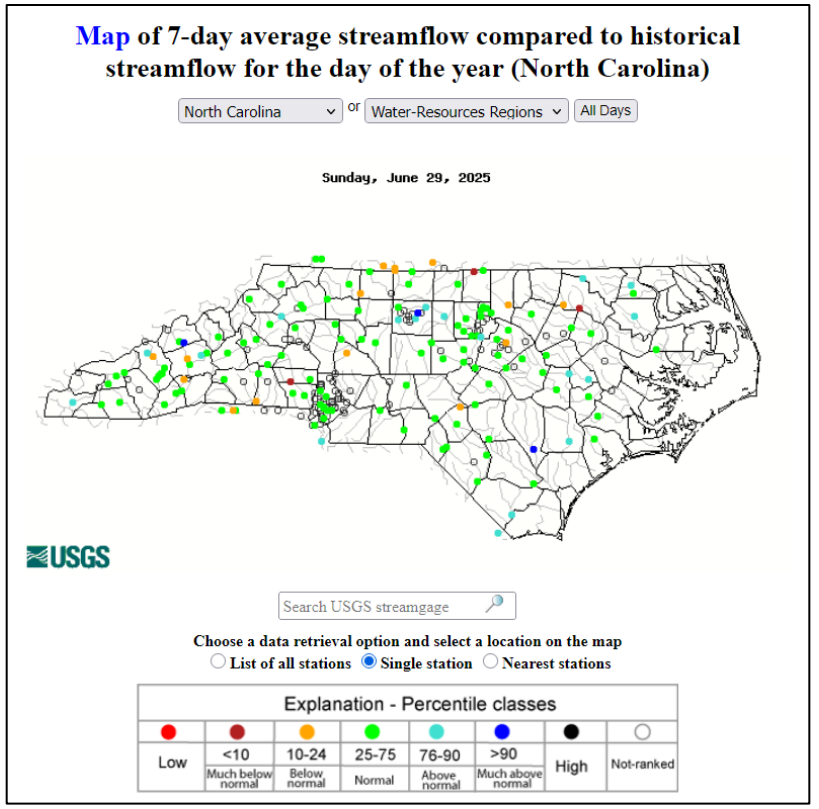




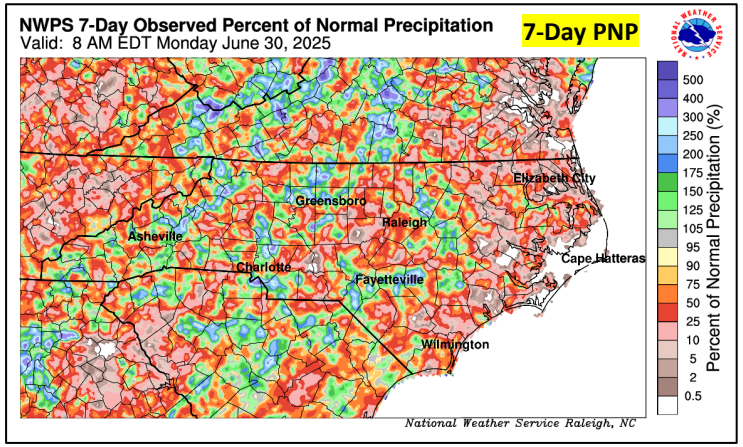


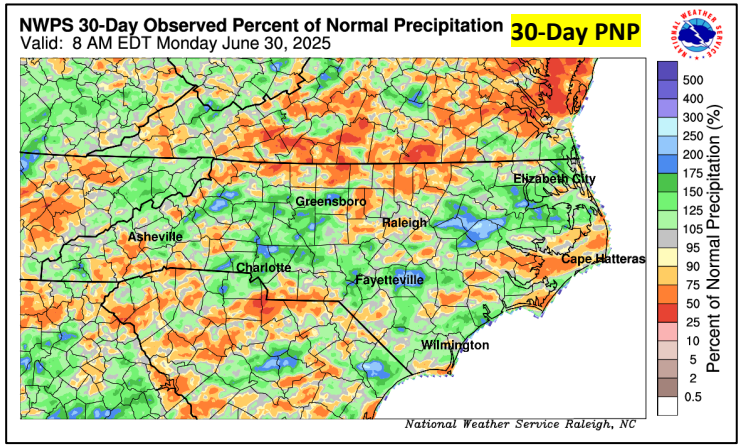


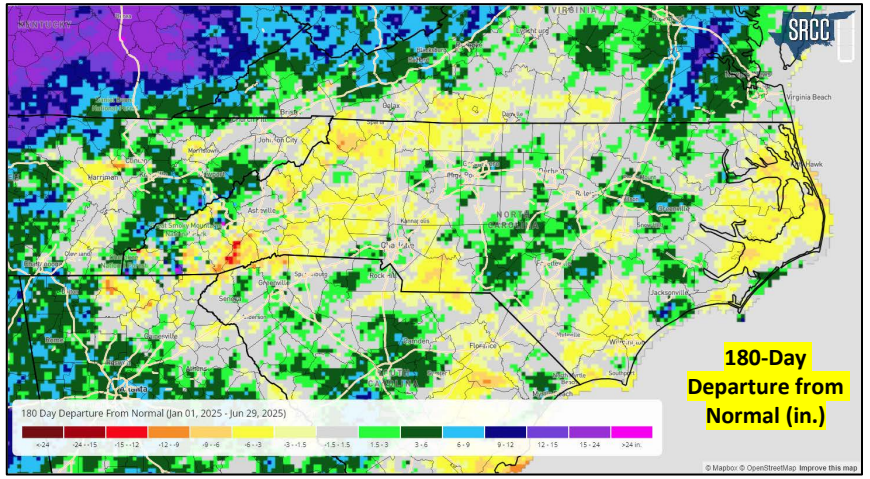
https://srcc.tamu.edu/water_portal/



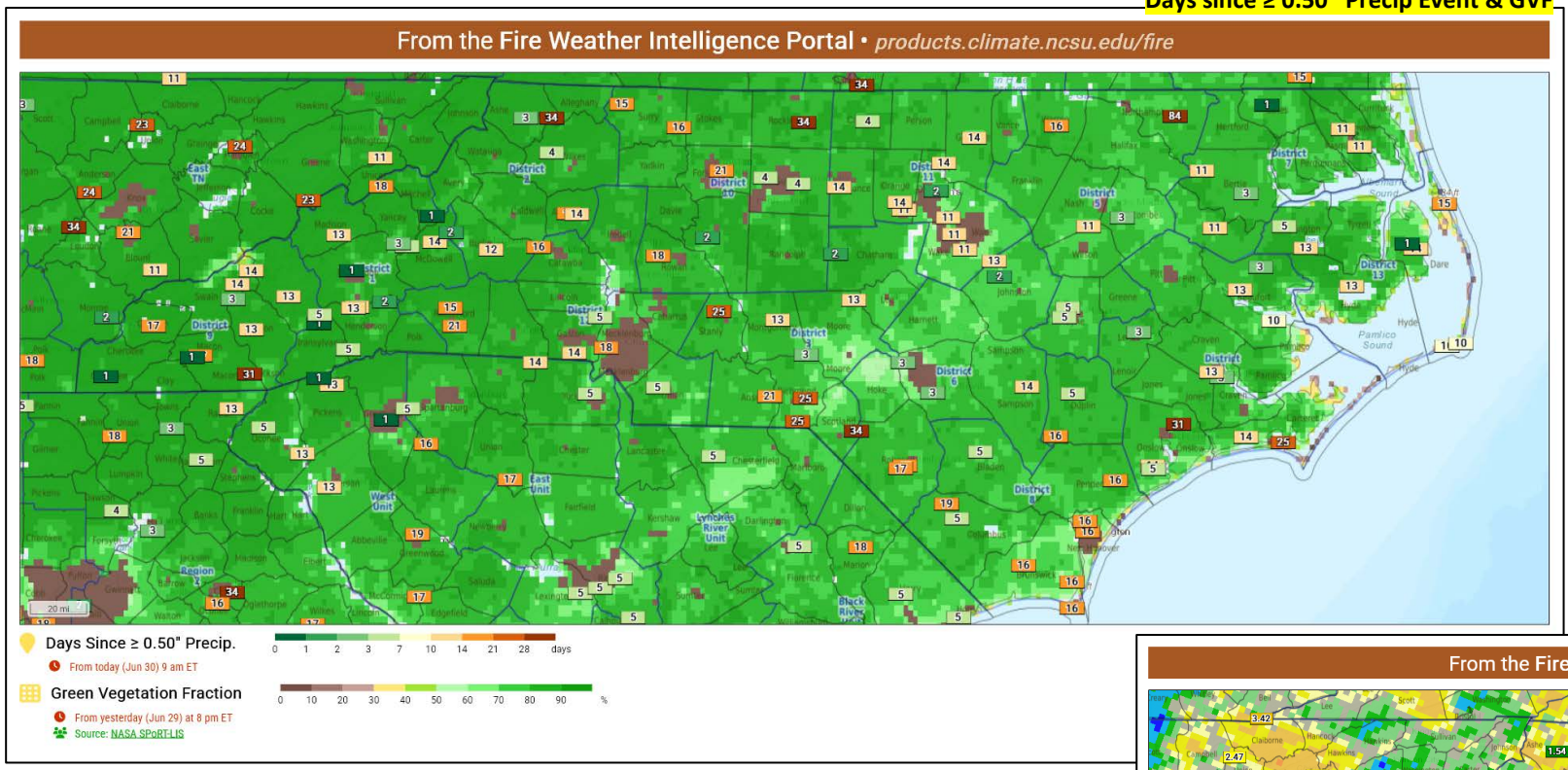
- Note the 7- & 30-day PNP graphics, shows scattered nature of precip (top right).
- Streamflow improvements throughout majority of state.
- 30-Day SPI shows shorter-term improvements/degradations (top left).
- 60/90 Day SPI picking up on mid-term improvements across most of the state. The 180-day SPI still shows longer-term pockets of dryness, although the intensity of these have decreased (left).
- 180-Day Departure from Normal Precip – areas in yellow and orange represent 3-6" & 6-9" (bottom right).







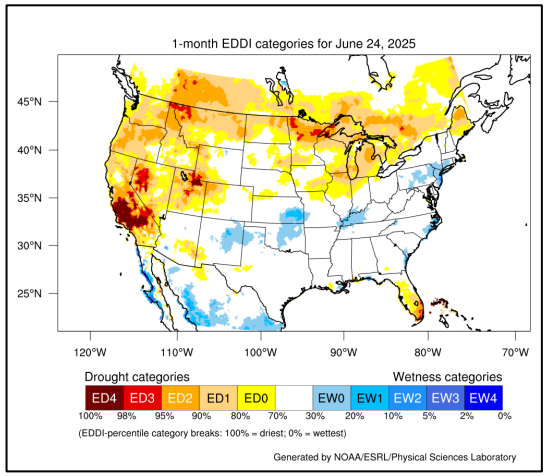
Days since ≥ 0.50” Precip Event & GVF

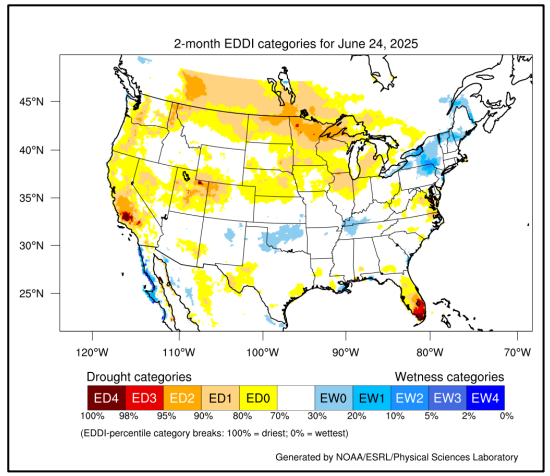


Days since ≥ 0.50” Precip Event Range from 1-day to +/- 3-Weeks due to the hit-or-miss nature of precip this time of year.

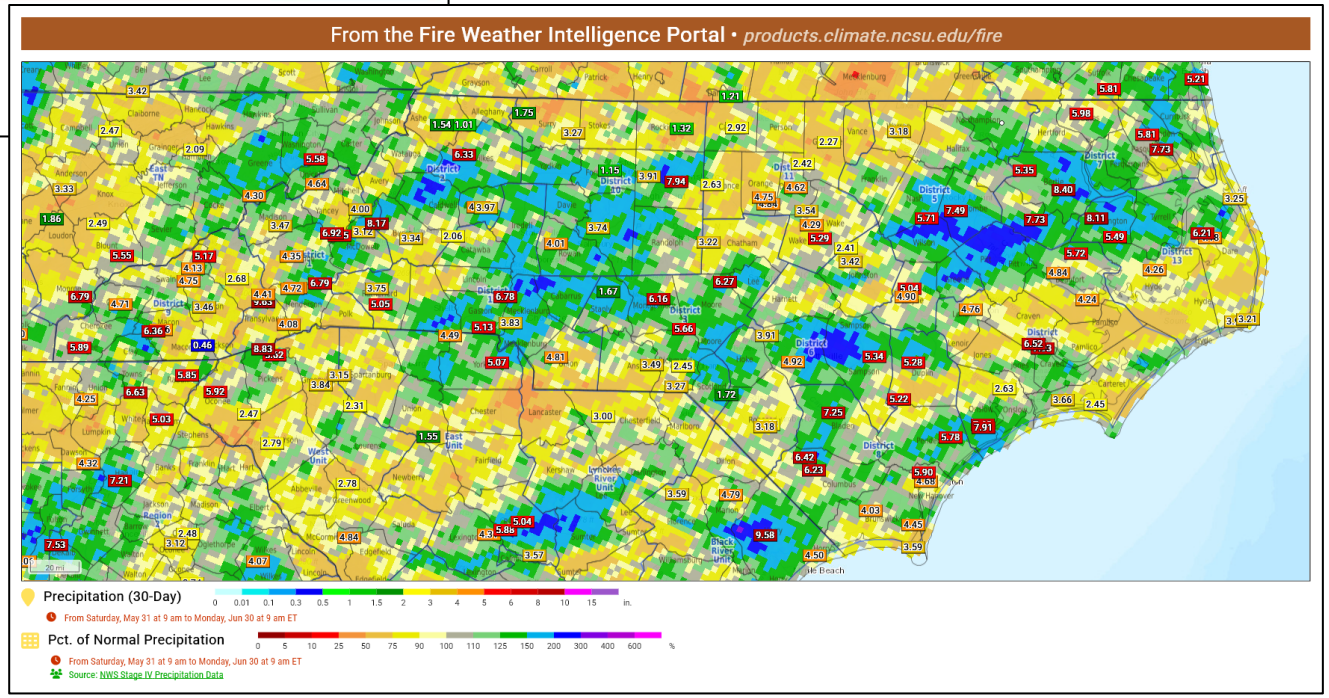
Observed EDDI values for most of NC have moderated over the past 4-8 weeks for period ending on 6/24.

30-Day PNP vs Station Totals – note pockets of very dry/very wet.



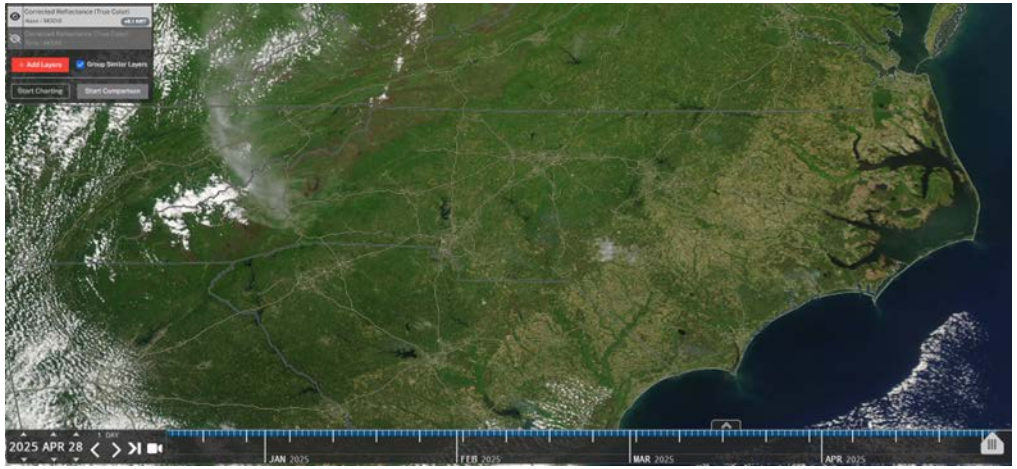


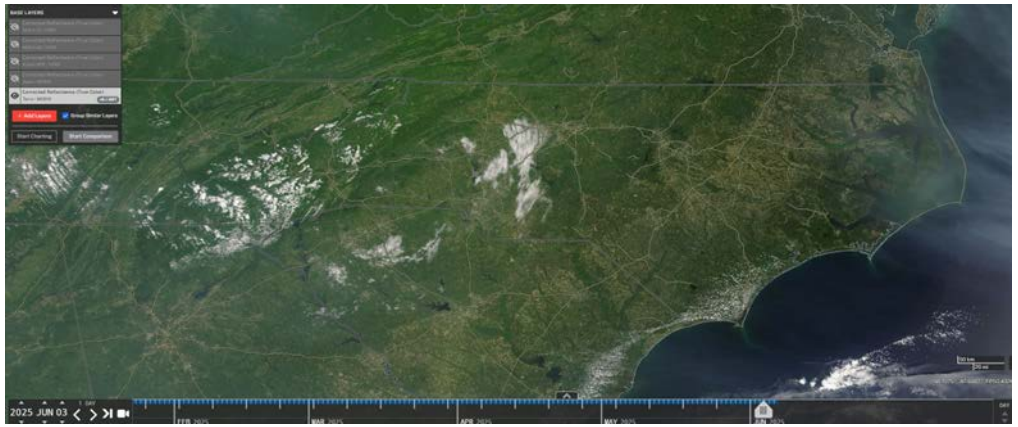
30-Day Station Totals & 30-Day PNP

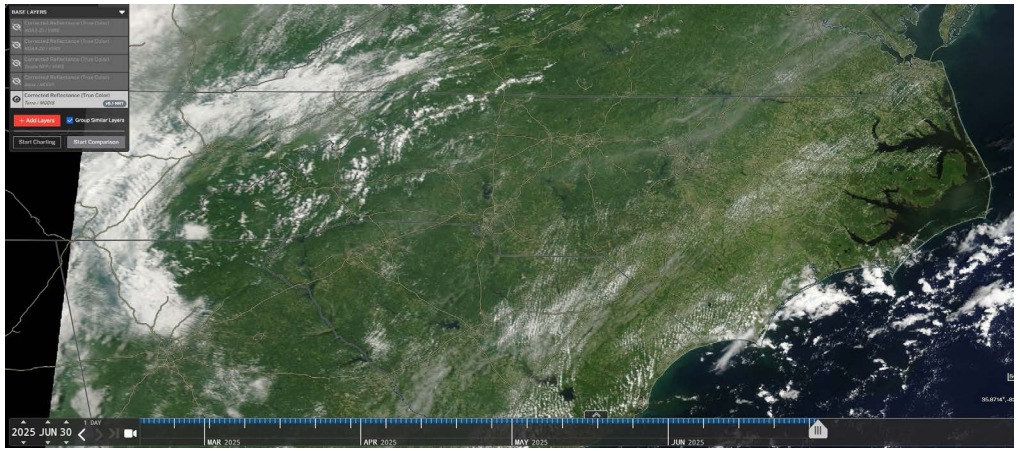


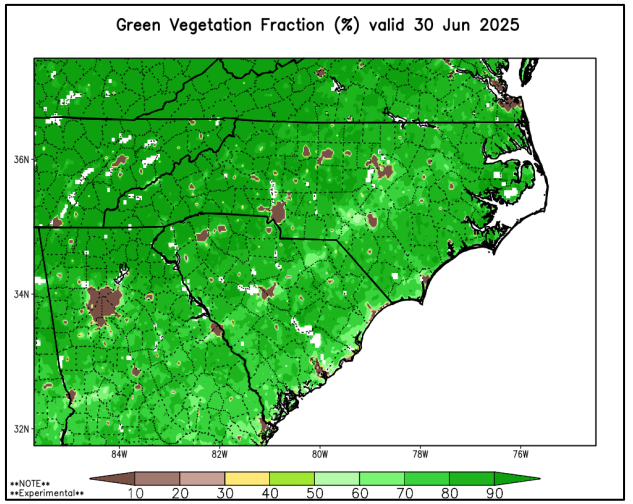
Green Fraction & Green-Up Anomaly

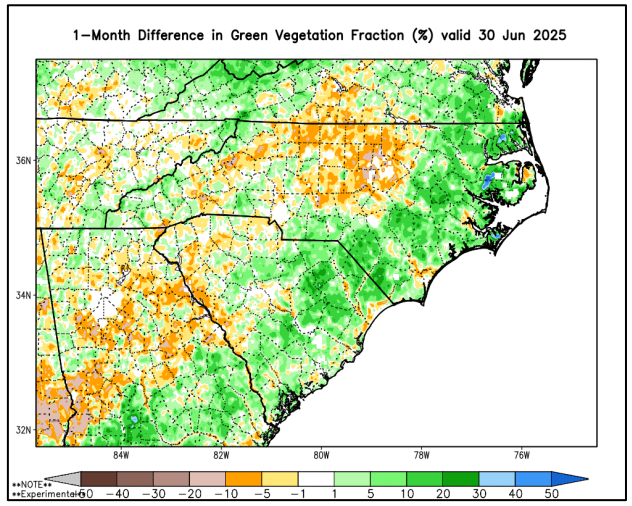
NASA Worldview Maps from Aqua/MODIS and Terra/MODIS sensors on left illustrate monthly true color representation – Apr 28 (top), June 3 (middle), and June 30 (bottom).

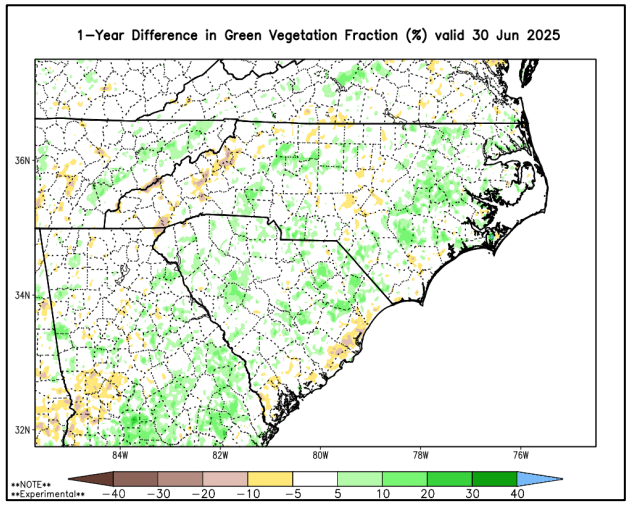












https://www.drought.gov/data-maps-tools/evaporative-demand-drought-index-eddi-subseasonal-forecasts

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 24, 2025**

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

The Main Takeaway

Despite hotter and drier weather over the past week, all of North Carolina remains clear of any drought or abnormal dryness on this week's US Drought Monitor.

This Week's Summary

After our spring drought disappeared last week, we quickly switched to a hotter pattern that has caused some signs of seasonal stress to emerge, including lawns turning yellow, flowers wilting in the heat, and smaller creek and pond levels declining. Fortunately, most streams and reservoirs are holding steady thanks to the moisture buffer we built up in recent weeks.

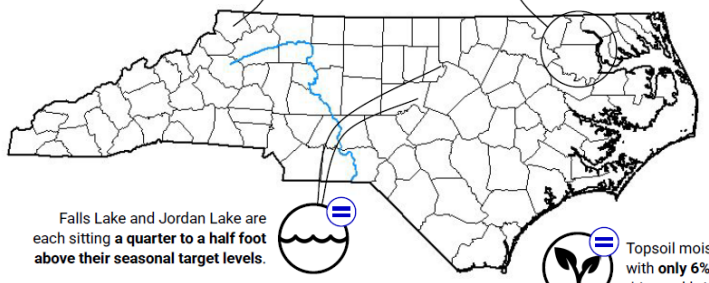
Next Week's Outlook

We'll stay hot, but not quite as hot, by the weekend with high temperatures in the low to mid 90s. Scattered showers and storms will be possible every afternoon.

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

A dry June continued in Ashe County, with only **0.20 inches last week and 1.17 inches all month** in Jefferson.

Another 1 to 1.5 inches of rain on Thursday night put **7-day average streamflows above the 90th percentile** across the northern Coastal Plain.



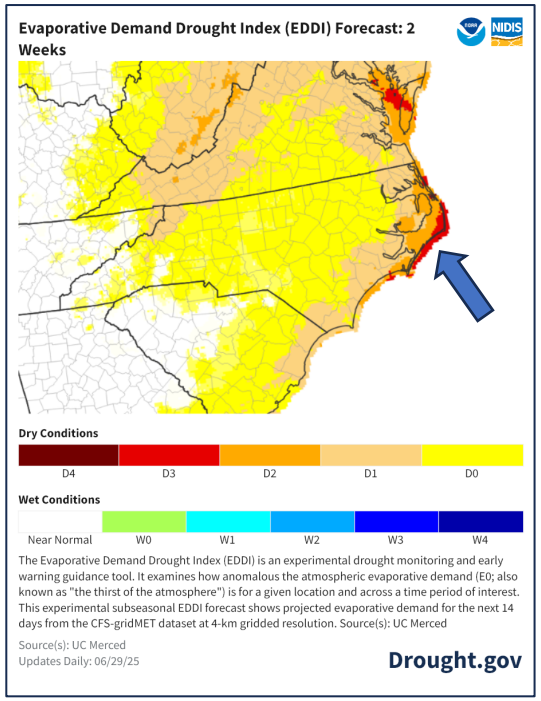
Falls Lake and Jordan Lake are each sitting **a quarter to a half foot above their seasonal target levels**.

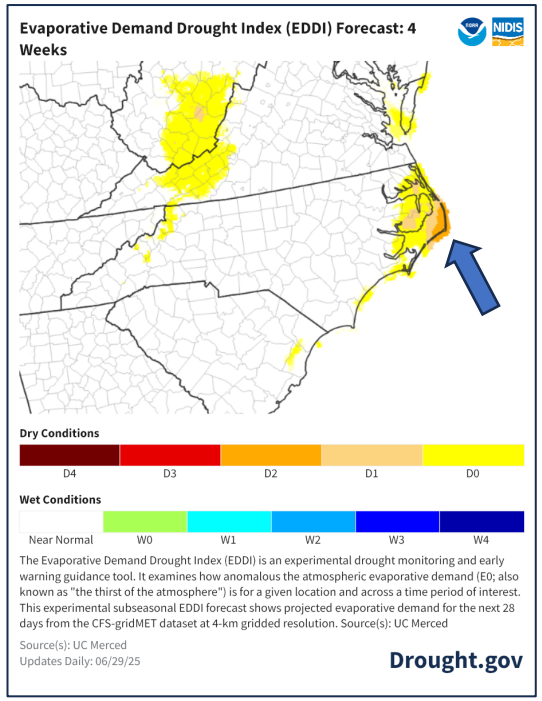
Topsoil moisture is holding strong, with **only 6% reported as short** on this week's USDA/NASS update.

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	0.00%	0.00%
D2: Severe Drought	0.00%	0.00%
D3: Extreme Drought	0.00%	0.00%
D4: Exceptional Drought	0.00%	0.00%



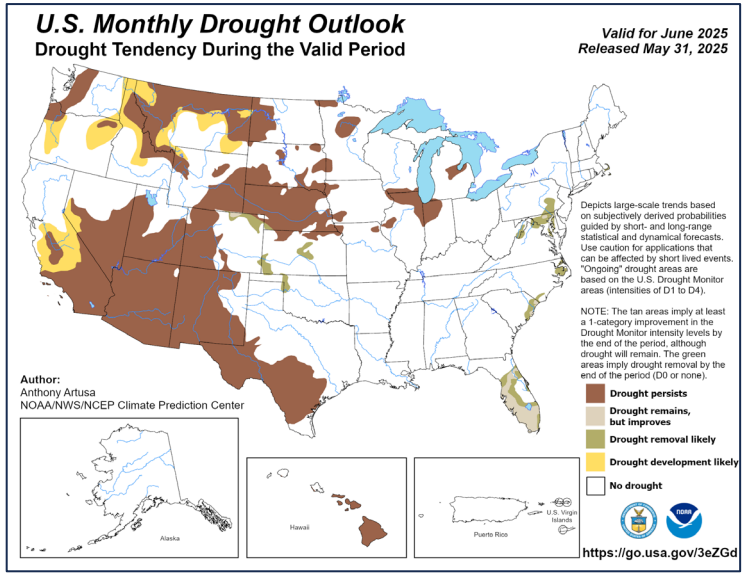


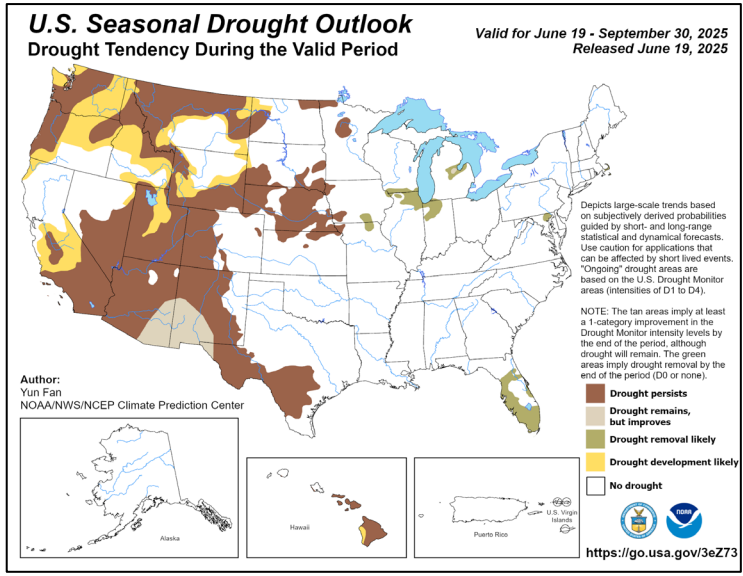
EDDI & Drought

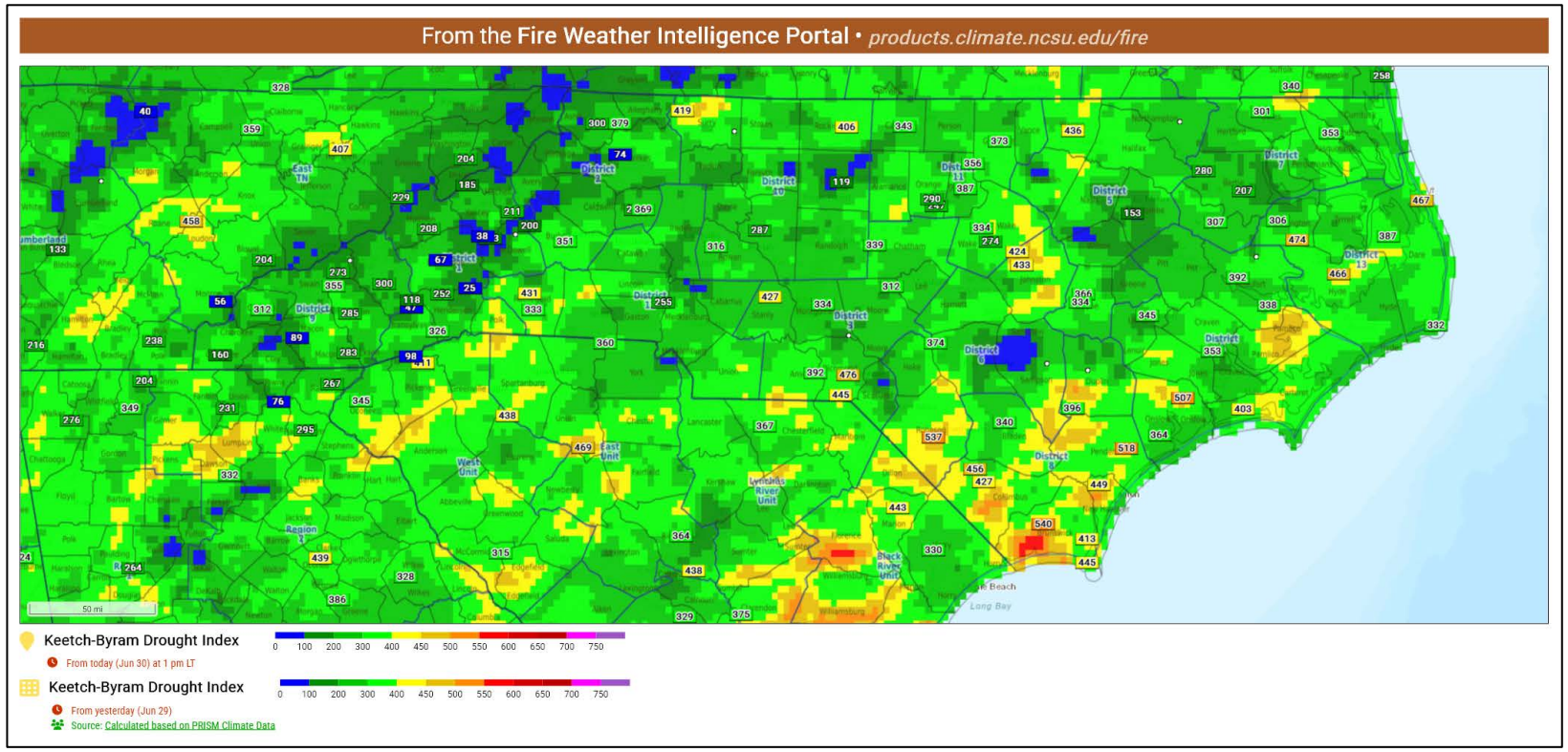
EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week avg level. They are currently trending above normal at the two-week scale. Warmth and dry air accelerates this index.

US Drought Monitor – USDM map released last week, note map remains clear for now. It is likely to change due to widely varying precip over the past couple weeks.

USDM Monthly & Seasonal Drought Outlook - shown at right. See detailed state/regional discussions here. Favoring absence of widespread drought for much of the Southeast. *All of this is dependent upon any future tropical storm tracks and typical seasonal variability we see moving through summer.*

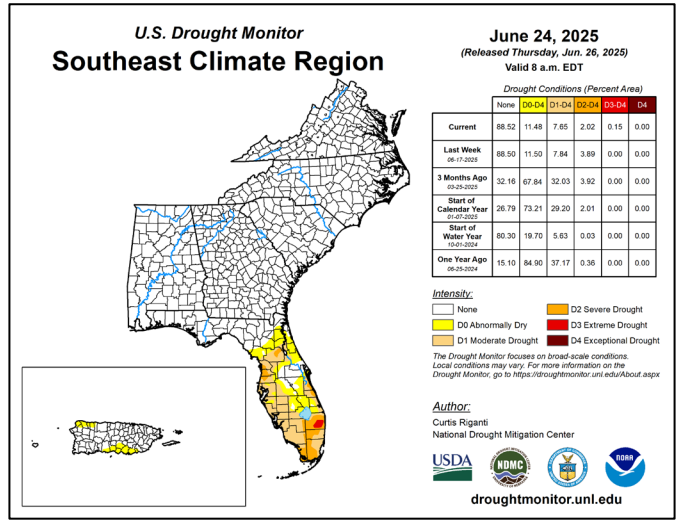


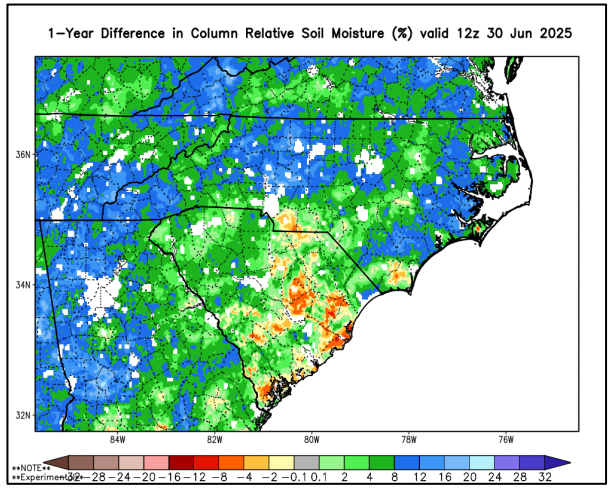




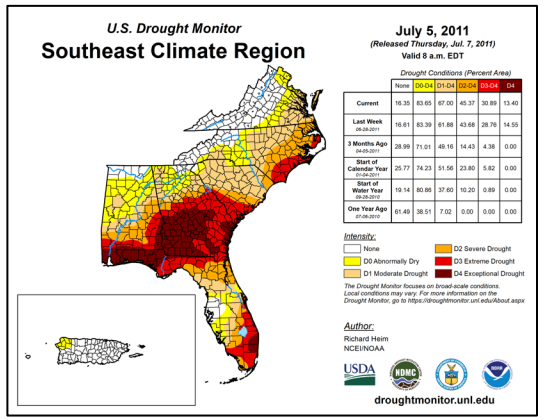
- KBDIs have decreased due to repeated rounds of unsettled weather over the past month for many areas. Pockets of higher values are redeveloping, especially in some southern/coastal counties.
- Note modeled changes to profile compared to last year at same time (bottom left).
- USDM Map comparison – 2011, 2017, 2018, 2025.

Current

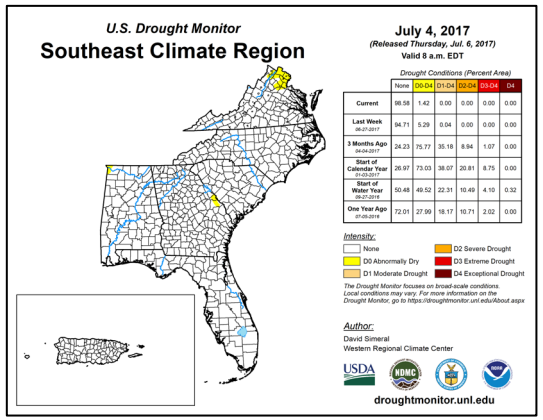




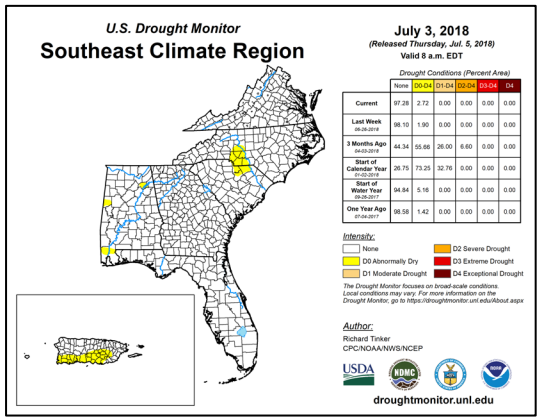
2011



2017

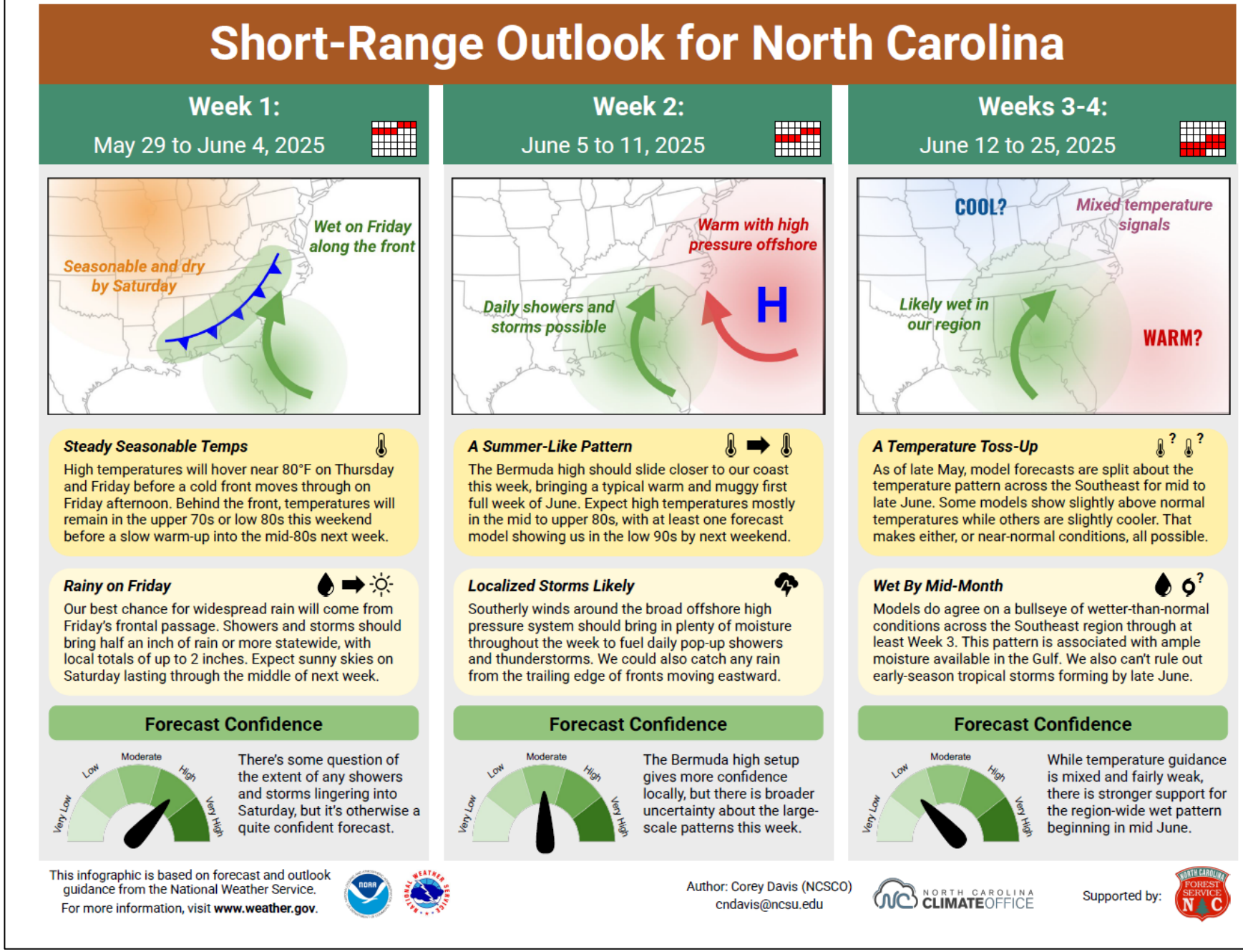


2018



State Climate Office: Short-Range Monthly Outlook for NC

*Released **6/1/25** - July update to be issued later in period.*
Location: https://climate.ncsu.edu/fire/outlooks/

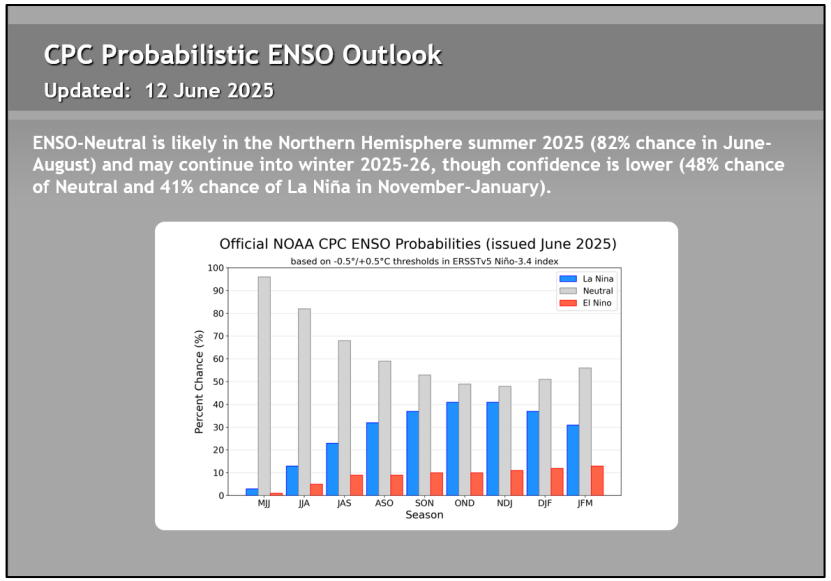


ENSO Notes from the CPC (6/12/25 Update)

ENSO Alert System Status: **Not Active**

ENSO-Neutral is likely in the Northern Hemisphere summer 2025 (82% chance in June-August) and may continue into winter 2025-26, though confidence is lower (48% chance of Neutral and 41% chance of La Niña in November-January).

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. In order to declare a La Nina, the departure from average SST must be at least -0.5^{o} C (line shown in green) for 3 consecutive months. For El Nino, the departure must be at least 0.5^{o} C above average for 3 consecutive months.



See this link for further discussion: https://www.climate.gov/news-features/blogs/enso/april-2025-enso-update-la-nina-has-ended

Historical El Niño and La Niña Episodes Based on the ONI computed using ERSST.v5

Recent Pacific warm (red) and cold (blue) periods based on a threshold of +/- 0.5 °C for the Oceanic Nino Index (ONI) [3 month running mean of ERSST.v5 SST anomalies in the Nino 3.4 region (5N-5S, 120-170W)]. For historical purposes, periods of below and above normal SSTs are colored in blue and red when the threshold is met for a minimum of 5 consecutive over-lapping seasons.

The ONI is one measure of the El Niño-Southern Oscillation, and other indices can confirm whether features consistent with a coupled ocean-atmosphere phenomenon accompanied these periods. The complete table going back to DJF 1950 can be found here.

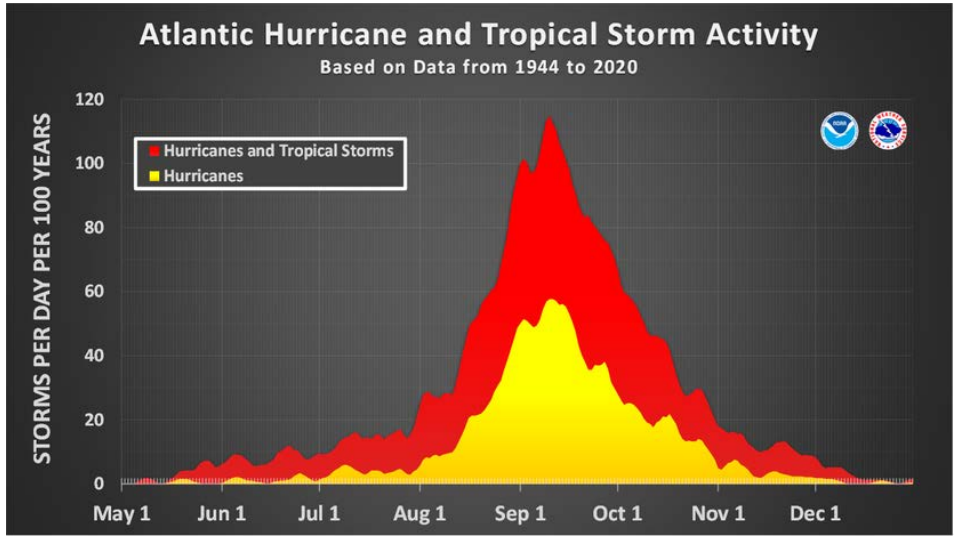
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	2.0
2024	1.8	1.5	1.1	0.7	0.4	0.2	0.0	-0.1	-0.2	-0.3	-0.4	-0.5
2025	-0.6	-0.4	-0.2	-0.1								

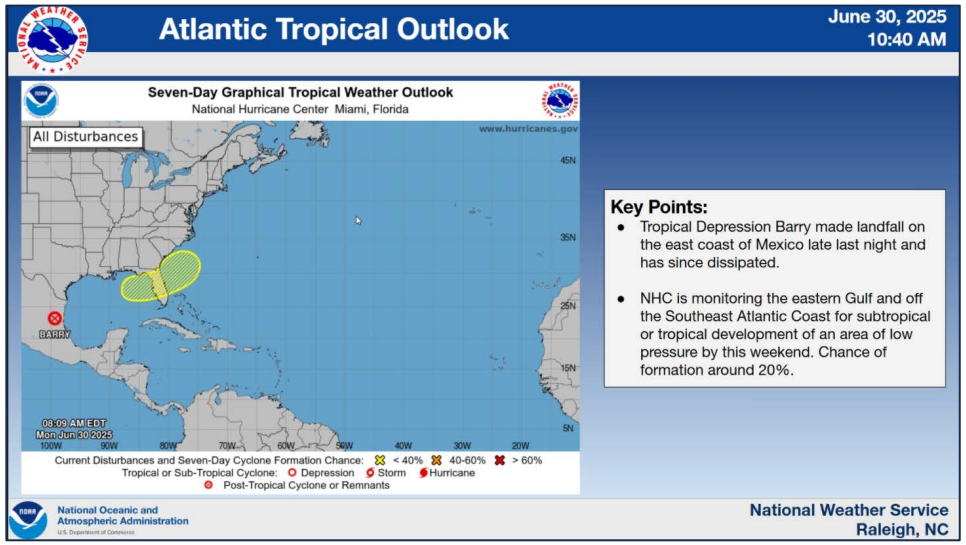
From the most recent CPC Diagnostic Discussion (ENSO Diagnostics Discussion):

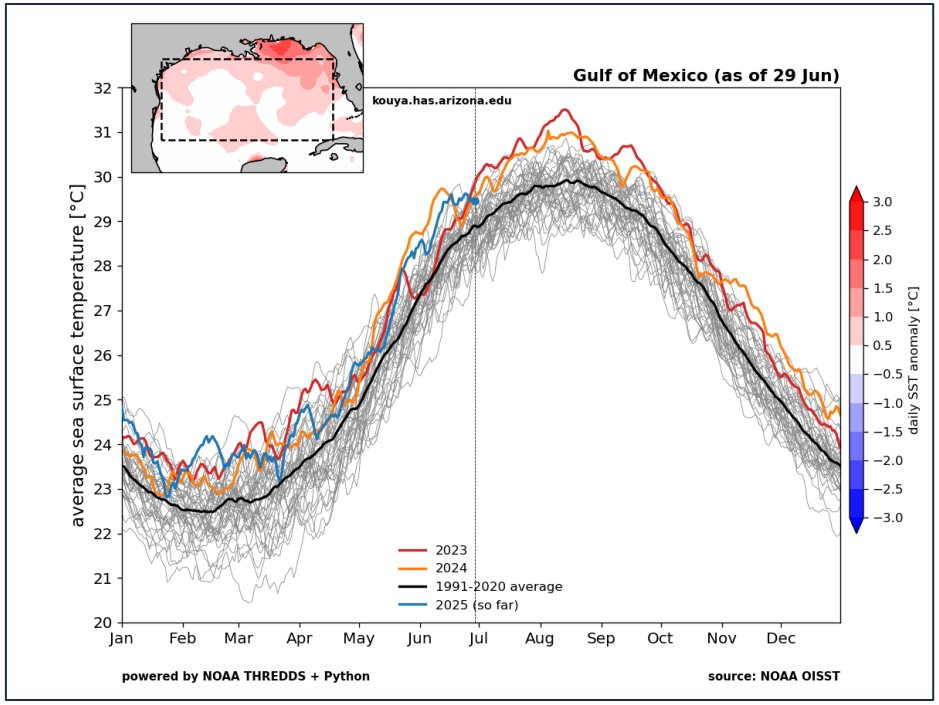
The IRI and North American Multi-Model Ensemble predictions indicate ENSO-neutral is most likely through the Northern Hemisphere winter 2025-26 [Fig. 6]. The forecast team also continuously favors ENSO-neutral through early 2026, with smaller chances that La Niña could form during winter 2025-26. In summary, ENSO-Neutral is likely in the Northern Hemisphere summer 2025 (82% chance in June-August) and may continue into winter 2025-26, though confidence is lower (48% chance of Neutral and 41% chance of La Niña in November-January; [Fig. 7]).

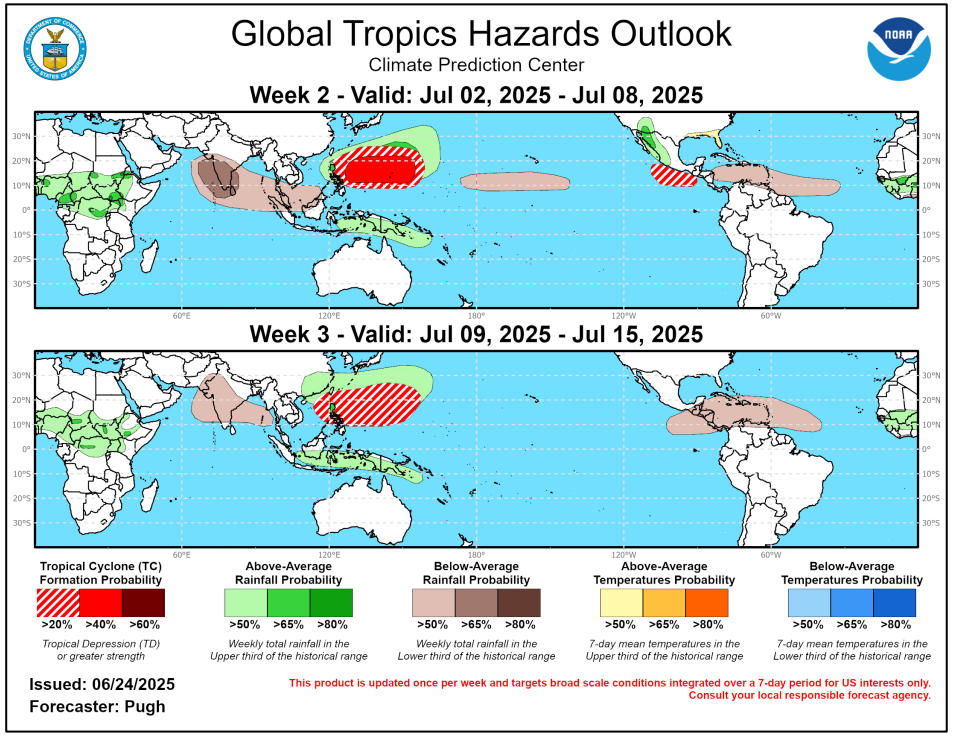
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

Hurricane Season



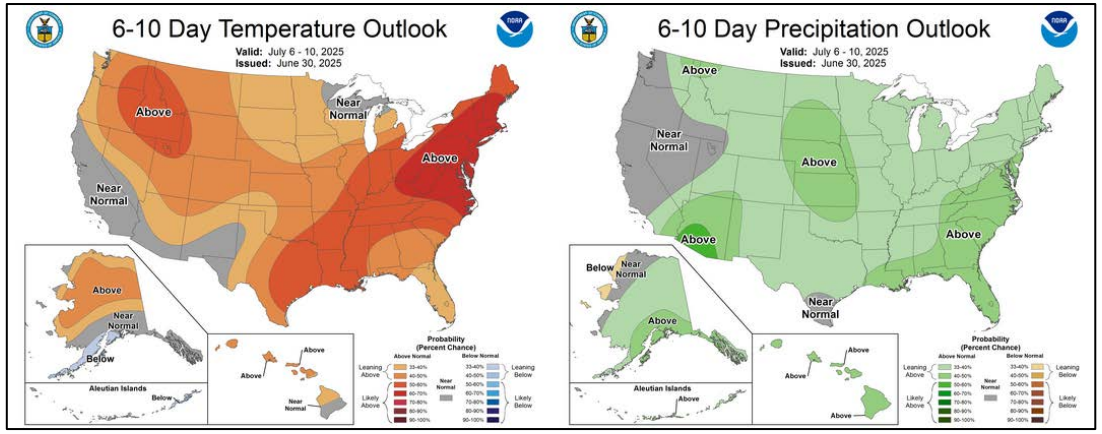


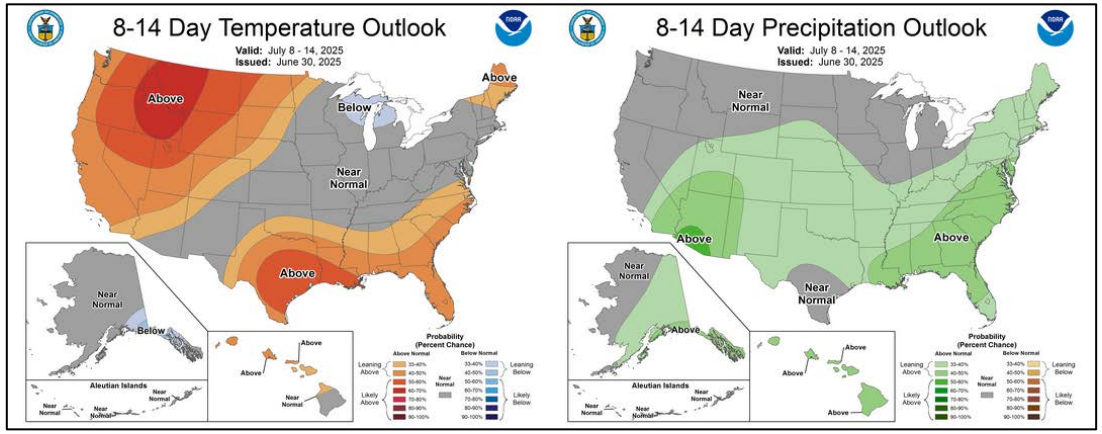




Temp & Precip Outlook

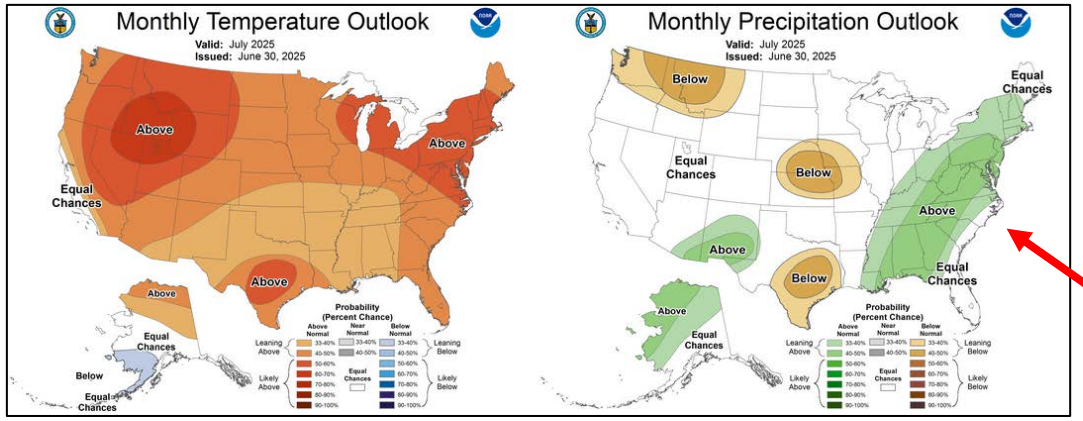
6-10 Day, 8-14 Day, Monthly (June), & Seasonal (J/A/S & A/S/O)

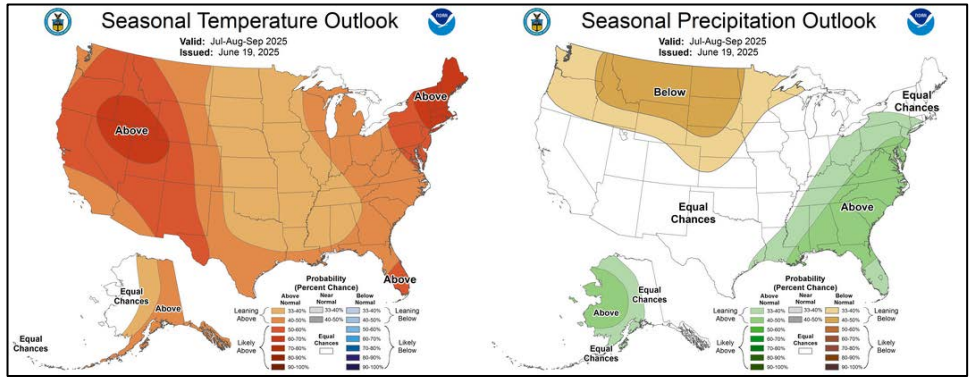


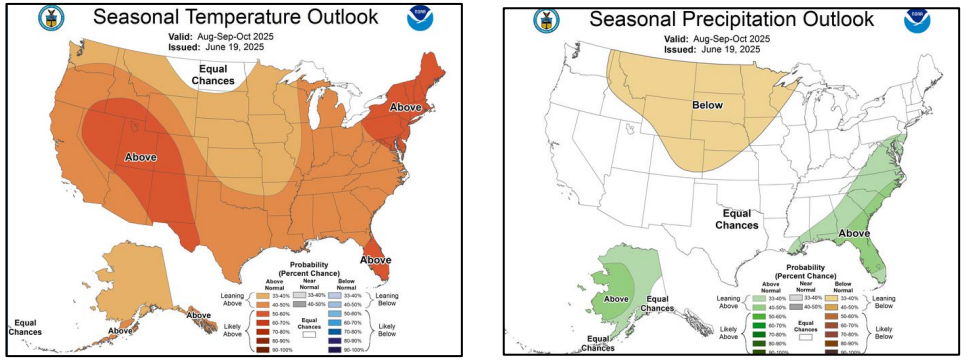


Source: https://www.cpc.ncep.noaa.gov/

https://www.cpc.ncep.noaa.gov/products/predictions/long_range/fxus05.html

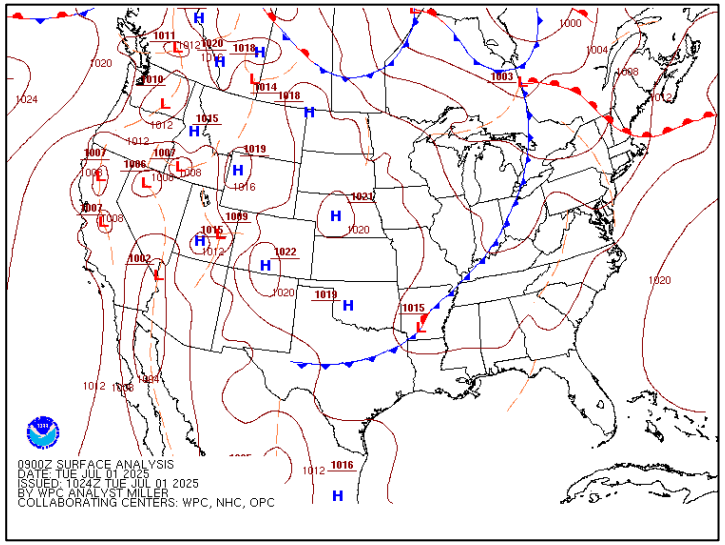




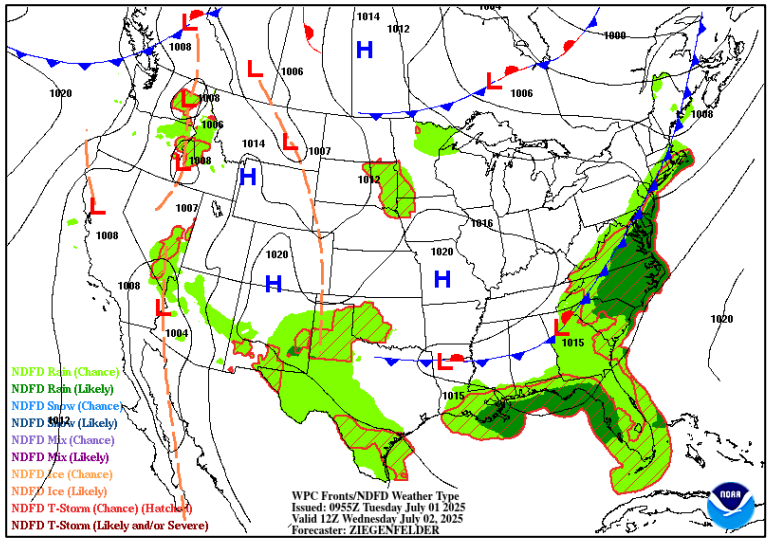


WPC Forecasted Surface Fronts & Sea-Level Pressures

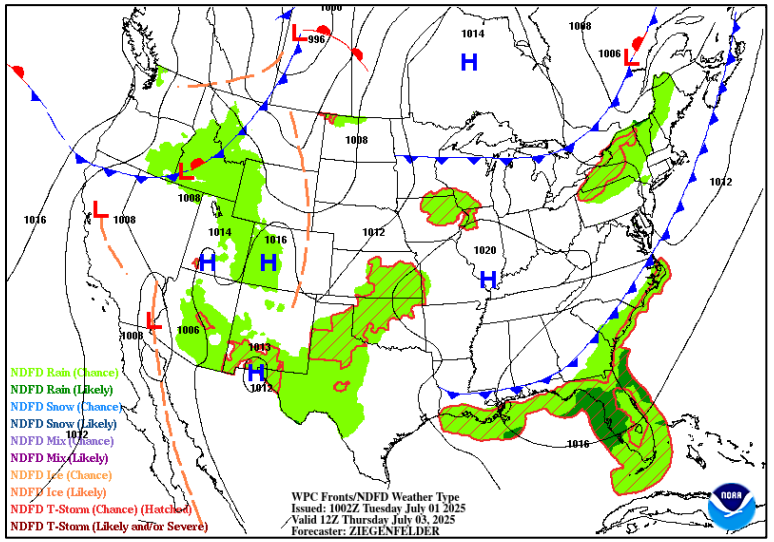
Day-1 @ 09Z Surface Analysis



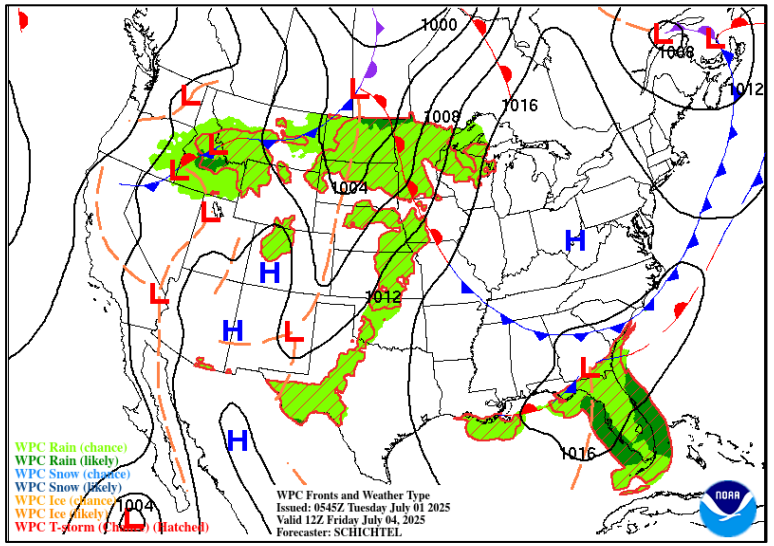
Day 2 - @ 12Z (0800 EDT)



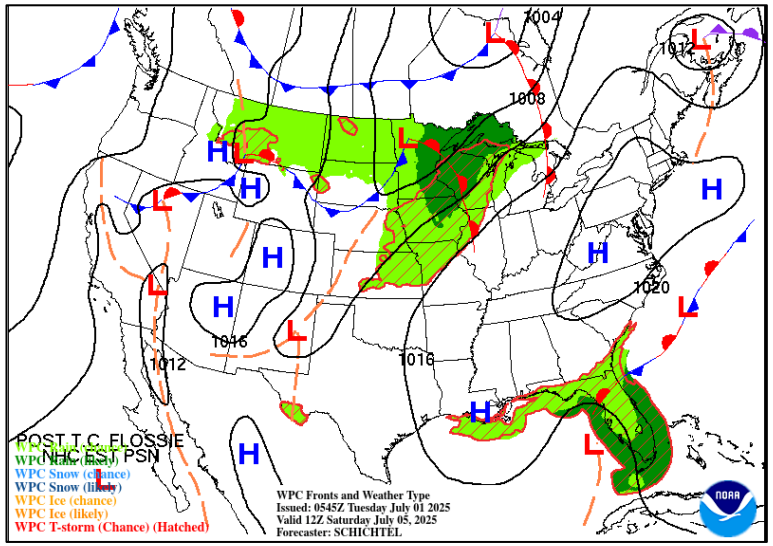
Day 3 @ 12Z (0800 EDT)



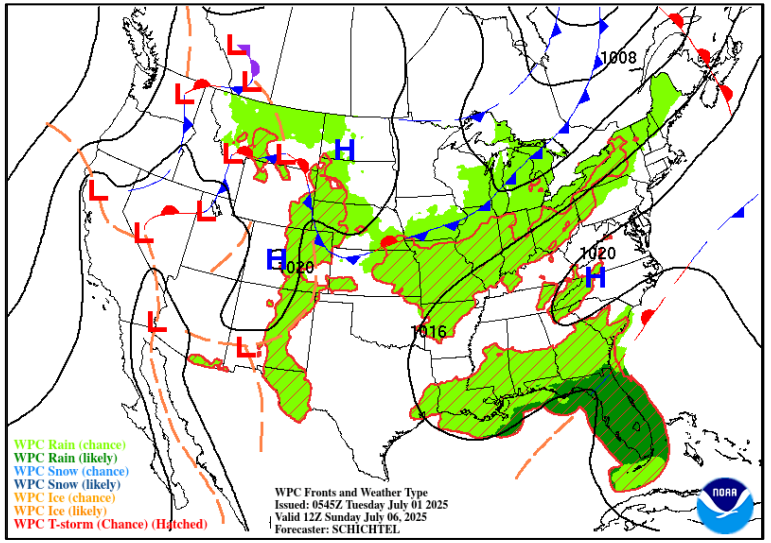
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



Day 6 @ 12Z (0800 EDT)

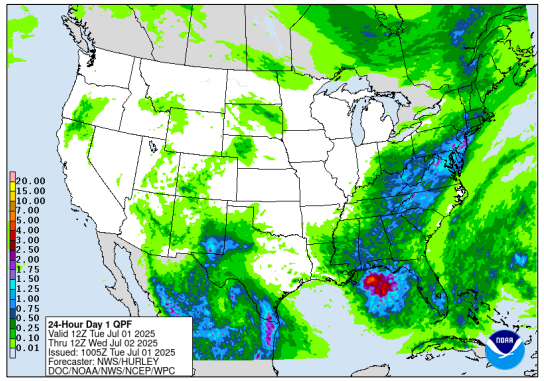


Location: https://www.wpc.ncep.noaa.gov/#

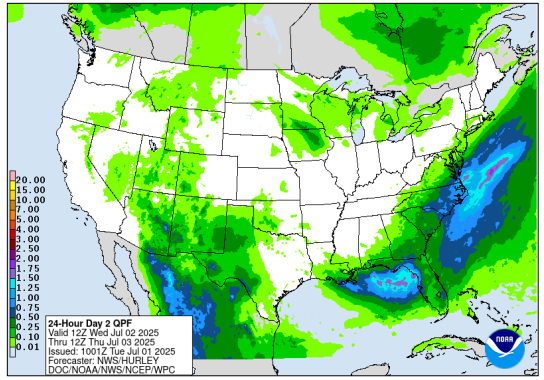
Quantitative Precipitation Forecast, 7-Day

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

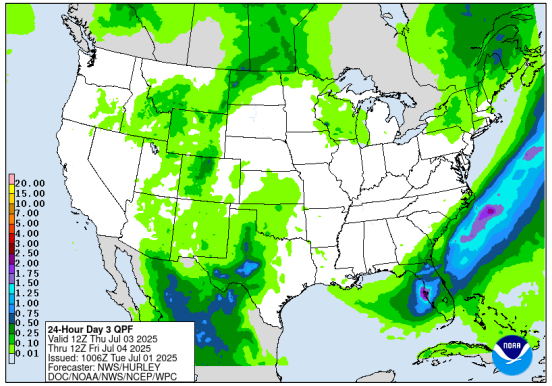
Day – 1



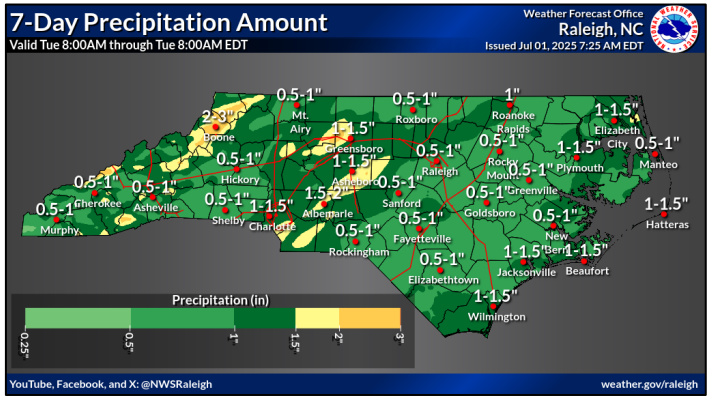
Day - 2



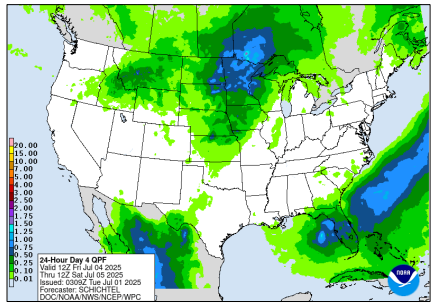
Day - 3



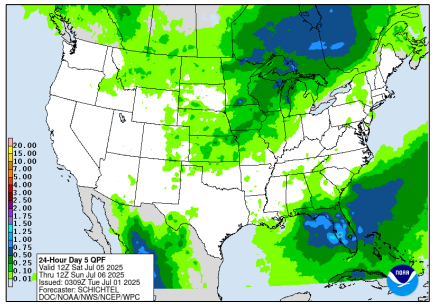
Zoom - Days 1 – 7 QPF



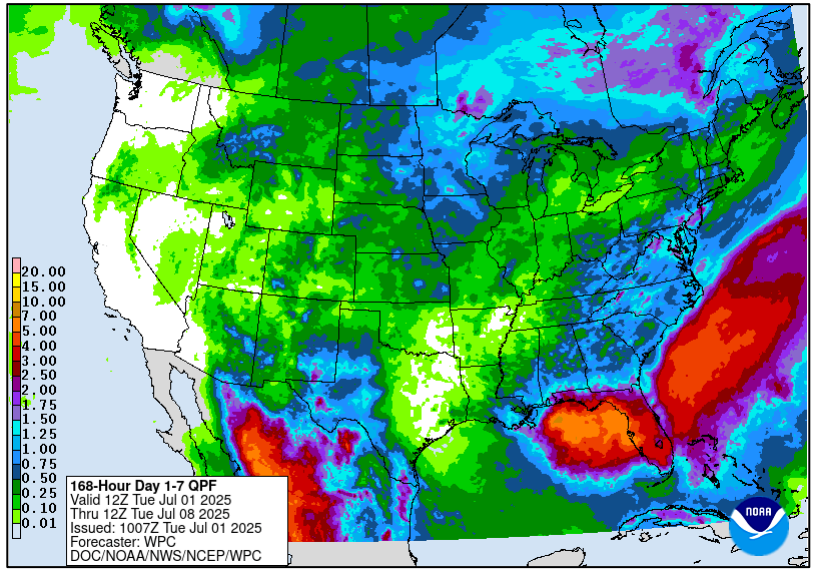
Day - 4



Day - 5

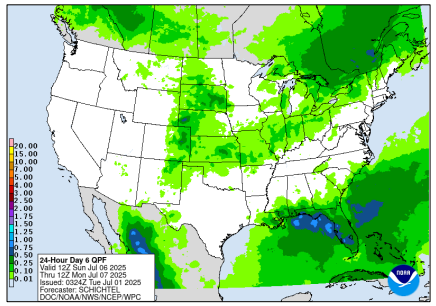


Days 1 – 7 QPF

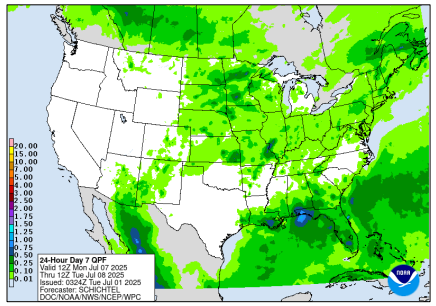


Thunderstorm derived precip is highly variable across the landscape, as evidenced by the past several weeks.

Day - 6



Day - 7



NFDRS Observations from yesterday, June 30th

(Averaged for each FDRA by SIG Group & "All Days Filter")

Averages by FDRA

FDRA	STATION_COUNT	NFDR_DATE	BI	ERC	IC	SC	KBDI	1HR	10HR	100HR	1000HR	HRB	WOODY	TEMP	RH	WIND	PRECIP	DUR
Southern Highlands	3	2025-06-29	44.30 69.0%	19.73 63.7%	3.20 51.9%	19.53 68.3%	270.00	20.86 77.7%	19.39 58.4%	19.13 46.0%	20.89 63.0%	156.47	134.00	77.3°F	67.7%	WSW 1.7 mph	0.03 in.	1.3
Central Mountains	3	2025-06-29	14.63 20.4%	10.20 26.5%	1.97 38.8%	3.37 16.0%	152.33	20.26 77.1%	20.35 65.7%	18.23 34.3%	20.47 51.7%	250.00	200.00	79.7°F	67.0%	E 1.3 mph	0.36 in.	1.7
Northern Highlands	2	2025-06-29	14.40 23.9%	7.30 26.3%	1.55 47.0%	4.65 31.2%	232.00	24.43 80.1%	21.25 68.3%	18.40 35.9%	20.33 51.1%	250.00	200.00	76.5°F	74.0%	S 6.5 mph	0.18 in.	1.5
Blue Ridge Escarpment	3	2025-06-29	42.57 59.4%	23.93 59.7%	5.53 61.4%	14.90 59.5%	218.00	18.99 75.6%	19.62 65.0%	20.46 58.2%	19.12 35.2%	169.43	144.67	82.0°F	65.7%	SE 3.3 mph	0.38 in.	1.7
Western Piedmont	3	2025-06-29	29.47 35.4%	22.57 47.1%	4.13 41.0%	6.50 34.2%	259.33	11.94 55.3%	16.89 58.2%	16.92 33.5%	18.81 49.3%	164.00	140.67	92.3°F	51.0%	S 3.0 mph	0.49 in.	1.0
Sandhills	3	2025-06-29	28.73 31.5%	33.03 37.1%	6.47 39.4%	4.20 32.9%	354.67	12.17 56.8%	18.59 68.3%	18.53 55.6%	19.16 47.7%	179.80	155.67	88.7°F	58.3%	SSW 2.3 mph	0.05 in.	0.7
Eastern Piedmont	4	2025-06-29	29.03 16.5%	17.70 22.1%	3.28 25.6%	7.95 12.4%	287.00	13.56 66.7%	17.18 53.3%	16.98 22.6%	18.39 26.4%	165.43	146.25	91.0°F	58.3%	WSW 6.5 mph	0.01 in.	0.5
Southern Coastal	7	2025-06-29	19.31 13.2%	17.31 24.0%	2.56 29.1%	3.54 9.3%	381.14	12.81 56.4%	17.65 57.8%	17.06 14.3%	19.00 32.3%	241.36	200.00	93.6°F	54.7%	SSE 2.6 mph	0.02 in.	0.3
Northern Coastal	4	2025-06-29	23.80 17.5%	22.30 31.5%	3.50 35.0%	4.15 10.3%	356.75	11.70 48.6%	16.89 56.1%	16.81 21.9%	18.91 38.5%	164.38	164.00	93.5°F	52.0%	SSW 3.5 mph	0.00 in.	0.0

BI/ERC/IC/SC Percentiles (%) 0 10 20 30 40 50 60 70 80 90

Fuel Moisture Percentiles (%) 0 10 20 30 40 50 60 70 80 90

Note decline in larger dead fuel classes due to impacts of above average warmth & lack of longer duration/widespread precip. Higher evaporative demand/high VPD leading to decline in modeled live fuel moistures.

Important notes for next slide group:

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

- These are extracts from FF+ using daily observation data downloaded from WIMS
- Graphs run in calendar year format from Jan-Dec to stay consistent with FDOP and yearly Percentiles. Averages from SIG stations across each FDRA.

B. Weekly Outlook - FDRA General Fire Danger Forecast Matrix:

- Available on the FWIP within the "Resources for NCFS" page.
- The operation link is: https://products.climate.ncsu.edu/fwip/outlook.php
- The matrix updates daily - please review the tool notes below for more details.

*Growing Season Index (GSI) has greened the live herbaceous & woody vegetation in the Fire Danger Rating Areas (FDRAs) within the NFDRS model. This greening directly impacts Fuel Model X outputs. Remember that it is only a model, and actual live fuel moisture depends on a variety of factors. There is variability across the broader landscape, especially with the nature of summer precip patterns. Values are averaged across the FDRA SIG Station Group.

Tool Summary:

The forecast matrix was created using **standard NFDRS and weather forecast data:**

- Weather conditions and NFDRS outputs are forecasted over the next 7 days by NWS for SIG stations in each FDRA.
- Weather variable ranges and breakpoints were defined by FDRA stakeholders and relate to Pocket Card notes.
- Maximum temperatures in the Critical range are color-coded with shades of red to help visually distinguish daily variations. The brightest red color corresponds to temperatures of 100°F or greater.

Fire danger forecast indices and component values are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

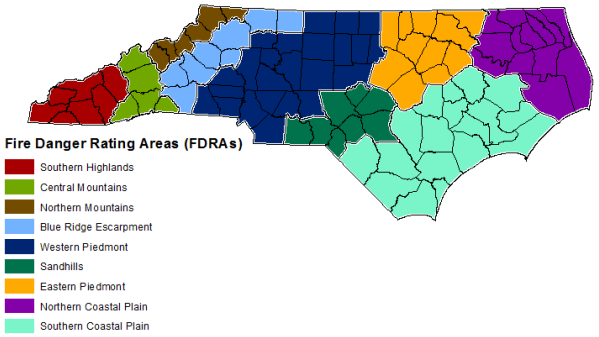
- Low to Moderate (0 to 74th percentile); shown in blue-green
- High (75th to 89th percentile); shown in yellow
- Very High to Extreme (90th+ percentile); shown in red and labeled as Critical

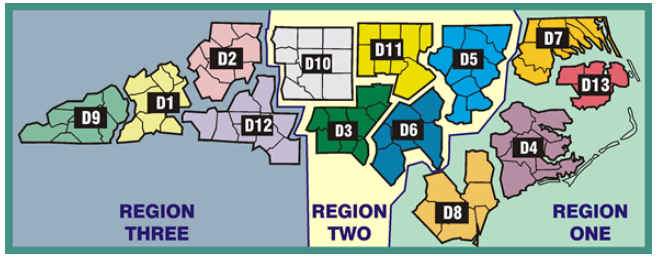
Dead fuel moisture forecast values are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

- Low to Moderate (26th to 100th percentile); shown in blue-green
- High (11th to 25th percentile); shown in yellow
- Very High to Extreme (0 to 10th percentile); shown in red and labeled as Critical

Other Notes:

- Read the key and notes for each FDRA, included on the outlook matrix page.
- Forecasts are variable and can change significantly over a forecast cycle and across the landscape.
- This is another tool for gaining better situational awareness, and should be used for general planning purposes only.
- The outlook matrix is refreshed when an FDRA is selected, using the most recent forecast data available at that time. The 7th day may drop off or display partial data prior to the afternoon/evening forecast update.
- Daily updates to NFDRS forecasts occur around **1530** daily, while general weather forecasts are updated around **1730** daily.



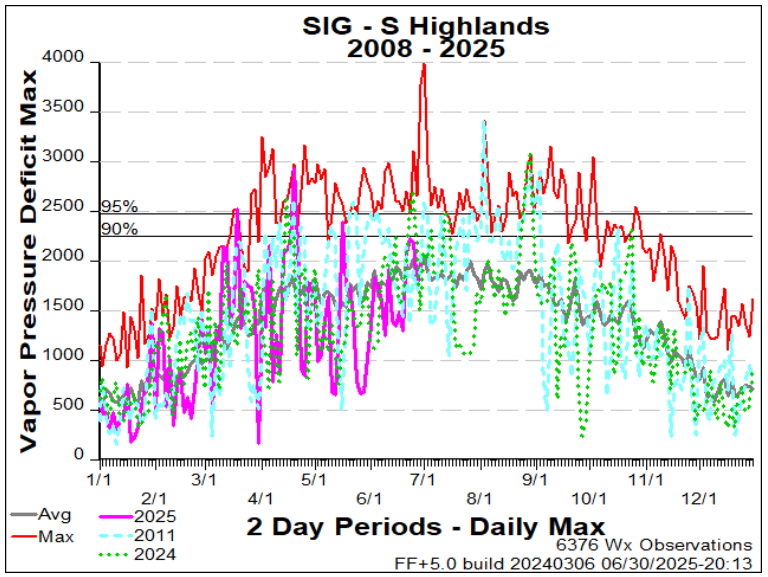


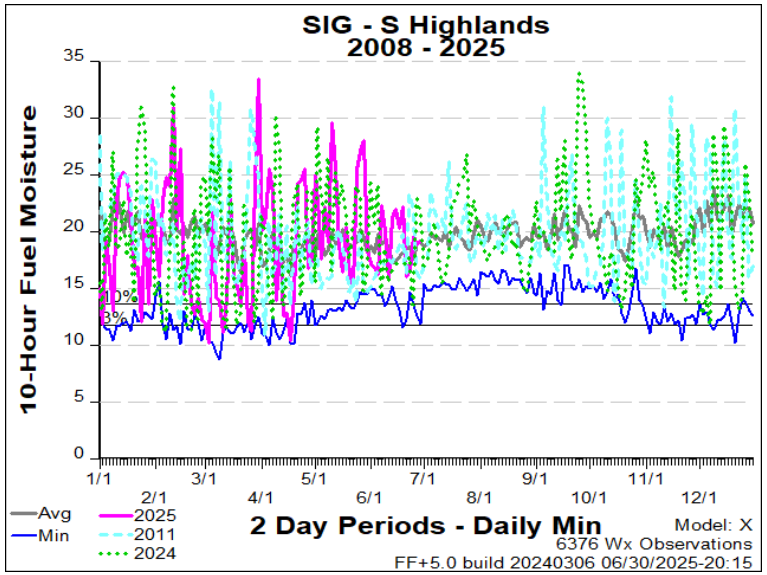
To reduce duplication & increase situational awareness, slides are organized by FDRA in this order:

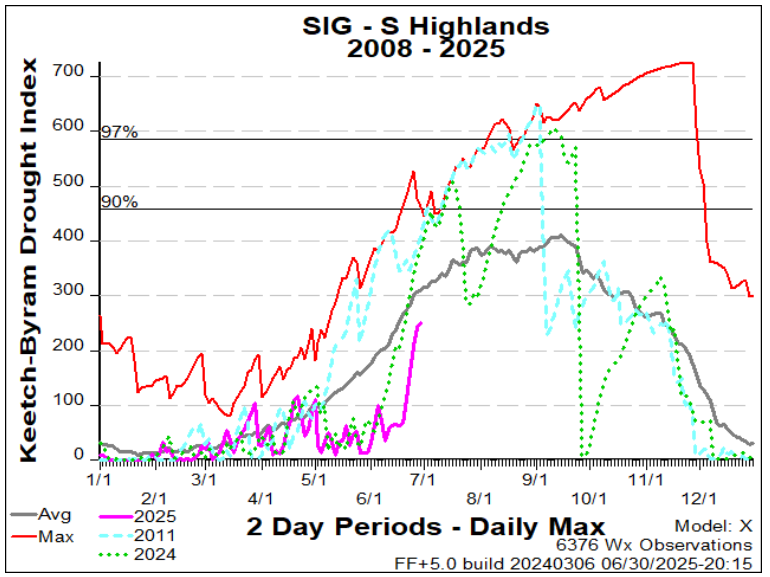
(R3 = Region 3, R2 = Region 2, R1 = Region 1)

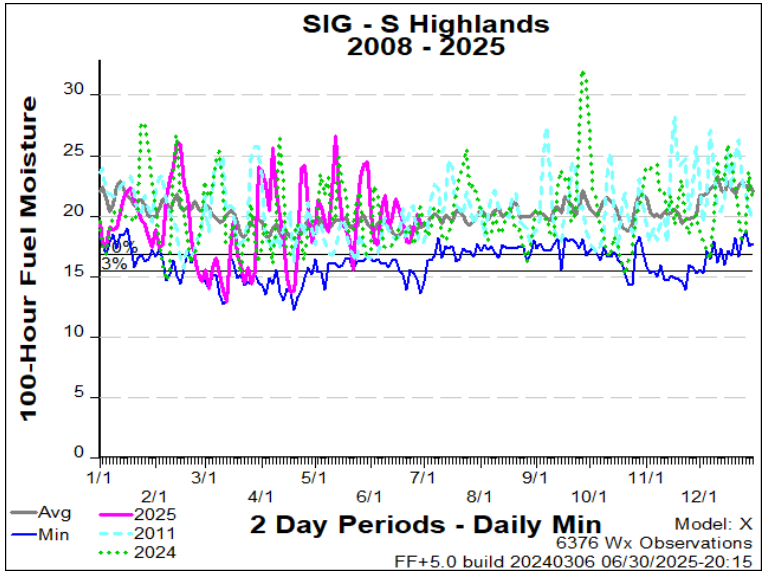
- Southern Highlands (R3)
- Central Mountains (R3)
- Northern Highlands (R3)
- Blue Ridge Escarpment (R2 & R3)
- Western Piedmont (R2 & R3)
- Eastern Piedmont (R2)
- Sandhills (R2)
- North Coast (R1)
- South Coast (R1 & R2)

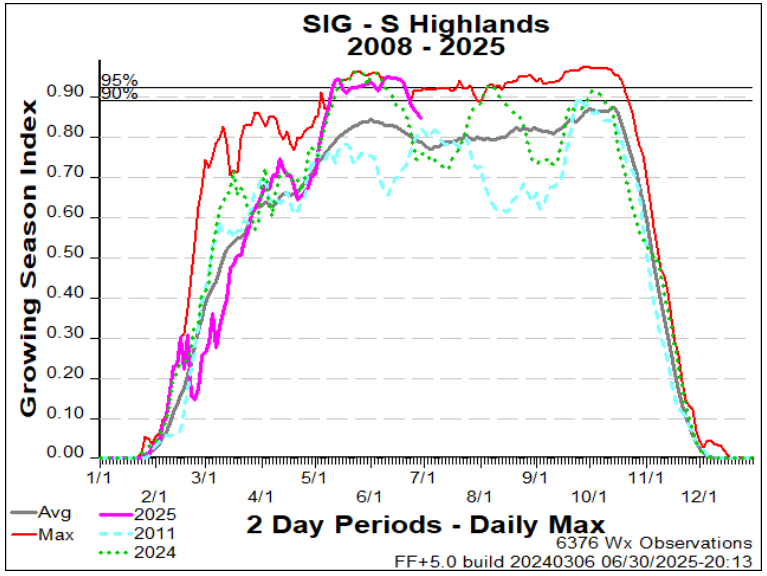
FDRA – Southern Highlands

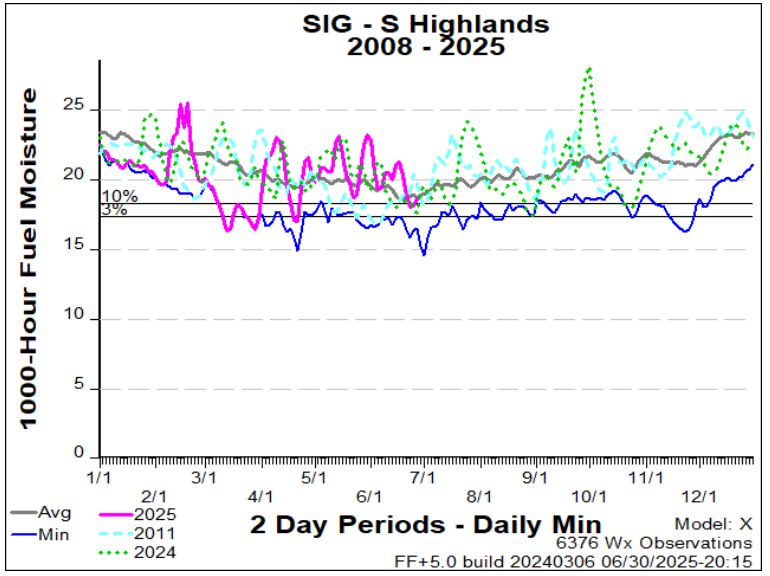






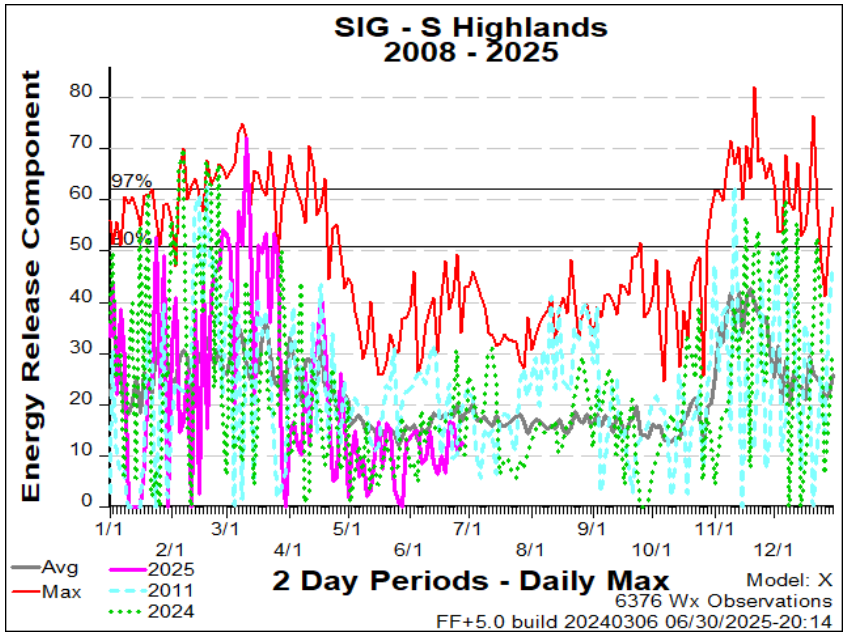




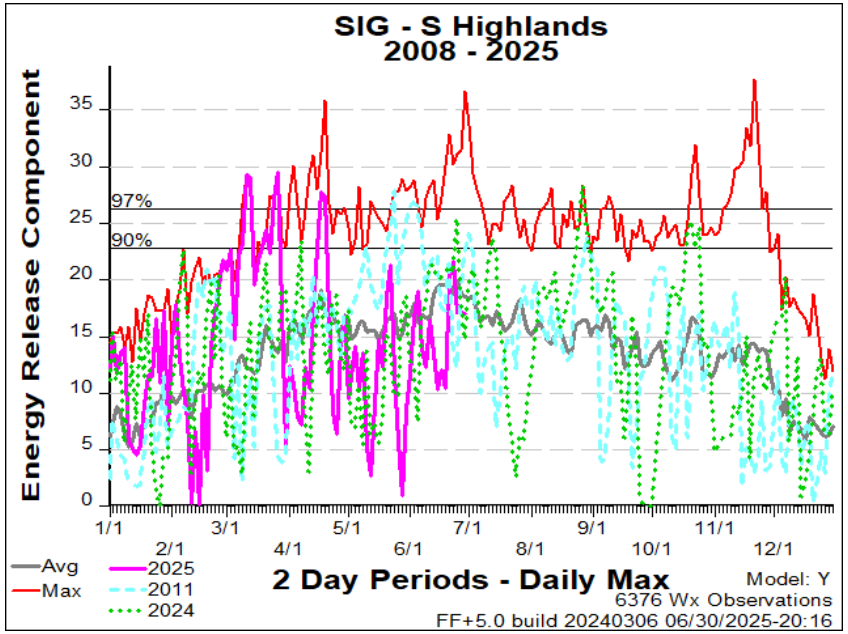


FDRA – Southern Highlands

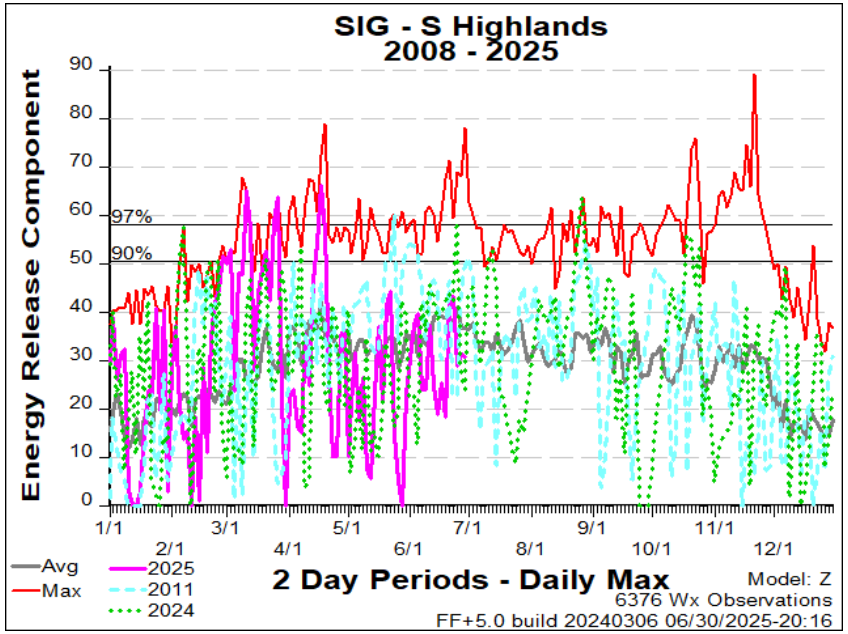
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Southern Highlands

Weekly Outlook

Southern Highlands FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	79	81	84	84	83	82	81
Avg. Min. Humidity (%)	74	65	52	54	59	62	66
Avg. 20' Wind Speed (mph)	2	2	2	2	3	3	3
Avg. Wind Direction*	SW	NW	SE	E	ESE	ESE	SE
Avg. Probability of Precip. (%)	76	34	11	16	22	33	49
Days Since a Wetting Rain**	0.0	1.0	2.0				
Forecast ERC (Fuel Model X)	18.1	14.7	16.8	17.4	15.2	14.1	12.9
Forecast BI (Fuel Model X)	36.3	29.0	31.4	30.1	26.7	25.2	24.1
Forecast IC (Fuel Model X)	2.1	1.8	2.8	3.3	2.8	2.4	2.1
Forecast 100-Hr. FMC	19.3	19.5	19.0	18.5	18.2	18.1	18.7
Forecast 1000-Hr. FMC	20.5	20.5	20.4	20.2	20.1	20.0	19.9
KBDI	233.7						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

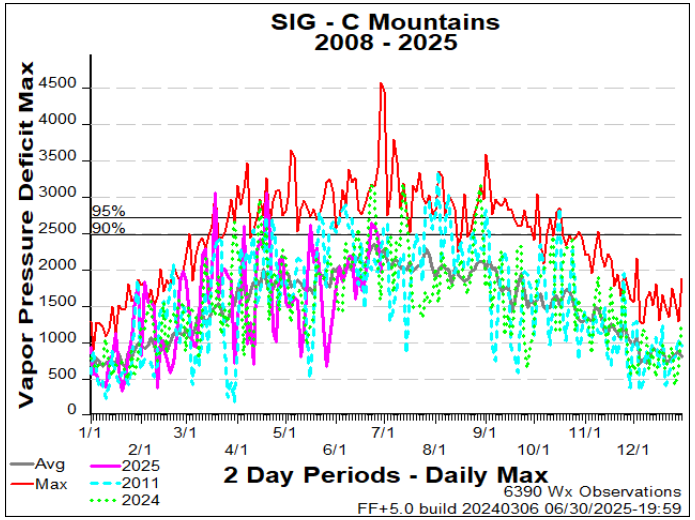
Values in the table above are averages from 3 stations in this FDRA:

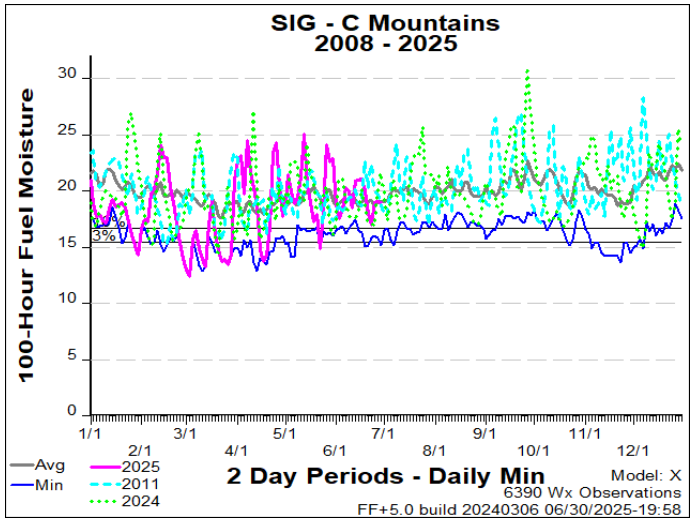
- **Tusquitee** (315602)
- **Locust Gap** (315802)
- **Highlands** (315803)

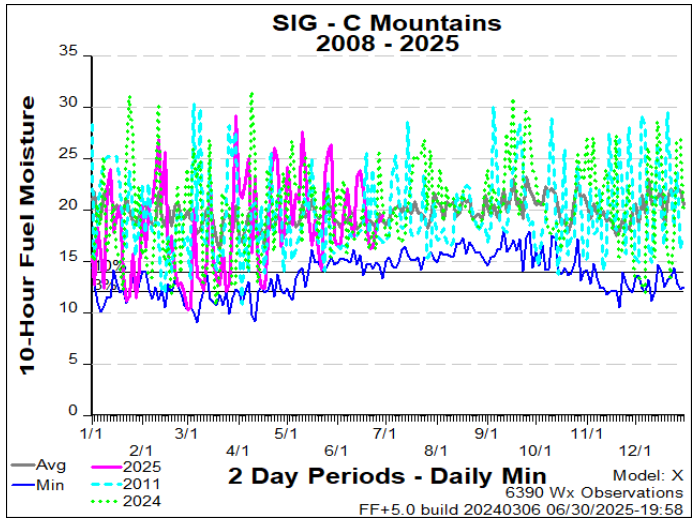
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph	Between 5 mph and 7 mph	Greater than 7 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 40	Between 40 and 52	Greater than 52
Burning Index	Less than 95	Between 95 and 118	Greater than 118
Ignition Component	Less than 9	Between 9 and 14	Greater than 14
100-Hour Fuel Moisture	Greater than 18%	Between 17% and 18%	Less than 17%
1000-Hour Fuel Moisture	Greater than 19%	Between 18% and 19%	Less than 18%
KBDI	Less than 345	Between 345 and 479	Greater than 479

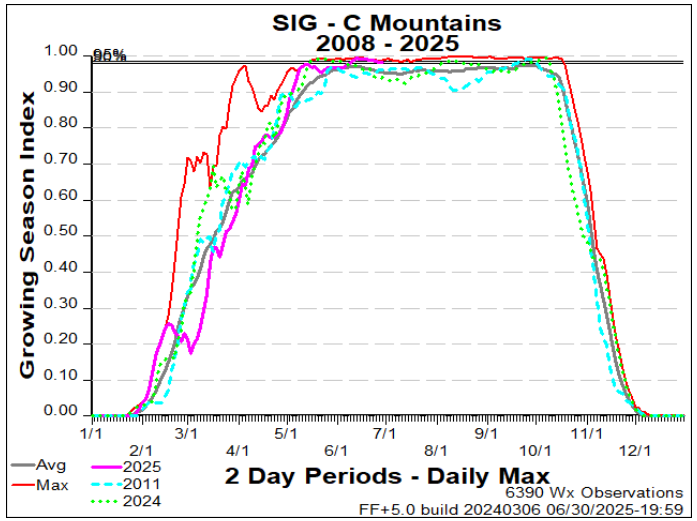
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

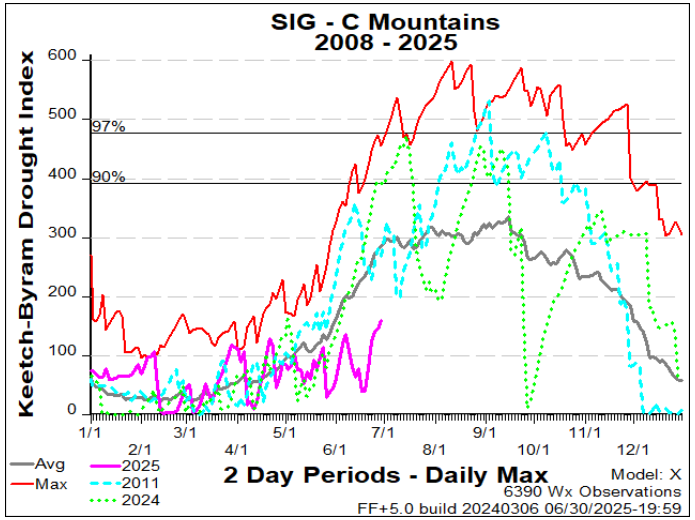
FDRA – Central Mountains

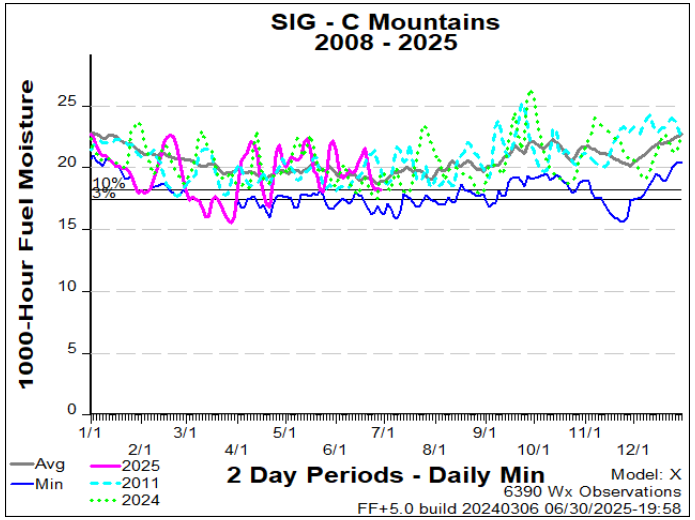






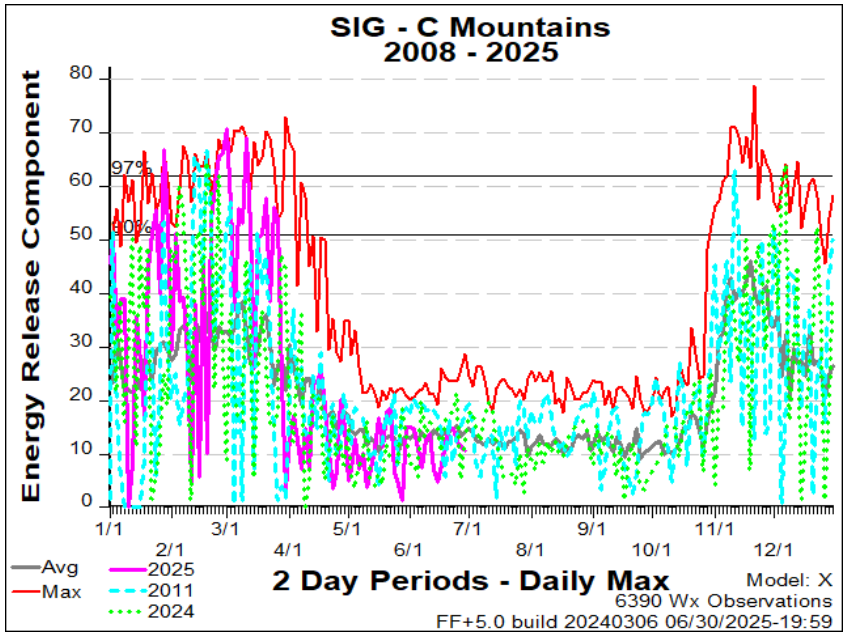




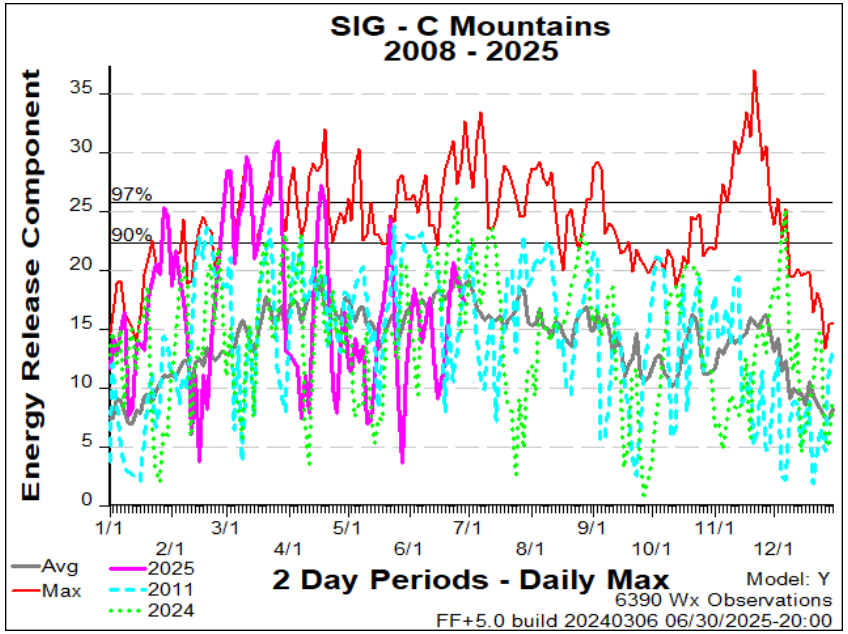


FDRA – Central Mountains

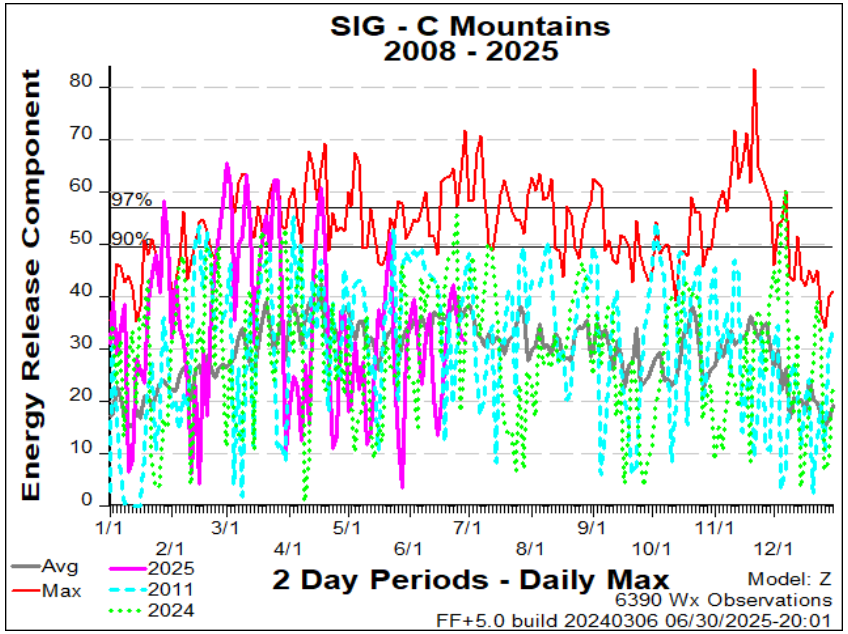
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Central Mountains

Weekly Outlook

Central Mountains FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more RED blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	83	85	86	87	86	86	86
Avg. Min. Humidity (%)	71	63	50	51	56	58	61
Avg. 20' Wind Speed (mph)	2	2	2	2	2	2	2
Avg. Wind Direction*	SSW	WNW	W	S	SSE	SSW	SW
Avg. Probability of Precip. (%)	69	42	14	15	26	35	50
Days Since a Wetting Rain**	0.0	1.0	2.0				
Forecast ERC (Fuel Model X)	11.1	10.3	12.6	13.4	13.0	12.3	11.9
Forecast BI (Fuel Model X)	16.5	16.1	18.1	19.1	19.2	18.6	18.1
Forecast IC (Fuel Model X)	1.5	1.3	2.0	2.5	2.2	2.0	1.8
Forecast 100-Hr. FMC	19.2	20.0	19.5	18.7	18.2	17.9	17.9
Forecast 1000-Hr. FMC	20.2	20.2	20.2	20.1	20.0	20.0	19.9
KBDI	169.0						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

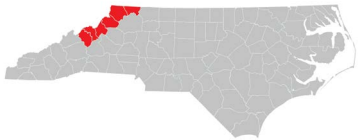
Values in the table above are averages from 3 stations in this FDRA:

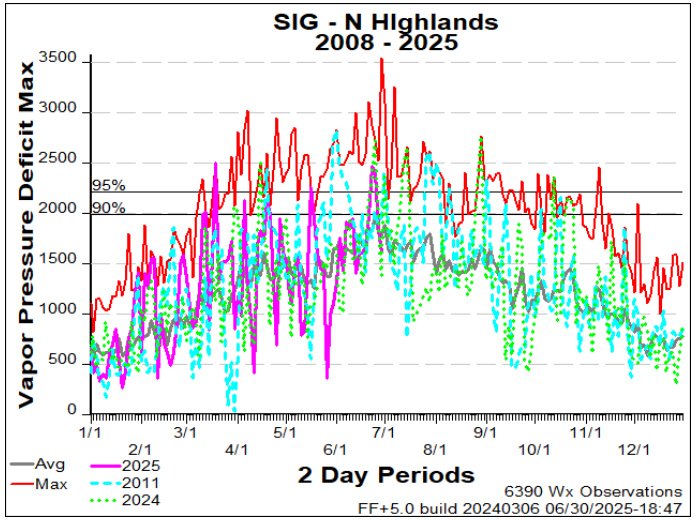
- **7 Mile Ridge** (313302)
- **Davidson River** (316001)
- **Mtn Horticultural Crops Res Stn** (316141)

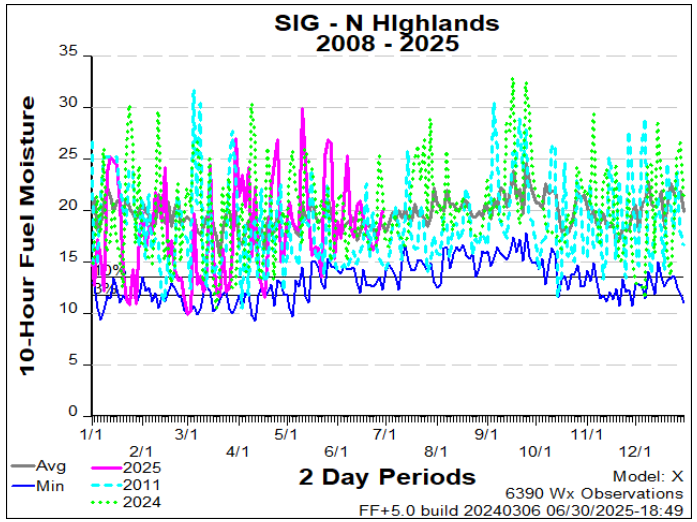
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph	Between 5 mph and 10 mph	Greater than 10 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 33	Between 33 and 50	Greater than 50
Burning Index	Less than 78	Between 78 and 106	Greater than 106
Ignition Component	Less than 6	Between 6 and 11	Greater than 11
100-Hour Fuel Moisture	Greater than 19%	Between 17% and 19%	Less than 17%
1000-Hour Fuel Moisture	Greater than 20%	Between 19% and 20%	Less than 19%
KBDI	Less than 319	Between 319 and 417	Greater than 417

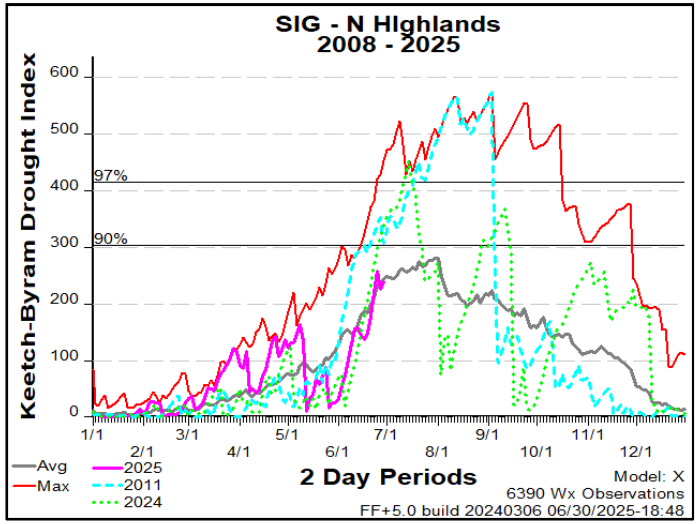
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

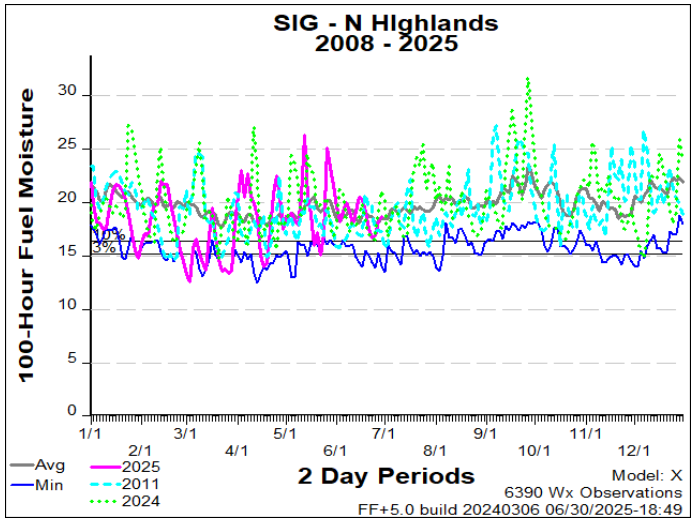
FDRA – Northern Highlands

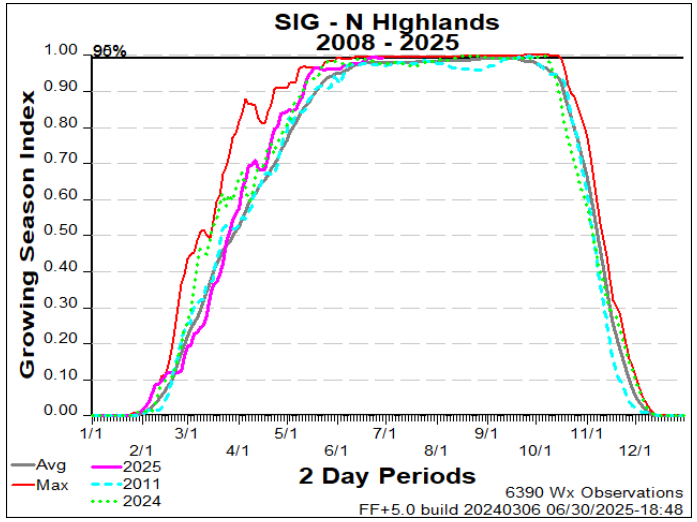


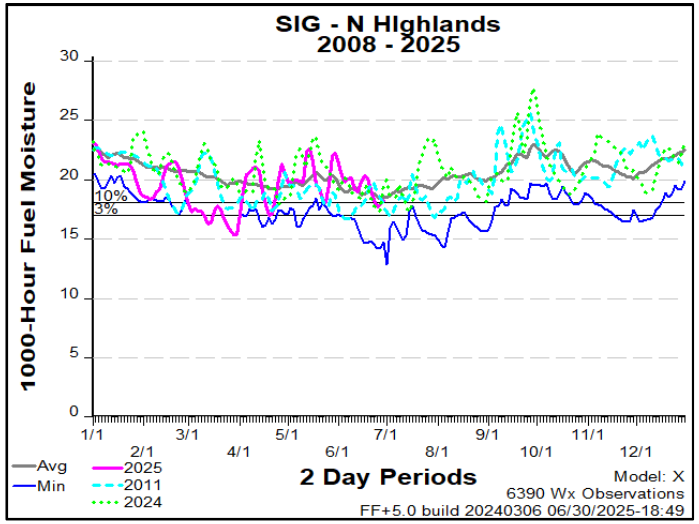




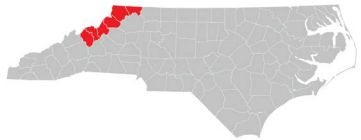




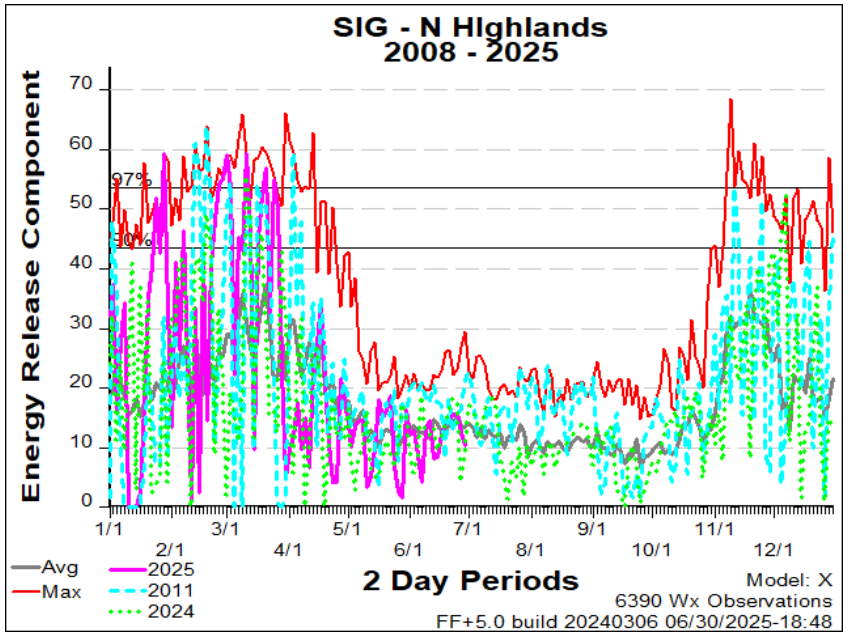




FDRA – Northern Highlands



ERC-X



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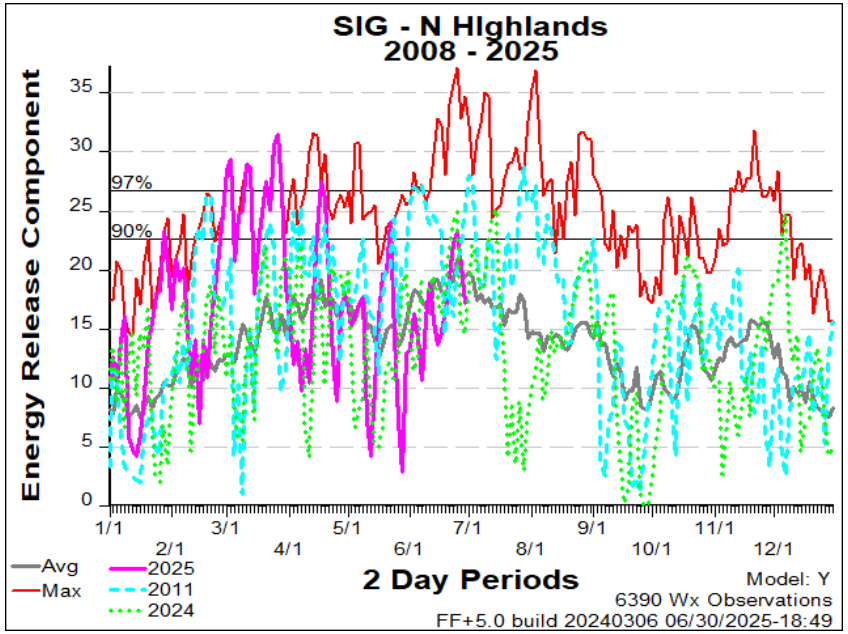

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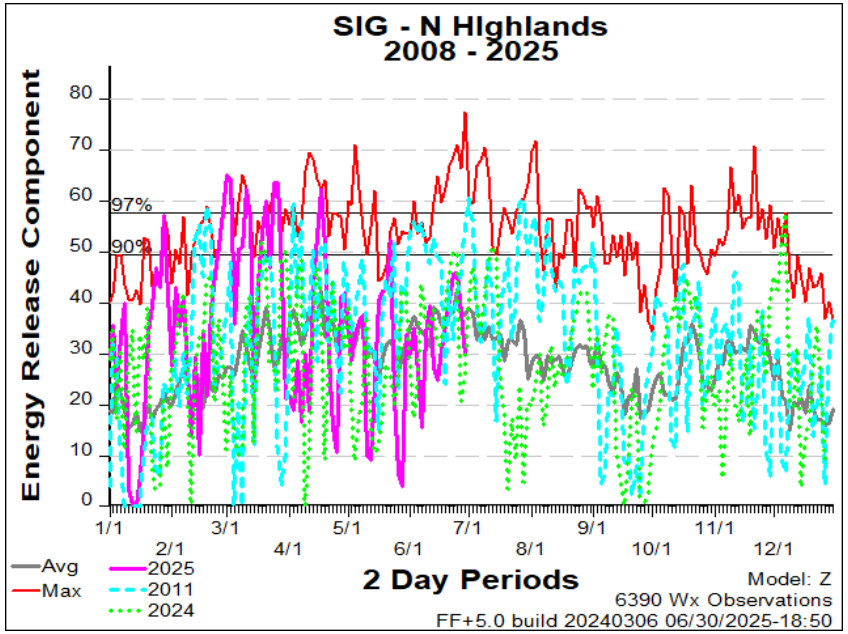

Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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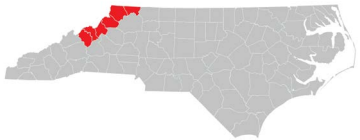
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Northern Highlands



Weekly Outlook

Northern Highlands FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	79	81	83	83	83	83	83
Avg. Min. Humidity (%)	81	70	52	56	60	63	68
Avg. 20' Wind Speed (mph)	3	3	3	3	3	3	3
Avg. Wind Direction*	SW	NW	NNW	SW	SW	SW	SW
Avg. Probability of Precip. (%)	82	34	7	10	20	26	44
Days Since a Wetting Rain**	0.0	1.0	2.0				
Forecast ERC (Fuel Model X)	10.8	10.1	14.0	15.4	13.9	13.2	12.2
Forecast BI (Fuel Model X)	19.6	18.2	21.7	23.3	22.7	22.1	21.2
Forecast IC (Fuel Model X)	1.4	1.5	2.8	3.3	2.8	2.5	2.0
Forecast 100-Hr. FMC	18.2	20.2	19.9	19.0	18.5	18.4	18.5
Forecast 1000-Hr. FMC	20.2	20.2	20.2	20.1	20.1	20.0	20.0
KBDI	246.0						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

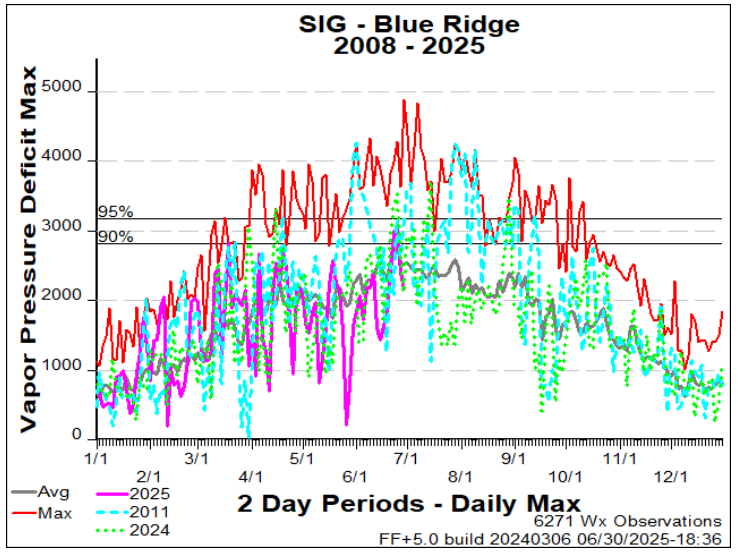
Values in the table above are averages from 3 stations in this FDRA:

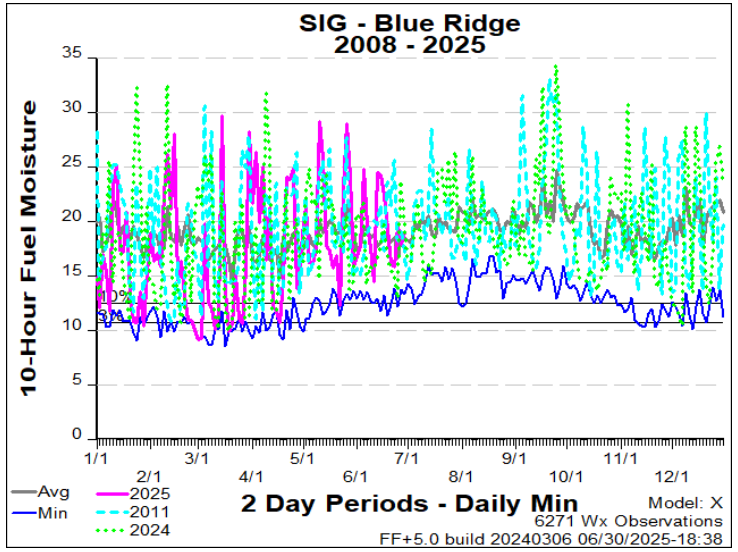
- **Laurel Springs** (310101)
- **Upper Mountain Research Stn** (310141)
- **Busick** (313402)

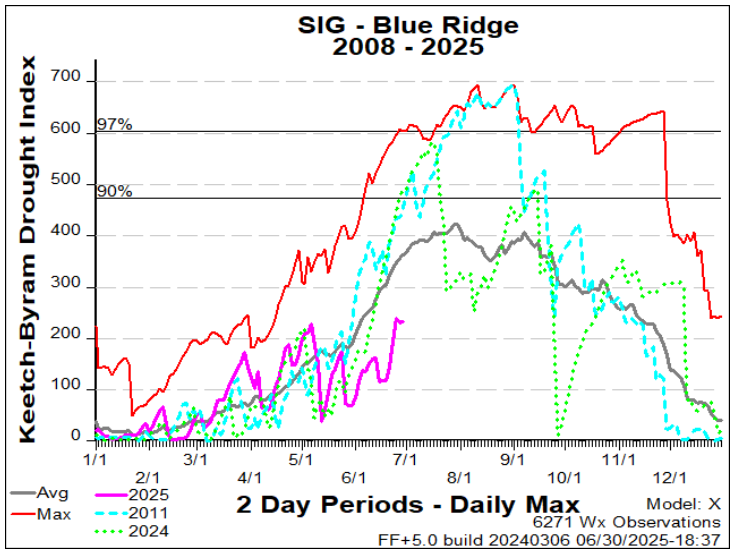
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 58°F	Greater than 58°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	Between 2 mph and 5 mph	Greater than 5 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 26	Between 26 and 46	Greater than 46
Burning Index	Less than 67	Between 67 and 108	Greater than 108
Ignition Component	Less than 5	Between 5 and 9	Greater than 9
100-Hour Fuel Moisture	Greater than 18%	Between 17% and 18%	Less than 17%
1000-Hour Fuel Moisture	Greater than 20%	Between 19% and 20%	Less than 19%
KBDI	Less than 192	Between 192 and 330	Greater than 330

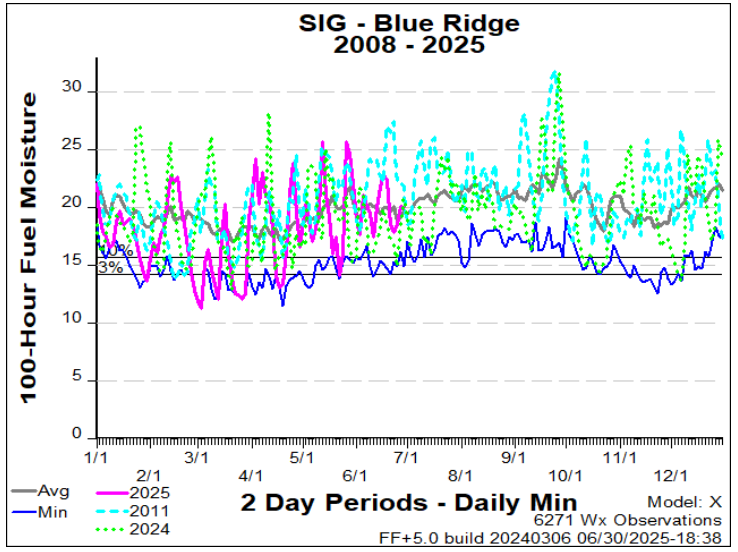
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

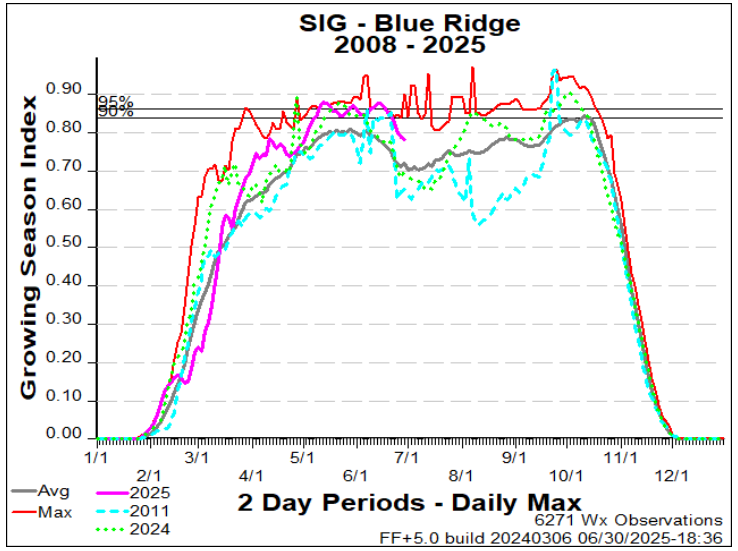
FDRA – Blue Ridge Escarpment

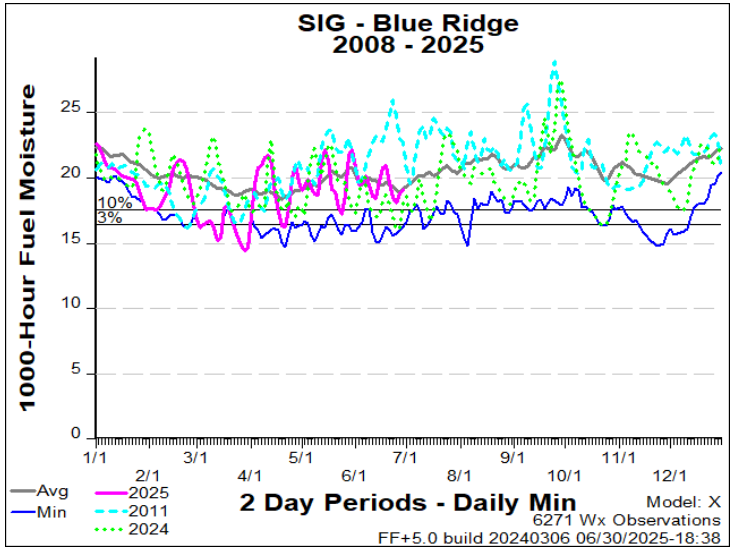






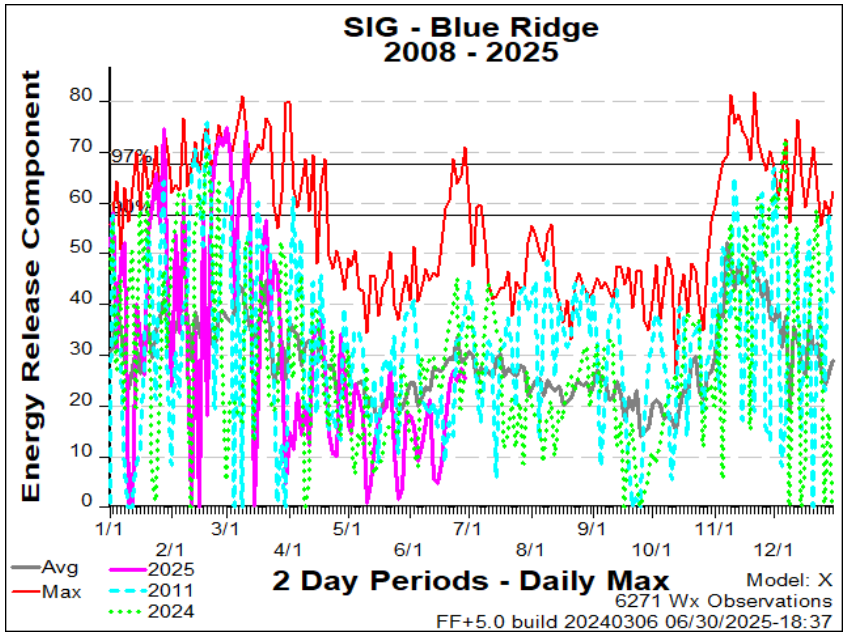




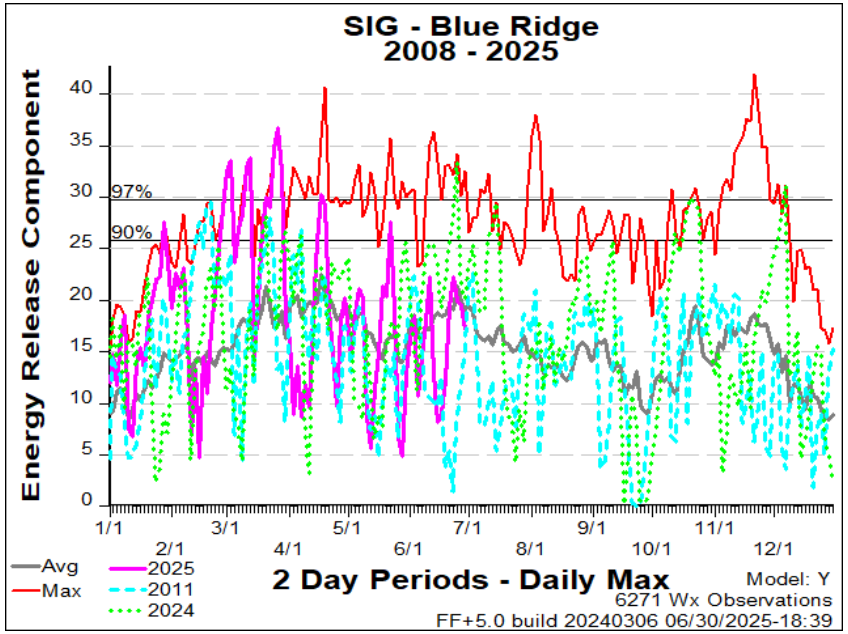


FDRA – Blue Ridge Escarpment

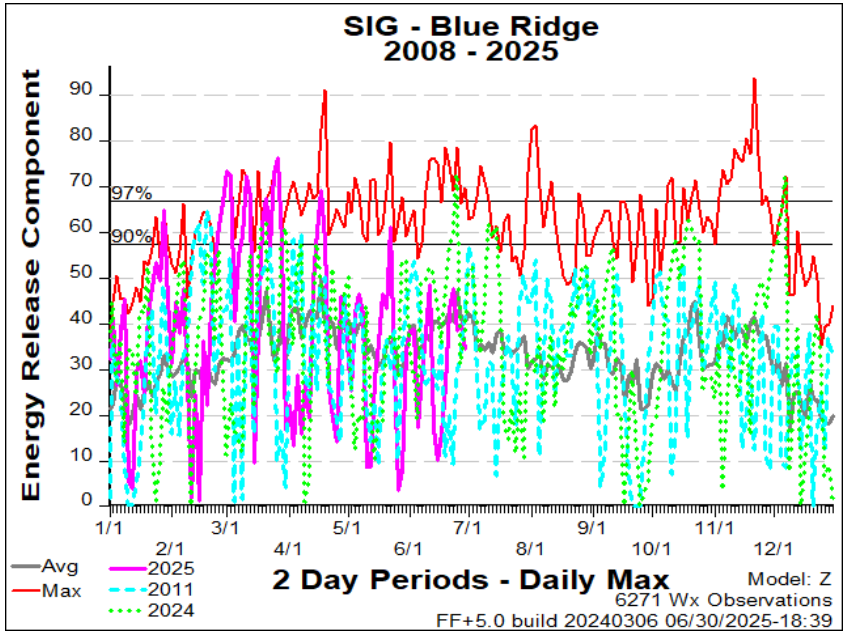
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Blue Ridge Escarpment

Weekly Outlook

Blue Ridge Escarpment FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	83	85	88	87	88	88	87
Avg. Min. Humidity (%)	75	65	50	51	56	59	63
Avg. 20' Wind Speed (mph)	2	2	2	2	2	2	2
Avg. Wind Direction*	SW	W	W	SSW	SSE	SSW	WSW
Avg. Probability of Precip. (%)	76	35	7	9	18	24	40
Days Since a Wetting Rain**	0.0	1.0	2.0				
Forecast ERC (Fuel Model X)	20.9	17.9	23.5	25.7	25.1	23.8	22.8
Forecast BI (Fuel Model X)	42.8	31.3	37.7	42.6	45.1	44.1	42.9
Forecast IC (Fuel Model X)	3.1	2.1	3.9	4.8	4.8	4.2	3.8
Forecast 100-Hr. FMC	18.7	21.0	19.5	18.6	18.4	18.5	18.7
Forecast 1000-Hr. FMC	19.1	19.3	19.4	19.1	18.8	18.6	18.6
KBDI	235.0						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

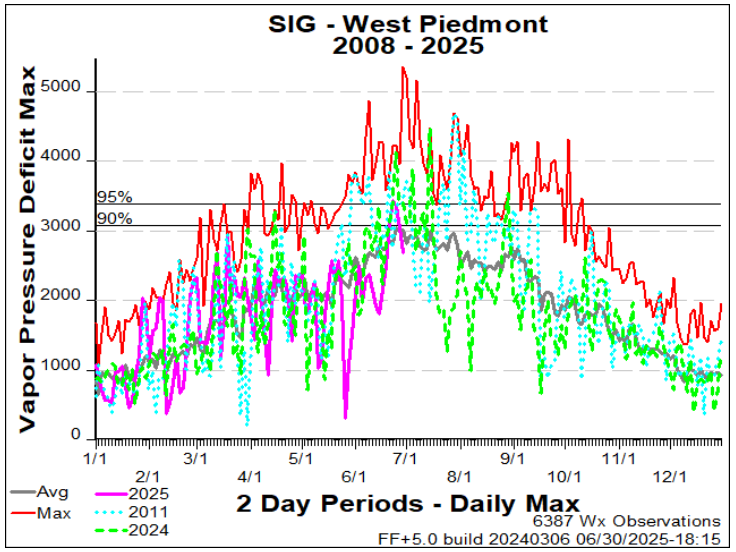
Values in the table above are averages from 3 stations in this FDRA:

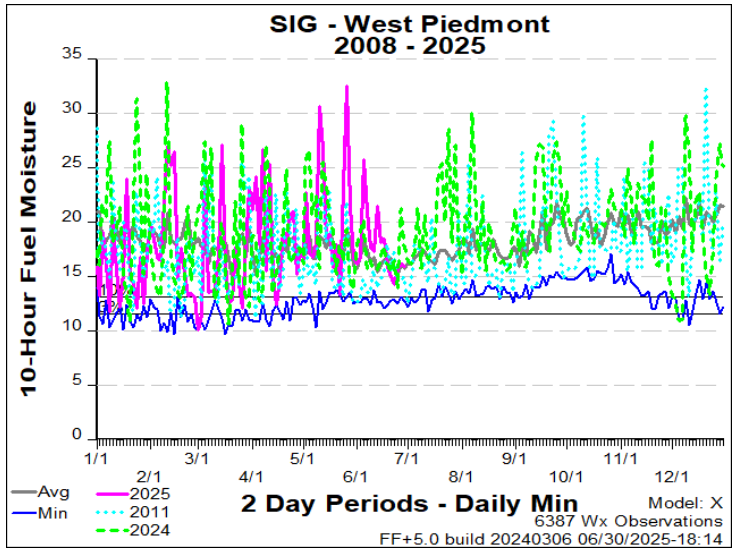
- **Rendezvous Mtn.** (312001)
- **North Cove Pinnacle (fr1)** (314301)
- **Rutherford County** (316302)

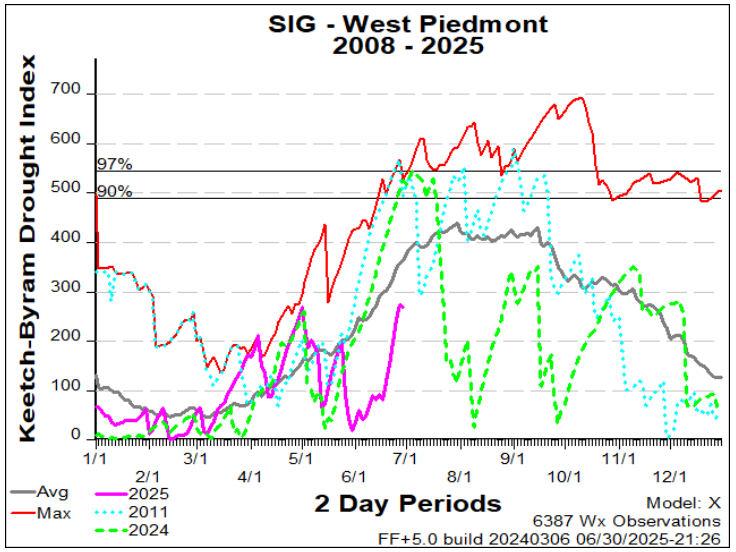
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	Between 2 mph and 4 mph	Greater than 4 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 52	Between 52 and 62	Greater than 62
Burning Index	Less than 116	Between 116 and 136	Greater than 136
Ignition Component	Less than 14	Between 14 and 20	Greater than 20
100-Hour Fuel Moisture	Greater than 18%	Between 16% and 18%	Less than 16%
1000-Hour Fuel Moisture	Greater than 19%	Between 18% and 19%	Less than 18%
KBDI	Less than 351	Between 351 and 508	Greater than 508

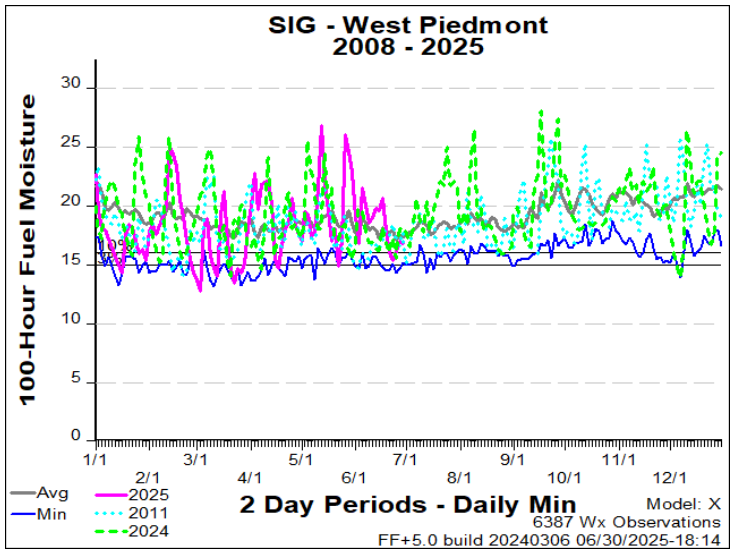
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

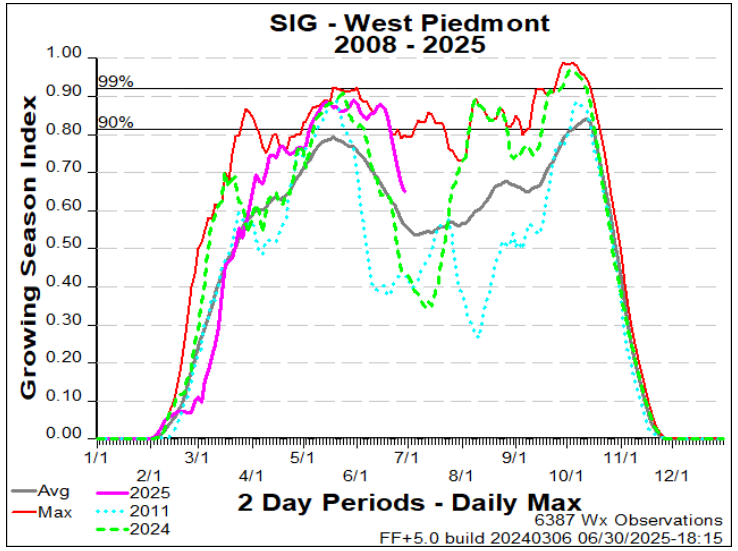
FDRA – Western Piedmont

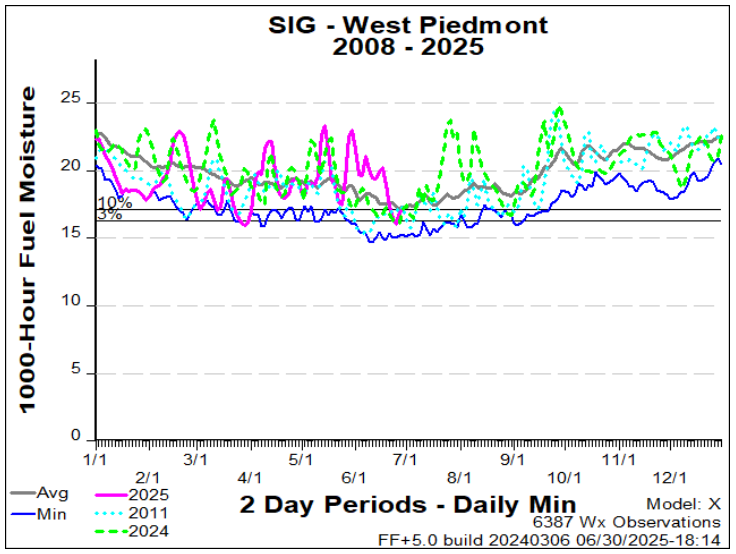






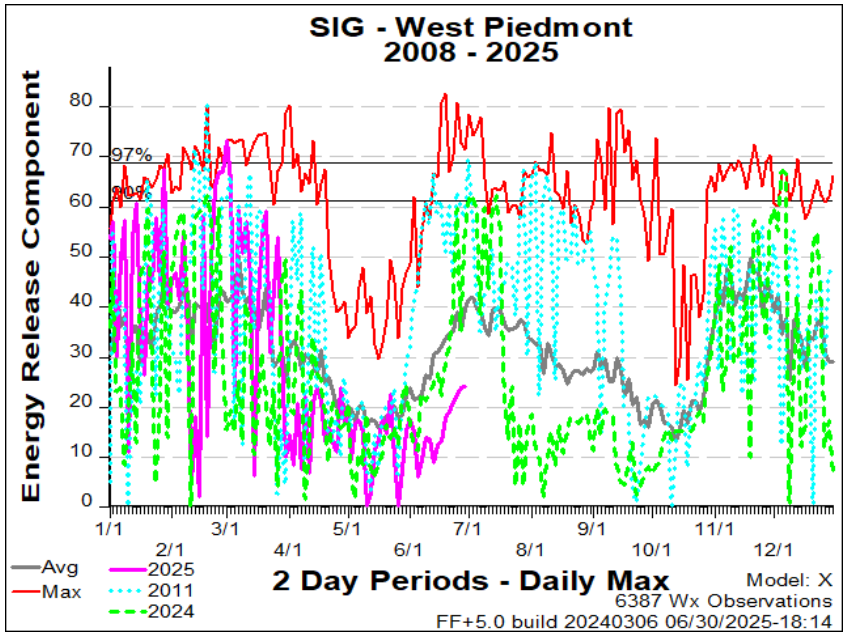




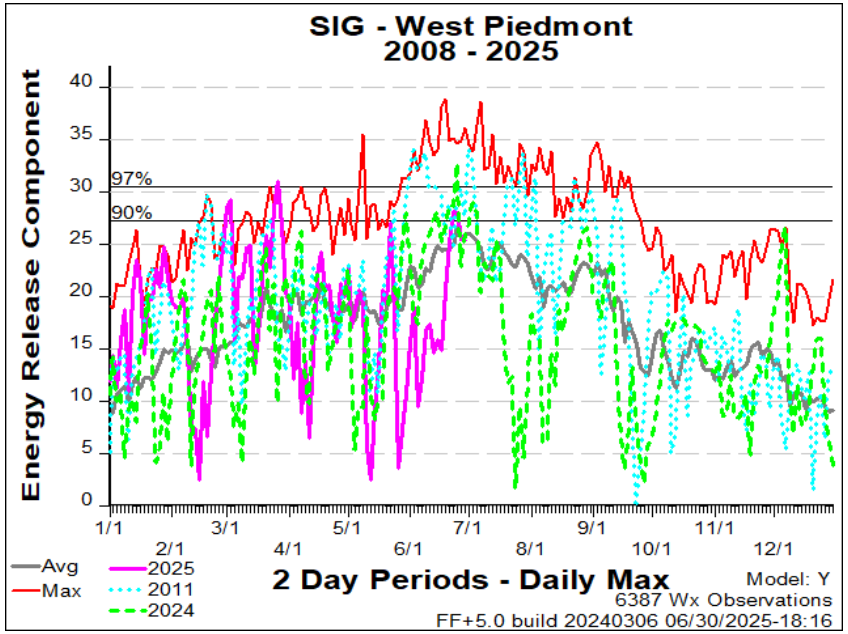


FDRA – Western Piedmont

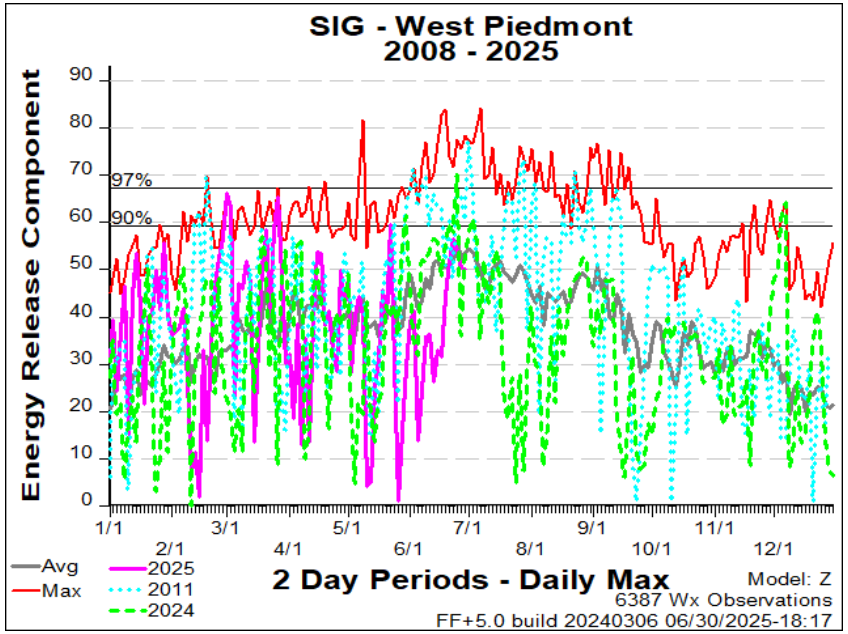
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Western Piedmont

Weekly Outlook

Western Piedmont FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	91	86	91	91	91	91	90
Avg. Min. Humidity (%)	62	72	50	49	51	53	59
Avg. 20' Wind Speed (mph)	6	3	2	3	3	3	3
Avg. Wind Direction*	SSW	SW	WSW	SE	SE	S	SSW
Avg. Probability of Precip. (%)	78	46	5	6	12	15	24
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model X)	18.4	12.6	18.2	20.9	20.4	20.0	19.3
Forecast BI (Fuel Model X)	37.2	19.5	24.9	30.6	31.4	32.9	30.7
Forecast IC (Fuel Model X)	4.0	1.8	2.7	4.0	3.7	3.6	3.2
Forecast 100-Hr. FMC	16.3	21.2	20.8	18.7	17.6	17.0	16.8
Forecast 1000-Hr. FMC	18.5	18.6	18.7	19.0	19.0	19.0	18.9
KBDI	277.3						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

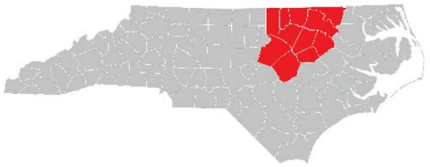
Values in the table above are averages from 3 stations in this FDRA:

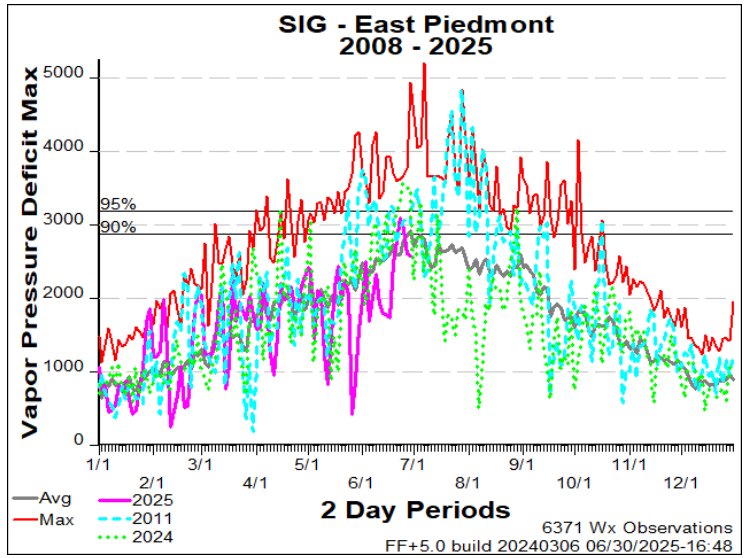
- **Duke Forest** (312501)
- **Lexington** (314602)
- **Mt. Island Lake** (316602)

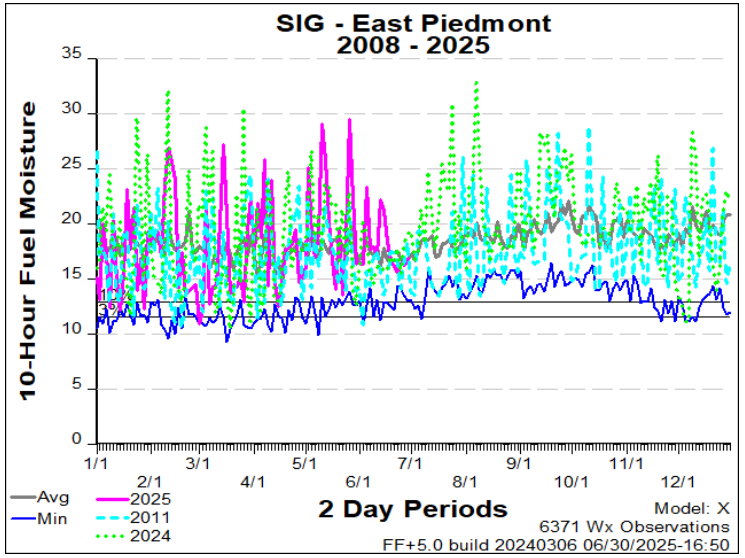
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	Between 2 mph and 4 mph	Greater than 4 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 40	Between 40 and 52	Greater than 52
Burning Index	Less than 95	Between 95 and 120	Greater than 120
Ignition Component	Less than 9	Between 9 and 14	Greater than 14
100-Hour Fuel Moisture	Greater than 18%	Between 17% and 18%	Less than 17%
1000-Hour Fuel Moisture	Greater than 19%	Between 18% and 19%	Less than 18%
KBDI	Less than 344	Between 344 and 479	Greater than 479

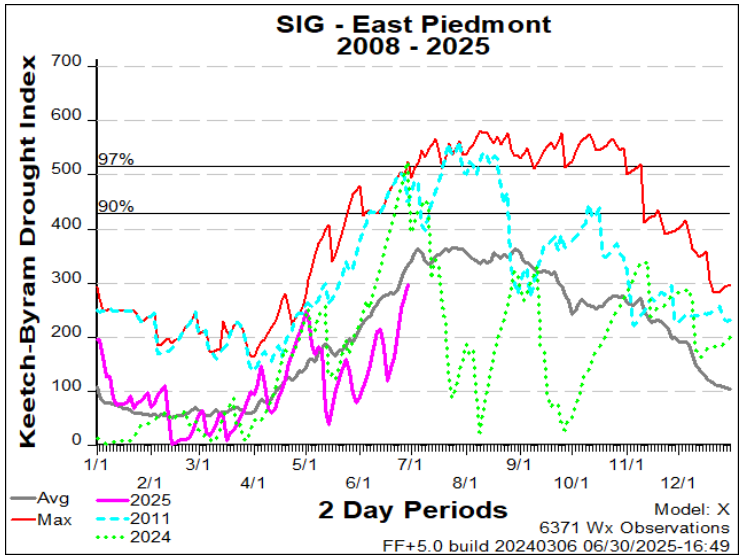
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

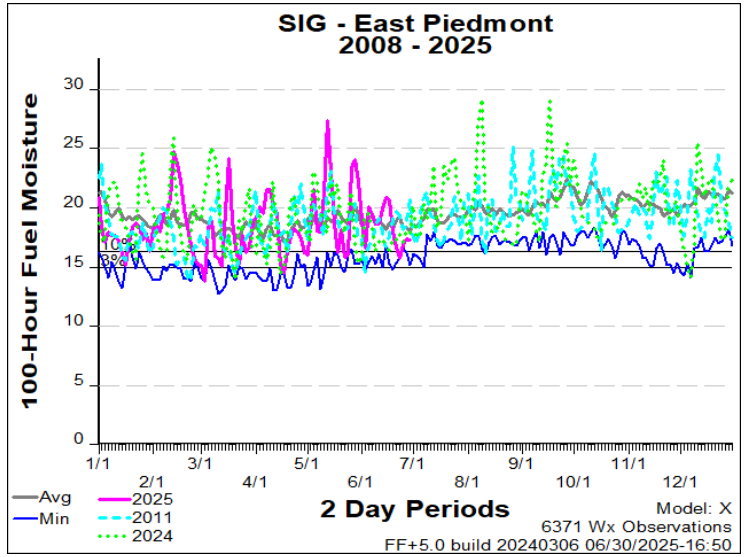
FDRA – Eastern Piedmont

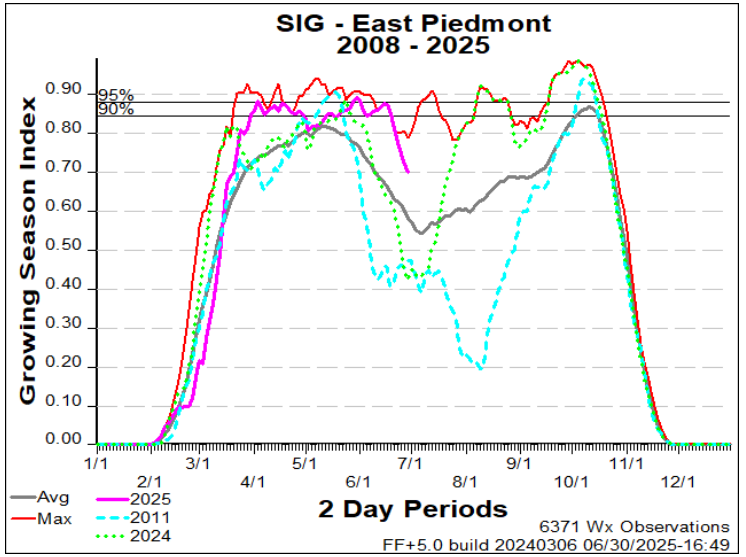


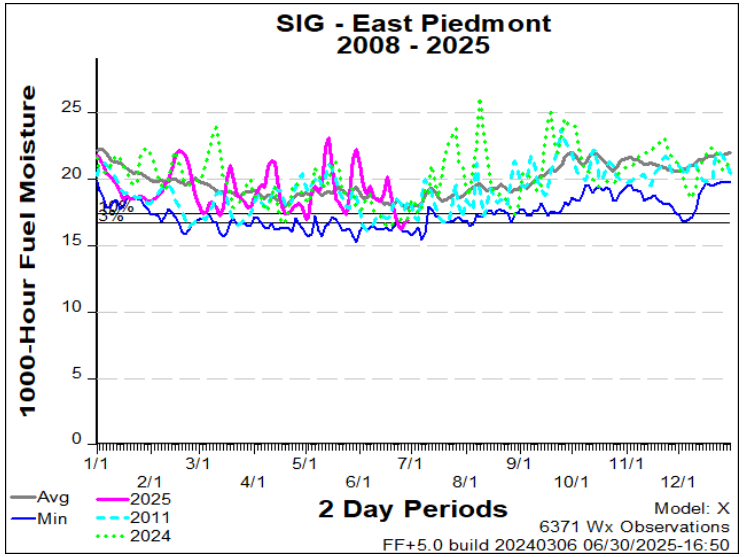




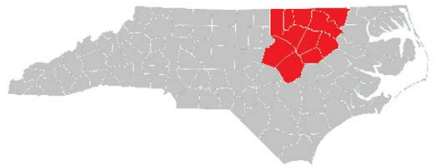




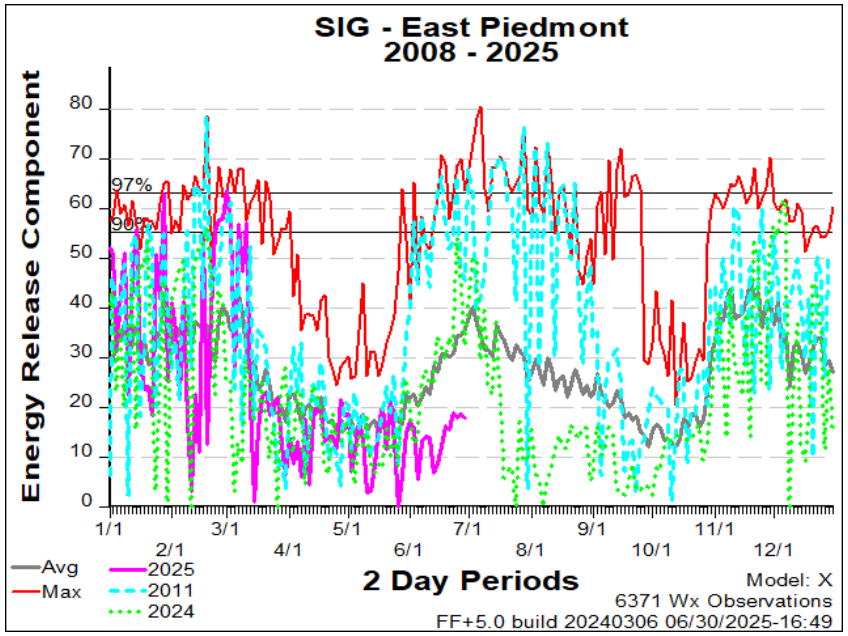




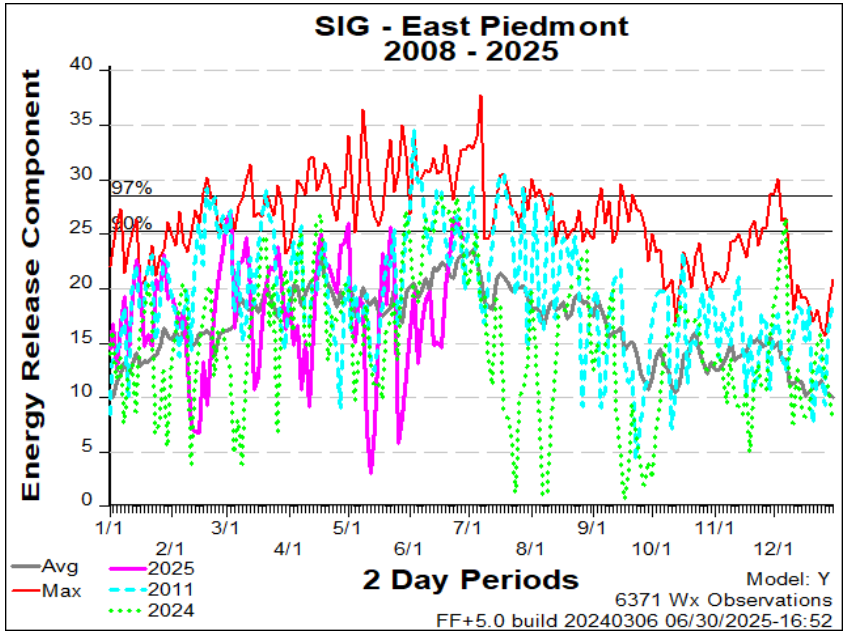
FDRA – Eastern Piedmont



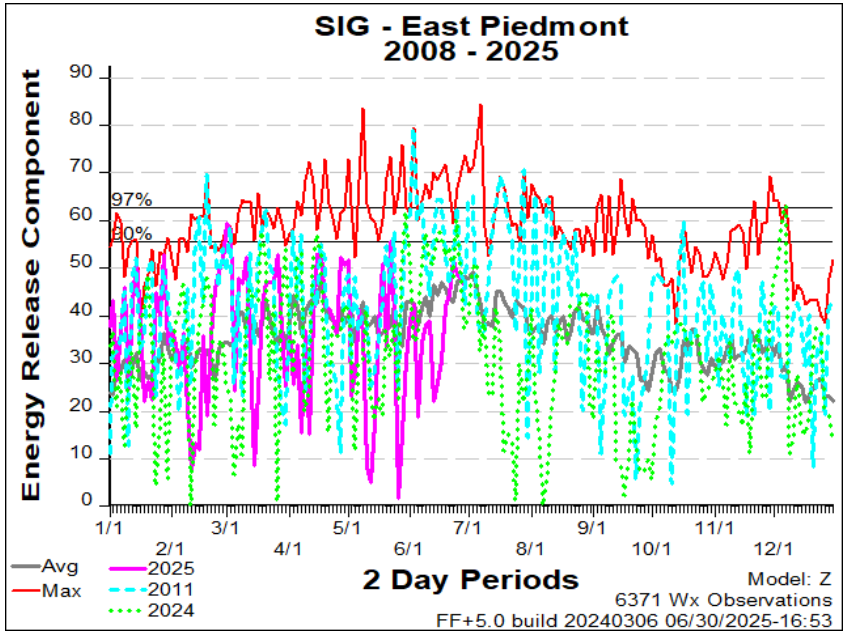
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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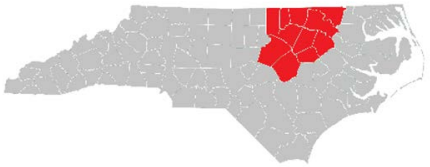
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – Eastern Piedmont



Weekly Outlook

Eastern Piedmont FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	93	85	92	92	91	92	93
Avg. Min. Humidity (%)	58	74	51	49	48	52	55
Avg. 20' Wind Speed (mph)	9	5	2	2	3	3	4
Avg. Wind Direction*	SSW	SW	WNW	ESE	ESE	S	SSW
Avg. Probability of Precip. (%)	67	67	10	8	9	14	21
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model X)	19.6	15.1	17.0	18.6	19.1	19.7	19.1
Forecast BI (Fuel Model X)	42.1	23.5	21.7	25.5	29.0	31.0	30.4
Forecast IC (Fuel Model X)	5.8	2.2	2.2	3.0	3.4	3.7	3.4
Forecast 100-Hr. FMC	16.6	19.9	20.0	18.1	17.1	16.7	16.5
Forecast 1000-Hr. FMC	18.2	18.2	18.2	18.3	18.3	18.3	18.2
KBDI	306.0						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

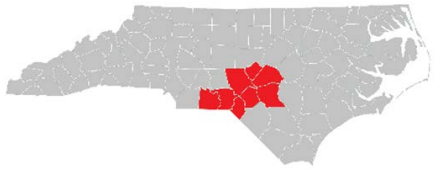
Values in the table above are averages from 4 stations in this FDRA:

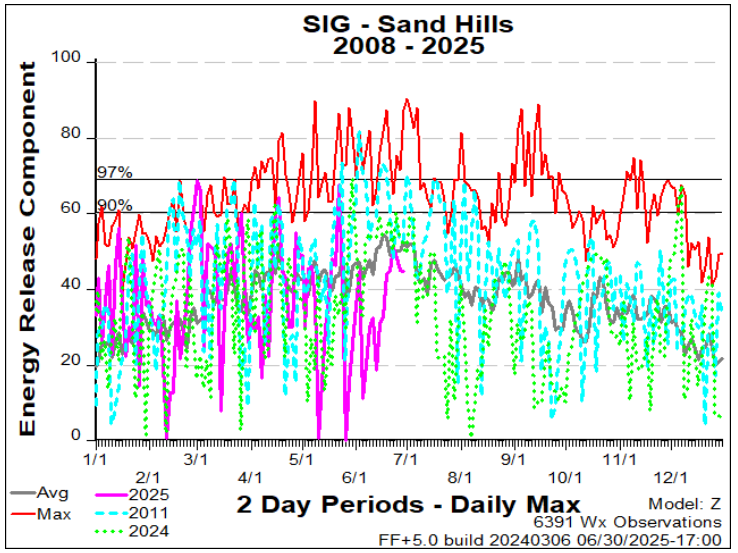
- **Oxford Tobacco Research Stn** (310841)
- **Upper Coastal Plain Res Stn** (312940)
- **Lake Wheeler Rd Field Lab** (314941)
- **Central Crops Research Station** (317441)

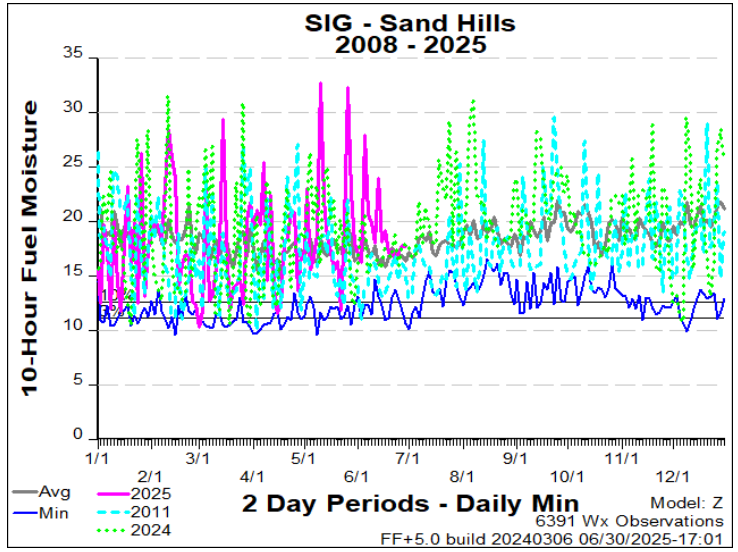
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph	Between 10 mph and 15 mph	Greater than 15 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 54.2	Between 54.2 and 61.7	Greater than 61.7
Burning Index	Less than 109.3	Between 109.3 and 130.5	Greater than 130.5
Ignition Component	Less than 12.7	Between 12.7 and 16.8	Greater than 16.8
100-Hour Fuel Moisture	Greater than 17.6%	Between 16.4% and 17.6%	Less than 16.4%
1000-Hour Fuel Moisture	Greater than 18.3%	Between 17.5% and 18.3%	Less than 17.5%
KBDI	Less than 337	Between 337 and 460	Greater than 460

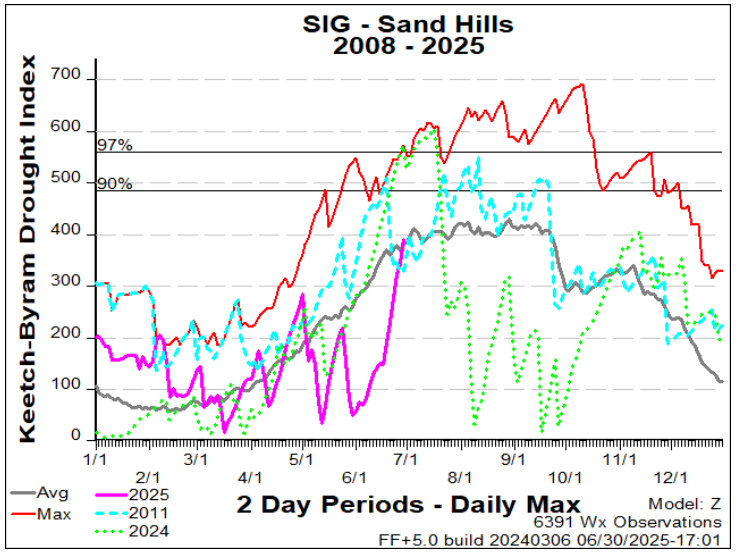
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

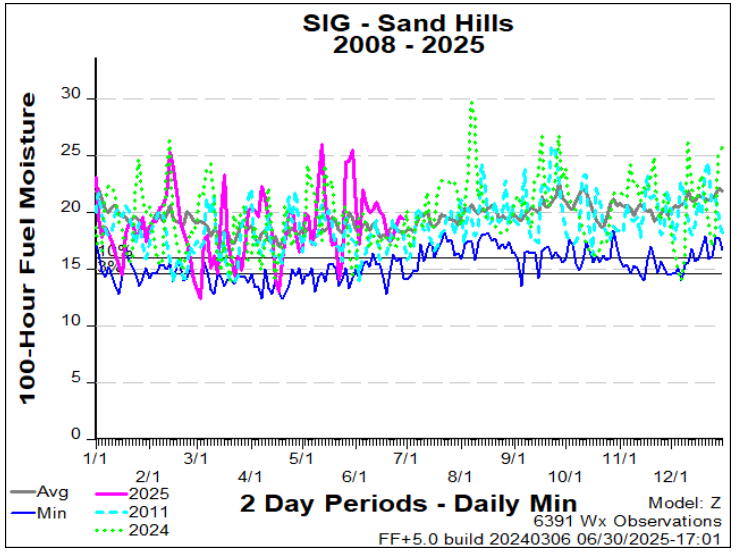
FDRA – Sandhills

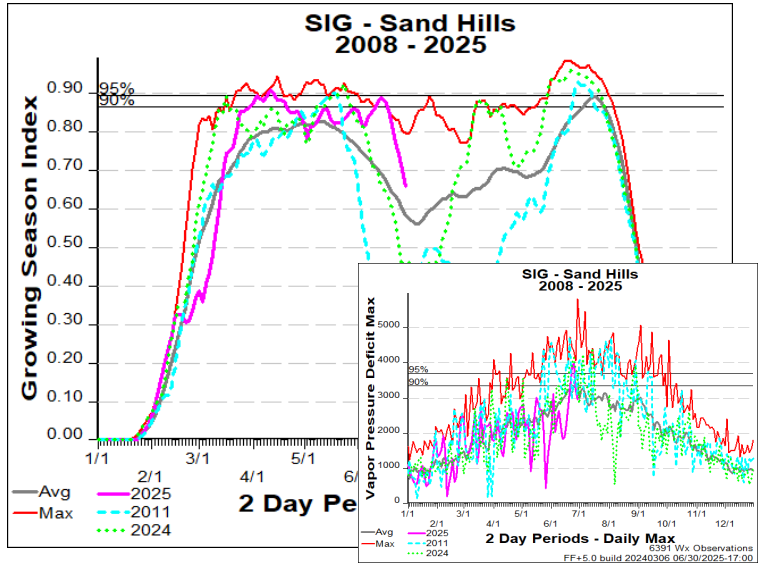


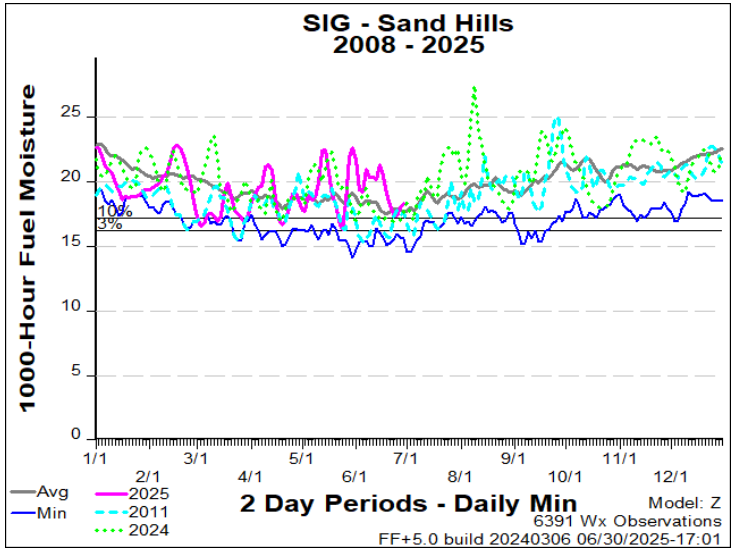




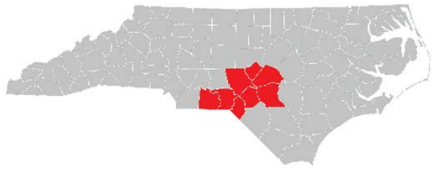








FDRA – Sandhills



Weekly Outlook

Sandhills FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	92	85	92	93	92	92	92
Avg. Min. Humidity (%)	57	69	49	45	44	47	53
Avg. 20' Wind Speed (mph)	8	5	2	3	3	4	4
Avg. Wind Direction*	SSW	SSW	W	ESE	ESE	SSE	S
Avg. Probability of Precip. (%)	71	69	15	11	15	19	24
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model Z)	42.6	31.8	33.9	39.3	40.7	41.6	40.8
Forecast BI (Fuel Model Z)	49.1	27.2	26.3	32.4	34.7	34.3	33.6
Forecast IC (Fuel Model Z)	11.3	4.6	4.7	7.1	7.2	7.4	6.3
Forecast 100-Hr. FMC	18.0	20.6	21.3	19.7	18.6	18.1	18.0
Forecast 1000-Hr. FMC	19.0	19.1	19.1	19.4	19.5	19.4	19.4
KBDI	370.7						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

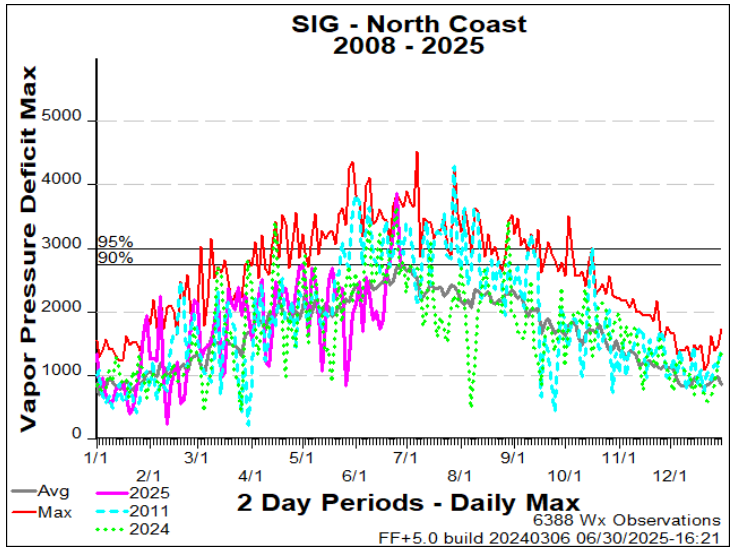
Values in the table above are averages from 3 stations in this FDRA:

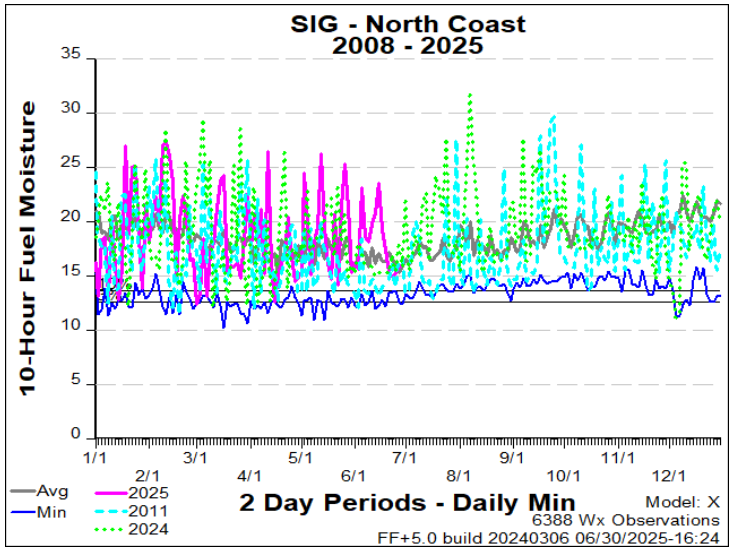
- **Sandhills Research Station** (317040)
- **Rockingham** (318202)
- **Fort Liberty** (318503)

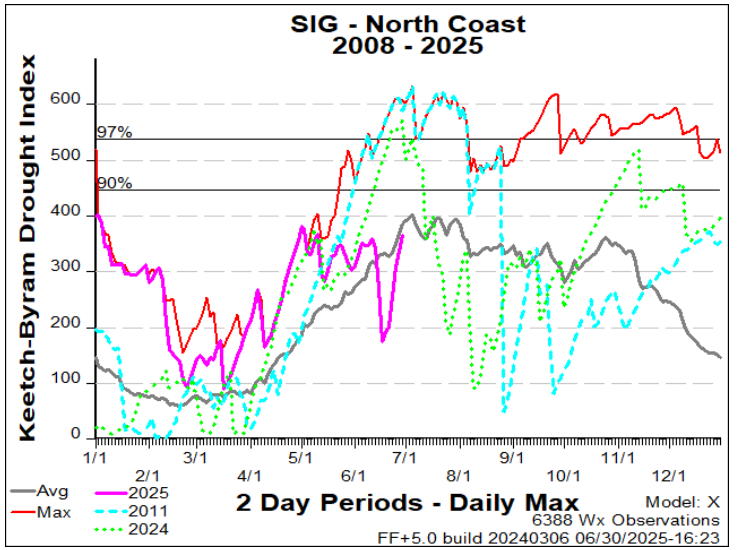
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 30% and 40%	Less than 30%
Avg. 20' Wind Speed	Less than 4 mph	Between 4 mph and 8 mph	Greater than 8 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 52.4	Between 52.4 and 62	Greater than 62
Burning Index	Less than 45.6	Between 45.6 and 53.3	Greater than 53.3
Ignition Component	Less than 13.6	Between 13.6 and 18.8	Greater than 18.8
100-Hour Fuel Moisture	Greater than 17.4%	Between 16% and 17.4%	Less than 16%
1000-Hour Fuel Moisture	Greater than 18.2%	Between 17.2% and 18.2%	Less than 17.2%
KBDI	Less than 397	Between 397 and 500	Greater than 500

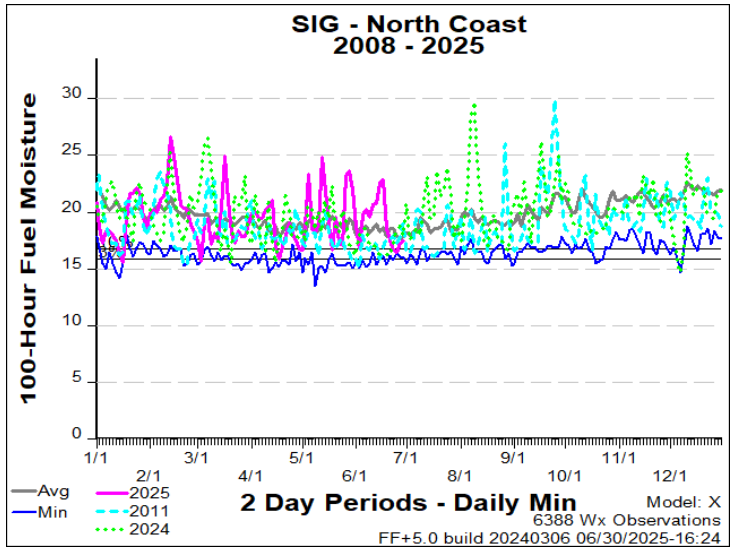
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

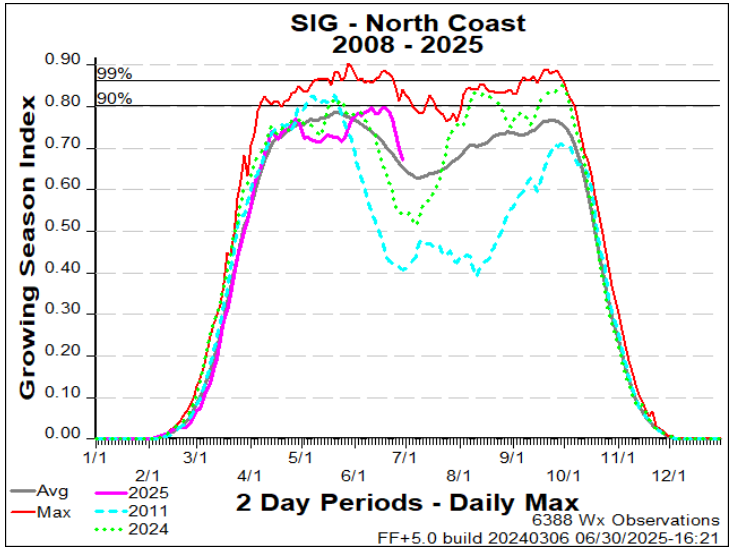
FDRA – North Coast

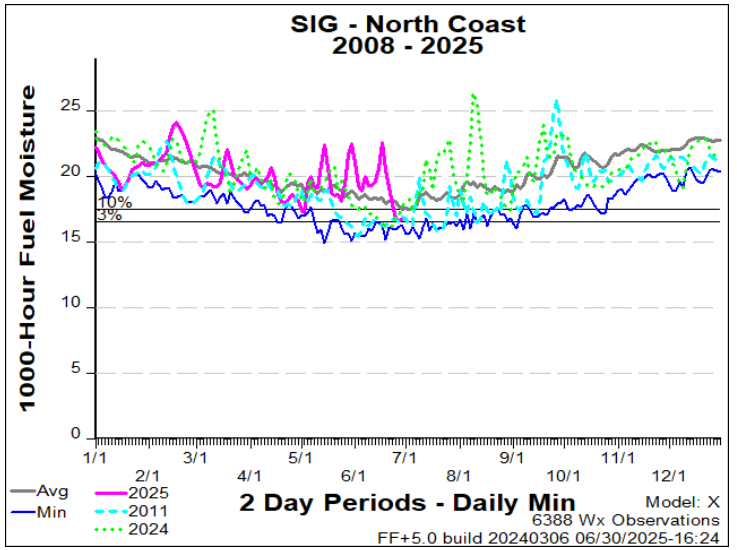






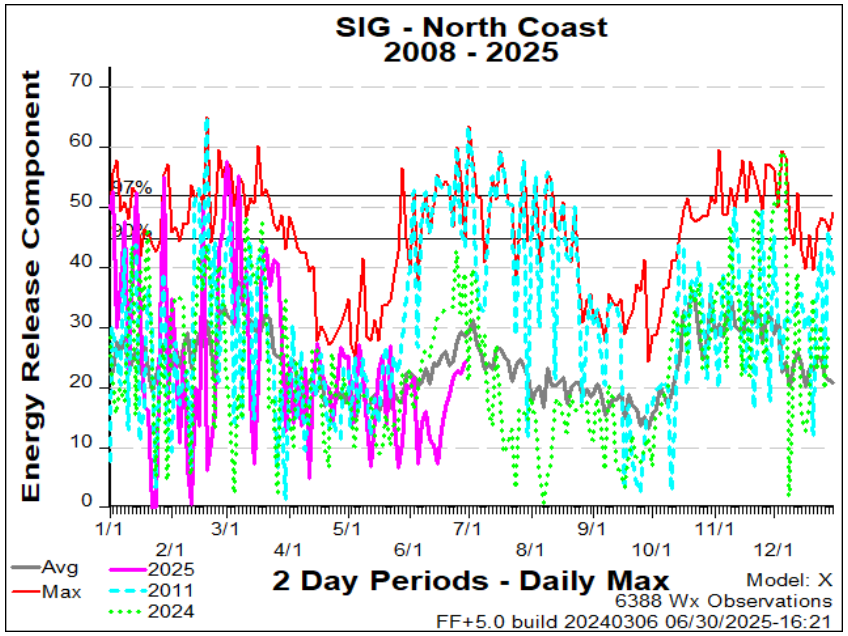




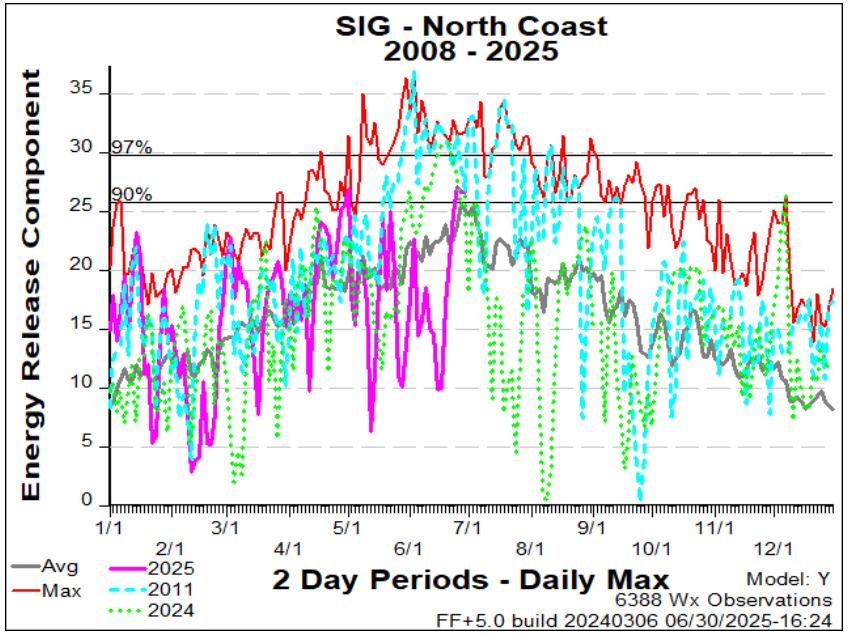


FDRA – North Coast

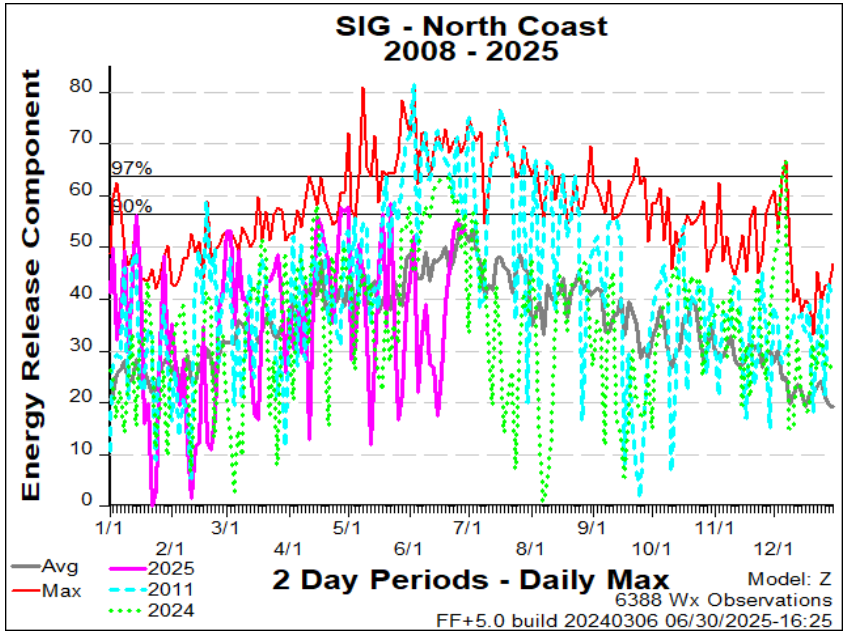
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – North Coast

Weekly Outlook

Northern Coastal FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	93	86	92	92	91	92	93
Avg. Min. Humidity (%)	53	74	58	54	51	55	54
Avg. 20' Wind Speed (mph)	11	7	3	3	4	4	5
Avg. Wind Direction*	SSW	SW	SW	S	ESE	SSE	SSW
Avg. Probability of Precip. (%)	57	85	25	14	10	16	21
Days Since a Wetting Rain**	8.3	0.0	1.0				
Forecast ERC (Fuel Model X)	20.2	16.5	15.5	19.1	20.6	21.0	20.7
Forecast BI (Fuel Model X)	47.1	29.5	21.6	26.7	29.4	30.8	30.4
Forecast IC (Fuel Model X)	6.2	3.0	2.0	2.9	3.7	4.0	3.6
Forecast 100-Hr. FMC	16.8	23.3	26.0	22.3	19.8	18.4	17.7
Forecast 1000-Hr. FMC	18.6	18.8	19.2	20.2	20.5	20.7	20.6
KBDI	375.0						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

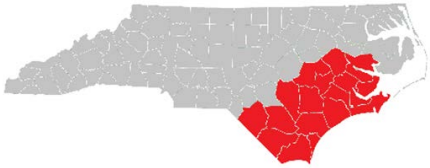
Values in the table above are averages from 4 stations in this FDRA:

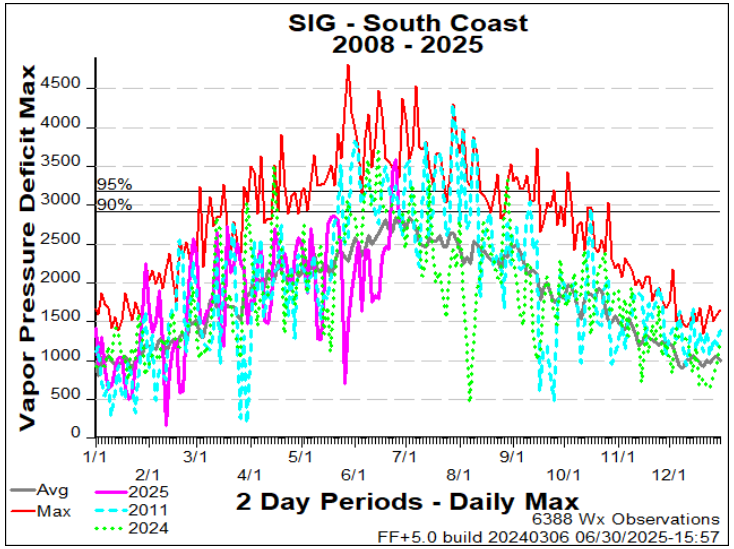
- **Elizabeth City** (311503)
- **Greens Cross** (313001)
- **Pocosin Lakes** (315201)
- **Fairfield** (317901)

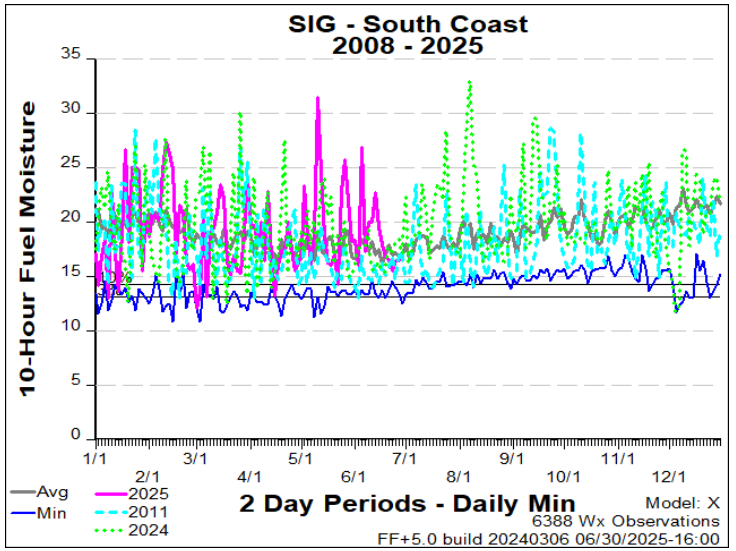
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 45°F	Between 45°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph	Between 10 mph and 15 mph	Greater than 15 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 39.3	Between 39.3 and 48	Greater than 48
Burning Index	Less than 78	Between 78 and 96.8	Greater than 96.8
Ignition Component	Less than 9.3	Between 9.3 and 12.8	Greater than 12.8
100-Hour Fuel Moisture	Greater than 17.7%	Between 16.8% and 17.7%	Less than 16.8%
1000-Hour Fuel Moisture	Greater than 18.5%	Between 17.5% and 18.5%	Less than 17.5%
KBDI	Less than 365	Between 365 and 463	Greater than 463

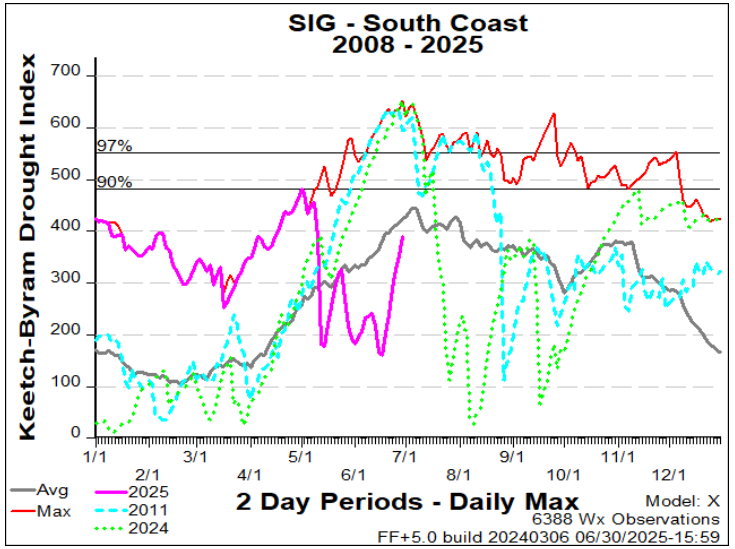
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

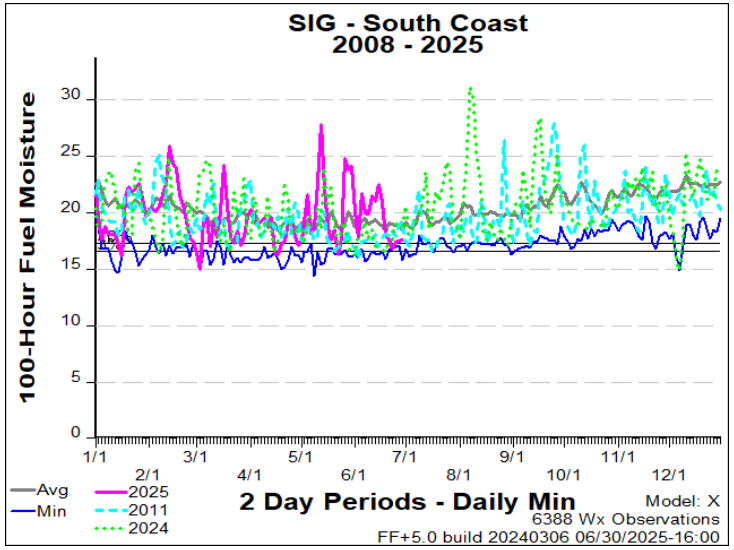
FDRA – South Coast

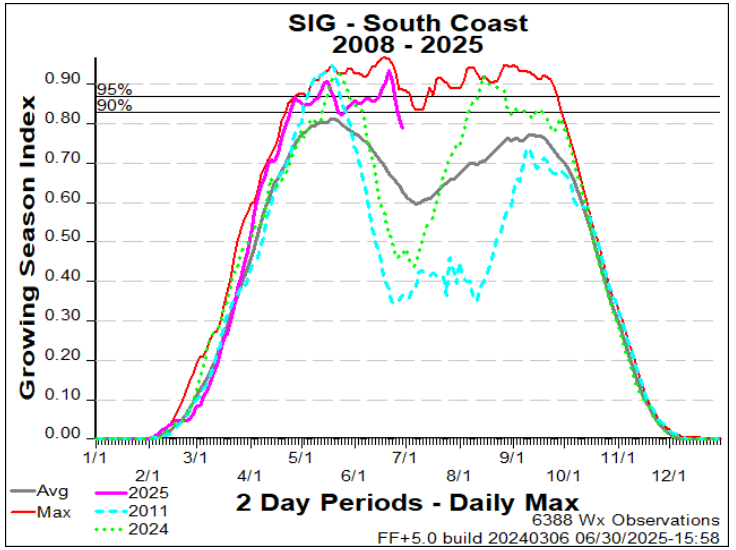


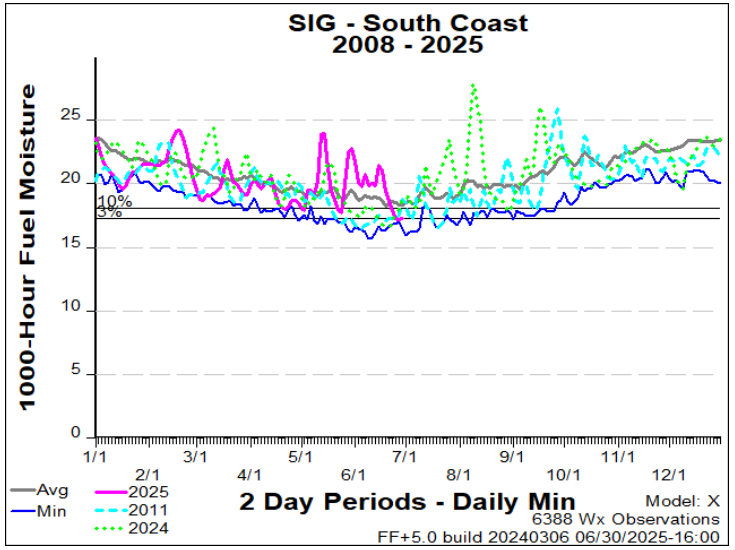






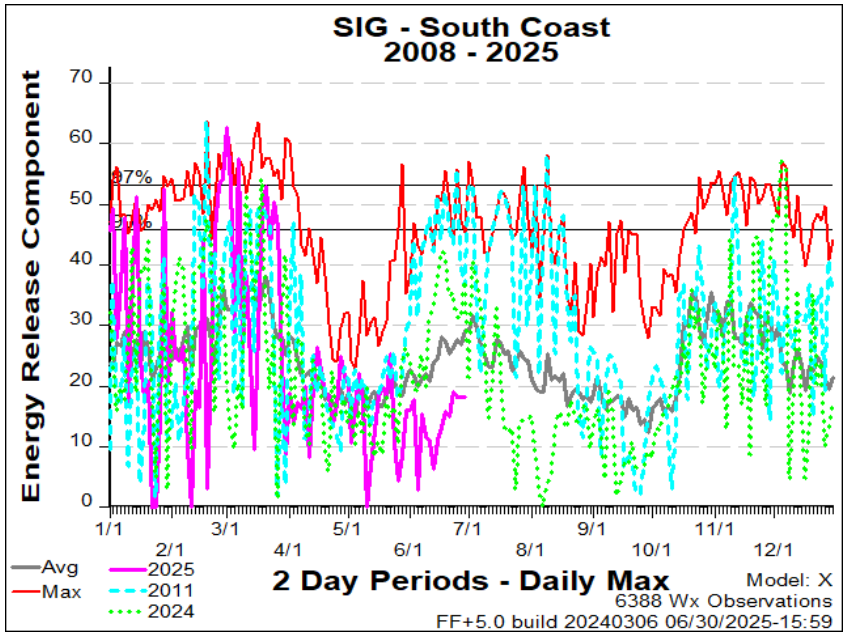




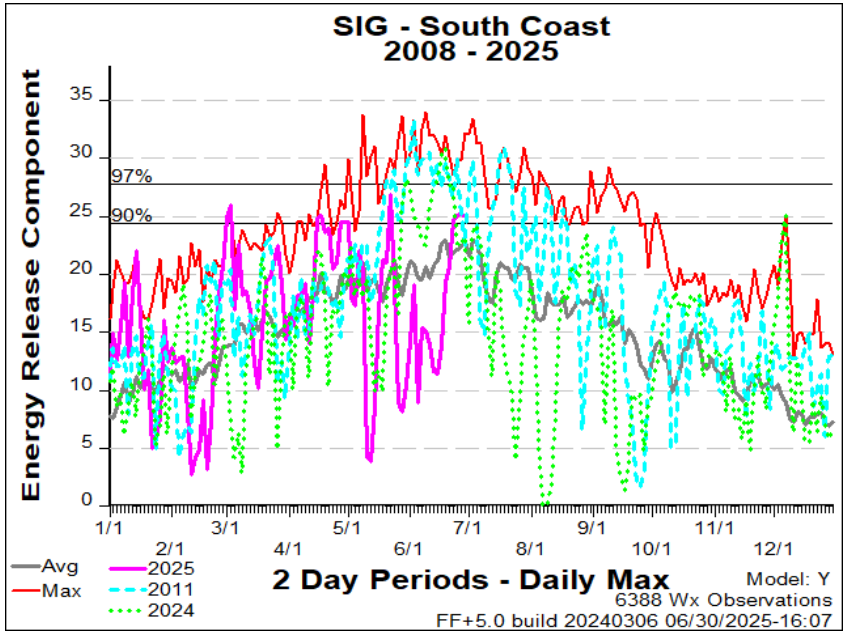


FDRA – South Coast

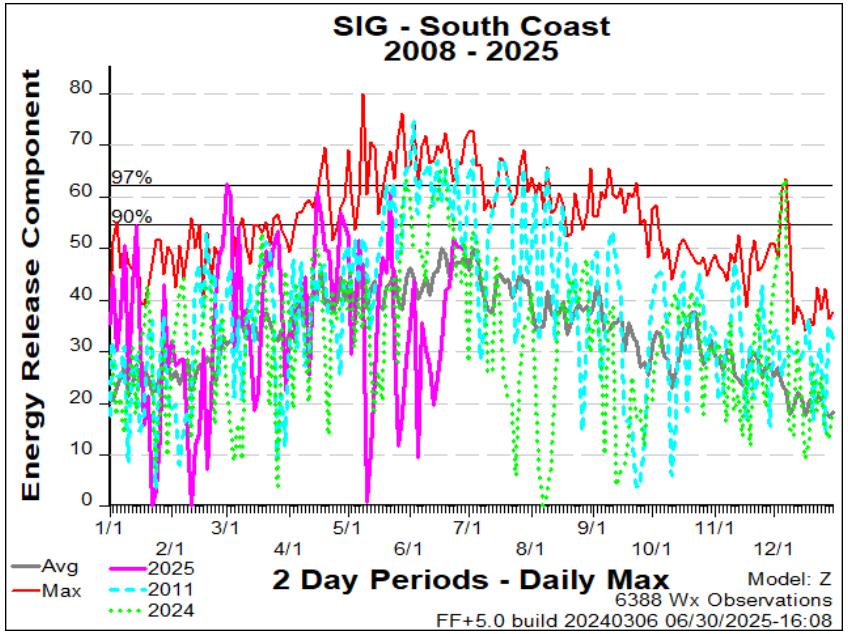
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

X: 1's, 10's, Live Component (GSI driven); + Drought Loading

Y: Heavily weighted on 1000's, less on smaller dead; No live; + Drought Loading

Z: Near even distribution between the four dead size classes of 1's, 10's, 100's, 1000's; No live; + Drought Loading

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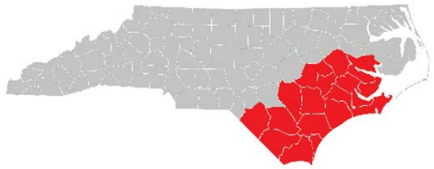
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

FDRA – South Coast



Weekly Outlook

Southern Coastal FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	TUE 01-Jul	WED 02-Jul	THU 03-Jul	FRI 04-Jul	SAT 05-Jul	SUN 06-Jul	MON 07-Jul
Avg. Max. Temp. (°F)	92	87	92	93	92	92	92
Avg. Min. Humidity (%)	59	71	58	54	53	56	58
Avg. 20' Wind Speed (mph)	9	7	3	3	4	4	5
Avg. Wind Direction*	SSW	SW	WSW	S	E	SE	S
Avg. Probability of Precip. (%)	53	85	33	22	20	23	28
Days Since a Wetting Rain**	3.1	0.0	0.4				
Forecast ERC (Fuel Model X)	16.3	14.2	11.4	15.0	15.6	16.0	15.4
Forecast BI (Fuel Model X)	34.9	26.7	17.1	22.3	24.4	24.4	24.7
Forecast IC (Fuel Model X)	4.7	3.0	1.7	2.4	2.8	3.0	2.8
Forecast 100-Hr. FMC	17.3	20.9	24.2	22.3	20.0	18.9	18.4
Forecast 1000-Hr. FMC	18.9	18.9	19.1	19.4	19.8	20.0	20.0
KBDI	399.7						

Data Source:

- Weather forecasts come from the National Weather Service's Digital Forecast Database. The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the log wind profile method.
- Days since a wetting rain is calculated using a combination of historical data (to determine the most recent wetting rain event) and forecasted precipitation amounts. These forecasted amounts are only available for the first three days of the forecast period.
- Fire danger forecasts for the next 7 days are issued by National Weather Service through WIMS. KBDI is only available on the first forecast day since the NFDRS Forecast product does not include precipitation amounts, which are used to adjust KBDI from day to day

Values in the table above are averages from 7 stations in this FDRA:

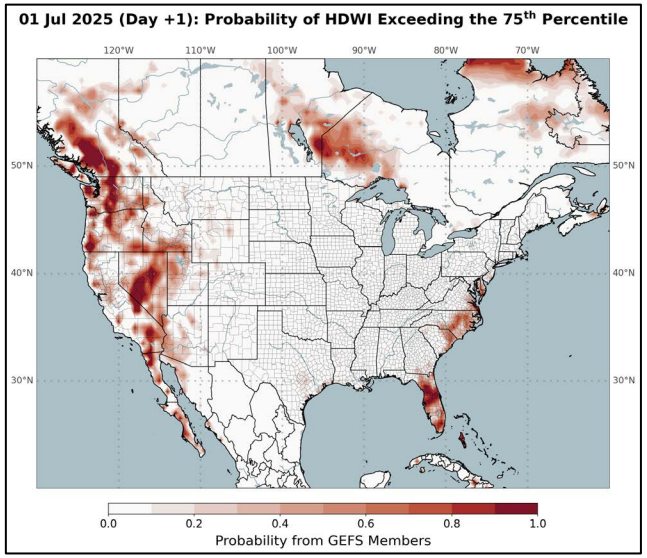
- **Finch's Station** (317501)
- **Beaufort** (317801)
- **New Bern** (319004)
- **Turnbull Creek** (319302)
- **Hofmann Forest** (319507)
- **Whiteville** (319701)
- **Sunny Point** (319803)

KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 65°F	Greater than 65°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 5 mph	Between 5 mph and 10 mph	Greater than 10 mph
Avg. Wind Direction*	Criticality of wind direction is highly dependent on burn operations and/or structures threatened.		
Days Since a Wetting Rain**	A wetting rain is defined as 0.10" or greater. This is an average of the FDRA stations noted above.		
Energy Release Comp.	Less than 36.4	Between 36.4 and 47.2	Greater than 47.2
Burning Index	Less than 68.3	Between 68.3 and 89.5	Greater than 89.5
Ignition Component	Less than 7.9	Between 7.9 and 12	Greater than 12
100-Hour Fuel Moisture	Greater than 18.2%	Between 17.3% and 18.2%	Less than 17.3%
1000-Hour Fuel Moisture	Greater than 19%	Between 18% and 19%	Less than 18%
KBDI	Less than 385	Between 385 and 486	Greater than 486

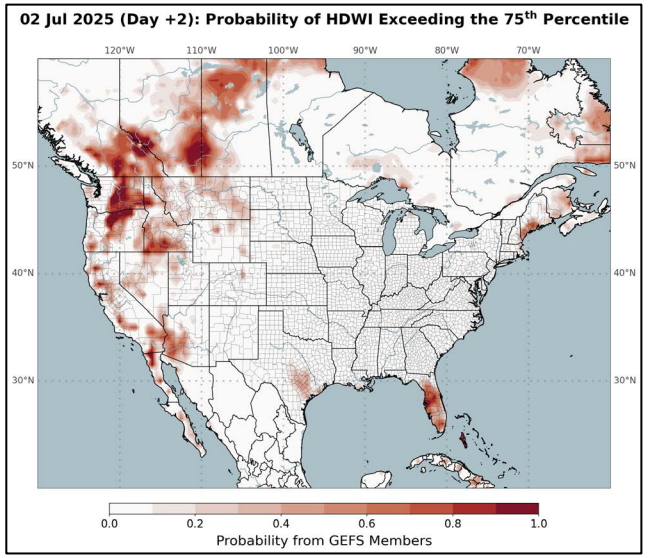
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

Hot-Dry-Windy Index (HDW)

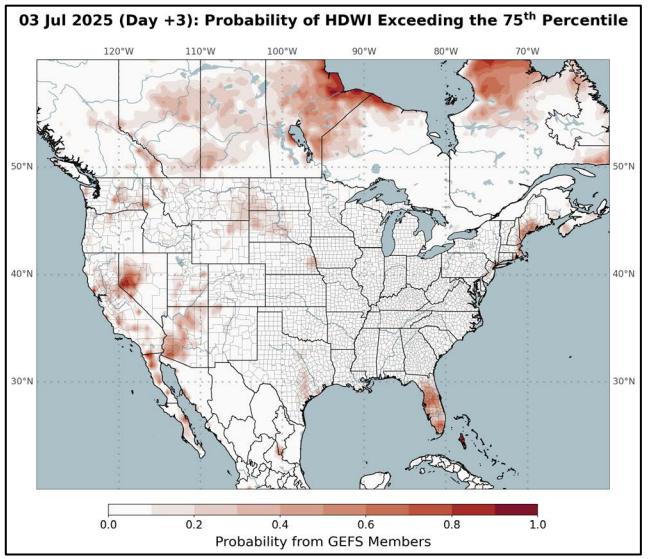
Tuesday > 75th Percentile



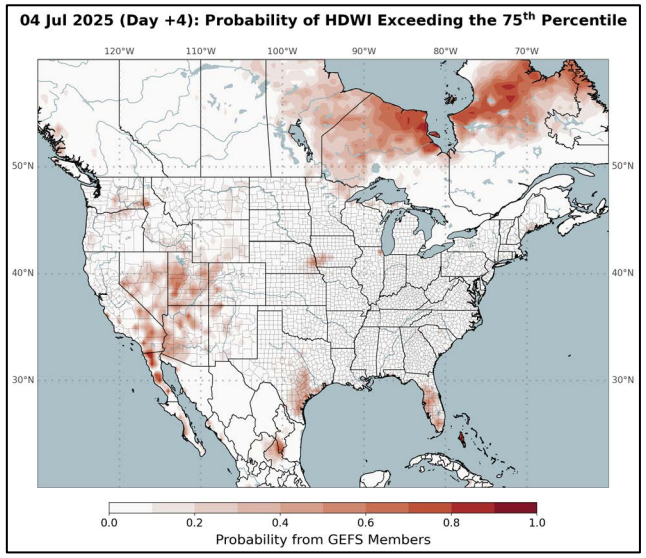
Wednesday > 75th Percentile



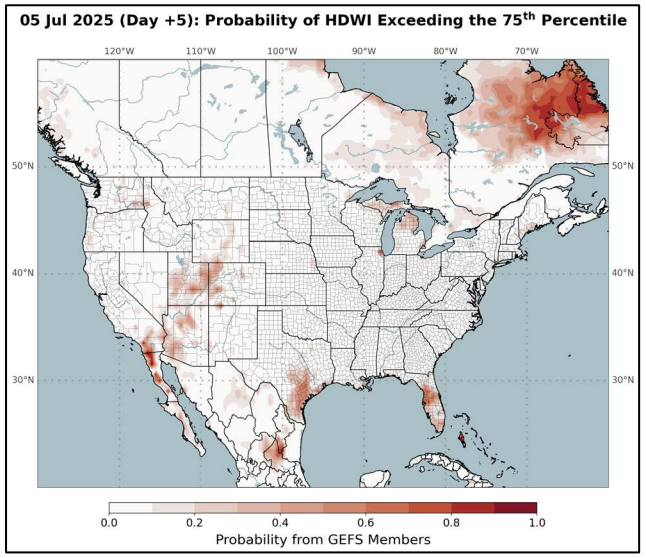
Thursday > 75th Percentile



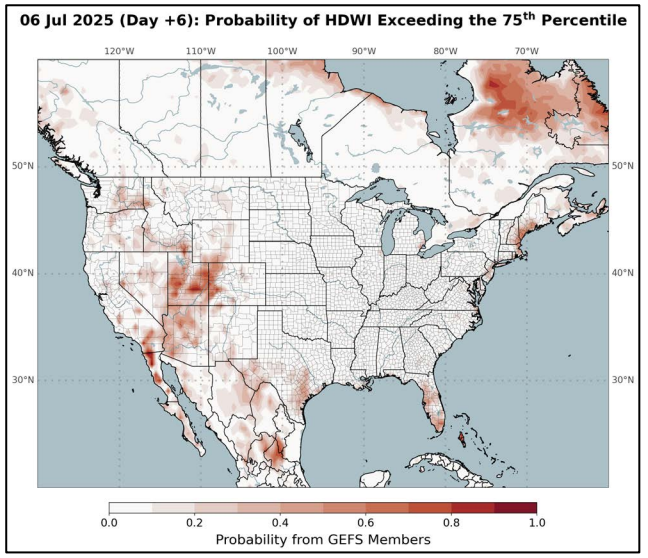
Friday > 75th Percentile



Saturday > 75th Percentile



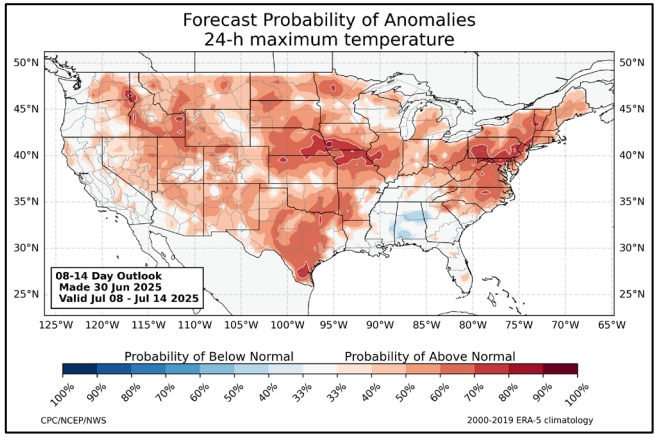
Sunday > 75th Percentile

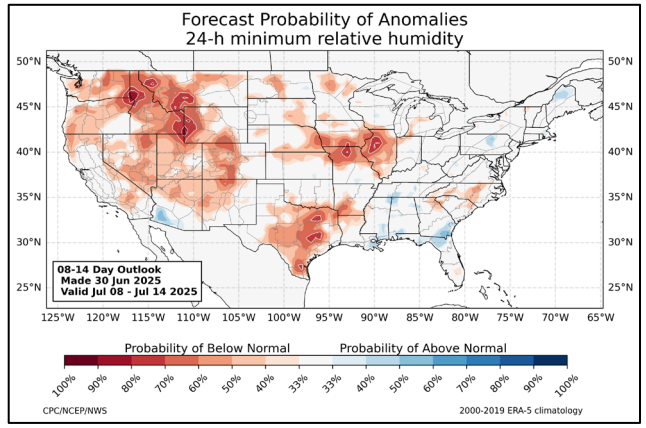


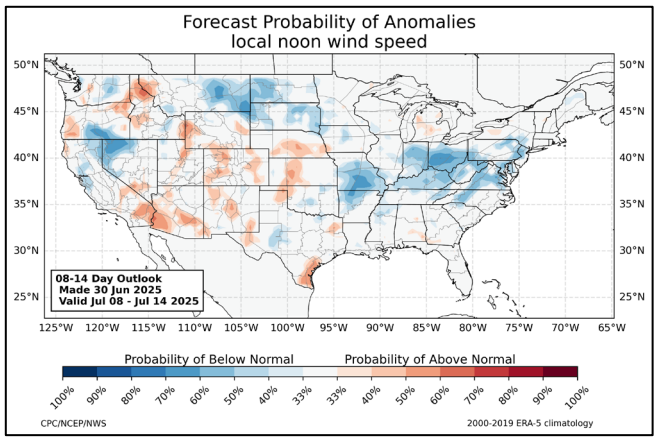
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

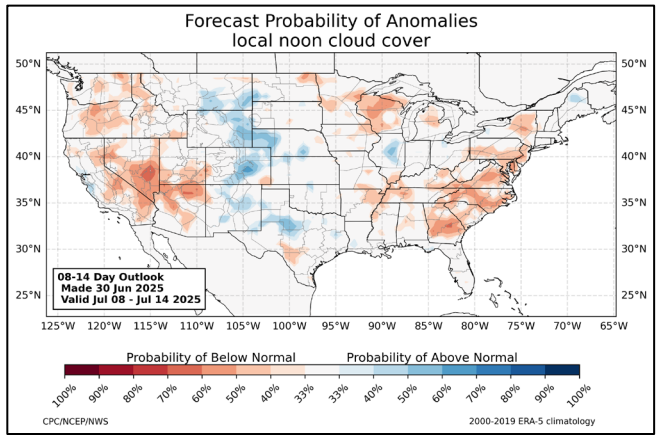
https://www.hdwindex.org/probs.html

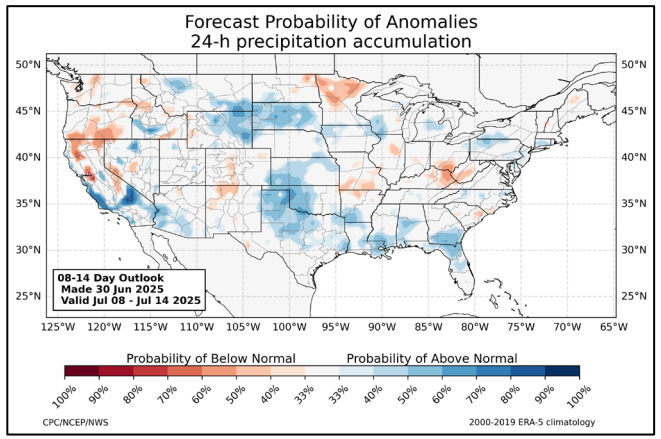
Week Two Forecast Anomalies: 7/8 - 7/14



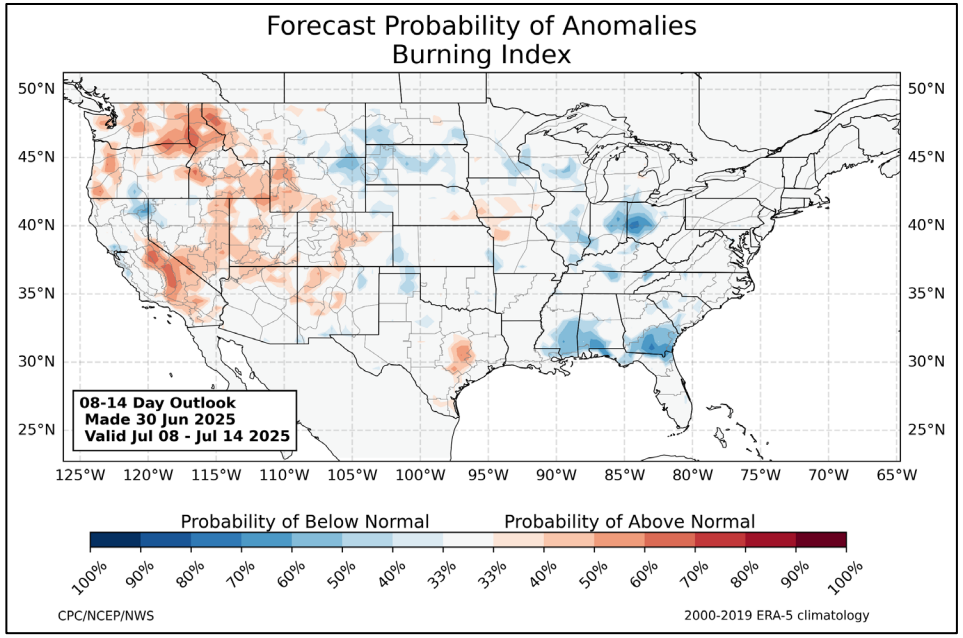


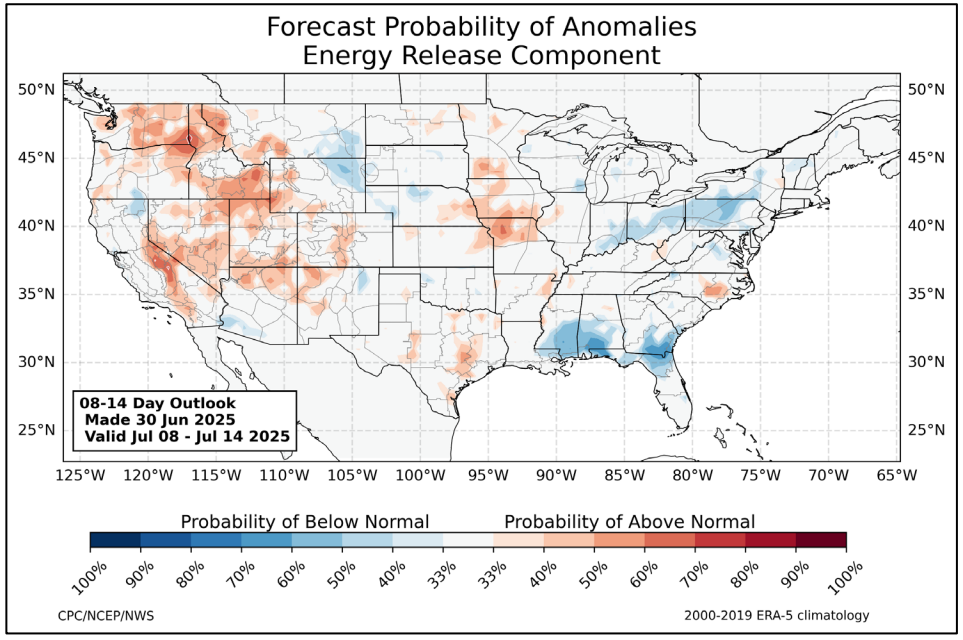






Important to note that there is significant forecast uncertainty as you go further out in time.



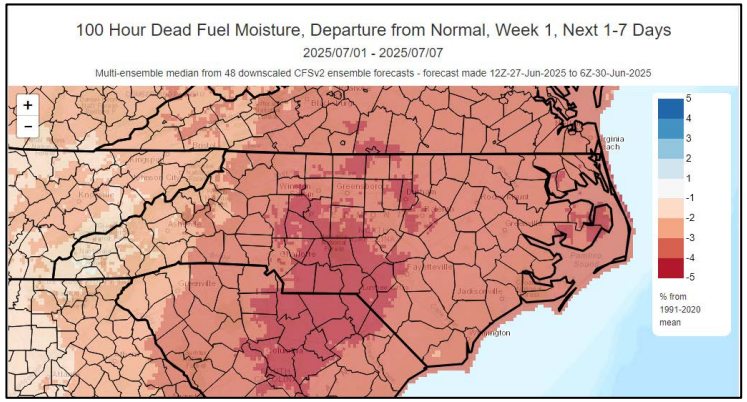


https://www.cpc.ncep.noaa.gov/products/people/mchen/fireWeather/cpc_wk2fw_index.html

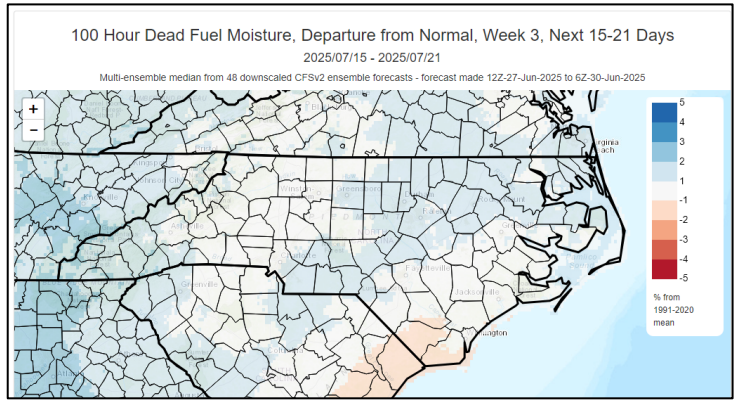
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1



Week-3

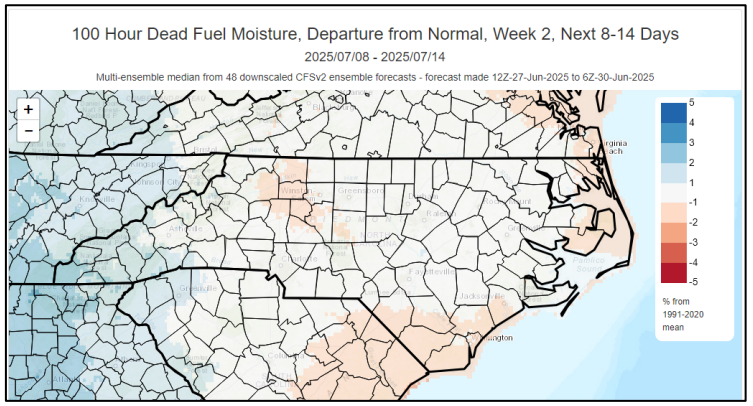


This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up or in drought conditions. Outputs relate to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration and overnight RH recovery trends.

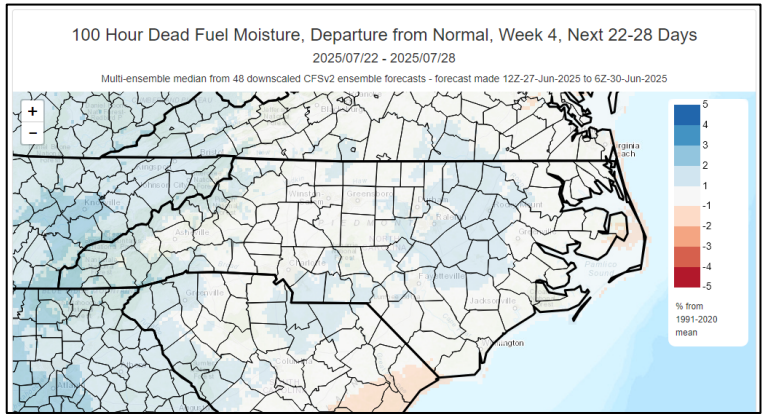
Note that <u>modeled</u> impacts of the much warmer/drier conditions (lower % mc or "worse") is focused most intensely on Week-1 with a potential transition back to near normal in Weeks 3-4.

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

SACC Daily Outlook, Selected Snips from Tuesday - 7/1

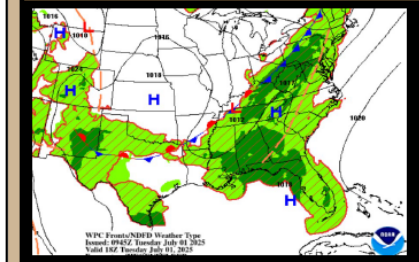
https://gacc.nifc.gov/sacc/resources/predictive/sacc-daily-outlook.pdf

SACC Daily Outlook
Tuesday, July 1, 2025

Watches, Warnings and Advisories

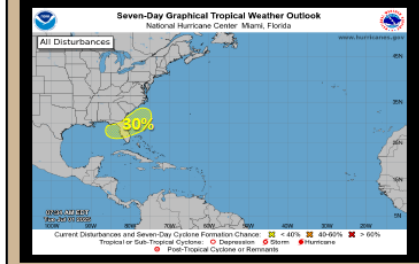
- **Flood Watches** in West TX and northern VA
- **Flood Warnings/Advisories** in TX, OK, AR, LA, MS, KY

Today's Weather Outlook



- Thunderstorms over the complex terrain of West TX may result in areas of flash flooding this afternoon into tonight, with some heavy rain expected in Deep South TX through the day, as well
- Look for numerous showers and thunderstorms ahead of a front from the Ohio and Tennessee Valleys to the Mid-Atlantic – flash flooding will be especially likely in northern VA but could occur throughout the Appalachian states
- Broad low pressure continues to take shape near the Southeast Coast – look for numerous showers and thunderstorms over the eastern Gulf Coast, with localized flash flooding and isolated tornadoes possible
- Isolated storms may occur near the East Coast and over the western Gulf coastal plain

Tropical Uncertainty Continues

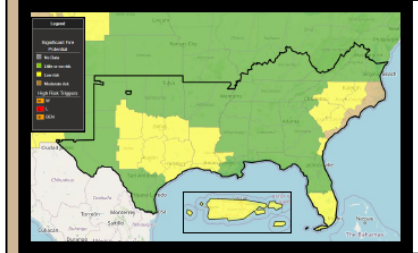


- Broad low pressure the next couple of days is forecast to become gradually more organized near the FL peninsula over the holiday weekend
- Exactly where the low consolidates remains uncertain, which will go on to impact its eventual track
- Trends the last 24 hours show more support for the system to consolidate over the Gulf stream, with impacts possible along the Eastern Seaboard early next week, though there is still some support for a weak system to meander in the Gulf
- Flooding rain continues to be the main threat through the end of the week, especially over the FL peninsula, while ultimate impacts are much less clear for the Southeast Coast next week – anything from dry, hot and breezy conditions to tropical storm impacts are possible

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

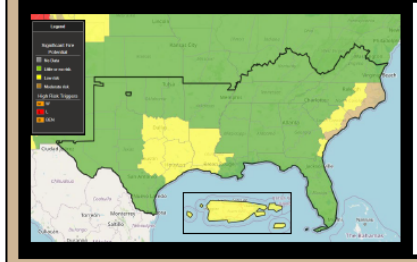
SACC Daily Outlook
Tuesday, July 1, 2025

Significant Fire Potential Outlook Today



- Abnormally dry fuels and hot temperatures will align in the coastal Southeast today, while gusty sea breeze winds could impact recent burns or any new incidents; there is a low risk for lightning, which will be more likely farther to the west
- Marginally dry conditions, lightning and erratic outflow winds will result in low significant fire potential across South FL
- Areas south of a front in TX and LA will see hot temperatures and RH as low as 30-40%, while lightning could accompany a weak front into northern parts of both states
- Look for dry, hot and breezy conditions in PR

Significant Fire Potential Outlook Wednesday



- Lightning ignitions will be the main threat as a front settles towards the Southeast Coast tomorrow; wetting rain should eventually become widespread
- The area of marginally receptive fuels and hot/dry weather will shrink a bit in TX, with showers and thunderstorms more likely with westward extent; some lightning ignitions are possible in central TX
- PR and the USVI will remain hot, dry and breezy

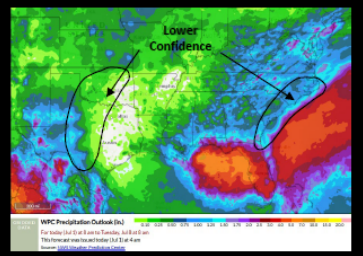
Significant Fire Potential Outlook Thursday

- Fuel dryness will continue to increase over the Caribbean islands, though winds will be a bit lighter than the next couple of days
- Drier air will move into the Lower Mississippi Valley behind an overnight frontal passage; RH will be as low as 30-40%
- No major changes are expected to the fire environment in central and eastern TX

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

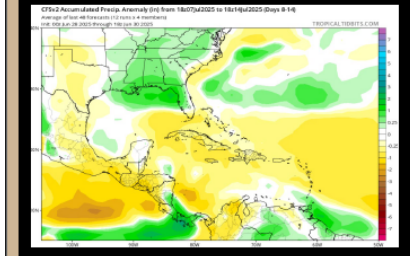
SACC Daily Outlook
Tuesday, July 1, 2025

Forecast Rainfall the Next Week



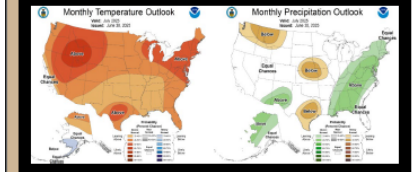
- Wetter trends are noted on recent model guidance over parts of TX and OK, but the eastward extent of the heavier rainfall amounts is uncertain – a sharp gradient in rainfall is expected
- Storms ahead of a front today into tomorrow will bring local 1-3" totals to the Appalachians, with mostly dry weather thereafter
- Low pressure forming in the Gulf is expected to bring daily showers and thunderstorms to FL and some adjacent areas
- This disturbance may track near the Southeast Coast by early next week, but there is a large degree of spread in rainfall amounts for the coast, with solutions ranging anywhere from totally dry weather after the front clears to heavy rain from a tropical system
- Dry weather is most likely from central and eastern TX And OK into the Mid-Mississippi Valley

Week Two Rainfall Anomaly Potential



- Recent dry weather over the Caribbean islands is expected to continue this week, with below average rainfall forecasted during the 8-14 day period, as well
- Wetness is forecast to continue in most of the eastern half of the Southern Area, with some dry pockets near the East Coast and over South FL
- Below average rainfall is expected over most of the Plains as a high pressure ridge aloft influences the weather most of the week two period

Updated July Outlook



- NOAA's updated July outlook depicts notable changes from the mid-month outlook
- Above average temperatures are now favored throughout the geographic area, most likely for a good part of TX, in addition to the East Coast
- An active monsoon is likely to continue bringing above average rainfall to far western TX, while drier conditions are now more likely than not farther east in TX
- Although some drier weather will take shape in early July over the Southeast and Appalachians, the month is likely to see above average rainfall, with lower confidence near the coast
- PR and the USVI are expected to see below average rainfall and near to above average temperatures

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

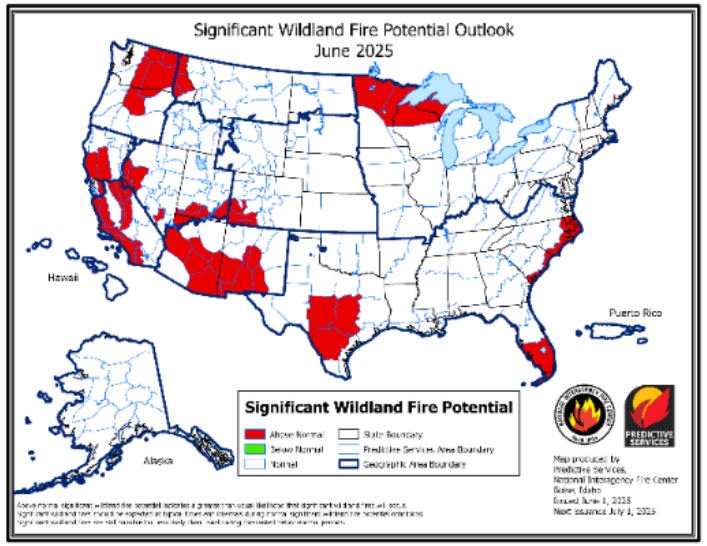
Significant Wildland Fire Potential Outlook:

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

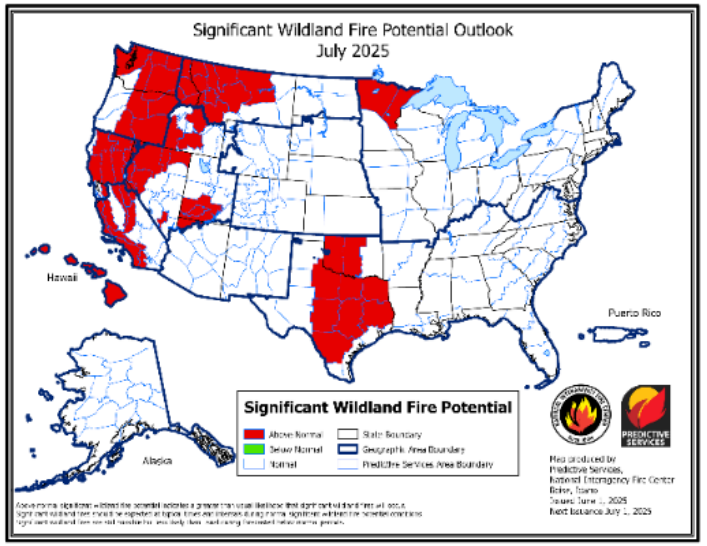
Updated 6/1/25

Note that the July 1st Significant Fire Potential Outlook update hasn't posted yet, before the time of this assessment release. Please refer to the weblink at top right, later in the day.

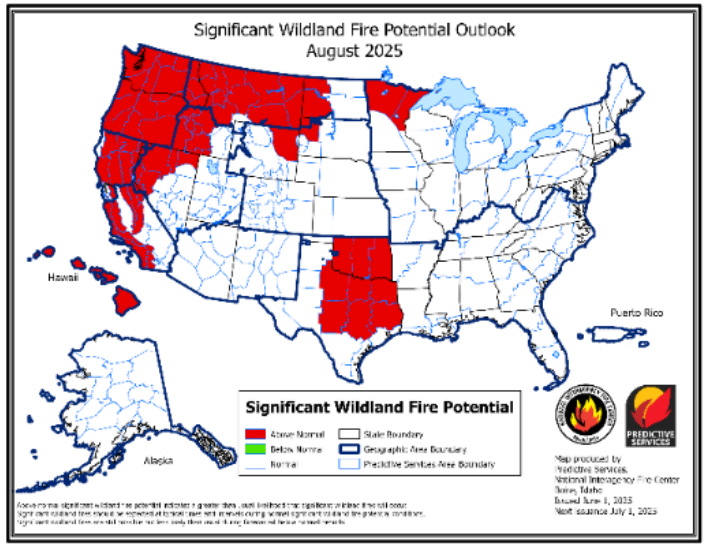
June



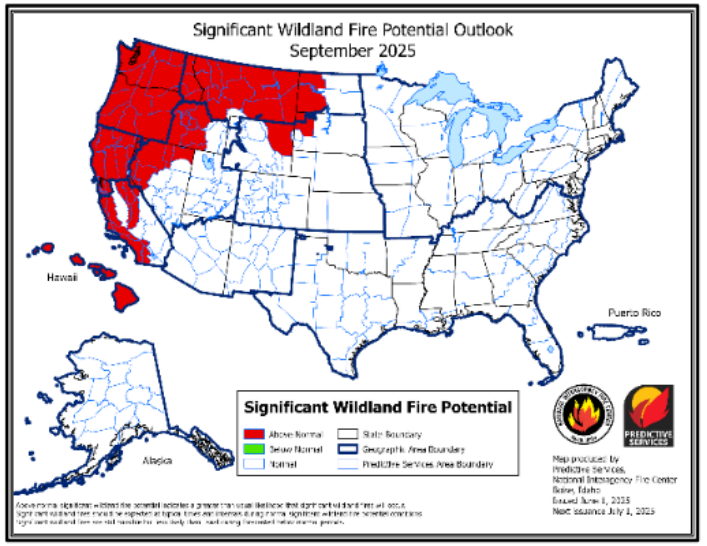
July



August



September



**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 this year.*

Overall

- FDRAs have continued to see benefit of green conditions, even with periods of increased dead fuel dryness. The most recent period of exceptionally warm and dry conditions accelerated drying in 100-hr and 1000-hr dead fuels (see FF+ Charts). The RAWS Electronic Fuel Stick temperature at Fort Bragg RAWS shows the influence of clear conditions and high air temps, note several days of fuel temps at/above 120* during peak heating. Overall, these periodic dead fuel moisture declines continue to be held in-check by effective green in most locations, residual soil moisture & reasonable nighttime recovery. Statewide fire activity/difficulty of control has continued to trend below or near seasonal normal moving through June.

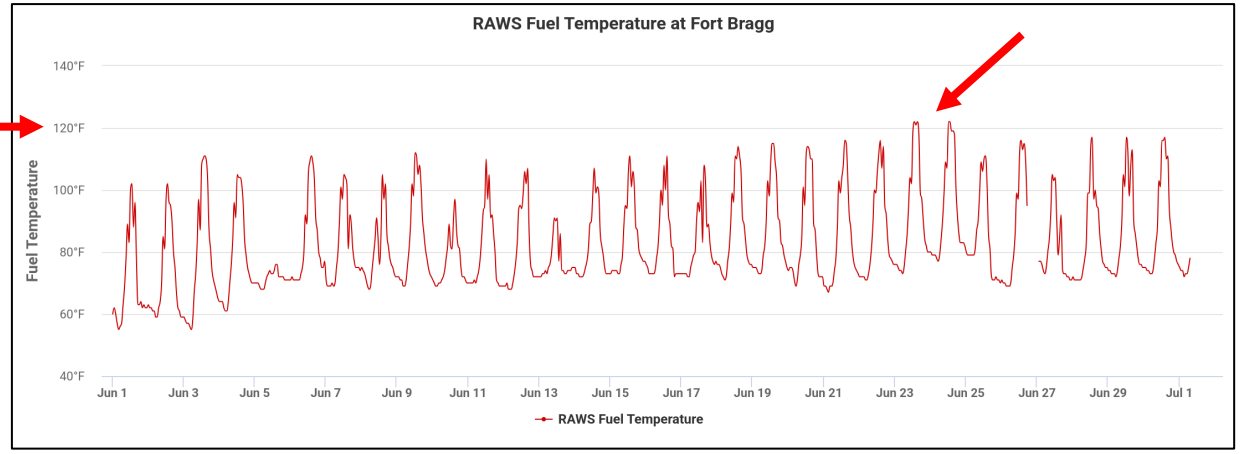
- However, significant precip deficits are still evident scattered across the state – the 7-day PNP map points out the "popcorn" nature of recent precip events. It doesn't take very long for shallow soil moisture to be depleted due to high evaporative demand, especially on engineered or altered/drained soils. Road shoulder browning, especially on larger highways could lead to more starts making off the road and into the woods. Activity & difficulty of control can easily increase in any FDRA if live vegetation and dead fuels reach critical moisture levels in alignment with conducive weather events.

- Widespread significant rainfall is still not expected, with forecast precip coming from rounds of isolated/scattered thunderstorm activity (risk of lightning holdover starts in drought impacted fuels continue), typical of summer.

- Hurricane Season is here and could very easily change fuel and moisture conditions depending on storm track.

- Of note - TS Helene impacts remain as the outlier to "Mountain/Foothills Green" – canopy closure, regrowth/death of downed/damaged timber, understory response, moisture balance with canopy removed and potential for lightning ignitions if drought conditions overlap severely damaged areas.

- Remember that premise of NFDRS is landscape scale FIRE DANGER relating to initiating fires, not fire specific FIRE BEHAVIOR, based on averaging between stations in an FDRA It is also a once daily output at 1300.



Predicted Adjective Rating - Fire Danger *(ERC & 100-HR)*

From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*

Forecasted Adjective Rating for FDRAs in North Carolina

FDRA	Tue Jul 1	Wed Jul 2	Thu Jul 3	Fri Jul 4	Sat Jul 5	Sun Jul 6	Mon Jul 7
Southern Highlands x	M	L	M	M	M	L	L
Central Mountains x	L	L	L	L	L	L	L
Northern Highlands x	L	L	M	M	M	M	M
Blue Ridge x	M	L	L	L	M	M	M
Western Piedmont x	M	M	M	M	M	M	M
Sandhills z	M	M	M	M	M	M	M
Eastern Piedmont x	M	M	M	M	M	M	M
Southern Coast x	L	L	L	L	L	L	L
Northern Coast x	M	L	L	L	L	M	M

100-hr Fuels, Modeled Trends – Percentiles

From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*

Forecasted Dead FM (100-Hr) Pctl. for FDRAs in North Carolina

FDRA	Tue Jul 1	Wed Jul 2	Thu Jul 3	Fri Jul 4	Sat Jul 5	Sun Jul 6	Mon Jul 7
Southern Highlands x	59.7%	79.4%	69.9%	59.7%	46.0%	46.0%	46.0%
Central Mountains x	62.9%	88.6%	82.3%	62.9%	49.8%	34.3%	34.3%
Northern Highlands x	35.9%	73.3%	73.3%	63.1%	50.6%	50.6%	35.9%
Blue Ridge x	34.2%	95.2%	75.6%	58.2%	45.9%	45.9%	45.9%
Western Piedmont x	17.5%	87.4%	80.8%	62.7%	49.4%	33.5%	33.5%
Sandhills z	40.5%	78.1%	78.1%	68.3%	55.6%	40.5%	40.5%
Eastern Piedmont x	22.6%	68.6%	68.6%	39.7%	22.6%	22.6%	11.4%
Southern Coast x	14.3%	60.0%	92.4%	80.7%	60.0%	46.5%	30.4%
Northern Coast x	21.9%	88.8%	97.8%	82.7%	64.9%	38.0%	38.0%

1000-hr Fuels, Modeled Trends - Percentiles

From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*

Forecasted Dead FM (1000-Hr) Pctl. for FDRAs in North Carolina

FDRA	Tue Jul 1	Wed Jul 2	Thu Jul 3	Fri Jul 4	Sat Jul 5	Sun Jul 6	Mon Jul 7
Southern Highlands x	47.0%	63.0%	63.0%	47.0%	47.0%	47.0%	47.0%
Central Mountains x	51.7%	51.7%	68.1%	68.1%	68.1%	68.1%	68.1%
Northern Highlands x	51.1%	51.1%	51.1%	51.1%	51.1%	51.1%	51.1%
Blue Ridge x	35.2%	35.2%	66.0%	50.8%	50.8%	35.2%	35.2%
Western Piedmont x	34.3%	49.3%	49.3%	49.3%	49.3%	49.3%	49.3%
Sandhills z	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%	47.7%
Eastern Piedmont x	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%	26.4%
Southern Coast x	32.3%	32.3%	32.3%	32.3%	49.1%	49.1%	49.1%
Northern Coast x	38.5%	38.5%	38.5%	55.0%	55.0%	70.2%	70.2%