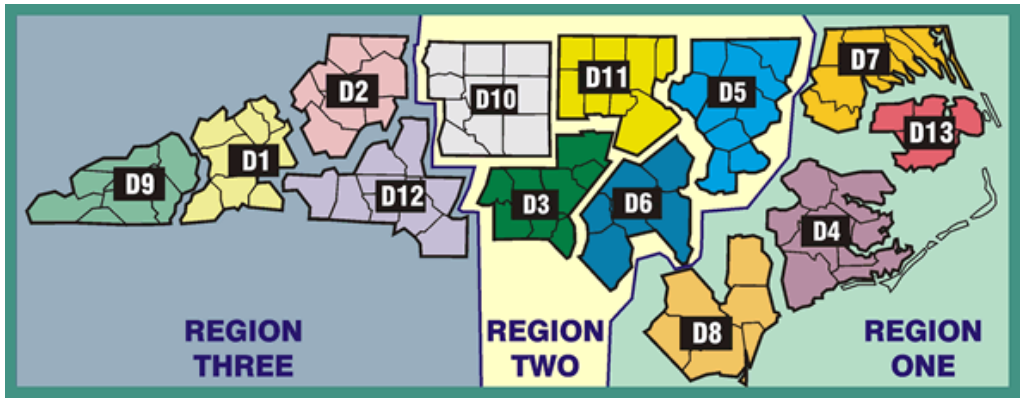


Weekly Fire Danger Assessment
NCFS – All Regions

For Time Period:

Friday (3/14/25) to Thursday (3/20/25)

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

Date: March 14, 2025
Created by: Jamie Dunbar
Fire Environment Staff Forester
North Carolina Forest Service

Statewide 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

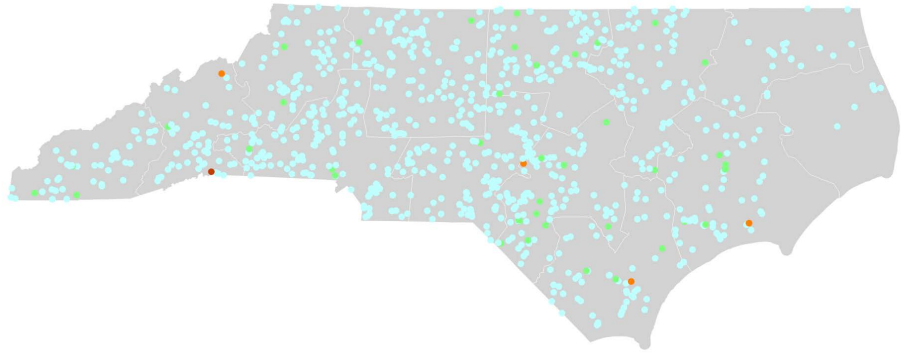
March MTD: 912 incidents for 2,961 acres
7-Day Activity: 333 incidents for 519 acres

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

Largest incidents last **7-Days** (Ending 3/13):
from fiResponse & preliminary reporting only

Incident Name	Discovery Date	Region	District	County	Acres
Bailey Drive	3/11/2025	Region 3	District 1	Mitchell County	110.00
Lockwood Lane	3/8/2025	Region 2	District 6	Sampson County	49.00
Rutherford County - 27	3/12/2025	Region 3	District 12	Rutherford County	22.00
Hwy 64	3/12/2025	Region 3	District 9	Clay County	21.00
No More	3/9/2025	Region 2	District 5	Wayne County	15.00
Powell Rd	3/9/2025	Region 1	District 4	Craven County	13.00
Pocosin Road	3/8/2025	Region 1	District 8	Columbus County	12.00
Gaston County - Crame	3/12/2025	Region 3	District 12	Gaston County	10.50
Glades Ridge	3/8/2025	Region 1	District 8	Pender County	10.00
Halltown	3/8/2025	Region 1	District 4	Onslow County	10.00

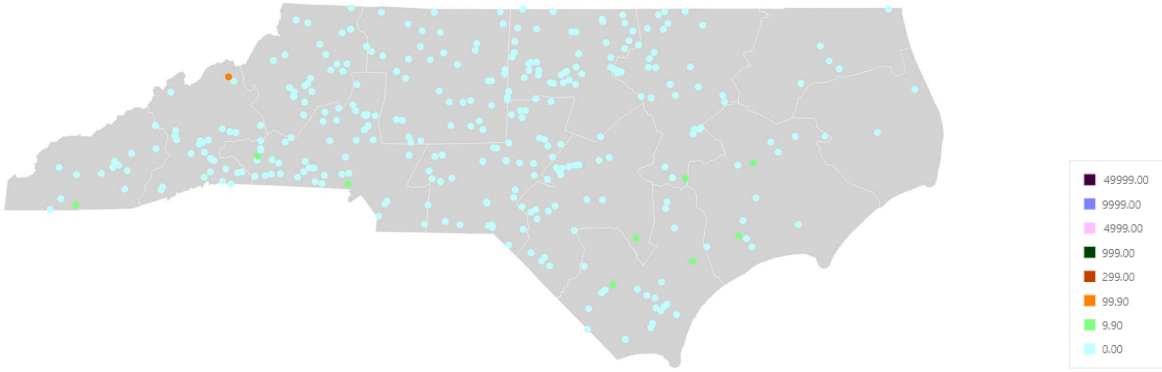
March MTD

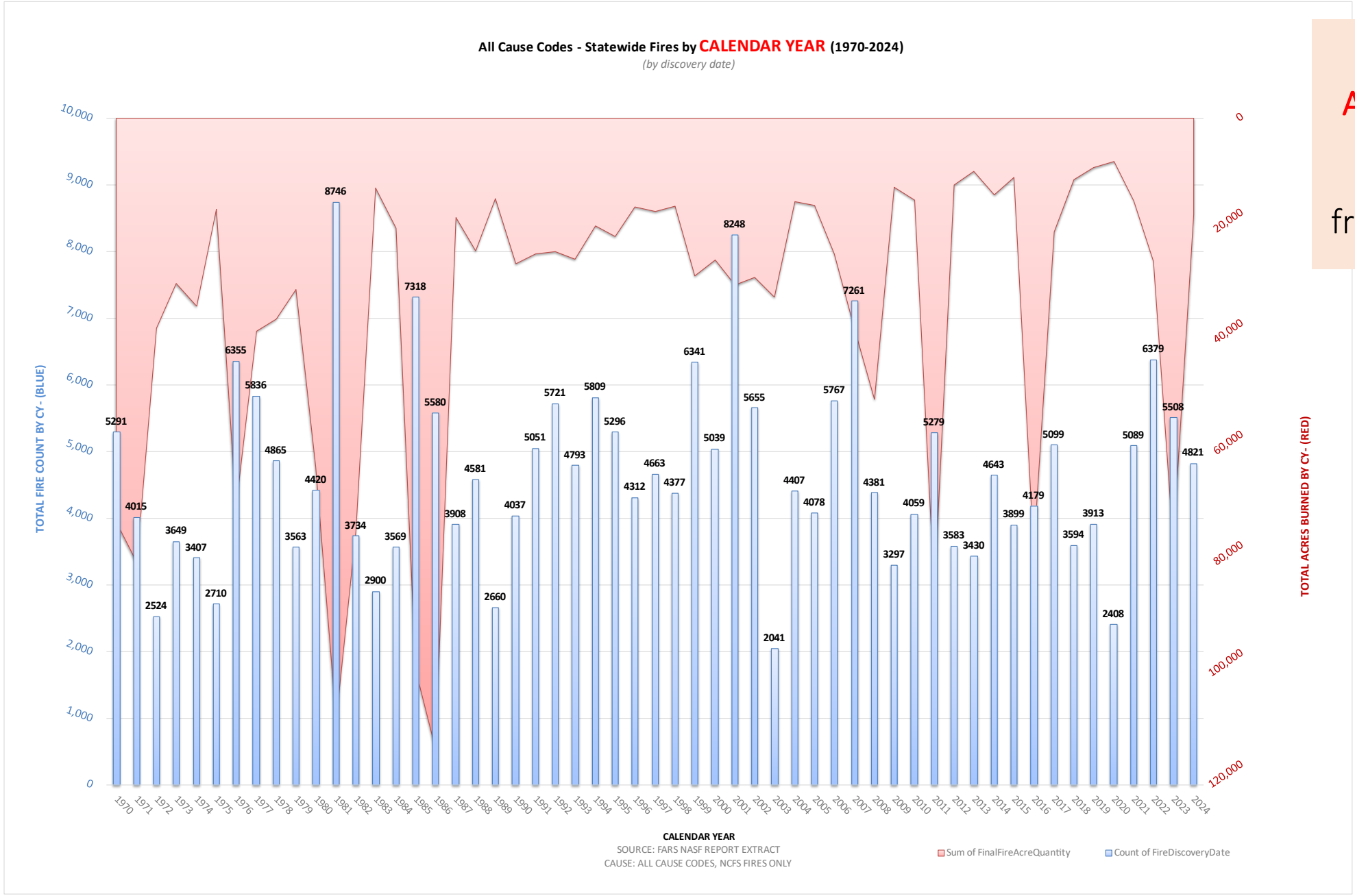


Largest incidents MTD:
from fiResponse & preliminary reporting only

Incident Name	Discovery Date	Region	District	County	Acres
3910	3/1/2025	Region 3	District 1	Polk County	619.00
Hawks Bill Drive	3/1/2025	Region 1	District 8	Brunswick County	215.00
Jeterville	3/1/2025	Region 2	District 6	Harnett County	212.52
Ramshorn	3/1/2025	Region 1	District 4	Carteret County	114.00
Bailey Drive	3/11/2025	Region 3	District 1	Mitchell County	110.00

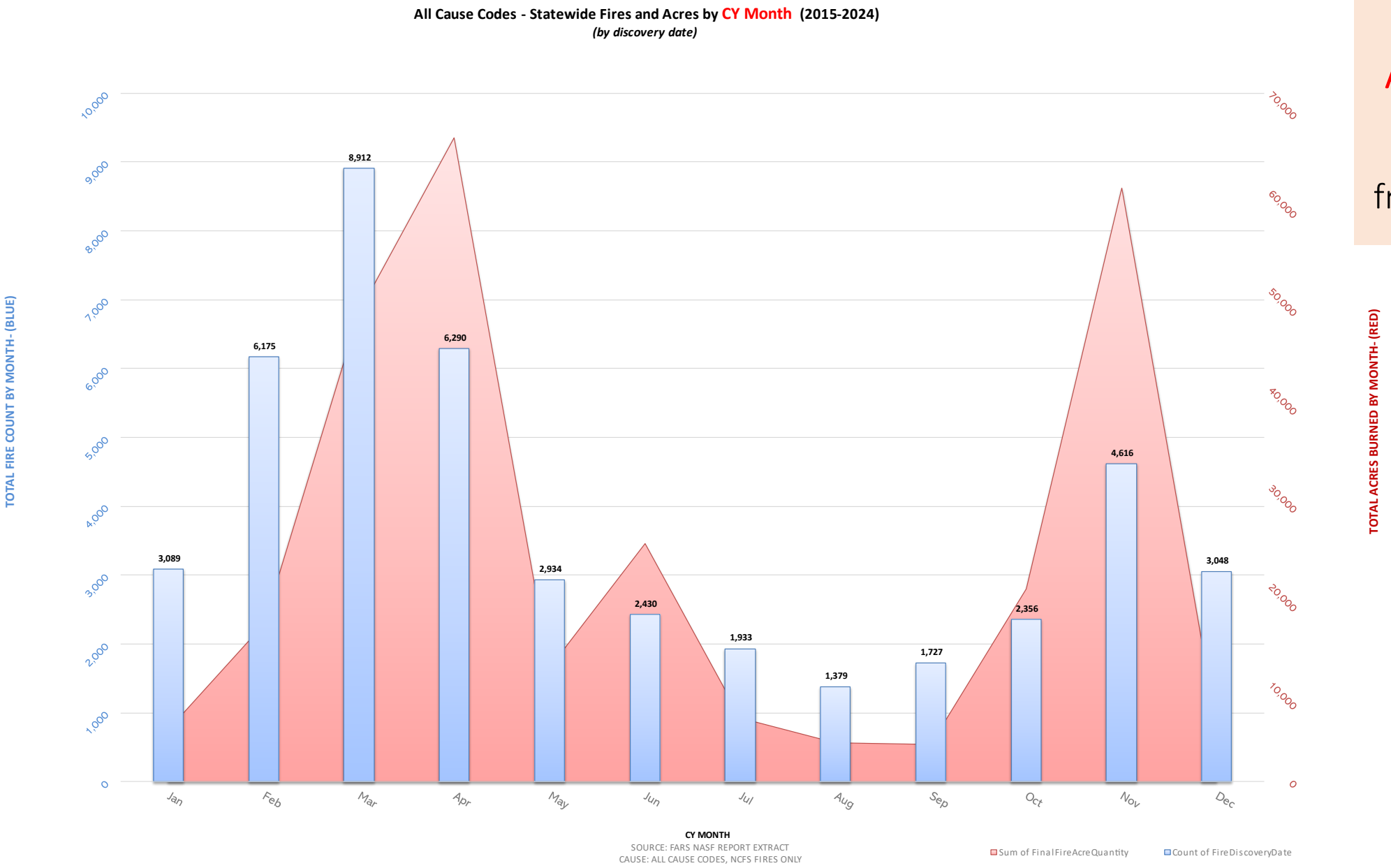
7-Day Activity
(ending 3/13)





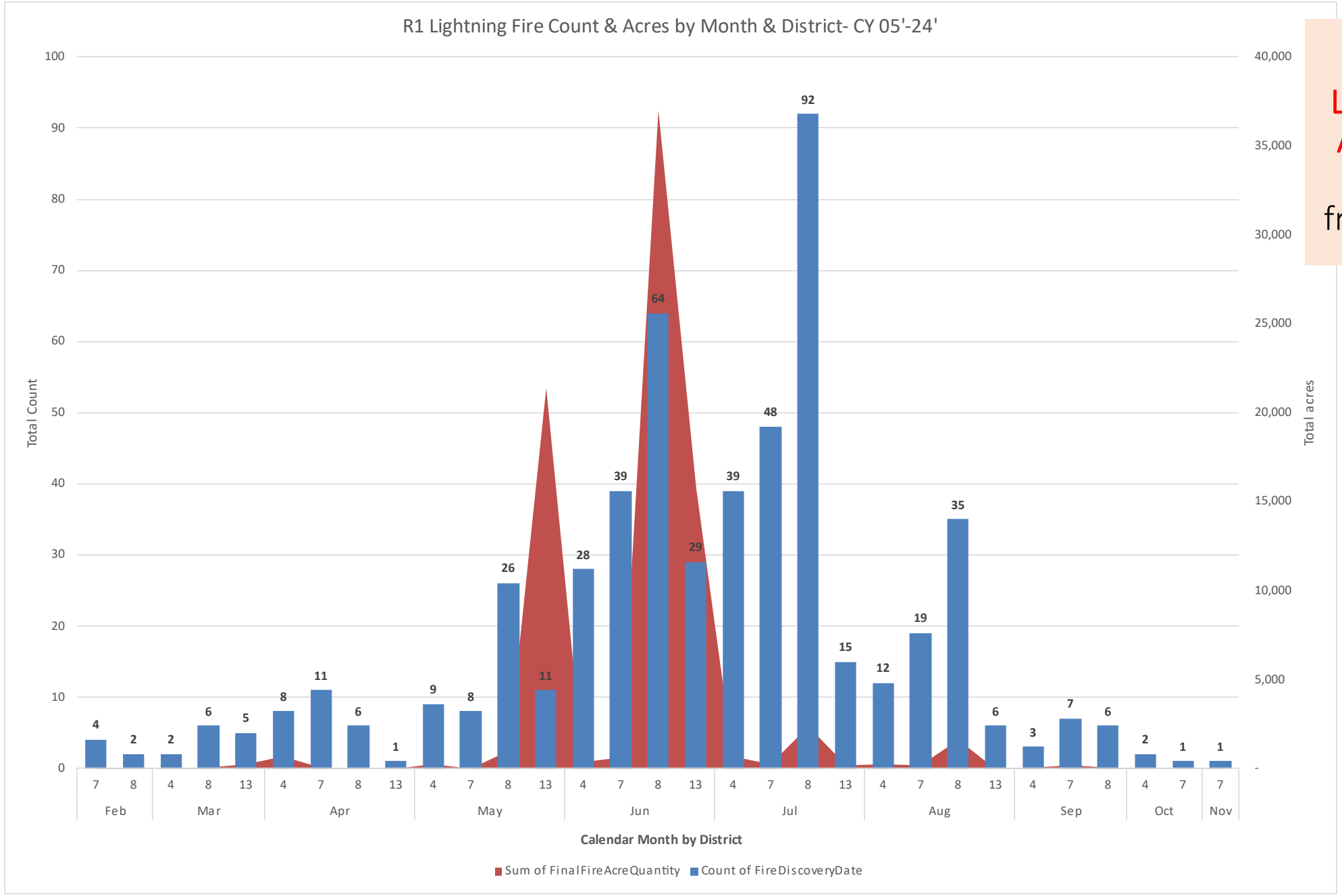
Distribution of
All Fires & Acres
By CY
Statewide
from 1970 - 2024

Cause: All Cause Codes, Statewide, NCFS Reported Fires Only



Distribution of
All Fires & Acres
By Month
Statewide
from 2015 - 2024

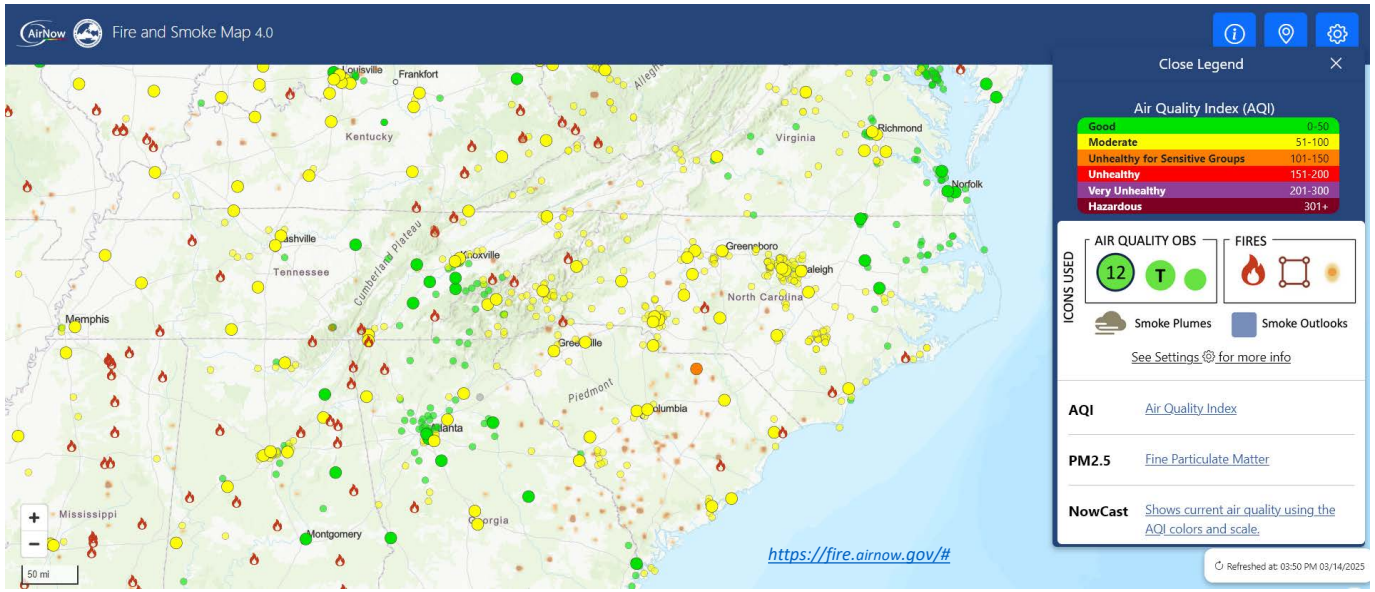
Cause: All Cause Codes, Statewide, NCFS Reported Fires Only



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

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

Air Quality Notes



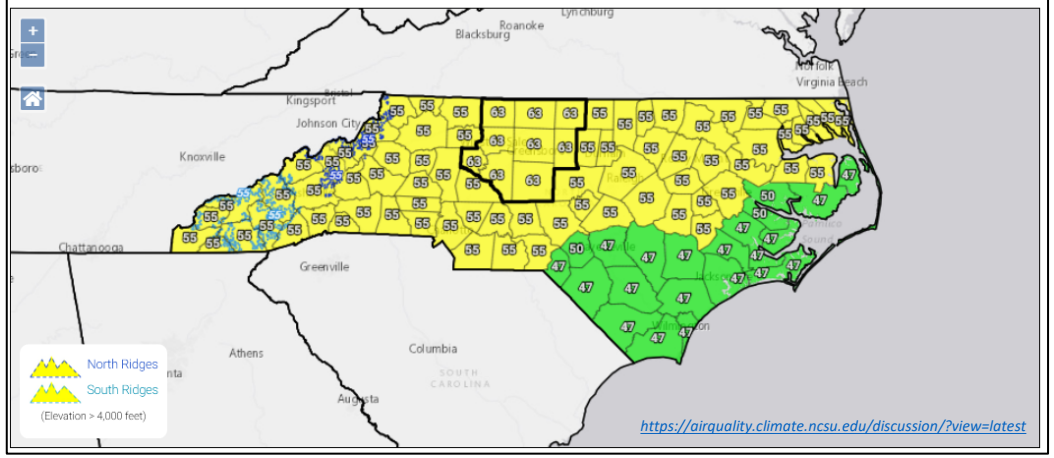
Extended Air Quality Outlook

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
Friday (Mar 14)	Max AQI · Ozone · PM2.5	43 to 71	Green to Yellow	download
Saturday (Mar 15)	**Max AQI** · Ozone · PM2.5	47 to 55	Green to Yellow	download
Sunday (Mar 16)	Max AQI · Ozone · PM2.5	43	Green	download
Monday (Mar 17)	Max AQI · Ozone · PM2.5	44 to 48	Green	download

Maximum Air Quality Index for Mar 15, 2025

0 51 101 151 201 301



This forecast was issued on **Friday, March 14, 2025** at **12:32 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Current daily average fine particulate levels remain stubbornly elevated from Raleigh southwestward. Current ozone levels are in the Code Green range across the state.

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

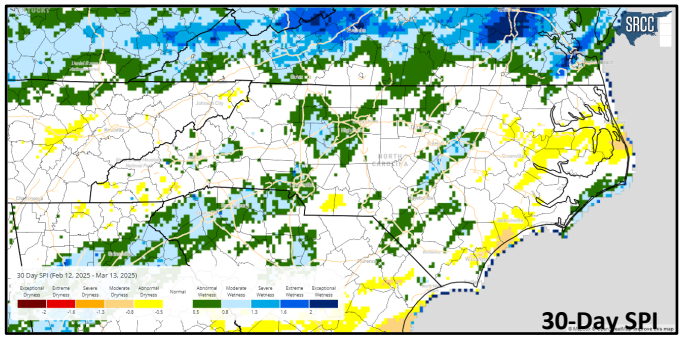
Tomorrow, a powerful upper-level low will race into the upper Midwest / western Great Lakes with an attendant surface low and trailing cold front also advancing eastward. North Carolina will remain ahead of the surface cold front on Saturday, and the main impacts on sensible weather and air quality will be strengthening southerly winds -- both aloft and at the surface -- that should significantly increase air mass dispersion. The upstream air mass condition will ultimately determine air quality levels, but given the increased mixing and moisture, it is possible air quality levels hold predominantly in the Code Green range.

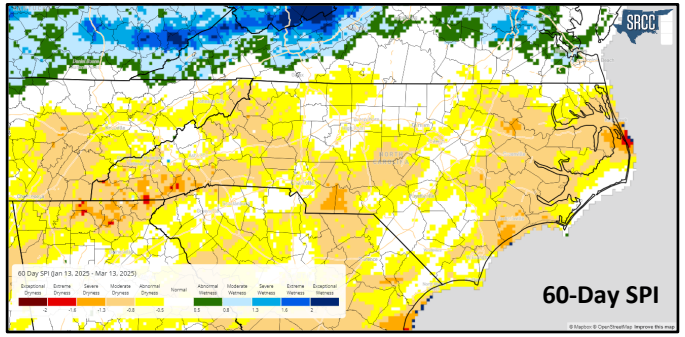
By Sunday, a line of strong storms will sweep across the state and should clean out the air shed, lowering air quality levels back into the Code Green range. Will continue to monitor and refine the forecast as the details become more clear on the nature of the incoming air mass.

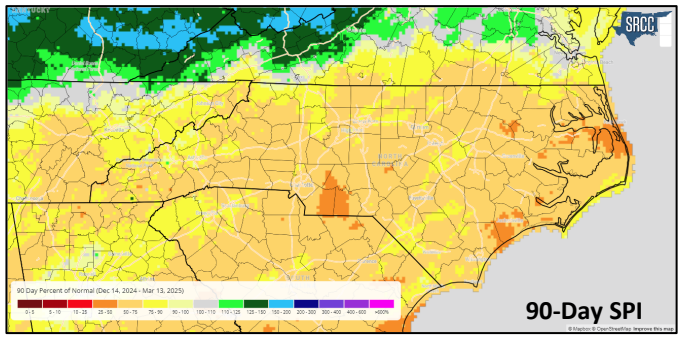
Outlook

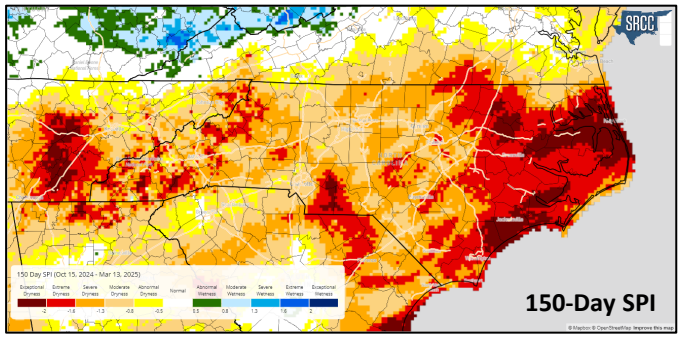
On Monday, behind the frontal passage the air mass should be relatively clean. Ozone may make a run at low Code Yellow with mostly sunny skies, but currently think max. 8-hr. averages will hold in the Code Green range, along with daily average fine particulate levels.

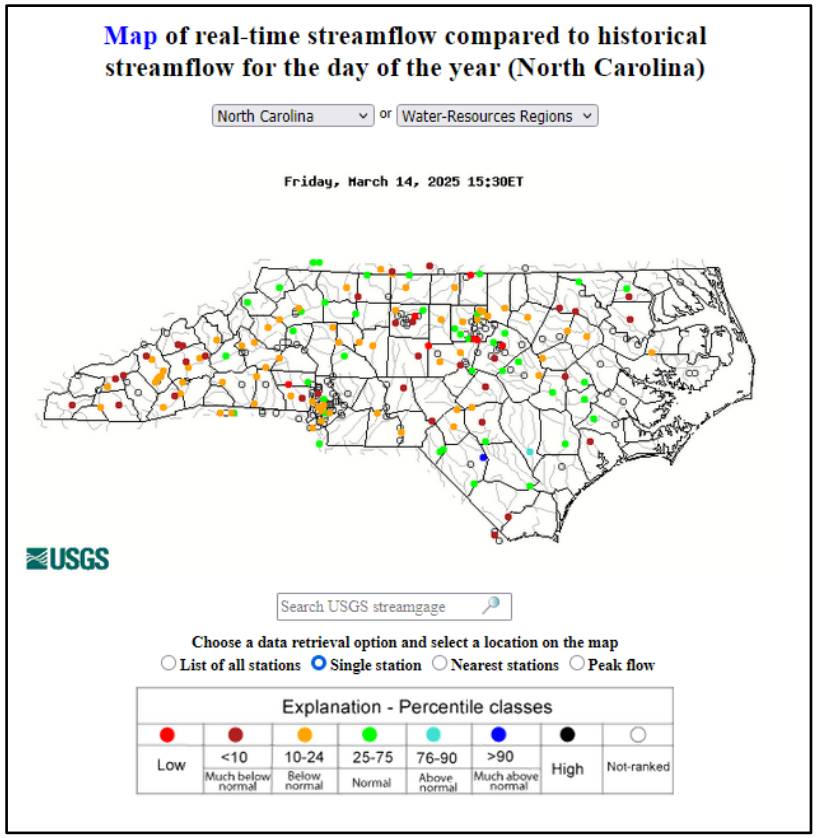
Author: *Bradley McLamb (bradley.mclamb@deq.nc.gov) · NC Division of Air Quality*





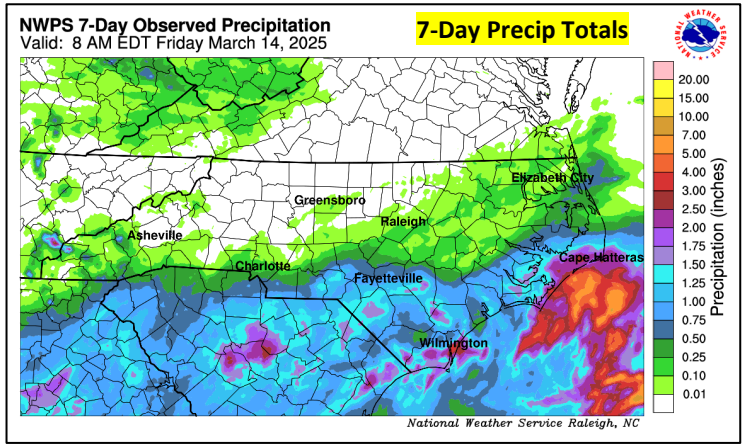


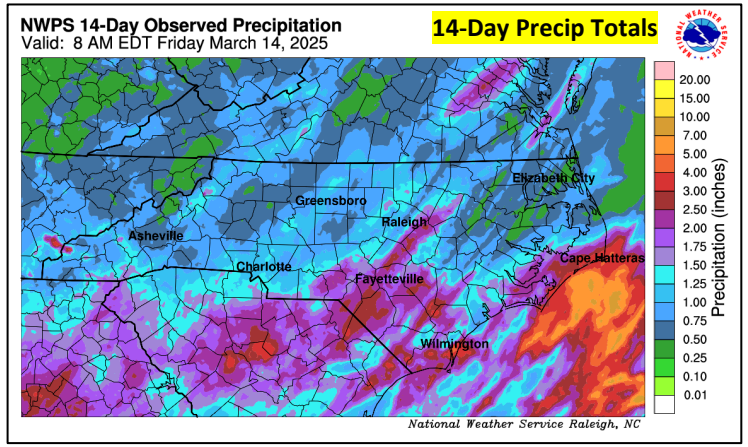


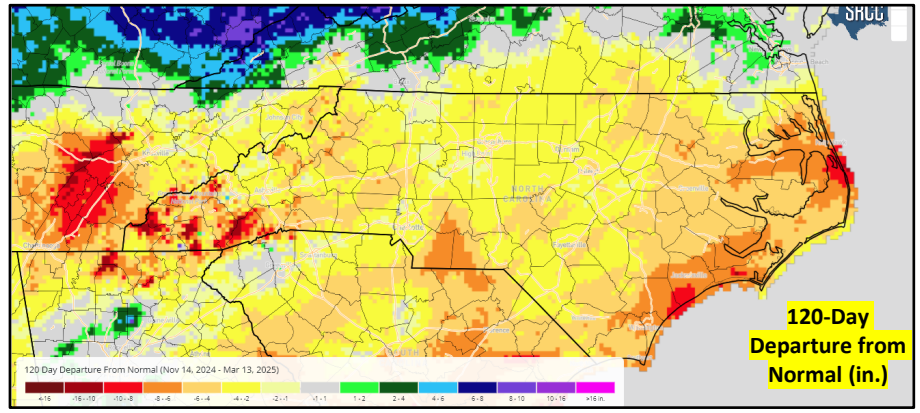


- Streamflow averages have declined again (center top). Flashy in dormant season.
- Note the 7 & 14 day observed precip graphics (top right). Minimal rainfall for much of R1's Coastal Counties.
- 120-Day Departure from Normal Precip – areas in darker orange & red represent 6-8" & 8-10" (bottom right).
- 30-Day SPI Map shows short-term decrease in near-term dryness. (top left).
- 60/90/150-Day SPI picking up on longer-term deficits (left).

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





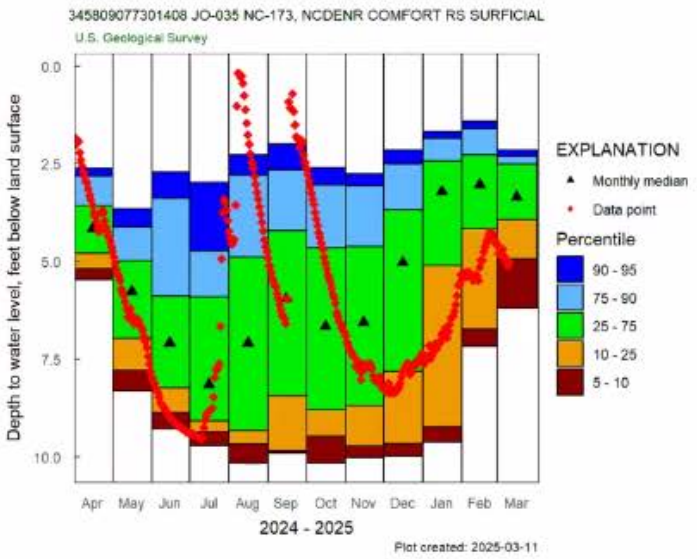


USGS Monitoring Well Analysis – Coastal Dryness

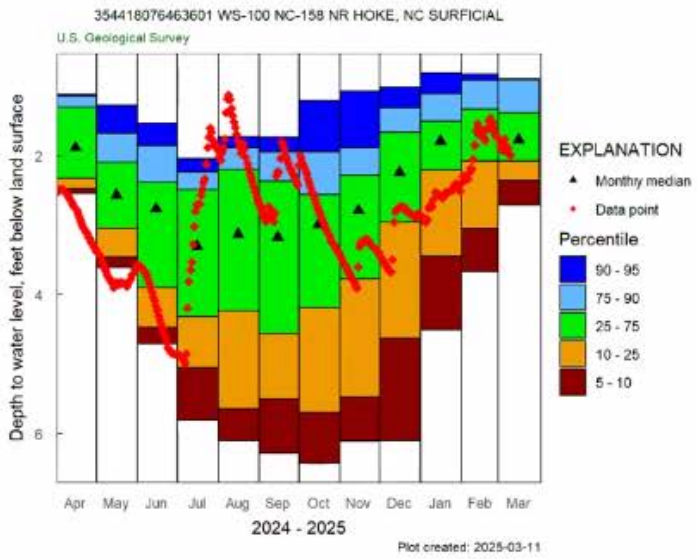
Coastal Plain

Graph of groundwater levels during the past year and monthly period of record statistics.

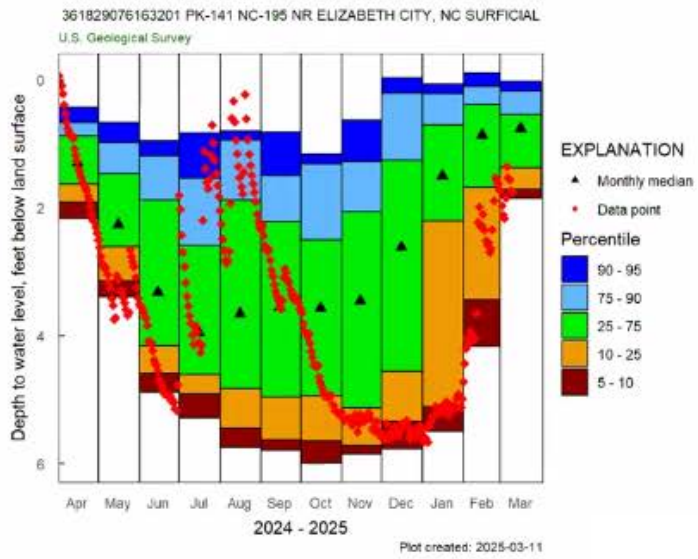
Jones Co.



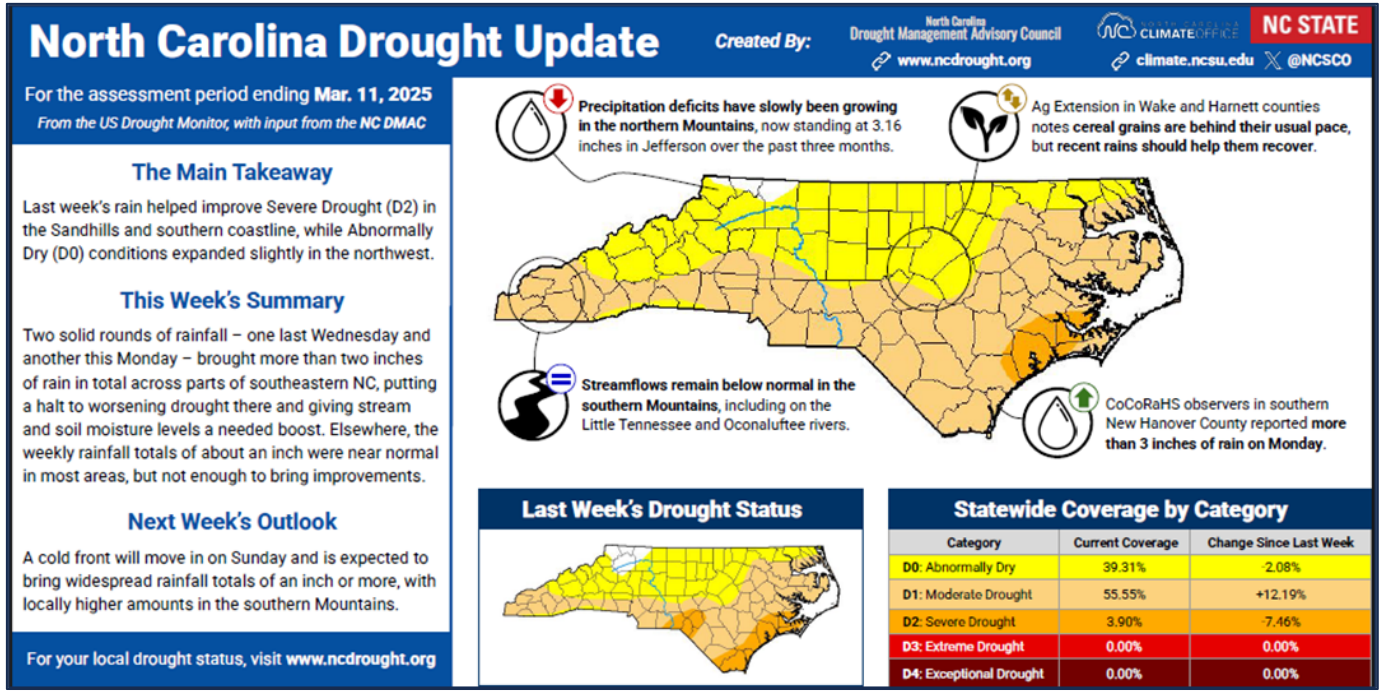
Washington Co.

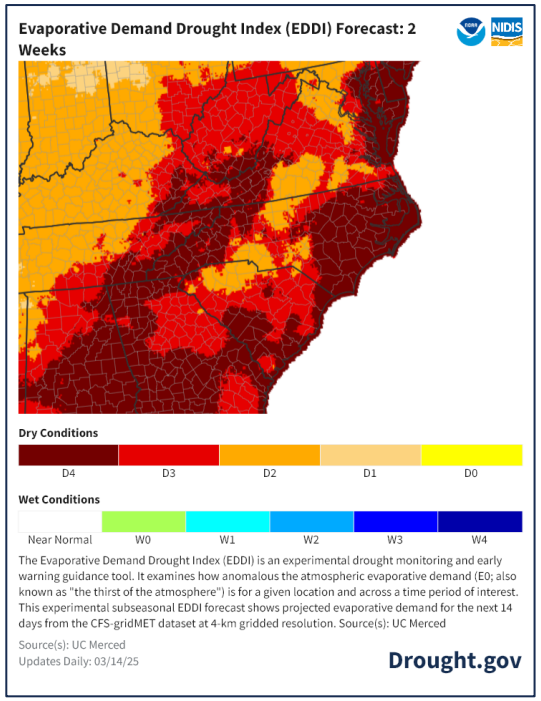


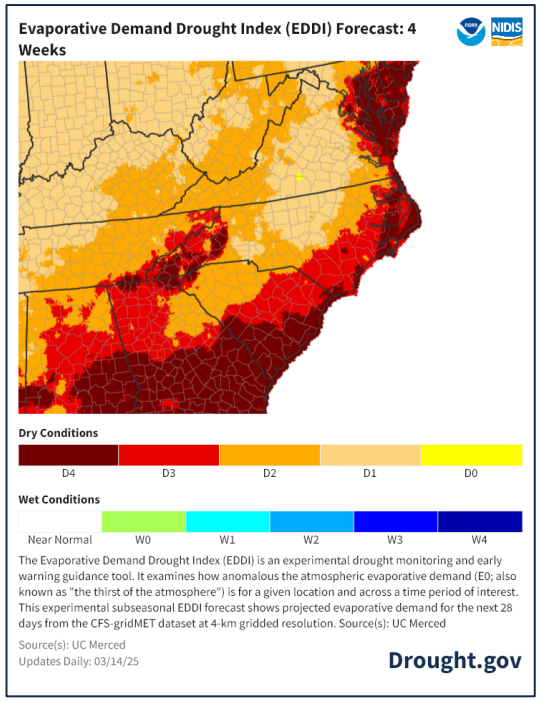
Pasquotank Co.



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





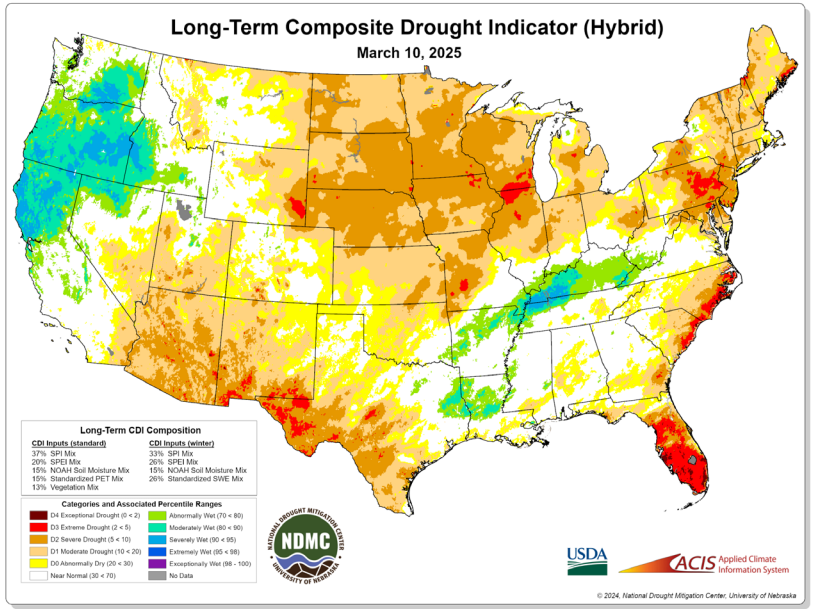


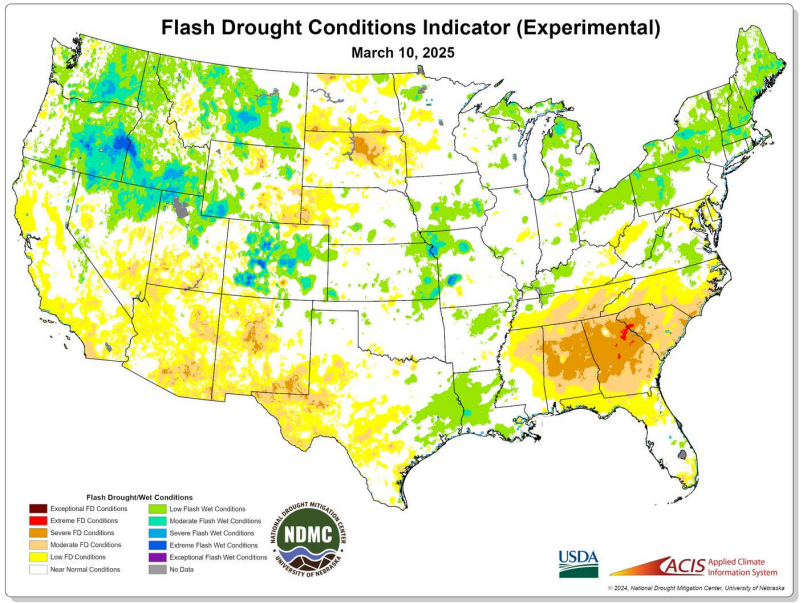
EDDI & Drought

EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week 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).

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

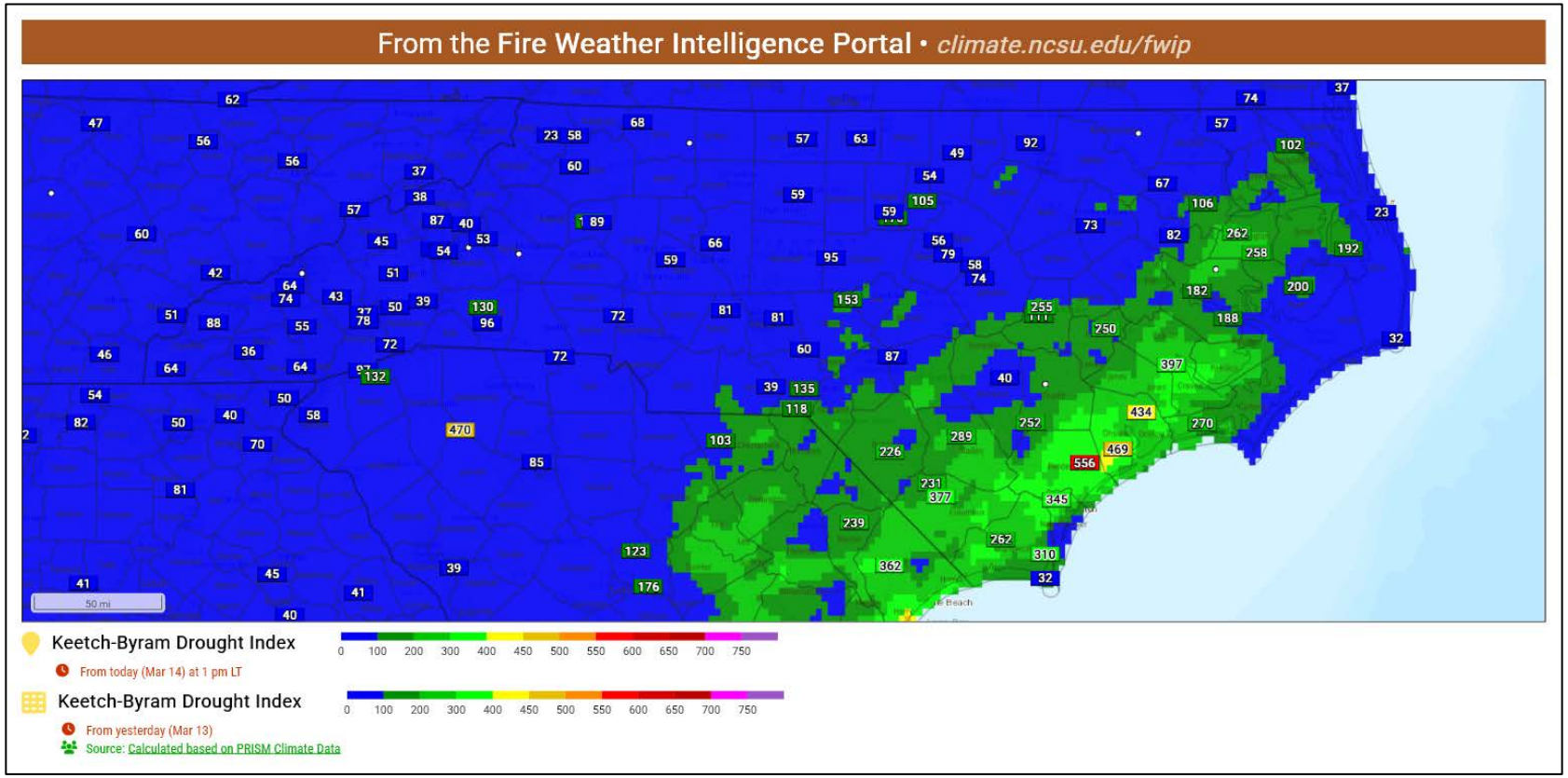
Drought Blend Maps - shown at right. These maps blend a variety of data. Please see website for further details. *https://ndmcblends.unl.edu/Metadata.aspx*

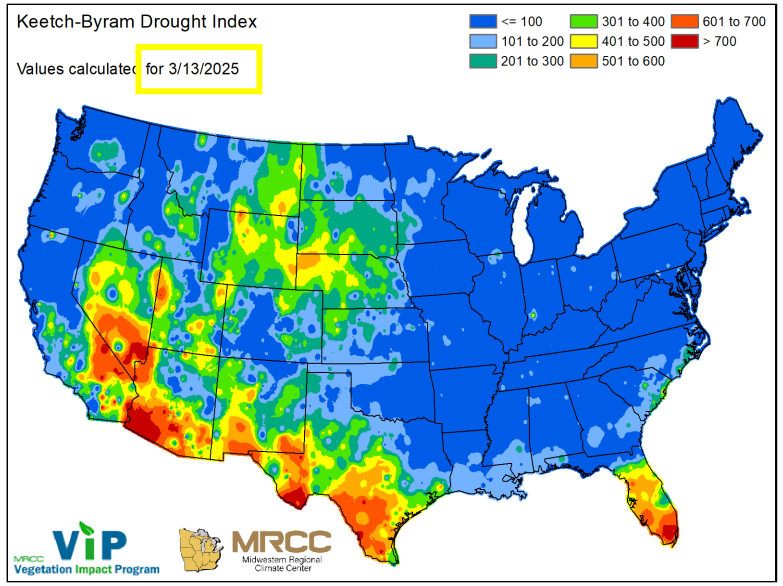




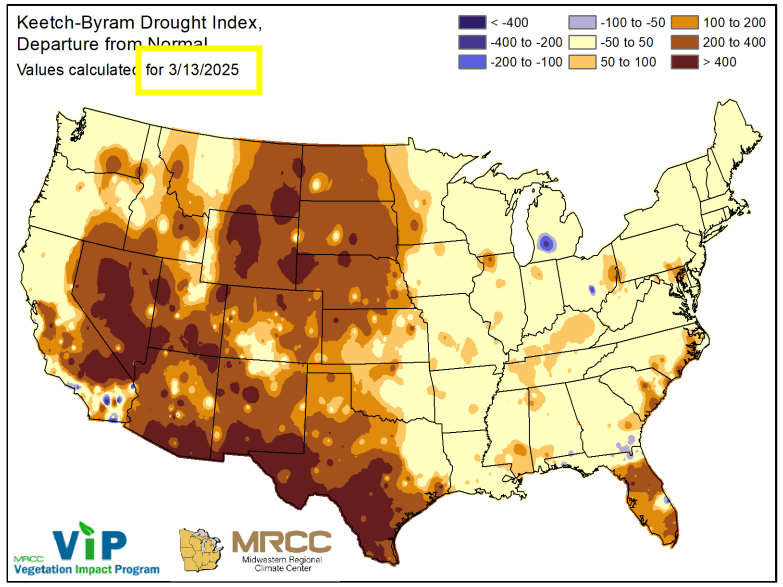
https://ndmcblends.unl.edu/

KBDI - Station Points *FWIP (Point calculation from WIMS @ 1300 on 3/14/25)*



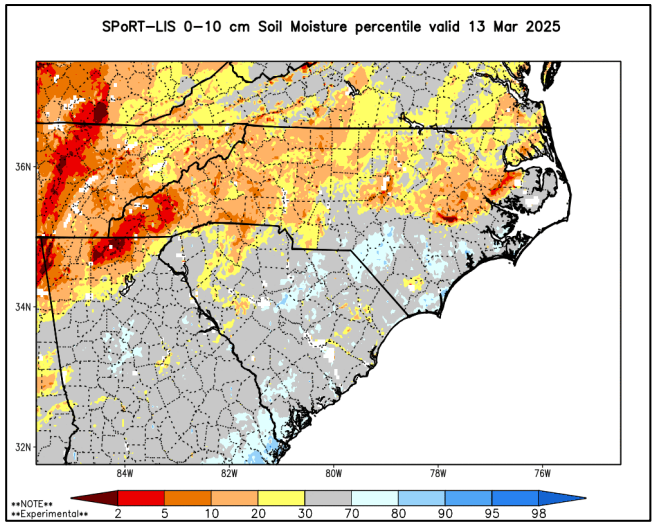


Product below is created by the Midwestern Regional Climate Center. See FAQ.

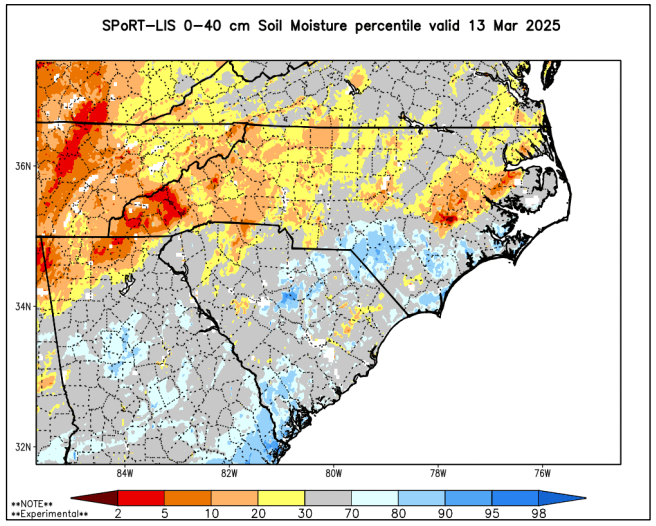


SPoRT Modeled Relative Soil Moisture

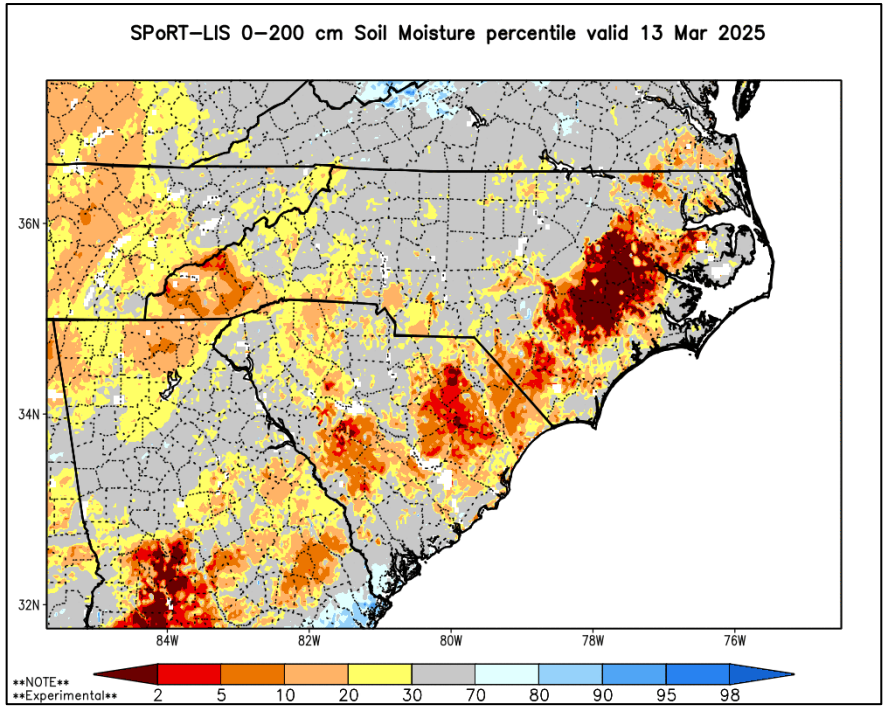
0-10 cm Depth



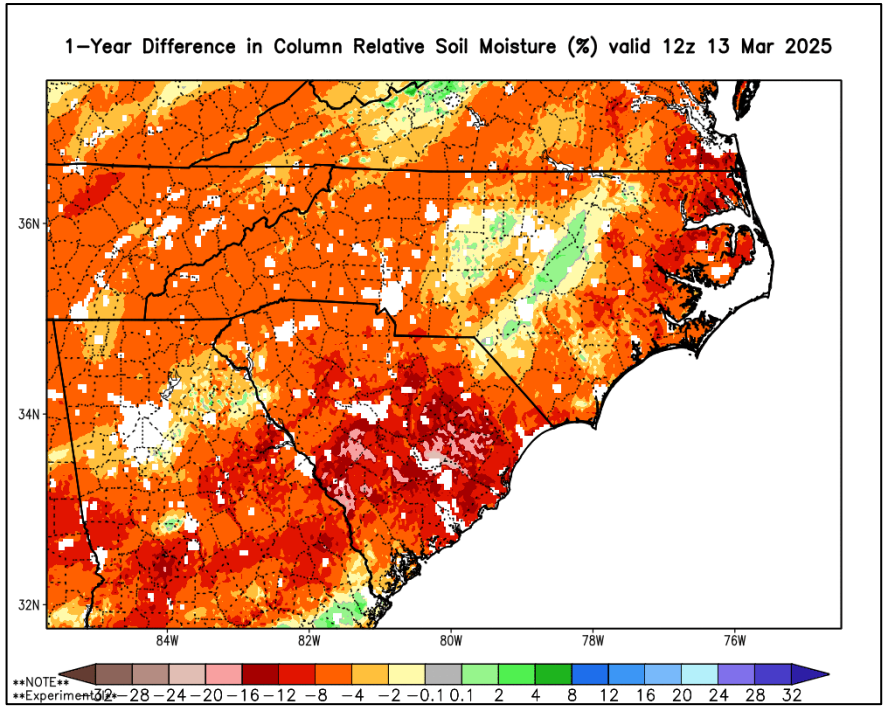
0-40 cm Depth



0-200 cm Depth



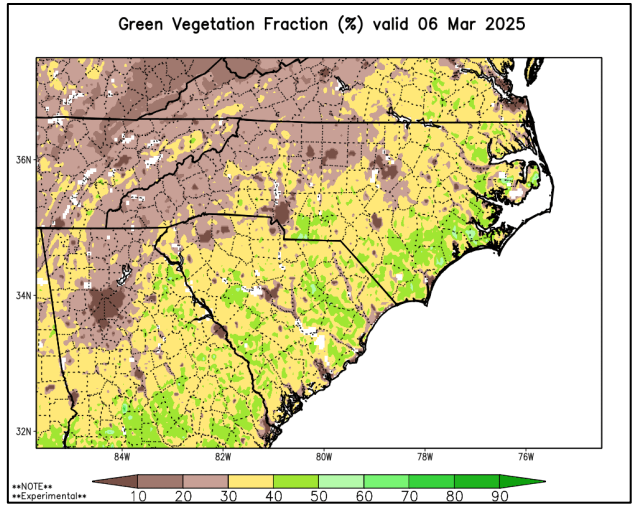
1-Yr Difference



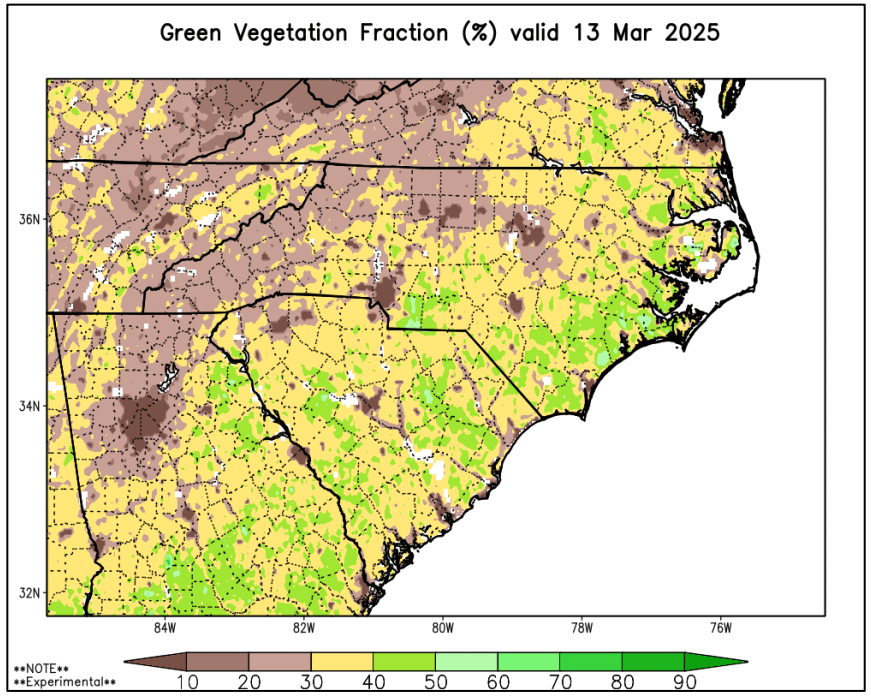
Source: https://weather.msfc.nasa.gov/sport/case_studies/lis_NC.html

Green Fraction & Green-Up Anomaly

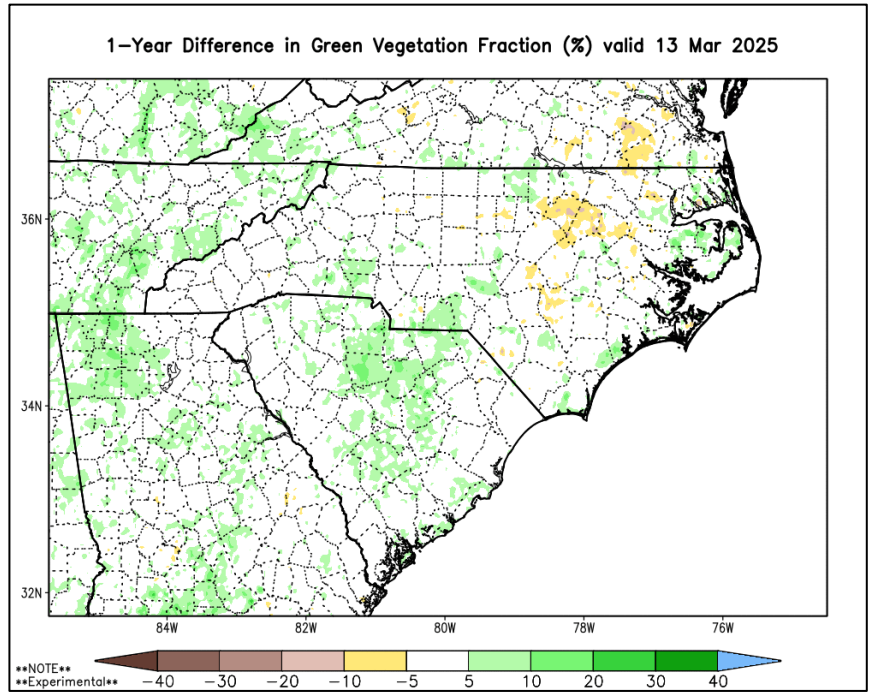
Last Week



Current



1 Year Change



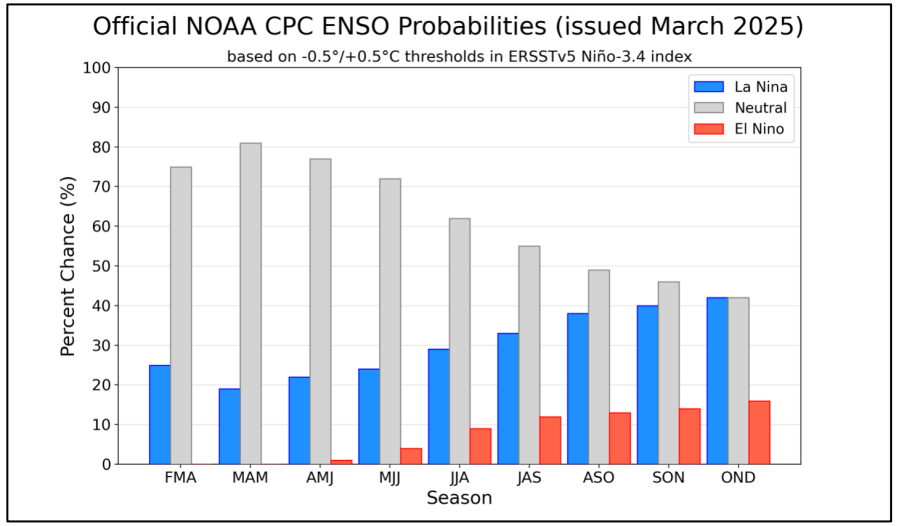
Link: https://weather.ndc.nasa.gov/sport/case_studies/lis_NC.html

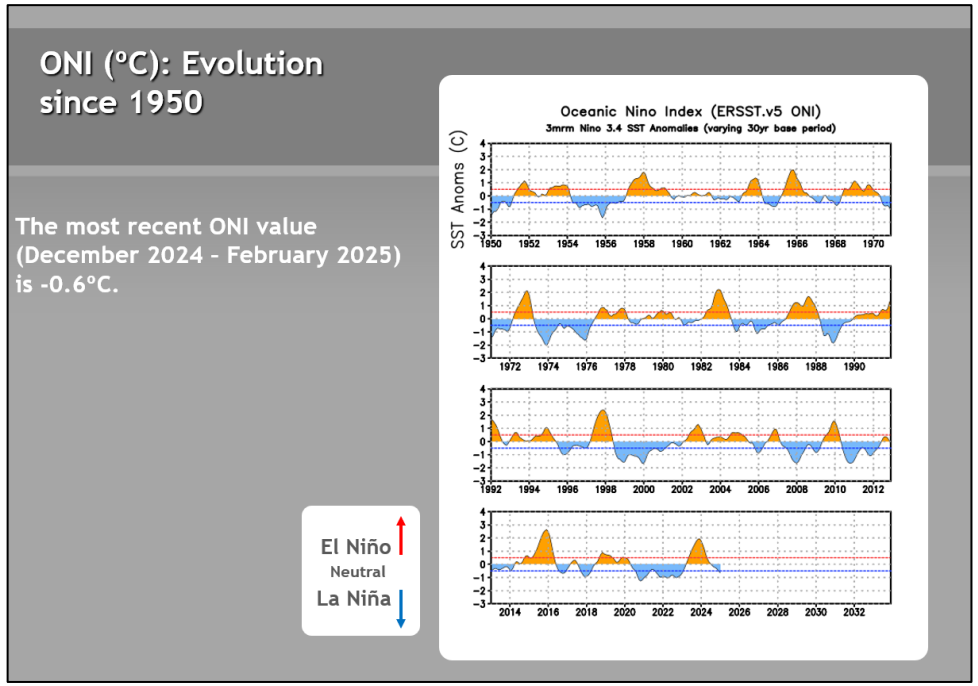
ENSO Notes from the CPC (3/13/25 Update)

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

ENSO-neutral is favored to develop in the next month and persist through the Northern Hemisphere summer (62% chance in June-August 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° C (line shown in green) for 3 consecutive months. For El Nino, the departure must be at least 0.5° C above average for 3 consecutive months.





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

The IRI and North American multi-model ensemble predicts a transition to ENSO-neutral in the coming season [Fig. 6]. The forecast team concurs and predicts ENSO-neutral, with chances greater than 50% through July-September 2025. As is typical for forecasts made in the spring, there is large forecast uncertainty at longer time horizons, with no outcome exceeding a 50% chance (chances of El Niño are the lowest). In summary, ENSO-neutral is favored to develop in the next month and persist through the Northern Hemisphere summer (62% chance in June-August 2025; [Fig. 7]).

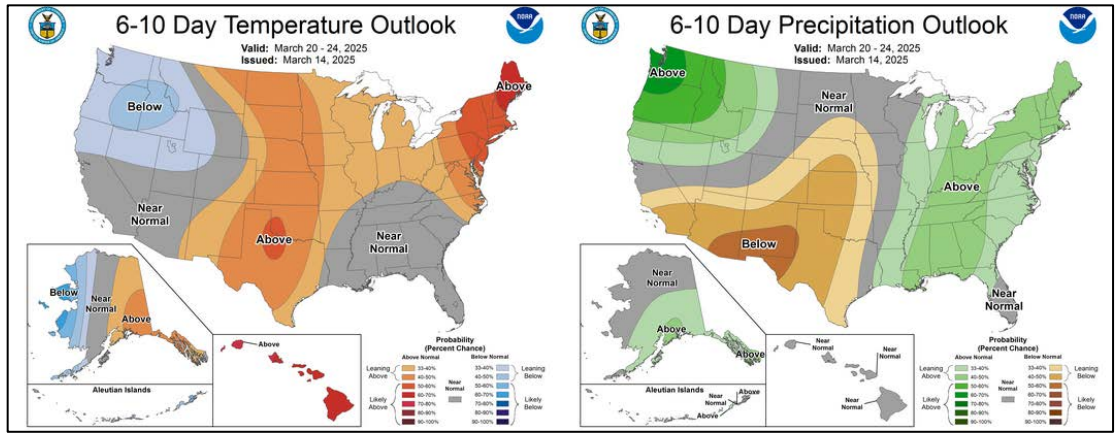
See this link for further discussion: https://www.climate.gov/news-features/blogs/enso/march-2025-enso-update-neutral-conditions-expected-soon

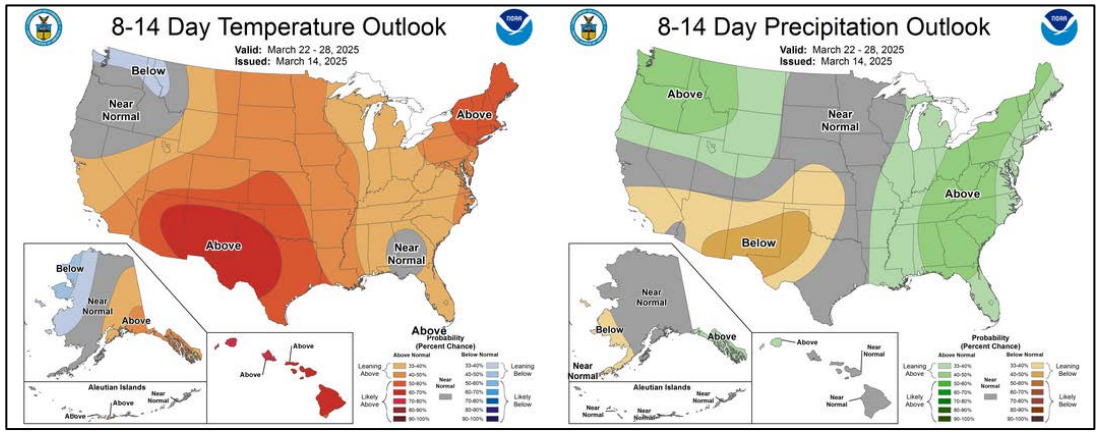
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

CPC Temp & Precip Outlook

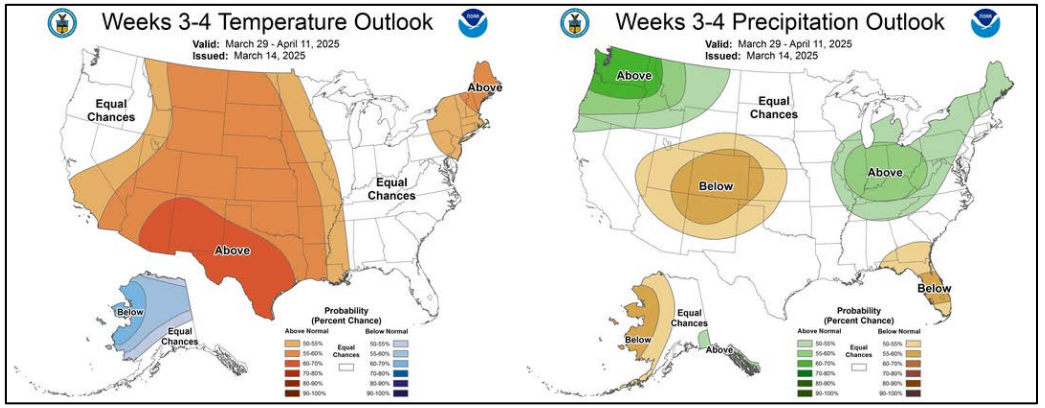
6-10 Day, 8-14 Day, Weeks 3-4, Monthly, 3-Month Seasonal

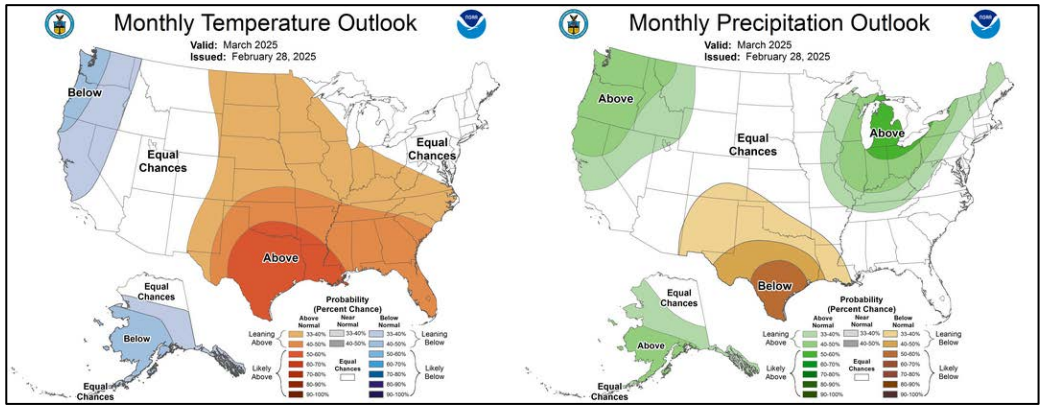
Source: https://www.cpc.ncep.noaa.gov/

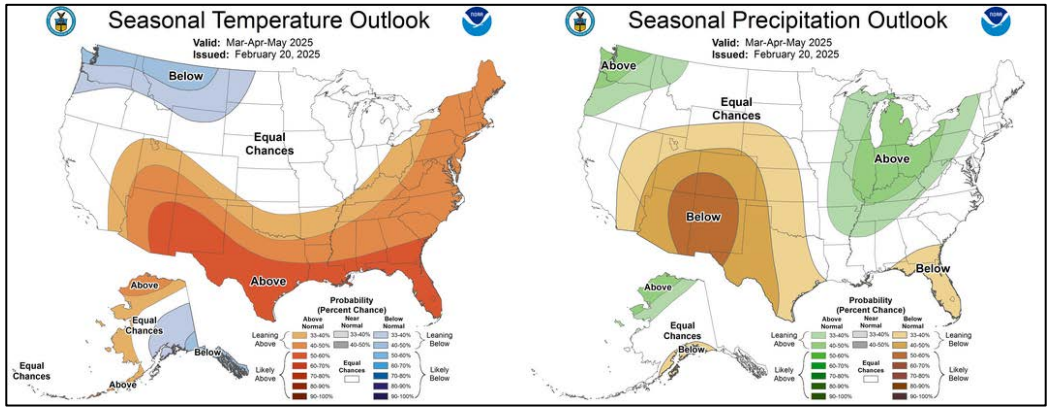




A lot of variability ahead. Leaning "above" for precip potential is not a certainty in amount or extent. The focus of rainfall continues to be the west and north of the state.



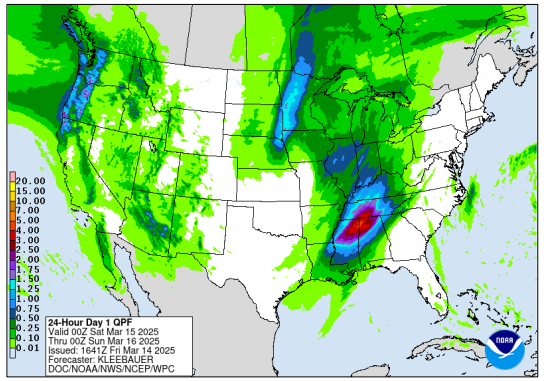




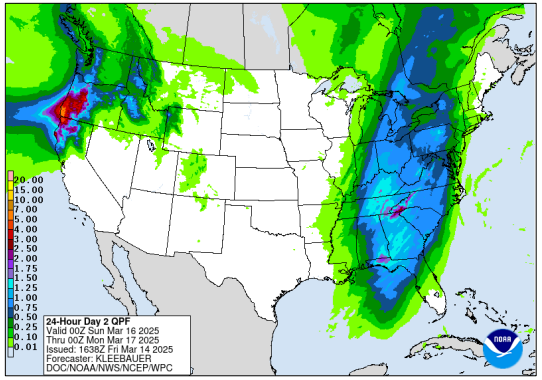
Quantitative Precipitation Forecast, 7-Day

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

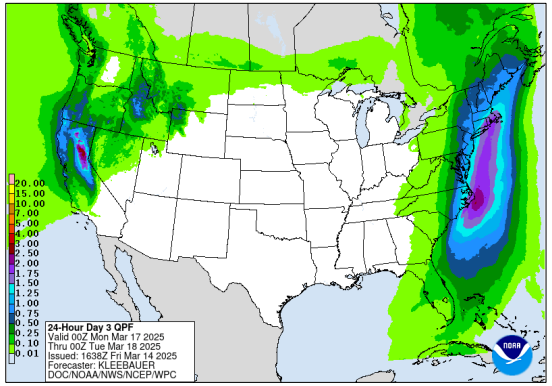
Day – 1



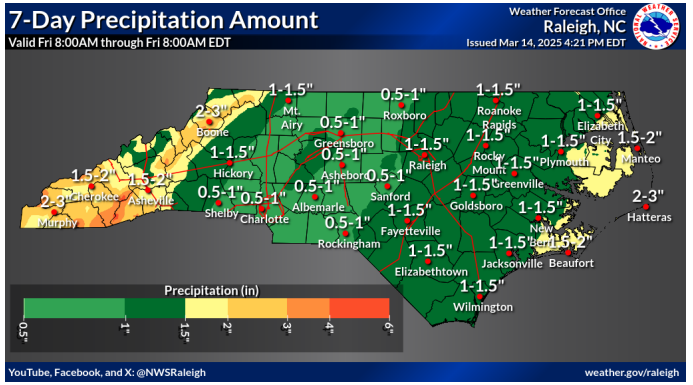
Day - 2



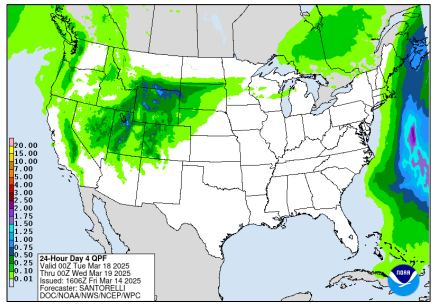
Day - 3



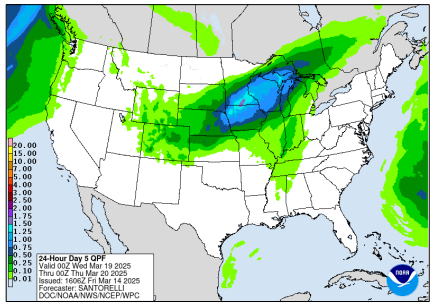
Zoom: 7-Day Potential



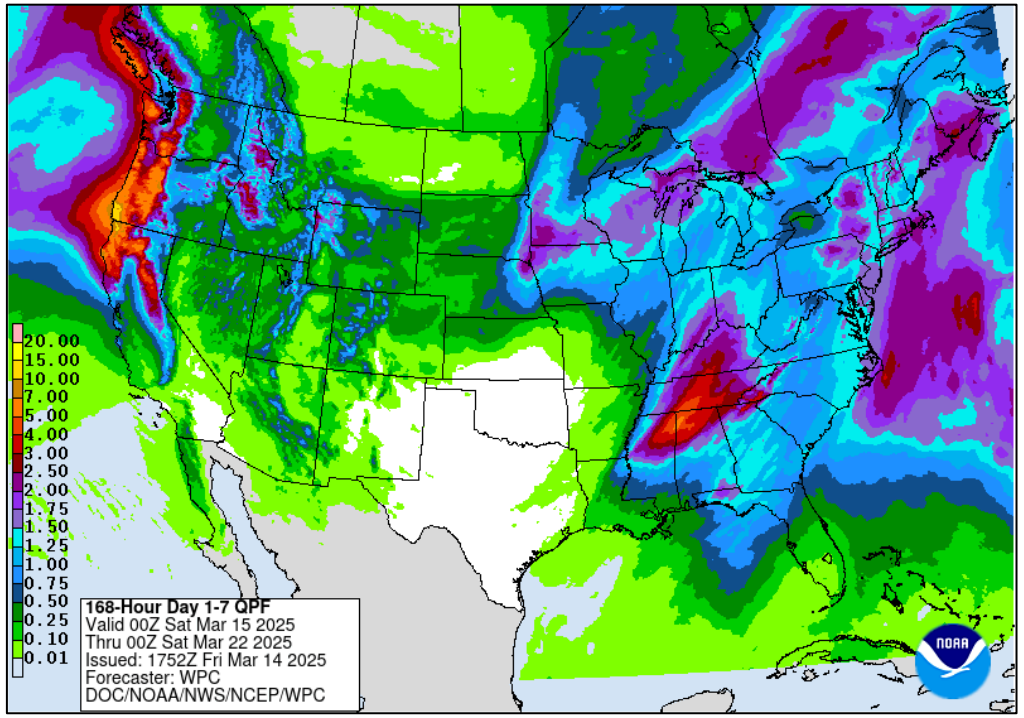
Day - 4



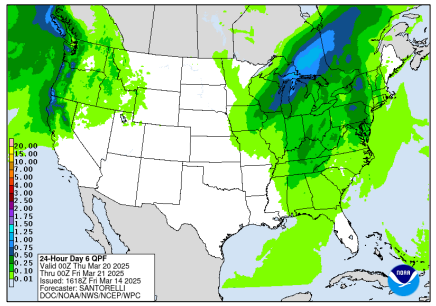
Day - 5



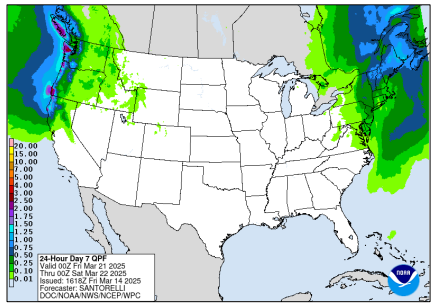
Days 1 – 7 QPF



Day - 6



Day - 7

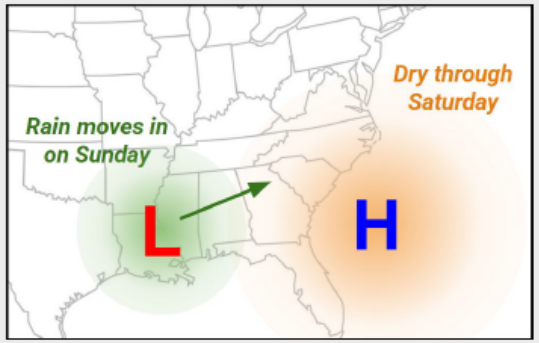


State Climate Office: Short-Range Monthly Outlook for NC

Released 3/6/25 & Location:
https://climate.ncsu.edu/fire/outlooks/

Short-Range Outlook for North Carolina

Week 1: March 6 to 12, 2025



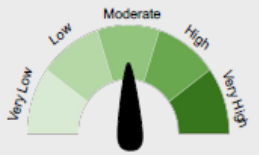
Windy, then Warmer

After Wednesday's cold frontal passage, we'll see cooler highs in the 50s on Thursday and gusty winds that could whip up any still-burning wildfires. Winds should slacken by Friday, and high temperatures will warm back into the 60s or 70s by early next week.

A Rainy Sunday

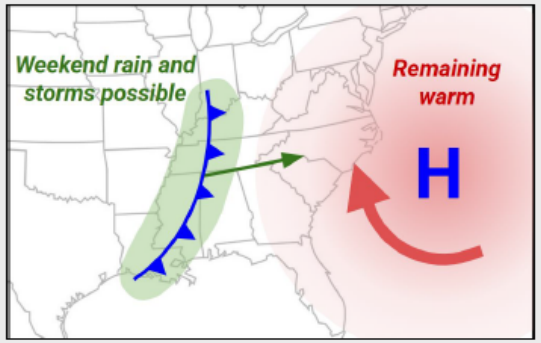
High pressure over the Southeast will keep us dry to begin this week, with rain chances returning by early Sunday morning as a low-pressure system skirts to our south. Current forecasts show light rainfall totals of a tenth of an inch to half an inch from that event.

Forecast Confidence



Recent model runs have disagreed about the track of the weekend storm system, which could bring less rain if it stays farther south.

Week 2: March 13 to 19, 2025



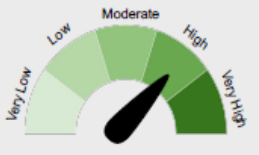
Warmth Continues Mid-Month

High pressure off our east coast should make for overall warm weather this week, along with higher humidity due to the southwesterly wind flow off the Atlantic. A weekend cold front could bring a brief cooldown, but temperatures should rebound quickly.

Showers and Storms Arrive

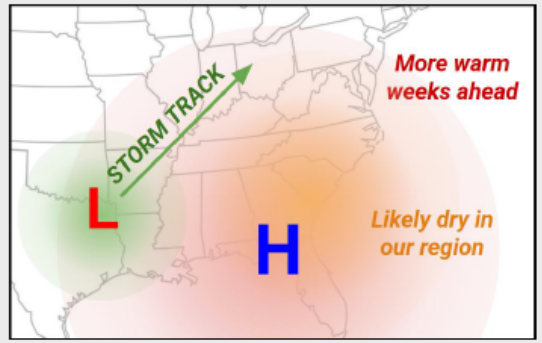
The best chance of widespread rain and possibly strong thunderstorms should come next weekend as a cold front moves in from the west. More rain is possible at other times this week, but based on current guidance, it may be light or more localized.

Forecast Confidence



Models are in strong agreement about the warm pattern plus the potential for severe storms in parts of the eastern US this week.

Weeks 3-4: Mar. 20 to Apr. 2, 2025



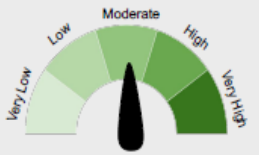
A Warm End to March

High pressure building over the Southeast should keep us warm through the end of March, with some forecasts showing our average temperatures running 4 to 8 degrees above normal. Our normal highs at this time of year range from the mid to upper 60s.

Dry and Favorable for Fire

With high pressure over our region, the predominant storm track is likely to shift to our north and west, keeping most rain-making systems away. The return of a drier pattern may favor more wildfire activity as we enter the typical heart of the spring fire season.

Forecast Confidence



There is good agreement about the large-scale pattern late in the month, which favors warm and dry weather for North Carolina.

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 CLIMATEOFFICE

Supported by:

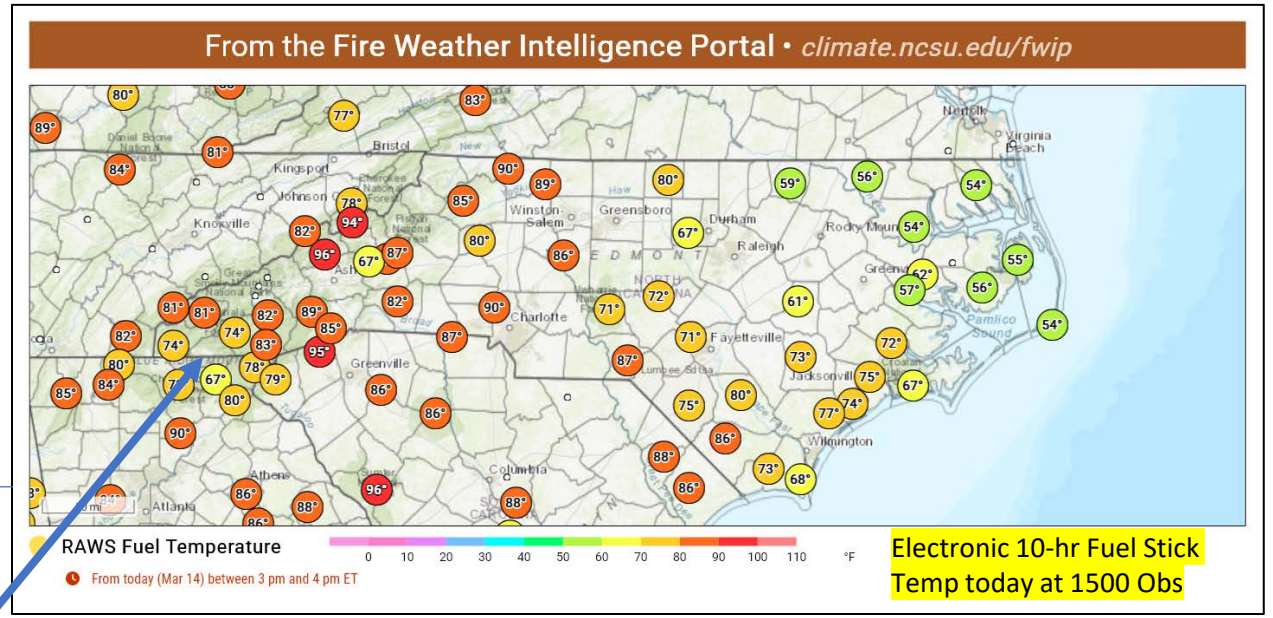
Daily WIMS Observations and NFDRS Estimates

Averaged by FDRA SIG Group
Observed: on the FWIP at: https://products.climate.ncsu.edu/fwip/nfdrs.php?data=ob&state=NC
Forecasted: on the FWIP at: https://products.climate.ncsu.edu/fwip/nfdrs.php?data=fc

- The averaged values are derived from the SIG Station Outputs for a particular FDRA
  (SIG station names shown in bold on the live link above)
- You can toggle the percentiles on/off, displaying below the actual calculated values
  percentiles are based on SIG station averages from analysis of "All Days" for entire calendar year range through 2021
- Herb & Woody Fuel Moisture Estimates derived from SIG Station Averages – based on Station GSI Settings within WIMS, not live fuel moisture sampling. Actual green-up is variable across the landscape.

Note cumulative impact of longer duration dry air from this week. 100-hr fuel moistures are still extremely low for many FDRAs. 1000-hr fuels have also accelerated in drying over the past two weeks.

Distinct difference in fuel temps and general receptivity across the state today (top right).



3/14/25 Observations

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	2025-03-14	123.83 94.7%	47.67 91.2%	11.57 92.7%	68.97 95.6%	60.67	11.98 31.5%	16.97 41.9%	13.98 0.6%	21.74 76.3%	44.03	59.33	70.3°F	39.7%	SSW 6.0 mph	0.03 in.	1.0
Central Mountains	3	2025-03-14	126.27 95.9%	50.40 90.7%	10.67 90.8%	67.13 95.7%	57.67	12.55 46.9%	16.21 31.2%	14.17 0.9%	20.28 51.7%	30.00	50.00	70.0°F	37.7%	S 7.7 mph	0.00 in.	0.0
Northern Highlands	2	2025-03-14	112.30 87.8%	39.45 82.9%	8.90 86.7%	67.00 91.4%	56.00	12.86 37.9%	15.01 23.3%	14.37 1.0%	20.32 51.1%	50.00	80.00	63.0°F	51.0%	E 10.5 mph	0.00 in.	0.0
Blue Ridge Escarpment	3	2025-03-14	78.90 73.4%	40.27 78.3%	7.53 72.3%	30.80 70.6%	81.00	12.27 46.8%	13.31 15.8%	12.03 0.1%	15.02 0.8%	70.93	82.67	69.3°F	44.3%	S 4.3 mph	0.00 in.	0.0
Western Piedmont	3	2025-03-14	49.63 58.3%	30.17 61.1%	2.63 32.4%	15.20 55.5%	65.67	16.32 76.2%	20.15 74.7%	14.98 6.2%	20.43 64.0%	30.00	50.00	66.0°F	52.3%	S 3.0 mph	0.00 in.	0.0
Sandhills	3	2025-03-14	13.73 13.7%	18.57 18.6%	1.17 15.7%	2.03 13.4%	94.00	20.76 86.2%	21.67 81.1%	15.42 6.8%	19.85 64.0%	36.67	63.33	60.3°F	69.3%	ENE 3.7 mph	0.00 in.	0.0
Eastern Piedmont	4	2025-03-14	0.95 5.4%	0.35 5.7%	0.00 10.9%	0.30 4.9%	64.75	26.08 92.1%	24.38 86.8%	15.66 11.4%	20.13 62.9%	67.63	84.50	51.8°F	82.8%	SW 2.3 mph	0.00 in.	0.0
Southern Coastal	7	2025-03-14	6.94 6.6%	3.17 7.7%	0.14 9.3%	2.36 5.5%	320.57	24.16 90.7%	23.93 86.1%	18.28 30.4%	22.09 77.3%	50.00	90.00	58.6°F	77.1%	NE 3.4 mph	0.00 in.	0.0
Northern Coastal	4	2025-03-14	5.73 8.7%	2.50 10.7%	0.00 12.2%	1.65 8.1%	166.50	23.17 87.1%	24.45 85.8%	18.10 38.0%	22.20 81.5%	50.00	90.00	50.8°F	83.3%	ENE 4.3 mph	0.00 in.	0.0

BI/ERC/IC/SC Percentiles (%) (based on all days through 2021) 0 10 20 30 40 50 60 70 80 90

Fuel Moisture Percentiles (%) (based on all days through 2021) 0 10 20 30 40 50 60 70 80 90

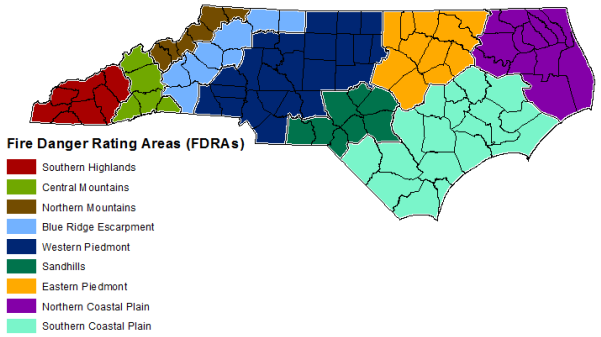
Important notes for next slide group:

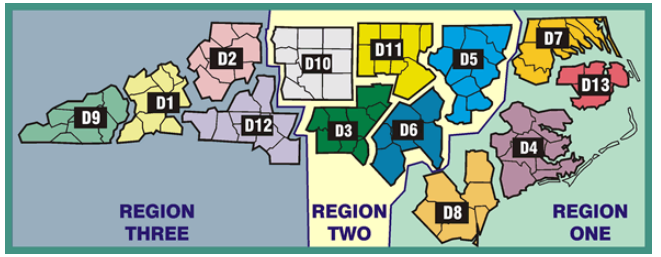
A. Current ERC, KBDI, VPD-Max, 10-Hr, 100-Hr & 1000-Hr Graphics:

- 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.

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.





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:

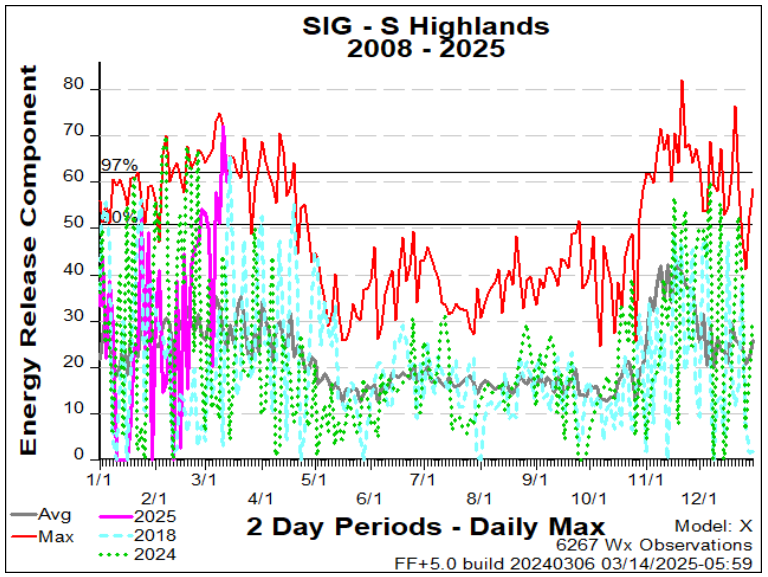
- Read the key and notes for each FDRA, included on the outlook matrix page.
- Forecasts are variable and can change significantly over a forecast cycle and across the landscape.
- This is another tool for gaining better situational awareness, and should be used for general planning purposes only.
- 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.

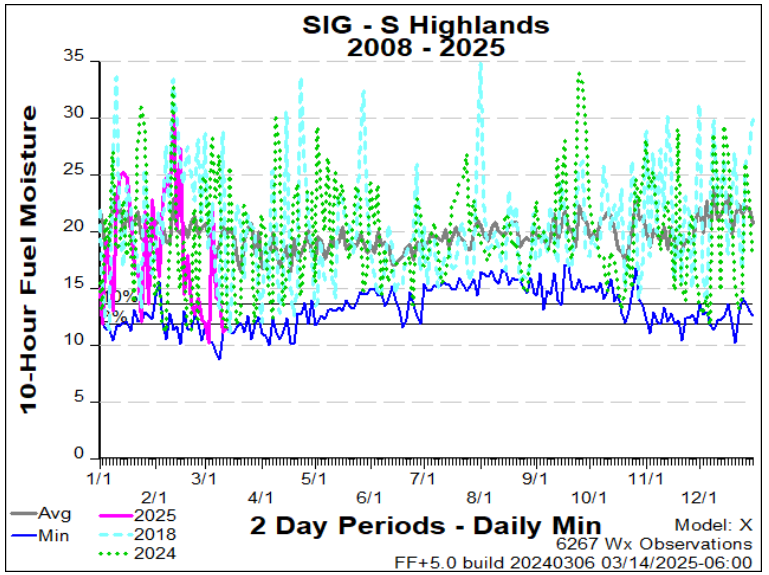
To reduce duplication & increase situational awareness, slides are organized by FDRA in this order:

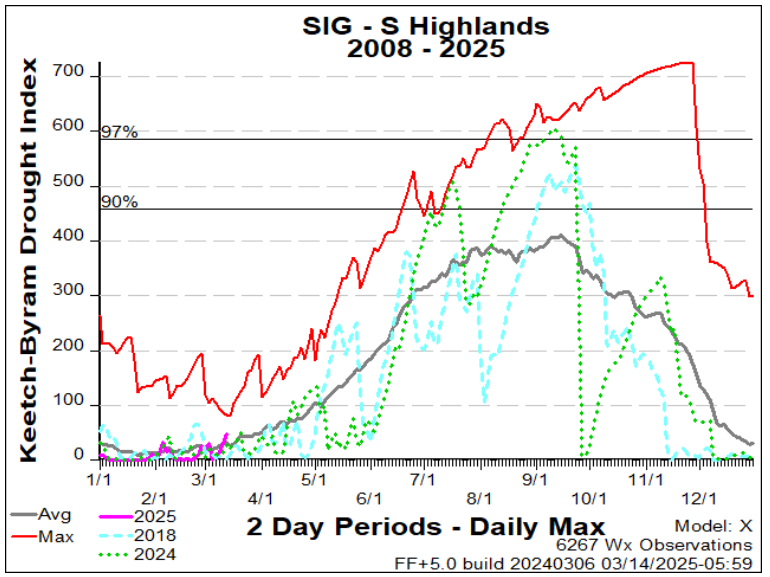
**(R3 = Region 3, R2 = Region 2, R1 = Region 1)*

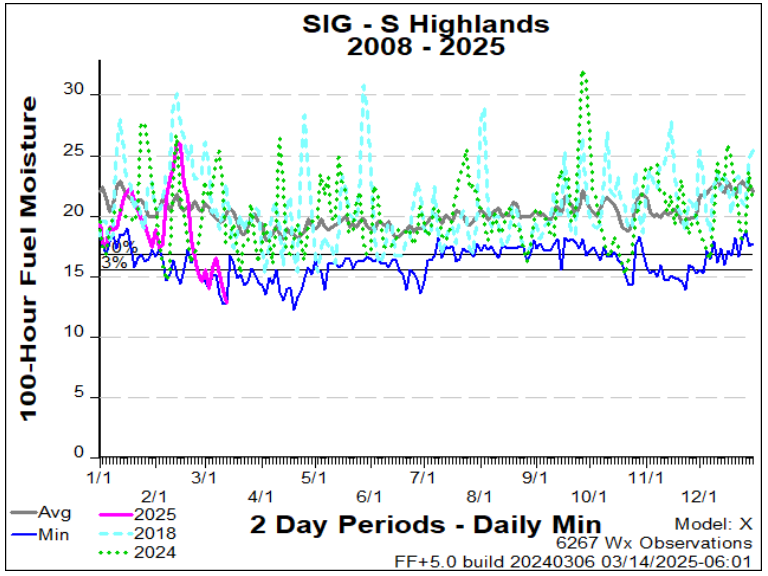
- Southern Highlands (R3)
- Central Mountains (R3)
- Northern Highlands (R3)
- Blue Ridge Escarpment (R2 & R3)
- Western Piedmont (R2 & R3)
- Eastern Piedmont (R2)
- Sandhills (R2)
- North Coast (R1)
- South Coast (R1 & R2)

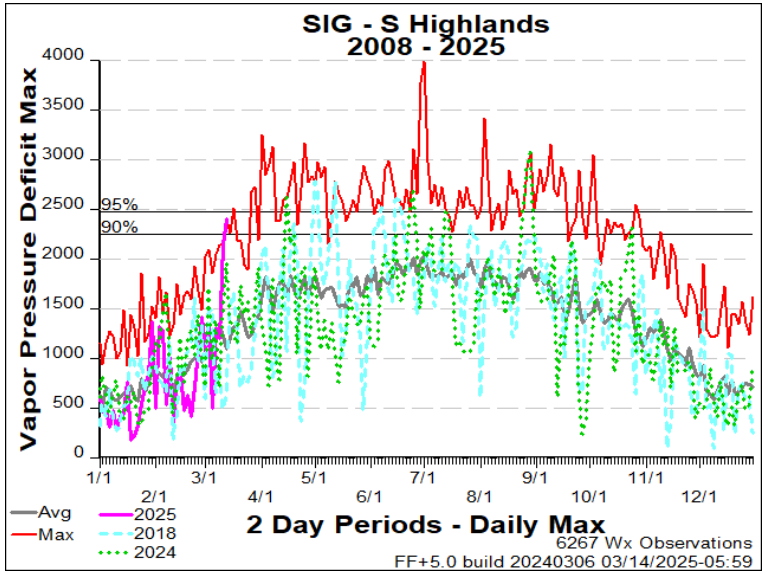
FDRA – Southern Highlands

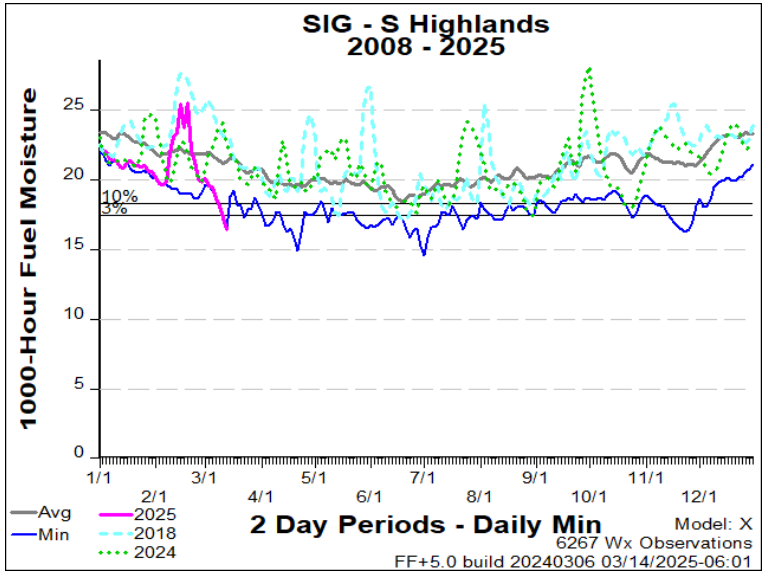






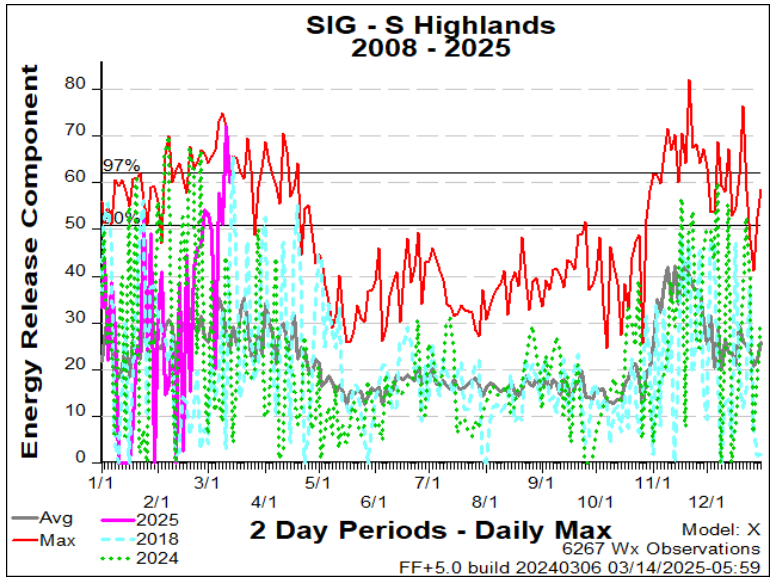




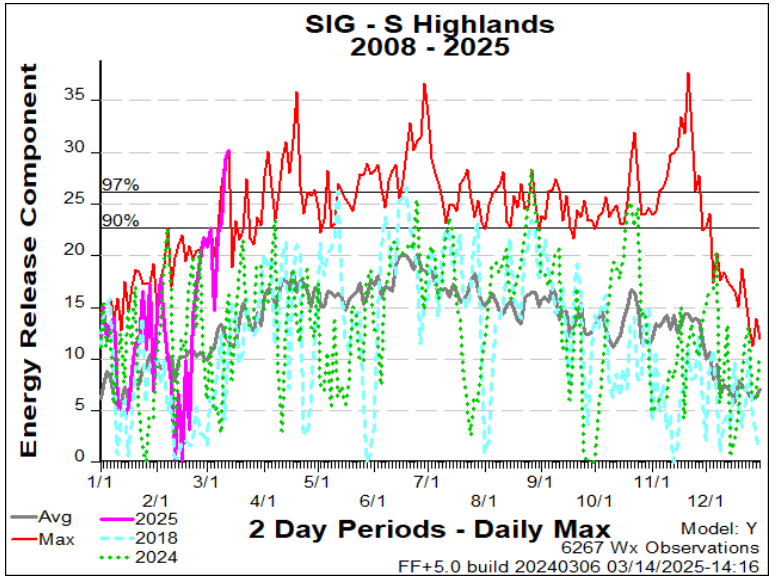


FDRA – Southern Highlands

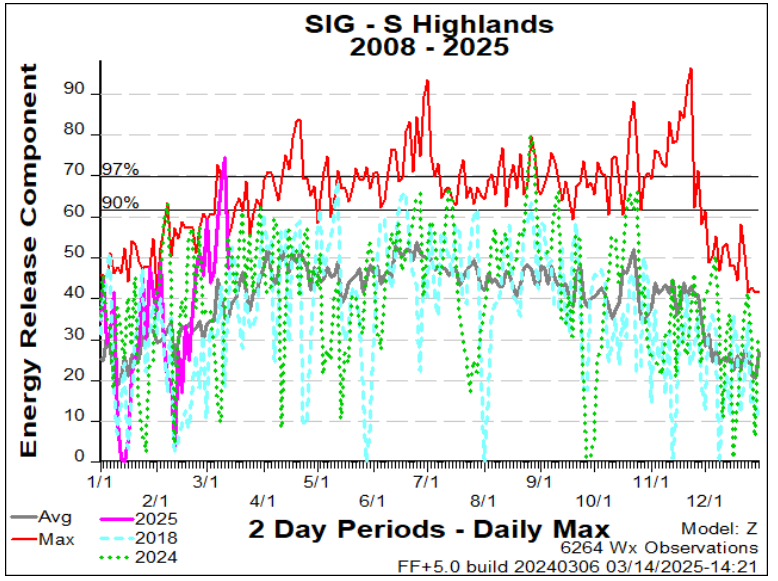
ERC-X



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

---

Average, Max, CY Year 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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	65	63	55	66	68	53	
Avg. Min. Humidity (%)	63	46	29	26	29	41	
Avg. 20' Wind Speed (mph)	12	14	8	3	5	11	
Avg. Wind Direction*	SSE	SSW	NW	SW	SSW	W	
Avg. Probability of Precip. (%)	98	79	4	1	42	37	
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model X)	24.8	19.8	34.4	48.8	50.3	37.1	46.2
Forecast BI (Fuel Model X)	89.2	73.4	96.9	97.3	123.5	124.7	113.9
Forecast IC (Fuel Model X)	5.5	5.0	7.4	11.6	15.9	9.8	10.7
Forecast 100-Hr. FMC	14.4	18.1	19.7	19.3	17.9	17.0	16.8
Forecast 1000-Hr. FMC	21.4	21.9	21.5	21.2	21.1	21.0	21.0
KBDI	60.7						

Note that Highlands RAWS is in process of being repaired. It has been removed from the SIG Group on the FWIP until repaired.

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

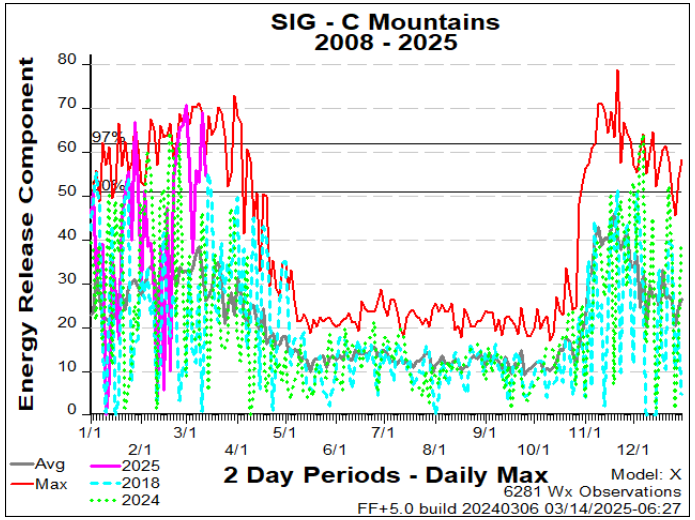
Values in the table above are averages from 3 stations in this FDRA:

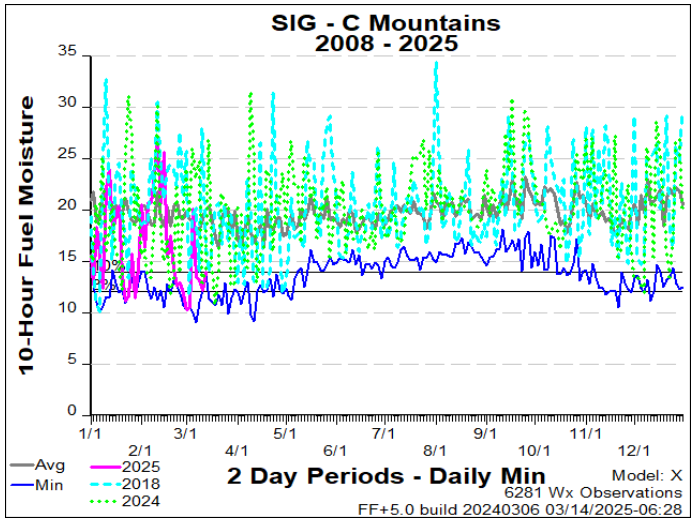
- **Tusquitee** (315602)
- **Locust Gap** (315802)
- **Highlands** (315803)

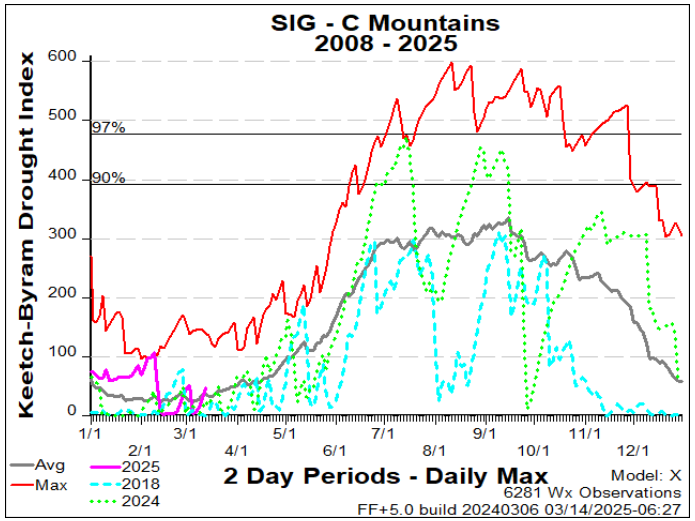
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph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

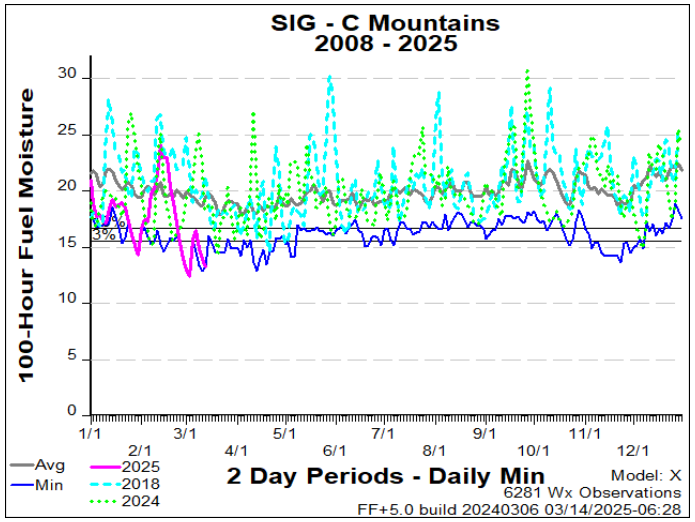
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

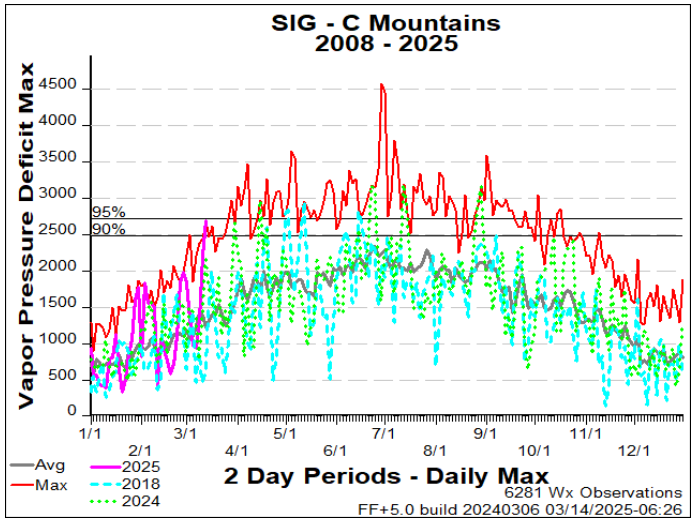
FDRA – Central Mountains

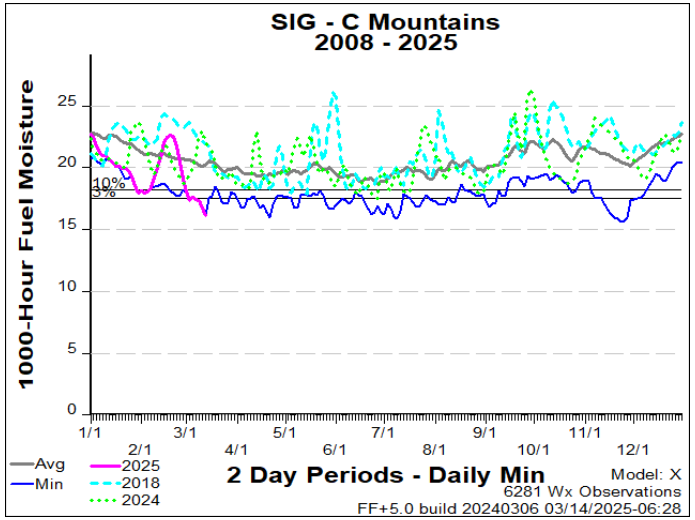






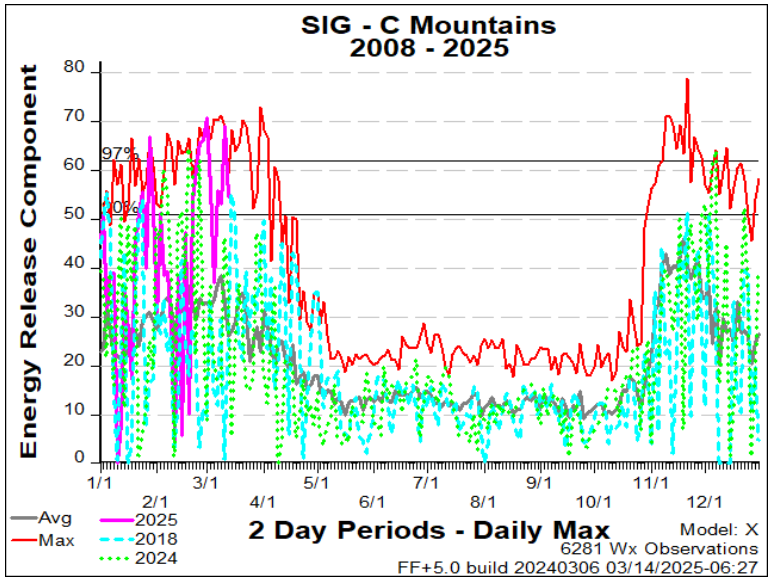




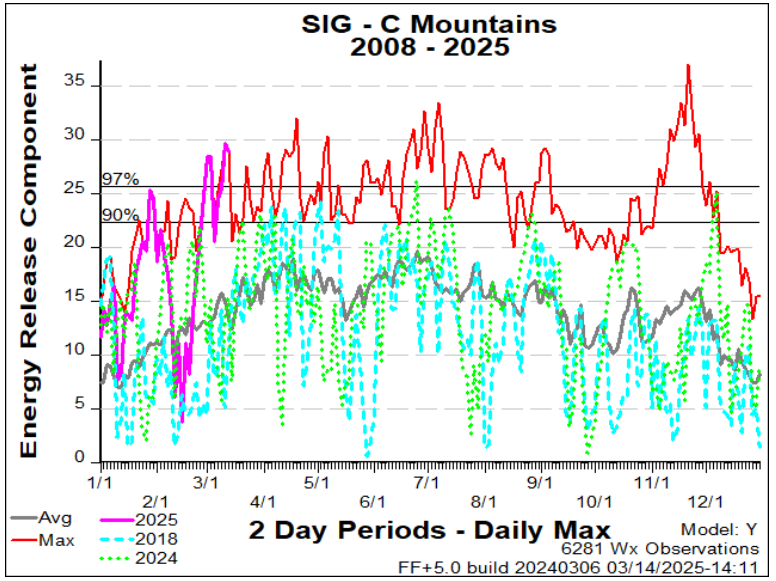


FDRA – Central Mountains

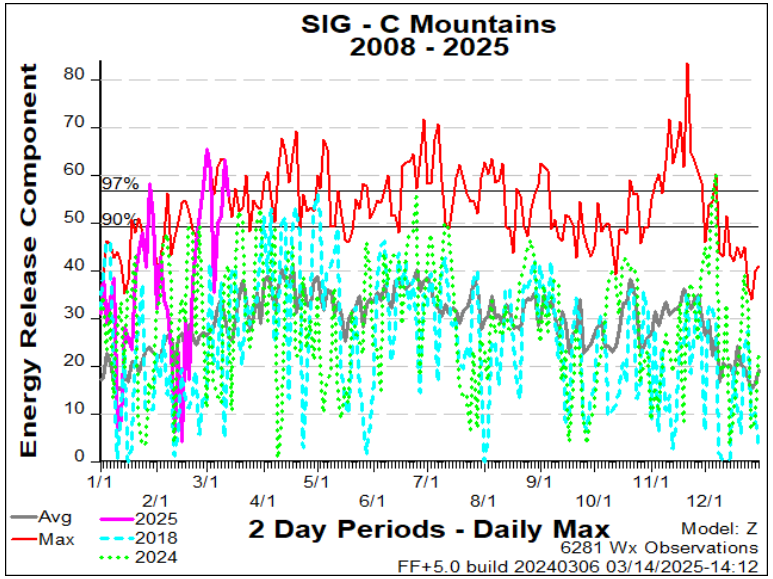
ERC-X



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 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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	69	70	57	73	75	62	
Avg. Min. Humidity (%)	56	43	30	24	25	37	
Avg. 20' Wind Speed (mph)	9	12	8	3	4	9	
Avg. Wind Direction*	SSE	S	NW	SW	SSW	WSW	
Avg. Probability of Precip. (%)	97	89	7	1	31	36	
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model X)	39.5	30.8	45.8	56.9	54.8	42.5	51.4
Forecast BI (Fuel Model X)	113.1	100.3	119.2	98.6	114.3	115.6	118.3
Forecast IC (Fuel Model X)	7.2	6.6	8.2	12.6	16.7	11.4	12.8
Forecast 100-Hr. FMC	14.4	18.2	19.8	19.1	17.5	16.4	16.2
Forecast 1000-Hr. FMC	20.1	20.6	20.4	20.2	20.1	20.0	20.0
KBDI	57.7						

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

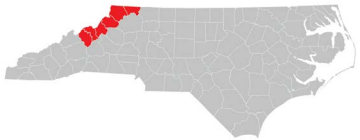
Values in the table above are averages from 3 stations in this FDRA:

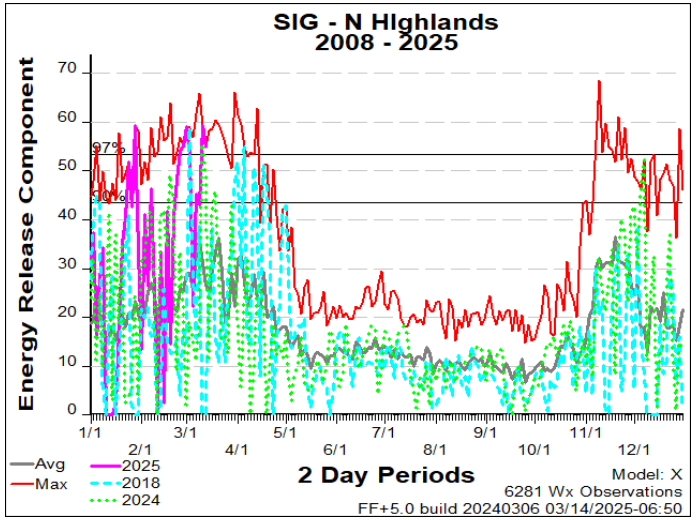
- **7 Mile Ridge** (313302)
- **Davidson River** (316001)
- **Mtn Horticultural Crops Res Stn** (316141)

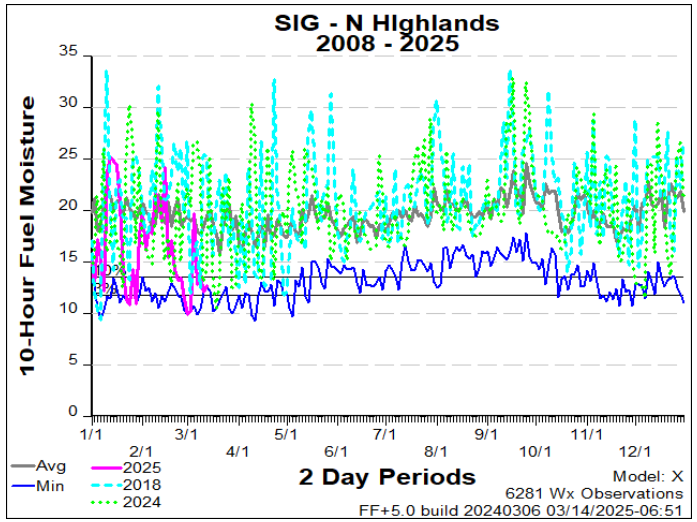
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 5 mph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

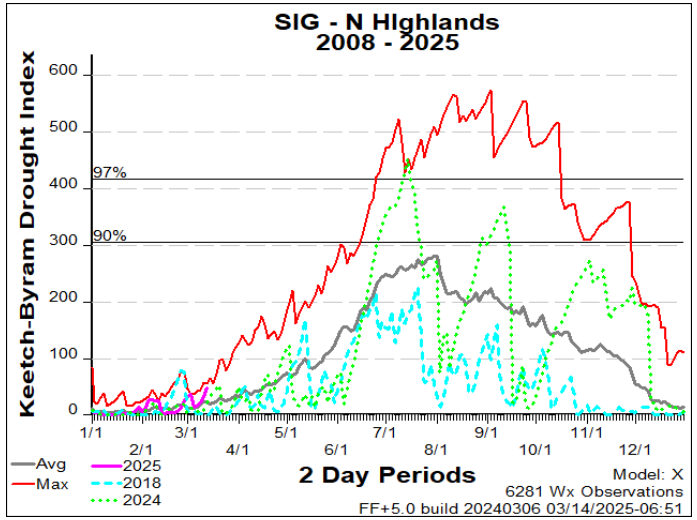
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain, and season**

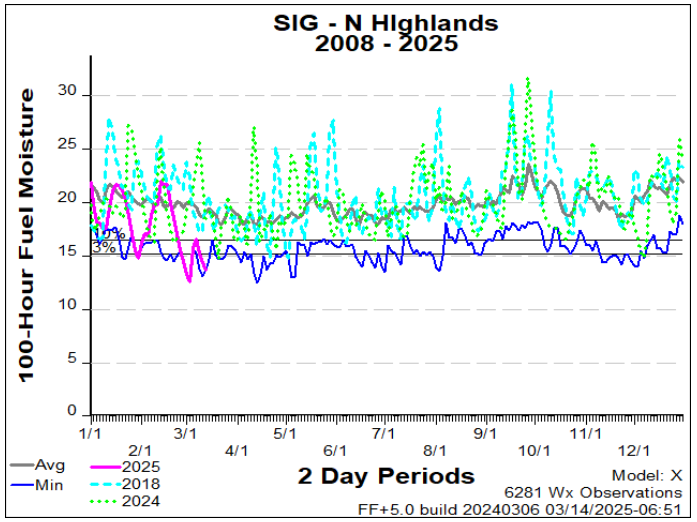
FDRA – Northern Highlands

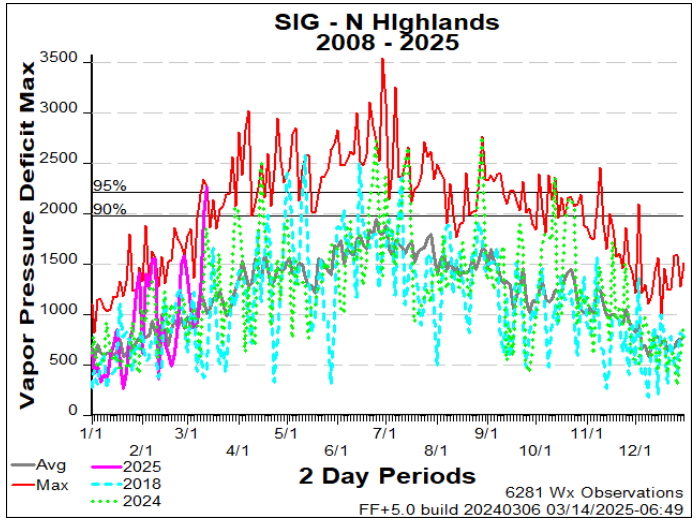


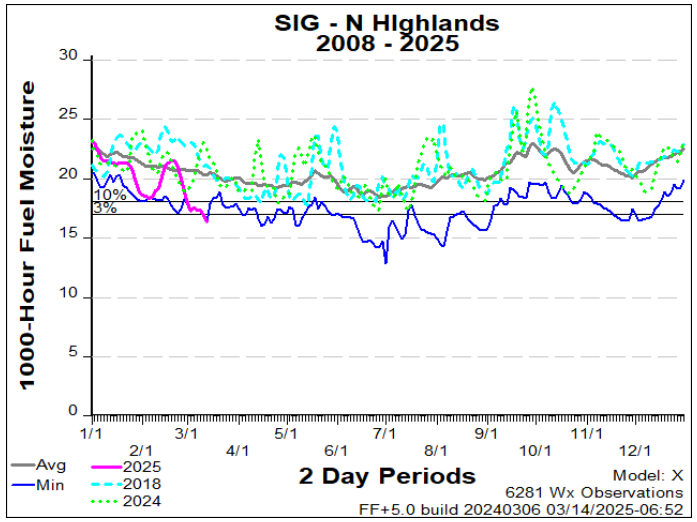




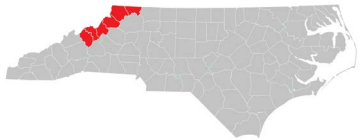




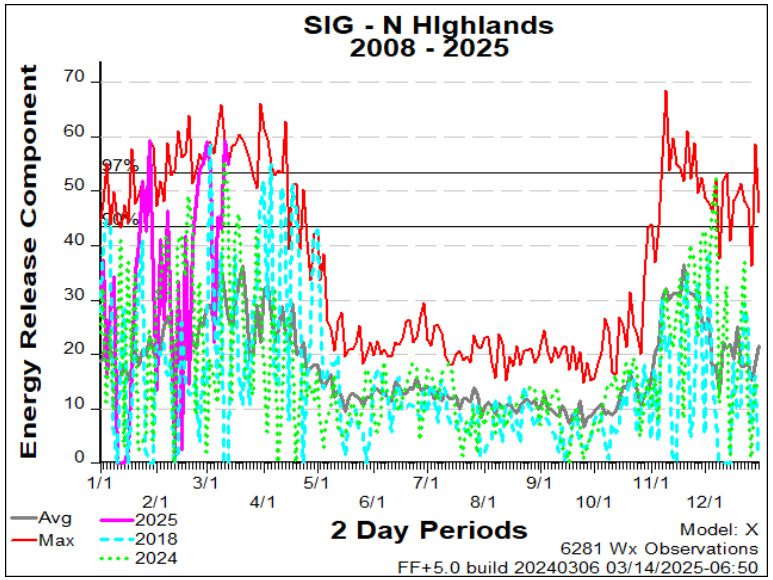




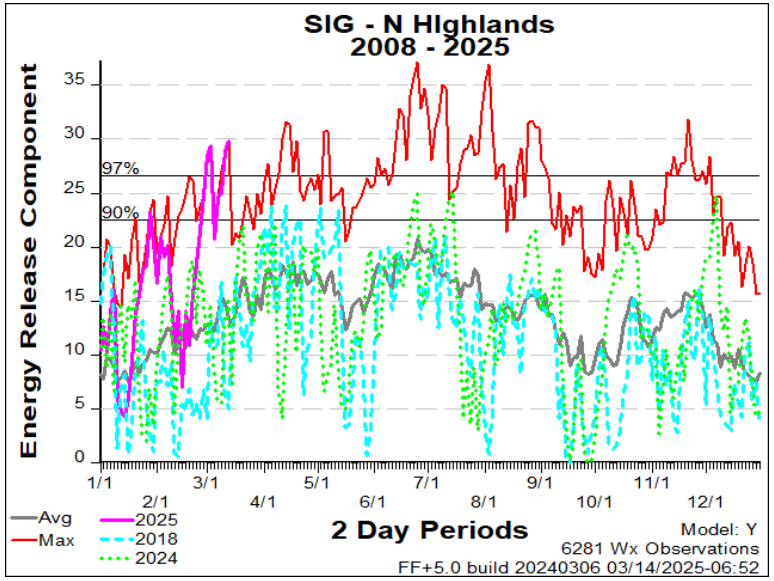
FDRA – Northern Highlands



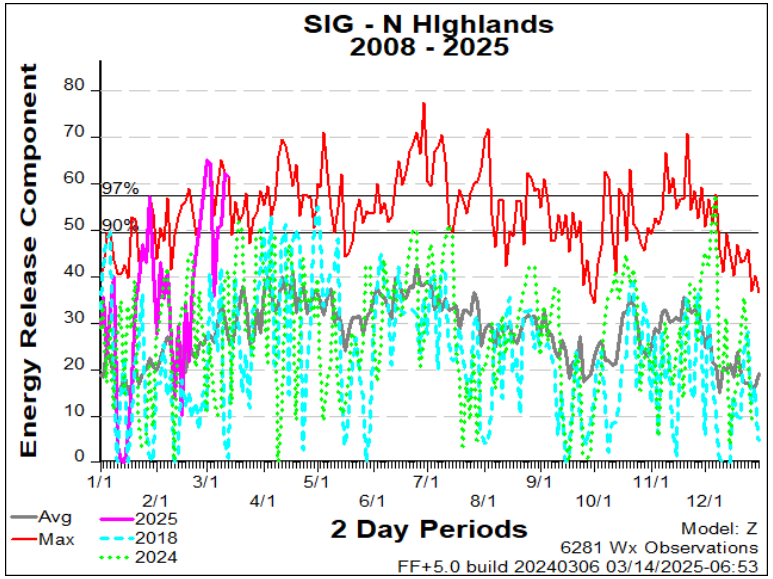
ERC-X



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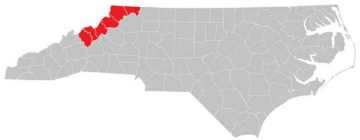
Average, Max, CY Year 2024 are displayed along with Year-to-Date 2025

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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	62	66	54	68	72	59	
Avg. Min. Humidity (%)	70	56	33	27	29	40	
Avg. 20' Wind Speed (mph)	11	18	12	6	6	13	
Avg. Wind Direction*	SSE	S	NW	WSW	SW	WSW	
Avg. Probability of Precip. (%)	96	94	7	1	18	33	
Days Since a Wetting Rain**	0.0	0.0	1.0				
Forecast ERC (Fuel Model X)	26.9	13.9	33.0	53.9	56.3	43.2	49.2
Forecast BI (Fuel Model X)	89.4	60.7	102.8	105.8	123.6	132.0	129.2
Forecast IC (Fuel Model X)	5.1	3.7	7.7	14.0	17.4	11.7	12.3
Forecast 100-Hr. FMC	14.5	17.6	20.6	20.7	19.1	17.7	17.3
Forecast 1000-Hr. FMC	20.1	20.6	20.5	20.5	20.4	20.4	20.4
KBDI	56.0						

Data Source:

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

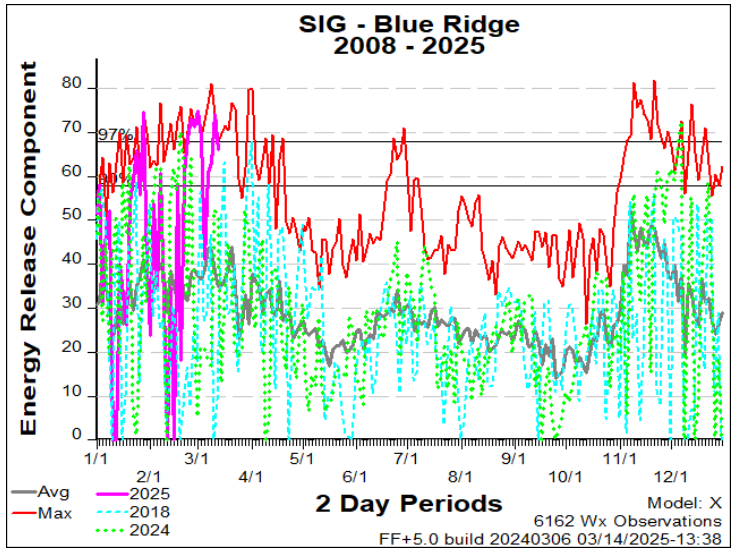
Values in the table above are averages from 3 stations in this FDRA:

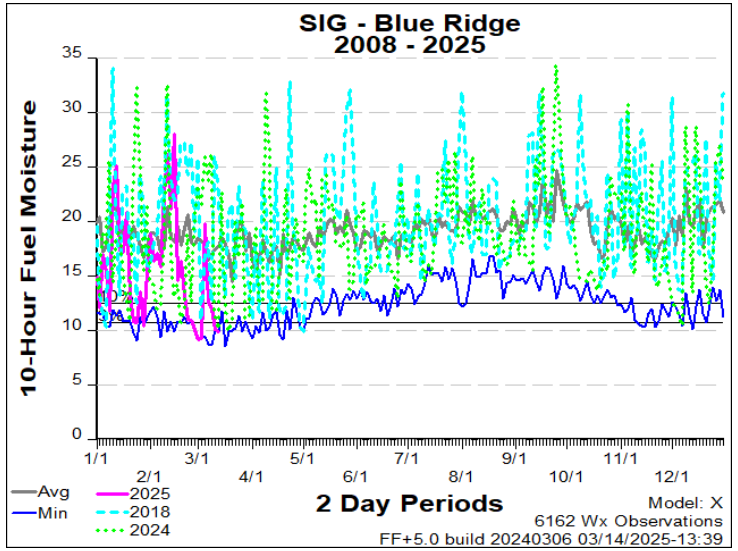
- **Laurel Springs** (310101)
- **Upper Mountain Research Stn** (310141)
- **Busick** (313402)

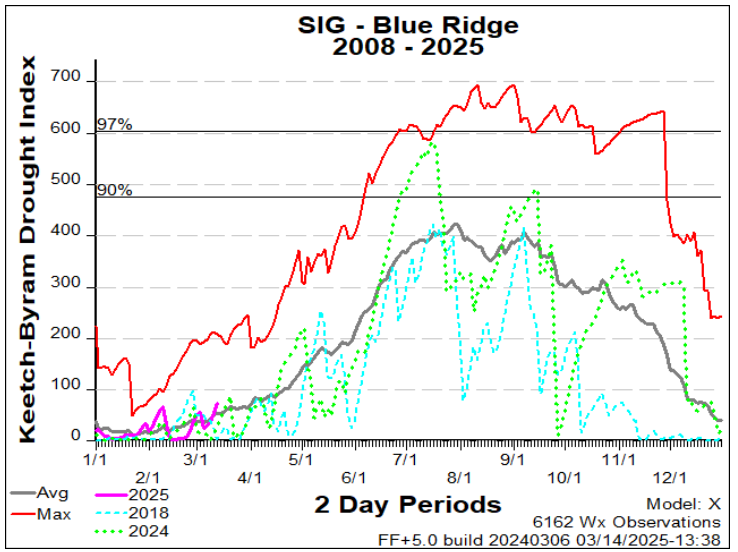
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 58°F	Greater than 58°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph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

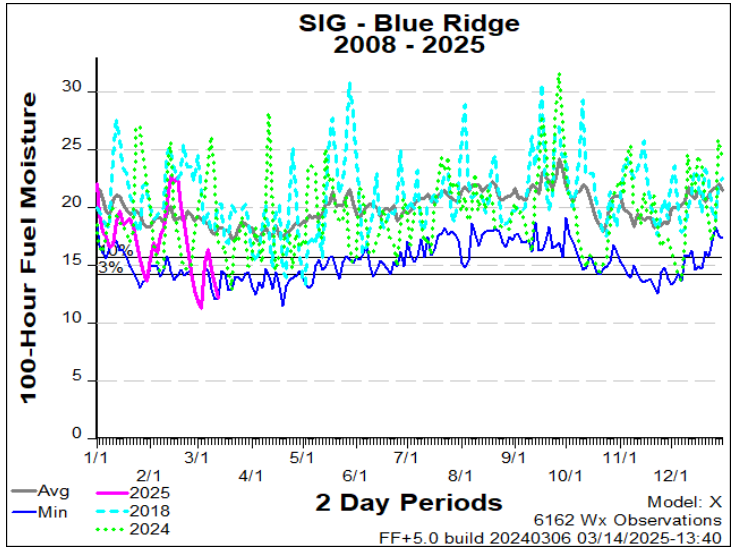
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

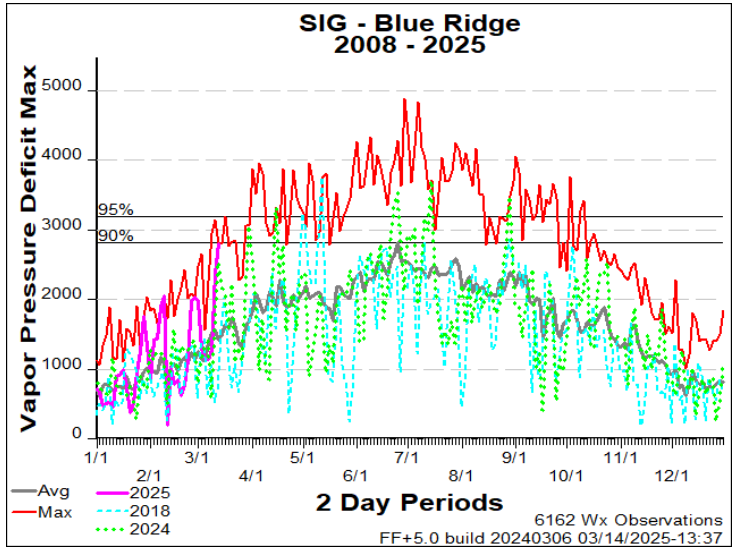
FDRA – Blue Ridge Escarpment

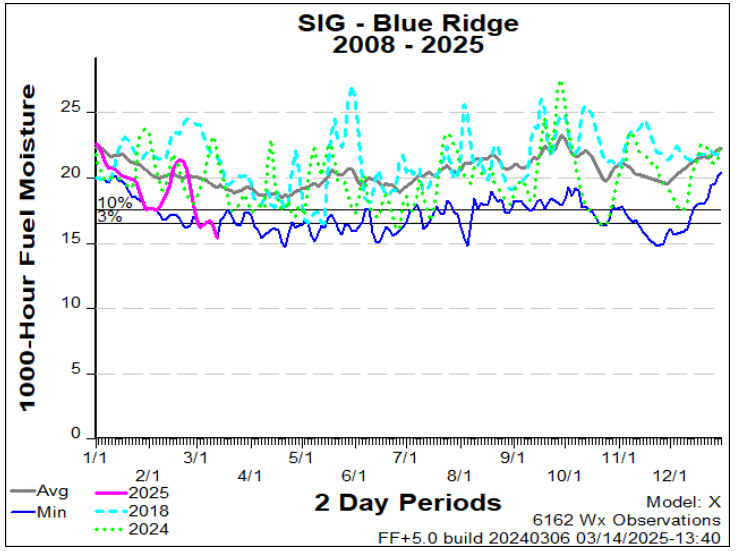






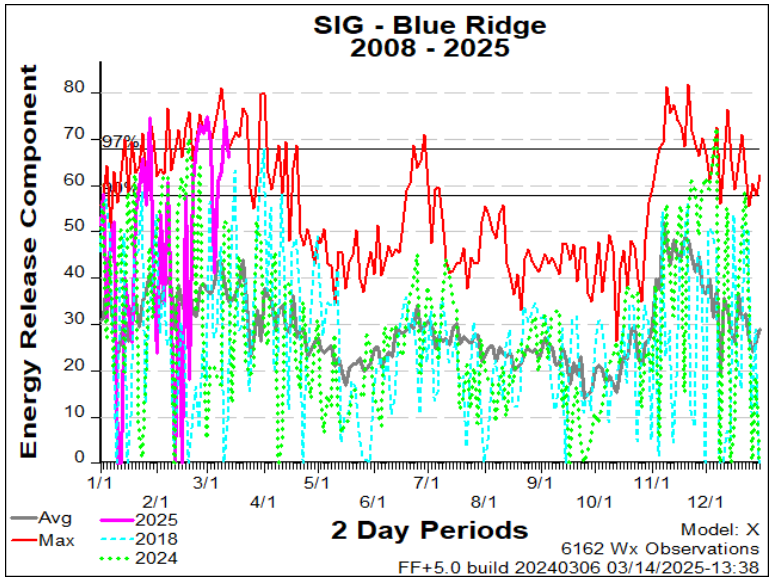




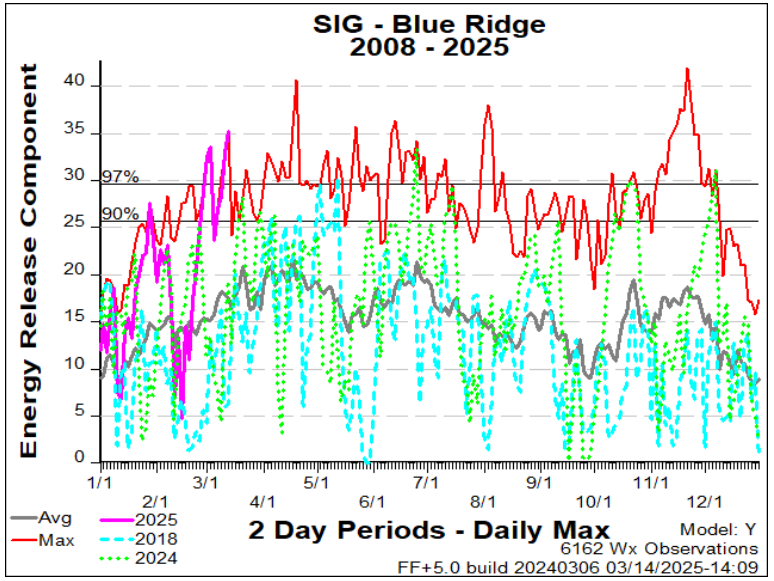


FDRA – Blue Ridge Escarpment

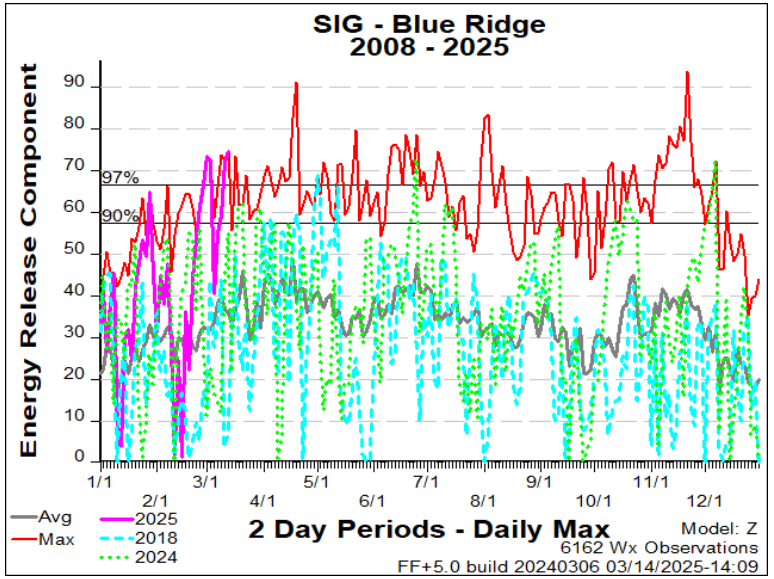
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

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

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

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

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Average, Max, CY Year 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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	68	70	60	71	74	64	
Avg. Min. Humidity (%)	56	46	26	24	26	33	
Avg. 20' Wind Speed (mph)	8	14	8	4	5	9	
Avg. Wind Direction*	SE	S	NW	WSW	SW	WSW	
Avg. Probability of Precip. (%)	95	92	6	1	18	29	
Days Since a Wetting Rain**	6.7	0.0	1.0				
Forecast ERC (Fuel Model X)	26.7	21.5	35.1	46.0	45.0	37.8	45.0
Forecast BI (Fuel Model X)	69.6	76.4	80.6	78.2	101.0	103.9	102.4
Forecast IC (Fuel Model X)	5.3	5.5	9.8	11.9	15.6	12.3	13.5
Forecast 100-Hr. FMC	13.4	21.4	22.4	19.4	16.9	15.5	14.9
Forecast 1000-Hr. FMC	15.3	15.2	16.9	17.3	17.5	17.4	17.1
KBDI	81.0						

Data Source:

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

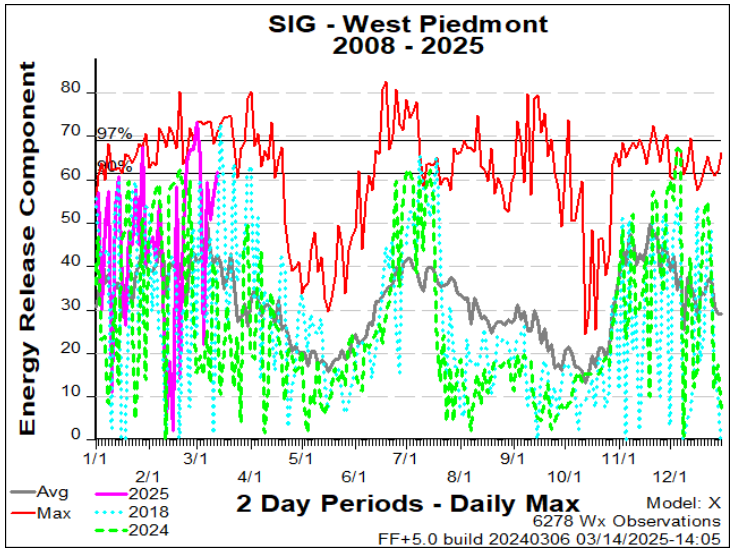
Values in the table above are averages from 3 stations in this FDRA:

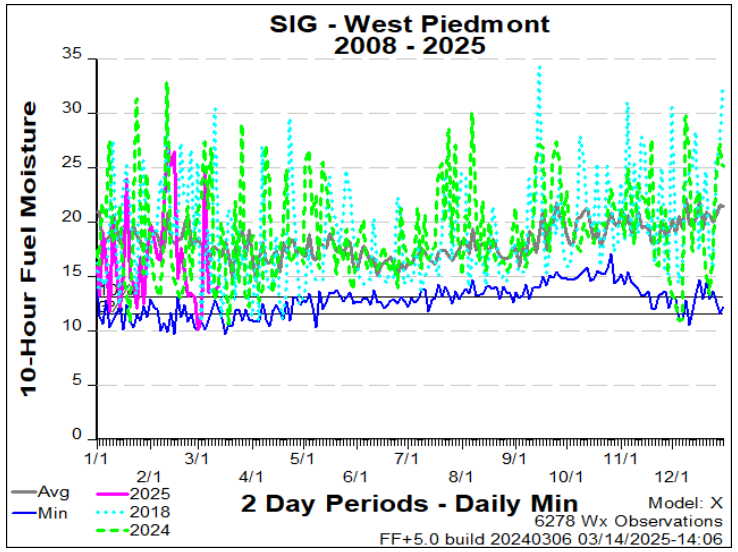
- **Rendezvous Mtn.** (312001)
- **North Cove Pinnacle (fr1)** (314301)
- **Rutherford County** (316302)

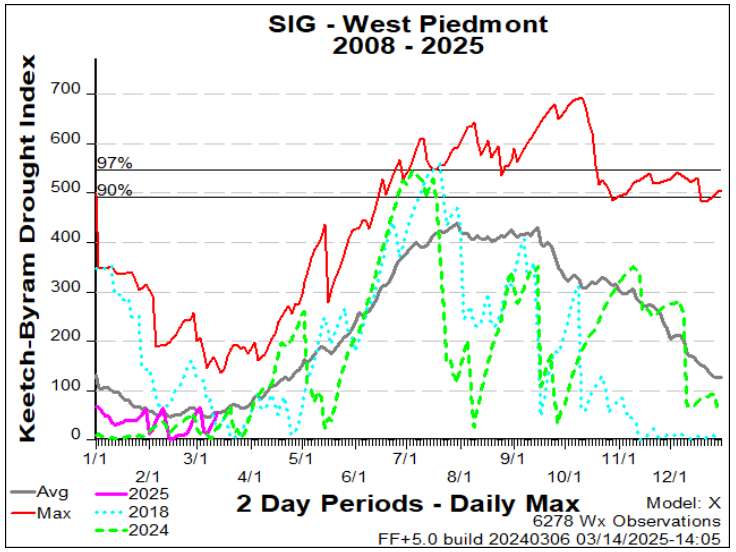
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph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

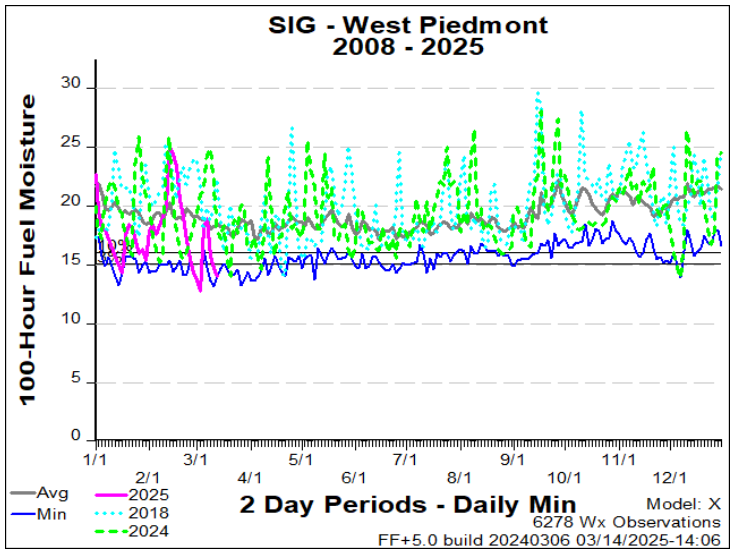
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

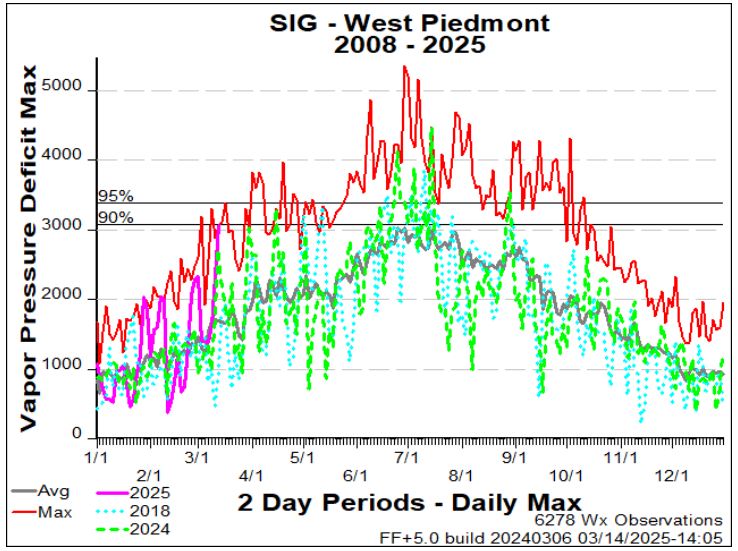
FDRA – Western Piedmont

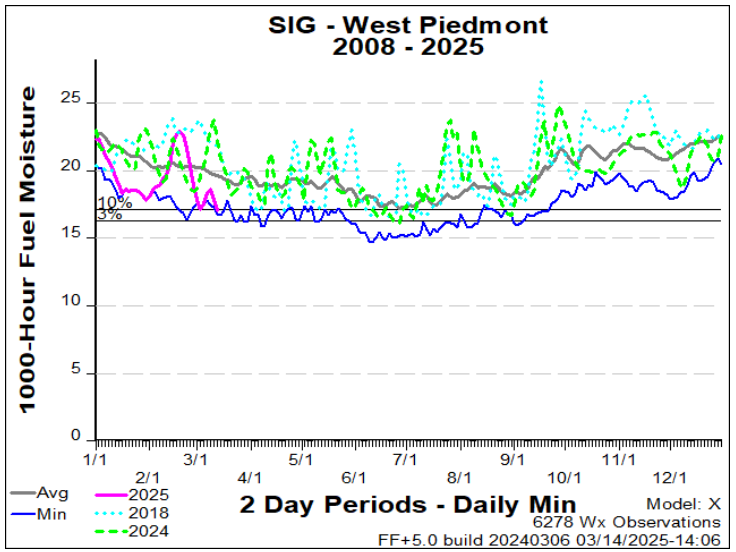






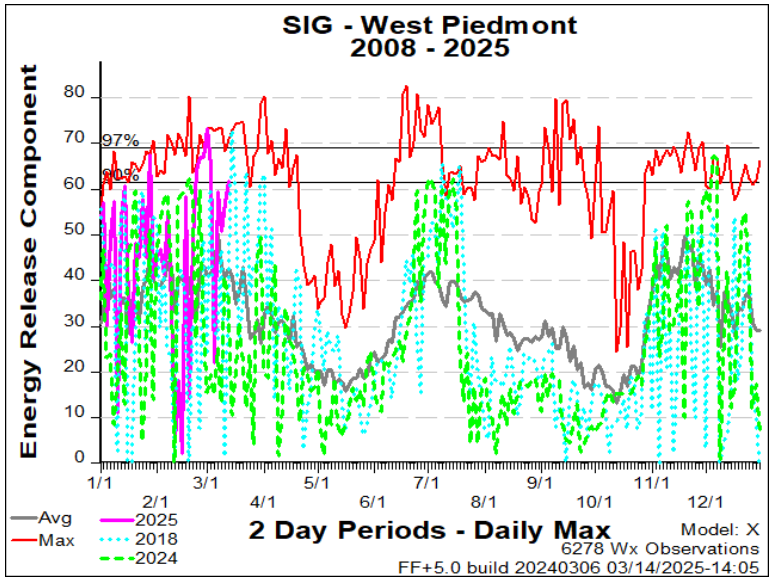




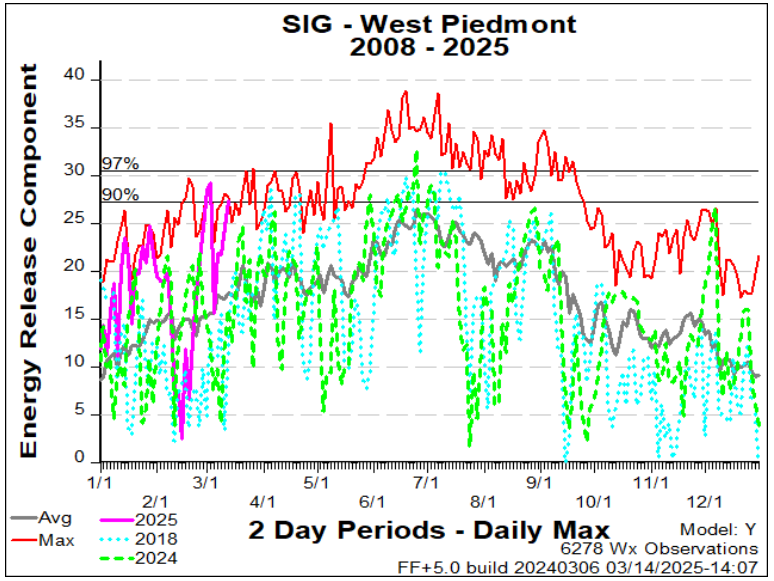


FDRA – Western Piedmont

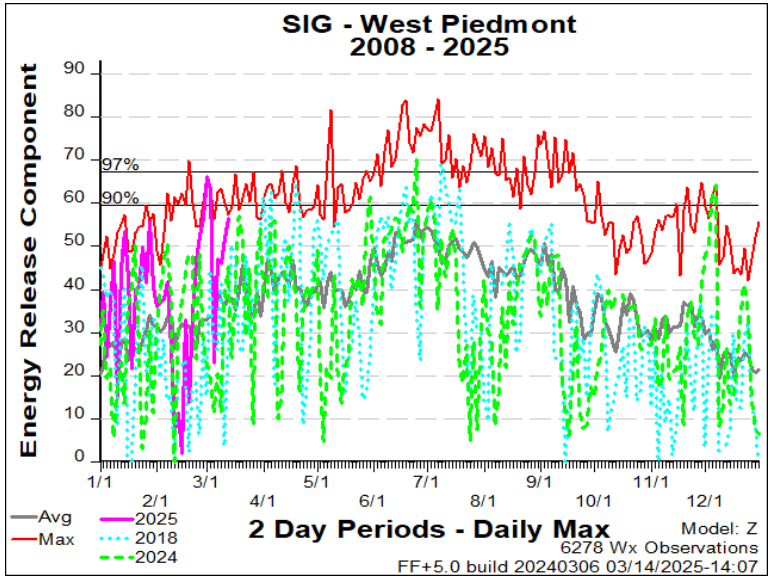
ERC-X



ERC-Y



ERC-Z



Comparison of ERC by NFDRS Fuel Model

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

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

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

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Average, Max, CY Year 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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	76	74	63	74	78	72	
Avg. Min. Humidity (%)	53	64	31	26	28	37	
Avg. 20' Wind Speed (mph)	8	15	8	4	5	9	
Avg. Wind Direction*	SSE	S	NW	W	SW	WSW	
Avg. Probability of Precip. (%)	64	96	10	1	10	24	
Days Since a Wetting Rain**	9.7	0.0	1.0				
Forecast ERC (Fuel Model X)	33.9	28.5	39.4	50.4	45.6	44.6	50.1
Forecast BI (Fuel Model X)	97.9	108.7	100.0	82.7	86.8	115.5	110.6
Forecast IC (Fuel Model X)	5.4	6.7	9.5	10.6	12.0	15.3	14.9
Forecast 100-Hr. FMC	15.8	20.2	22.2	21.8	19.5	17.7	16.9
Forecast 1000-Hr. FMC	20.3	20.6	20.5	20.4	20.4	20.4	20.4
KBDI	65.7						

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

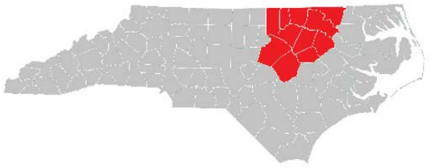
Values in the table above are averages from 3 stations in this FDRA:

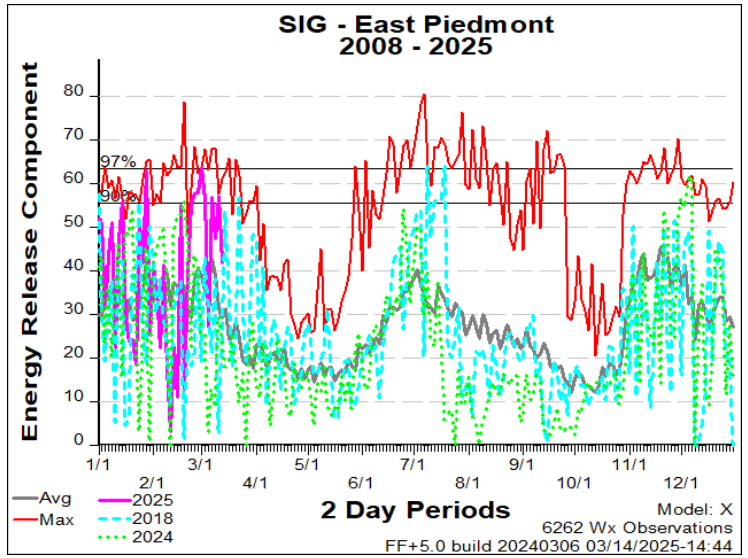
- **Duke Forest** (312501)
- **Lexington** (314602)
- **Mt. Island Lake** (316602)

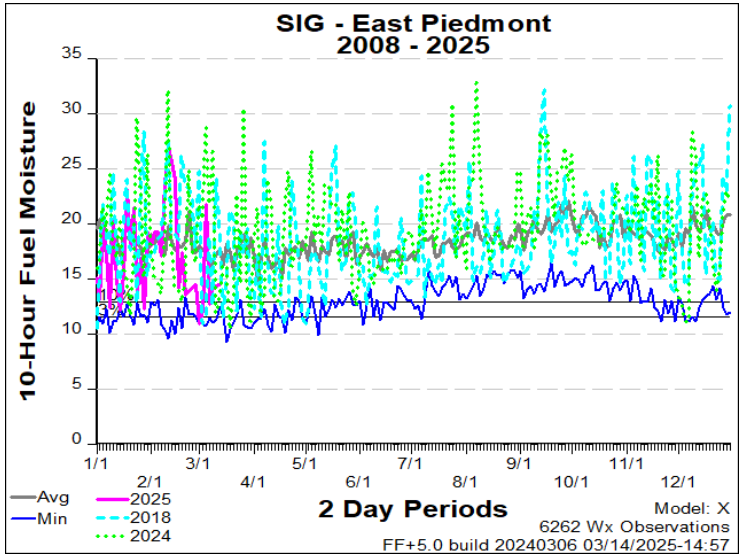
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 40°F	Between 40°F and 50°F	Greater than 50°F
Avg. Min. Humidity	Greater than 35%	Between 30% and 35%	Less than 30%
Avg. 20' Wind Speed	Less than 2 mph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

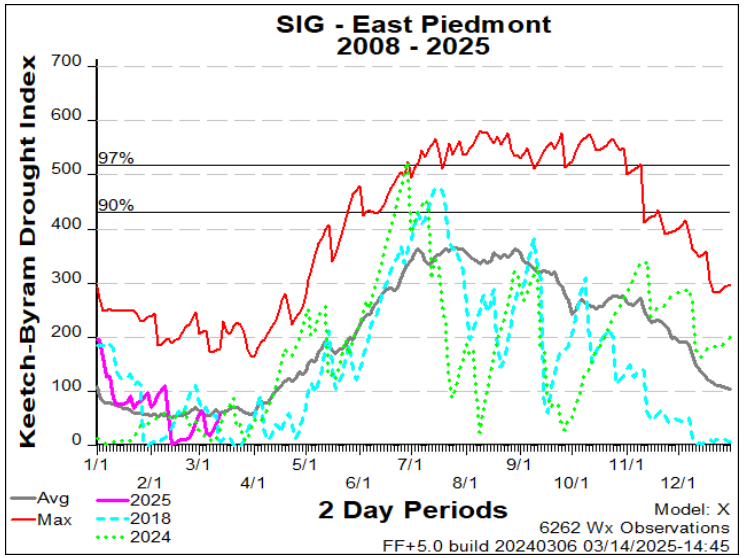
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

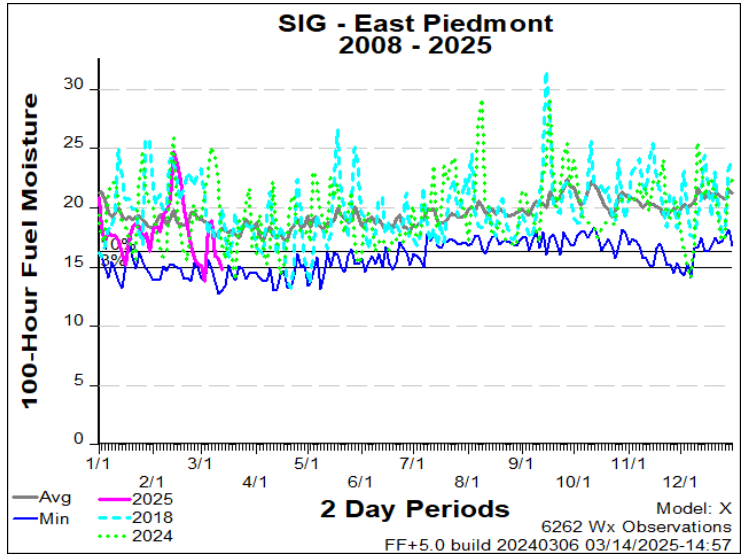
FDRA – Eastern Piedmont

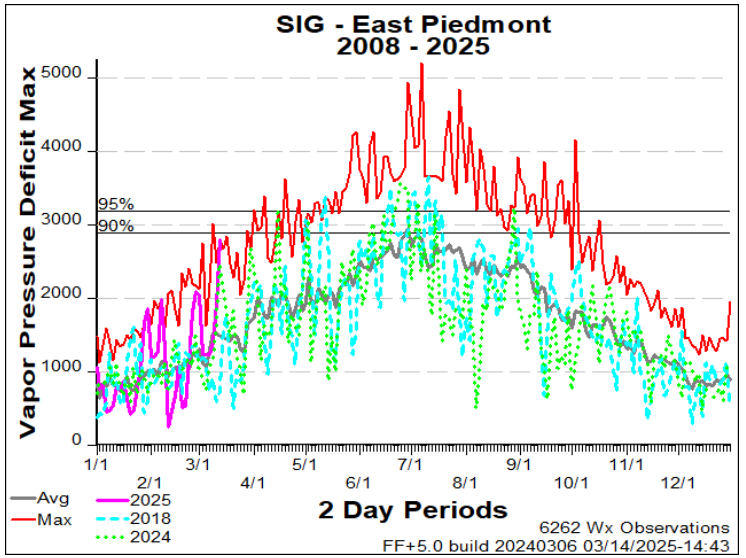


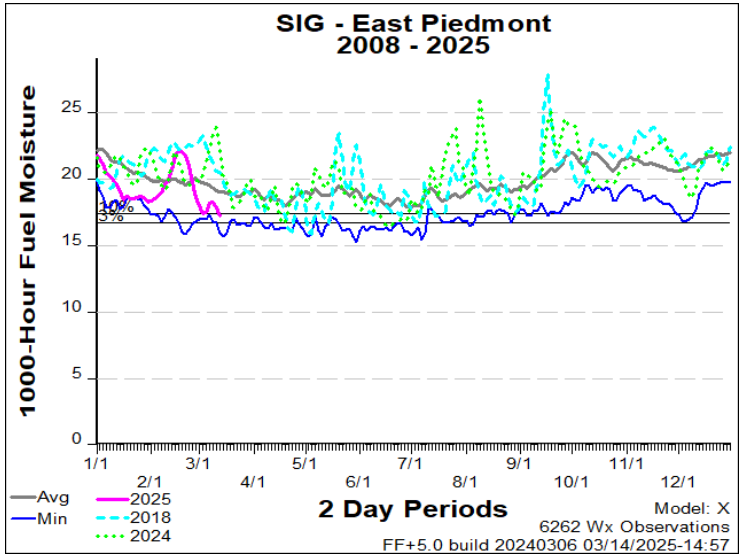




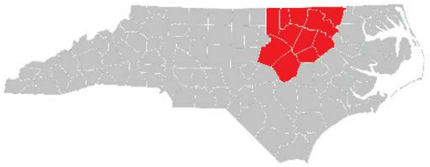








FDRA – Eastern Piedmont



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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	77	75	64	72	78	75	
Avg. Min. Humidity (%)	53	68	41	28	31	42	
Avg. 20' Wind Speed (mph)	7	16	10	4	4	9	
Avg. Wind Direction*	SSE	S	NW	W	SSW	SW	
Avg. Probability of Precip. (%)	24	87	22	2	7	26	
Days Since a Wetting Rain**	1.0	0.0	0.8				
Forecast ERC (Fuel Model X)	10.3	10.9	8.8	20.2	19.9	19.6	24.6
Forecast BI (Fuel Model X)	33.3	47.4	27.9	29.3	30.6	46.0	51.0
Forecast IC (Fuel Model X)	2.4	4.3	2.5	4.2	4.5	6.9	8.1
Forecast 100-Hr. FMC	17.0	19.6	22.7	23.3	20.7	18.8	18.0
Forecast 1000-Hr. FMC	20.1	20.2	20.2	20.2	20.1	20.2	20.2
KBDI	64.8						

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

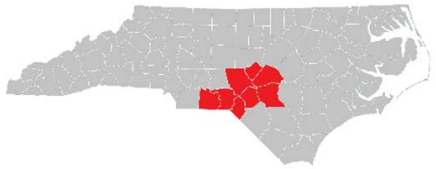
Values in the table above are averages from 4 stations in this FDRA:

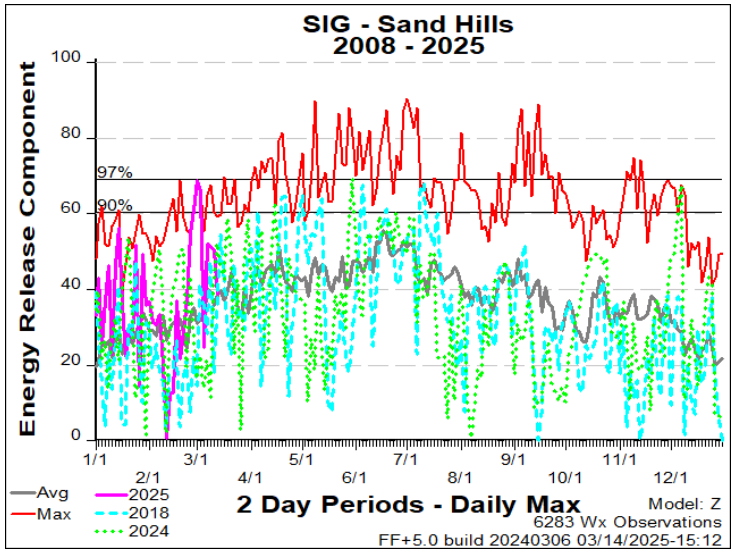
- **Oxford Tobacco Research Stn** (310841)
- **Upper Coastal Plain Res Stn** (312940)
- **Lake Wheeler Rd Field Lab** (314941)
- **Central Crops Research Station** (317441)

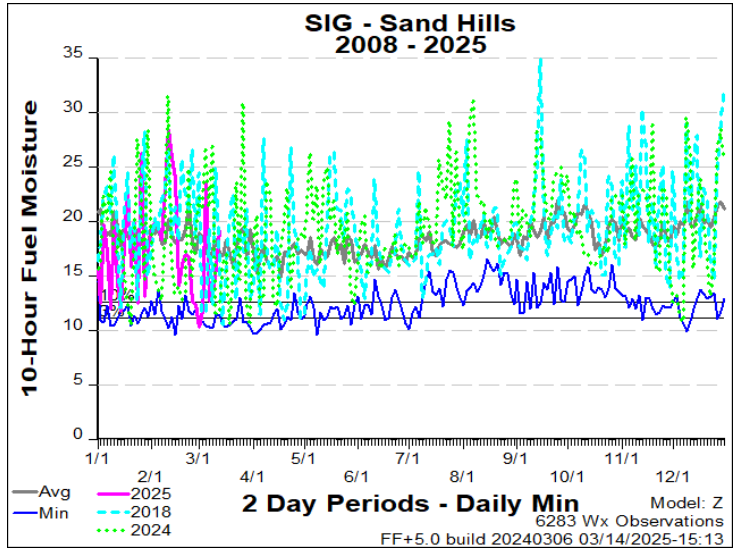
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph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

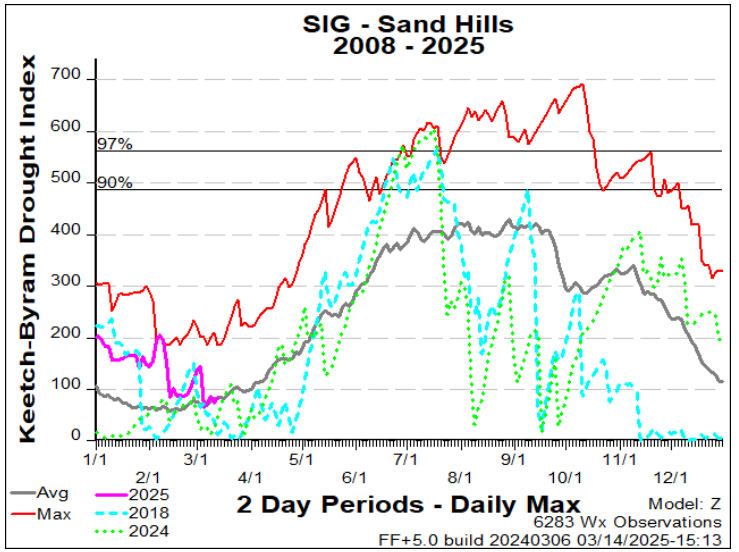
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

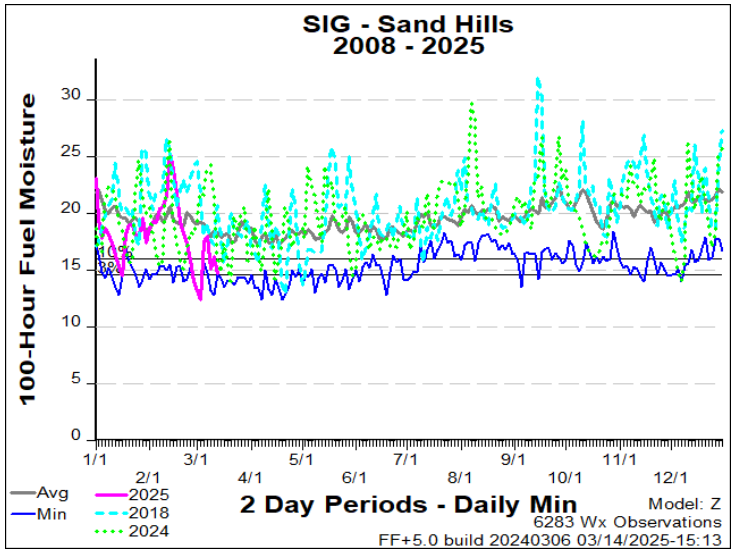
FDRA – Sandhills

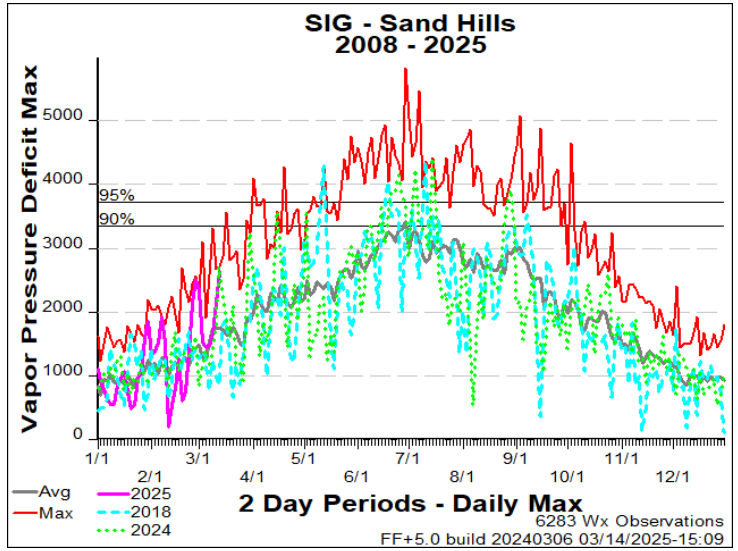


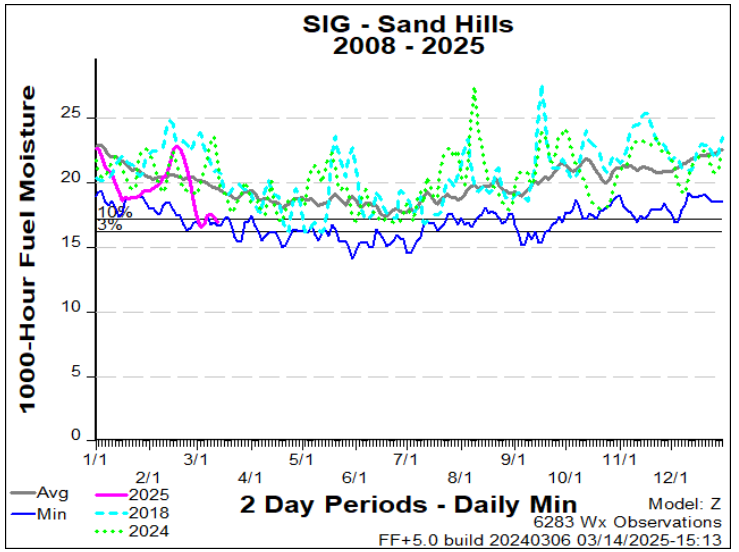




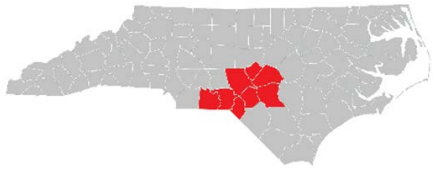








FDRA – Sandhills



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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	77	74	64	73	80	74	
Avg. Min. Humidity (%)	50	71	35	26	25	38	
Avg. 20' Wind Speed (mph)	8	16	9	4	4	9	
Avg. Wind Direction*	SSE	S	NW	W	SW	SW	
Avg. Probability of Precip. (%)	34	89	15	2	8	24	
Days Since a Wetting Rain**	3.7	0.0	1.0				
Forecast ERC (Fuel Model Z)	28.3	21.4	19.2	37.2	40.7	42.6	50.5
Forecast BI (Fuel Model Z)	36.7	44.5	30.3	30.8	35.5	55.2	53.4
Forecast IC (Fuel Model Z)	4.8	6.8	5.9	9.3	10.3	15.1	15.8
Forecast 100-Hr. FMC	16.7	21.0	23.5	23.4	20.7	18.6	17.6
Forecast 1000-Hr. FMC	20.0	20.0	20.0	20.0	20.0	20.0	20.0
KBDI	94.0						

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

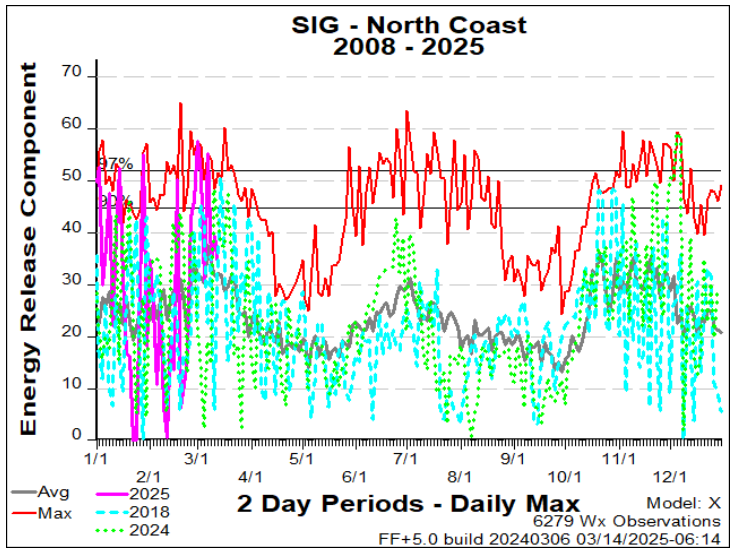
Values in the table above are averages from 3 stations in this FDRA:

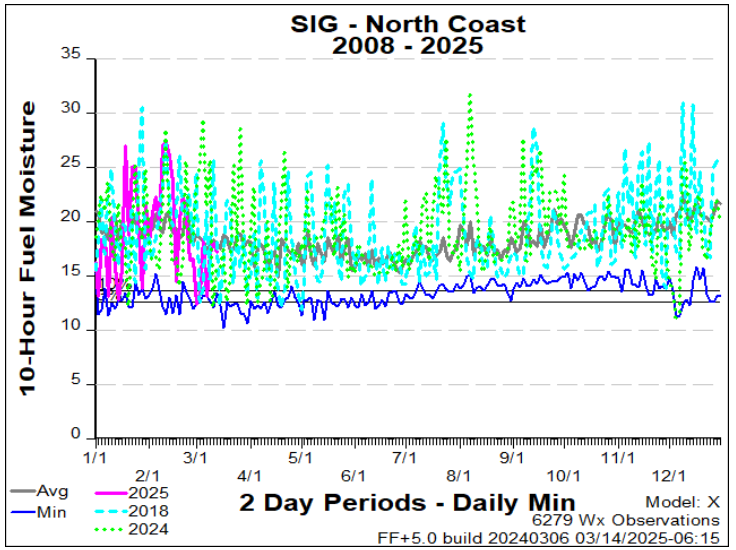
- **Sandhills Research Station** (317040)
- **Rockingham** (318202)
- **Fort Liberty** (318503)

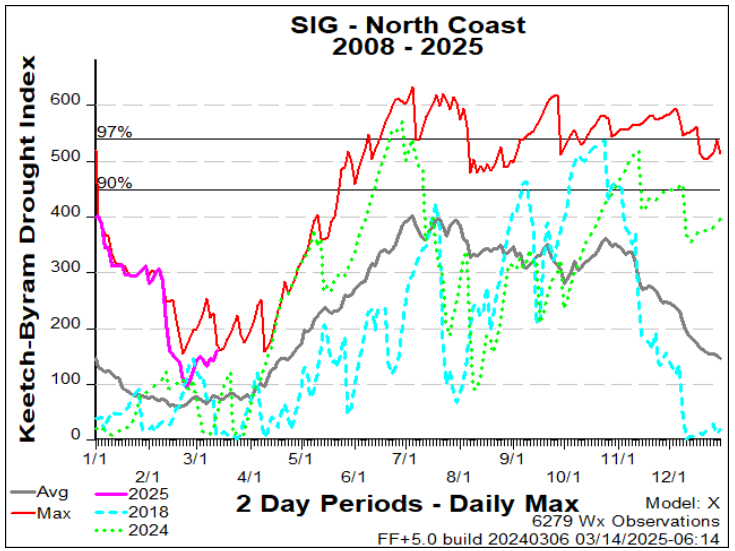
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 60°F	Greater than 60°F
Avg. Min. Humidity	Greater than 40%	Between 30% and 40%	Less than 30%
Avg. 20' Wind Speed	Less than 4 mph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

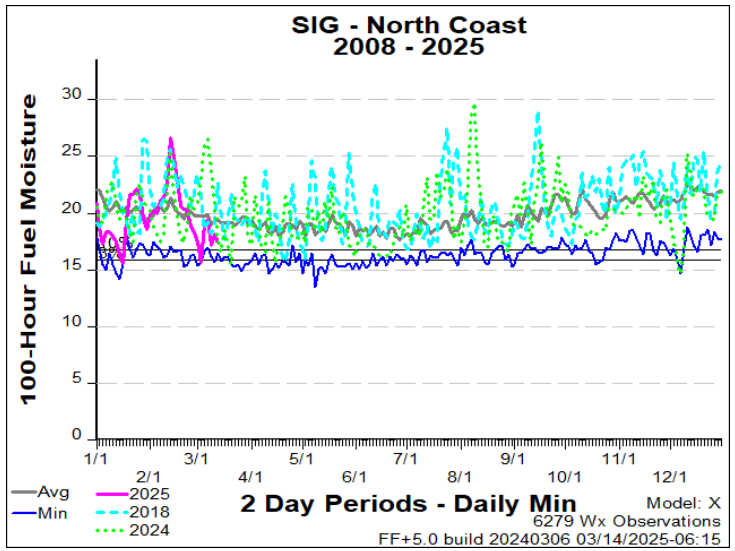
Other factors to consider when determining fire danger: **sky conditions**, **precipitation amount**, **number of days since rain**, and **season**

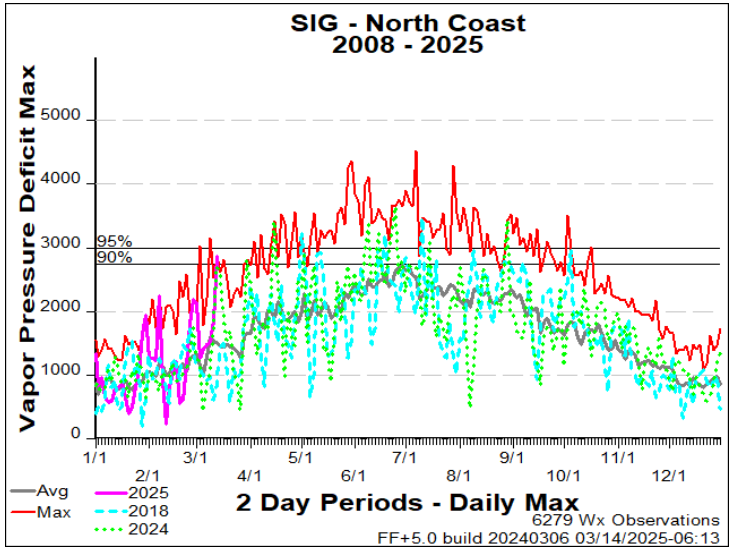
FDRA – North Coast

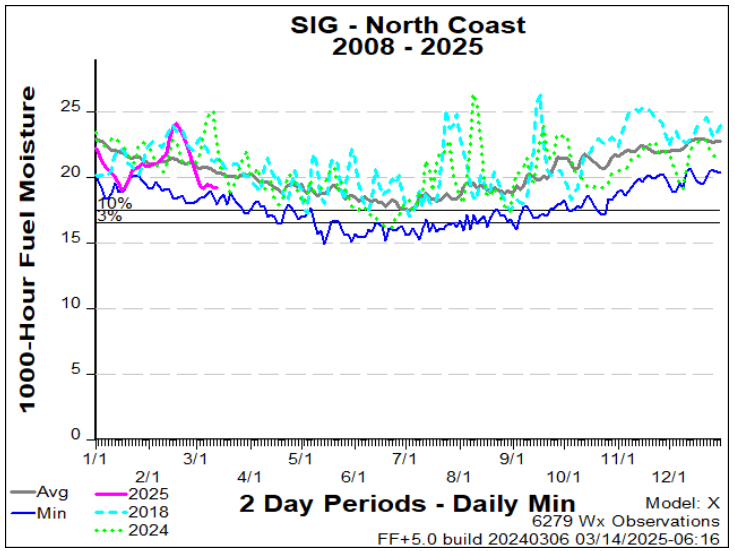






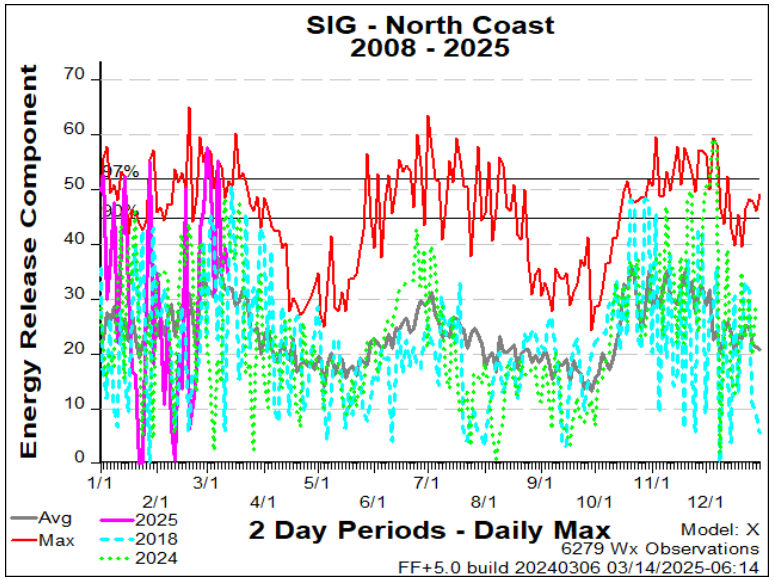






FDRA – North Coast

ERC-X



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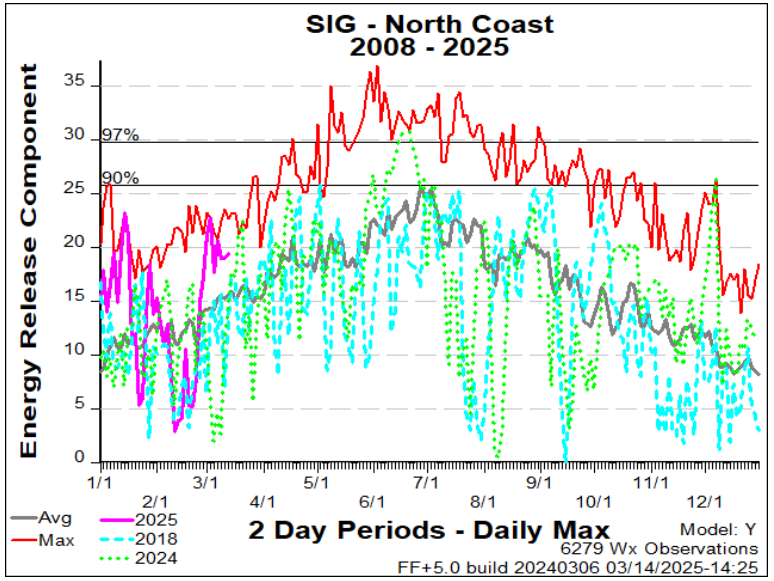
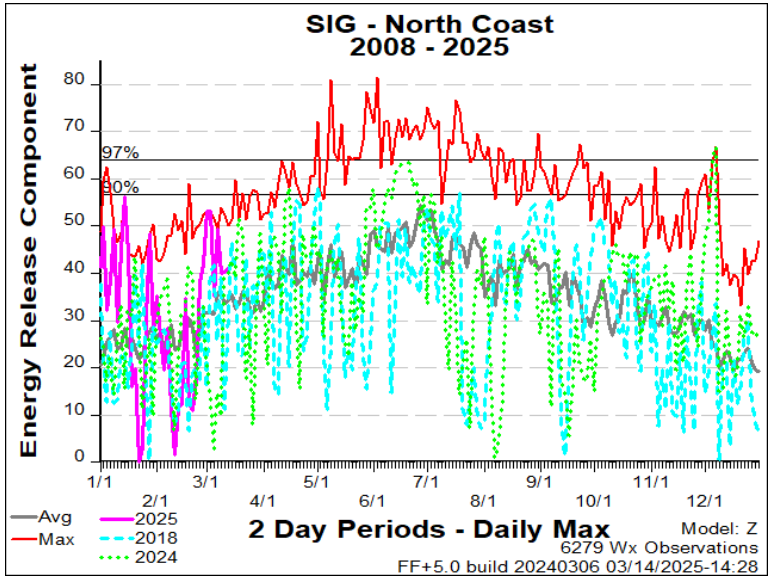


ERC-Z



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 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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	76	76	64	68	75	76	
Avg. Min. Humidity (%)	55	60	52	33	40	47	
Avg. 20' Wind Speed (mph)	7	14	9	5	4	9	
Avg. Wind Direction*	SE	S	WNW	WNW	SSW	SSW	
Avg. Probability of Precip. (%)	7	79	36	3	4	23	
Days Since a Wetting Rain**	5.5	0.0	0.0				
Forecast ERC (Fuel Model X)	13.5	19.0	7.2	37.6	38.4	30.5	44.4
Forecast BI (Fuel Model X)	46.9	93.3	29.7	68.7	69.9	97.5	111.4
Forecast IC (Fuel Model X)	2.8	6.9	1.6	5.9	6.5	8.8	11.1
Forecast 100-Hr. FMC	18.7	19.9	23.3	24.1	21.6	20.4	19.3
Forecast 1000-Hr. FMC	22.2	22.2	22.3	22.2	22.2	22.3	22.2
KBDI	166.5						

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

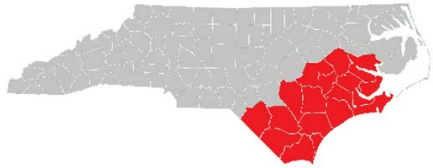
Values in the table above are averages from 4 stations in this FDRA:

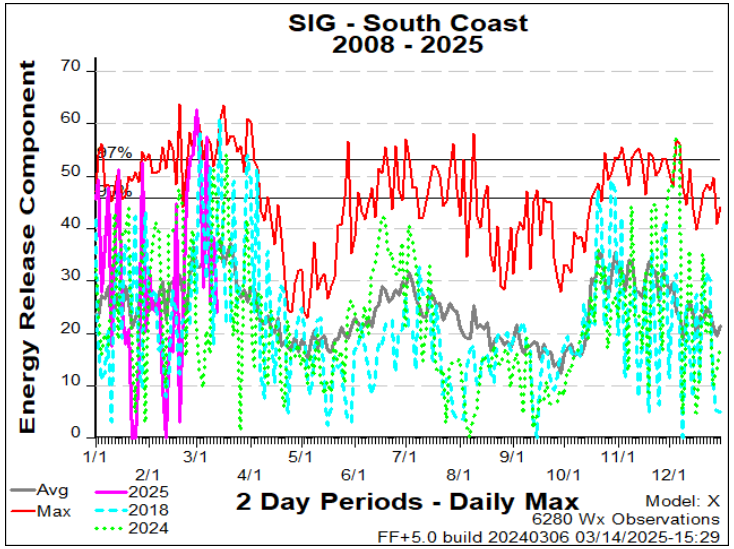
- **Elizabeth City** (311503)
- **Greens Cross** (313001)
- **Pocosin Lakes** (315201)
- **Fairfield** (317901)

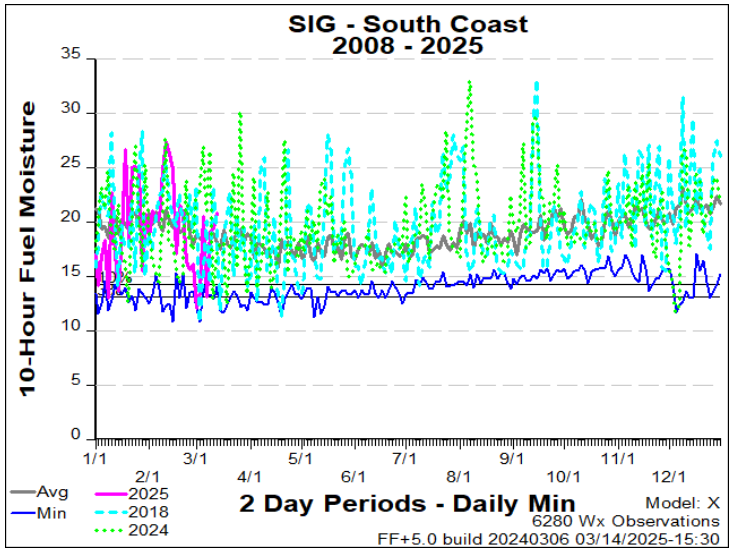
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 45°F	Between 45°F and 55°F	Greater than 55°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 10 mph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

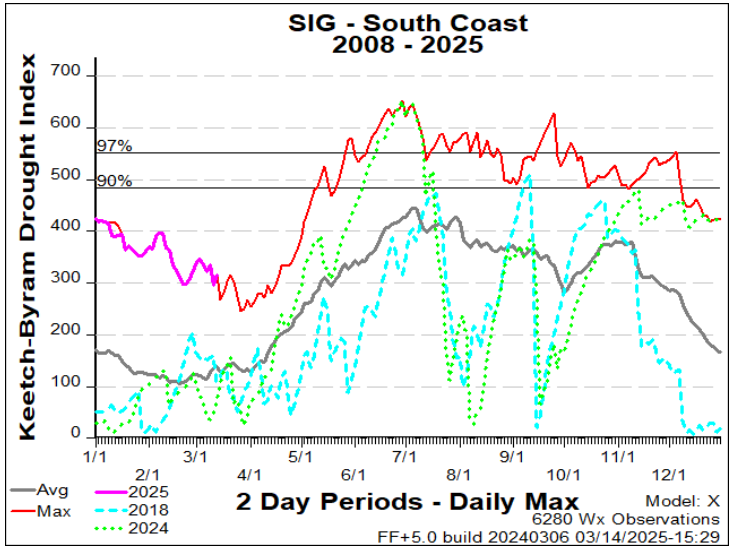
Other factors to consider when determining fire danger: **sky conditions, precipitation amount, number of days since rain,** and **season**

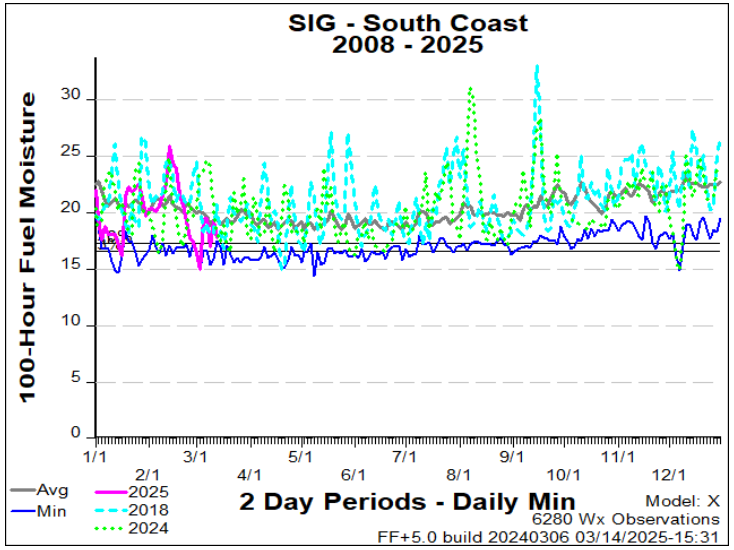
FDRA – South Coast

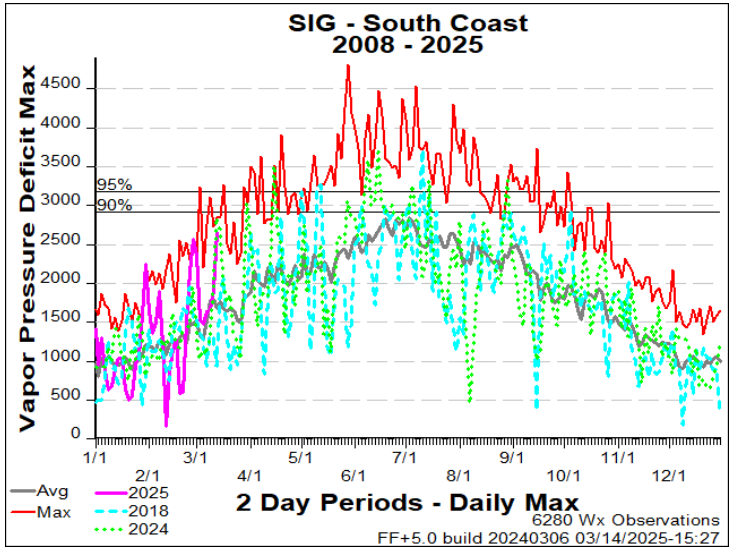


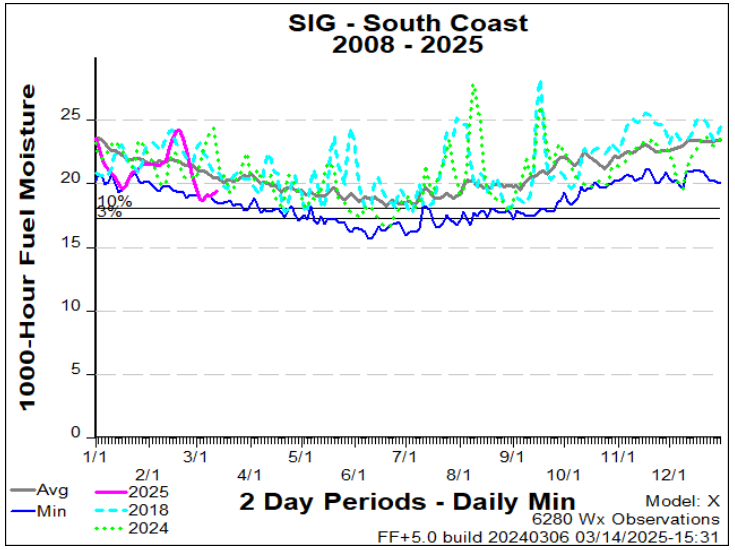






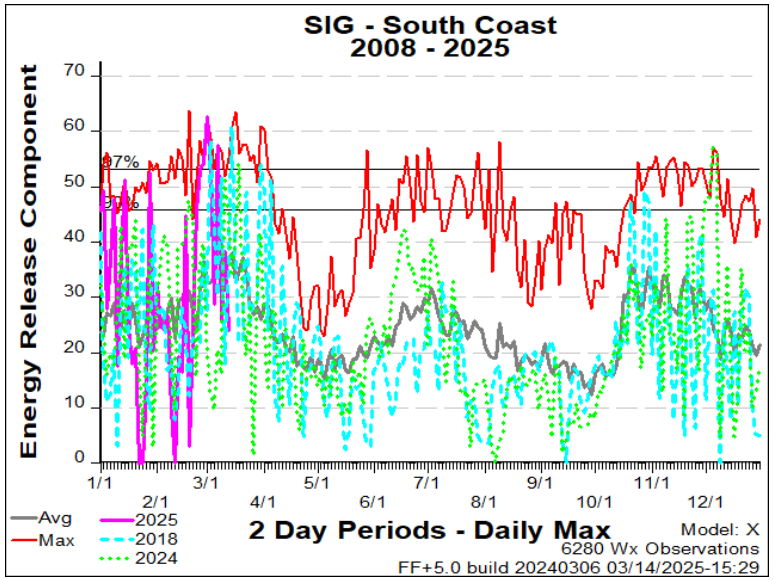




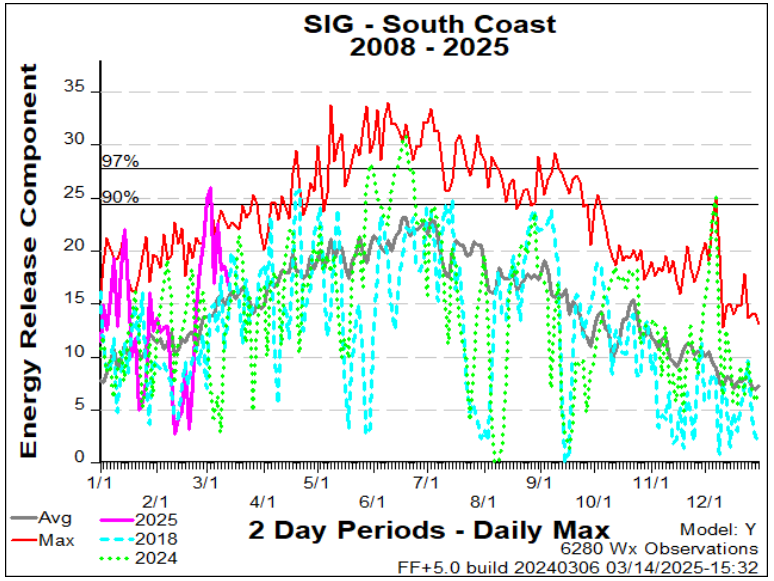


FDRA – South Coast

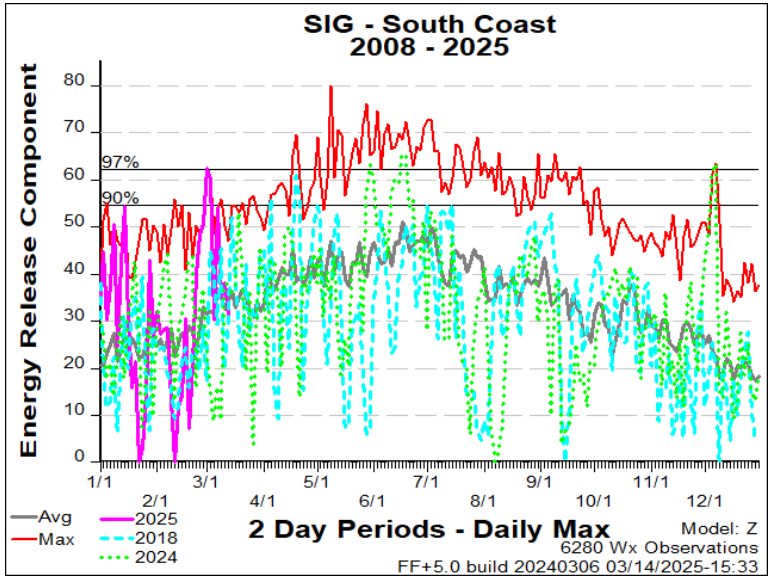
ERC-X



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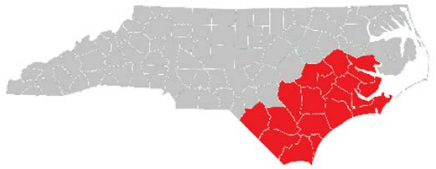
Average, Max, CY Year 2024 are displayed along with Year-to-Date 2025

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	SAT 15-Mar	SUN 16-Mar	MON 17-Mar	TUE 18-Mar	WED 19-Mar	THU 20-Mar	FRI 21-Mar
Avg. Max. Temp. (°F)	78	76	67	71	78	76	
Avg. Min. Humidity (%)	54	65	44	27	34	45	
Avg. 20' Wind Speed (mph)	6	14	9	4	3	8	
Avg. Wind Direction*	SE	S	WNW	WNW	SW	SW	
Avg. Probability of Precip. (%)	9	86	22	1	4	20	
Days Since a Wetting Rain**	5.0	2.3	2.7				
Forecast ERC (Fuel Model X)	19.3	21.9	12.1	43.8	46.0	37.1	52.9
Forecast BI (Fuel Model X)	69.2	102.1	46.3	84.2	74.0	113.8	121.9
Forecast IC (Fuel Model X)	4.4	6.9	2.8	8.0	7.7	11.0	14.1
Forecast 100-Hr. FMC	18.8	19.9	22.5	23.1	20.7	19.6	18.6
Forecast 1000-Hr. FMC	22.1	22.1	22.2	22.1	22.1	22.1	22.1
KBDI	320.6						

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:

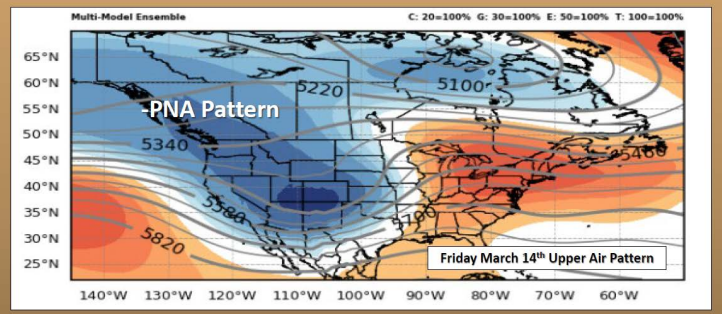
- **Finch's Station** (317501)
- **Beaufort** (317801)
- **New Bern** (319004)
- **Turnbull Creek** (319302)
- **Hofmann Forest** (319507)
- **Whiteville** (319701)
- **Sunny Point** (319803)

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**

Slides for Context from SA Fire Environment March Seasonal Update (3/7/25)

Southern Great Plains Wildfire Outbreak Potential



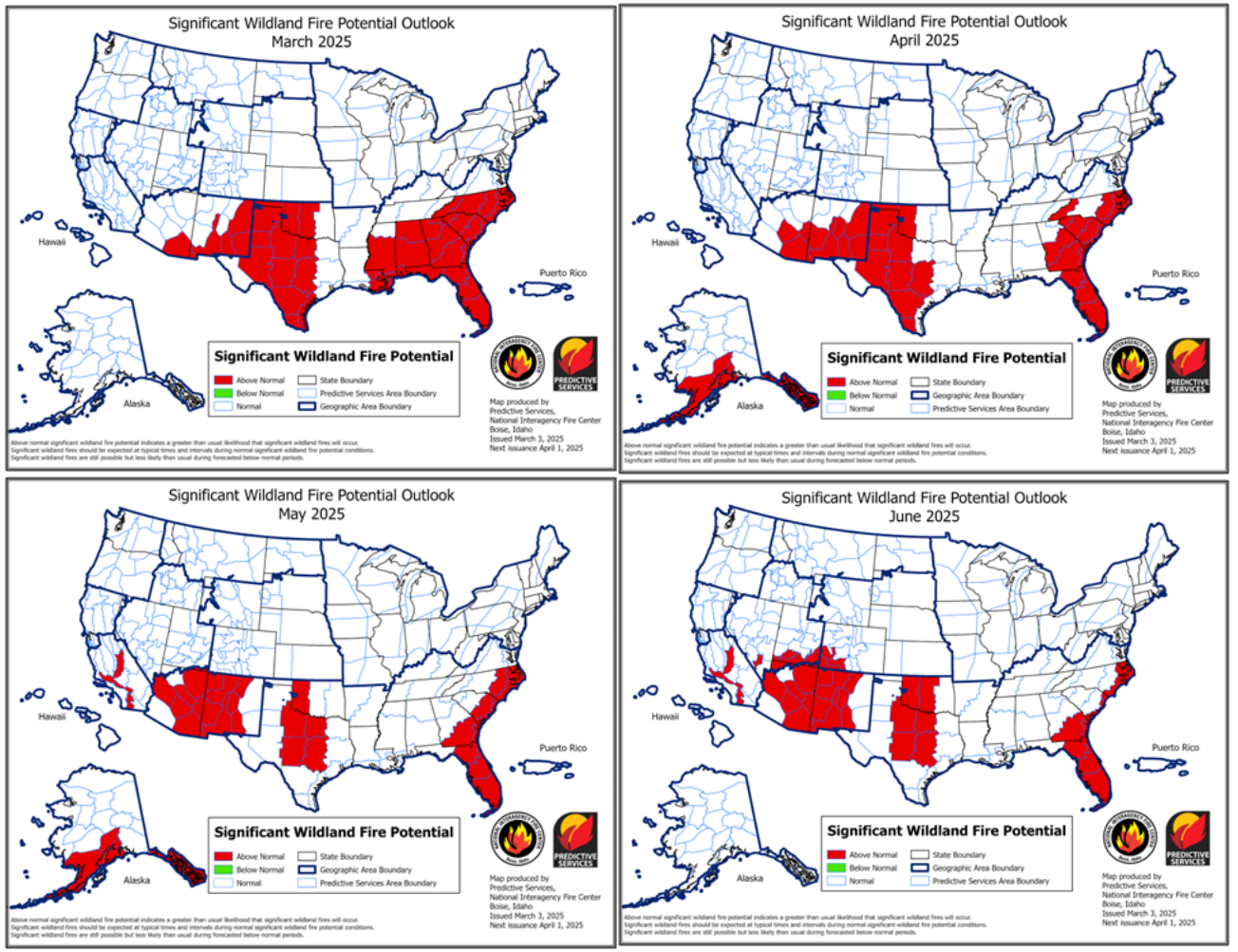
- Plenty of potential Red Flag days in the Plains next week
- Classic spring storm expected late next week, potentially resulting in a Southern Great Plains Wildfire Outbreak (consistently modeled on Friday)
- Windy elsewhere, and another east Tennessee mountain wave wind event appears likely Saturday, March 15th
- More significant severe weather possible, as Gulf moisture looks more widespread this time through the Gulf Coast and Mississippi Valley

Summary

- Severe impacts appear likely for the Southern Plains this spring
  - La Niña pattern supports frequent hot-dry-windy events and maintenance of extreme fuel dryness
- Early season heat due to drought feedback could keep things going in the Plains right into summer
- Mississippi Valley most likely to be stormy and wet through April, but intense drying may occur between systems
- Appalachians on the edge of wet and dry/warm conditions
  - New landscape behind Helene enhances/extends risks there
- Coastal Southeast drought maintenance or intensification
  - Organic soils of major concern in the coastal Carolinas
  - Florida water levels may see accelerated drying until the rainy season begins in June or July
- Early season tropical activity possible but is of low confidence

Significant Wildland Fire Potential Outlook:

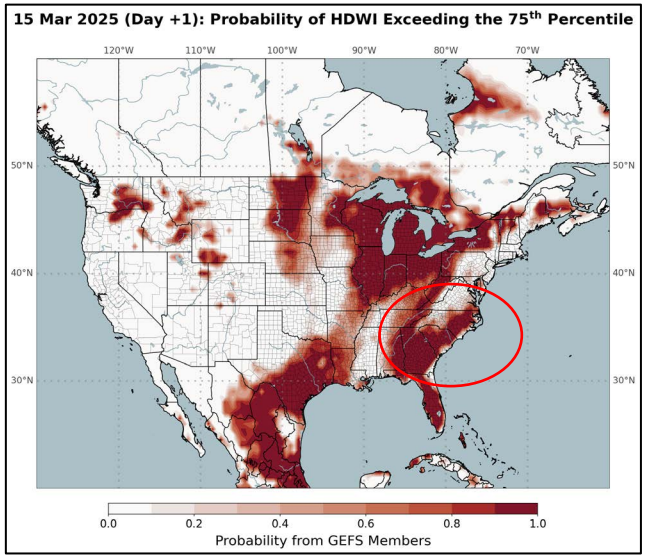
Updated 3/3/25 – Next Update on 4/1/25



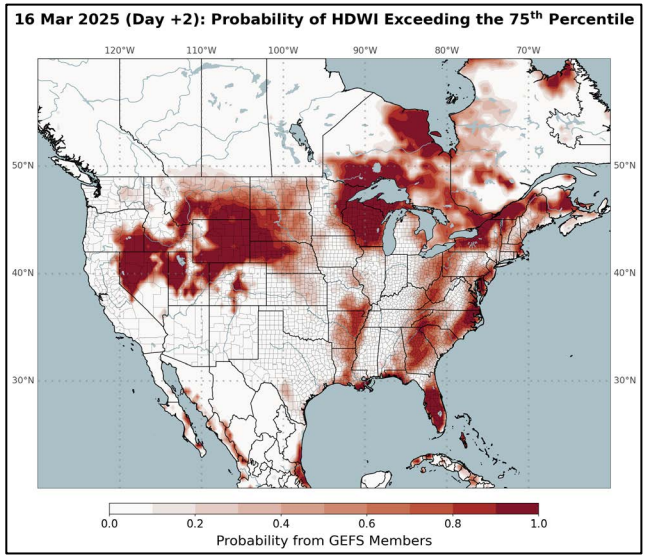
**A significant fire is one that requires resources from outside the district (other than aviation). IA potential is based more on shorter term weather factors. Just a few days of dry weather can increase IA activity considerably as we have consistently seen this year.*

Hot-Dry-Windy Index (HDW)

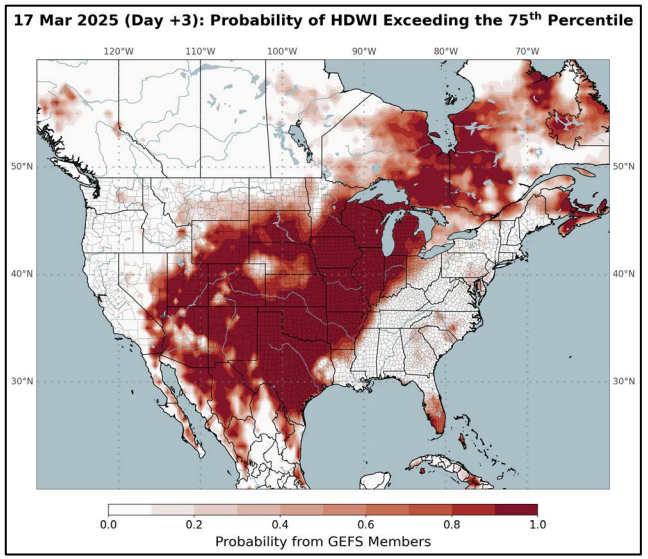
Saturday > 75th Percentile



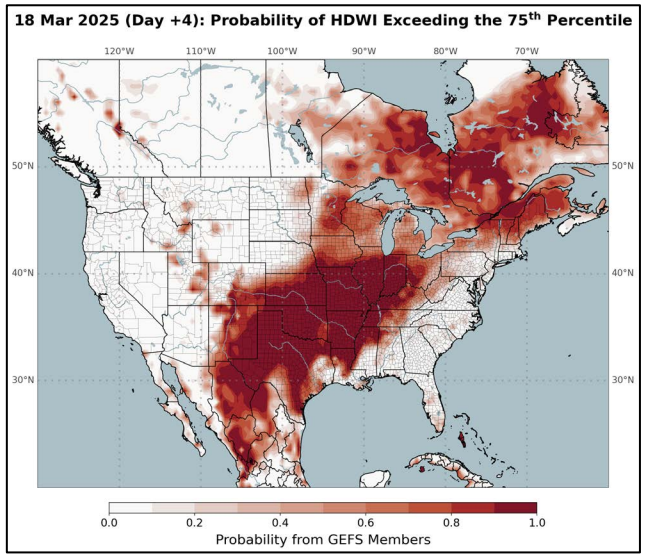
Sunday > 75th Percentile



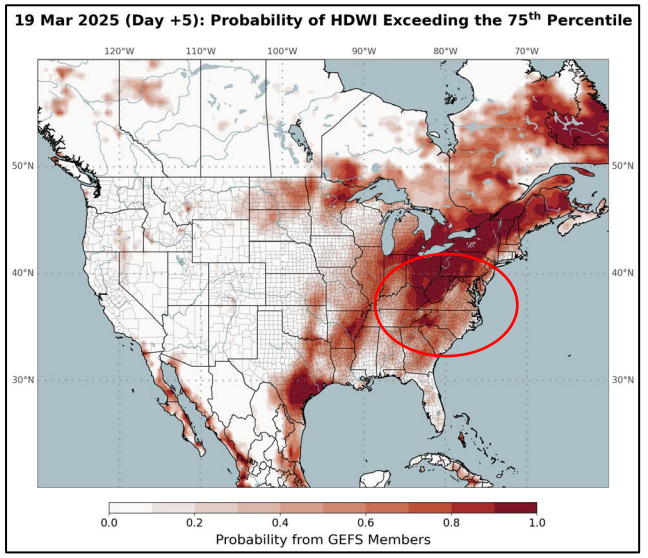
Monday > 75th Percentile



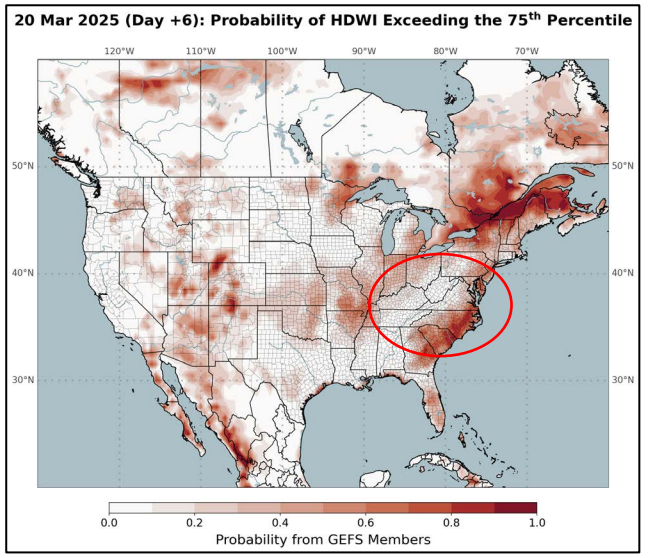
Tuesday > 75th Percentile



Wednesday > 75th Percentile



Thursday > 75th Percentile



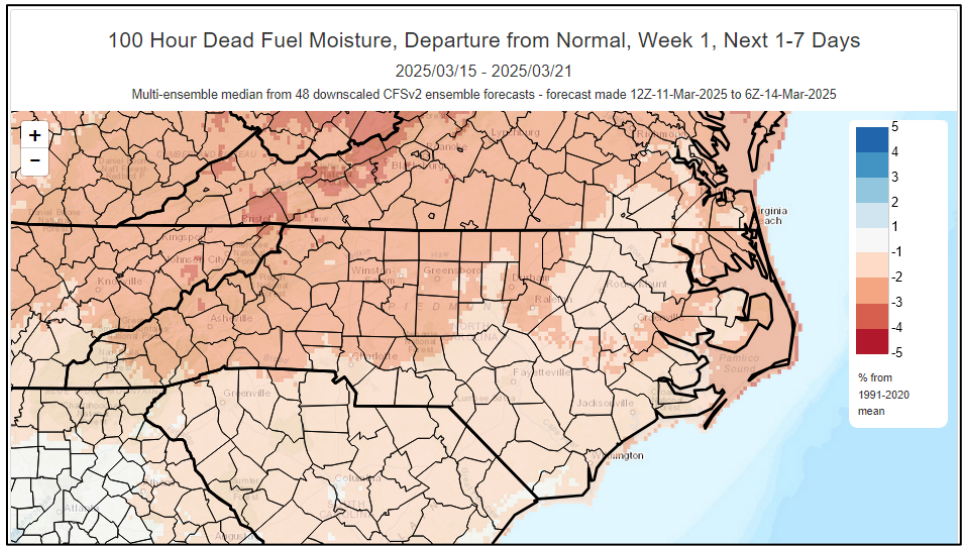
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

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

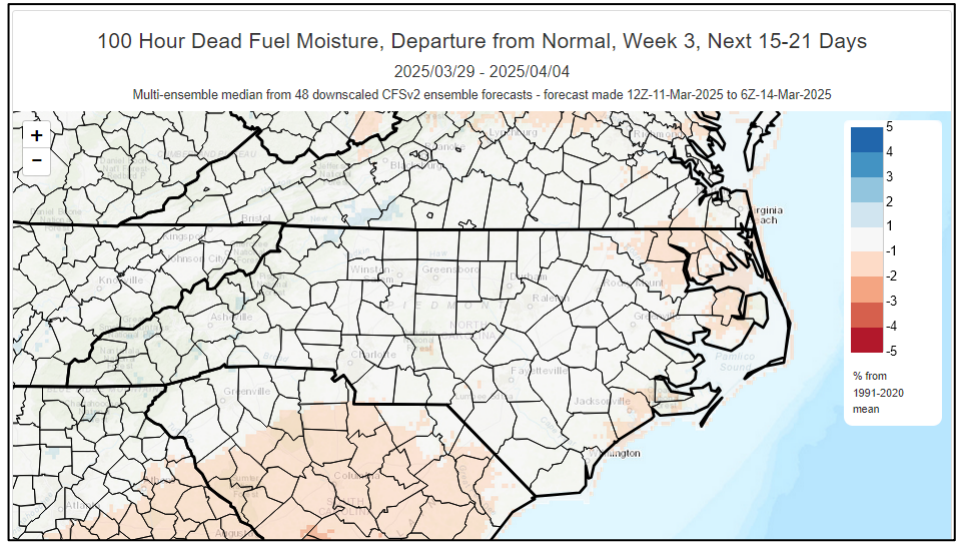
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1



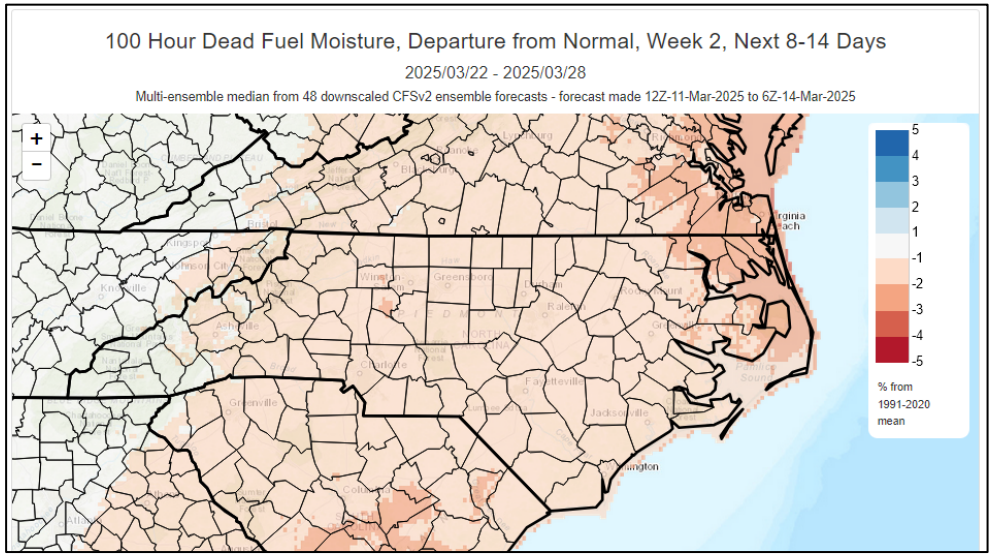
Week-3



This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up.

Note drier than normal conditions for Wk-1 & 2. Wks. 3 & 4 show potential for fuel moistures to return to near normal.

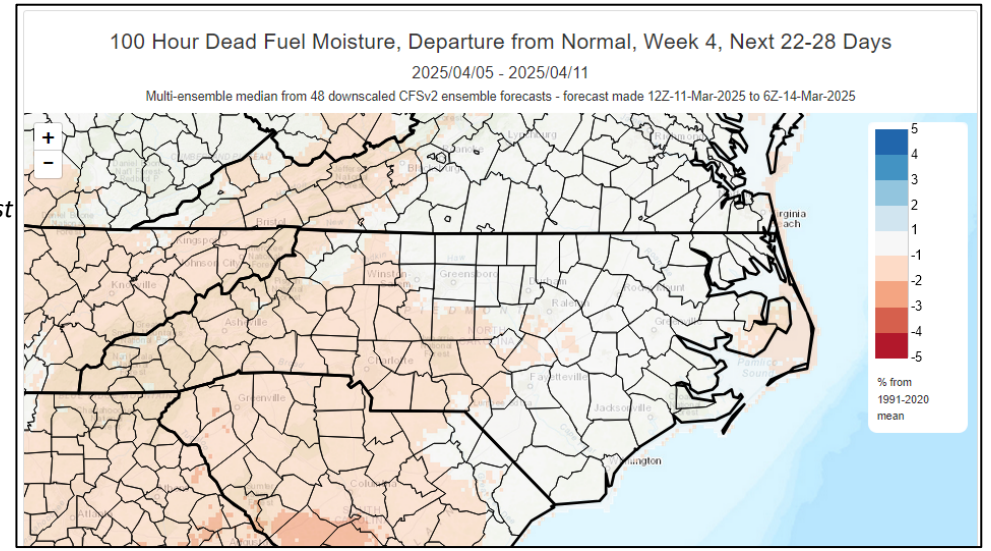
Week-2



Relates to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration and overnight RH recovery trends.

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

Week-4



From: https://climatetoolbox.org/tool/Climate-Mapper , 100-hr Map Link

R3 Staff Comments from this week:

- With warm temperatures and low rhs, fire danger remained high to very high cross all FDRAs this week. The Central Mountains showed extreme fire danger for several days.
- 8 to 9 days since wetting rain (0.1”) for most stations in R3 as of 3/14.
- As of 3/14 all R3 stations are showing 100-hr FM at or below 15%, with the BRE FDRA trending slightly below the rest of the region at 11-14%.
- Tree tops and laps associated with Helene damage contributed fire behavior, especially in areas with oak/hickory litter.
- Duff continues to be unavailable in most locations and fires are being contained with leaf blowers/handline in areas with no storm damage.
- Indirect attack will continue to be required in areas with Helene blowdown, ample time is needed to construct line and burn out prior to the advancement of the main fire.
- Windthrown trees from Helene on the Bailey Branch Fire were showing bud swell. These trees will likely decline over the summer and eventually die; however, this will likely prolong the curing process in these fuels.

Images from R3/D1/Mitchell County/Bailey Drive Fire; NCFS provided

Generalized Statewide Comments:

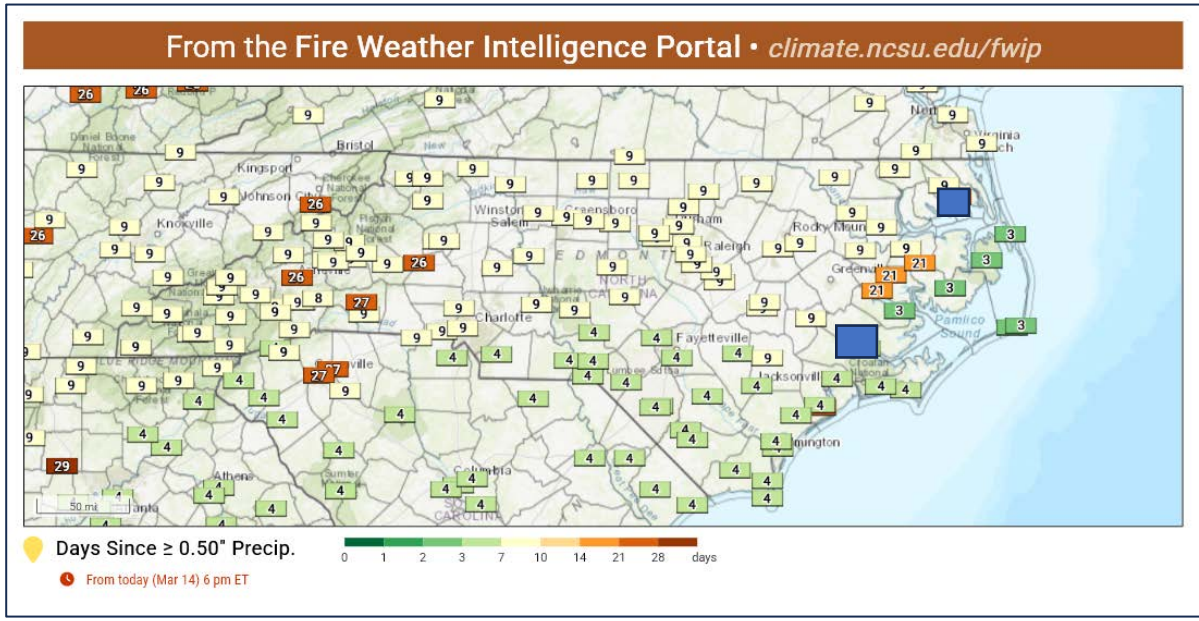
Fuel Dryness - fire danger increased due to substantial **surface** drying of 1's, 10's, 100's again this past week for most FDRAs. On days when warmth, low fuel moisture and wind lined up IA was moderate to heavy in impacted FDRAs. Aerial dead fuels (snags) were reported to be consuming, while heavy down & dead were charring.

Drought - Still concerned about cumulative impacts of limited rainfall along coast (KBDI/Drought related) moving towards growing season. Canal networks and swamp systems remain significantly drier than normal even with recent rains. Green-up is beginning & we'll likely see rapid draw-down of remaining plant available water in the soil and duff, without significant/repeated soaking rains, lining up with warmer temps and increasing evaporative demands.

Live Fuels/Greenness – live fuels are waking up, but generally remain in seasonal dormant/cured status, also reflected in the NFDRS models. Note that daylength continues to increase, which will provide more opportunity for fuel heating/drying as we move towards Spring. Start of green-up varies across the state & doesn't match the typical pattern, based on model interpretation.

Spells of very dry & cold air – Continue to be watchful for situations where consecutive days of dry air aligns with increasing air temps, vegetative dormancy, wind and heavy loading of drying storm debris as we progress towards the growing season.

Storm Damage Concerns – Helene impacted areas will continue to be problematic relating to access and containment. Curing of downed treetops & smaller branches (leaves/needles are still attached) continues, acting like elevated 1's,10's and 100's (more responsive to air/wind). Larger tree stems are generally not contributing significantly to fire behavior. Species, severity of stem damage and landscape position (exposure) will continue to play into site specific availability of hurricane blowdown fuels.



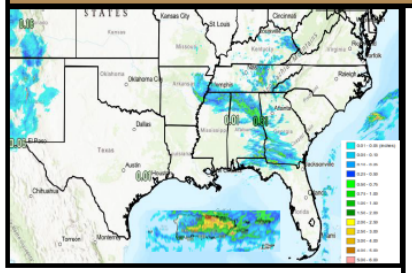
Southern Area Daily Outlook Page:

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

Product provides weekly context for Southern Area (Portion of Friday - 3/14 Outlook shown) & is typically updated daily during high SA Planning Levels.

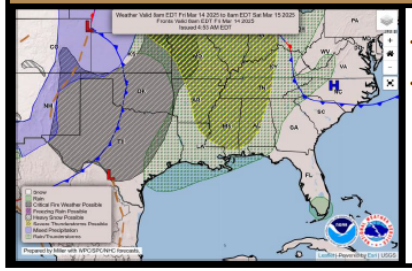
SACC Daily Outlook
Friday, March 14, 2025

Rainfall Accumulations for the Past 24 Hours



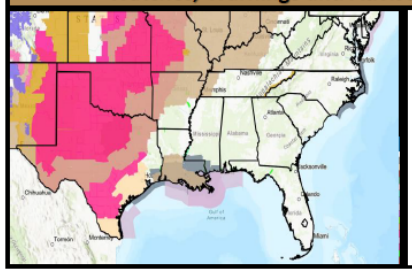
- There were scattered areas of significant rain over portions of N AL, Central TN, S GA, and PR and isolated areas in NE AR, N MS, Central TN, E KY, NW FL, W KY, and the Appalachians in NC and GA.
  - In these areas, generally up to one inch fell.
  - There were also isolated areas there were amounts up to one and one quarter inches.
  - Puerto Rico/VI is the exception where widespread rain fell, with most of the islands saw amounts up to 6 inches, with localized amounts up to 6.25 inches.
    - The heavier amounts mostly fell over the northern half of the island.

The Weather Outlook for Today



- Weak High pressure over NC is forecast to keep the Atlantic coast dry for the day.
- A dry cold front is forecast to move across the eastern half of TX and OK and into the Mississippi River Valley.
  - This will bring a significant potential for strong wind and a very dry air mass to the northern half of TX and OK, moving into AR.
  - This will bring critical Fire Weather conditions to most of TX and OK, possibly into AR.
  - As the front entangles with moisture from the Gulf, showers and thunderstorms, some may be strong to severe, are possible for the MS River Valley late today through Saturday morning.

Watches, Warnings and Advisories as of 8 am This Morning

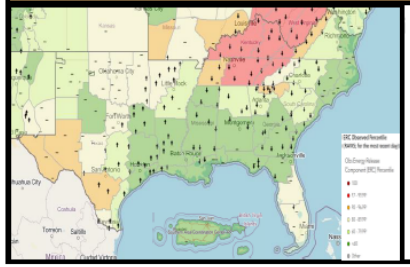


- **Red Flag Warnings/Fire Weather Watch:** Red Flag Warnings are in effect for most of TX, all of OK, and NW AR for strong gusty wind, very low RH, and very dry fuels.
- **Wind Watches/Warnings/Advisories:** A High Wind Warning is in effect for most of N and W TX, the TX/OK Panhandles, most of OK, and the TN Mts. There is a Wind Advisory for portions of W, north E TX, Central TX, SE OK, N AR, far W TN, W KY, S LA, and the TN Mts.

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

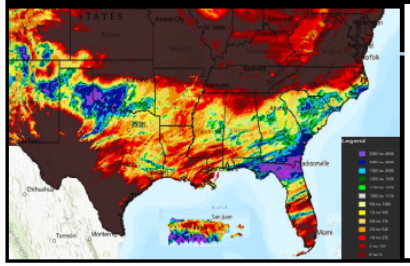
SACC Daily Outlook
Friday, March 14, 2025

Observed/Forecast ERC



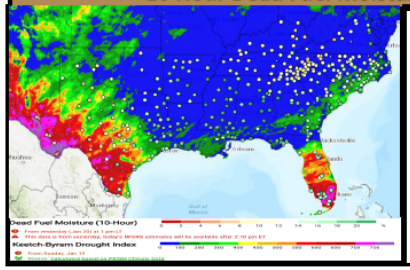
- ERCs across the Southern Area are varying greatly. KY and most of TN are reporting ERCs above the 97th percentile.
- The lowest ERCs are generally in the coastal states , PR, and NW TX reporting in below the 60th percentile.
- The forecast over the next 3 days is showing ERCs:
- Decreasing or stationary for areas east of the MS River.
- Increasing or stationary for areas west of the MS River.

7-Day Percent of Normal Precipitation Observed



- The Southern Area is seeing a mixed batch of well above normal and well below normal rainfall over the last 7 days.
- The driest areas are W and S TX, N OK, TN, N AR, KY, NC, VA, and the FL Peninsula.
- The wettest areas are NW TX, SC, S GA, and N FL.

10 Hour Dead Fuel Moisture with the KBDI (shaded)

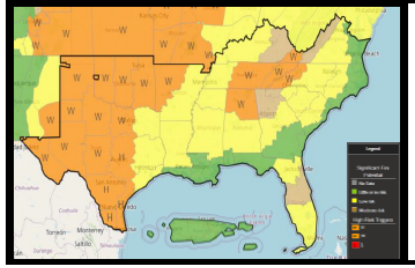


- The Southern Area is reporting 10-hour Fuel Moistures generally above 15% across the coastal states, AR, coastal TX, and Central/East OK.
- West/Central/Panhandle TX are mostly 6-11%
- The Appalachians are reporting in at 8%-15%.
- KBDIs are still showing a large area of values at 100 or less.
- W TX and S FL have the highest KBDIs, with much of these areas at 700 and above.

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

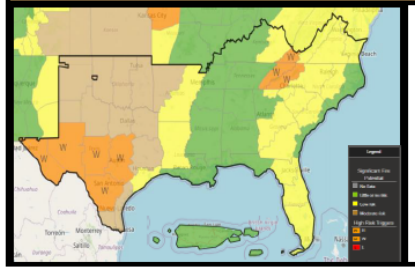
SACC Daily Outlook
Friday, March 14, 2025

Significant Potential for Today



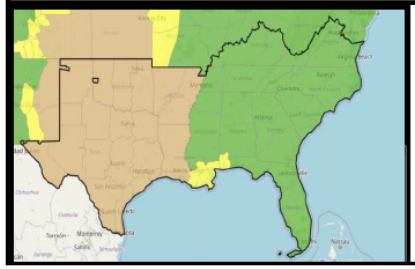
- **High Risk:** Most of TX, OK, NW AR, N AL, Central TN, TN/NC and VA Mts for strong wind, very low RH, and low fuel moisture. E Central and South TX for well above normal temperatures, low RH, and dry fuels.
- **Moderate Risk:** N GA, GA Mts, KY Mts, and Central FL for low RH and dry Fuels.
- **Low Risk:** E TX, SE AR, LA, MS, W TN, W KY, Central VA, NC, SC, Central GA, and NE/South FL, for low RH and dry fuels.

Significant Fire Potential for Tomorrow



- **High Risk:** W and Central TX, the N Rio Grande Valley, and the TN/NC/SW VA Mts for windy conditions, low RH, and dry fuels.
- **Moderate Risk:** S Rio Grande Plain, North and E TX, TX/OK Panhandle, OK, NW AR for very low RH and dry fuels.
- **Low Risk:** N TX coast, Central/South GA, GA Mts, VA, NC, SC, E KY, and the FL peninsula for low RH and dry fuels.

Significant Fire Potential for Sunday



- **High Risk:** None.
- **Moderate Risk:** TX, OK, AR, and LA for very low RH and dry fuels.
- **Low Risk:** LA Toe, MS and AL coast for low RH and dry fuels.

National 7-Day Significant Fire Potential Outlook

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

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

Forecasted Adjective Rating for FDRAs in North Carolina

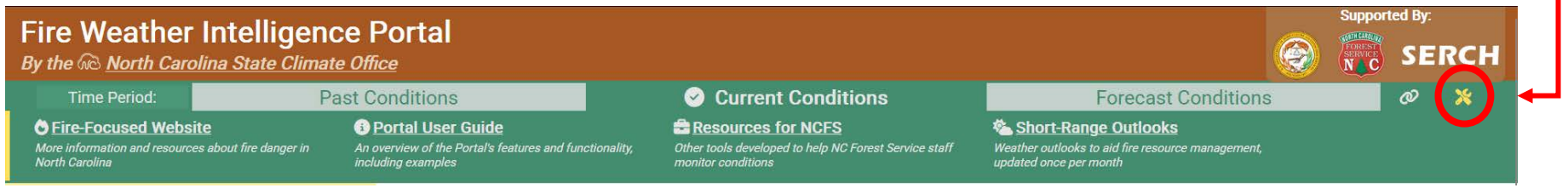
FDRA	Fri Mar 14	Sat Mar 15	Sun Mar 16	Mon Mar 17	Tue Mar 18	Wed Mar 19	Thu Mar 20	Fri Mar 21
Southern Highlands ⚙ X	V	H	M	M	M	H	H	H
Central Mountains ⚙ X	E	V	M	M	M	H	H	H
Northern Highlands ⚙ X	H	H	M	M	M	M	H	H
Blue Ridge ⚙ X	V	H	L	M	M	H	H	H
Western Piedmont ⚙ X	V	M	M	M	M	M	H	H
Sandhills ⚙ Z	H	H	M	L	M	M	M	H
Eastern Piedmont ⚙ X	H	M	M	L	L	M	M	M
Southern Coast ⚙ X	H	L	L	L	H	H	M	V
Northern Coast ⚙ X	M	L	L	L	M	M	M	H

Important to note that the model outputs can change significantly farther out in time. Changes due to shifts in timing of precip, cloud cover, recovery, modeled rh's, etc.

Fire Weather Intelligence Portal Links Reminder

Main Page: https://climate.ncsu.edu/fire/
New Portal: https://products.climate.ncsu.edu/fire/
Obs by Station: https://products.climate.ncsu.edu/fwip/nfdrs.php?data=ob
Forecast by Station: https://products.climate.ncsu.edu/fwip/nfdrs.php?data=fc&state=NC
Hazard Tool: https://products.climate.ncsu.edu/fwip/hazard.php
Weekly Outlook Tool: https://products.climate.ncsu.edu/fwip/outlook.php

New Portal Interface: Click on Tool button to expand menu like old portal.



NCFS Pocket Cards: https://www.ncagr.gov/divisions/nc-forest-service/fire-control-and-prevention/fire-danger-pocket-cards
NIFC Fuels and Fire Danger Advisories: https://www.nifc.gov/nicc/predictive-services/fuels-fire-danger
Fire & Smoke Map: https://fire.airnow.gov/#6.81/35.215/-80.269
NC AIR Portal: https://airquality.climate.ncsu.edu/discussion/?view=latest