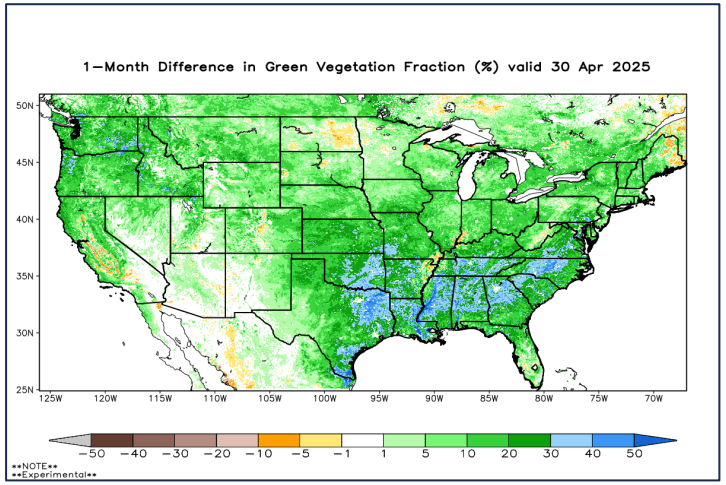
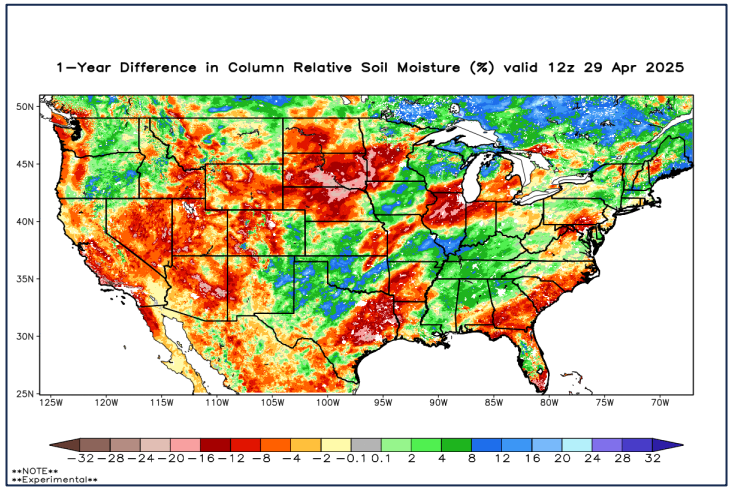
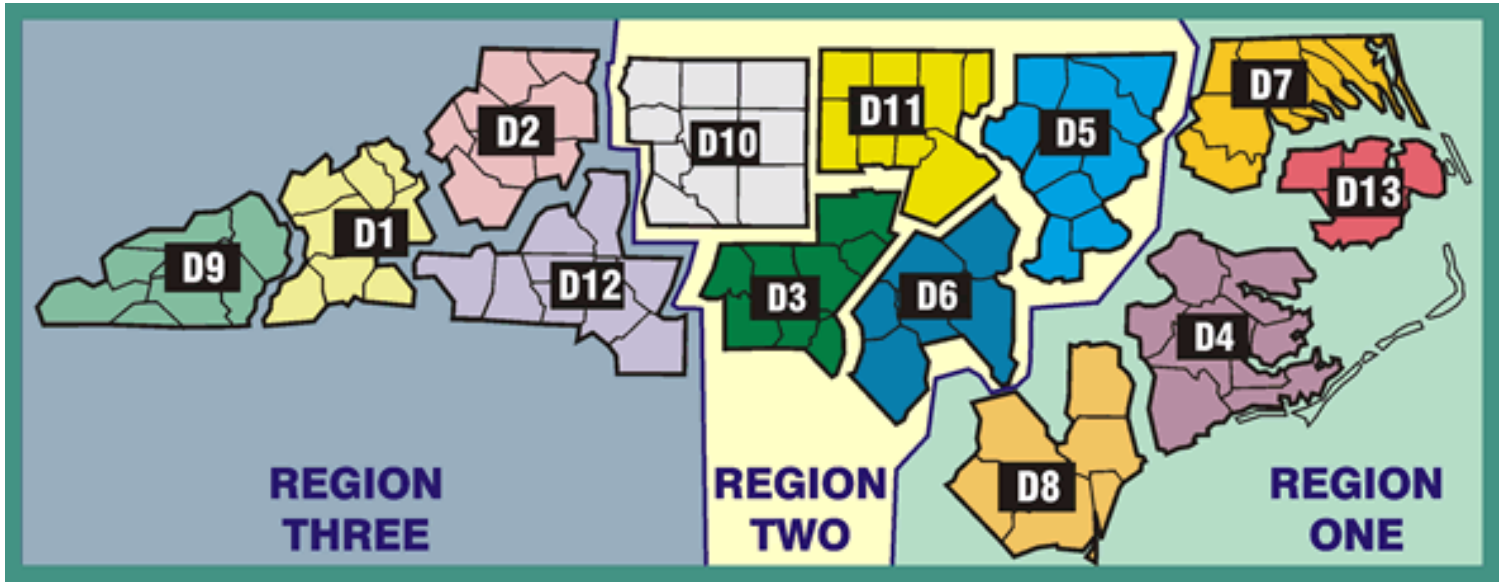
For Time Period:

Thursday (5/1/25) to Thursday (5/8/25)

Weekly Fire Danger Assessment NCFS – All Regions







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

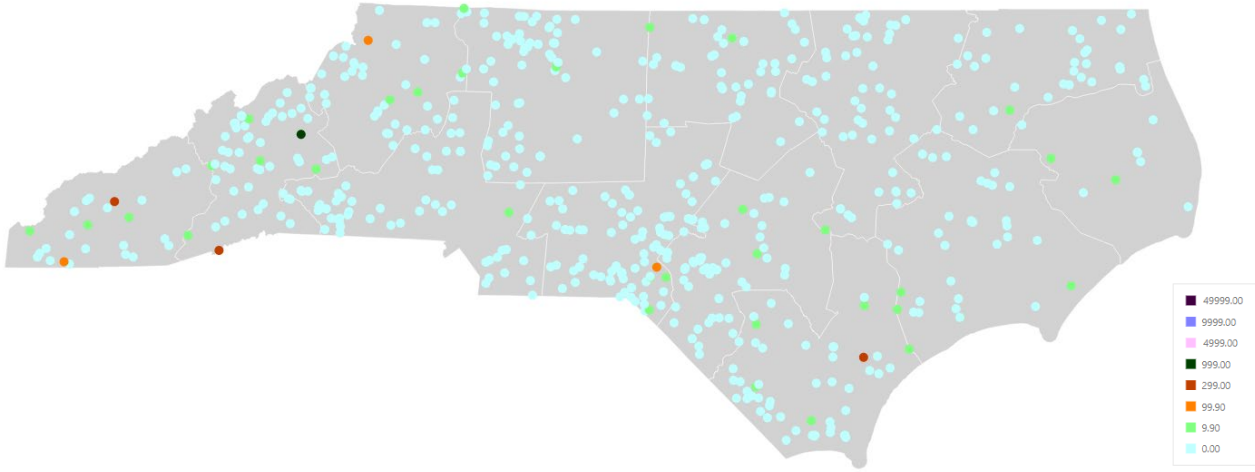
April: 603 incidents for 5,698 acres
7-Day Activity: 110 incidents for 298 acres

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

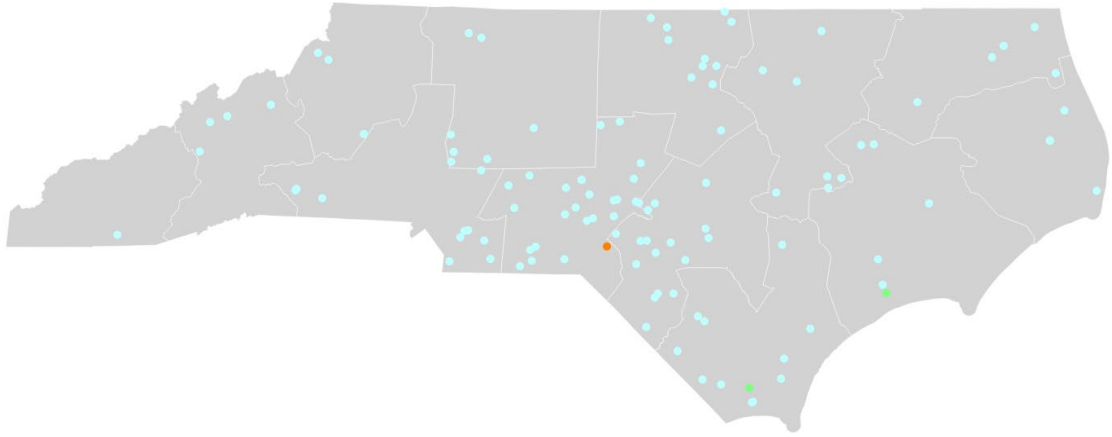
**Largest incidents by discovery date in April:
from fiResponse & preliminary reporting only

Incident Name	Discovery Date	Region	District	County	Acres
Bee Rock Creek	4/15/2025	Region 3	District 1	McDowell County	2085.00
Hwy 210 Fire	4/19/2025	Region 1	District 8	Pender County	661.00
Table Rock Complex	4/2/2025	Region 3	District 1	Transylvania County	635.00
Sam Davis Road	4/18/2025	Region 3	District 9	Swain County	559.00
S Carter Cove	4/15/2025	Region 3	District 9	Clay County	150.00
Gardener Farm and slate	4/24/2025	Region 2	District 3	Scotland County	138.00
Bald Fork	4/17/2025	Region 3	District 2	Ashe County	105.00
Johnny's ocean	4/20/2025	Region 2	District 3	Scotland County	86.00
Crown Point #1	4/29/2025	Region 1	District 4	Onslow County	75.00
Deer Run	4/17/2025	Region 3	District 2	Caldwell County	73.00
Lowgap Mtn	4/16/2025	Region 2	District 10	Surry County	65.00
Old Murray Road	4/17/2025	Region 3	District 1	Madison County	62.00
Zion Church Road	4/5/2025	Region 3	District 12	Cabarrus County	40.00
308 Cabin	4/15/2025	Region 1	District 7	Bertie County	40.00
Topton Bridge	4/17/2025	Region 3	District 9	Macon County	36.00
Rose Acre Fire	4/7/2025	Region 1	District 13	Hyde County	35.00

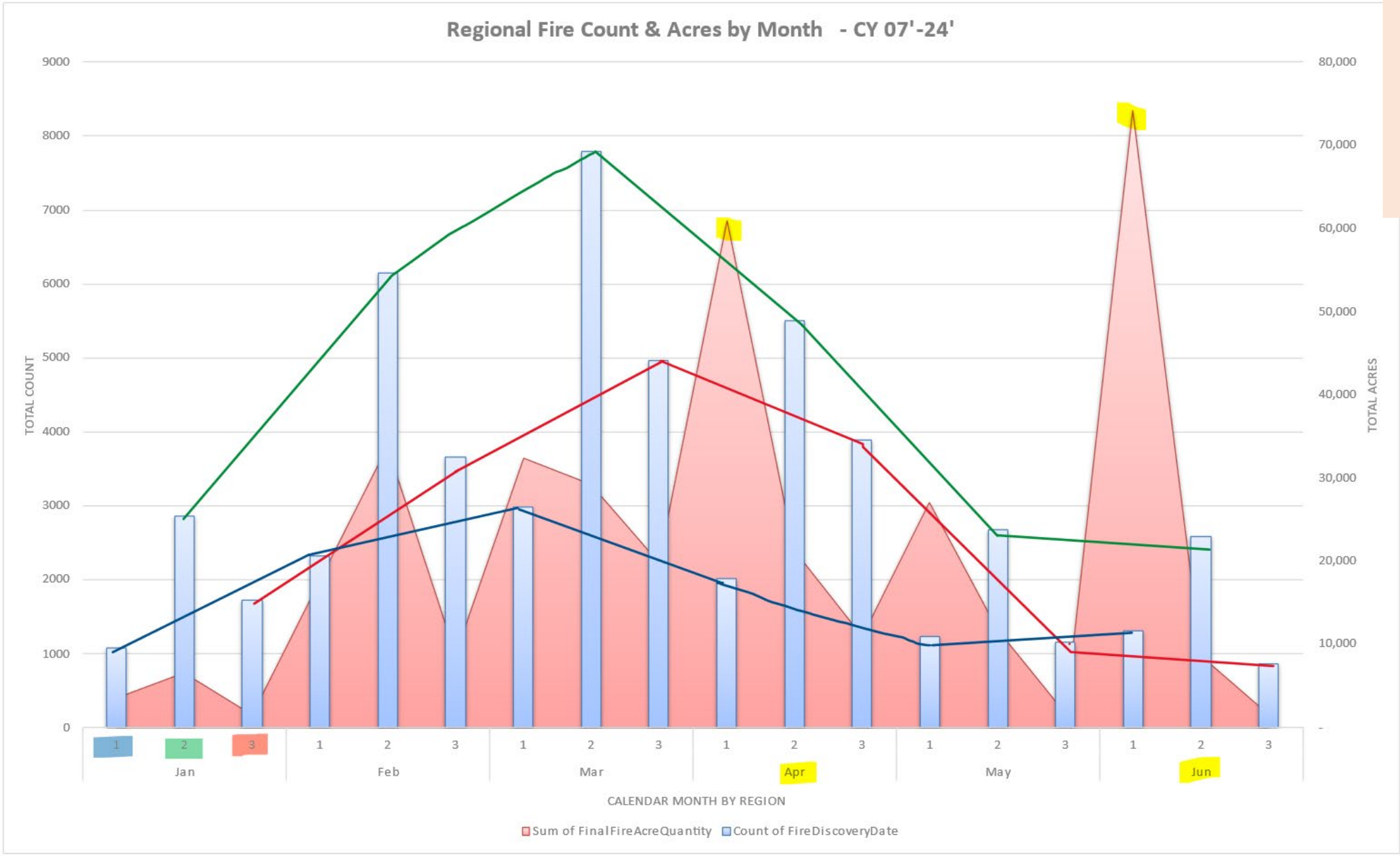
April 2025



Last 7-Days (4/24 - 4/30)

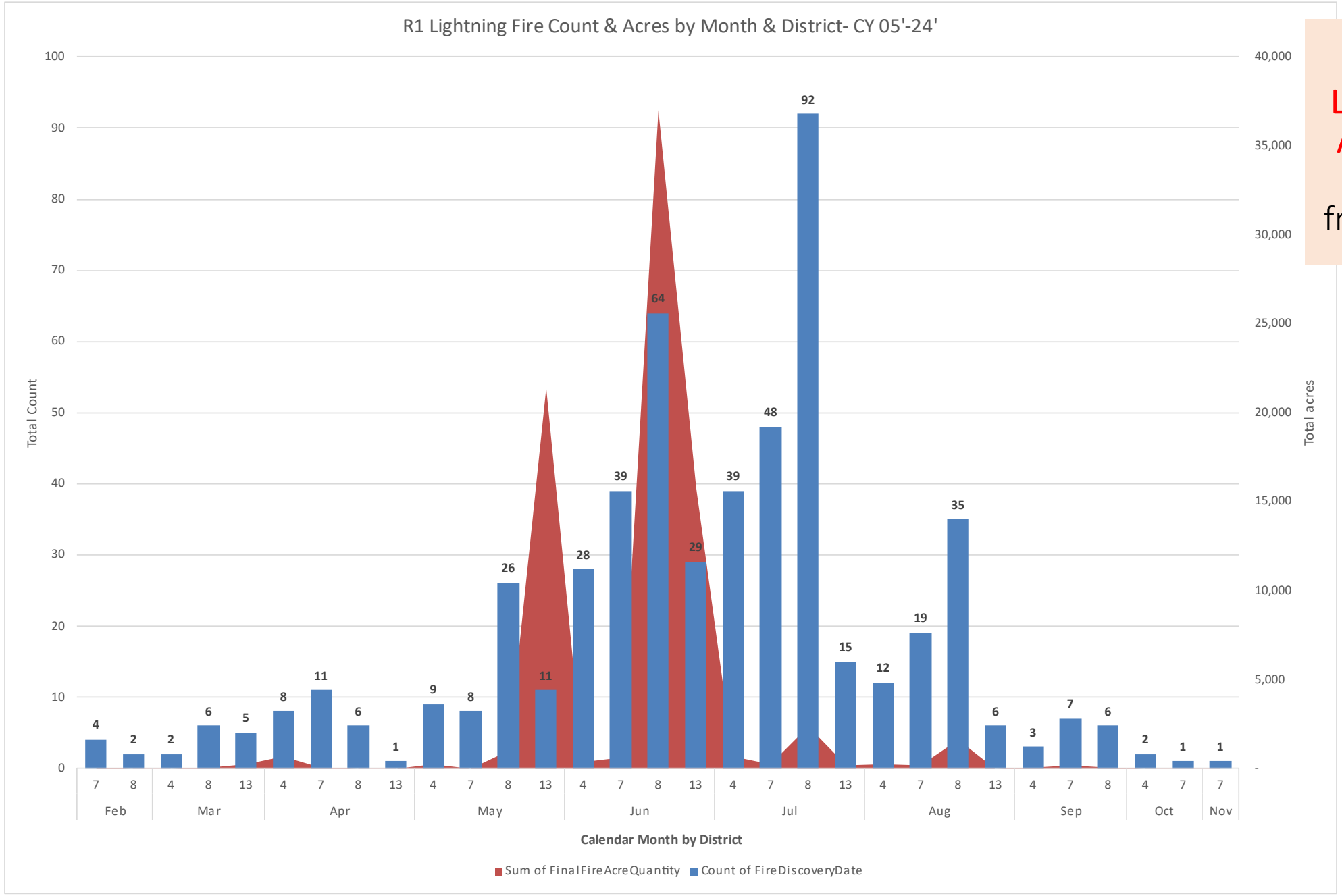


***Note: DOD & other entirely federal ownership wildfires not shown on fiResponse*



Distribution of **All Fires & Acres By Month *Regional*** from 2007 - 2024

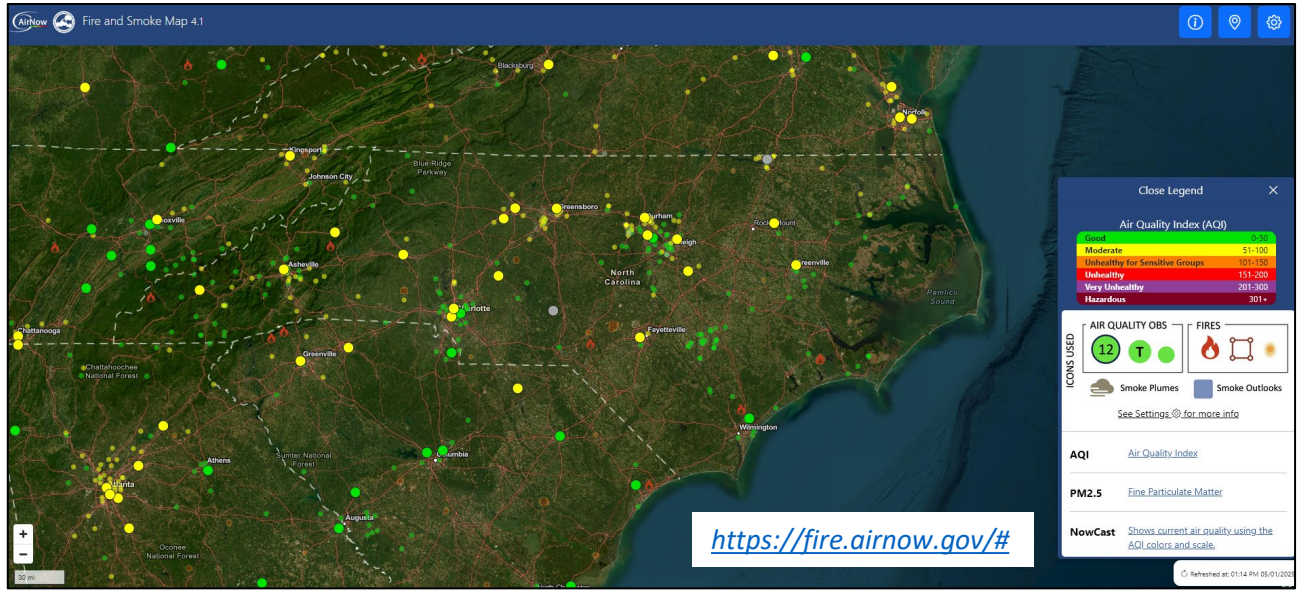
Cause: All Cause Codes, Regional Binning, NCFS Reported Fires Only



Distribution of
Lightning Fires &
Acres By Month
R1
from 2005 - 2024

Cause: Lightning
Cause Code, R1
Districts, NCFS
Reported Fires Only

Air Quality Notes



AirNow Link for Public regarding Smoke Ready practices:

https://www.airnow.gov/wildfires/be-smoke-ready/

Portions of Jones, Craven, and Onslow counties continue to see localized elevated PM2.5 readings related to ongoing wildfires.

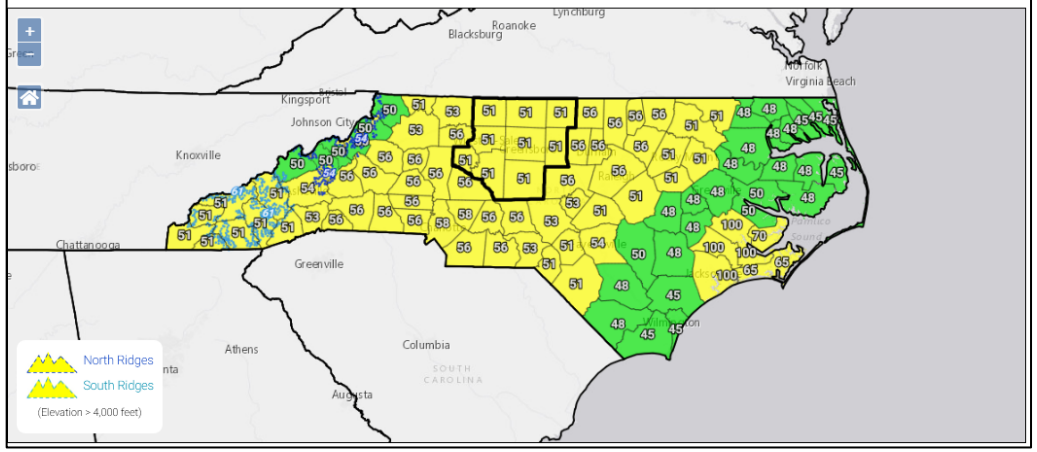
Extended Air Quality Outlook

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

Forecast Day	View Maps	Max AQI Range	Category Range	Download KML
Wednesday (Apr 30)	Max AQI • Ozone • PM2.5	48 to 140	Green to Orange	download
Thursday (May 1)	**Max AQI** • Ozone • PM2.5	45 to 100	Green to Yellow	download
Friday (May 2)	Max AQI • Ozone • PM2.5	45 to 100	Green to Yellow	download
Saturday (May 3)	Max AQI • Ozone • PM2.5	42 to 53	Green to Yellow	download

Maximum Air Quality Index for May 1, 2025

0 51 101 151 201 301



This forecast was issued on **Wednesday, April 30, 2025** at **3:19 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Current hourly ozone readings are in Code Green range statewide except for Mecklenburg County where Code Yellow is being observed. Current daily averages for fine particulates are in Code Yellow range across much of the Piedmont, and Code Green range elsewhere with the exception of parts of Jones, Craven, and Onslow counties where smoke from wildfires is likely leading to localized elevated PM2.5 readings.

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

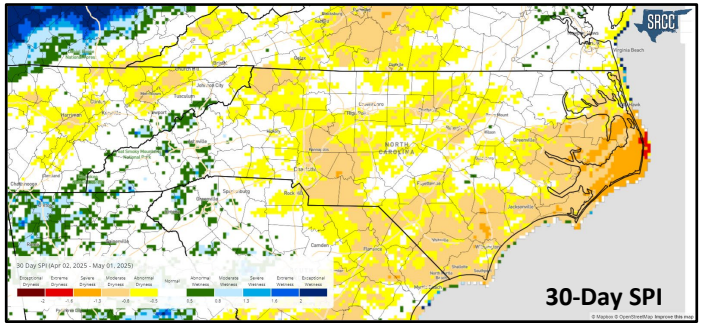
We'll see a similar weather pattern yet again on Thursday across the state as the center of high pressure remains offshore. South/southwest winds will increase a bit more as an upper-level trough begins to approach from the west and we see increased afternoon mixing. With no major changes to the airshed, fine particulates will likely average out in Code Yellow range again across much of the state. As for ozone, we should see enough sunshine for some ozone production and Code Yellow ozone maximum 8-hour averages are forecast for the Charlotte, Fayetteville, and Raleigh areas., although persistent winds and mixing should put a cap on ozone. Meanwhile, some ozone may also transport in from the south and mix down in the southwestern part of the state, leading to Code Yellow averages in that area. Regarding the Black Swamp Fire in Jones County, containment has increased today (Wednesday) and the acreage has remained the same. The smoke plume has shrunk in size on satellite imagery this afternoon and is a bit hard to see at times. Modeled smoke plume data is also not very impressive through Thursday. Based on this, we have decided to not continue Code Orange for Craven and Jones county for Thursday, but are still forecasting Upper Code Yellow (Moderate) to account for some smoke, so those that are sensitive should still use caution. We also are forecasting Upper Code Yellow for Onslow County due to a wildfire burning near Hubert. We'll continue to monitor both of these fires and adjust the forecast as necessary.

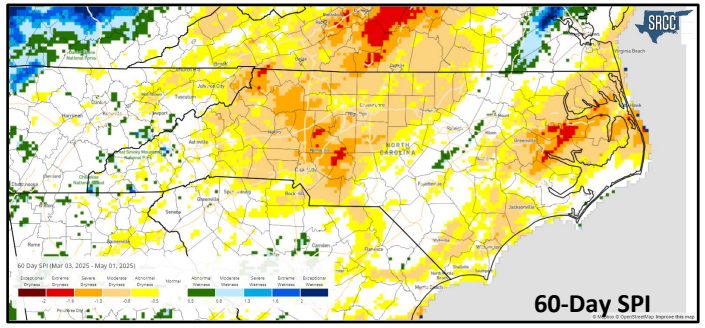
Outlook

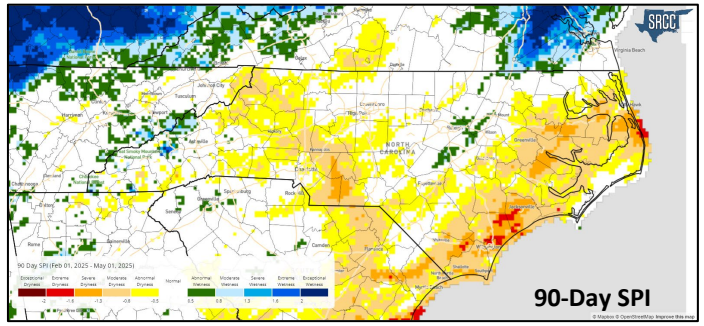
We'll see the pattern start to slowly break down heading through Friday and Saturday as a trough moves in. This will lead to increasing clouds and rain chances, especially over the weekend. Fine particulates will likely remain in Code Yellow range for the interior, but will slowly decrease. The increasing clouds and precipitation chances should lower ozone averages to Code Green range statewide by Saturday.

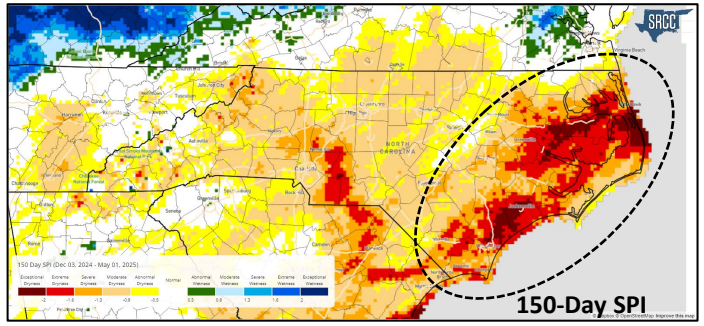
Author: *Jordan Root (jordan.root@deq.nc.gov) - NC Division of Air Quality*

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

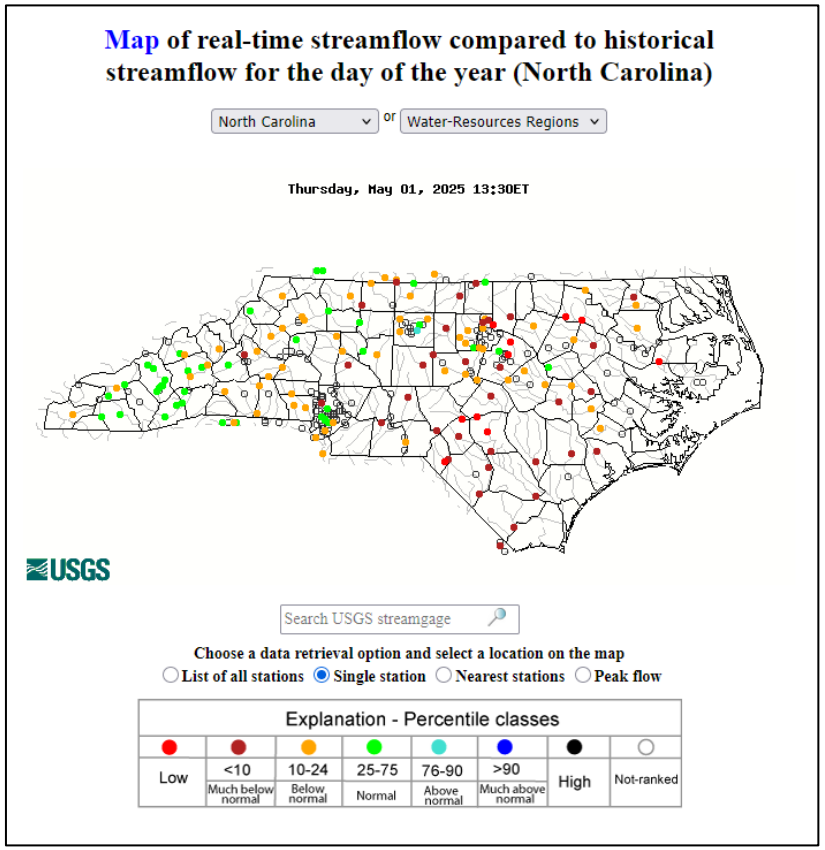


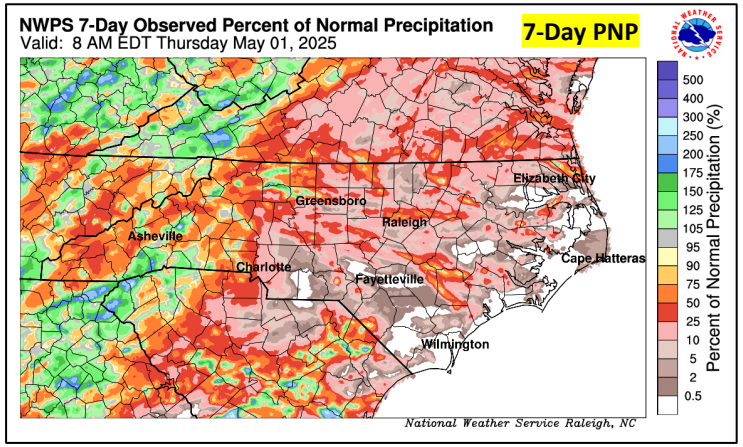


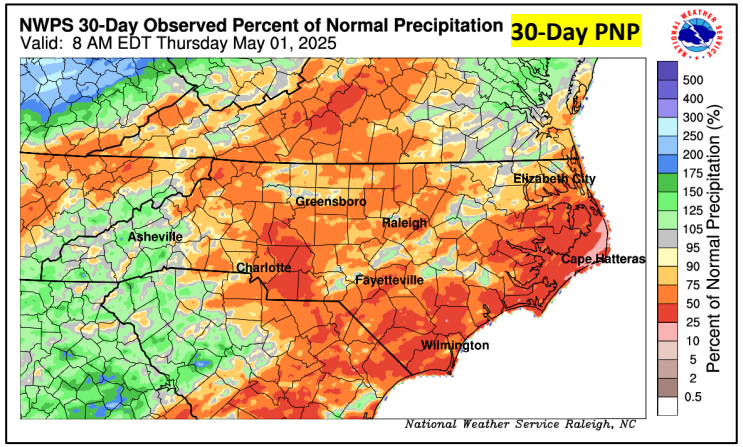




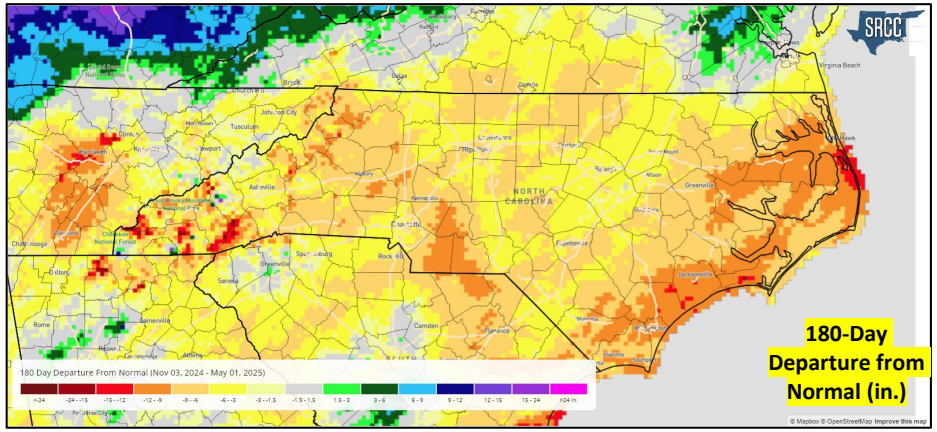
https://srcc.tamu.edu/water_portal/



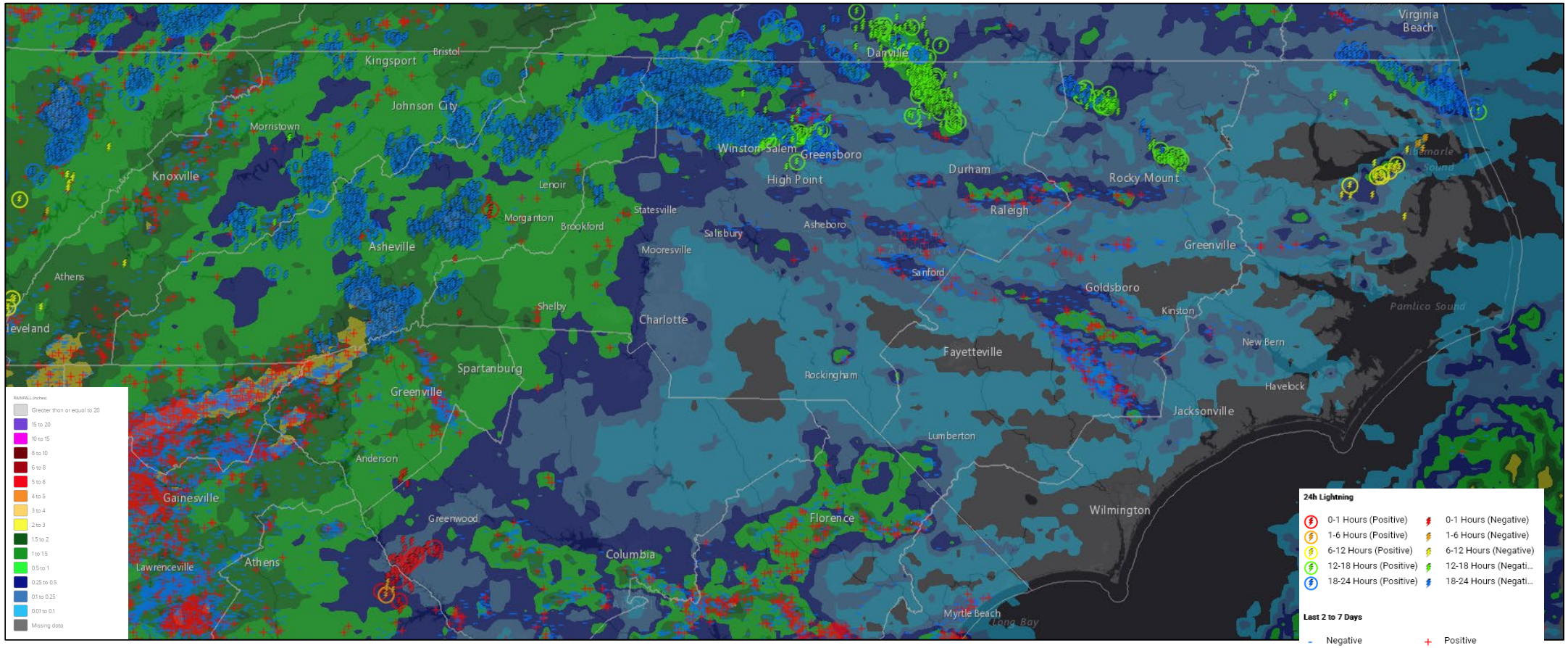




- Note the 7- & 30-day PNP graphics (top right).
- Streamflow improvements southwest mtns, declines remain/intensify central & east (center top).
- 30-Day SPI shows improvements SW & Central Mtns, otherwise dryness slowly expanding. (top left).
- 60/90/150-Day SPI picking up on longer-term pockets of dryness (left).
- 180-Day Departure from Normal Precip – areas in darker orange & red represent 9-12” & 12-15” + (bottom right).

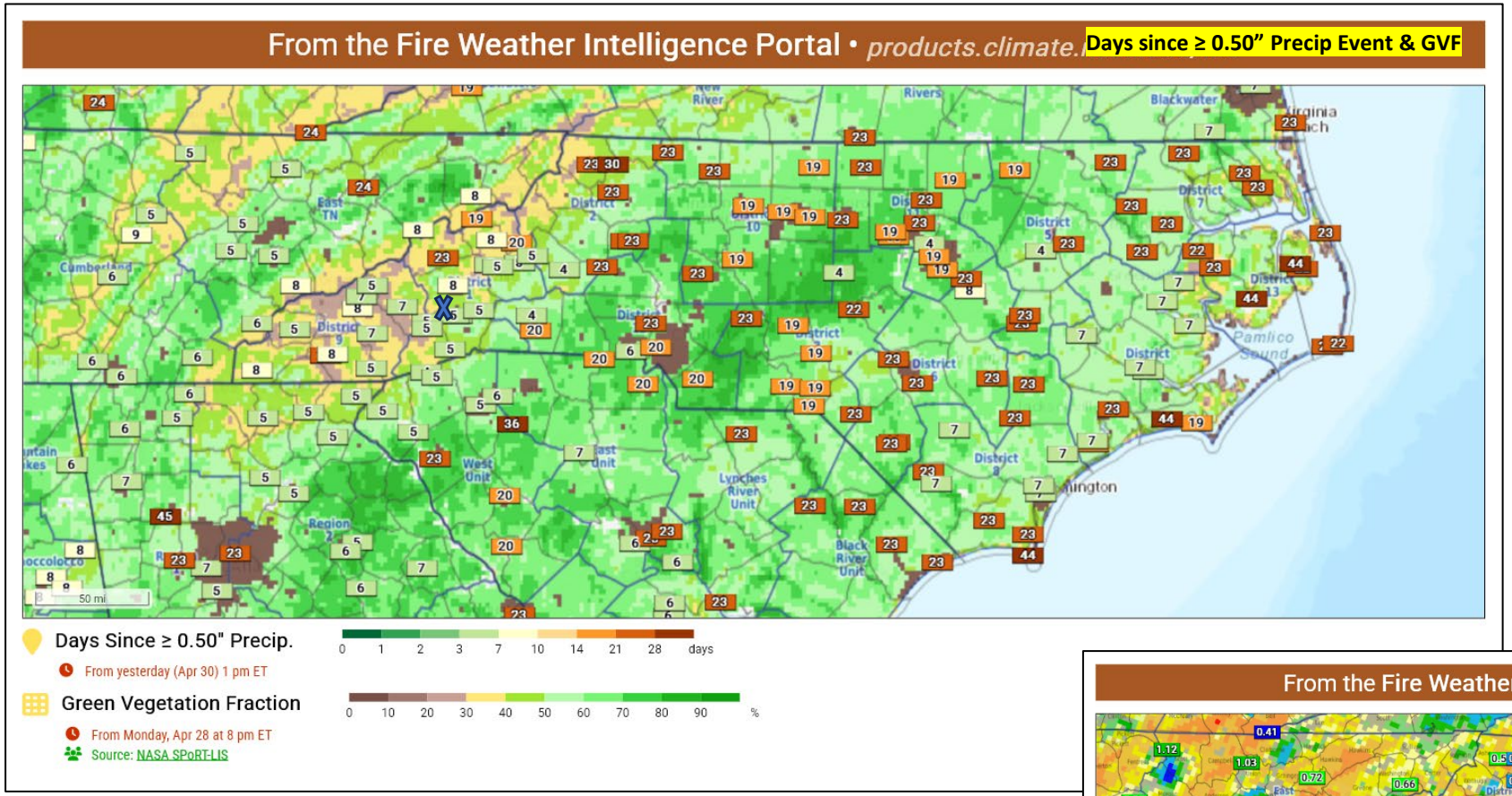


EGP Lightning: 7-Day Lightning and 7-Day NowCoast Observed Precip Estimates with PSA boundaries for location context.



Lightning Outputs Ending 5/1/25 at 1400hrs

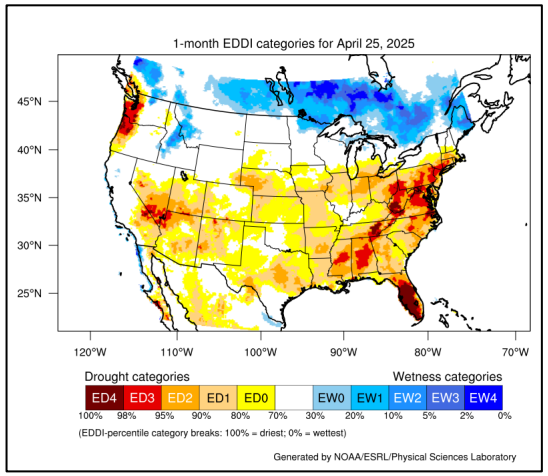
Note that 7-day precip output layer doesn't update as rapidly as lightning layer.

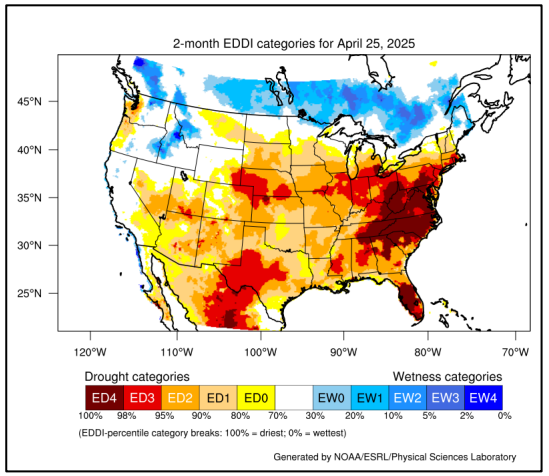


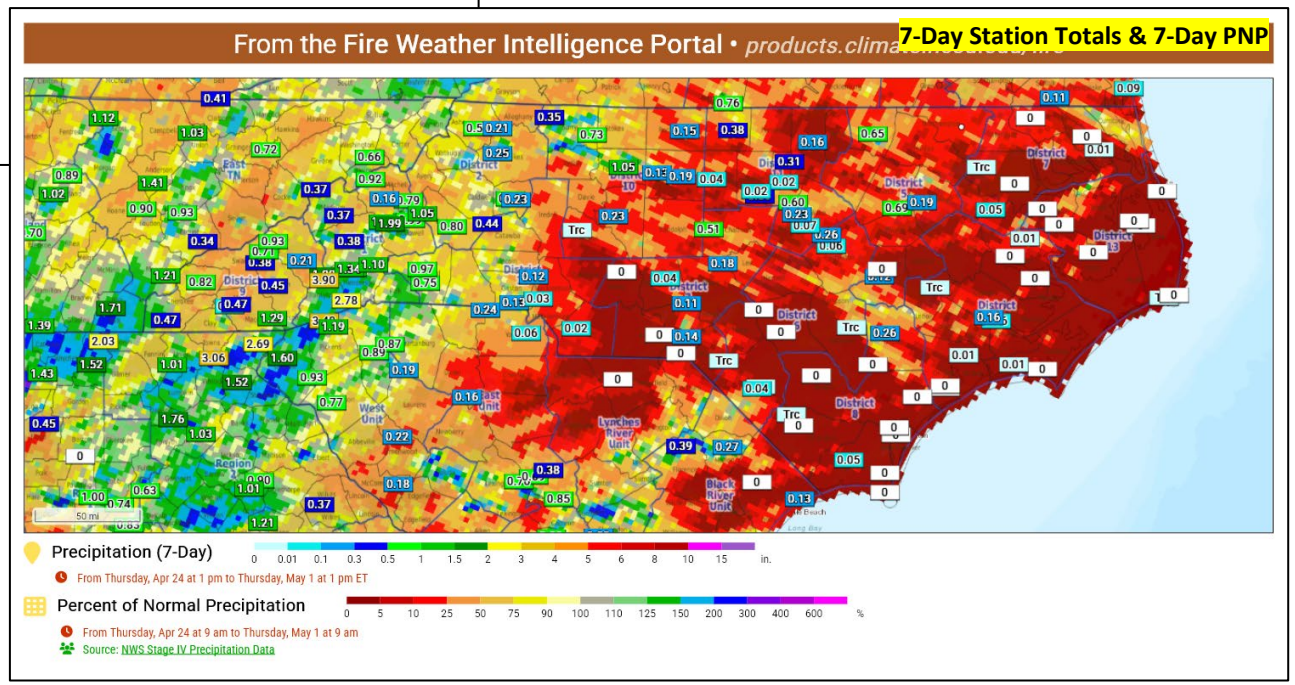
Days since ≥ 0.50" Precip Event
Some of East at 40+ days

Note very high observed EDDI values for parts of NC, at one- and two-month timescales for period ending on 4/25.

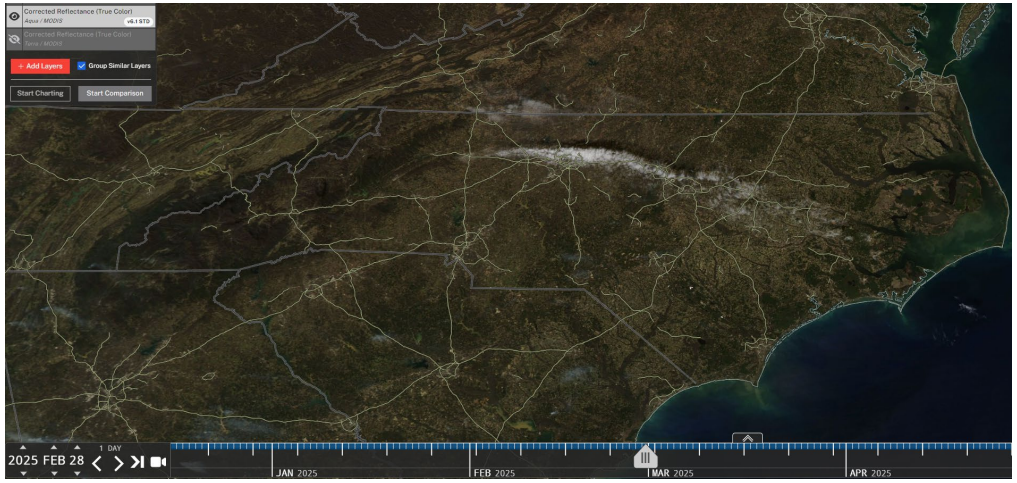
7 Day PNP vs Station Totals – note continued and increasing dryness across much of Central/Eastern NC.

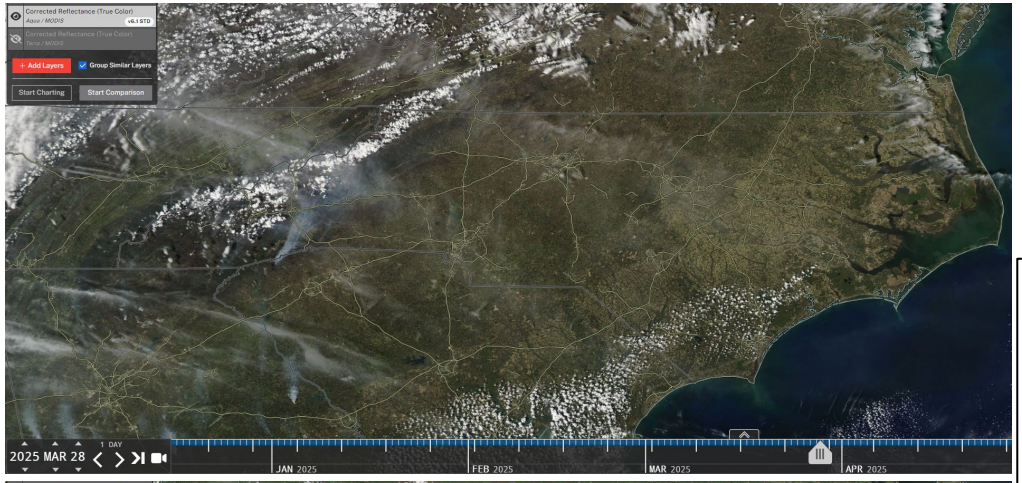


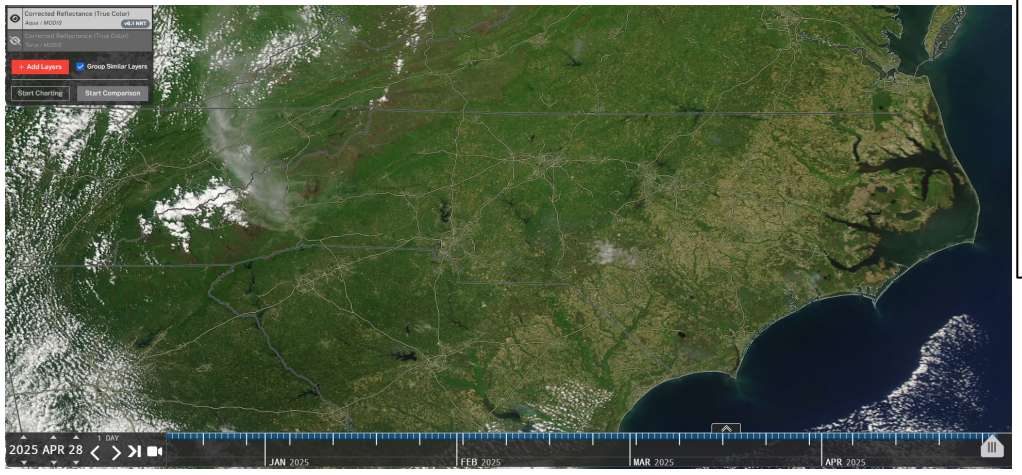




Green Fraction & Green-Up Anomaly





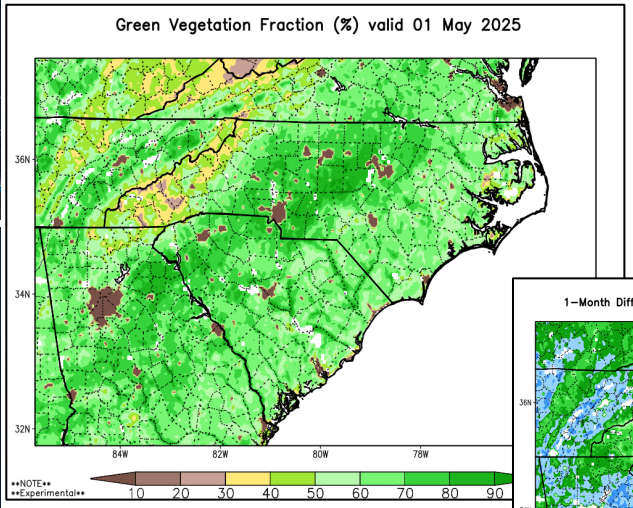


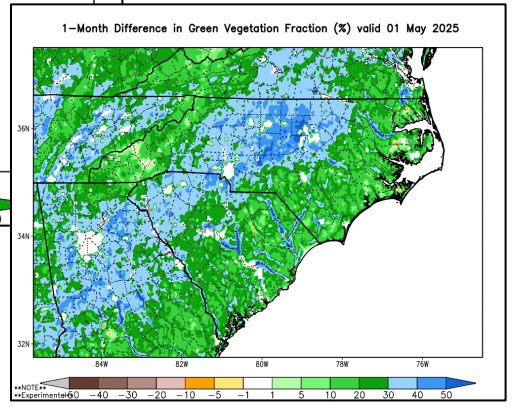
Greenup processes continue with warming soils, higher average air temps, and warmer nights. Forest leaf-out traditionally varies by species (early vs late), soil moisture regime, and elevation across the landscape. The GVF maps provide useful context on overall greenup across the landscape. NASA Worldview Maps from Aqua/MODIS sensors on left illustrate monthly true color representation – Feb 28 (top), Mar 28 (middle) and Apr 28 (bottom).

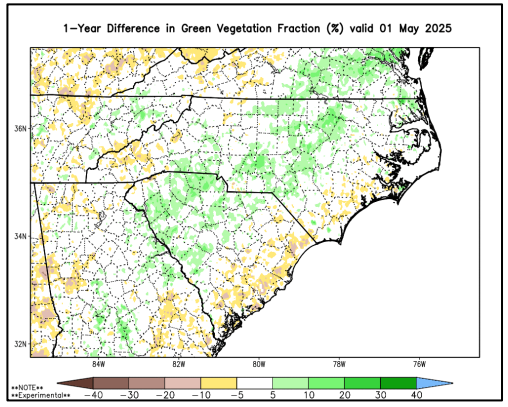
- **Generally,** elevations above 2,200 ft. still greening with leaf out moving more slowly in higher elevations impacted by prior sustained cooler conditions. Lower elevation sites remain ahead.

- Road shoulders, yards and understory herbs have had & continue to see the most immediate response at all elevations. However, available soil water is quickly becoming the limiting factor with sensitive grasses/herbs showing signs of stress/decline in drought impacted areas (most common on engineered soils of larger highways) which will lead to starts more easily establishing and making it into the "woods".

- Also, remember seasonal implications of drought aligning with areas of the "Southern Rough" fuel complex including **Pocosin/Bay** species with deeper organic horizons, even with overall "greenness" increasing across the landscape. "Green" may slow initial establishment, but the extra available fuel loading will add to intensity and fire growth potential much faster.







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 State Climate Office — climate.ncsu.edu | @NCSCO

For the assessment period ending **Apr. 29, 2025**

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

The Main Takeaway

After a week of hit-or-miss rain showers, we saw some local improvements along with expanding Moderate Drought (D1) in parts of the Piedmont and eastern NC.

This Week's Summary

Parts of the southern Mountains and central Coastal Plain saw more than two inches of rain last week, while less than half an inch fell in much of the Piedmont and other coastal areas. Although local totals were highly varied, broader trends this week included a progressing green-up along with declining topsoil moisture content – both of which were due in part to the recent warmth.

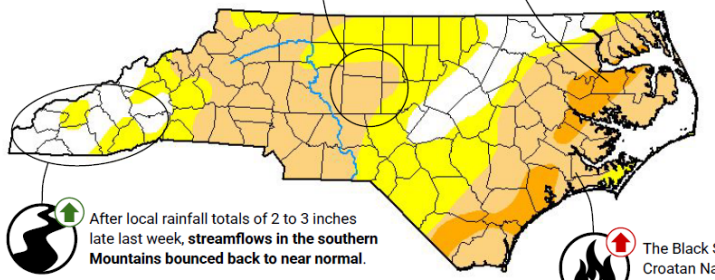
Last Month's Precipitation

It was a wet month in the southern Mountains, with **Asheville** seeing its 28th-wettest April on record, but dry elsewhere, including the 15th-driest in **Fayetteville**.

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

After less than a quarter-inch of rainfall last week, the **central Piedmont is seeing browning grass and dry, cracked ground**.

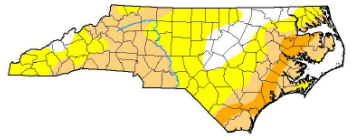
Washington County Extension reports **farmers made good planting progress in early April** but are **now waiting for more moisture to continue**.



After local rainfall totals of 2 to 3 inches late last week, **streamflows in the southern Mountains bounced back to near normal**.

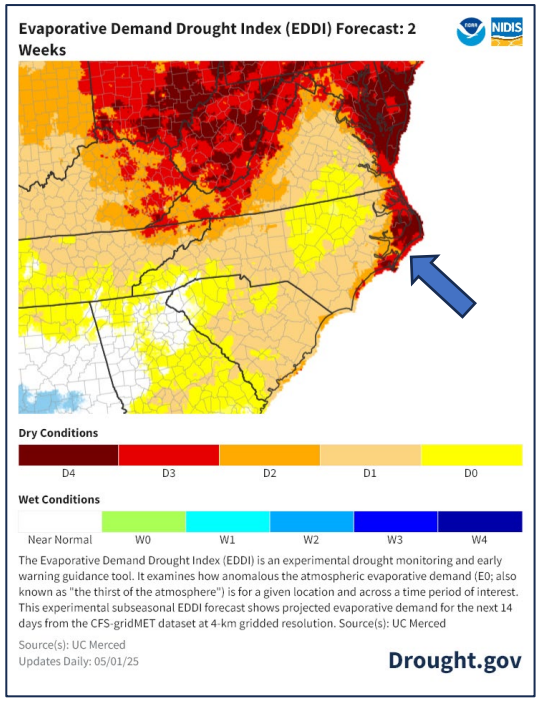
The Black Swamp wildfire at Croatan National Forest has **burned 950 acres since Sunday**.

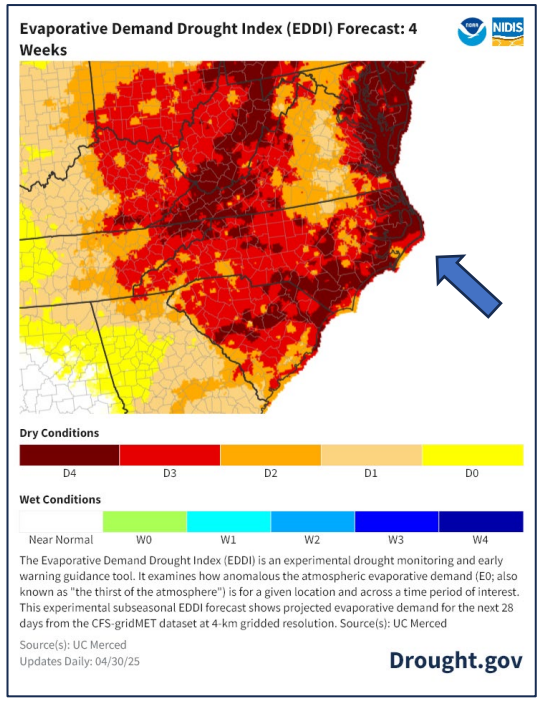
Last Week's Drought Status



Statewide Coverage by Category

Category	Current Coverage	Change Since Last Week
D0: Abnormally Dry	31.32%	-11.15%
D1: Moderate Drought	45.35%	+8.24%
D2: Severe Drought	7.37%	-0.68%
D3: Extreme Drought	0.00%	0.00%
D4: Exceptional Drought	0.00%	0.00%



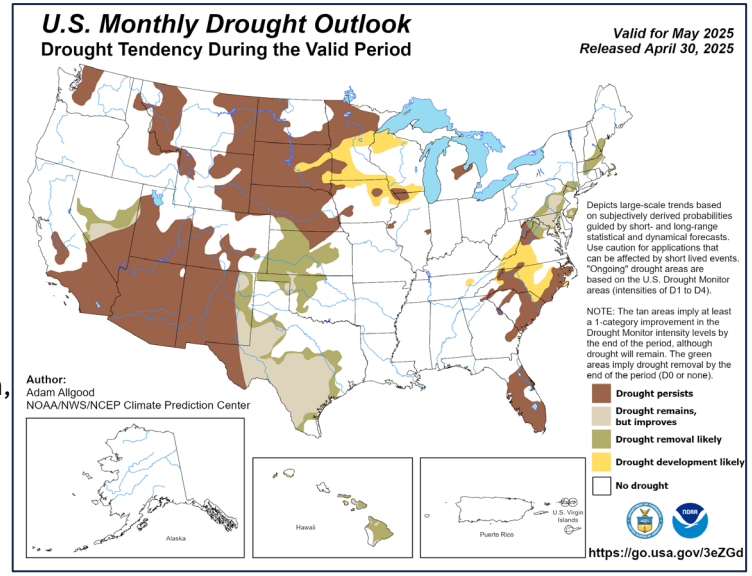


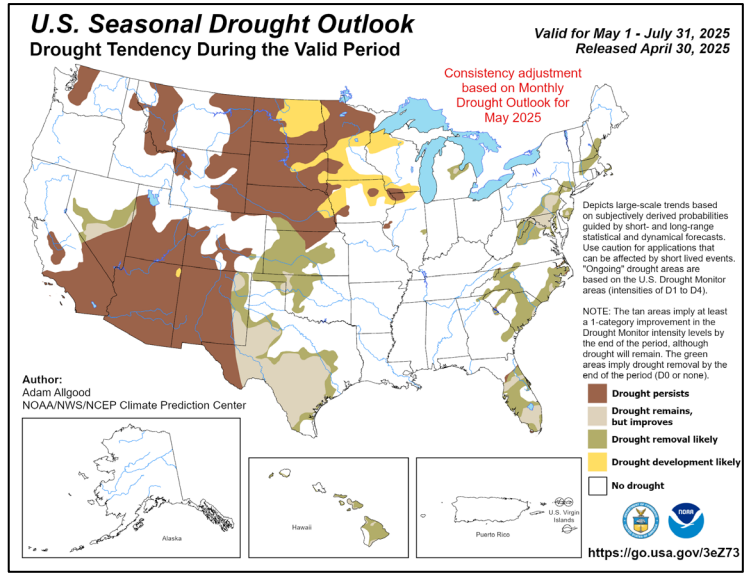
EDDI & Drought

EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week avg level. They represent influence of warmer conditions and enhanced evaporative demand expected over the next several weeks. Warmth and dry air accelerates this index (Spring Weather). Focus on Eastern/Coastal NC.

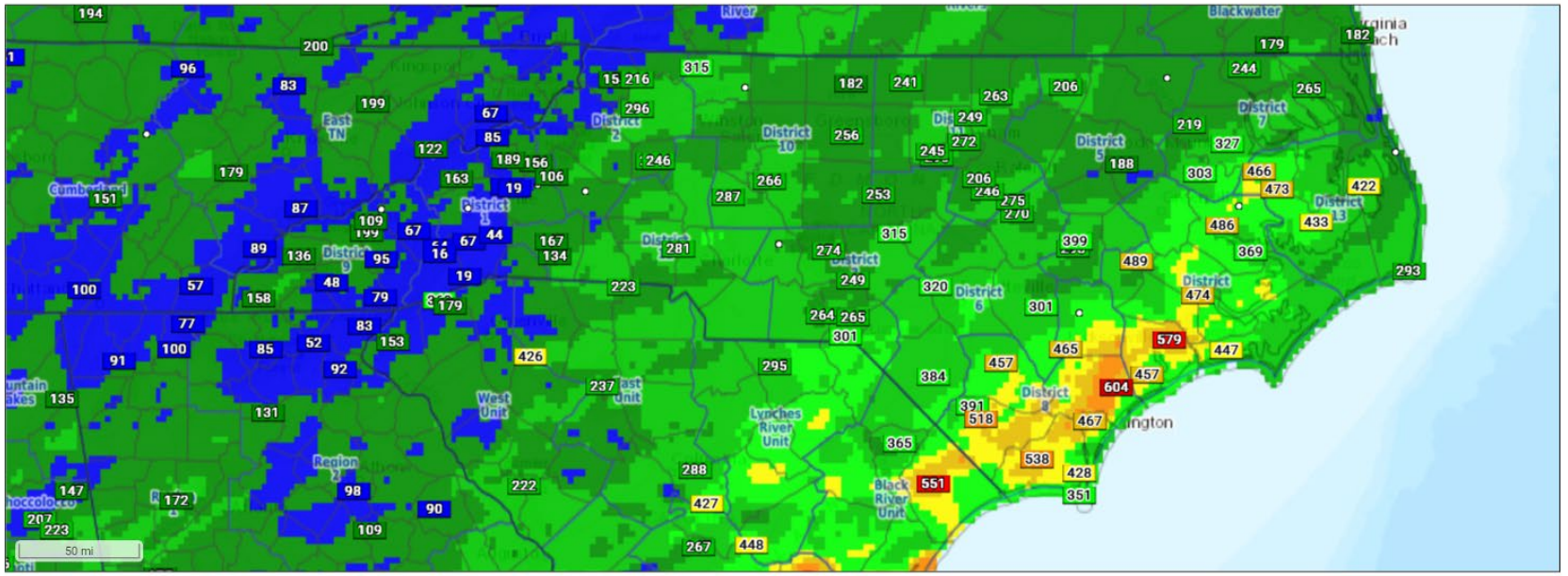
US Drought Monitor – USDM map released last week, note D1 & D2 areas.

USDM Monthly & Seasonal Drought Outlook - shown at right. See detailed state/regional discussions here. Favoring extension of drought in shorter term, but seasonal reduction in extent/severity is still favored. *All of this is dependent upon any future storm tracks and likely seasonal variability we begin to experience moving to summer.*



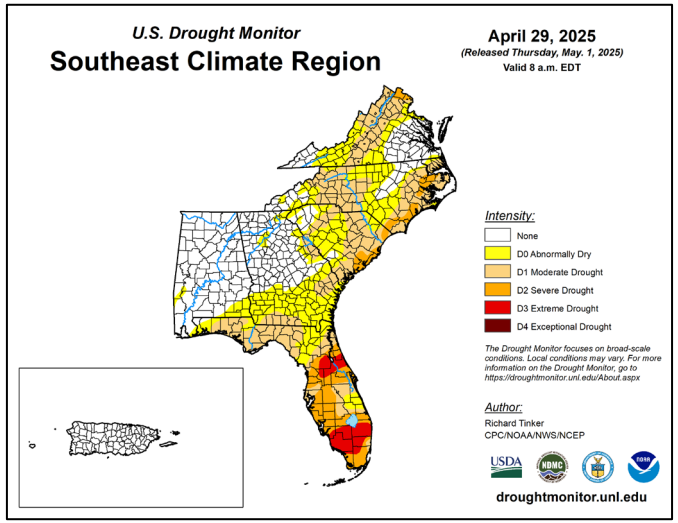


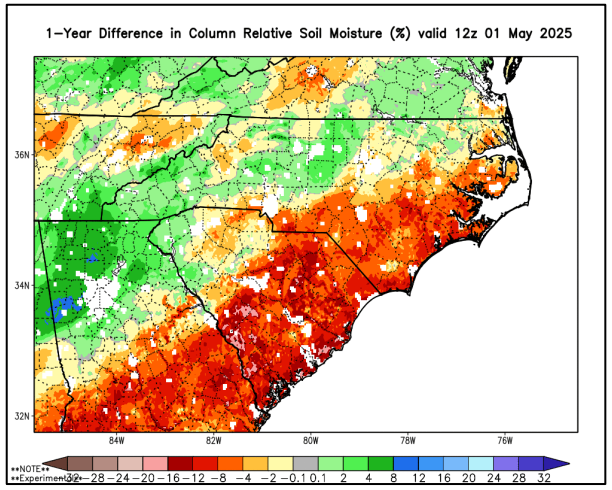
From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*



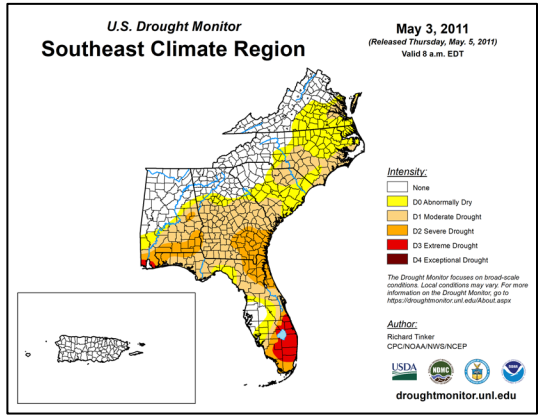
- KBDIs continue to increase more rapidly with warmer temps. Most central and south coast stations are at/near seasonal max.
- Note modeled changes to profile compared to last year at same time (bottom left).
- USDM Map comparison – 2011, 2017, 2018, 2025.

Current

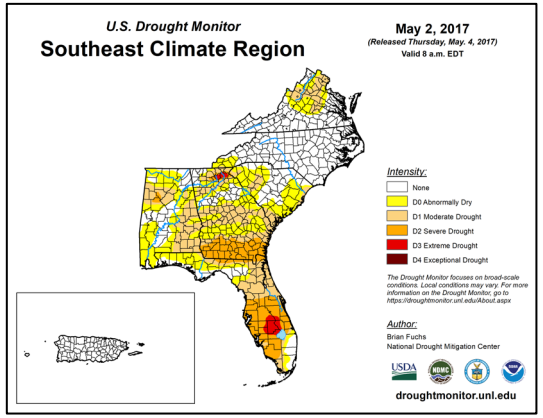




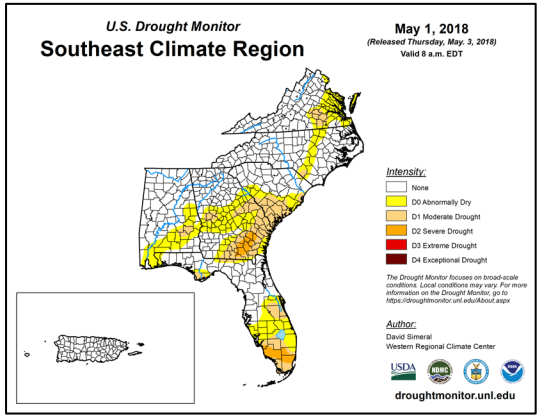
2011



2017



2018

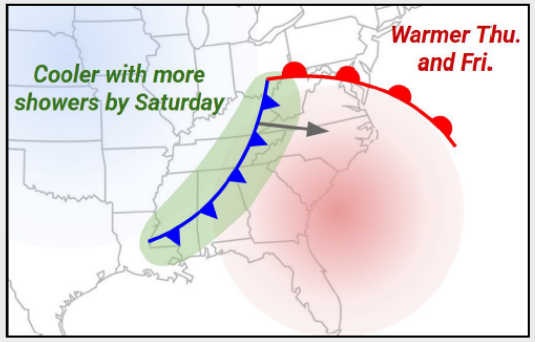


State Climate Office: Short-Range Monthly Outlook for NC

Released 5/1/25 & Location:
https://climate.ncsu.edu/fire/outlooks/

Short-Range Outlook for North Carolina

Week 1: May 1 to 7, 2025



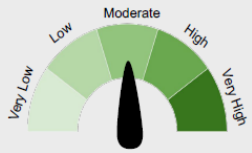
A Weekend Cooldown

Behind a warm front to our north, our temperatures will soar into the 80s on Thursday and Friday. On Saturday, an approaching cold front will bring more cloud cover, and after it moves by, temperatures will top out in the 70s through at least next Wednesday.

Stormy by Saturday

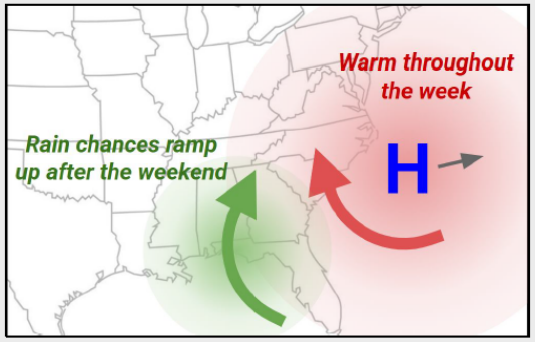
Shower and thunderstorm activity will ramp up on Saturday as the cold front moves in, with unsettled weather potentially lasting into early next week if a low pressure system stalls over us. Weekly rainfall should range from half an inch to just over an inch.

Forecast Confidence



Models have been split on the potential stormy pattern for early next week, which will depend on the position of the approaching low.

Week 2: May 8 to 14, 2025



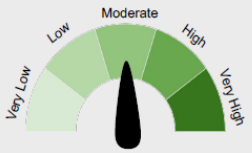
Warm and Muggy

An offshore high pressure system should help keep our temperatures above normal through most of the week. As is common during these "Bermuda high" setups, winds from the south should also elevate humidity levels, which could temper the fire danger.

Showers Spring Back

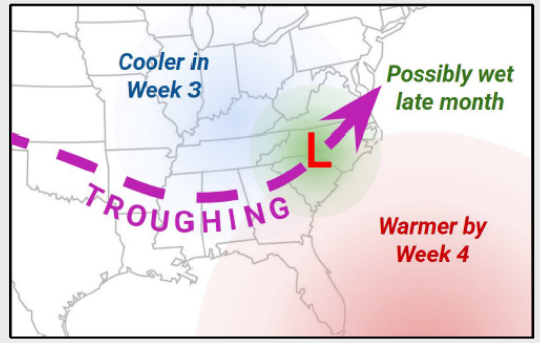
Current forecasts are dry heading into next weekend, but as that high pressure system takes shape off our coastline by the start of the work week, it should pull in Gulf moisture from the south to fuel daily showers and thunderstorms in a typical summer-like pattern.

Forecast Confidence



Current guidance is in good agreement, but predicting exact rain amounts is always tough with this sort of convective pattern.

Weeks 3-4: May 15 to 28, 2025



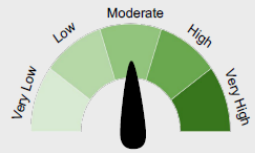
Late-Month Variability

Week 3 could see a slight cooldown, with near- or below-normal temperatures possible under weak jet stream troughing over the Southeast US. We should be back on the warm side of the jet stream by Week 4, with high temperatures rising back into the 80s.

Rain Chances Remain

No matter which side of the jet stream we're on, we should be in the storm track bringing systems out of the Gulf or across the Southeast. That favors wetter weather for late May and possibly more widespread rainfall from those organized weather systems.

Forecast Confidence



Model agreement is decent, but the exact evolution of the troughing pattern and its rain chances are tough to predict this far out.

This infographic is based on forecast and outlook guidance from the National Weather Service.
For more information, visit **www.weather.gov**.

Author: Corey Davis (NCSCO)
cndavis@ncsu.edu

NORTH CAROLINA CLIMATE OFFICE

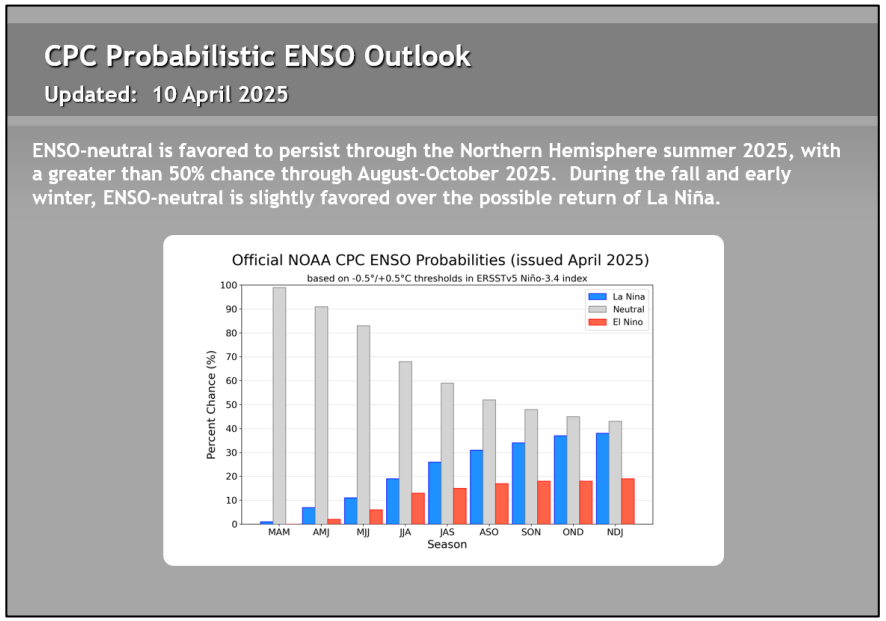
Supported by: NORTH CAROLINA FOREST SERVICE NC

ENSO Notes from the CPC (4/10/25 Update)

ENSO Alert System Status: **Final La Niña Advisory**

ENSO-neutral is favored during the Northern Hemisphere summer, with a greater than 50% chance through August-October 2025.

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										

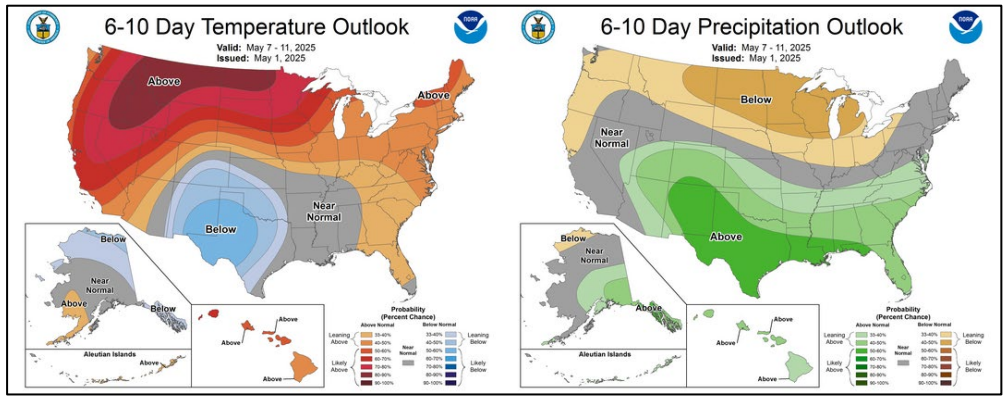
From the most recent CPC Diagnostic Discussion (ENSO Diagnostics Discussion):

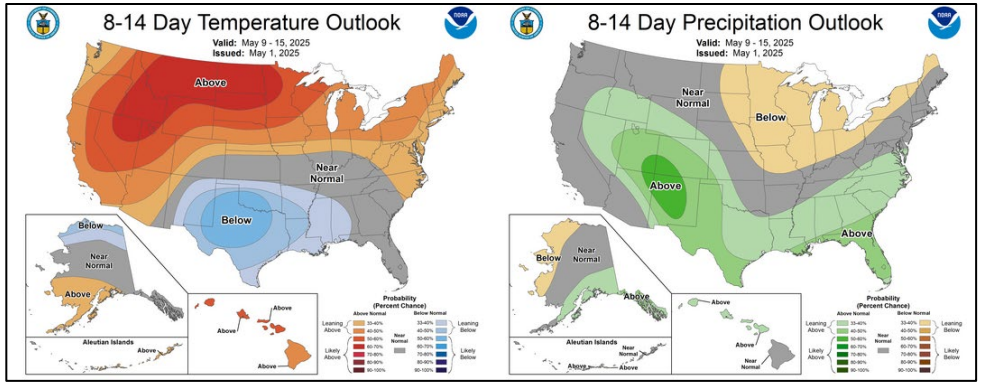
The IRI and North American multi-model ensemble indicate ENSO-neutral will continue through the summer [Fig. 6]. The forecast team also favors ENSO-neutral, with chances well over 50% through summer 2025. Because of reduced forecast accuracy in the spring, the uncertainty increases at longer time horizons, with a 43% chance of ENSO-neutral and a 38% chance of La Niña during November 2025 - January 2026 (chances of El Niño are under 20%). In summary, ENSO-neutral is favored during the Northern Hemisphere summer, with a greater than 50% chance through August-October 2025 [Fig. 7].

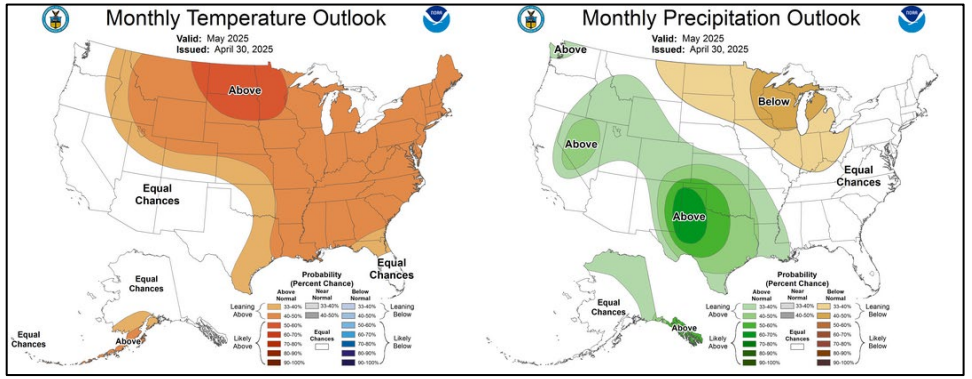
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

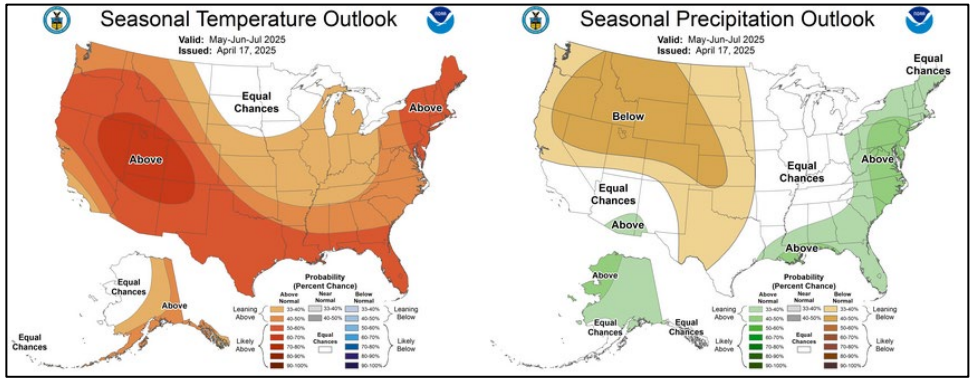
Temp & Precip Outlook

6-10 Day, 8-14 Day, Monthly (May), & Seasonal (May-June-July)







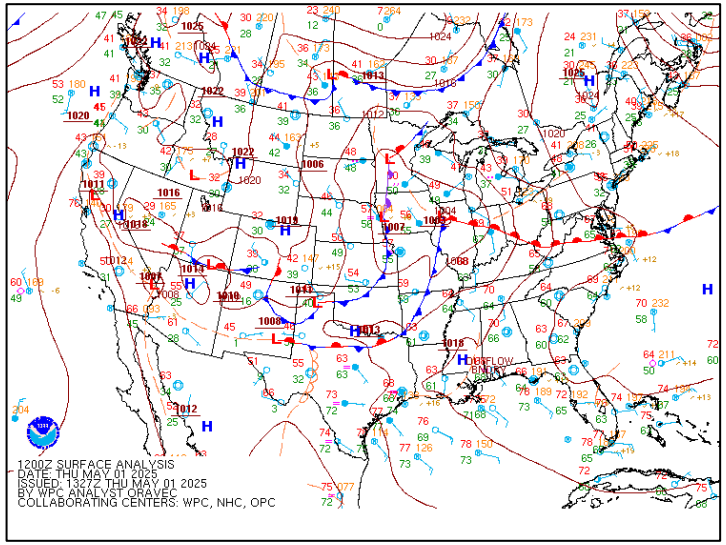


Source: https://www.cpc.ncep.noaa.gov/

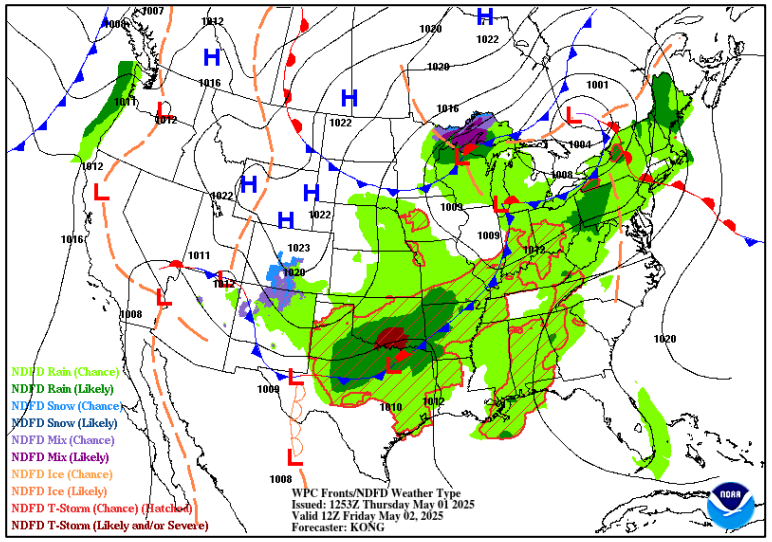
https://www.cpc.ncep.noaa.gov/products/predictions/long_range/fxus05.html

WPC Forecasted Surface Fronts & Sea-Level Pressures

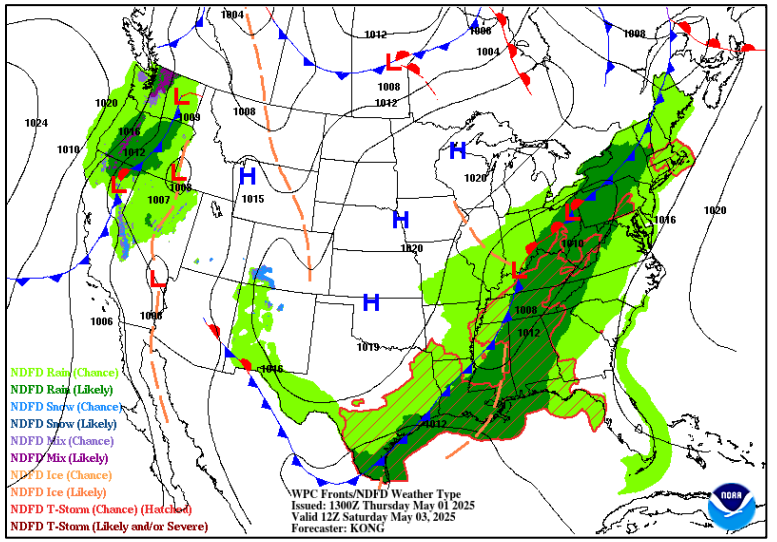
Day-1 @ 12Z Surface Analysis



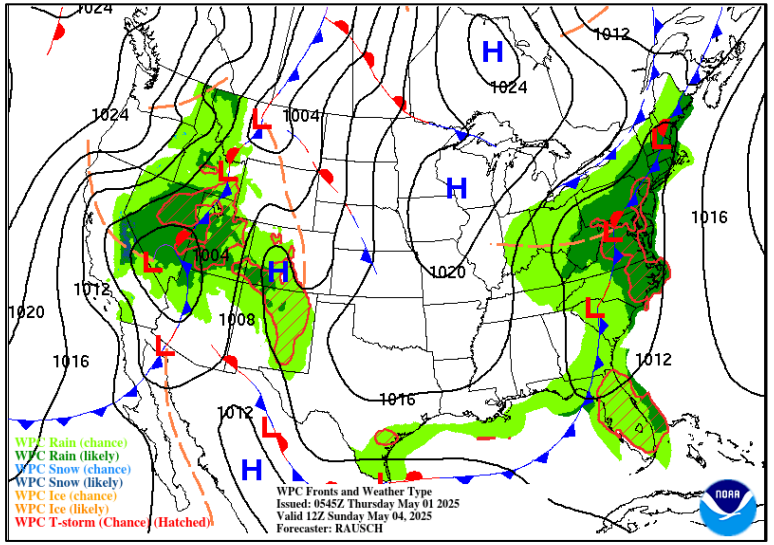
Day 2 - @ 12Z (0800 EDT)



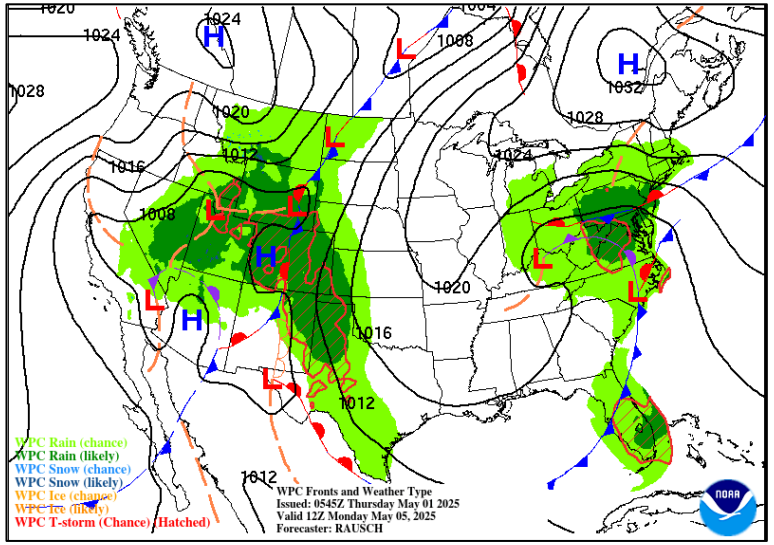
Day 3 @ 12Z (0800 EDT)



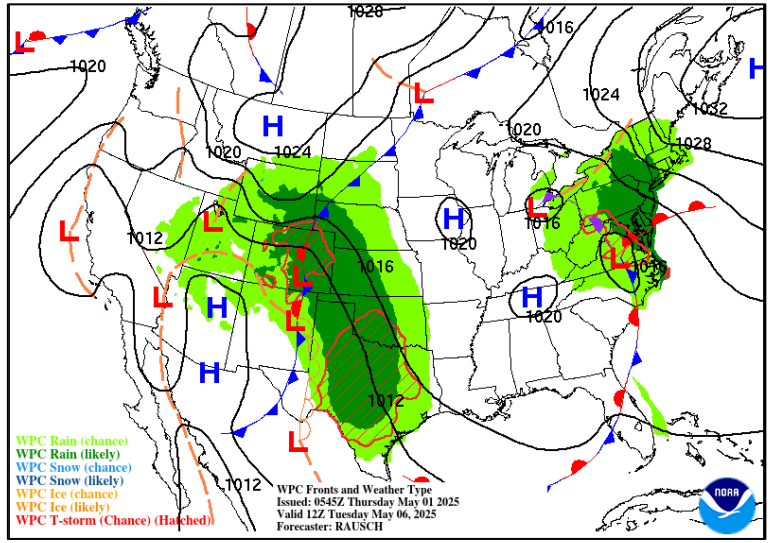
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



Day 6 @ 12Z (0800 EDT)

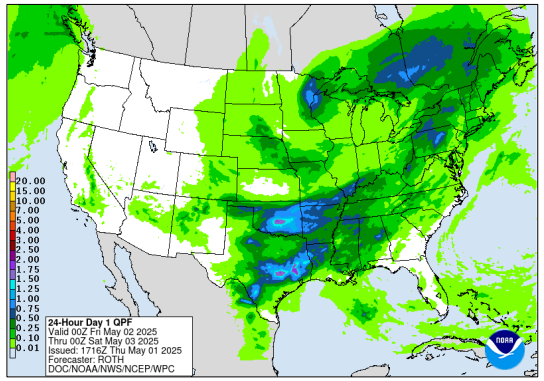


Location: https://www.wpc.ncep.noaa.gov/#

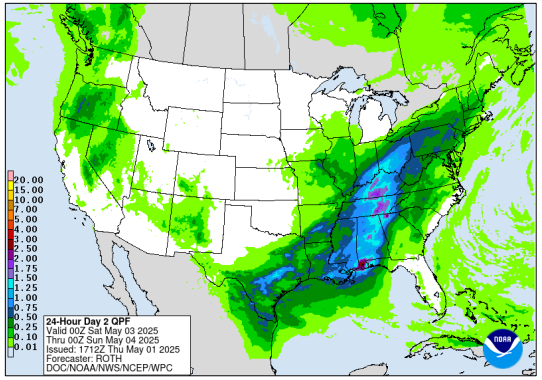
Quantitative Precipitation Forecast, 7-Day

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

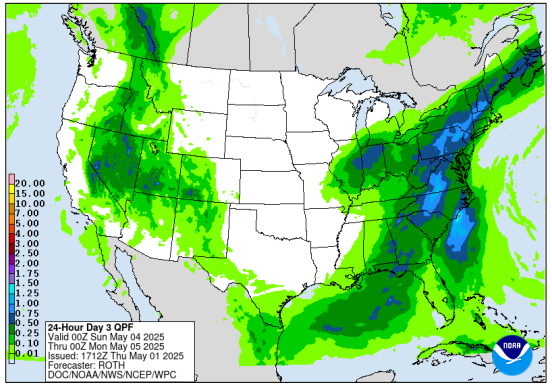
Day – 1



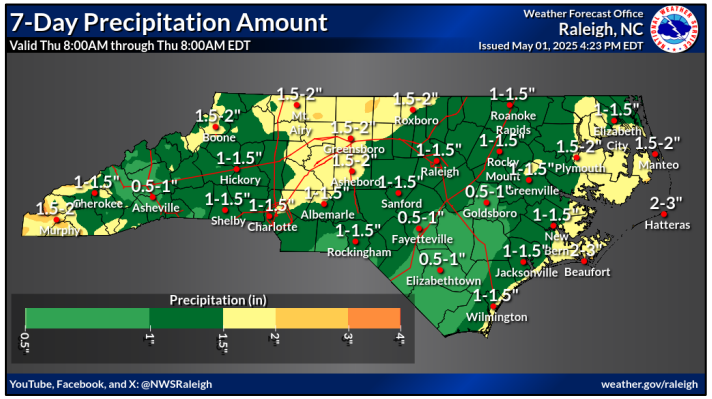
Day - 2



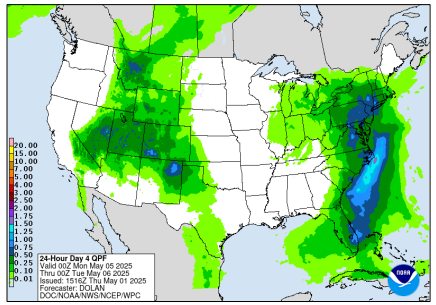
Day - 3



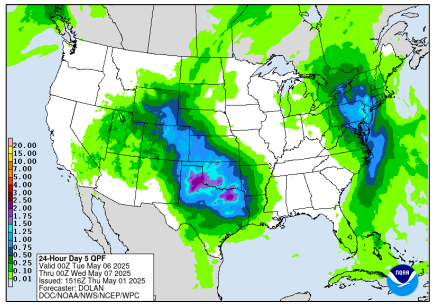
Zoom - Days 1 – 7 QPF



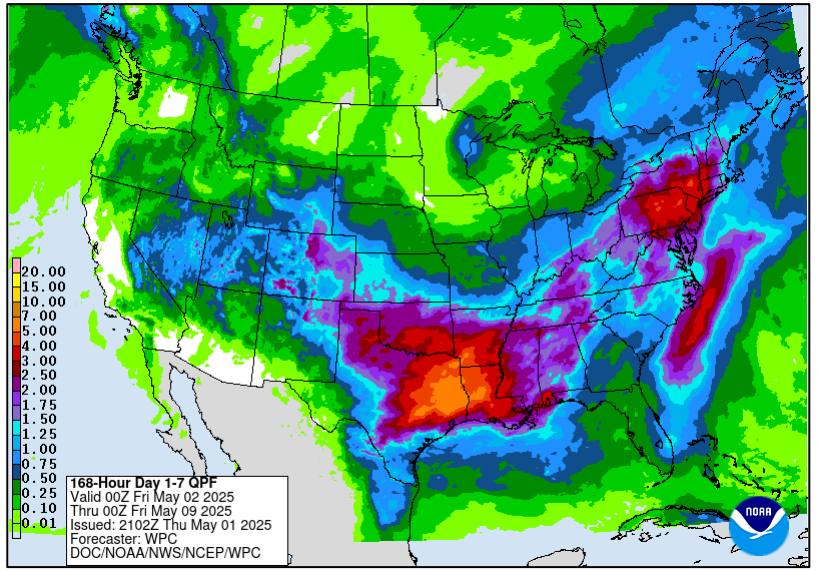
Day - 4



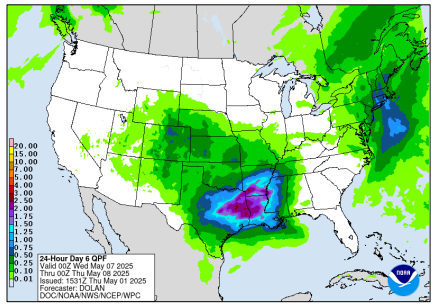
Day - 5



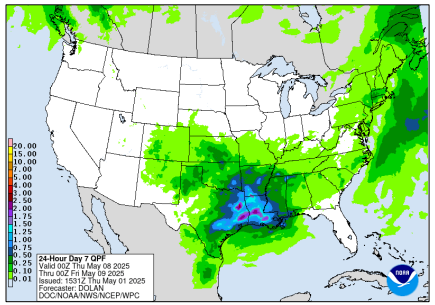
Days 1 – 7 QPF



Day - 6



Day - 7



Uncertainty in models, possibility that dry trend continues.

Thunderstorm derived precip overlapping areas in drought & drying 100 & 1000 hr. dead fuels, especially East.

NFDRS Actual Observations from Yesterday

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

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

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	2025-04-30	29.70 50.3%	15.97 48.7%	3.63 63.4%	9.30 52.3%	93.00	12.93 42.1%	18.84 58.4%	18.50 31.0%	22.39 76.3%	153.03	134.00	76.7°F	49.0%	SSW 1.3 mph	0.00 in.	0.0
Central Mountains	3	2025-04-30	18.70 27.1%	11.87 32.0%	1.97 38.8%	4.63 31.7%	98.00	14.10 54.7%	19.96 65.7%	18.31 34.3%	22.18 83.1%	223.17	181.67	72.0°F	68.7%	SW 2.0 mph	0.33 in.	1.3
Northern Highlands	2	2025-04-30	27.10 48.9%	13.95 47.0%	3.20 58.1%	8.95 53.6%	141.50	13.20 37.9%	19.23 56.7%	18.25 35.9%	21.45 66.8%	215.65	179.00	75.0°F	55.5%	NW 4.0 mph	0.00 in.	0.0
Blue Ridge Escarpment	3	2025-04-30	44.57 60.6%	23.73 59.7%	6.37 61.4%	15.73 60.9%	174.33	11.52 46.8%	18.28 53.7%	16.87 23.5%	19.33 35.2%	169.73	145.67	82.0°F	51.0%	WSW 4.0 mph	0.00 in.	0.0
Western Piedmont	3	2025-04-30	21.30 20.2%	16.43 27.9%	3.23 32.4%	4.30 15.6%	251.00	11.95 55.3%	18.72 70.4%	17.84 49.4%	20.73 76.6%	223.83	184.67	86.0°F	49.0%	WSW 3.0 mph	0.00 in.	0.0
Sandhills	3	2025-04-30	35.97 48.9%	33.77 38.9%	8.27 49.8%	7.53 80.2%	263.67	11.93 56.8%	18.88 68.3%	16.77 25.7%	19.59 64.0%	242.93	196.33	86.3°F	48.3%	SW 3.7 mph	0.00 in.	0.0
Eastern Piedmont	4	2025-04-30	26.20 15.1%	16.58 21.0%	3.75 30.6%	6.85 11.2%	228.75	12.30 51.1%	16.91 53.3%	16.36 11.4%	19.61 62.9%	234.25	192.75	84.0°F	53.5%	W 6.0 mph	0.00 in.	0.0
Southern Coastal	7	2025-04-30	24.93 18.6%	20.04 28.2%	4.09 36.4%	5.40 11.7%	467.43	11.13 35.5%	17.76 57.8%	17.19 14.3%	20.19 49.1%	250.00	200.00	85.4°F	48.7%	SSW 3.4 mph	0.00 in.	0.0
Northern Coastal	4	2025-04-30	25.88 18.7%	22.90 32.9%	4.68 41.2%	4.83 11.8%	361.00	10.36 22.0%	16.18 46.2%	16.89 21.9%	20.19 55.0%	216.93	181.25	86.8°F	45.3%	WSW 5.0 mph	0.00 in.	0.0

NFDRS Observations from Today

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

Slow decline in 100's and 1000's continue, also indicative of duff and litter layer drying. Most significant in the Central & Eastern FDRAs.

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	2025-05-01	2.97 11.3%	0.50 12.5%	0.07 17.2%	2.37 12.1%	110.67	27.48 88.0%	25.76 87.5%	18.35 31.0%	22.47 76.3%	148.73	129.67	68.7°F	67.7%	SW 4.3 mph	0.08 in.	2.7
Central Mountains	3	2025-05-01	12.40 17.1%	6.10 18.3%	0.90 26.3%	4.03 21.8%	82.00	19.03 73.6%	22.34 75.5%	18.65 49.8%	22.30 83.1%	226.63	184.67	68.0°F	71.7%	SSW 4.3 mph	0.66 in.	1.7
Northern Highlands	2	2025-05-01	38.25 62.7%	13.95 47.0%	4.80 73.3%	19.95 65.3%	117.50	12.90 37.9%	19.95 63.1%	18.58 50.6%	21.60 80.1%	215.45	179.00	72.0°F	55.0%	E 8.5 mph	0.51 in.	2.5
Blue Ridge Escarpment	3	2025-05-01	19.27 22.9%	9.17 23.5%	2.40 30.4%	6.93 33.7%	189.67	20.59 79.3%	21.50 74.2%	18.31 34.2%	19.09 35.2%	167.87	144.67	72.3°F	70.7%	SW 4.0 mph	0.09 in.	1.3
Western Piedmont	3	2025-05-01	26.40 29.1%	17.63 32.4%	4.27 41.0%	6.57 34.2%	264.00	11.51 55.3%	18.24 65.2%	17.59 49.4%	20.67 76.6%	223.67	182.00	83.3°F	46.0%	SSW 6.0 mph	0.00 in.	0.0
Sandhills	3	2025-05-01	37.90 54.5%	35.20 40.6%	10.73 64.7%	7.73 80.2%	278.00	10.87 46.1%	19.06 68.3%	17.05 25.7%	19.47 47.7%	239.37	193.33	86.7°F	42.0%	SSW 6.0 mph	0.00 in.	0.0
Eastern Piedmont	4	2025-05-01	30.60 17.2%	17.70 22.1%	5.45 36.2%	8.83 13.6%	243.00	11.24 39.1%	17.80 61.5%	16.46 11.4%	19.41 44.9%	231.73	190.00	84.0°F	49.8%	W 9.5 mph	0.04 in.	0.3
Southern Coastal	7	2025-05-01	23.39 16.9%	19.54 28.2%	3.79 36.4%	4.84 11.7%	477.29	11.21 35.5%	18.37 57.8%	17.20 14.3%	20.06 49.1%	250.00	200.00	85.4°F	47.4%	S 4.3 mph	0.00 in.	0.0
Northern Coastal	4	2025-05-01	24.08 17.5%	24.08 34.6%	4.90 41.2%	3.90 10.3%	374.50	9.69 22.0%	16.83 56.1%	16.95 21.9%	20.01 55.0%	216.43	179.75	88.5°F	42.8%	SW 4.5 mph	0.00 in.	0.0

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 this Spring has not been typical based on snows, freezes, rain events, extremely dry air, very warm spells and now trending drier with higher evaporative demand, relating to actual plant growth. There is variability across the broader landscape. 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:

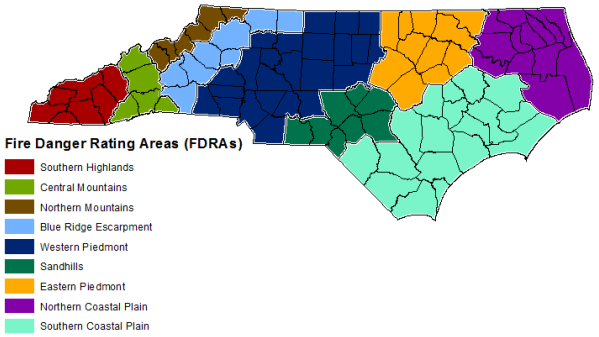
- Low to Moderate (0 to 74th percentile); shown in blue-green
- High (75th to 89th percentile); shown in yellow
- Very High to Extreme (90th+ percentile); shown in red and labeled as Critical

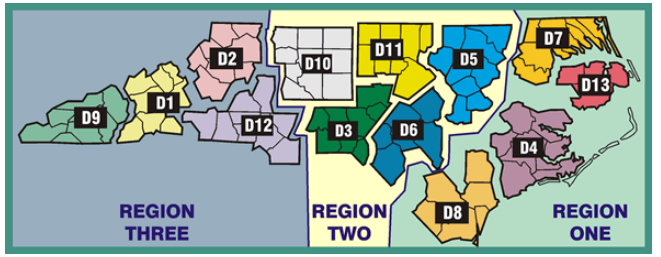
Dead fuel moisture forecast values are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

- 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.



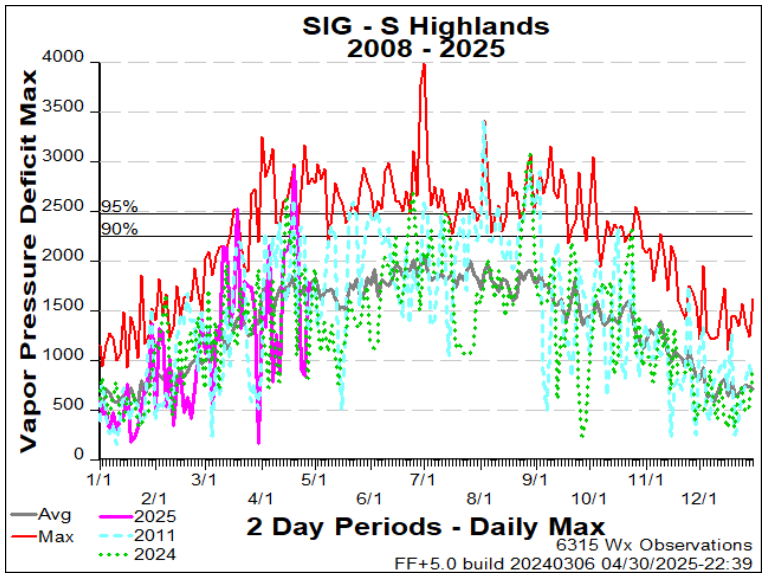


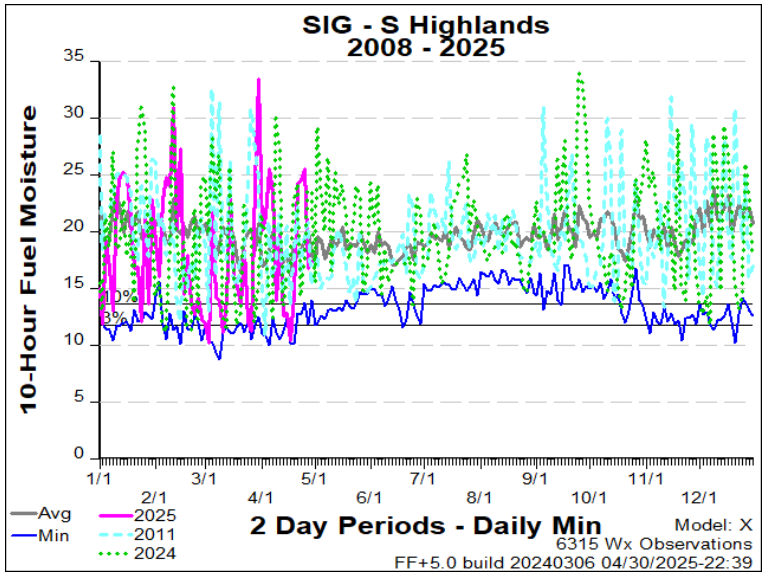
To reduce duplication & increase situational awareness, slides are organized by FDRA in this order:

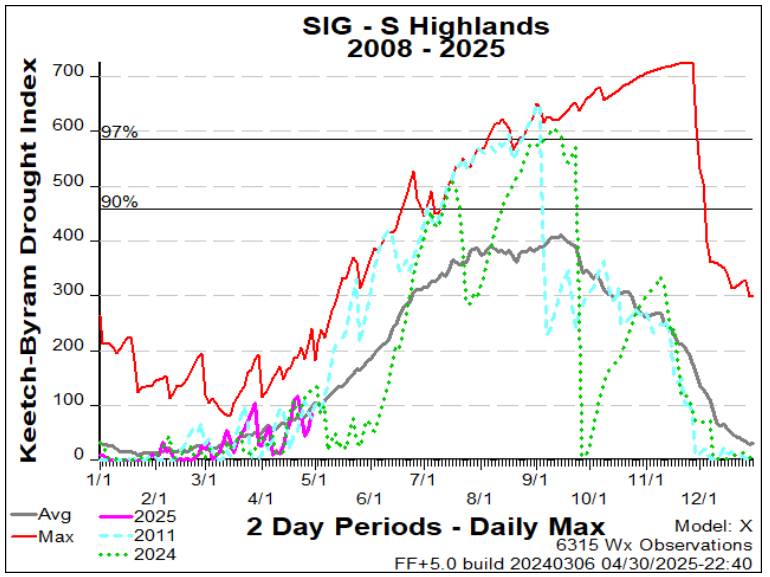
(R3 = Region 3, R2 = Region 2, R1 = Region 1)

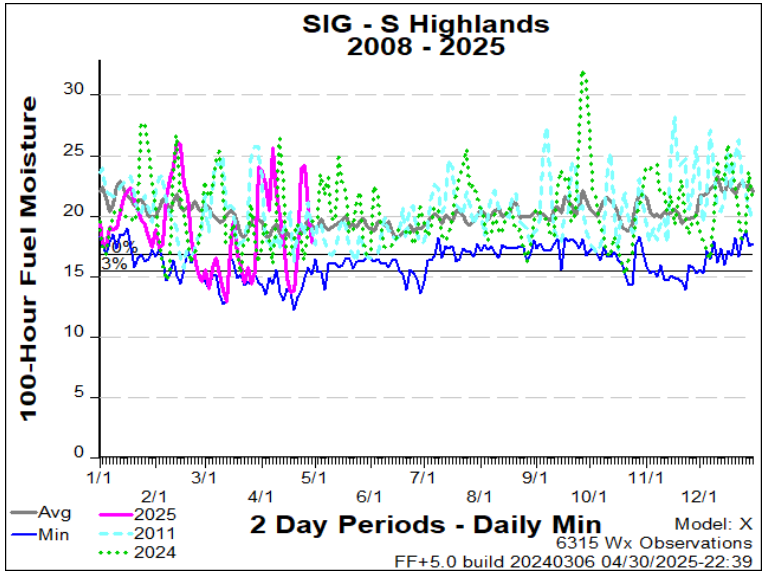
- Southern Highlands (R3)
- Central Mountains (R3)
- Northern Highlands (R3)
- Blue Ridge Escarpment (R2 & R3)
- Western Piedmont (R2 & R3)
- Eastern Piedmont (R2)
- Sandhills (R2)
- North Coast (R1)
- South Coast (R1 & R2)

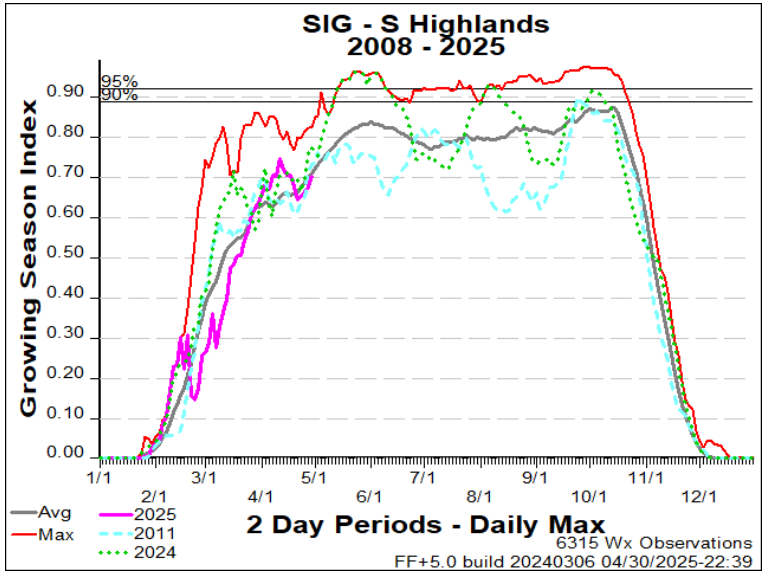
FDRA – Southern Highlands

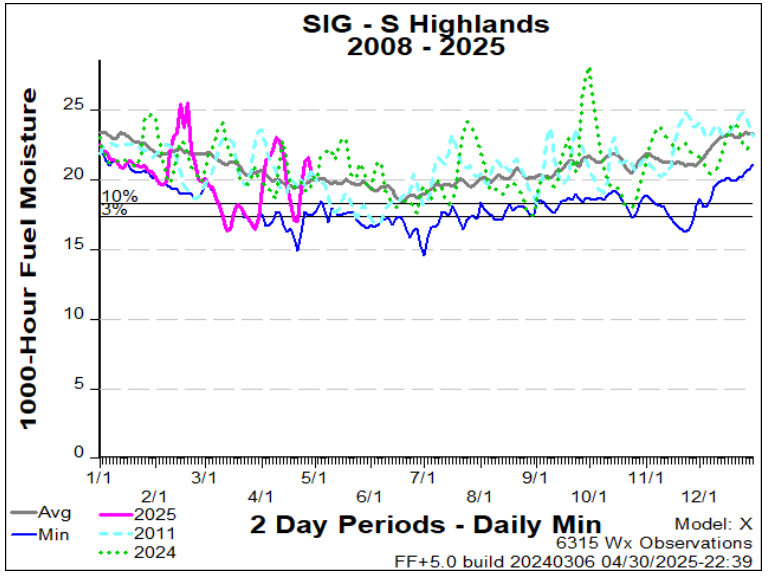






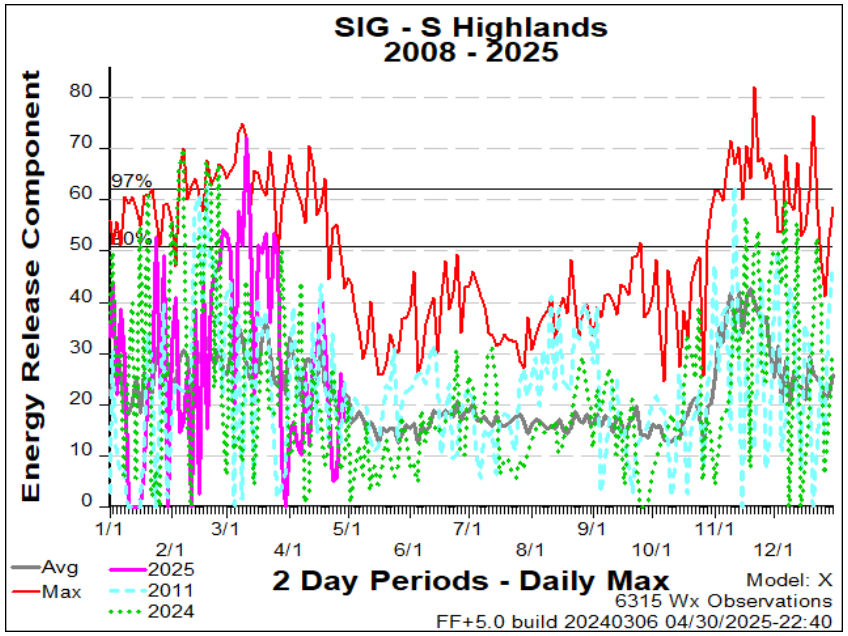




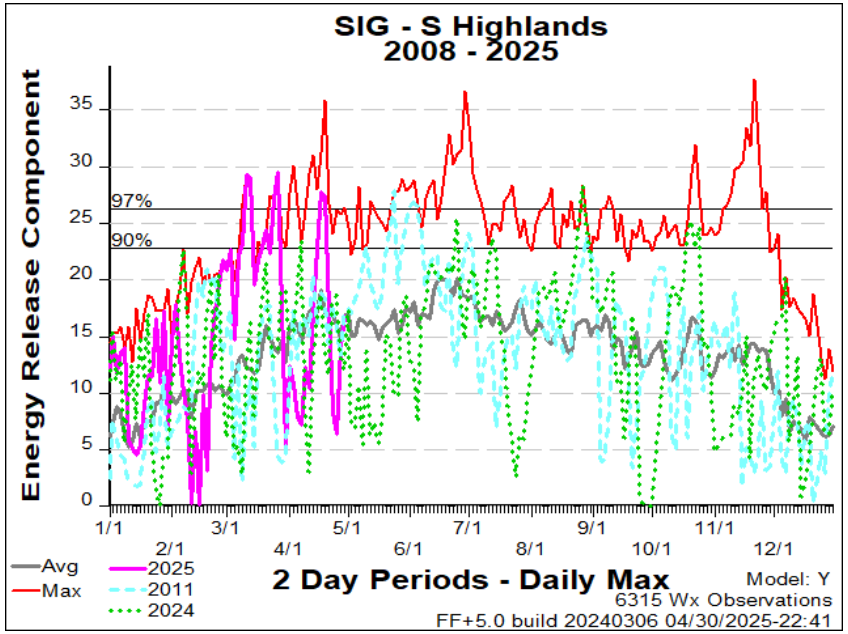


FDRA – Southern Highlands

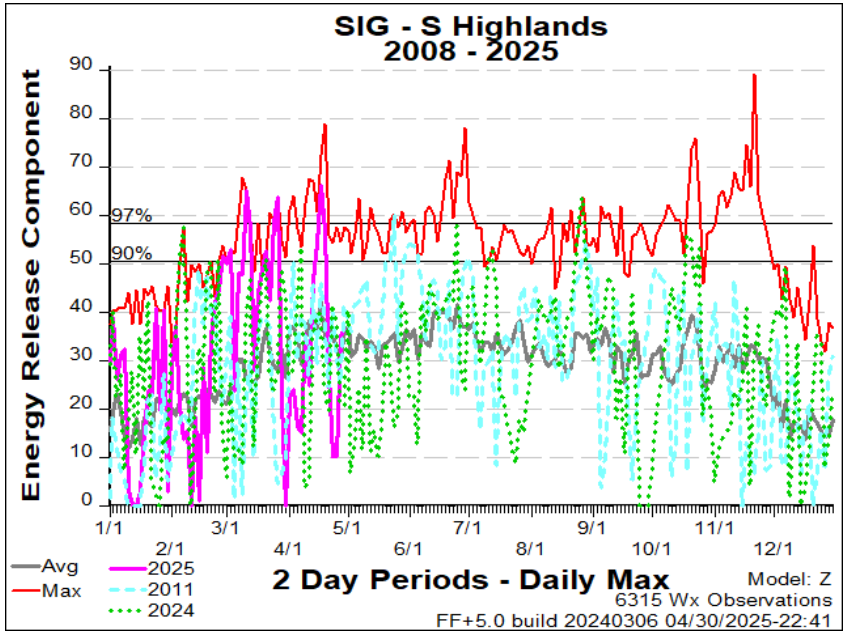
ERC-X



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	74	74	67	65	66	66	71
Avg. Min. Humidity (%)	54	55	73	48	44	49	49
Avg. 20' Wind Speed (mph)	6	3	4	5	4	3	3
Avg. Wind Direction*	SSW	SSW	SSW	WNW	SW	SW	SSW
Avg. Probability of Precip. (%)	43	68	81	32	23	20	21
Days Since a Wetting Rain**	2.3	0.0	0.0	1.0			
Forecast ERC (Fuel Model X)	14.4	12.5	11.2	11.5	13.1	13.2	12.7
Forecast BI (Fuel Model X)	34.6	28.5	26.2	25.0	25.1	23.4	23.5
Forecast IC (Fuel Model X)	3.5	2.5	2.1	2.5	2.6	2.4	2.5
Forecast 100-Hr. FMC	18.0	18.4	20.3	22.0	21.7	20.6	19.8
Forecast 1000-Hr. FMC	22.5	22.3	22.1	22.1	22.1	22.0	21.9
KBDI	93.0						

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

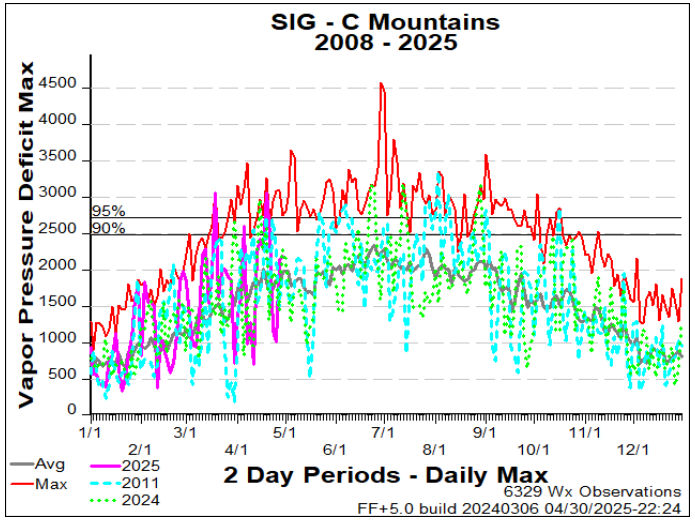
Values in the table above are averages from 3 stations in this FDRA:

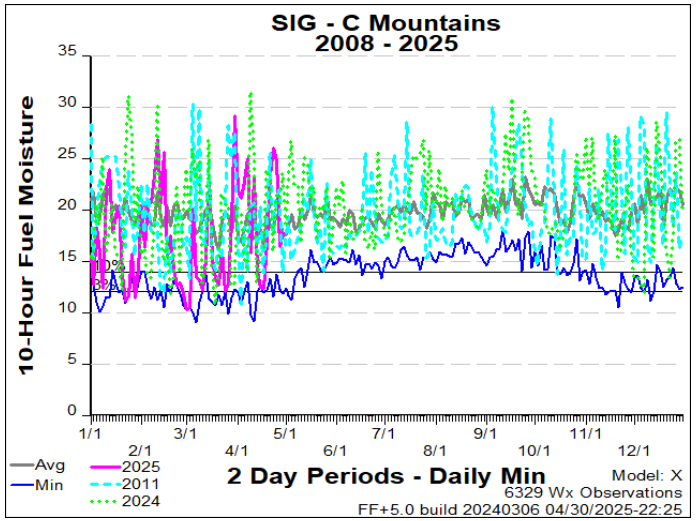
- **Tusquitee** (315602)
- **Locust Gap** (315802)
- **Highlands** (315803)

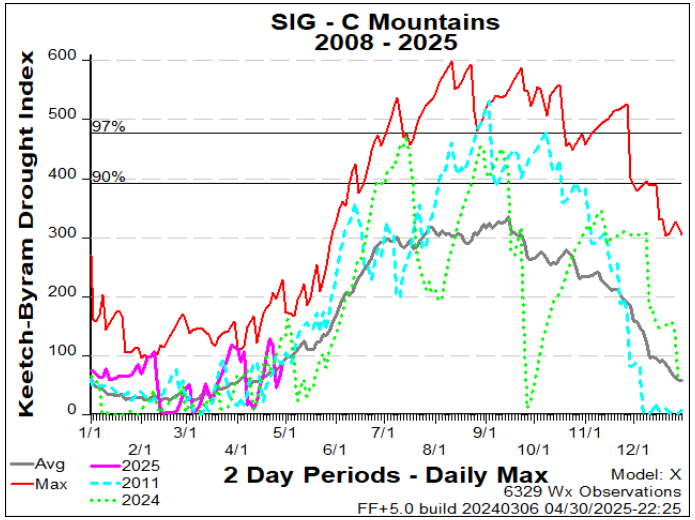
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph	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

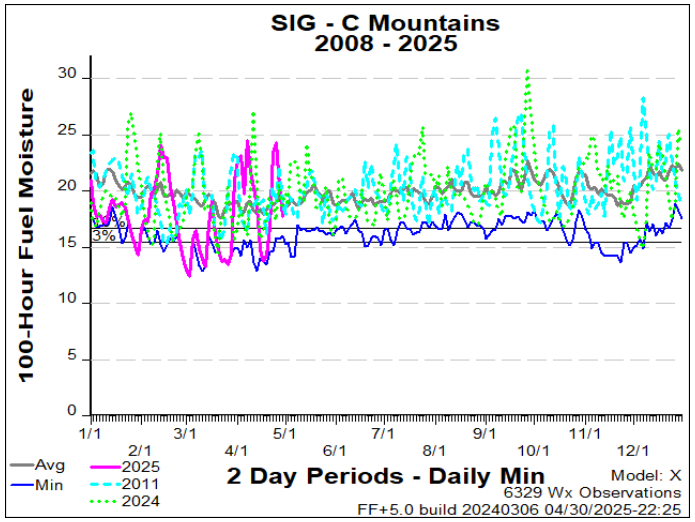
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

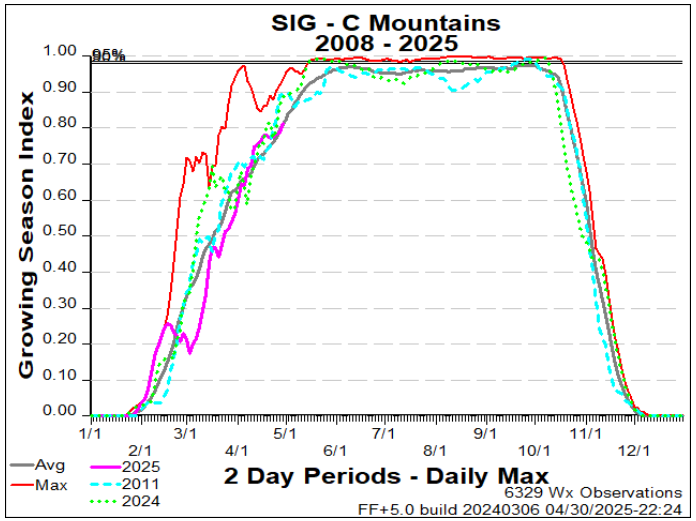
FDRA – Central Mountains

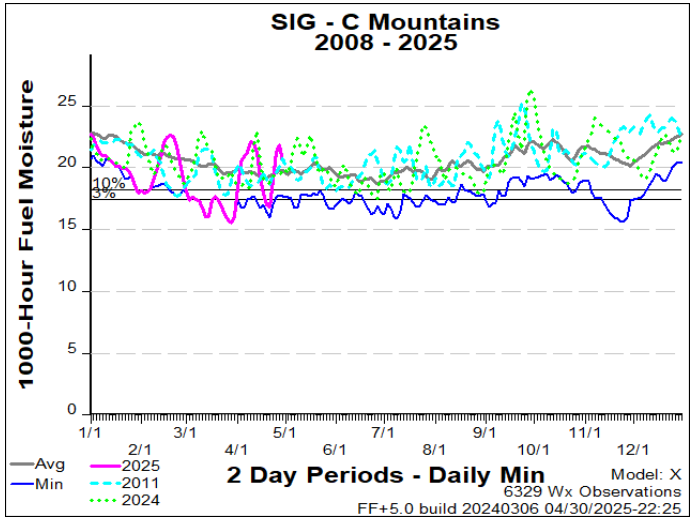






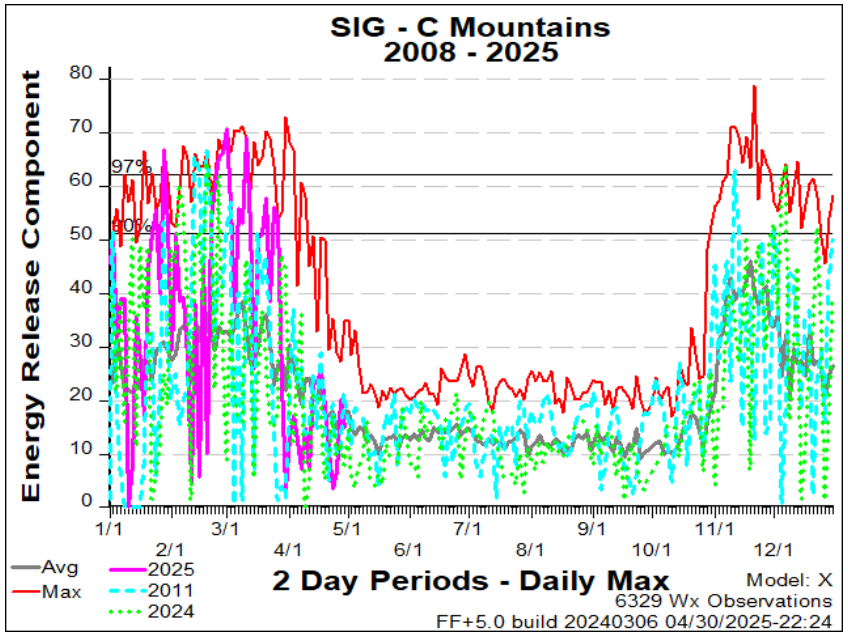




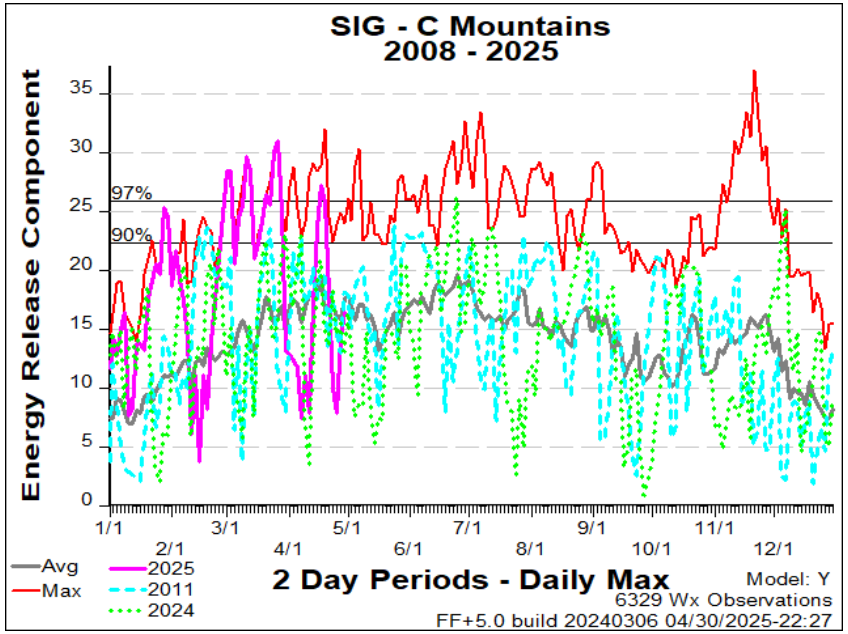


FDRA – Central Mountains

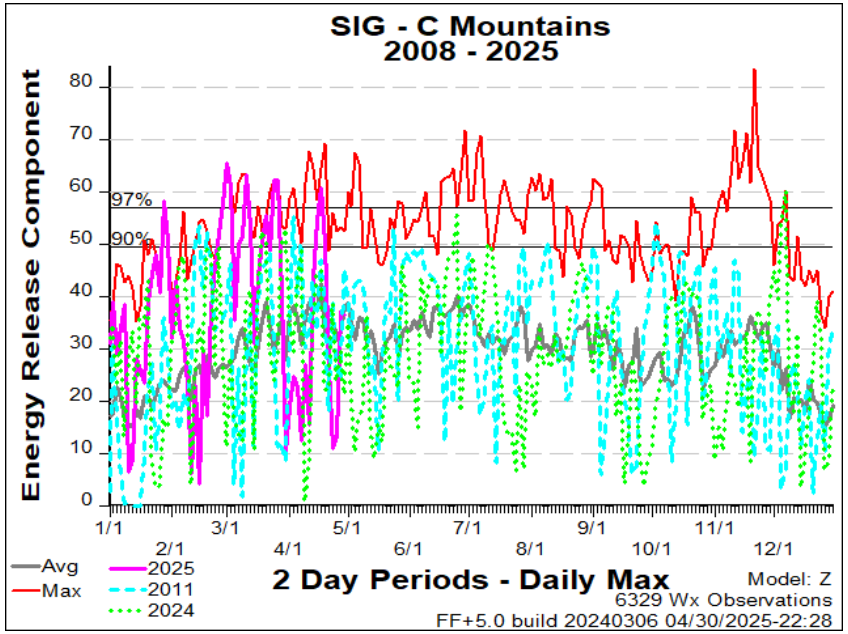
ERC-X



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	79	79	74	68	70	69	74
Avg. Min. Humidity (%)	53	52	61	48	43	47	46
Avg. 20' Wind Speed (mph)	6	3	4	4	3	3	3
Avg. Wind Direction*	S	S	SSW	NW	WNW	NNW	NNW
Avg. Probability of Precip. (%)	43	65	79	38	29	26	23
Days Since a Wetting Rain**	0.0	0.3	0.0	1.0			
Forecast ERC (Fuel Model X)	11.9	11.8	10.9	9.1	12.2	12.1	11.8
Forecast BI (Fuel Model X)	23.7	20.1	21.0	18.2	19.6	18.6	19.3
Forecast IC (Fuel Model X)	2.3	2.0	2.1	1.8	2.1	1.9	2.0
Forecast 100-Hr. FMC	17.9	17.8	19.2	22.8	22.4	20.9	19.9
Forecast 1000-Hr. FMC	22.2	22.0	21.8	22.0	22.0	21.9	21.9
KBDI	98.0						

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

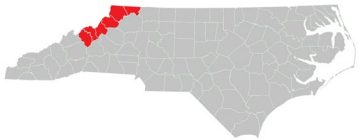
Values in the table above are averages from 3 stations in this FDRA:

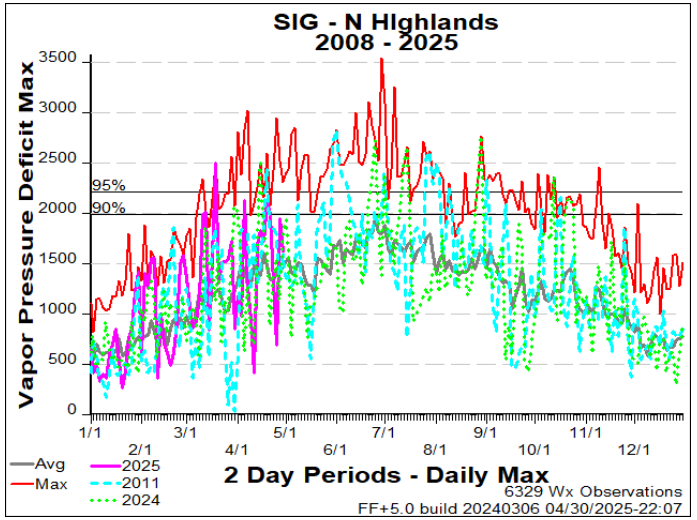
- **7 Mile Ridge** (313302)
- **Davidson River** (316001)
- **Mtn Horticultural Crops Res Stn** (316141)

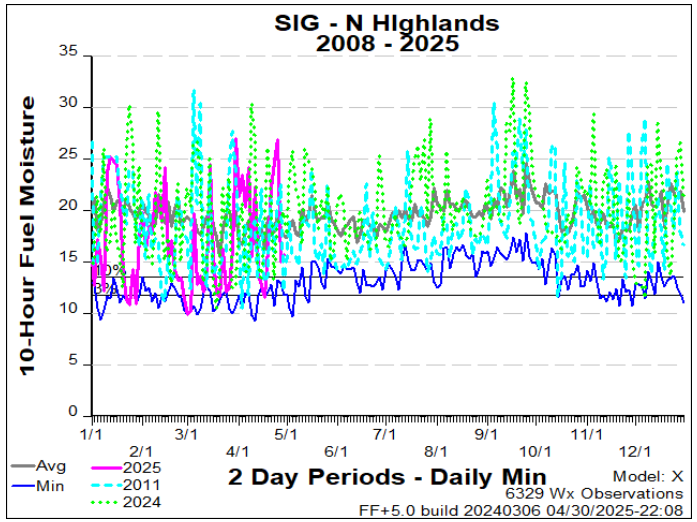
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph	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

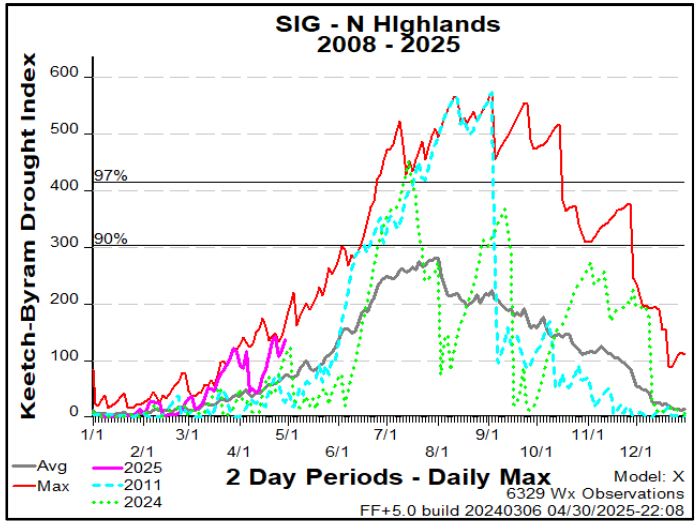
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

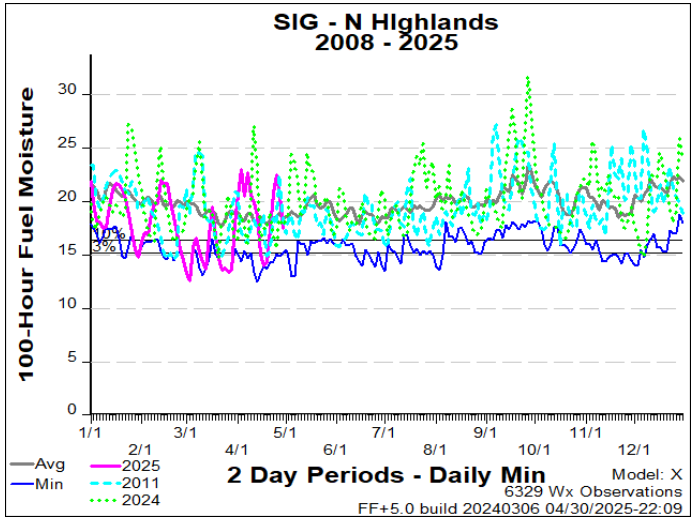
FDRA – Northern Highlands

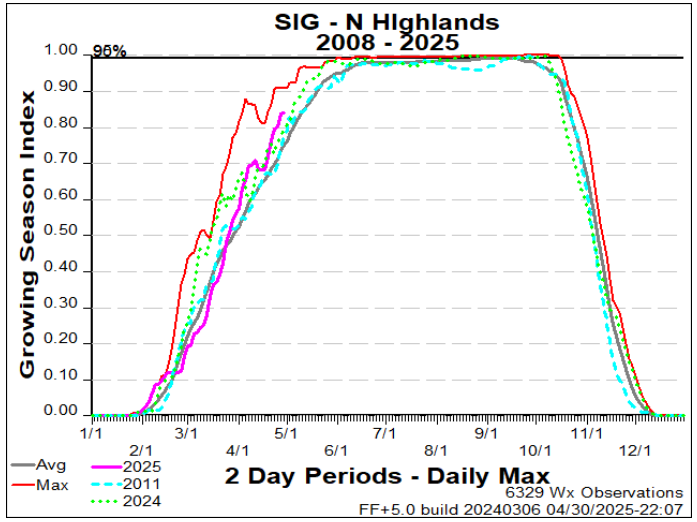


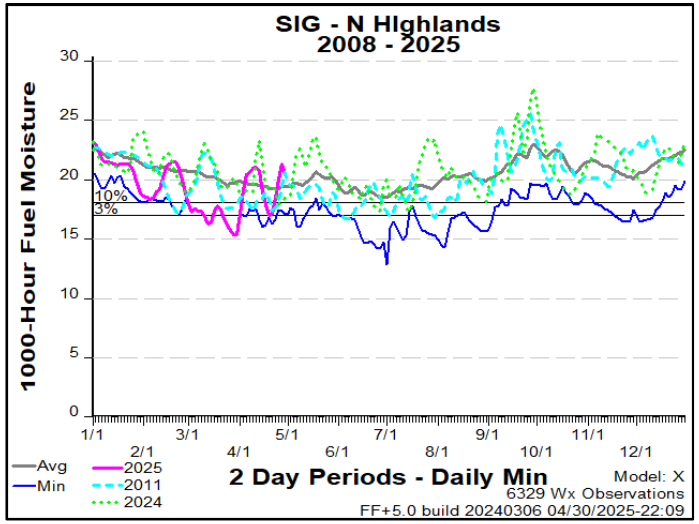




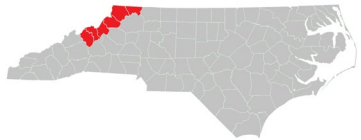




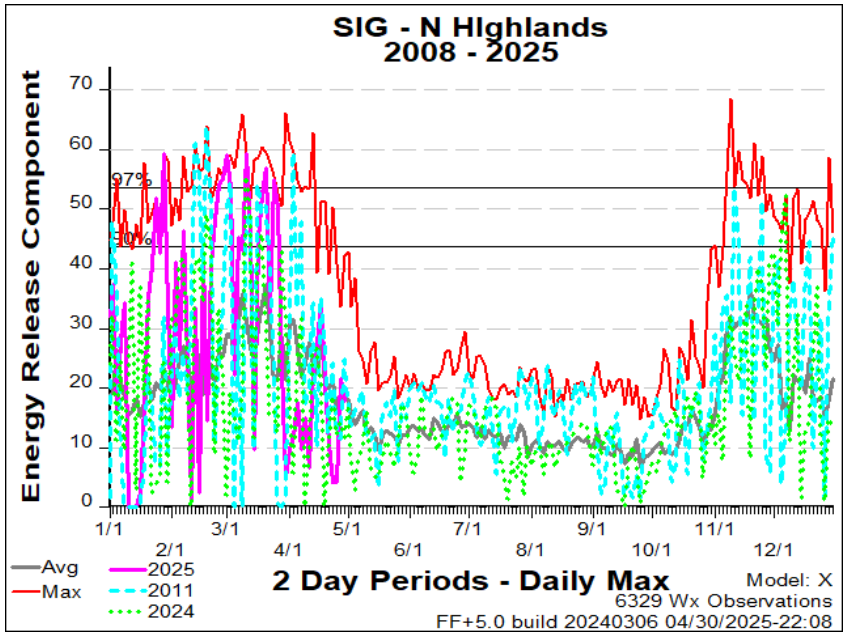




FDRA – Northern Highlands



ERC-X



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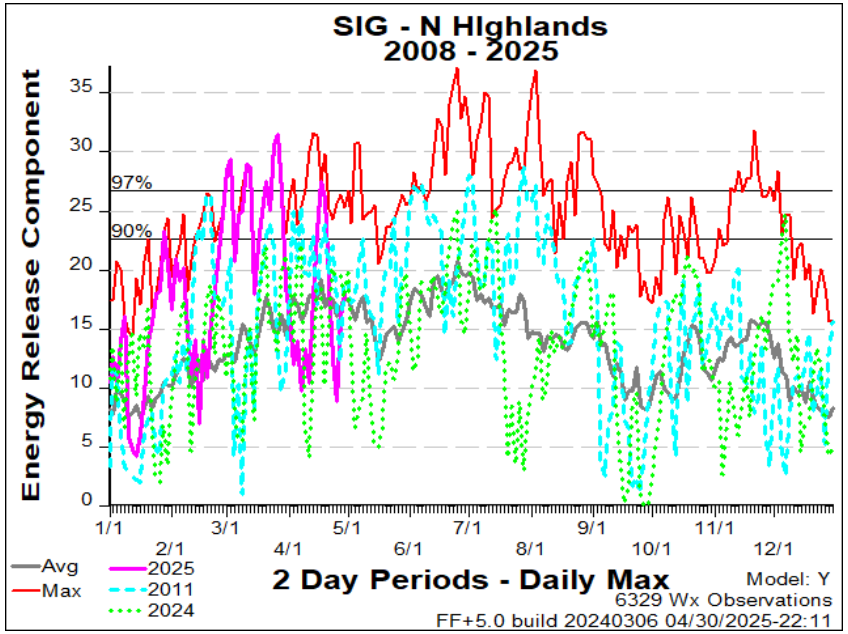
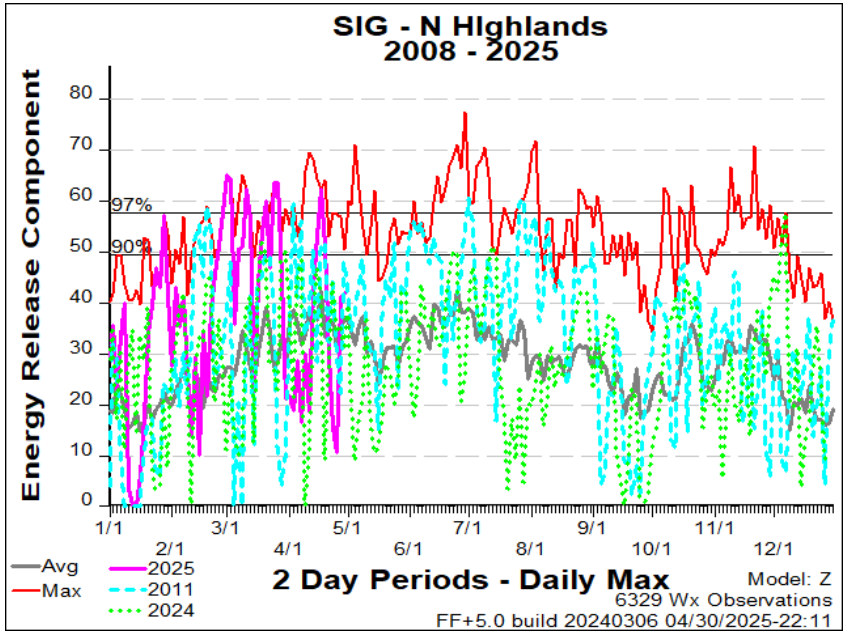


ERC-Z



Comparison of ERC by NFDRS Fuel Model

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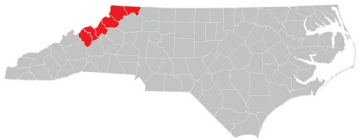
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	77	75	70	65	67	67	70
Avg. Min. Humidity (%)	52	58	64	53	51	56	55
Avg. 20' Wind Speed (mph)	8	5	6	7	5	5	5
Avg. Wind Direction*	SSW	SW	SSW	WNW	W	NW	NW
Avg. Probability of Precip. (%)	37	55	77	50	38	31	27
Days Since a Wetting Rain**	0.0	0.0	0.0	1.0			
Forecast ERC (Fuel Model X)	12.2	12.4	11.0	10.5	13.2	13.2	13.9
Forecast BI (Fuel Model X)	27.7	24.3	24.0	22.4	24.2	24.1	24.7
Forecast IC (Fuel Model X)	2.6	2.3	2.0	2.1	2.1	2.0	2.4
Forecast 100-Hr. FMC	18.6	18.4	19.7	23.7	23.2	21.4	20.0
Forecast 1000-Hr. FMC	21.5	21.6	21.5	21.6	21.6	21.8	21.9
KBDI	141.5						

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

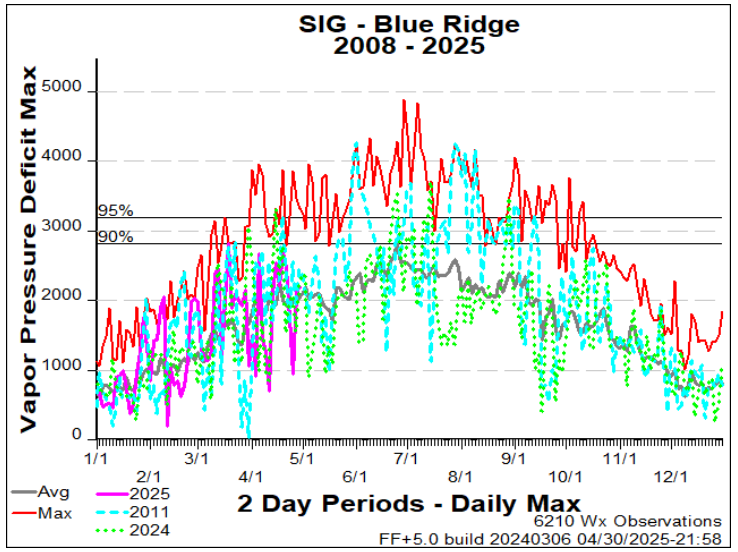
Values in the table above are averages from 3 stations in this FDRA:

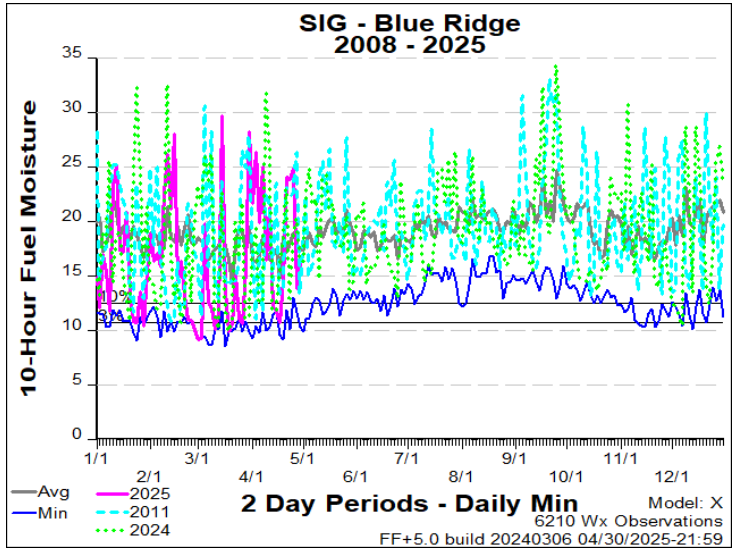
- **Laurel Springs** (310101)
- **Upper Mountain Research Stn** (310141)
- **Busick** (313402)

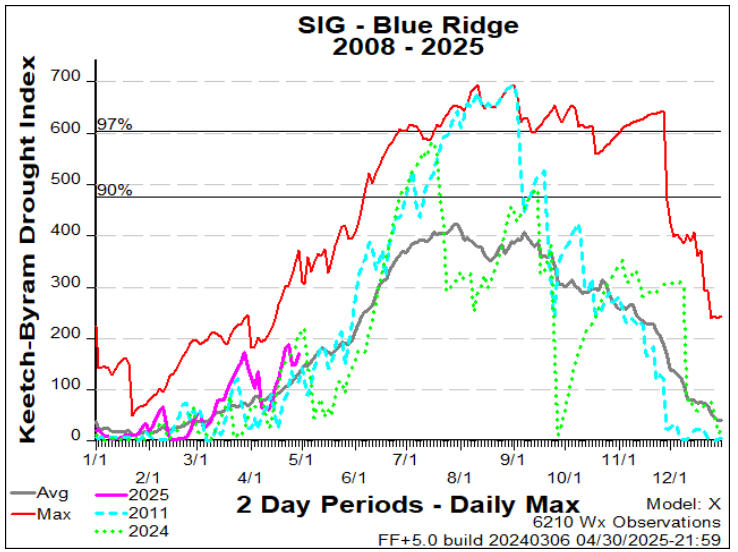
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 58°F	Greater than 58°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	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

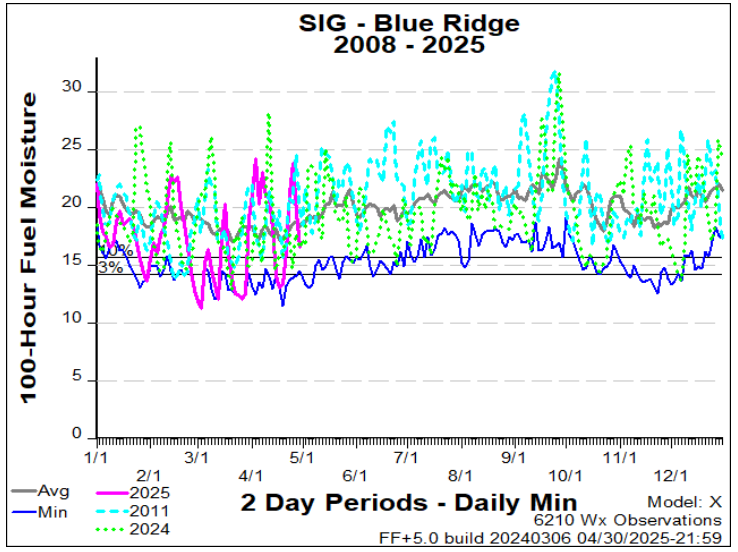
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

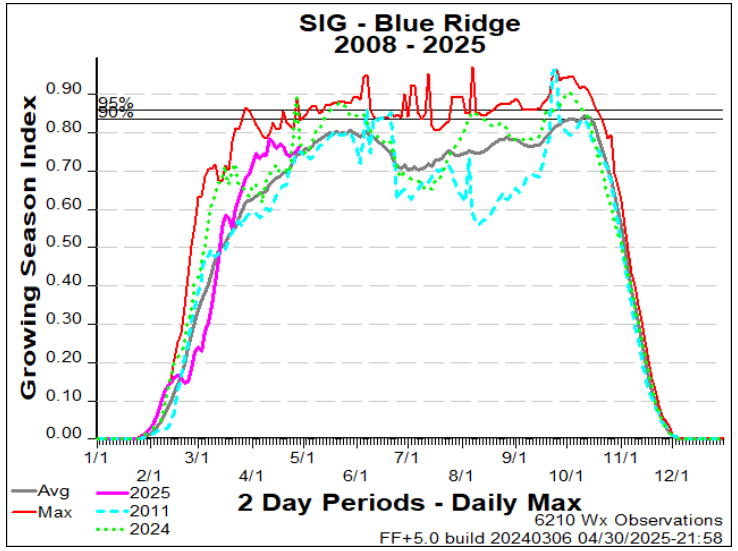
FDRA – Blue Ridge Escarpment

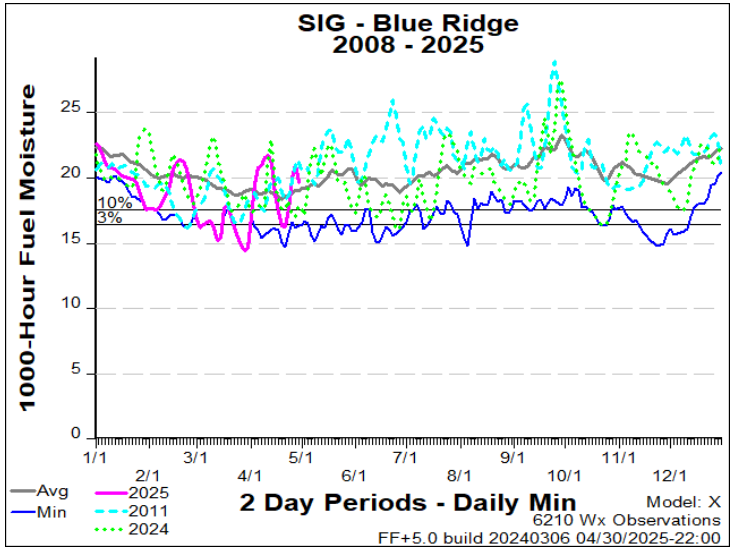




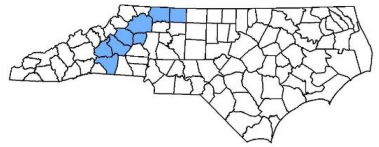




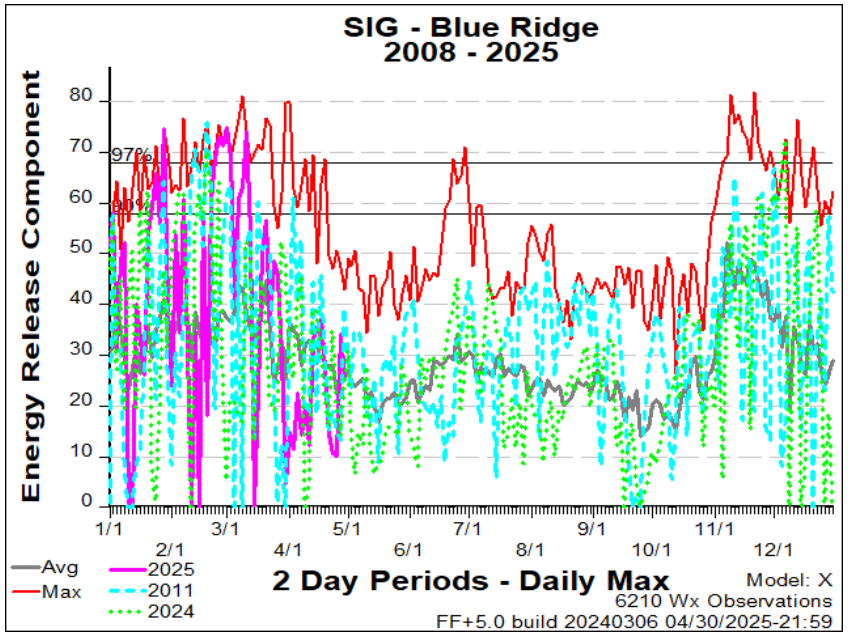




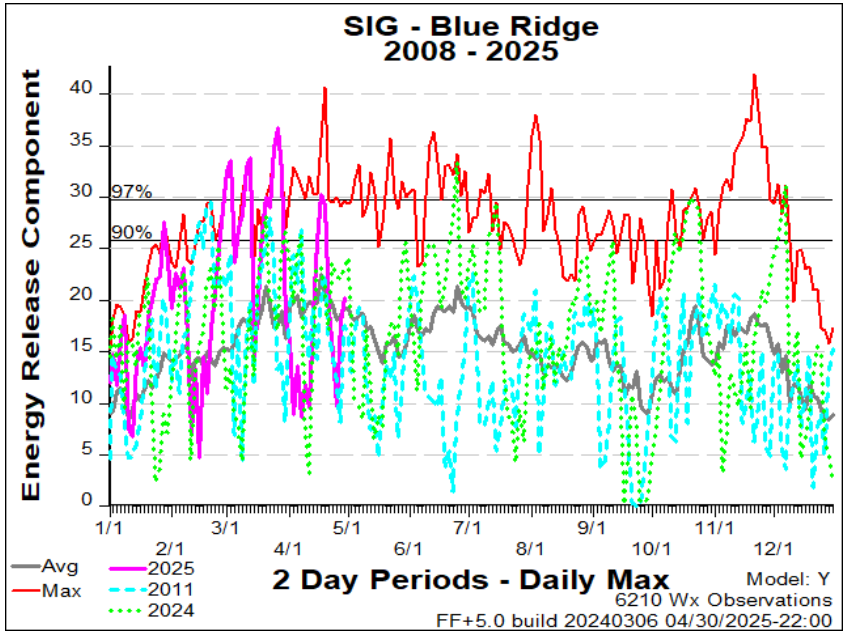
FDRA – Blue Ridge Escarpment



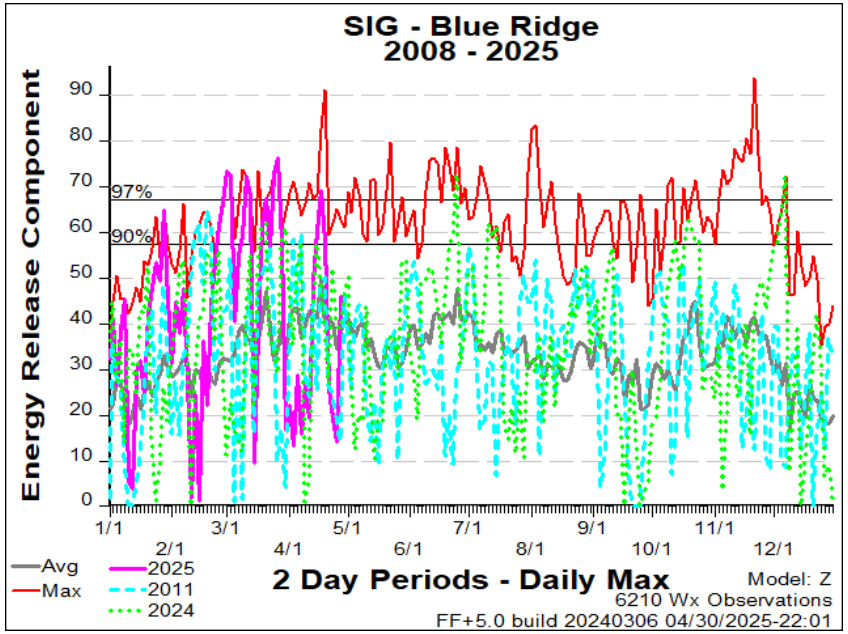
ERC-X



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	81	79	75	71	71	71	75
Avg. Min. Humidity (%)	46	51	53	44	42	46	44
Avg. 20' Wind Speed (mph)	7	5	5	5	4	3	4
Avg. Wind Direction*	SSW	SSW	SSW	W	W	WNW	WNW
Avg. Probability of Precip. (%)	30	54	74	44	34	29	25
Days Since a Wetting Rain**	4.0	2.3	0.0	1.0			
Forecast ERC (Fuel Model X)	19.7	20.8	19.3	17.0	19.7	18.9	18.5
Forecast BI (Fuel Model X)	52.6	49.0	46.7	33.9	35.8	31.0	27.5
Forecast IC (Fuel Model X)	5.6	5.1	4.3	3.6	4.0	3.7	3.6
Forecast 100-Hr. FMC	17.4	17.6	17.9	23.4	21.1	18.9	17.5
Forecast 1000-Hr. FMC	18.6	18.5	18.4	18.6	19.4	19.5	19.3
KBDI	174.3						

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

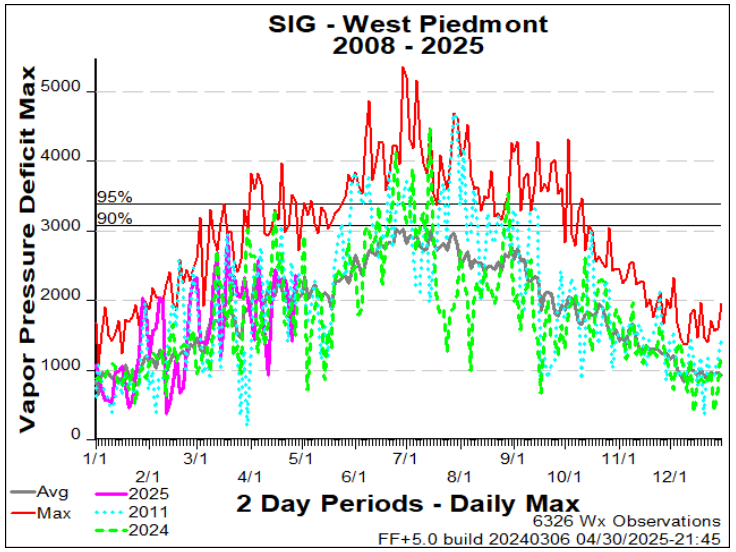
Values in the table above are averages from 3 stations in this FDRA:

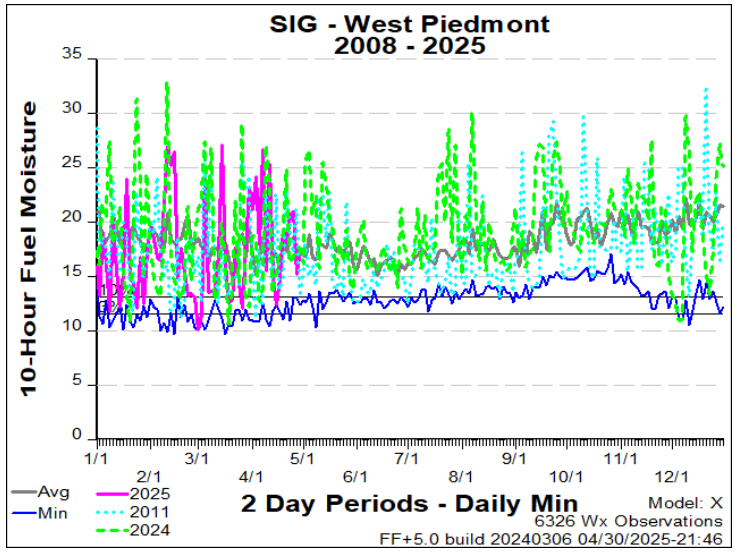
- **Rendezvous Mtn.** (312001)
- **North Cove Pinnacle (fr1)** (314301)
- **Rutherford County** (316302)

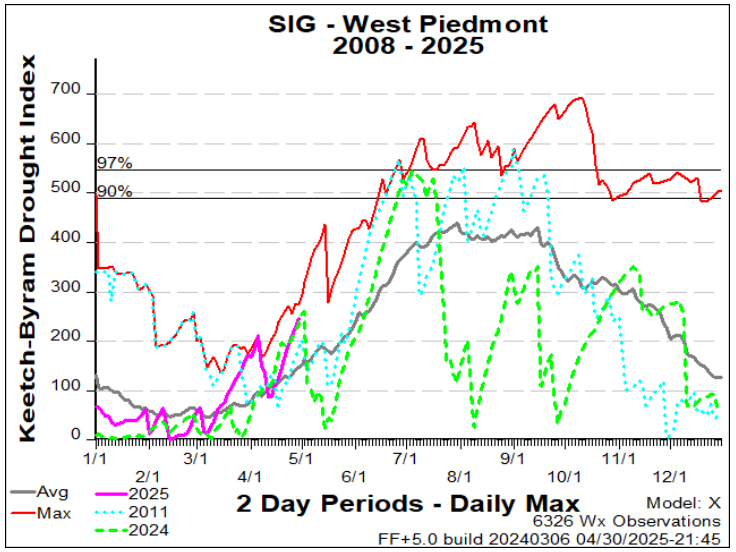
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	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

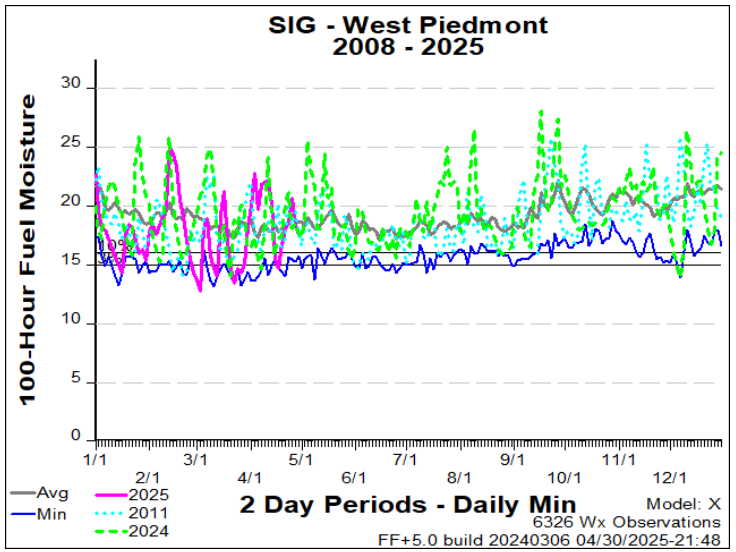
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

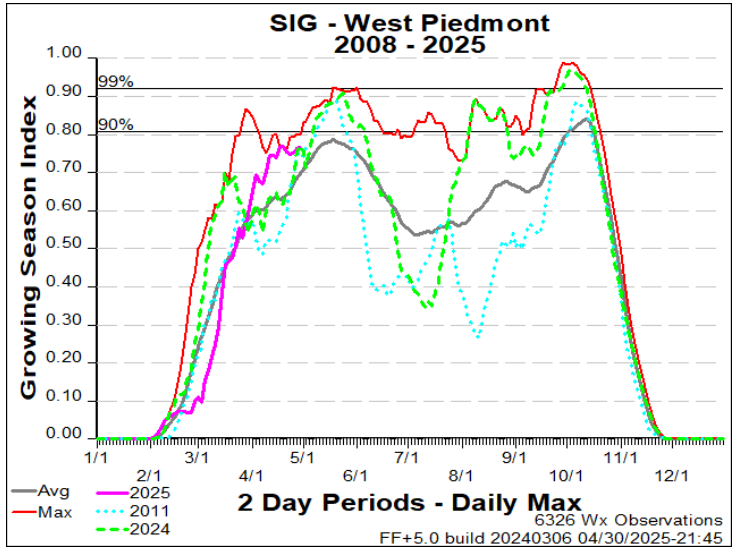
FDRA – Western Piedmont

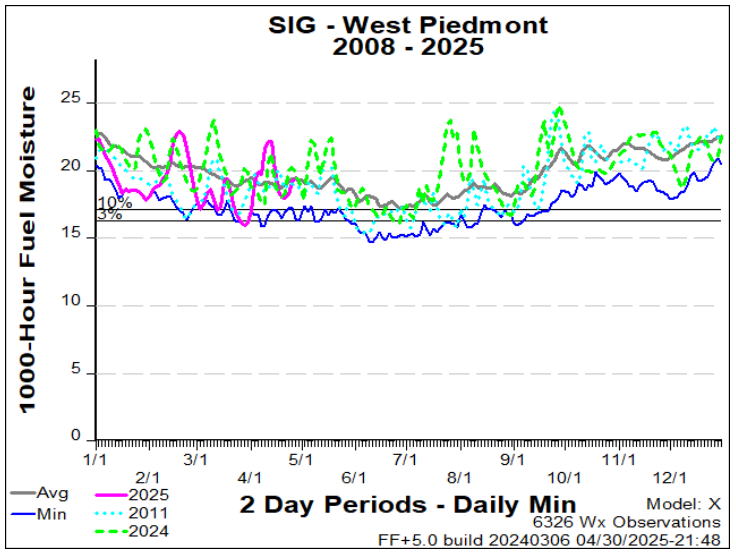






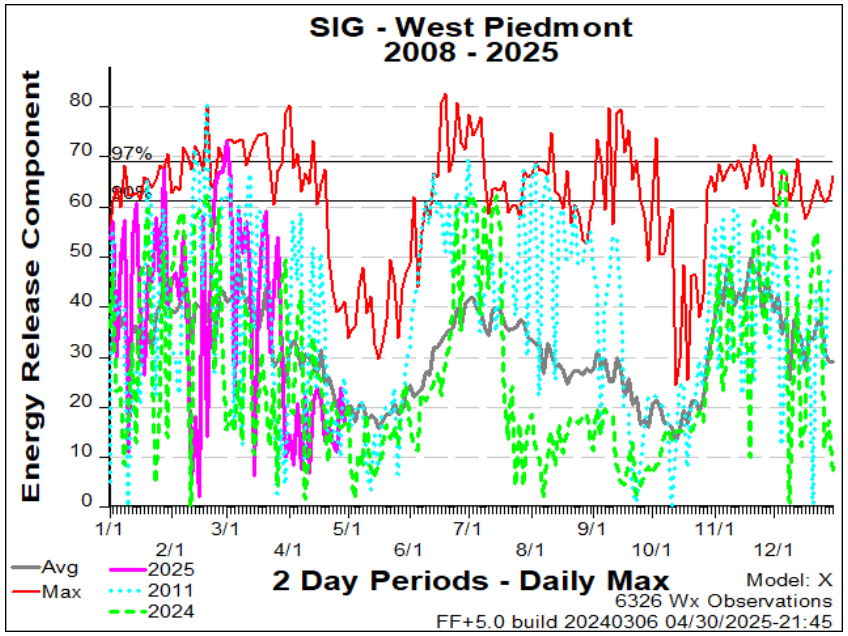




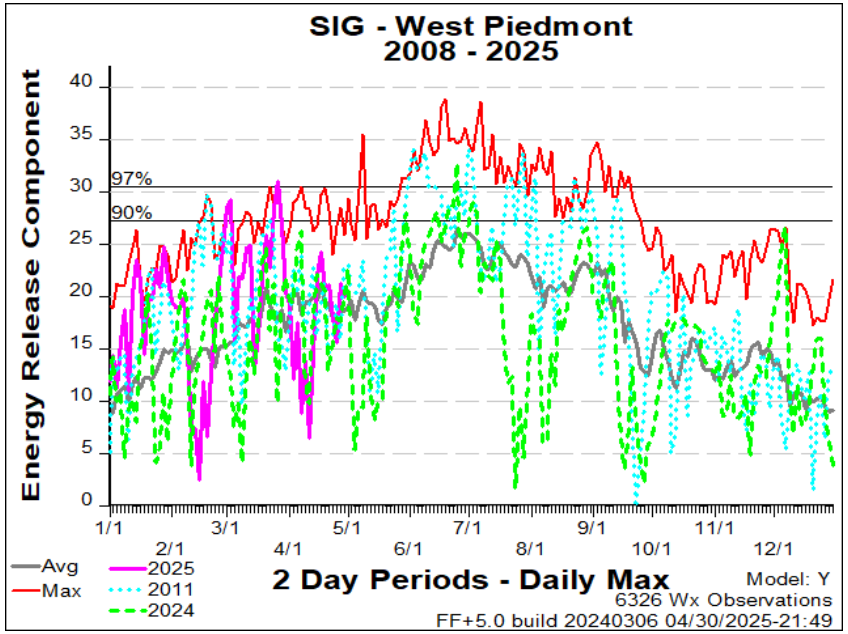


FDRA – Western Piedmont

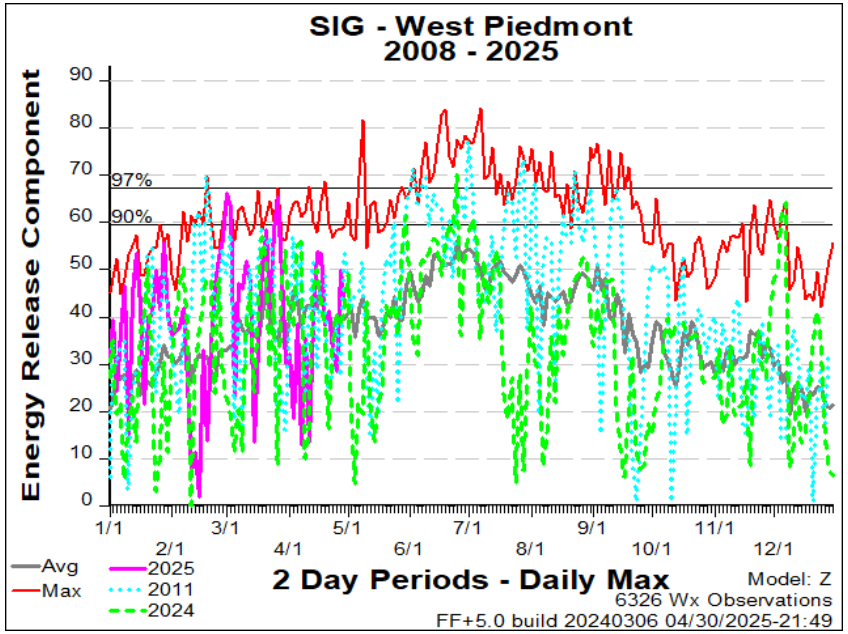
ERC-X



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	86	85	83	75	76	77	77
Avg. Min. Humidity (%)	37	49	54	57	49	50	50
Avg. 20' Wind Speed (mph)	8	6	6	5	4	4	4
Avg. Wind Direction*	SW	SSW	SSW	S	E	SE	SSW
Avg. Probability of Precip. (%)	14	51	68	51	43	33	27
Days Since a Wetting Rain**	12.3	0.0	0.0	0.0			
Forecast ERC (Fuel Model X)	15.8	16.9	15.9	14.0	13.4	13.5	13.9
Forecast BI (Fuel Model X)	27.1	29.9	27.8	21.1	20.8	18.8	18.5
Forecast IC (Fuel Model X)	3.8	4.5	3.8	2.4	2.2	2.1	2.2
Forecast 100-Hr. FMC	17.2	17.1	17.2	17.3	17.5	17.6	17.5
Forecast 1000-Hr. FMC	20.6	20.4	20.2	20.0	20.0	20.0	19.9
KBDI	251.0						

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

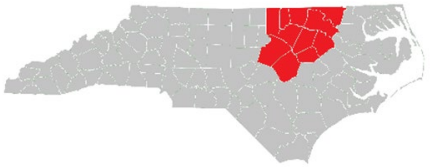
Values in the table above are averages from 3 stations in this FDRA:

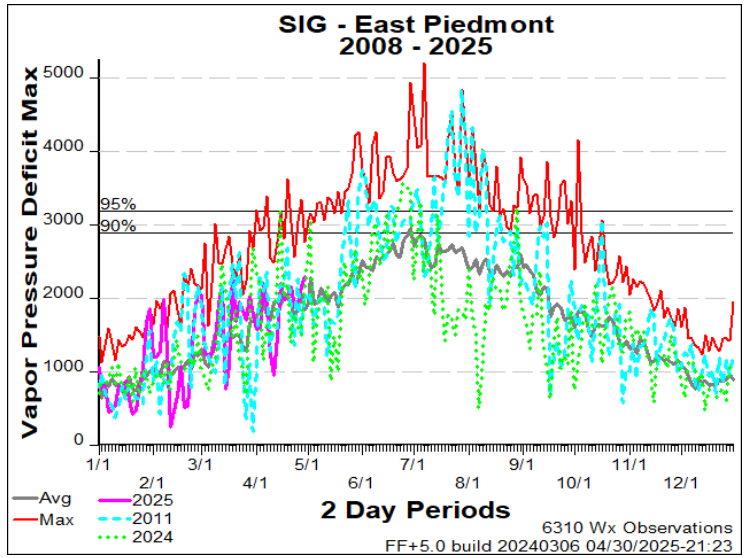
- **Duke Forest** (312501)
- **Lexington** (314602)
- **Mt. Island Lake** (316602)

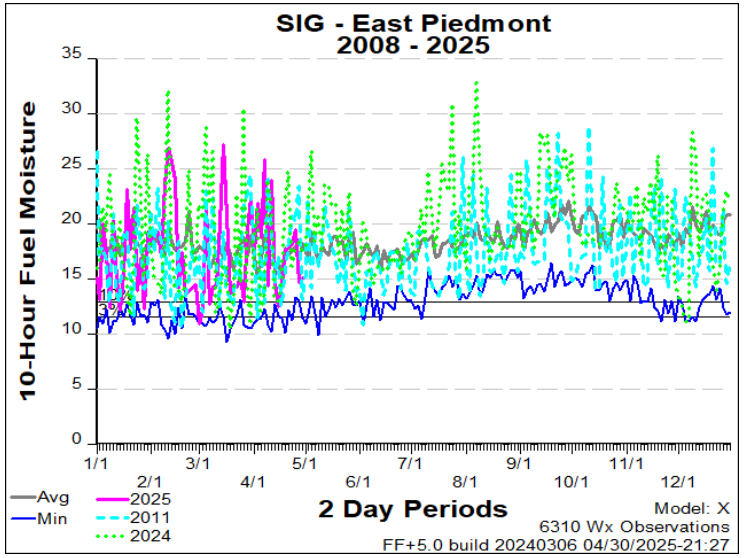
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph	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

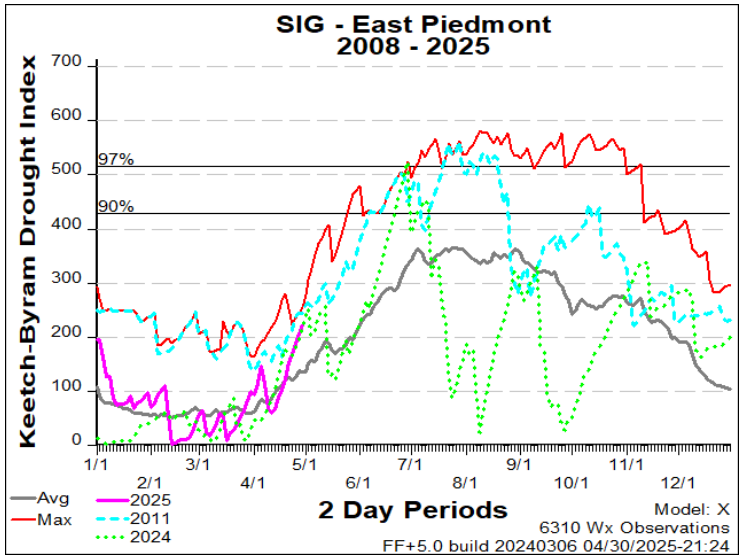
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

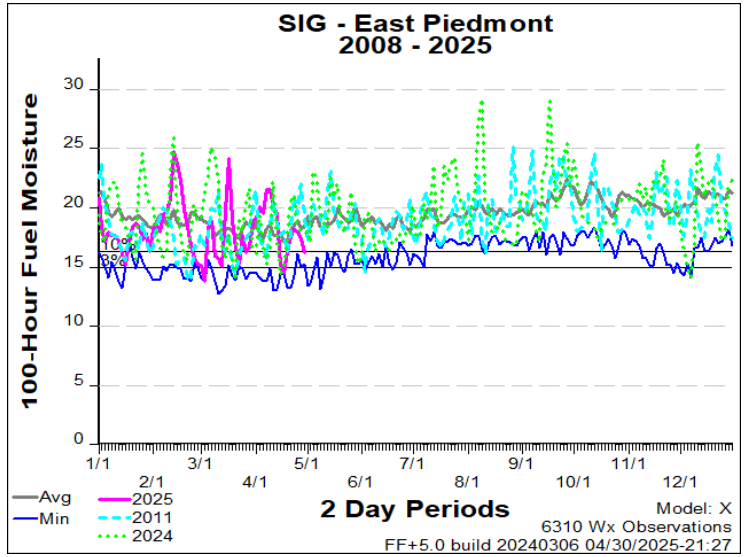
FDRA – Eastern Piedmont

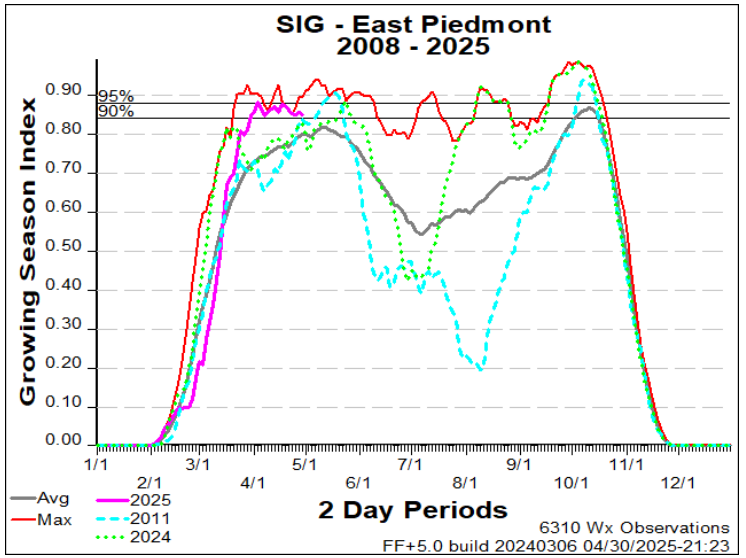


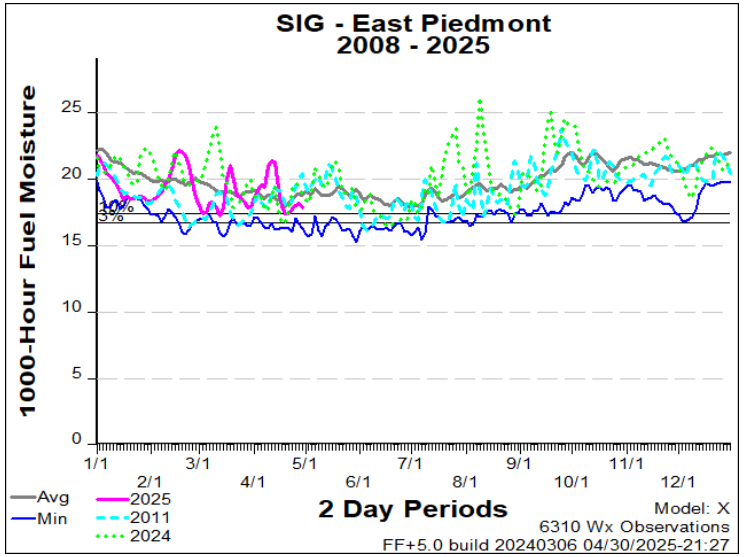




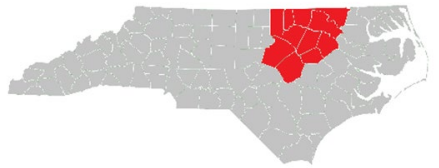




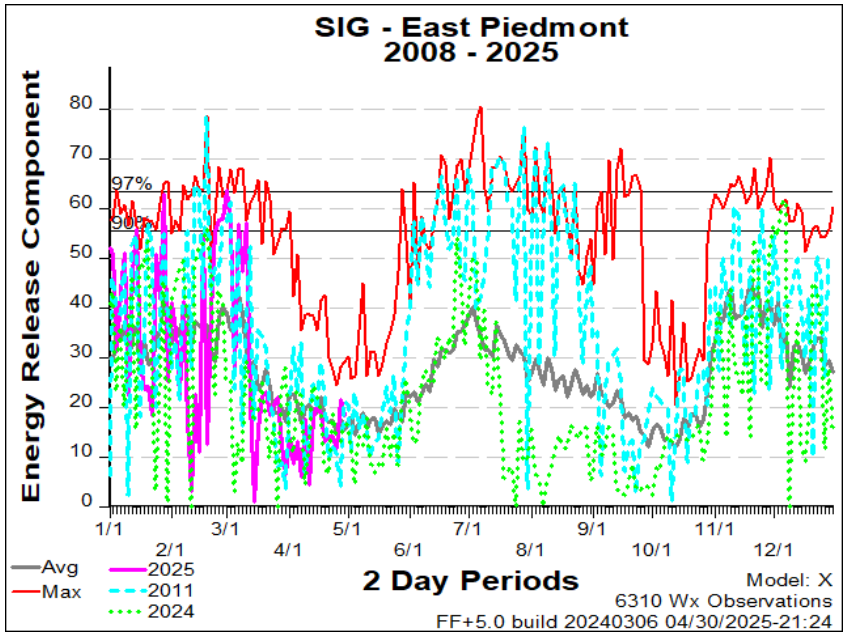




FDRA – Eastern Piedmont



ERC-X



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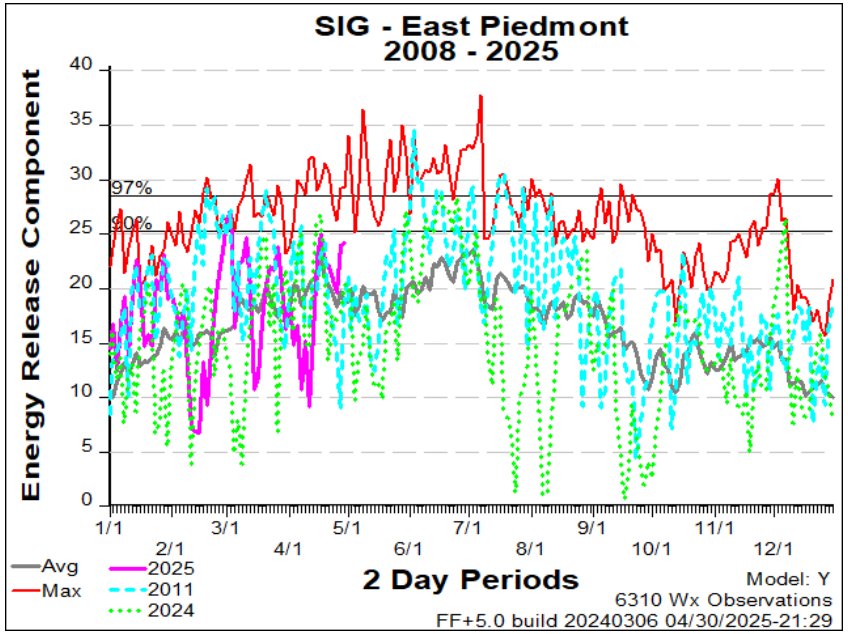
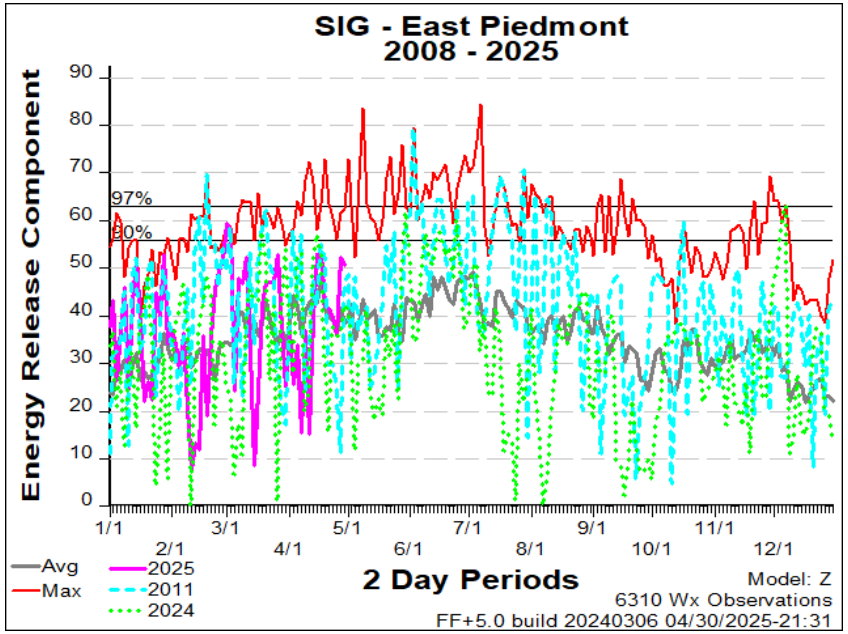


ERC-Z



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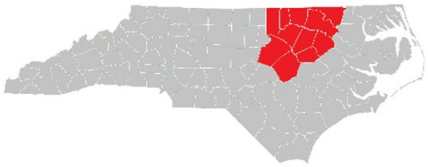
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	88	86	85	77	77	78	78
Avg. Min. Humidity (%)	36	47	49	60	52	51	49
Avg. 20' Wind Speed (mph)	9	8	7	5	4	4	4
Avg. Wind Direction*	SSW	SSW	SSW	S	ESE	ESE	SW
Avg. Probability of Precip. (%)	11	39	65	59	49	38	30
Days Since a Wetting Rain**	1.0	1.0	0.0	0.0			
Forecast ERC (Fuel Model X)	17.8	18.4	16.9	15.8	14.4	14.2	14.5
Forecast BI (Fuel Model X)	28.2	32.4	28.9	24.7	23.4	21.0	20.2
Forecast IC (Fuel Model X)	4.2	4.9	3.6	2.5	2.1	1.9	2.0
Forecast 100-Hr. FMC	16.1	16.0	16.2	16.4	16.5	16.6	16.5
Forecast 1000-Hr. FMC	19.4	19.2	18.9	18.8	18.7	18.7	18.7
KBDI	228.8						

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

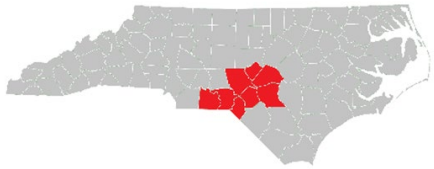
Values in the table above are averages from 4 stations in this FDRA:

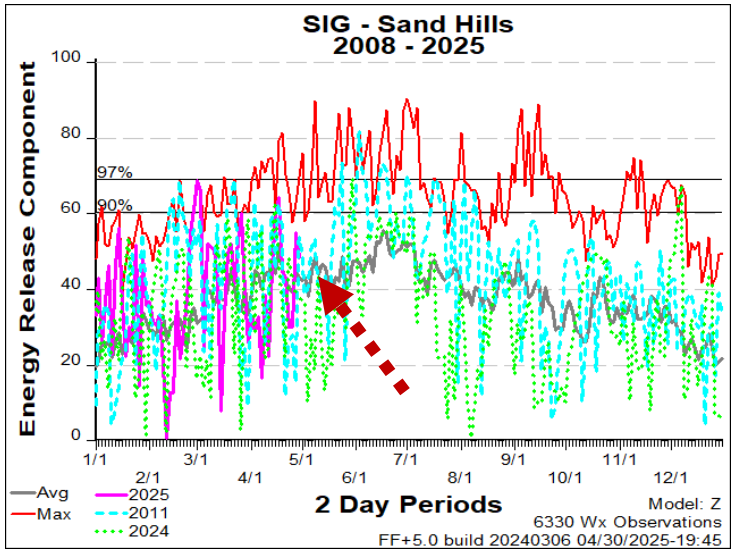
- **Oxford Tobacco Research Stn** (310841)
- **Upper Coastal Plain Res Stn** (312940)
- **Lake Wheeler Rd Field Lab** (314941)
- **Central Crops Research Station** (317441)

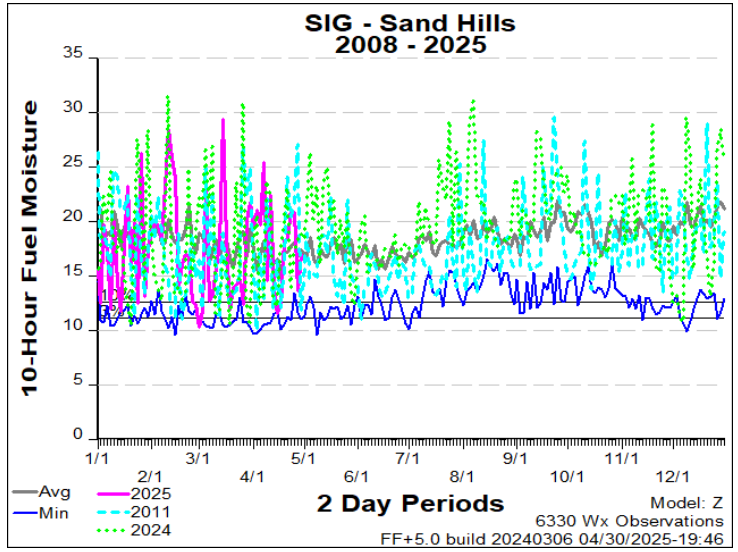
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph	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

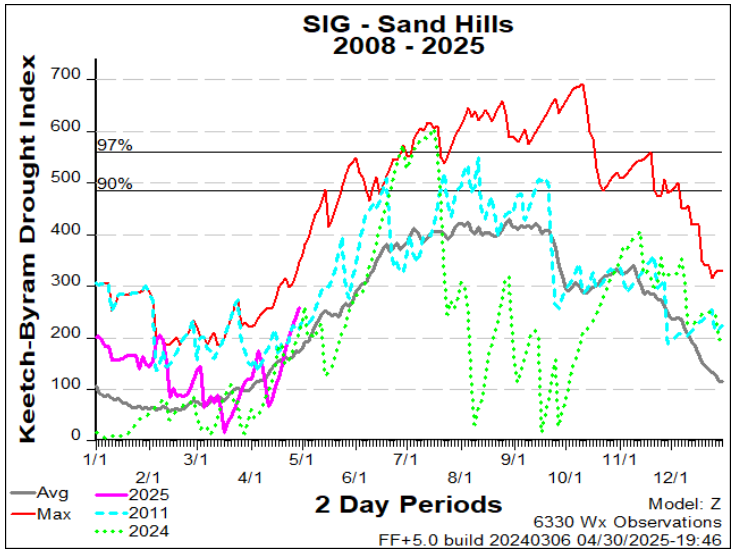
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

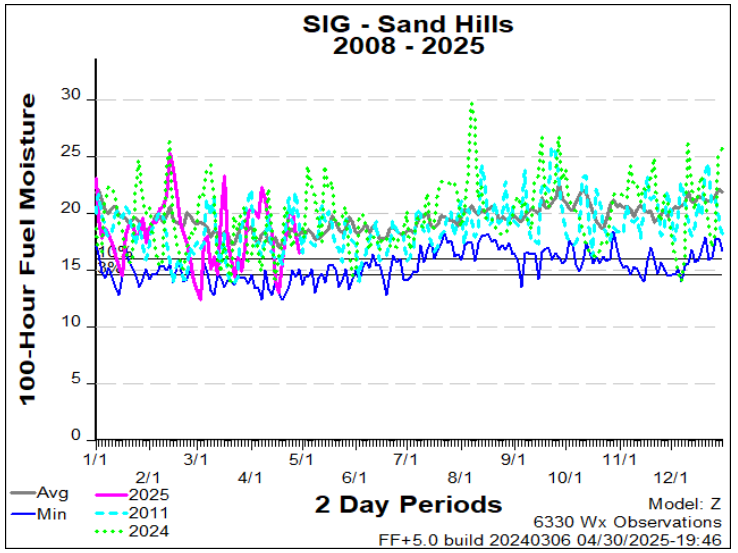
FDRA – Sandhills

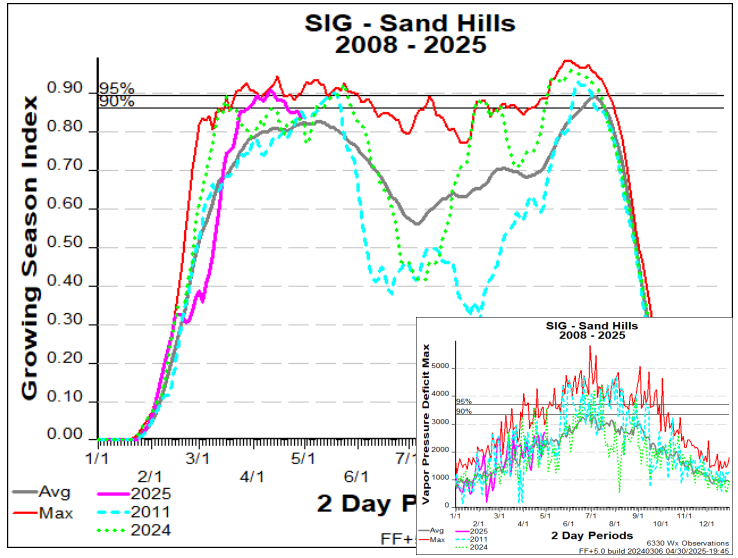


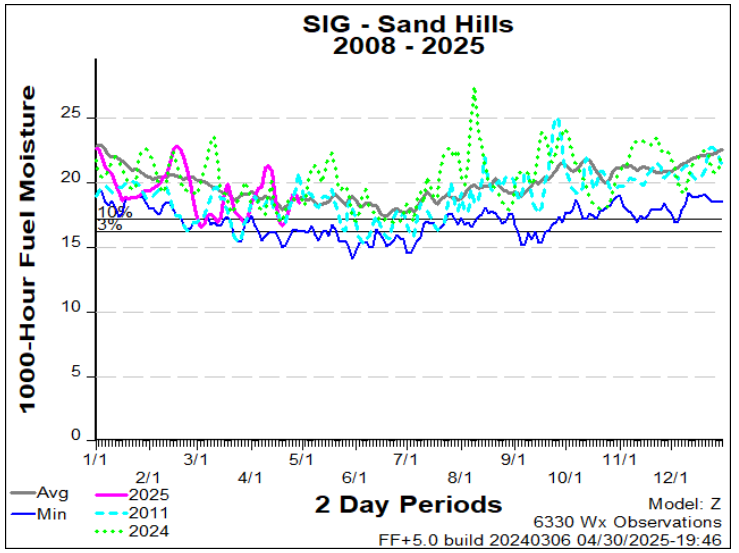




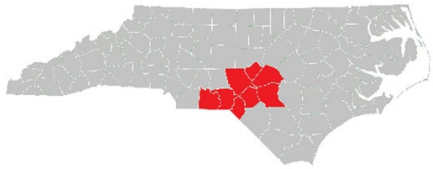








FDRA – Sandhills



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	87	87	86	77	78	79	78
Avg. Min. Humidity (%)	32	44	48	50	42	45	44
Avg. 20' Wind Speed (mph)	9	8	7	5	4	4	3
Avg. Wind Direction*	SSW	SSW	SSW	S	E	E	S
Avg. Probability of Precip. (%)	10	43	64	51	42	31	26
Days Since a Wetting Rain**	10.0	3.7	0.0	0.0			
Forecast ERC (Fuel Model Z)	43.9	43.6	40.2	37.0	37.1	36.0	36.6
Forecast BI (Fuel Model Z)	43.7	44.5	39.3	33.7	35.4	32.1	29.9
Forecast IC (Fuel Model Z)	11.5	11.7	8.3	5.4	5.7	4.8	4.6
Forecast 100-Hr. FMC	16.9	17.0	17.3	17.6	17.9	17.9	18.0
Forecast 1000-Hr. FMC	19.5	19.3	19.3	19.3	19.3	19.2	19.2
KBDI	263.7						

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

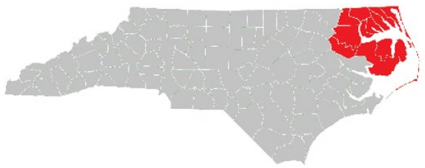
Values in the table above are averages from 3 stations in this FDRA:

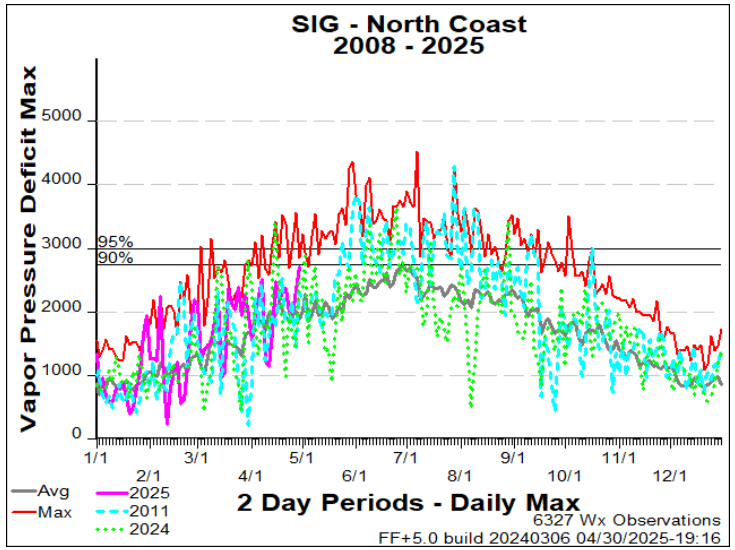
- **Sandhills Research Station** (317040)
- **Rockingham** (318202)
- **Fort Liberty** (318503)

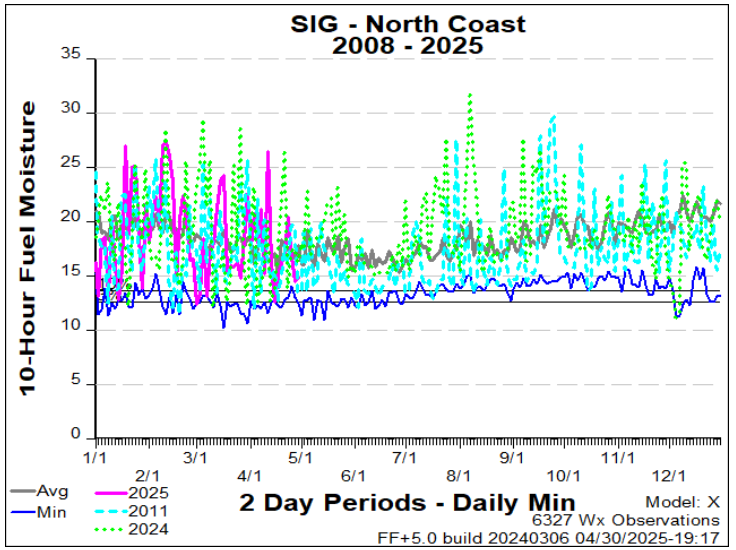
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 30% and 40%	Less than 30%
Avg. 20' Wind Speed	Less than 4 mph	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

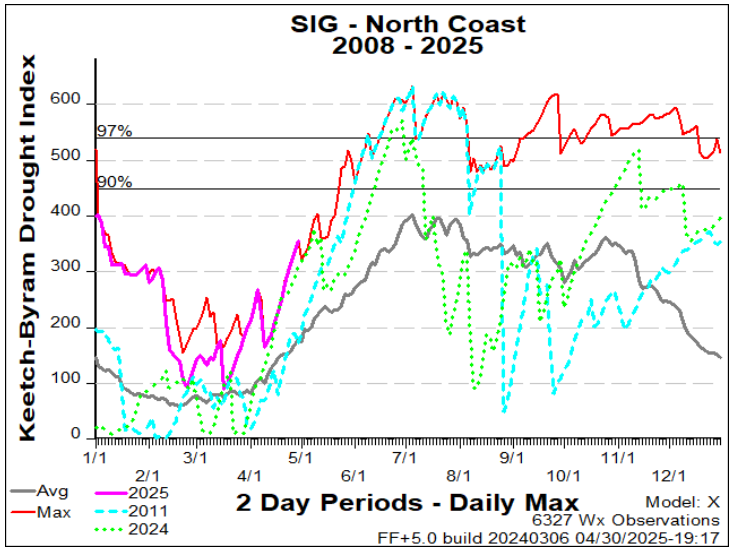
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

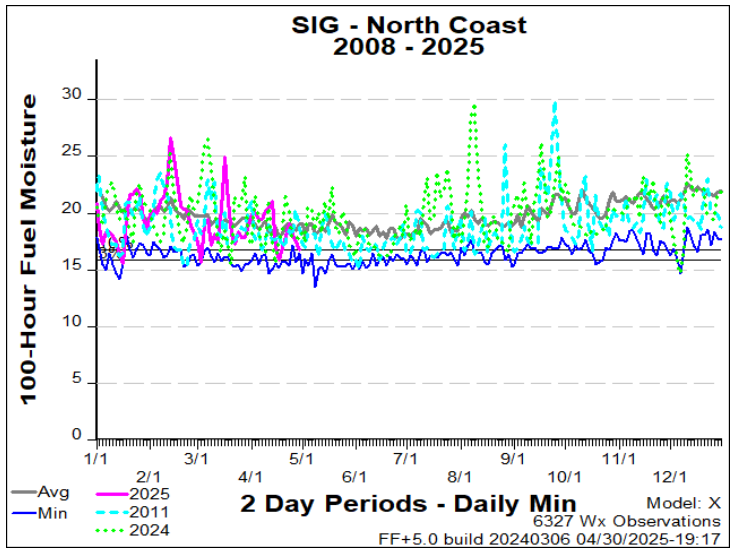
FDRA – North Coast

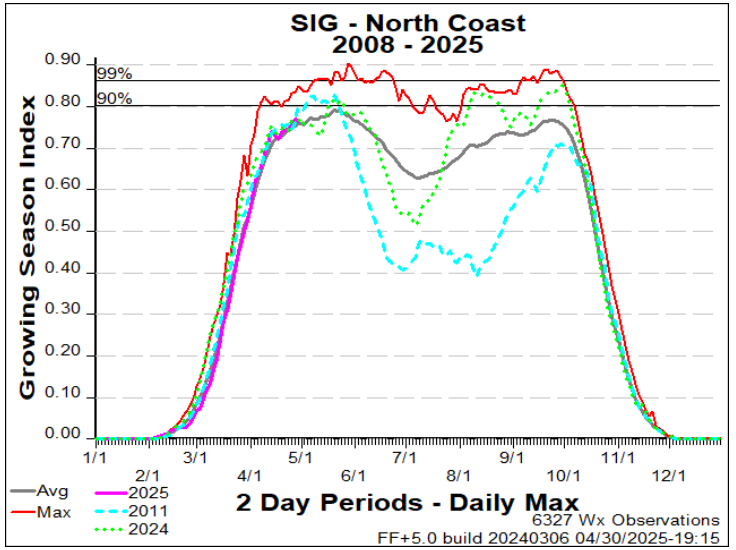


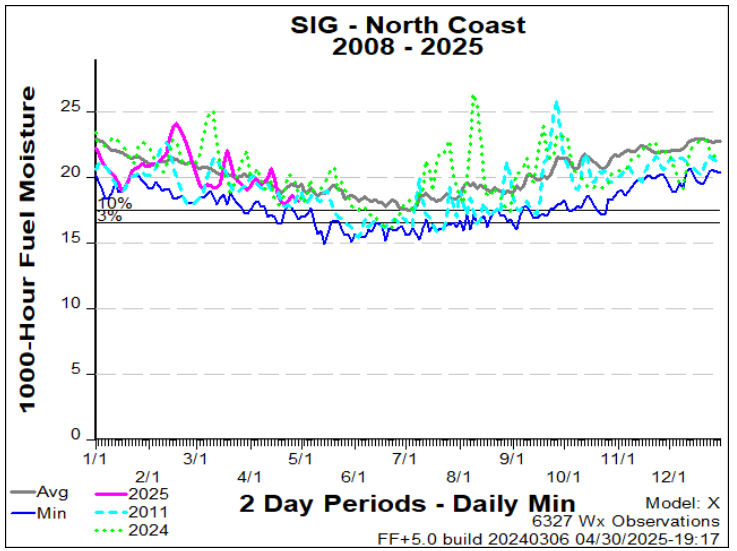






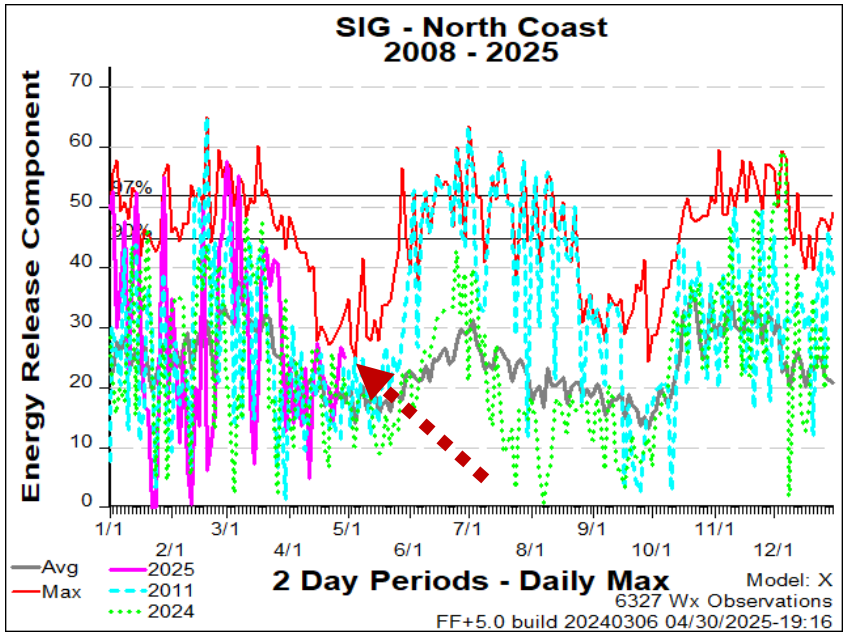




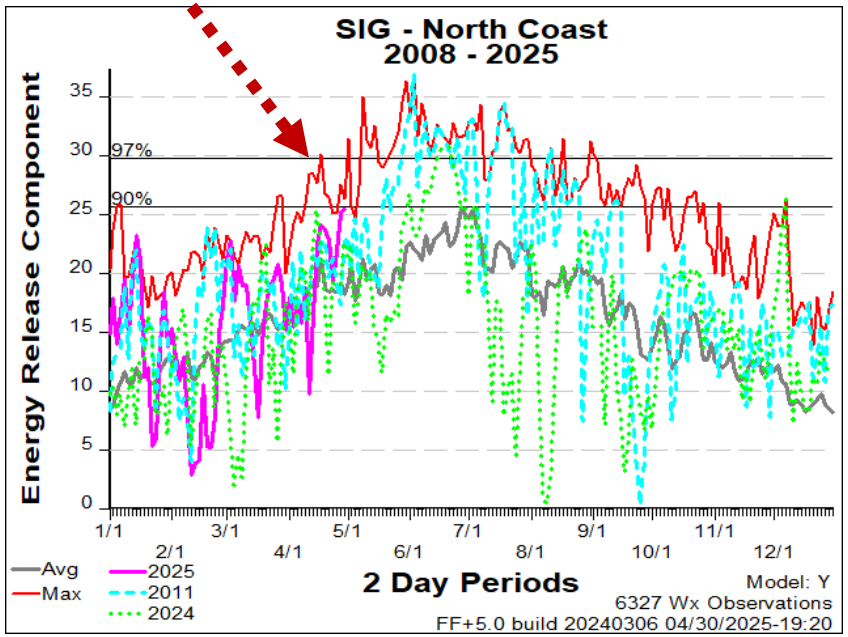


FDRA – North Coast

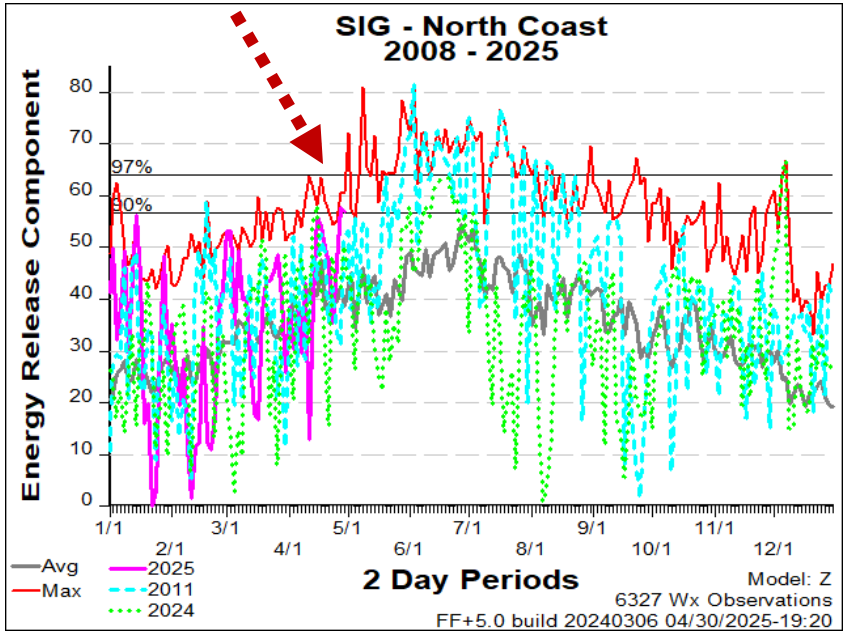
ERC-X



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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	87	87	85	76	78	78	80
Avg. Min. Humidity (%)	45	44	45	62	55	52	49
Avg. 20' Wind Speed (mph)	9	10	9	6	5	5	5
Avg. Wind Direction*	SSW	SSW	SSW	S	SE	SE	SE
Avg. Probability of Precip. (%)	11	12	54	64	52	46	33
Days Since a Wetting Rain**	12.3	13.3	0.0	0.8			
Forecast ERC (Fuel Model X)	18.4	18.3	18.8	16.2	15.9	16.0	15.7
Forecast BI (Fuel Model X)	25.9	38.6	36.1	30.0	31.9	28.5	21.9
Forecast IC (Fuel Model X)	3.6	5.5	5.1	2.9	3.3	3.0	2.3
Forecast 100-Hr. FMC	16.8	17.1	17.2	17.3	17.4	17.6	17.6
Forecast 1000-Hr. FMC	20.0	19.8	19.7	19.6	19.6	19.6	19.6
KBDI	361.0						

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

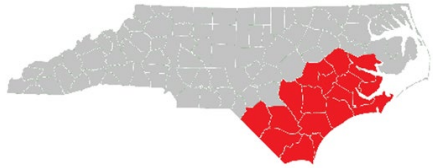
Values in the table above are averages from 4 stations in this FDRA:

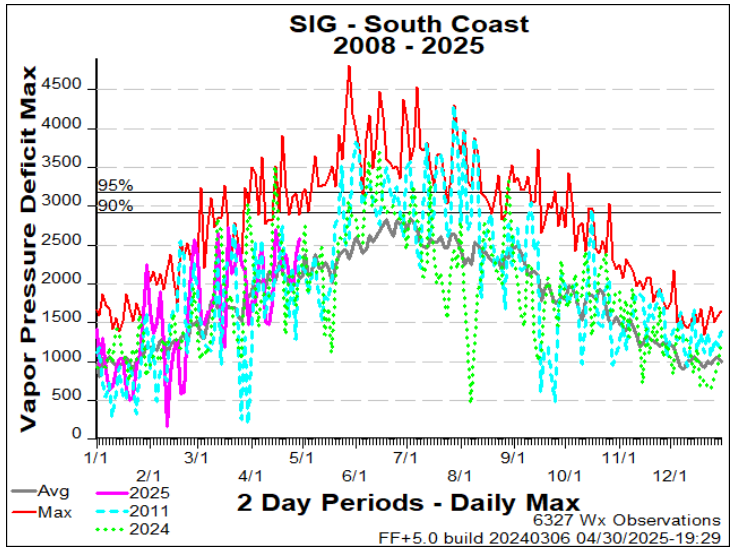
- **Elizabeth City** (311503)
- **Greens Cross** (313001)
- **Pocosin Lakes** (315201)
- **Fairfield** (317901)

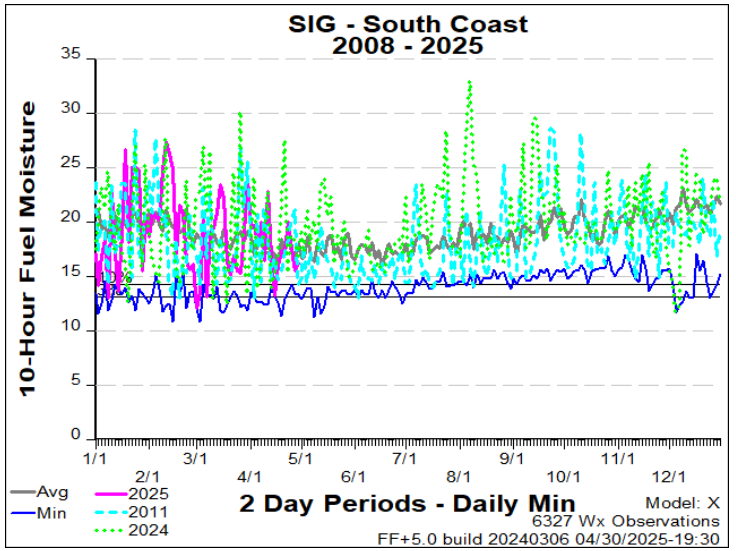
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 45°F	Between 45°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph	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

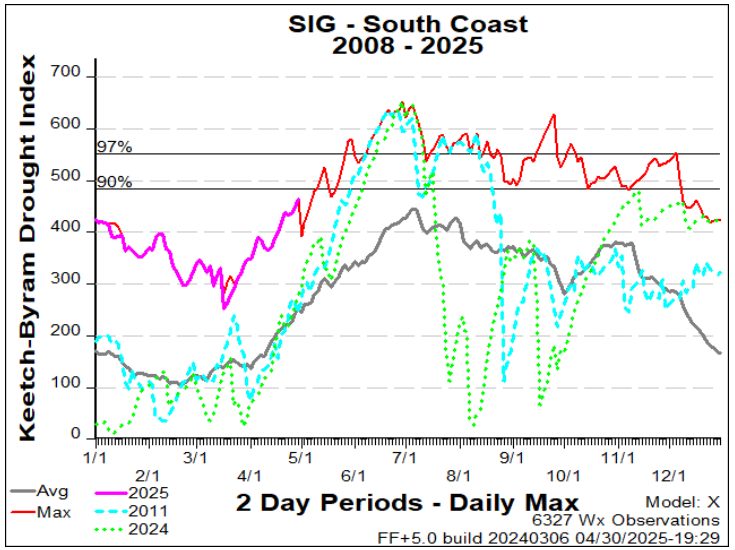
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

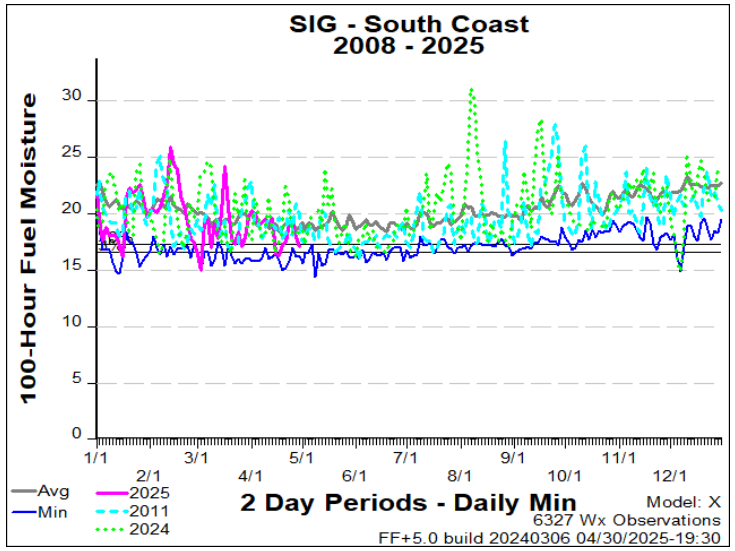
FDRA – South Coast

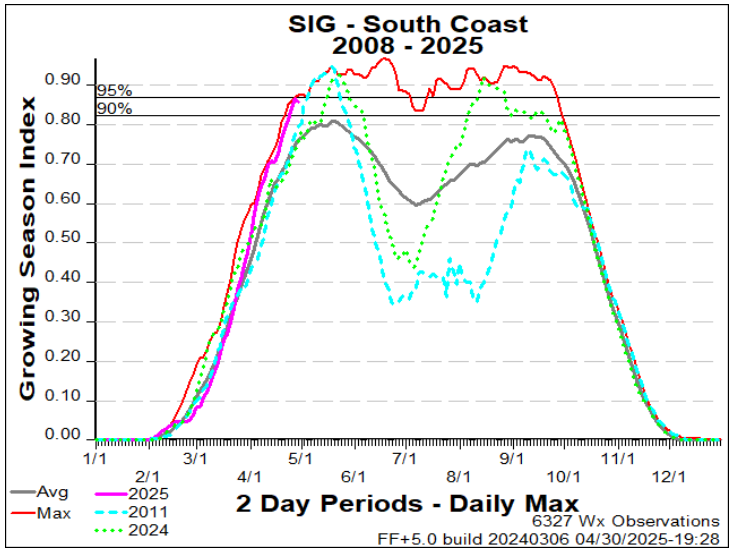


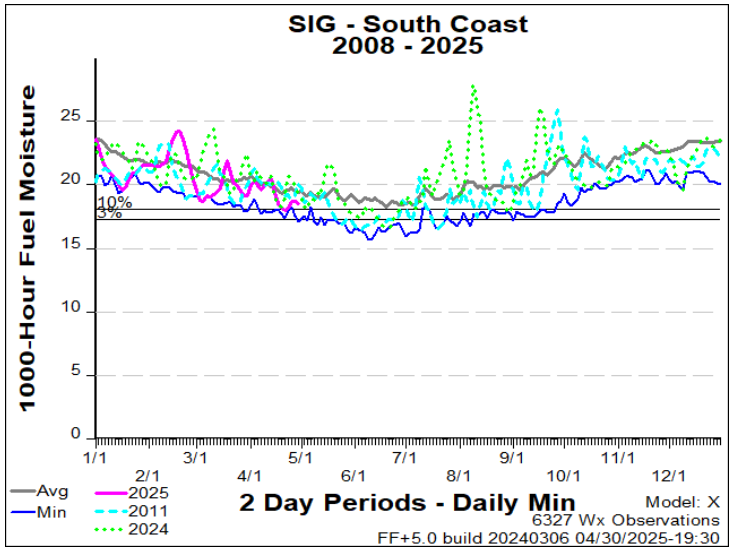






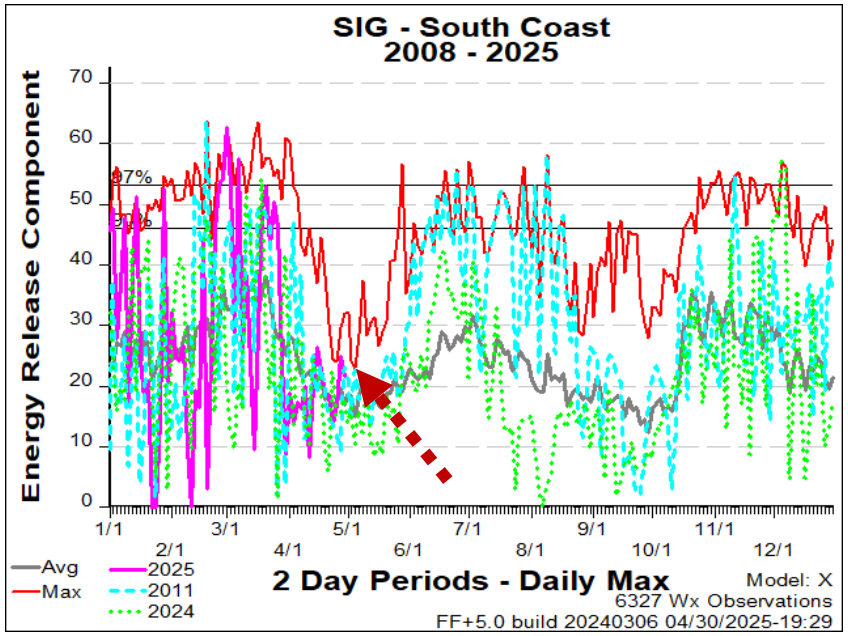




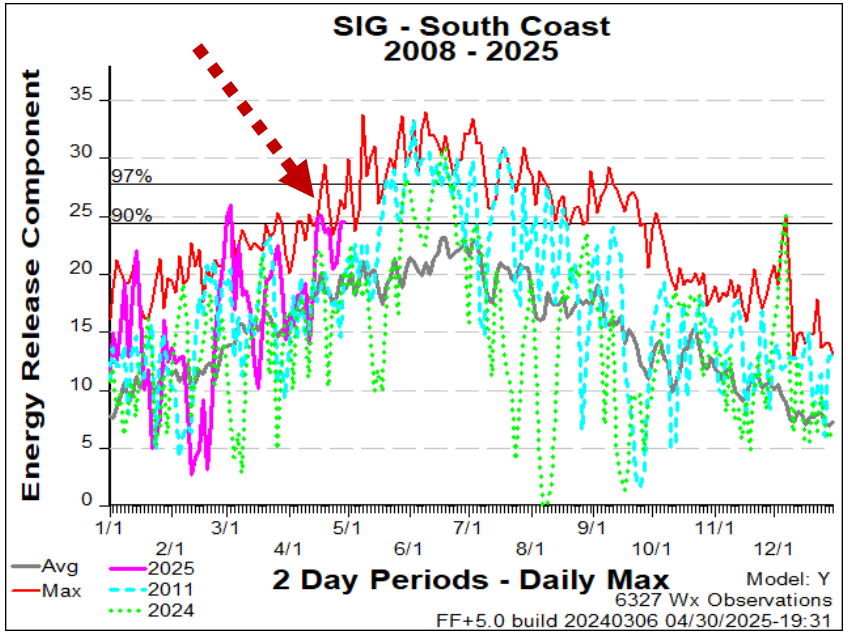


FDRA – South Coast

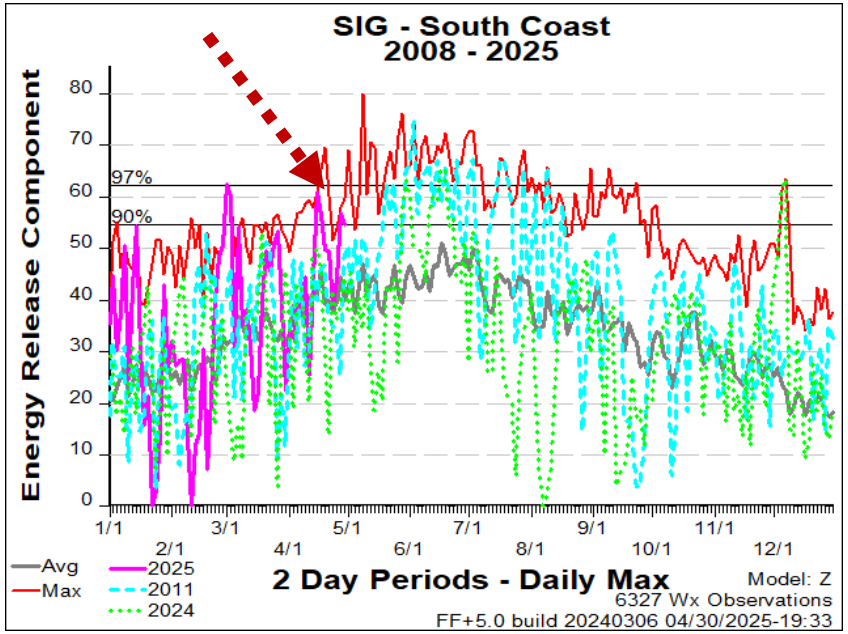
ERC-X



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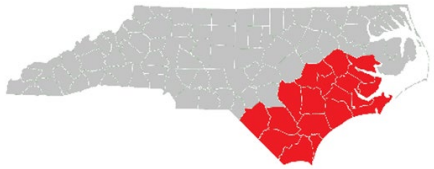
Average, Max, CY Year 2011, 2024 are displayed along with Year-to-Date 2025

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	THU 01-May	FRI 02-May	SAT 03-May	SUN 04-May	MON 05-May	TUE 06-May	WED 07-May
Avg. Max. Temp. (°F)	86	87	85	77	80	80	81
Avg. Min. Humidity (%)	43	45	47	59	52	47	44
Avg. 20' Wind Speed (mph)	9	7	7	5	4	3	3
Avg. Wind Direction*	SSW	SSW	SSW	S	SE	SE	SSE
Avg. Probability of Precip. (%)	4	12	63	61	43	34	26
Days Since a Wetting Rain**	12.1	10.0	3.3	0.4			
Forecast ERC (Fuel Model X)	18.2	17.6	17.4	15.1	15.1	15.5	16.3
Forecast BI (Fuel Model X)	27.2	30.9	31.4	25.8	26.5	26.1	23.6
Forecast IC (Fuel Model X)	3.9	4.3	4.4	2.5	2.7	2.8	2.8
Forecast 100-Hr. FMC	16.9	17.0	17.2	17.3	17.5	17.5	17.5
Forecast 1000-Hr. FMC	20.0	19.8	19.7	19.6	19.6	19.5	19.5
KBDI	467.4						

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:

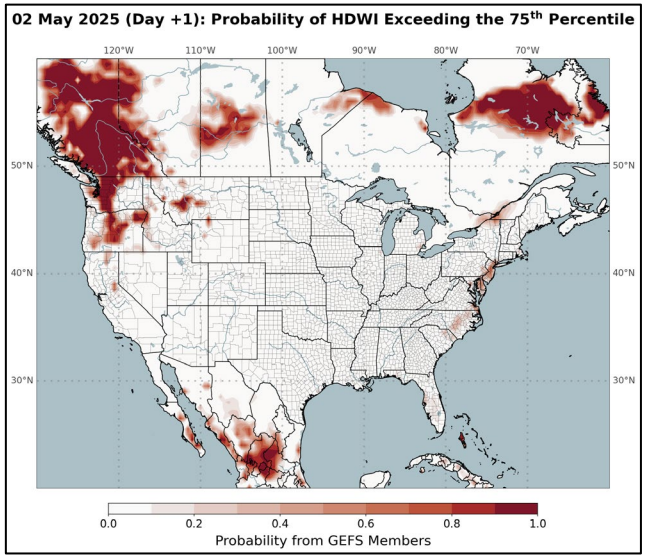
- **Finch's Station** (317501)
- **Beaufort** (317801)
- **New Bern** (319004)
- **Turnbull Creek** (319302)
- **Hofmann Forest** (319507)
- **Whiteville** (319701)
- **Sunny Point** (319803)

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

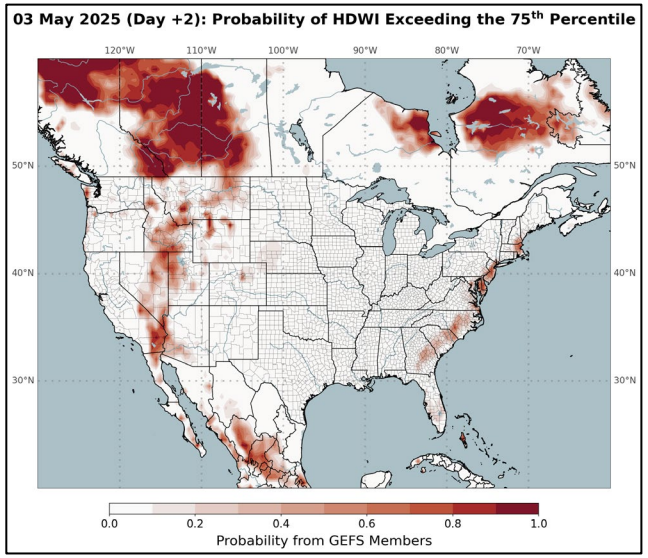
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

Hot-Dry-Windy Index (HDW)

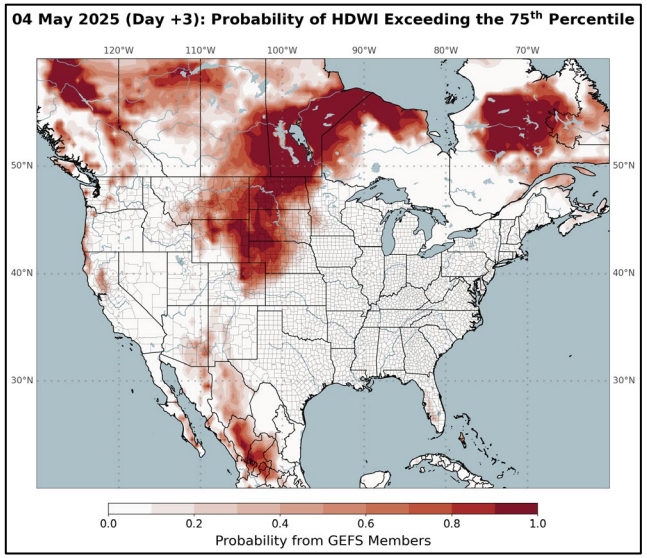
Friday > 75th Percentile



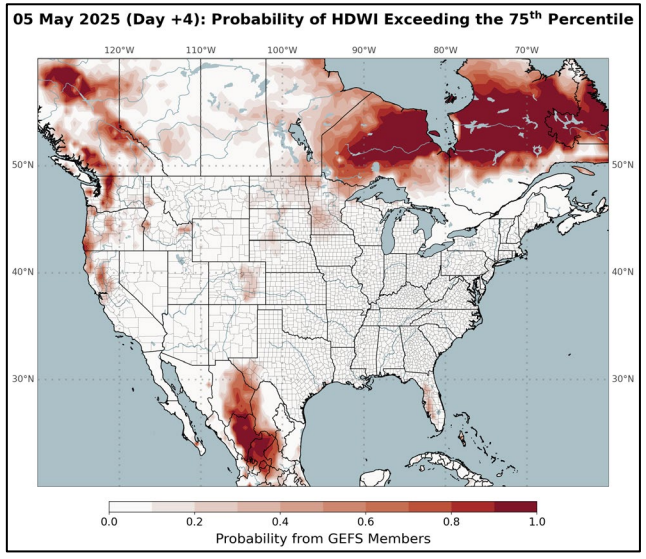
Saturday > 75th Percentile



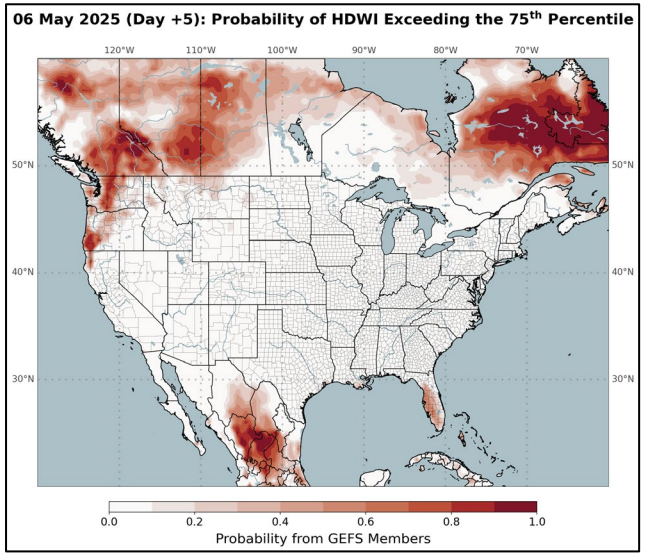
Sunday > 75th Percentile



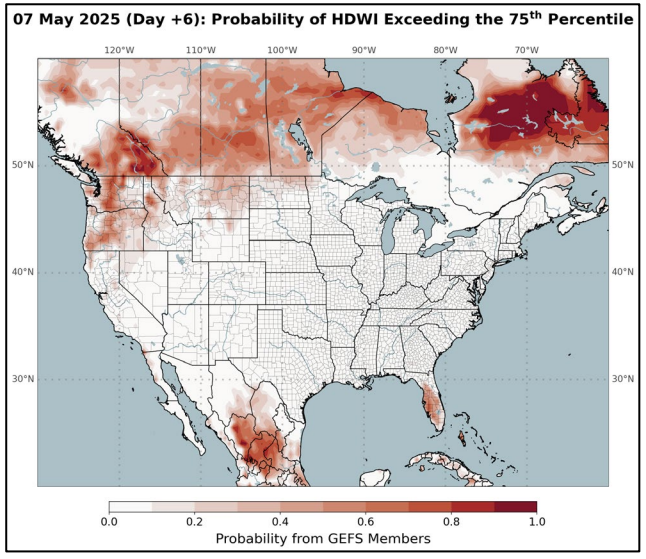
Monday > 75th Percentile



Tuesday > 75th Percentile



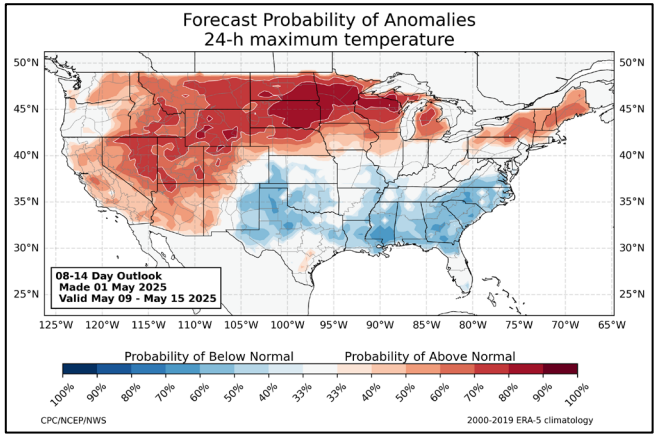
Wednesday > 75th Percentile

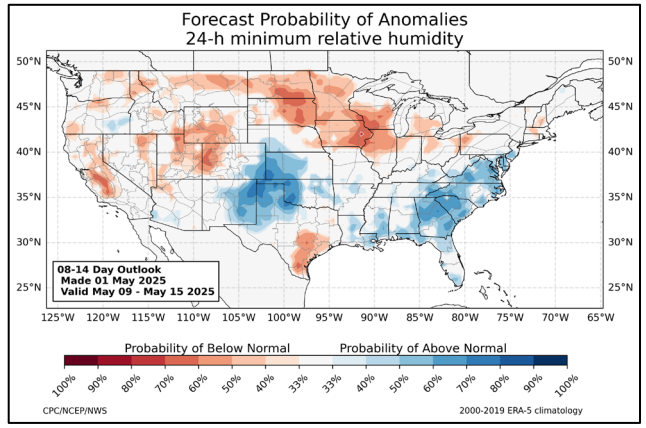


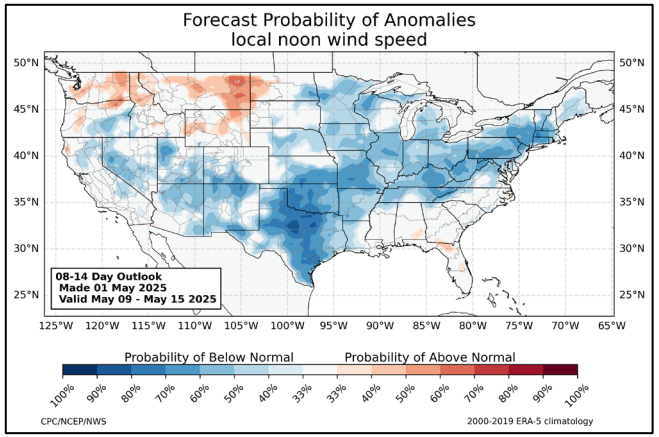
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

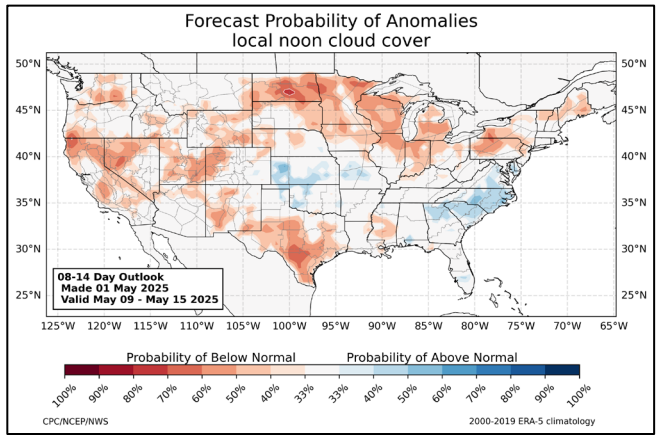
https://www.hdwindex.org/probs.html

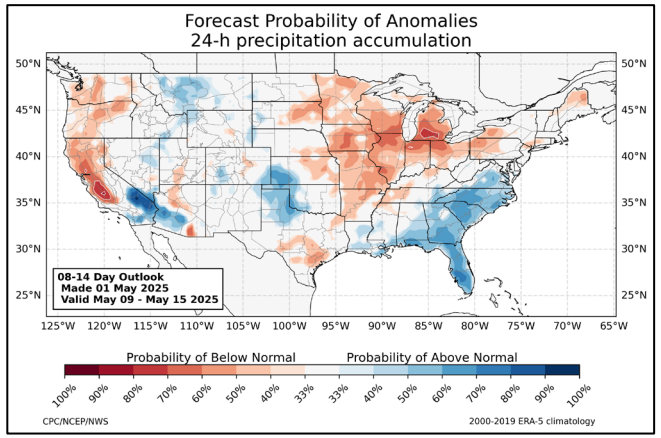
Week Two Forecast Anomalies: 5/9 - 5/15



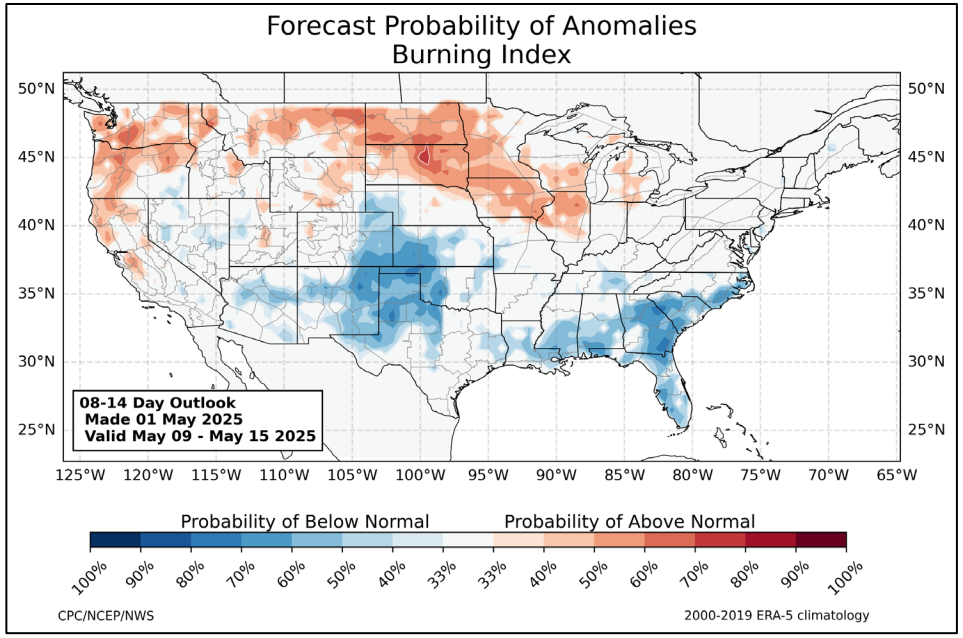


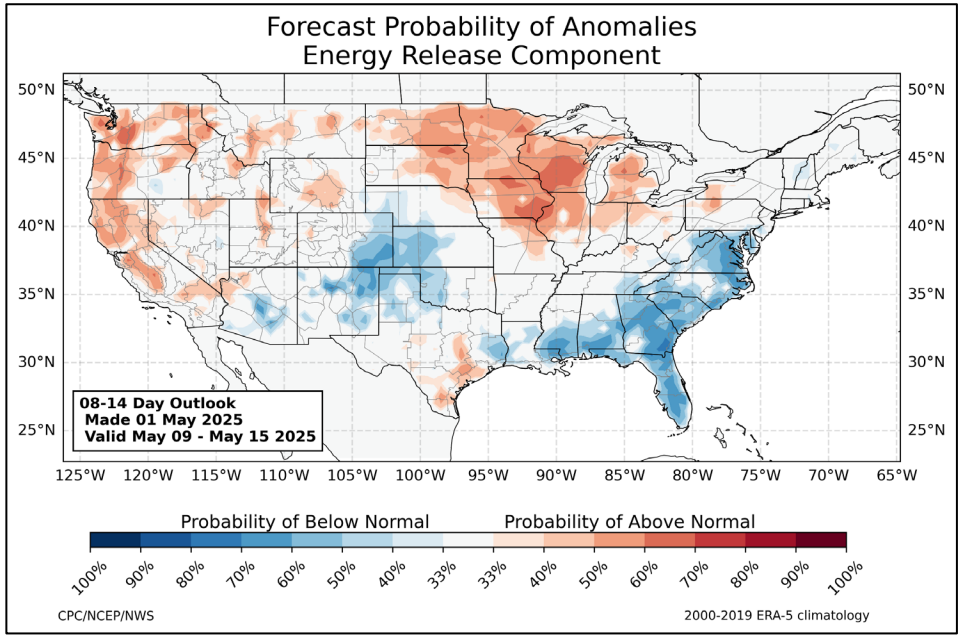






Important to note that there is significant forecast uncertainty as you go further out in time, especially with the current weather pattern. Drier trend possible.



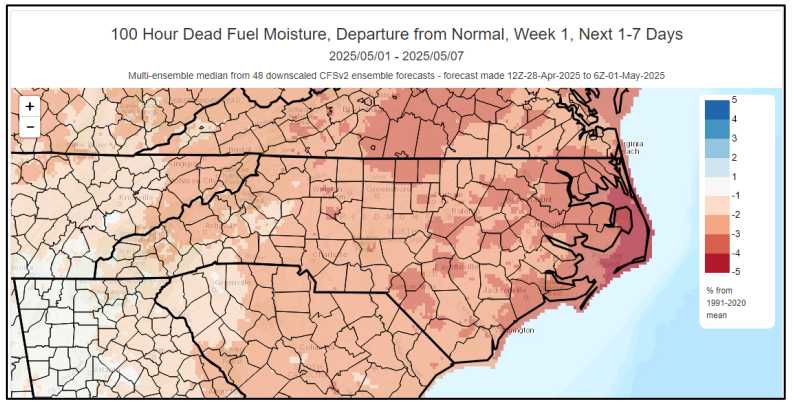


https://www.cpc.ncep.noaa.gov/products/people/mchen/fireWeather/cpc_wk2fw_index.html

Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1

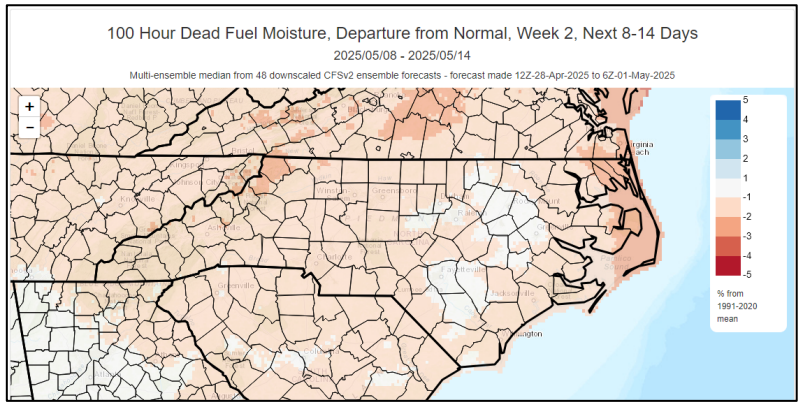


This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up or in drought conditions. Outputs relate to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration and overnight RH recovery trends.

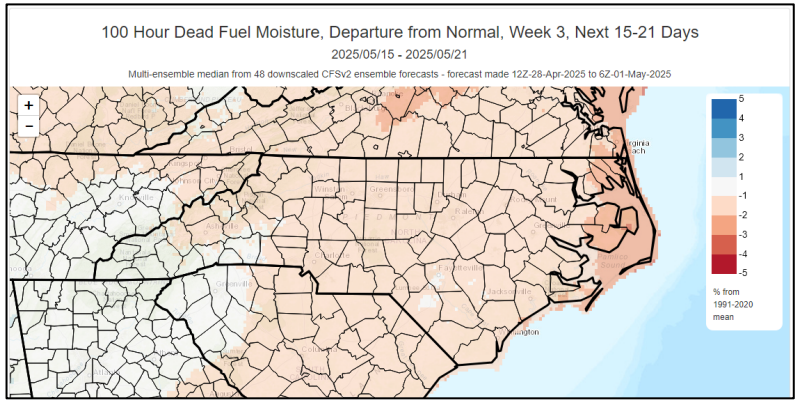
Note that <u>modeled</u> below normal conditions (lower % mc or "worse") are focused on coastal counties for much of next four weeks, especially Weeks 1-3.

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

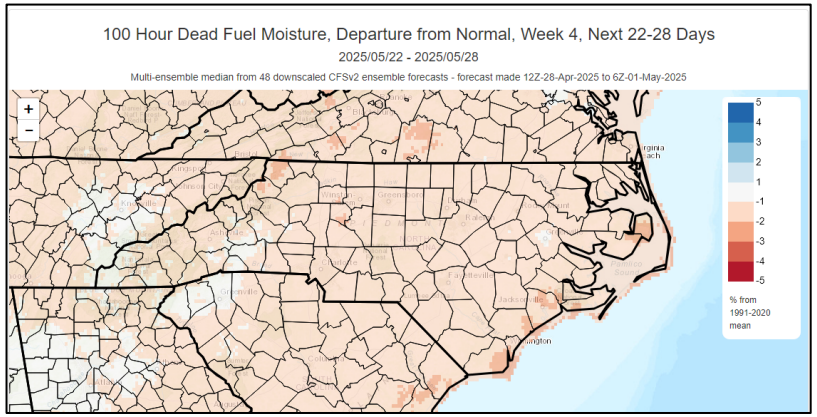
Week-2



Week-3



Week-4



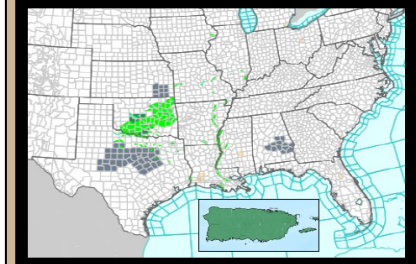
From: https://climatetoolbox.org/tool/Climate-Mapper

SACC Daily Outlook, Selected Snips from Thursday - 5/1

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

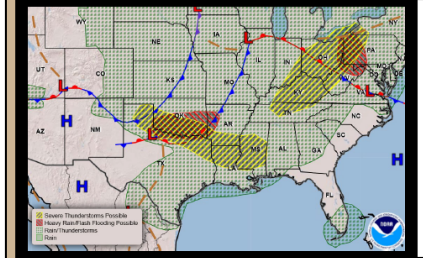
SACC Daily Outlook
Thursday, May 1, 2025

Watches, Warnings and Advisories



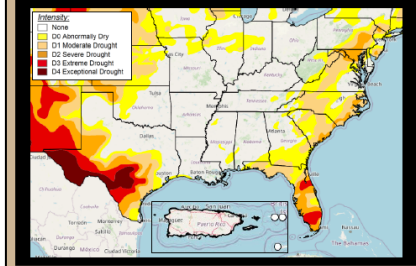
- **Flood Watches** for parts of OK, TX and all of PR
- **Dense Fog Advisories** this morning in TX and AL
- **Flood Warnings** or **Flood Advisories** across OK, TX, AR, LA, MS

Today's Weather Outlook



- Showers and thunderstorms will be most common today from parts of the Texas Hill Country through the Mississippi and Ohio Valleys
- Severe thunderstorms will be possible across TN, KY and the Lower Mississippi Valley, while any severe storms in OK and north TX will become more likely during the overnight hours
- Another round of flash flooding is expected tonight across far northern TX into OK and western AR; rain amounts will mostly remain below 2", but ongoing flooding and saturated soils will mean quick runoff of any rain that occurs
- Flash flooding will also be possible across the Caribbean as an unsettled pattern continues near a stalled frontal boundary
- Most of the East Coast will be dry today outside of an isolated storm here and there; warm temperatures and breezy conditions are in store, maintaining high fire danger in areas of drought from NC to FL

U.S. Drought Monitor Update

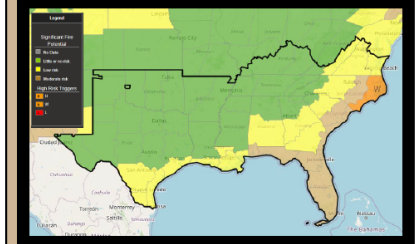


- Severe and extreme drought expanded across the FL peninsula this week, while moderate drought developed over most of the FL panhandle into southern GA
- Drought also increased throughout VA, NC and parts of SC, with severe drought increasing over coastal SC and northeast NC
- Severe drought expanded over the OK and northeast TX panhandles, while most of the rest of the Plains saw improving conditions
- Dryness decreased over western AL and southern MS, in addition to northern GA, upstate SC And the southwest NC mountains
- The Caribbean remains drought-free

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

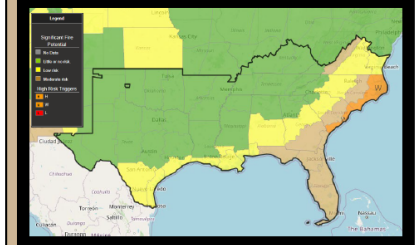
SACC Daily Outlook
Thursday, May 1, 2025

Significant Fire Potential Outlook Today



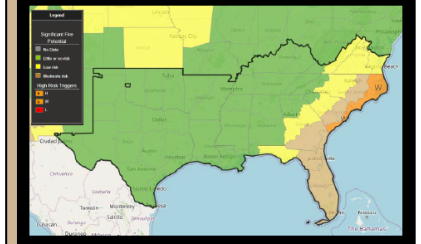
- **North Carolina Coast:** southwest winds will turn more southerly as sea breezes develop this afternoon, with gusts increasing to near 30 mph for the coastal counties; lightning holdovers may emerge in northern parts of the PSA; the main risks will be growth on existing incidents and escaped intentional burns
- Pre-frontal very warm, dry and breezy conditions will affect areas from VA to south GA, AL and the eastern Gulf Coast; look for RH as low as 25-35% inland, with S/SW wind gusts of 20-35 mph, highest in the VA and NC Piedmont and foothills
- Sea breezes across the FL peninsula will bring some afternoon gusts as high as 25-30 mph, while inland RH will be as low as 25-35%; lightning holdovers could emerge from thunderstorms earlier in the week
- Thunderstorms will be possible from South TX to the Lower Mississippi Valley, where fuels are a bit drier than average, potentially resulting in lightning ignitions; erratic outflow winds could impact lingering prescribed fires and any news starts, as well

Significant Fire Potential Outlook Friday



- **Coastal Carolinas:** sea breeze winds will be a bit stronger in the region tomorrow, while isolated thunderstorms farther inland could result in some gusty outflows and perhaps a few new ignitions; peak wind gusts from 25-35 mph will be common, potentially resulting in escapes and growth on existing incidents
- Areas in the higher elevations of the VA mountains that have not greened up will see drier and warmer conditions, with RH as low as 25-35% and SW wind gusts of 20-35 mph; high temperatures will approach daily records
- Weather from the rest of the Southeast coastal plain to FL will be similar to today, with dry and very warm to hot conditions giving way to gusty sea breeze winds; thunderstorms capable of producing lightning ignitions and erratic outflow winds will be most likely across the Carolina Sandhills through the fall line into GA and AL
- Thunderstorms should be more likely inland from the rest of the Gulf Coast, while the immediate coast sees sea breeze winds, continued dry fuels and isolated thunderstorms

Significant Fire Potential Outlook Saturday

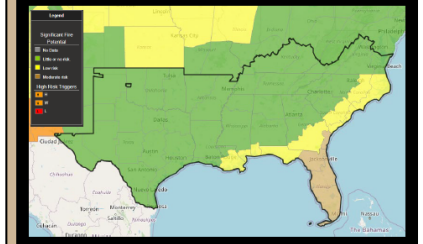


- **Coastal Carolinas:** models are in better agreement on a slower frontal passage, which will allow for strong winds and dry weather ahead of the front to prevail; RH will be higher than previous days, but consistent wind gusts from 25-35 mph will be likely much of the day; isolated storms are possible late in SC but will be more likely farther west in the Piedmont and Sandhills
- Very warm to hot and mostly dry conditions will be the rule across the FL peninsula into south GA, where inland RH will be as low as 25-35%; sea breezes will bring gusts as high as 25-30 mph; isolated storms are possible in north FL and GA but will be more likely to the north and west
- Scattered thunderstorms are expected from VA to the FL panhandle, generally decreasing fire danger from previous days but potentially leading to a few new ignitions

National 7-Day Significant Fire Potential Outlook

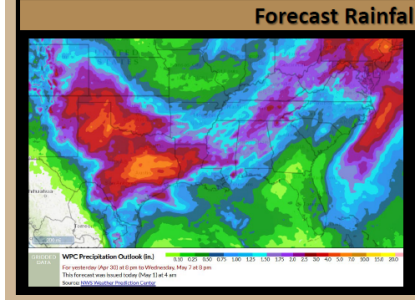
SACC Daily Outlook
Thursday, May 1, 2025

Significant Fire Potential Outlook Sunday



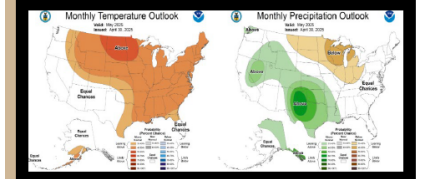
- The fire environment will undergo changes Sunday into early next week as low pressure over the Ohio Valley results in increasing rain chances from the Carolinas to FL
- Persistent southerly flow will bring in much higher humidity, while scattered to locally numerous showers and thunderstorms develop throughout the Southeast
- Lightning ignitions will be possible for the coastal Southeast and may be more likely across portions of the FL peninsula, potentially requiring high risk lightning triggers
- Drier air will follow a front, bringing the potential for some lightning holdover emergence from the FL panhandle to southeast LA

Forecast Rainfall the Next Week



- Multiple rounds of showers and thunderstorms are on tap for the Plains into next week, where some areas may see 5-10" amid widespread 2-4" totals
- River flooding is likely to be come more significant and locally record-setting, while flash flooding and severe storms should also be expected
- Most of the precipitation in the Mississippi Valley will occur the next few days, with some 1-3" totals in store; wet weather may return late next week
- A cut-off upper low will meander from the Ohio Valley to the Northeast by early next week; rainfall totals associated with this disturbance and its associated front are still uncertain across the coastal Southeast but could trend locally higher from the Carolinas to FL
- Wet weather will continue for the Caribbean during the week ahead, resulting in some additional flooding, before drier weather returns by late next week

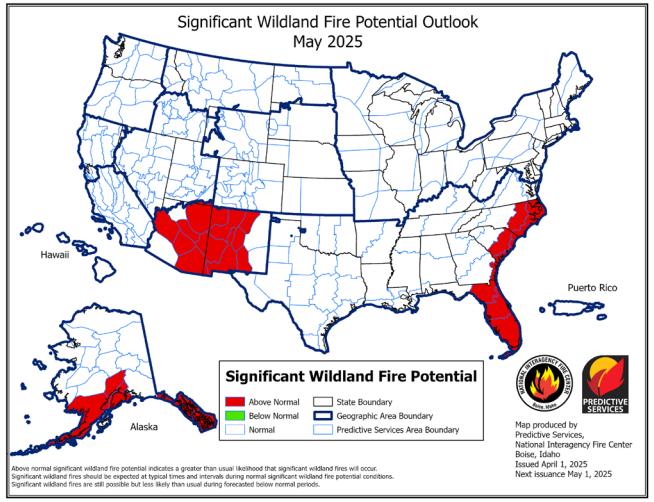
Updated May Outlook

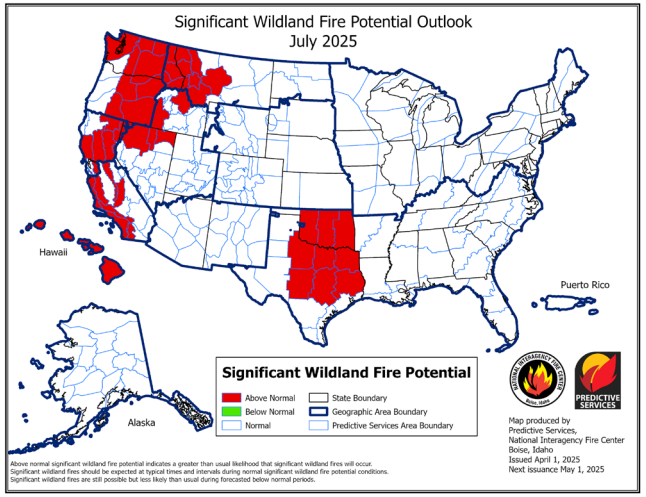


- NOAA's updated May outlook saw dramatic changes from the previous update, which may be an indication of the low predictability pattern over the next few weeks
- What is of high confidence is a wet opening to the month across the Plains states, particularly in western OK and TX
- Some wetter weather will open the month over central and eastern portions of the Southern Area, but drier conditions may return later in the month, resulting in a large area of equal chances east of the Mississippi Valley, with dry conditions slightly favored in northern KY
- Above average temperatures will be the rule in most of the region, though there is more uncertainty over the FL peninsula and across the Plains, where conditions may be more variable

Significant Wildland Fire Potential Outlook:

Updated 4/1/25 – Newest Update Not Released at time of this report.





**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.*

Coastal Plain areas of R1 & R2:
Note on Fuel Conditions and Increasing Difficulty of Control

"**Greenup"** continues its seasonal increase across the landscape, remaining most noticeable in yards, hardwood/swamp forests & road shoulders where adequate rainfall has occurred. As mentioned earlier available soil water is quickly becoming the limiting factor with sensitive grasses/herbs showing signs of stress/decline in drought impacted areas (fastest response on engineered soils of larger highways and developments) which will lead to starts more easily establishing and making it into the "woods". Overall if drought conditions intensify expect green grasses and other herbaceous/shrubby fuels to respond by moving towards conditions reflective of dormancy (lower moisture content), then becoming available fuel instead of a functional heat sink. Refer to Slide #6 for precip related information.

However, even with greenness generally still increasing in coastal areas – the "Southern Rough" shrub dominated fuel complex is still very sensitive to drought impacts related to increasing availability of duff, heavier down & dead, and organic soil horizons for consumption in the Spring. Sunny conditions, warm air temps and lower relative humidities have helped preheat & further dry drought impacted fuels this week.

- Eastern "lightning season" alignment with drought impacted fuels noted above can lead to very significant fires when weather conditions align to initiate movement from smoldering snags/piles/hummocks to the volatile shrub and then tree canopy. These fire can often become fuel-driven engines, steered by frontal passages and sea breeze influences – even with higher "minimum" relative humidities (remember the additive impact of drought to fuel availability).

- KBDIs remain at near/at seasonal max for many South & Central Coast RAWS. 100 & 1000hr fuel moistures will continue to incrementally decline without soaking rainfall and consistently good recoveries.

- South Coast and North Coast FDRA ERCs for FM-Y and FM-Z continue to be near seasonal max and near/at the 90th percentile. See Slides 40 & 43.

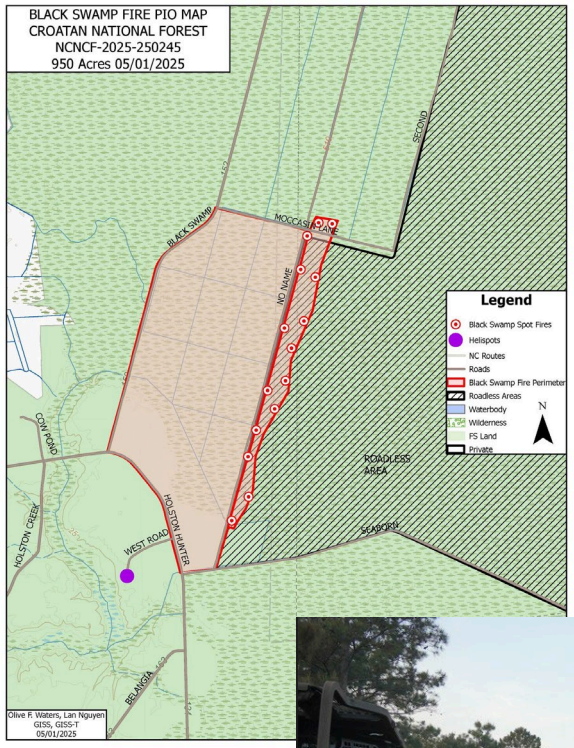
- If above normal temperatures, continued lack of substantial wetting rain, and high expected evaporative demands over the next few weeks come to fruition, and align with ignition sources - it will lead to rapid larger-scale increases in difficulty of control along with enhanced reburn risk/holding concerns (focus initially on current drought impacted areas). Note the discussion on Slide #48 from SACC regarding potential frontal timing and wind.

- Instances of smoke-induced fog and/or superfog can be possible when the correct meteorology lines up with smoldering fuels often encountered in these conditions. Refer to PMS-477 (Smoke and Roadway Safety Guide) and PMS 477-1 (Smoke and Roadway Safety Pocket Guide) for further reference on this topic.

Recent R1 Area Fires of Note:

R1/D4/Jones/Project Fire: USFS Croatan NF Black Swamp Fire
Images and Map from INCIWEB

The Crown Point #1 Fire in R1/D4/Onslow County occurred in a WUI area & was noted as having extreme fire behavior during reburn, with observed running and subsequent spotting on 4/30. Aviation resources were utilized yesterday during strategic burnout operations. Holding and mop-up continue at the time of this report.



The Black Swamp Fire is burning within the general footprint of the Great Lakes Fire of April 2023. Trafficability is poor due to deep organics. Multiple agencies are supporting containment operations. Specialized equipment working the fire include LGP tracked heavy equipment, helicopters and volume lift pumps.

Overall

- Western FDRAs have continued to see generally better recovery of larger fuel moistures over the past several days due to unsettled weather/better overnight recoveries and precip in the central/sw mtns. Fire activity/difficulty of control has trended down during this period.

- However, precip deficits are increasing throughout other portions of the state, see previous PNP maps. Widespread significant rainfall is still not expected, with it being more related to isolated/scattered thunderstorm activity (risk of lightning holdover starts in drought impacted fuels) over the next few days.

- Greenup continues to advance across the state, but slower at higher elevations. See note on Eastern FDRA concerns related to Greenup/Drought on previous slide. Typical "Spring Fire Season" activity trends downward with good greenup of canopy and understory vegetation, so long as sustaining precip keeps occurring. However, 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.

- 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 rh.

- Adj Rating – Models have responded to the increase in 100-hr fuel moistures compared to last month's values and GSI related greening for FM-X (Low to Moderate Forecast Daily Ratings). **However, the drying trend will begin to have a more pronounced impact on each FDRA's live fuel moisture model as we move into May – which will impact FM-X outputs.**

- TS Helene impacts remain as the outlier to eventual seasonal "Mountain/Foothills Greenup" – 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.

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

Predicted 100-hr Fuel Moistures by Percentile (not abs % mc)

Based upon same FDRA SIG Station Avg process using "All Days" from analysis period through 2021.

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

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

FDRA	Thu May 1	Fri May 2	Sat May 3	Sun May 4	Mon May 5	Tue May 6	Wed May 7
Southern Highlands x	31.0%	69.9%	90.7%	96.2%	94.0%	86.1%	69.9%
Central Mountains x	34.3%	49.8%	73.1%	88.6%	88.6%	82.3%	73.1%
Northern Highlands x	50.6%	50.6%	50.6%	82.1%	92.7%	82.1%	73.3%
Blue Ridge x	23.5%	45.9%	45.9%	88.0%	82.9%	58.2%	45.9%
Western Piedmont x	33.5%	33.5%	33.5%	62.7%	62.7%	49.4%	49.4%
Sandhills z	25.7%	25.7%	25.7%	40.5%	40.5%	40.5%	40.5%
Eastern Piedmont x	11.4%	11.4%	11.4%	11.4%	22.6%	22.6%	22.6%
Southern Coast x	14.3%	14.3%	14.3%	14.3%	14.3%	30.4%	14.3%
Northern Coast x	21.9%	21.9%	21.9%	21.9%	21.9%	38.0%	38.0%