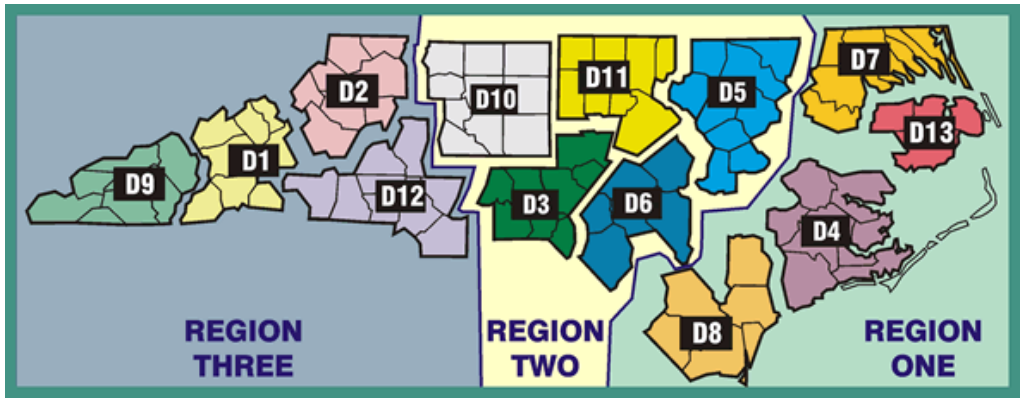


Weekly Fire Danger Assessment
NCFS – All Regions

For Time Period:

Friday (3/7/25) to Thursday (3/13/25)

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

Date: March 7, 2025
Created by: Jamie Dunbar
Fire Environment Staff Forester
North Carolina Forest Service

Statewide Context

January: 10-yr avg is 326 fires for 524 acres
February: 10-yr avg is 576 fires for 1,494 acres
***March: 10-yr avg is 913 fires for 4,727 acres**
April: 10-yr avg is 659 fires for 6,481 acres
May: 10-yr avg is 317 fires for 1,241 acres
June: 10-yr avg is 221 fires for 2,408 acres
July: 10-yr avg is 183 fires for 626 acres
August: 10-yr avg is 137 fires for 420 acres
September: 10-yr avg is 171 fires for 383 acres
October: 10-yr avg is 226 fires for 1,895 acres
November: 10-yr avg is 465 fires for 6,046 acres
December: 10-yr avg is 277 fires for 427 acres

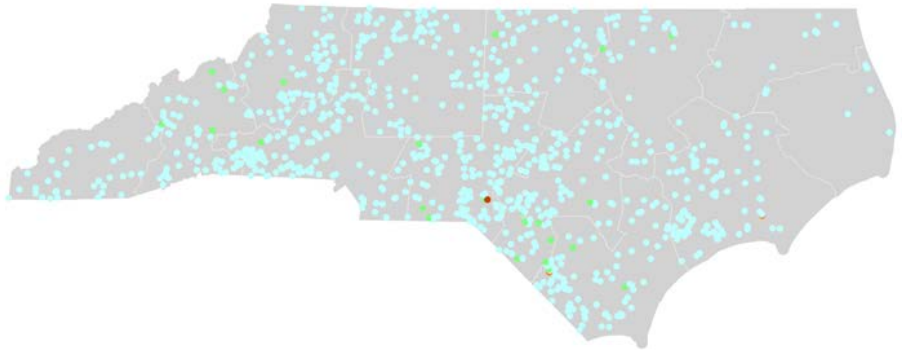
February: 928 incidents for 2,078 acres
8-Day Activity: 753 incidents for 2,872 acres

All fire activity data is preliminary
Does not include additional federal fires/acres
2014-2023 CY Average

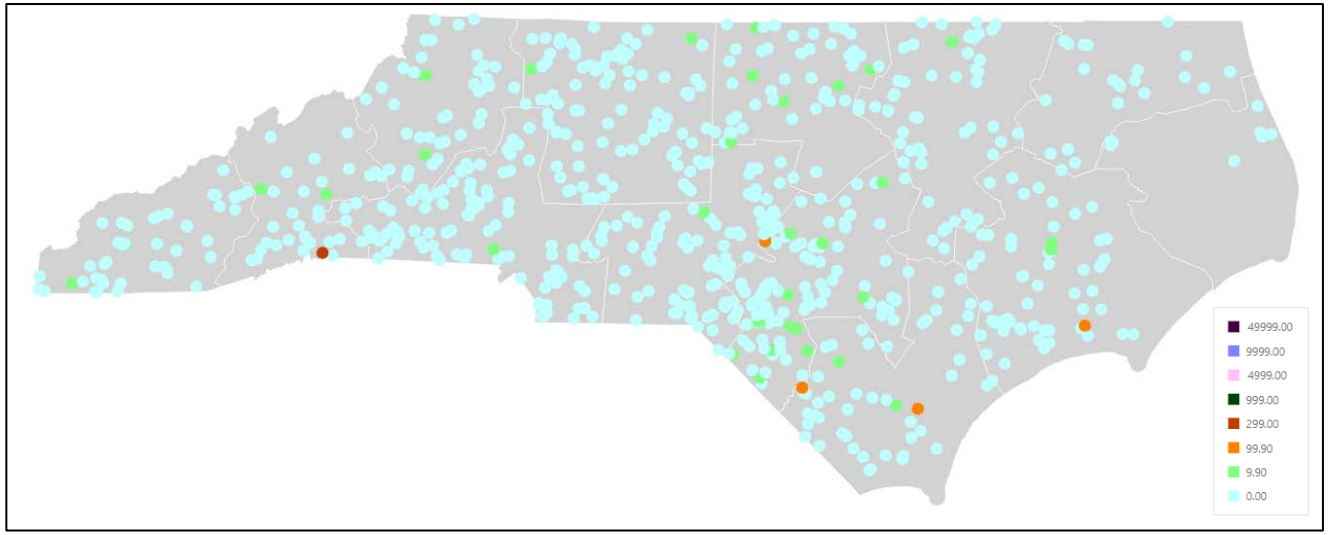
Largest incidents last **8-Days** (Ending 3/6):
from fiResponse & preliminary reporting only

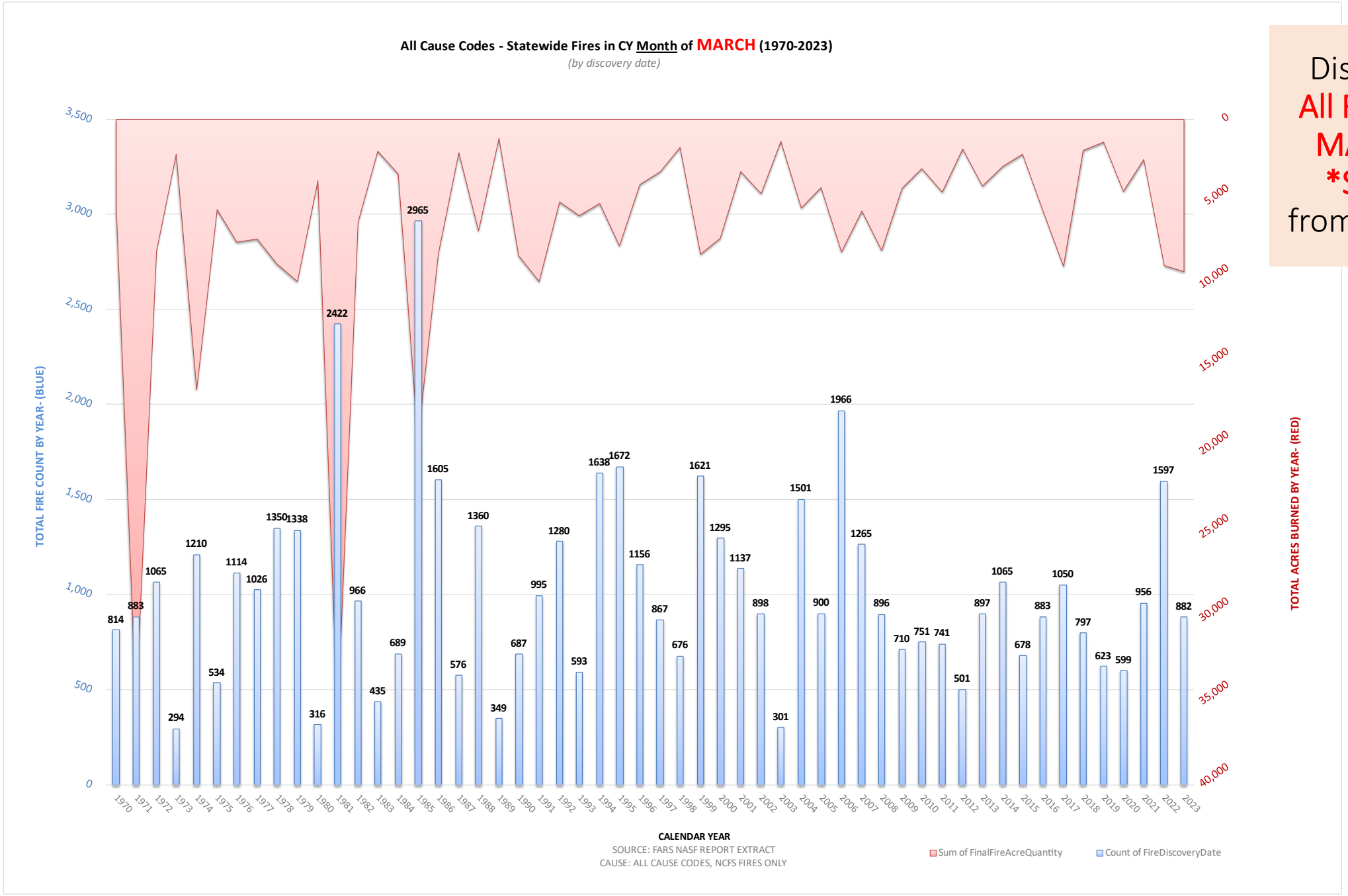
Incident Name	Discovery Date	Region	District	County	Acres
3910	3/1/2025	Region 3	District 1	Polk County	619.00
Rough Horn Rd	2/27/2025	Region 1	District 8	Columbus County	263.00
Jeterville	3/1/2025	Region 2	District 6	Harnett County	212.52
Hawks Bill Drive	3/1/2025	Region 1	District 8	Brunswick County	165.00
Ramshorn	3/1/2025	Region 1	District 4	Carteret County	114.00
Redprings-Springside-03-03-25	3/2/2025	Region 2	District 6	Robeson County	92.60
River Road	3/1/2025	Region 1	District 4	Craven County	80.00
Wood grain Dry Kiln	3/1/2025	Region 2	District 10	Surry County	55.00
Grooms Road	3/1/2025	Region 3	District 1	Buncombe County	52.00
Bear	3/1/2025	Region 2	District 6	Harnett County	46.00

February 2025



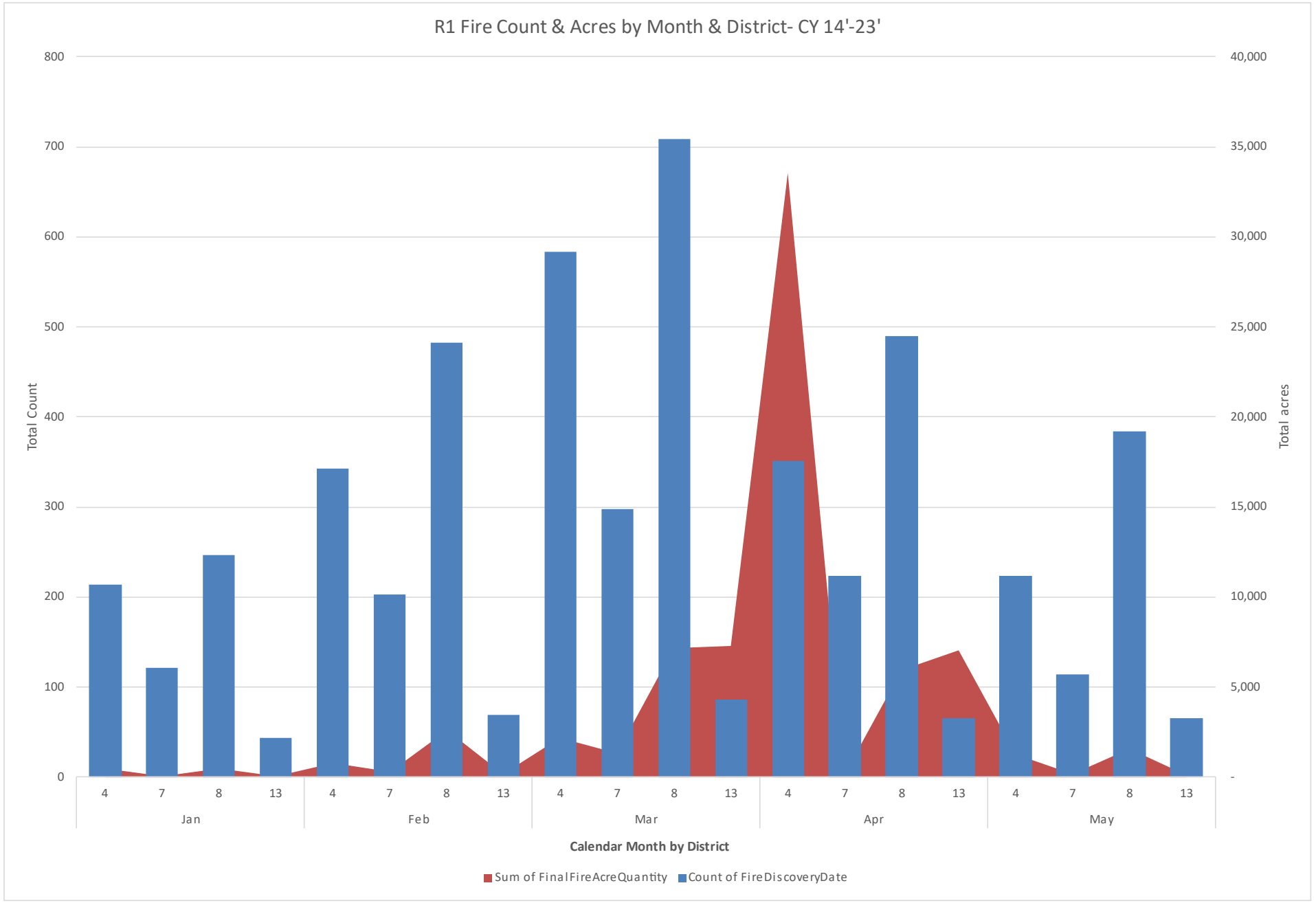
8-Day Activity
(ending 3/7 at 1100)





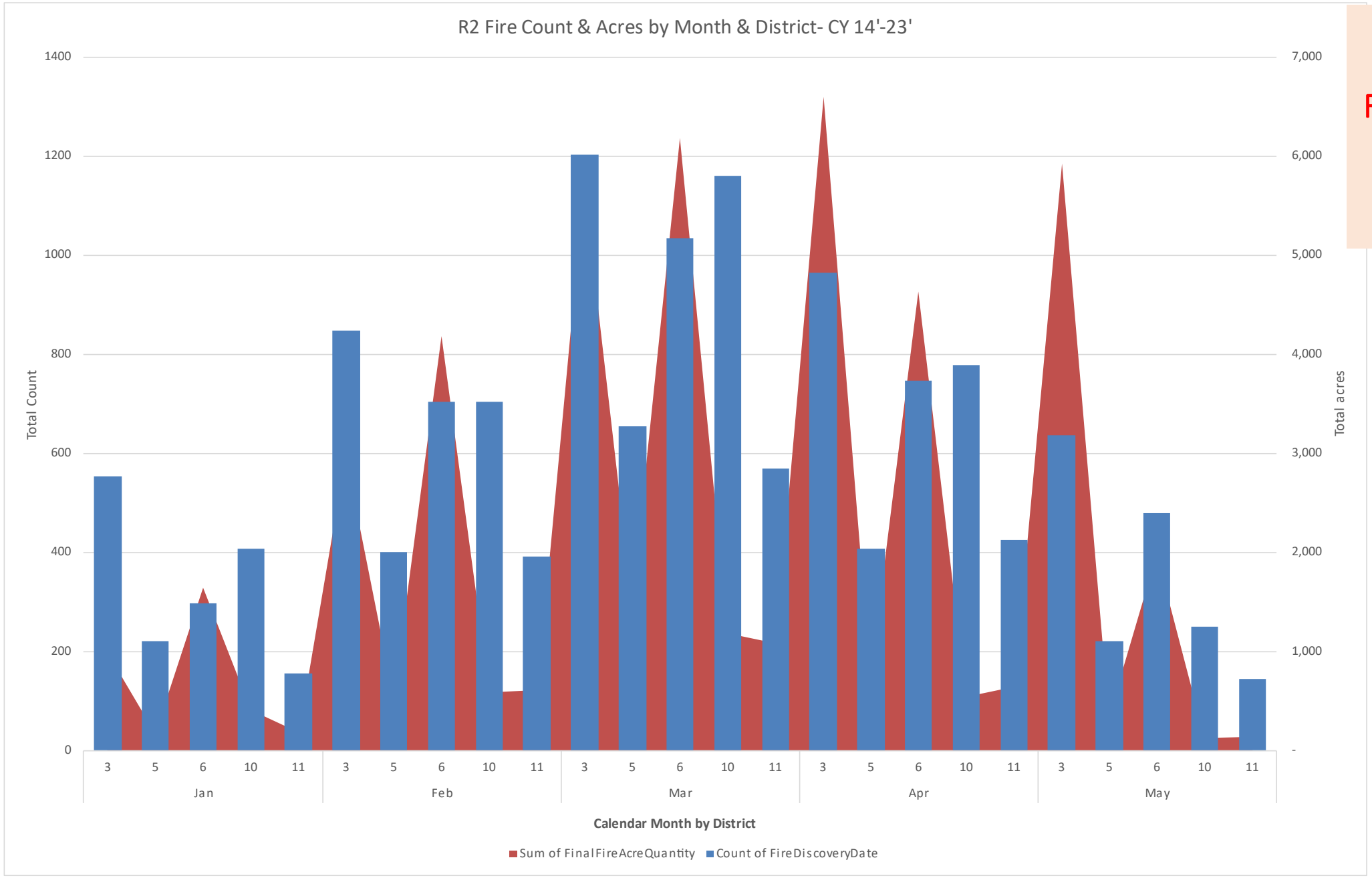
Distribution of
All Fires & Acres
MARCH By CY
Statewide
from 1970 - 2023

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



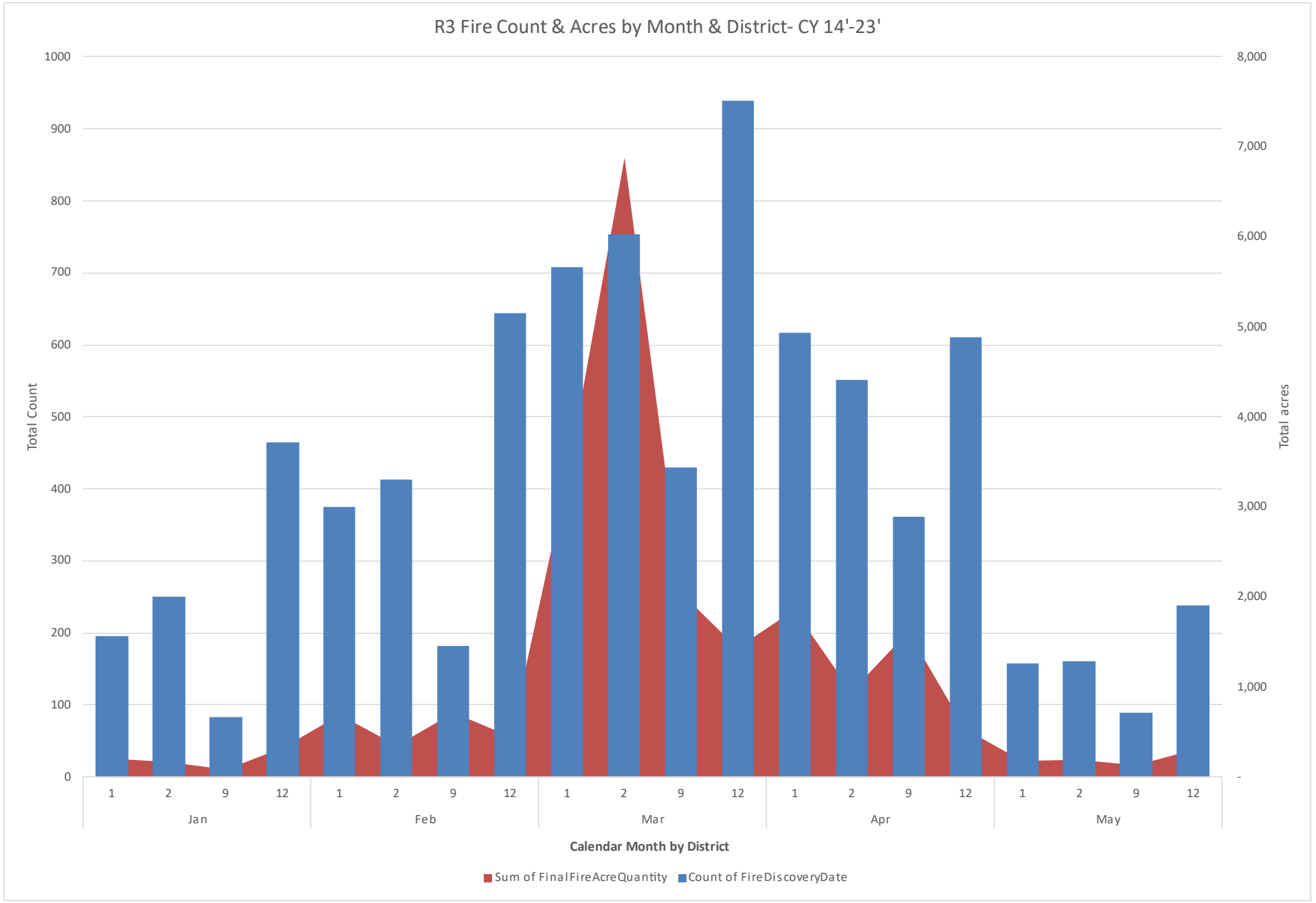
Distribution of
R1 Fires & Acres by Month (Jan-May)
from 2014-2023

Cause: All Cause Codes, R1, NCFS Reported Fires Only



Distribution of
R2 Fires & Acres by Month (Jan-May)
from 2014-2023

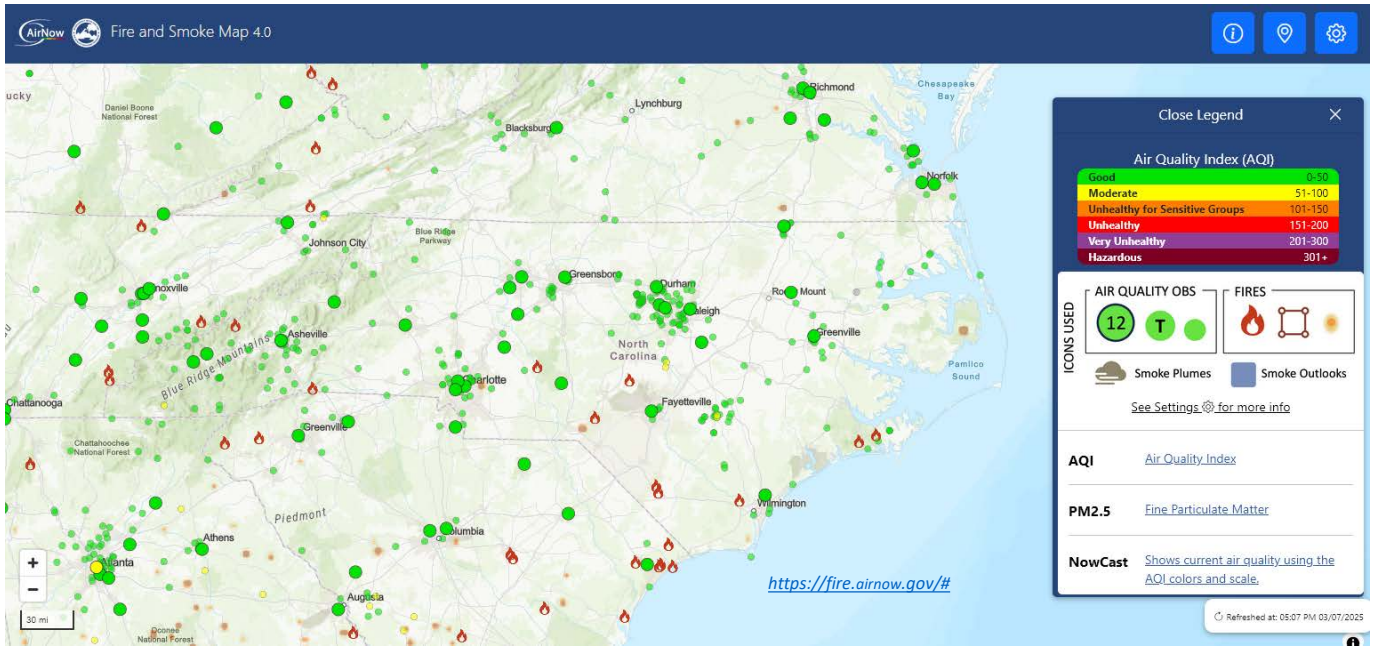
Cause: All Cause Codes, R2, NCFS Reported Fires Only



Distribution of
R3 Fires & Acres by Month (Jan-May)
from 2014-2023

Cause: All Cause Codes, R3, NCFS Reported Fires Only

Air Quality Notes



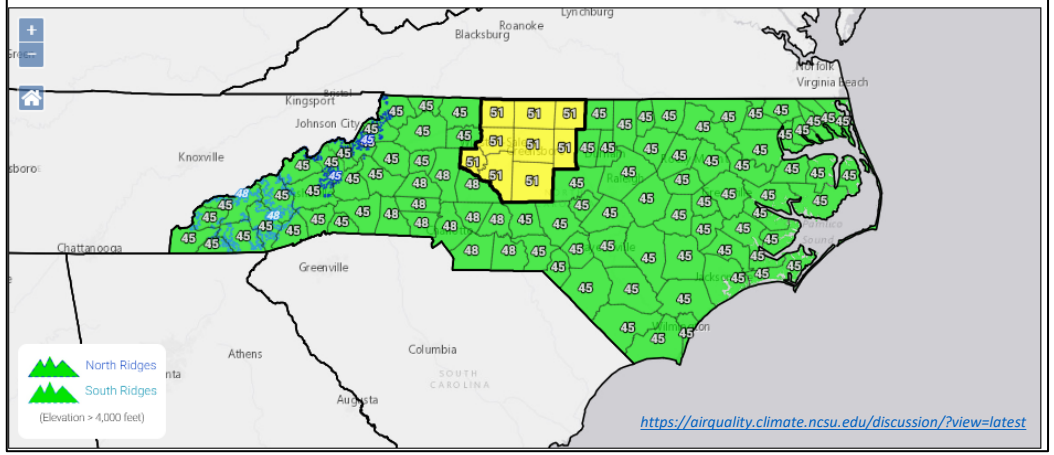
Extended Air Quality Outlook

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 7)	Max AQI · Ozone · PM2.5	42	Green	download
Saturday (Mar 8)	**Max AQI** · Ozone · PM2.5	45 to 48	Green	download
Sunday (Mar 9)	Max AQI · Ozone · PM2.5	40 to 48	Green	download
Monday (Mar 10)	Max AQI · Ozone · PM2.5	40 to 48	Green	download

Maximum Air Quality Index for Mar 8, 2025

0 51 101 151 201 301



This forecast was issued on **Friday, March 7, 2025** at **2:23 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Air quality is well within the Code Green range today 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.

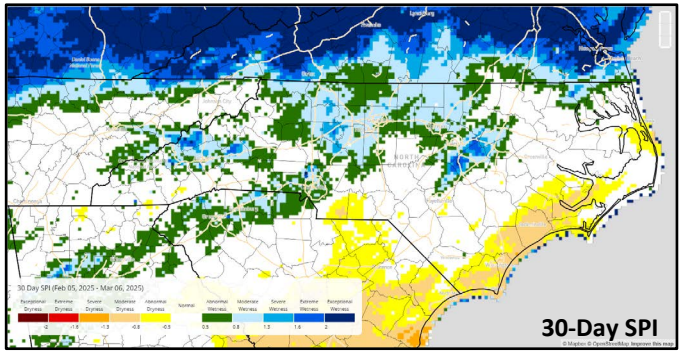
General Forecast Discussion

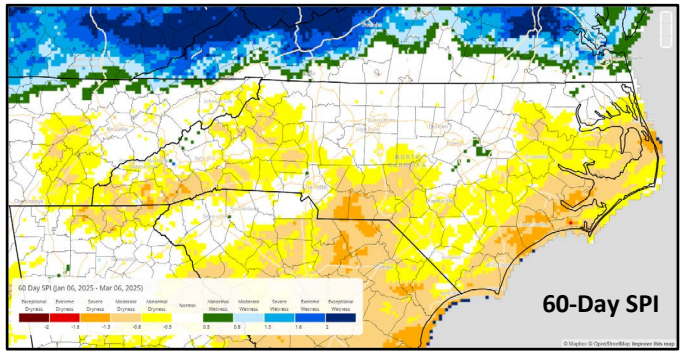
A cold front from the north on Saturday should help keep the air mass from stagnating, and daily average PM2.5 levels will hold in the Green range again. Ozone will rise into the upper Code Green range as a bit more sunshine reaches the surface compared to today.

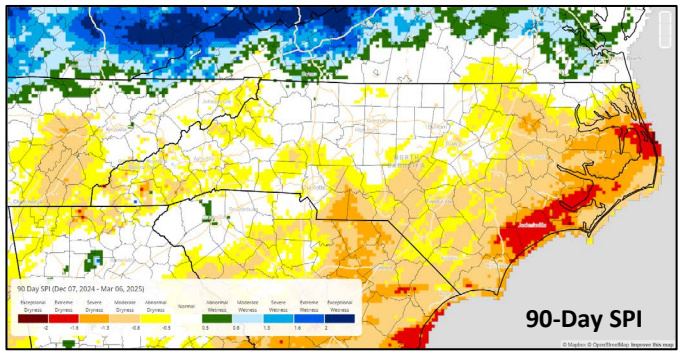
Outlook

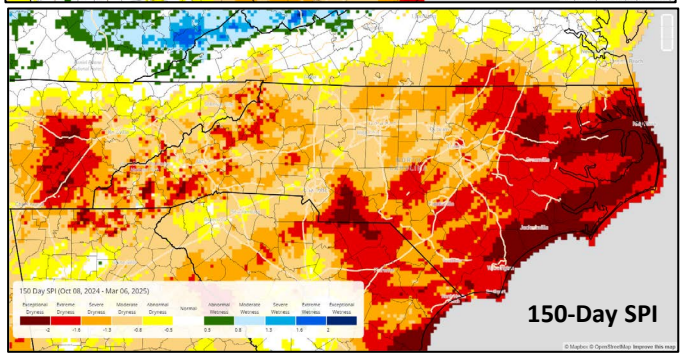
On Sunday into Monday, low pressure looks to develop over the Gulf states and move eastward, potentially bringing rain to the state on Monday as the cyclone travels up the coast. Gusty winds, cloud cover, and a fairly clean antecedent air mass will keep air quality in the Code Green range on both days for both pollutants.

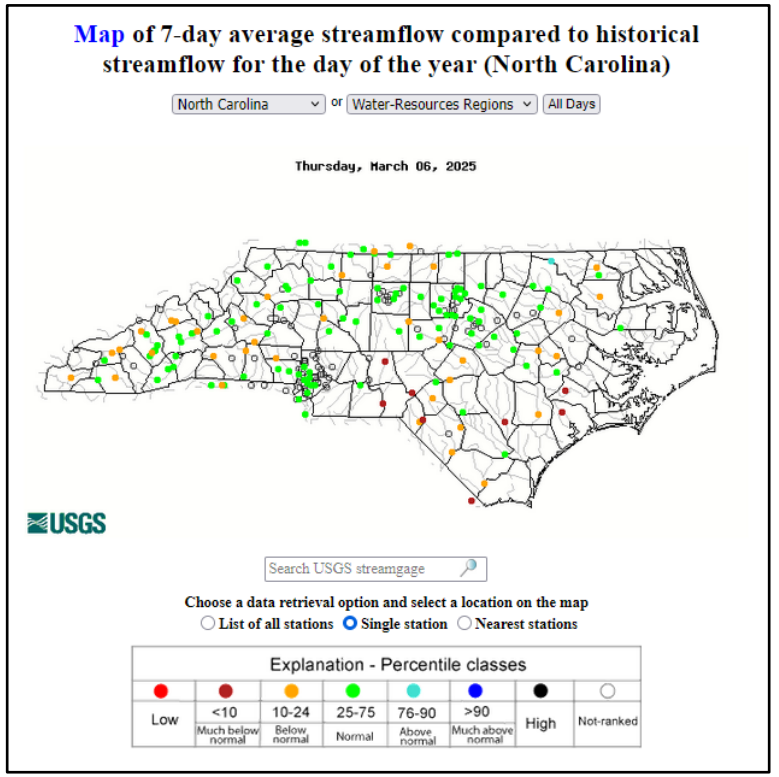
Author: *Sara Kreuser (sara.kreuser@deq.nc.gov) - NC Division of Air Quality*





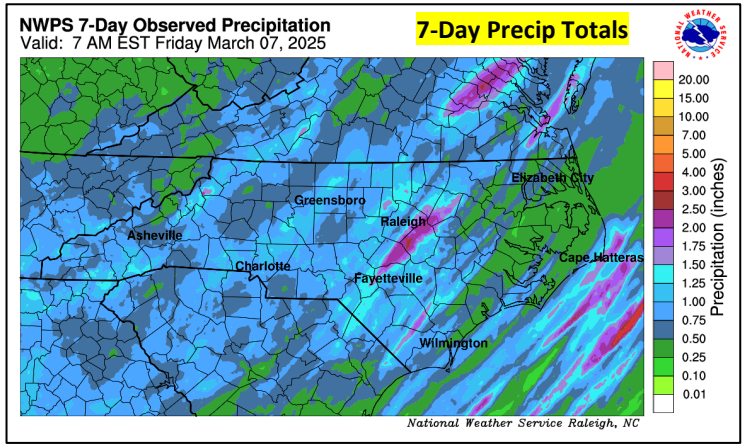


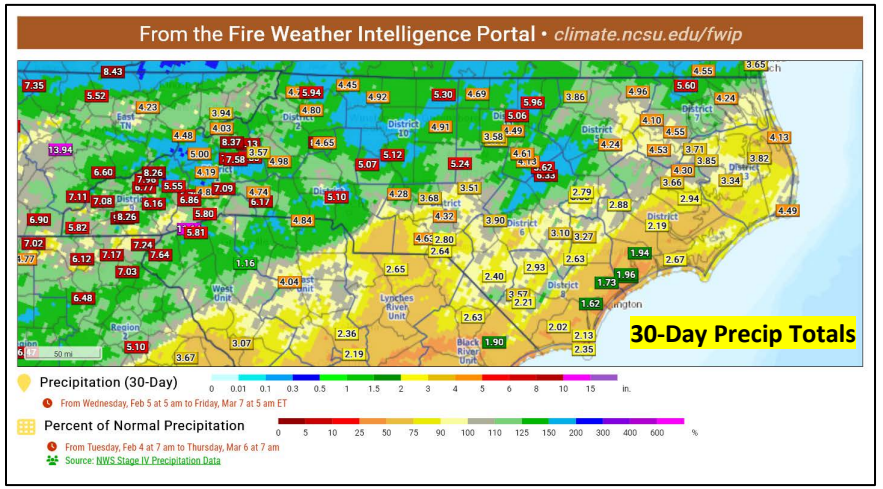


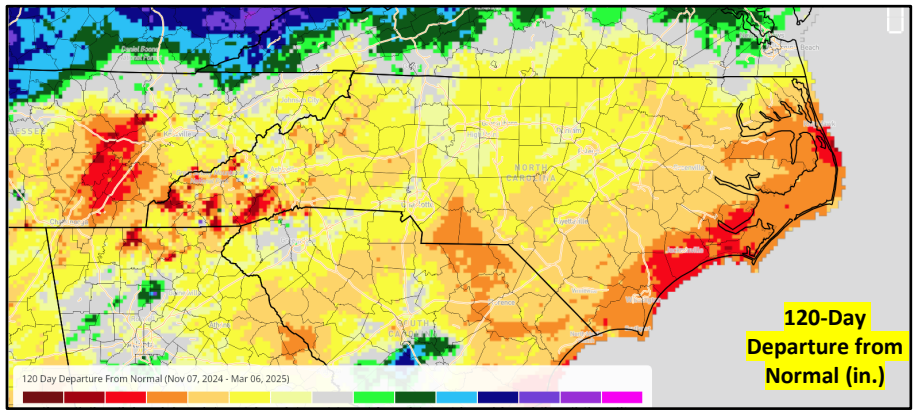


- Streamflow averages have improved for short-term (center top). Flashy in dormant season.
- Note the 7 & 30 day observed precip graphics (top right). Minimal rainfall for much of R1's Coastal Counties.
- 120-Day Departure from Normal Precip – areas in darker orange & red represent 6-8" & 8-10" departure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

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





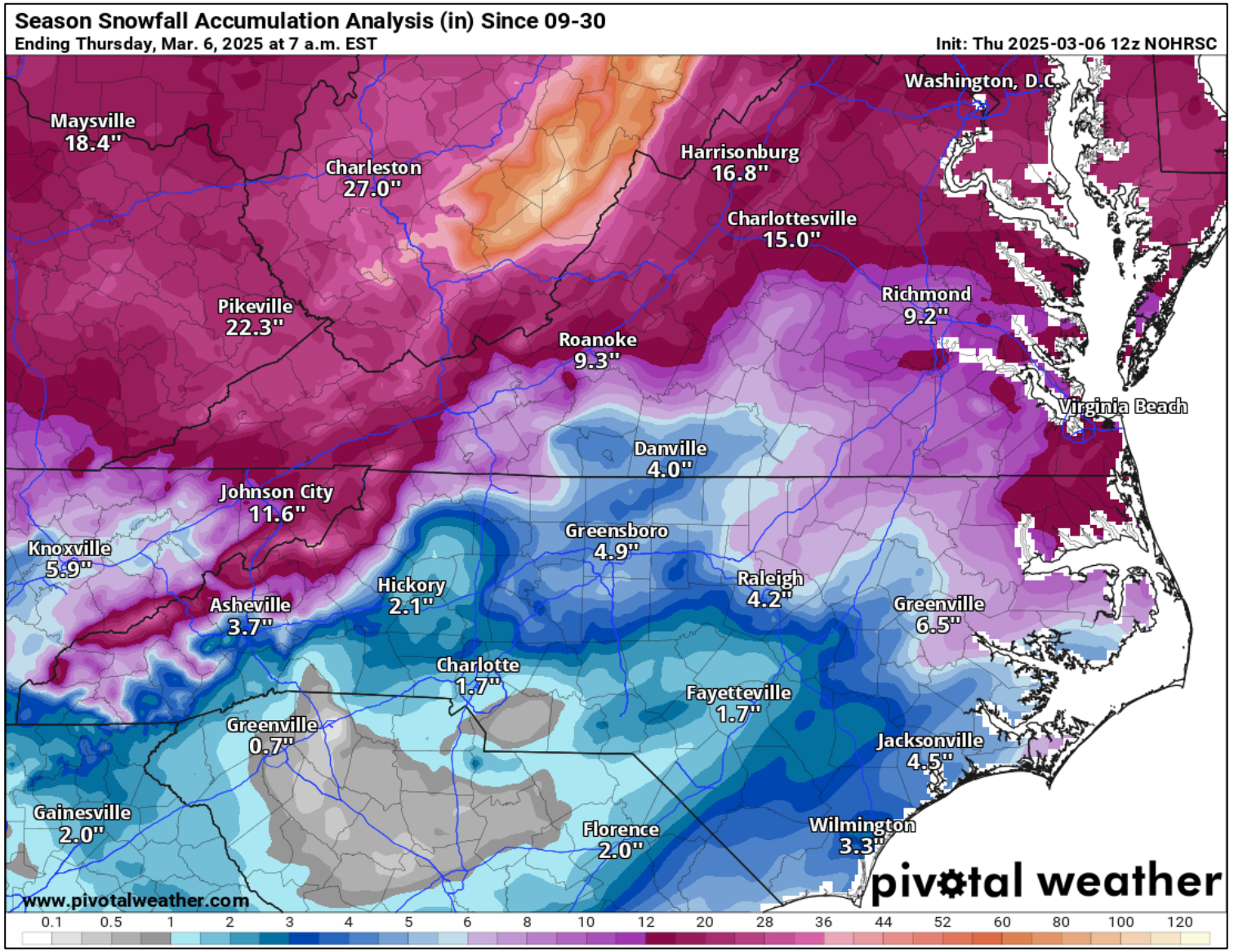


End of Snow Drought

10:1 + ratio

Several rounds of icing on fringes of snow could enhance fuel loading this Spring – broken tops/limbs, etc.

Cumulative Snowfall – Since 9/30/24



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

North Carolina Drought Update

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

For the assessment period ending **Mar. 4, 2025**

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

The Main Takeaway

Moderate (D1) and Severe Drought (D2) have expanded along our southern tier of counties, reflecting recent dryness and impacts such as widespread wildfires.

This Week's Summary

It's officially climatological spring now, and the recovery and recharge we hoped to see this winter was lacking in many areas. Some farm ponds never fully filled up, stream levels remain low, and dry soils and dormant vegetation led to an explosive start to the spring fire season last week, with more than 3,600 acres burned on state and private lands, per the NC Forest Service.

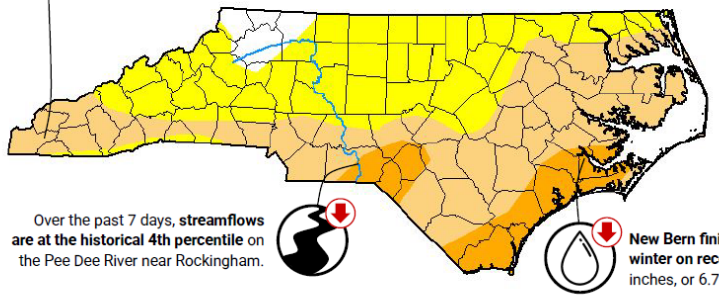
Seasonal Perspective

The last time this much of the state was in drought in the first week of March was in 2011, which also saw an active fire season through the summer along the coast.

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

Groundwater levels in Cherokee County are below normal again, declining quickly after the last rain event in mid-February.

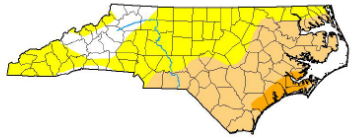
Low humidity, gusty winds, and dry fuels helped spread **about 250 wildfires burning nearly 1,800 acres last Saturday alone**.



Over the past 7 days, **streamflows are at the historical 4th percentile** on the Pee Dee River near Rockingham.

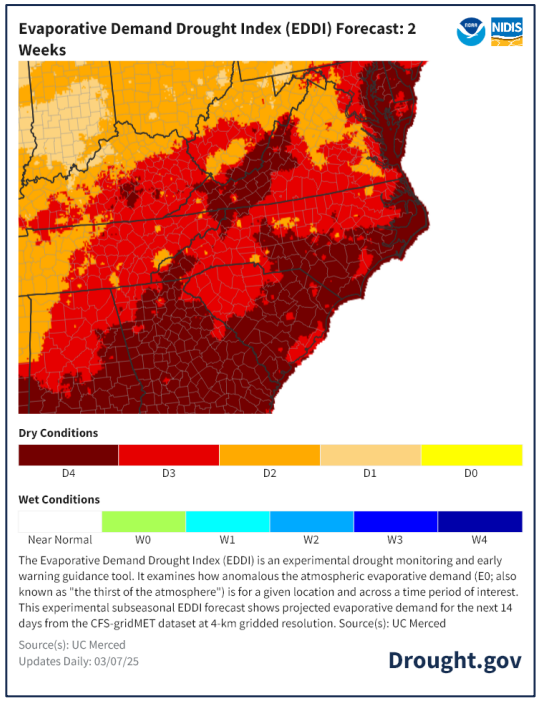
New Bern finished with its driest winter on record, measuring 4.06 inches, or 6.78 inches below normal.

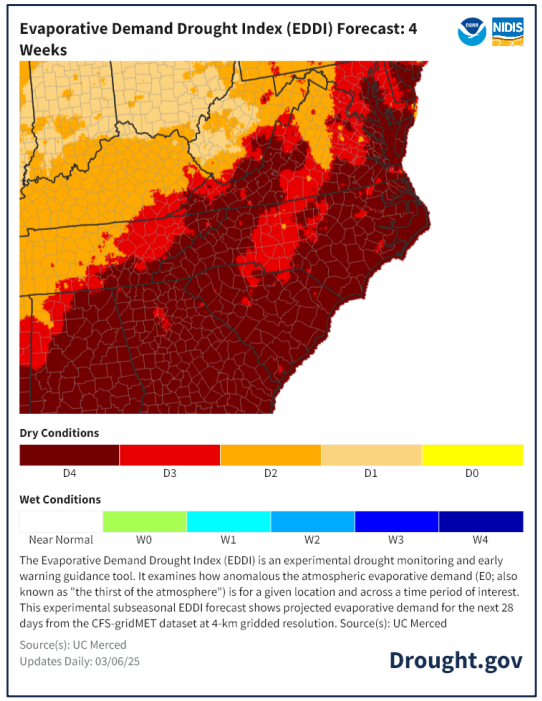
Last Week's Drought Status



Statewide Coverage by Category

Category	Current Coverage	Change Since Last Week
D0: Abnormally Dry	41.39%	-4.47%
D1: Moderate Drought	43.36%	+4.31%
D2: Severe Drought	11.36%	+7.28%
D3: Extreme Drought	0.00%	0.00%
D4: Exceptional Drought	0.00%	0.00%



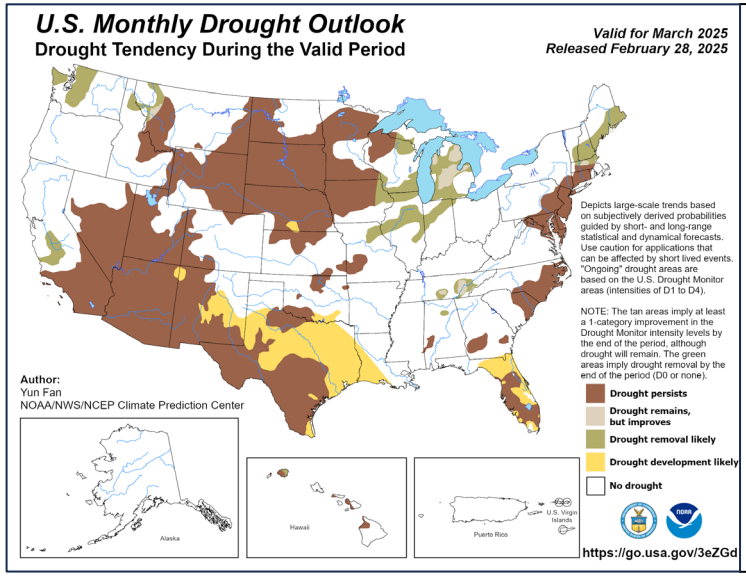


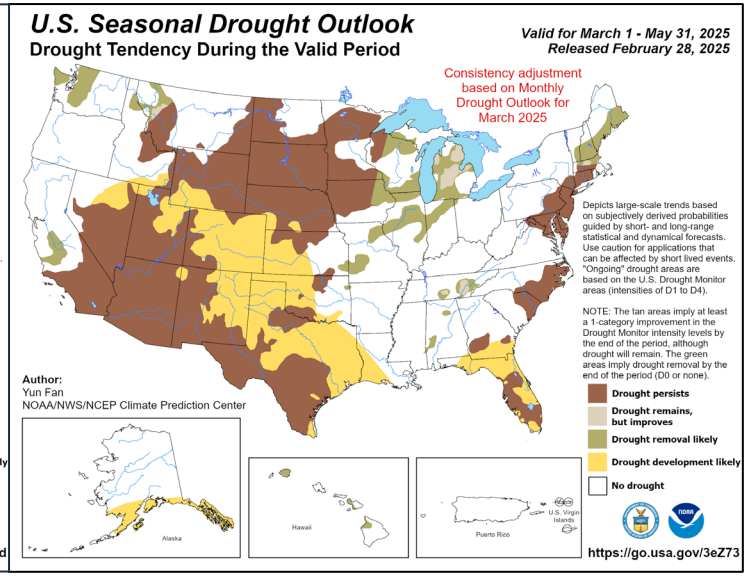
EDDI & Drought

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

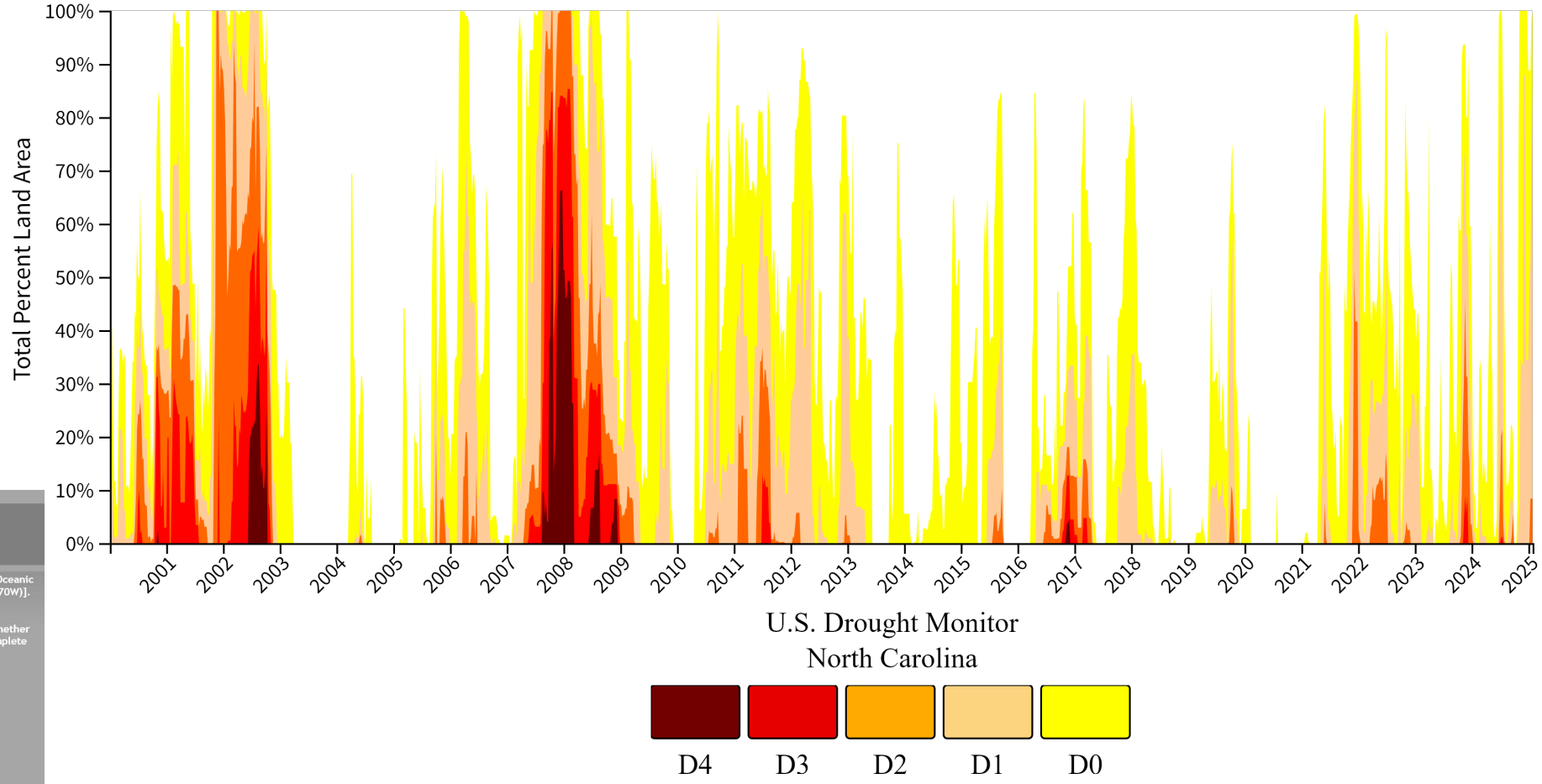
US Monthly & Seasonal Drought Outlook - shown at right. See detailed state/regional discussions here. *All of this is dependent upon any future storm tracks and/or any La Nina associated impacts.*





USDM – Drought Time Series

Statewide Drought Visualized – but think localized conditions as well.



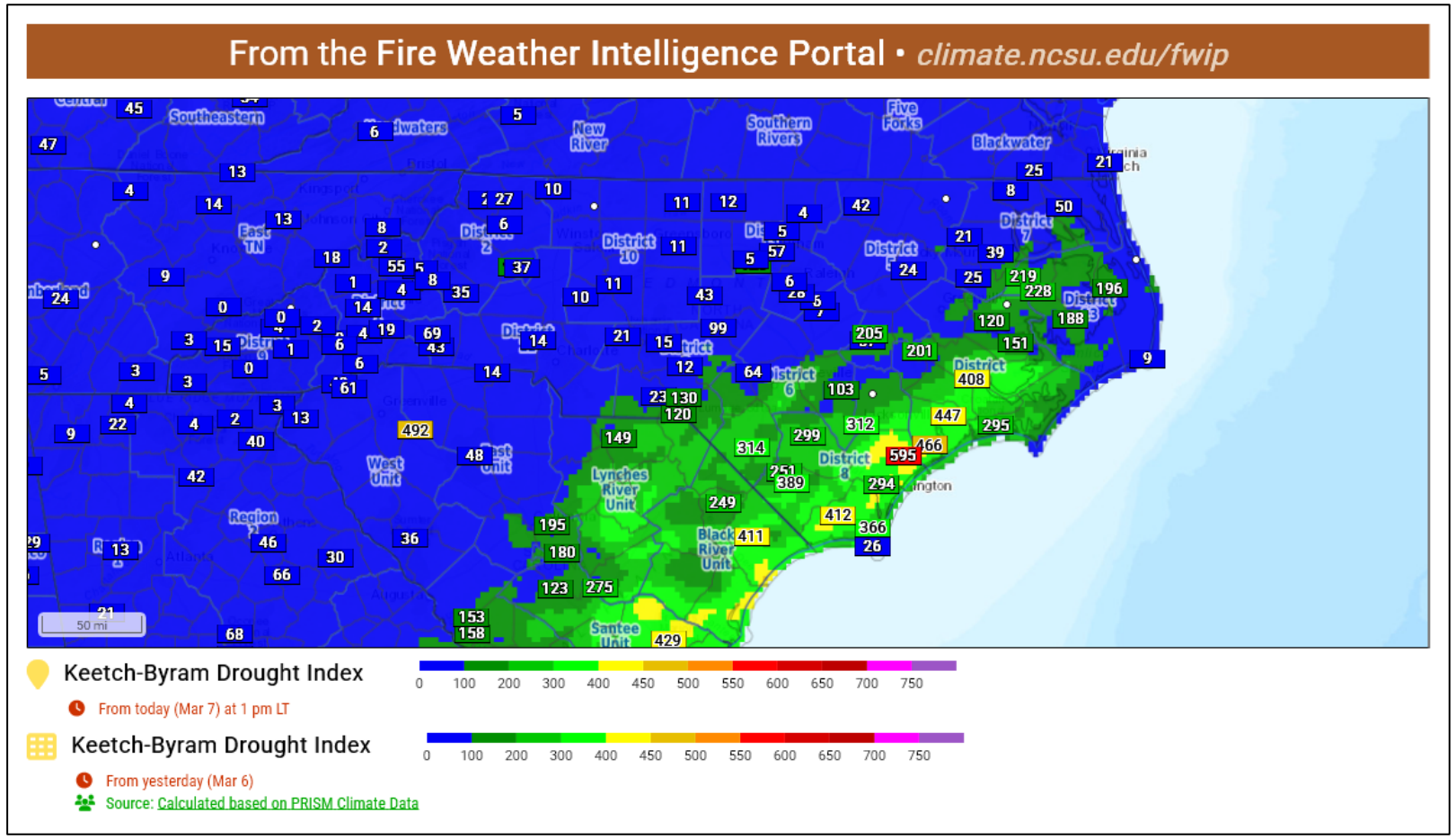
Historical El Niño and La Niña Episodes Based on the ONI computed using ERSST.v5

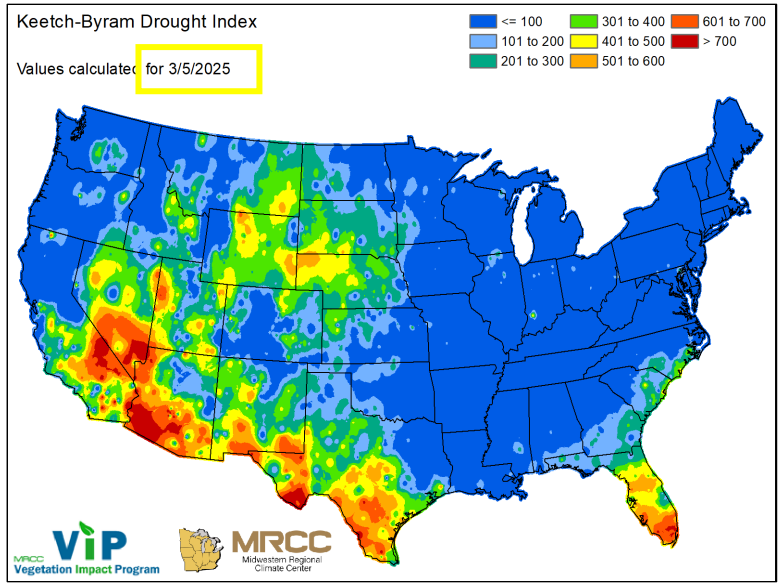
Recent Pacific warm (red) and cold (blue) periods based on a threshold of +/- 0.5 °C for the Oceanic Nino Index (ONI) [3 month running mean of ERSST.v5 SST anomalies in the Nino 3.4 region (5N-5S, 120-170W)]. For historical purposes, periods of below and above normal SSTs are colored in blue and red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

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

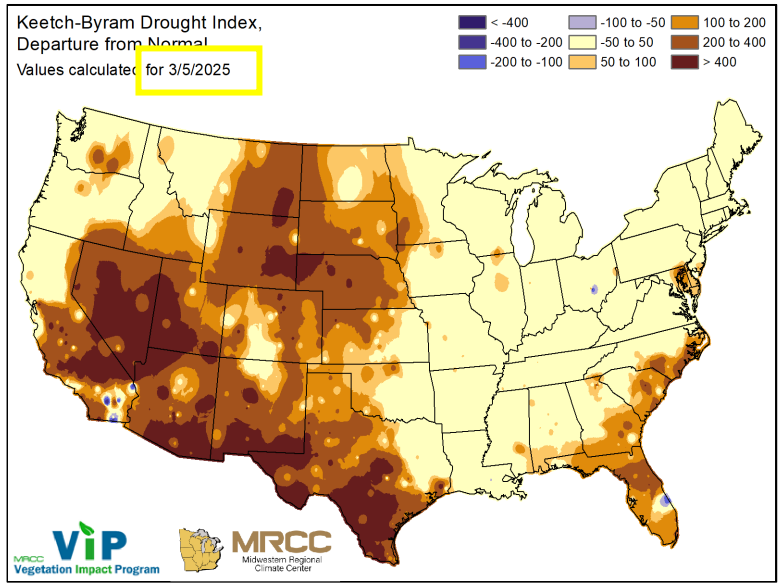
Year	DJF	JFM	FMA	MAM	AMJ	MJJ	JJA	JAS	ASO	SON	OND	NDJ
2012	-0.9	-0.7	-0.6	-0.5	-0.3	0.0	0.2	0.4	0.4	0.3	0.1	-0.2
2013	-0.4	-0.4	-0.3	-0.3	-0.4	-0.4	-0.4	-0.3	-0.3	-0.2	-0.2	-0.3
2014	-0.4	-0.5	-0.3	0.0	0.2	0.2	0.0	0.1	0.2	0.5	0.6	0.7
2015	0.5	0.5	0.5	0.7	0.9	1.2	1.5	1.9	2.2	2.4	2.6	2.6
2016	2.5	2.1	1.6	0.9	0.4	-0.1	-0.4	-0.5	-0.6	-0.7	-0.7	-0.6
2017	-0.3	-0.2	0.1	0.2	0.3	0.3	0.1	-0.1	-0.4	-0.7	-0.8	-1.0
2018	-0.9	-0.9	-0.7	-0.5	-0.2	0.0	0.1	0.2	0.5	0.8	0.9	0.8
2019	0.7	0.7	0.7	0.7	0.5	0.5	0.3	0.1	0.2	0.3	0.5	0.5
2020	0.5	0.5	0.4	0.2	-0.1	-0.3	-0.4	-0.6	-0.9	-1.2	-1.3	-1.2
2021	-1.0	-0.9	-0.8	-0.7	-0.5	-0.4	-0.4	-0.5	-0.7	-0.8	-1.0	-1.0
2022	-1.0	-0.9	-1.0	-1.1	-1.0	-0.9	-0.8	-0.9	-1.0	-1.0	-0.9	-0.8
2023	-0.7	-0.4	-0.1	0.2	0.5	0.8	1.1	1.3	1.6	1.8	1.9	2.0
2024	1.8	1.5	1.1	0.7	0.4	0.2	0.0	-0.1	-0.2	-0.3	-0.4	-0.5

KBDI - Station Points *FWIP (Point calculation from WIMS @ 1300 on 3/7/25)*



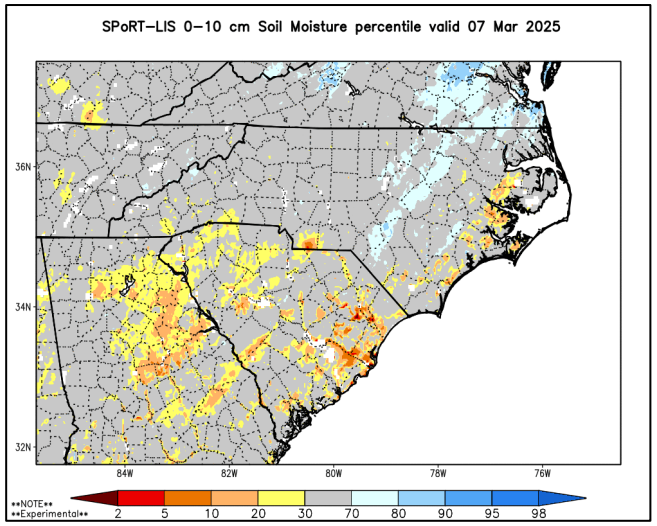


Product below is created by the Midwestern Regional Climate Center. See FAQ.

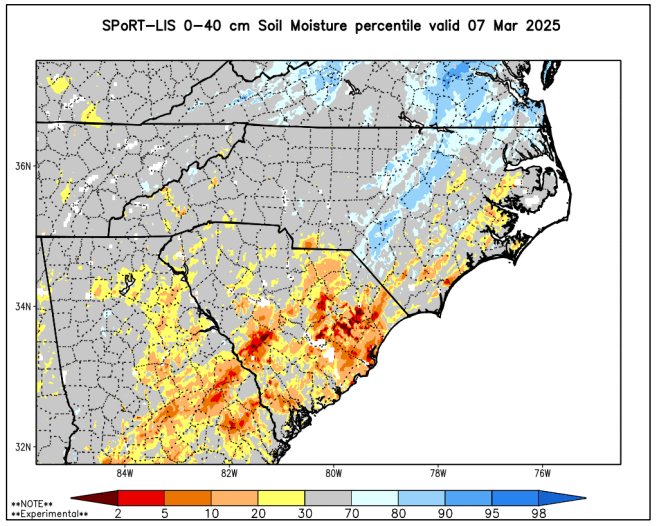


SPoRT Modeled Relative Soil Moisture

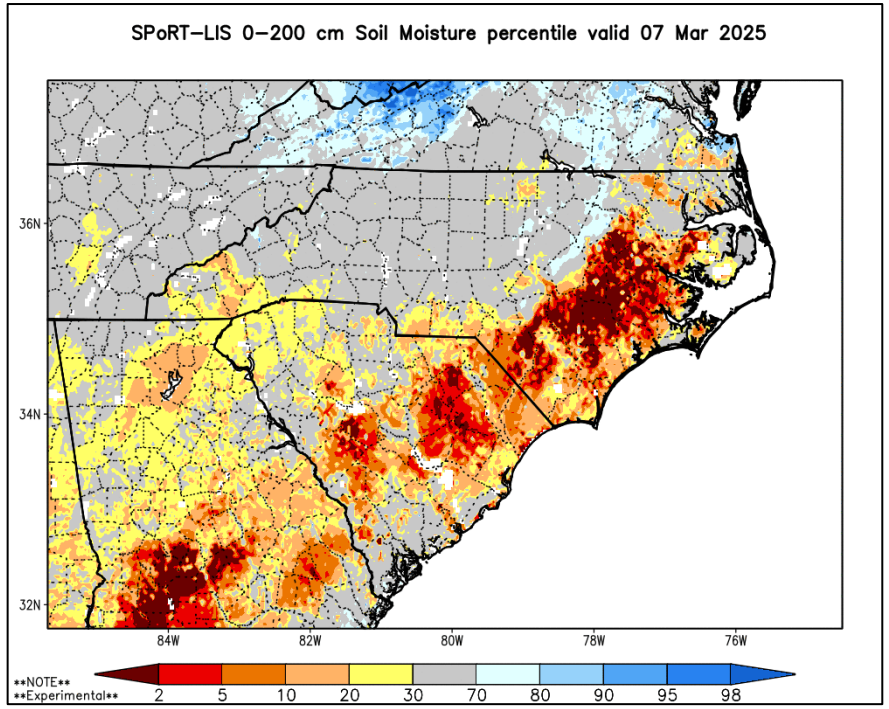
0-10 cm Depth



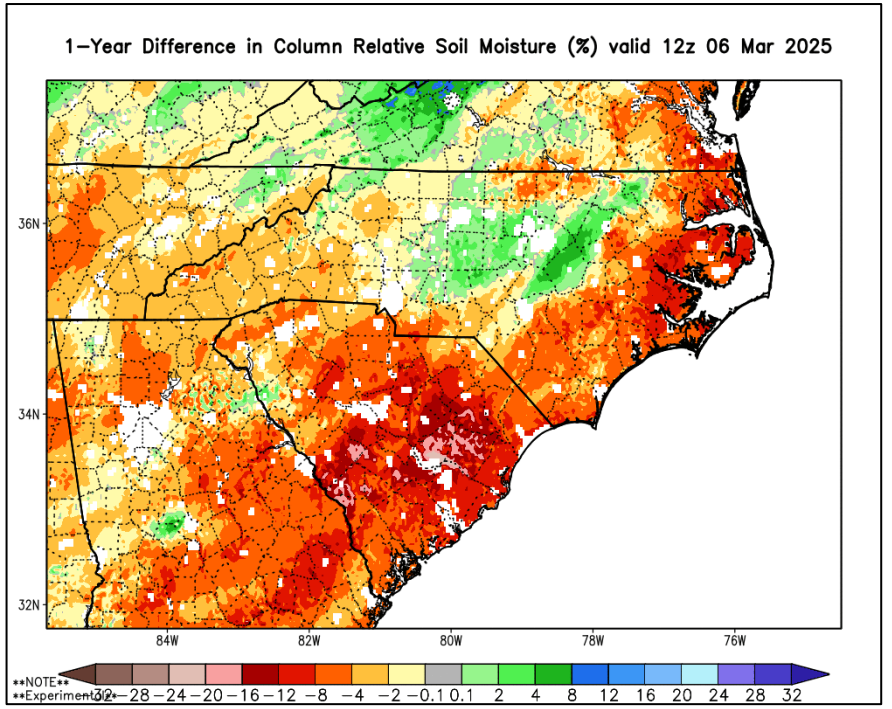
0-40 cm Depth



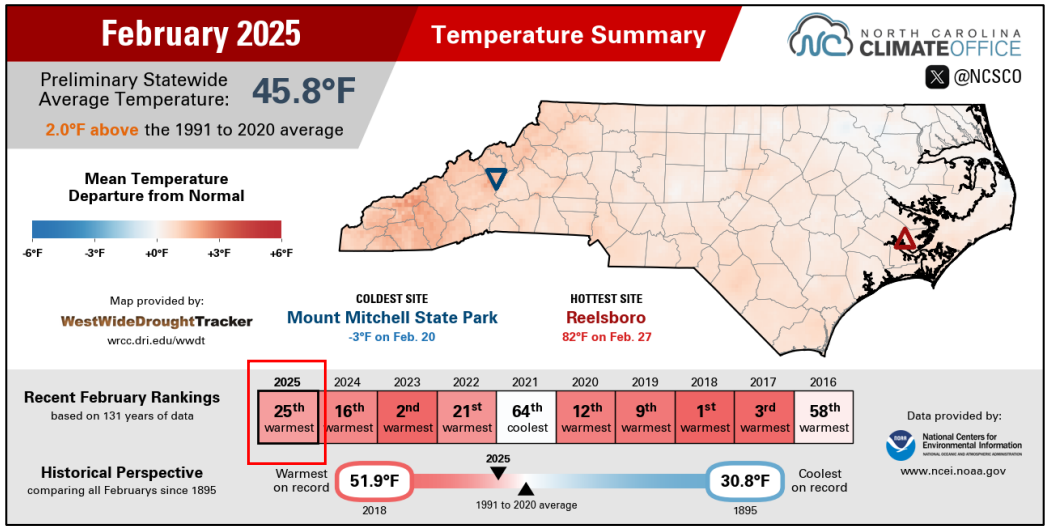
0-200 cm Depth

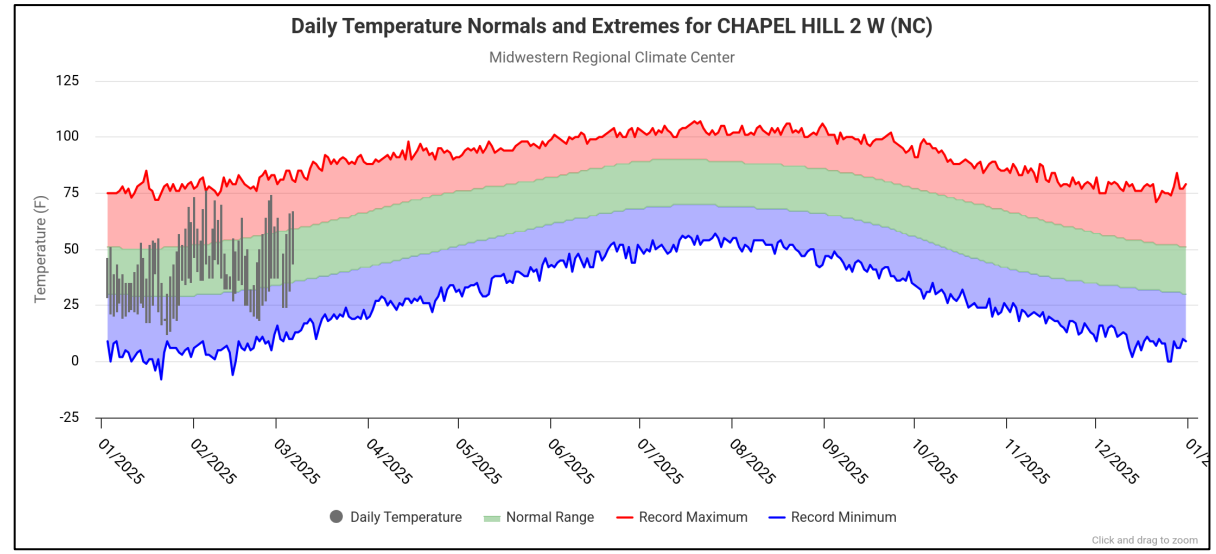


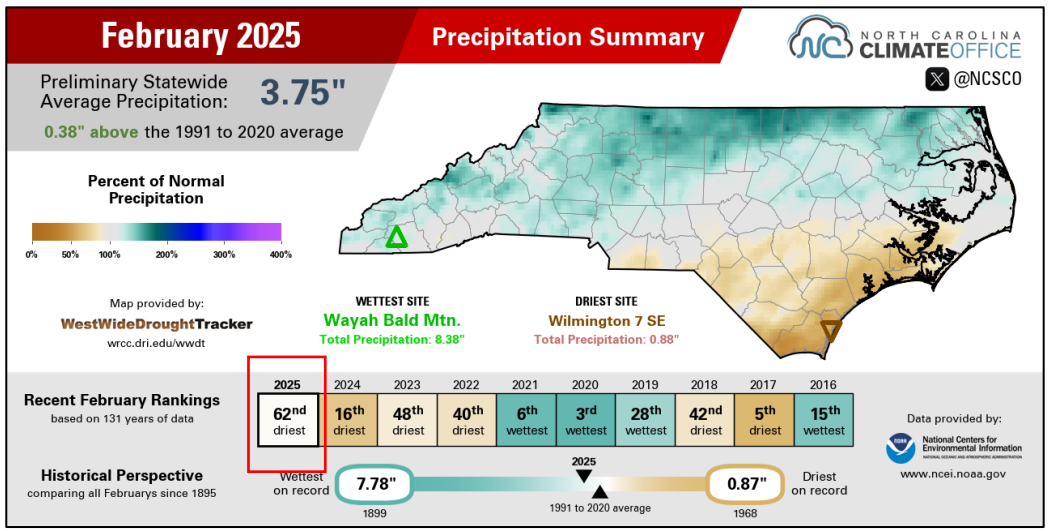
1-Yr Difference

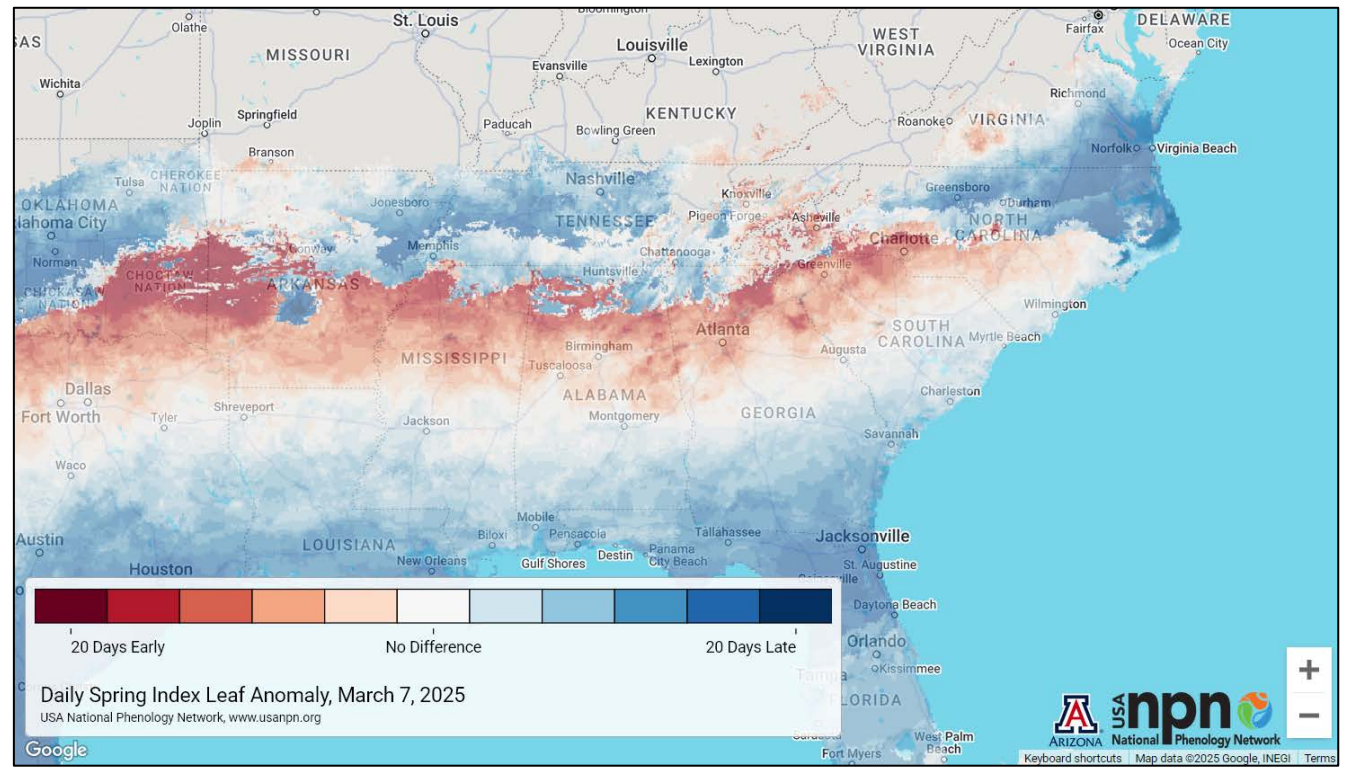


Source: https://weather.msfc.nasa.gov/sport/case_studies/lis_NC.html


February 2025
Temperature Summary
NORTH CAROLINA CLIMATEOFFICE
@NCSCO
Preliminary Statewide Average Temperature: 45.8°F
2.0°F above the 1991 to 2020 average
Mean Temperature Departure from Normal
-6°F -3°F +0°F +3°F +6°F
Map provided by:
WestWideDroughtTracker
wrcc.dri.edu/wwdt
COLDEST SITE
Mount Mitchell State Park
-3°F on Feb. 20
HOTTEST SITE
Reelsboro
82°F on Feb. 27
Recent February Rankings
based on 131 years of data
2025 2024 2023 2022 2021 2020 2019 2018 2017 2016
25th warmest | 16th warmest | 2nd warmest | 21st warmest | 64th coolest | 12th warmest | 9th warmest | 1st warmest | 3rd warmest | 58th warmest
Historical Perspective
comparing all Februarys since 1895
Warmest on record 51.9°F 2018
2025
1991 to 2020 average
30.8°F 1895 Coolest on record
Data provided by:
National Centers for Environmental Information
www.ncei.noaa.gov

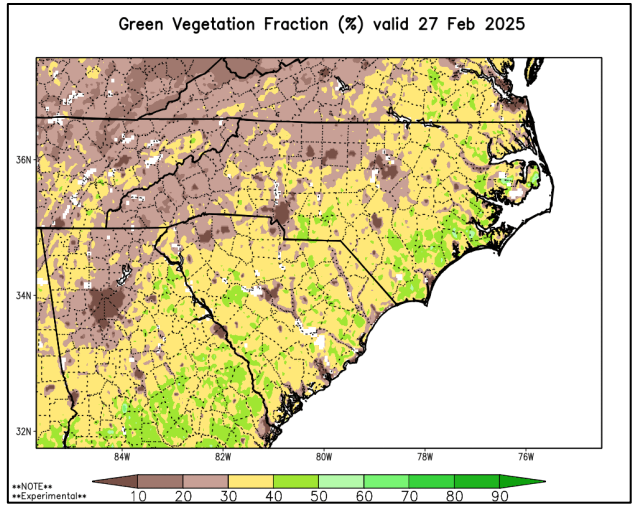

Daily Temperature Normals and Extremes for CHAPEL HILL 2 W (NC)
Midwestern Regional Climate Center
Temperature (F)
125
100
75
50
25
0
-25
01/2025 02/2025 03/2025 04/2025 05/2025 06/2025 07/2025 08/2025 09/2025 10/2025 11/2025 12/2025
Daily Temperature
Normal Range
Record Maximum
Record Minimum
Click and drag to zoom


February 2025
Precipitation Summary
NORTH CAROLINA CLIMATEOFFICE
@NCSCO
Preliminary Statewide Average Precipitation: 3.75"
0.38" above the 1991 to 2020 average
Percent of Normal Precipitation
0% 50% 100% 200% 300% 400%
Map provided by:
WestWideDroughtTracker
wrcc.dri.edu/wwdt
WETTEST SITE
Wayah Bald Mtn.
Total Precipitation: 8.38"
DRIEST SITE
Wilmington 7 SE
Total Precipitation: 0.88"
Recent February Rankings
based on 131 years of data
2025 2024 2023 2022 2021 2020 2019 2018 2017 2016
62nd driest | 16th driest | 48th driest | 40th driest | 6th wettest | 3rd wettest | 28th wettest | 42nd driest | 5th driest | 15th wettest
Historical Perspective
comparing all Februarys since 1895
Wettest on record 7.78" 1899
2025
1991 to 2020 average
0.87" 1968 Driest on record
Data provided by:
National Centers for Environmental Information
www.ncei.noaa.gov

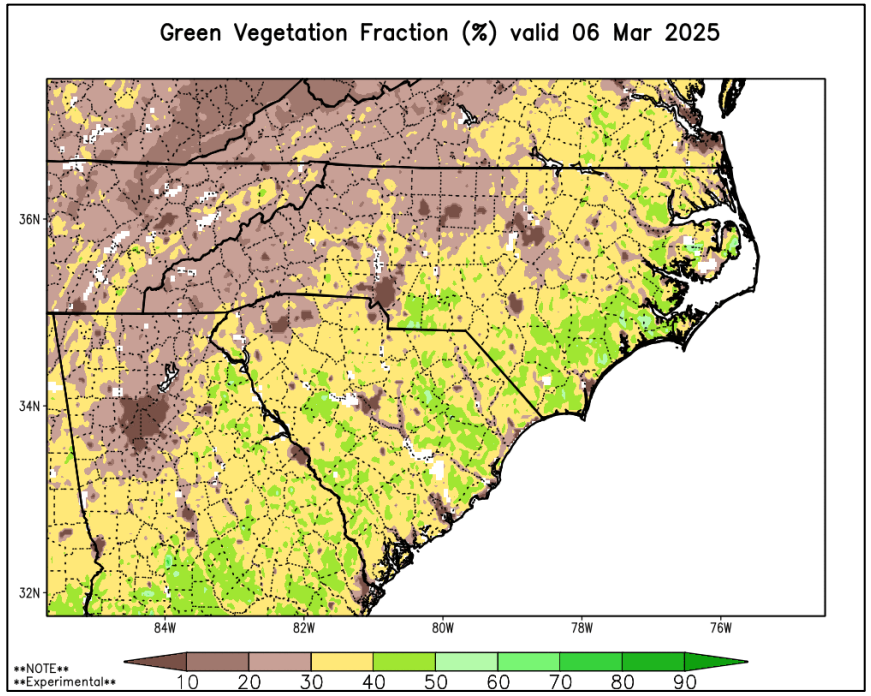

St. Louis
Louisville
Lexington
Evansville
Paducah
Bowling Green
Springfield
Joplin
Wichita
Olathe
Branson
Nashville
Knoxville
Memphis
Jonesboro
Chattanooga
Huntsville
Atlanta
Birmingham
Tuscaloosa
Montgomery
Augusta
Dallas
Fort Worth
Tyler
Shreveport
Jackson
Waco
Austin
Houston
Mobile
Biloxi
Pensacola
Tallahassee
New Orleans
Gulf Shores
Destin
Panama City Beach
Jacksonville
St. Augustine
Daytona Beach
Orlando
Kissimmee
Tampa
Fort Myers
West Palm Beach
Charleston
Savannah
Wilmington
Myrtle Beach
Roanoke
Richmond
Norfolk
Virginia Beach
Fairfax
Ocean City
Greensboro
Durham
Asheville
Pigeon Forge
Greenville
Charlotte
Conway
Norman
Tulsa
Oklahoma City
MISSOURI
KENTUCKY
WEST VIRGINIA
VIRGINIA
DELAWARE
NORTH CAROLINA
SOUTH CAROLINA
TENNESSEE
ARKANSAS
MISSISSIPPI
ALABAMA
GEORGIA
LOUISIANA
OKLAHOMA
CHEROKEE NATION
CHOCTAW NATION
20 Days Early
No Difference
20 Days Late
Daily Spring Index Leaf Anomaly, March 7, 2025
USA National Phenology Network, www.usanpn.org
Google
Keyboard shortcuts
Map data ©2025 Google, INEGI
Terms

Green Fraction & Green-Up Anomaly

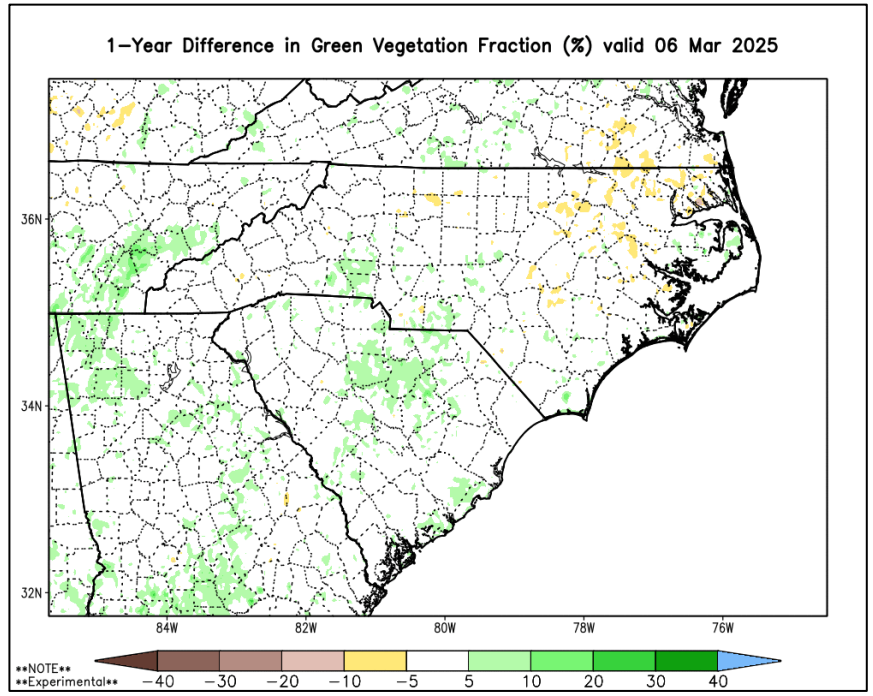
Last Week



Current



1 Year Change



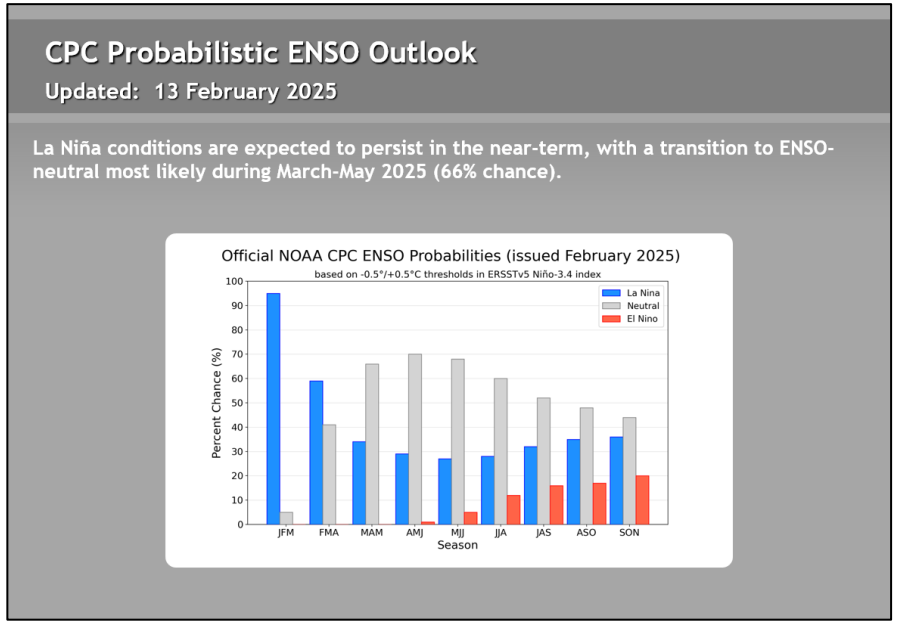
Link: https://weather.ndc.nasa.gov/sport/case_studies/lis_NC.html

ENSO Notes from the CPC (2/13/25 Update)

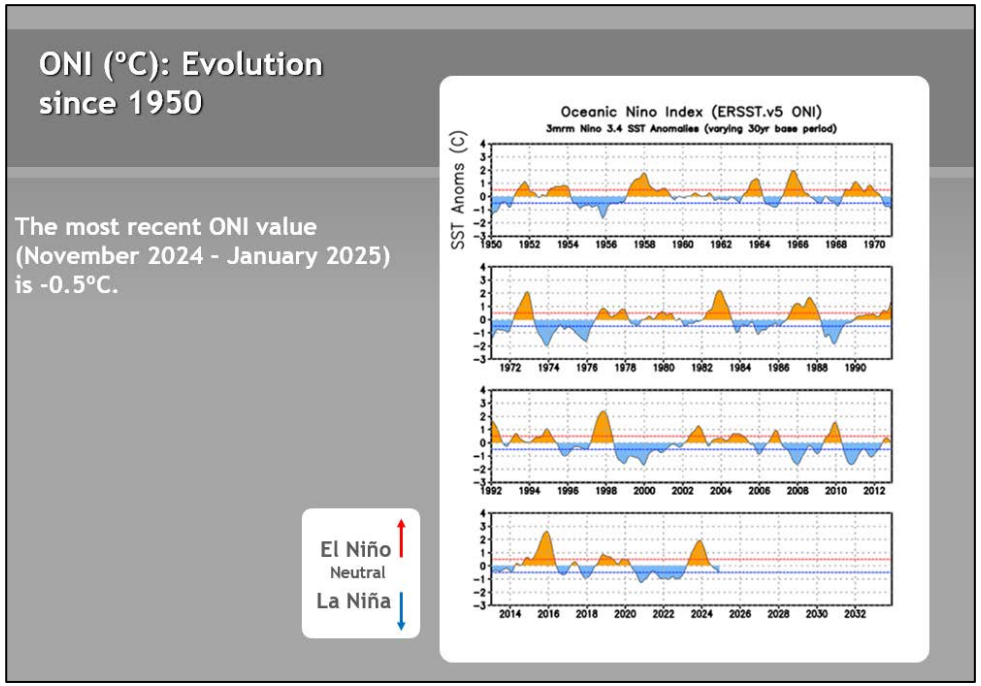
ENSO Alert System Status: **La Niña Advisory**

La Niña conditions are expected to persist in the near-term, with a transition to ENSO-neutral likely during March-May 2025 (66% chance).

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.



See this link for further discussion: https://www.climate.gov/news-features/understanding-climate/us-climate-outlook-march-2025



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

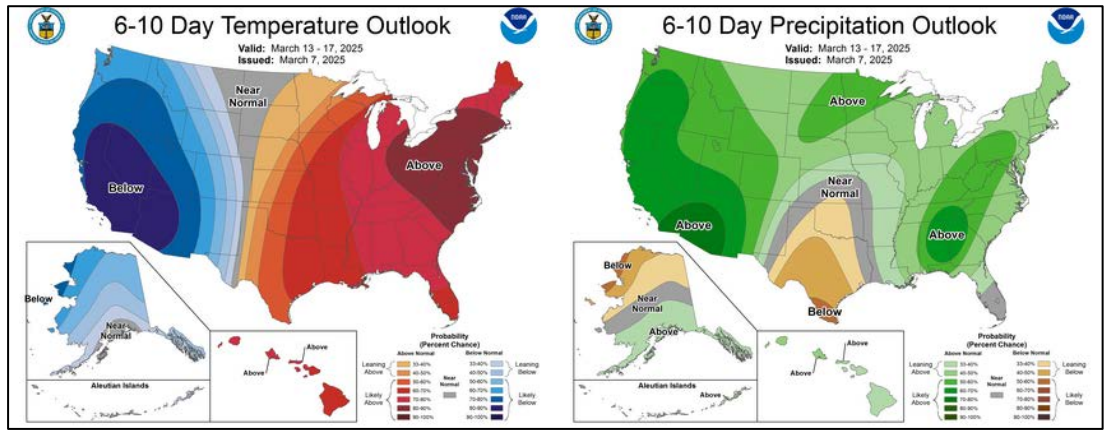
The IRI multi-model average predicts weak La Niña conditions to continue through February-April 2025 and then transition to ENSO-neutral [Fig. 6]. The IRI dynamical model average and several of the models from the North American Multi-Model Ensemble (NMME) predict an earlier transition to ENSO-neutral in January-March 2025. The forecast team favors a weak La Niña through February-April, but there is also a 41% chance of ENSO-neutral emerging in this season. A weak La Niña is less likely to result in conventional winter/spring impacts, though predictable signals can still influence the forecast guidance (e.g., CPC's seasonal outlooks). In summary, La Niña conditions are expected to persist in the near-term, with a transition to ENSO-neutral likely during March-May 2025 (66% chance; [Fig. 7]).

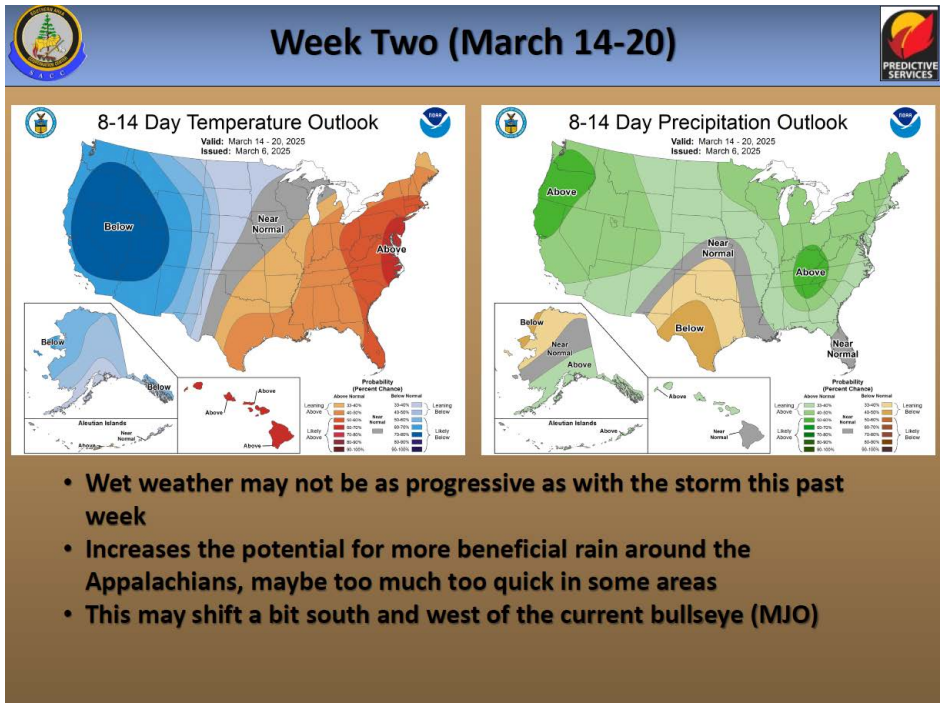
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

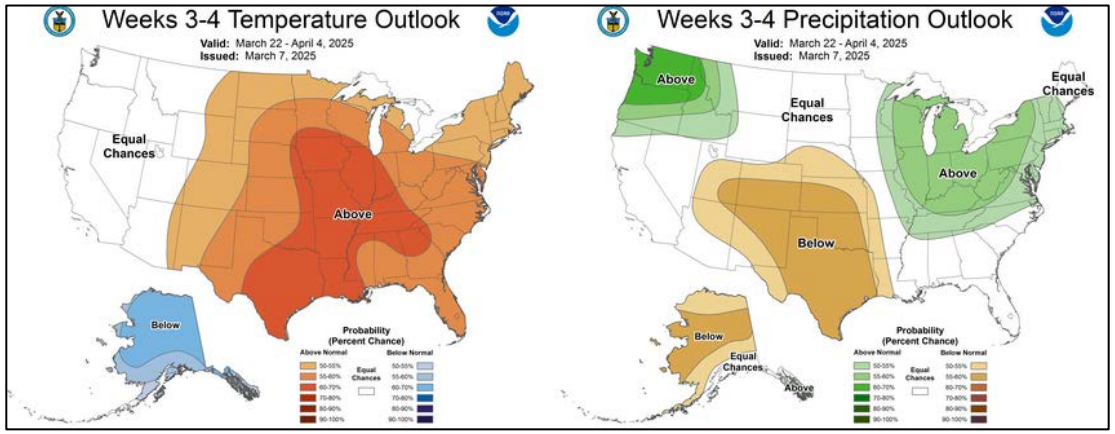
CPC Temp & Precip Outlook

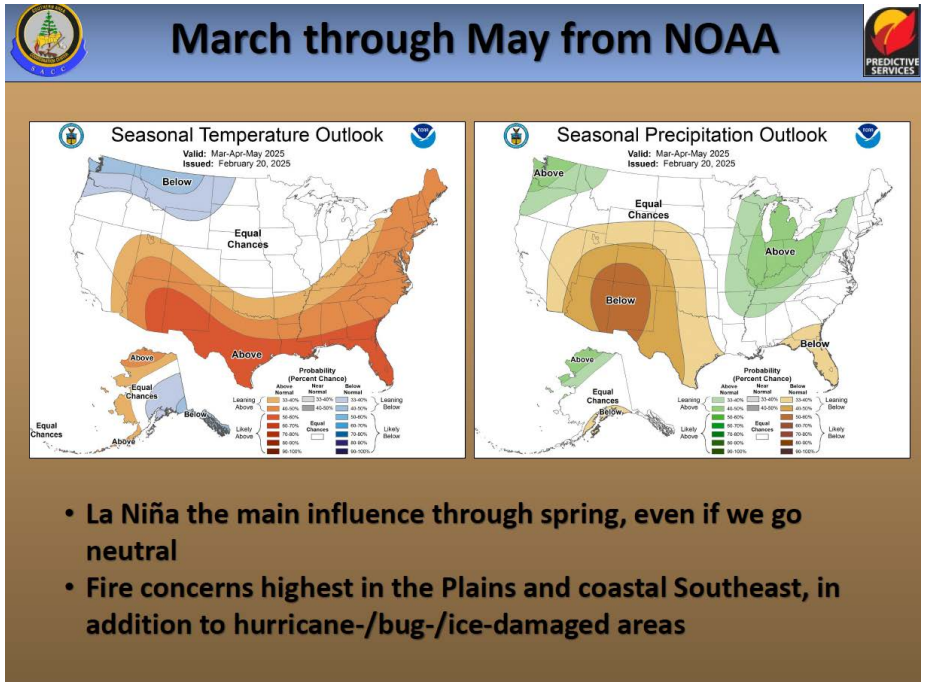
6-10 Day, 8-14 Day, Weeks 3-4, 3-Month Seasonal

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





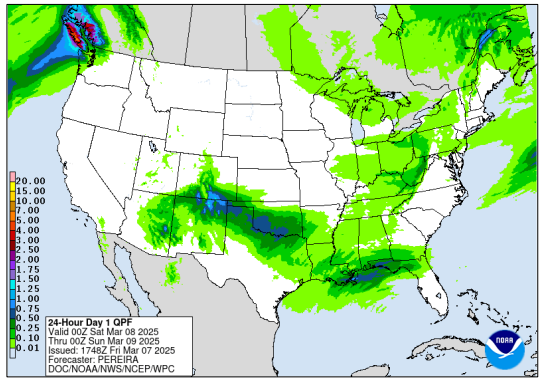




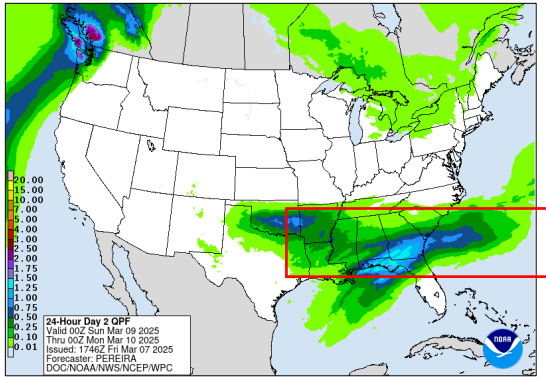
Quantitative Precipitation Forecast, 7-Day

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

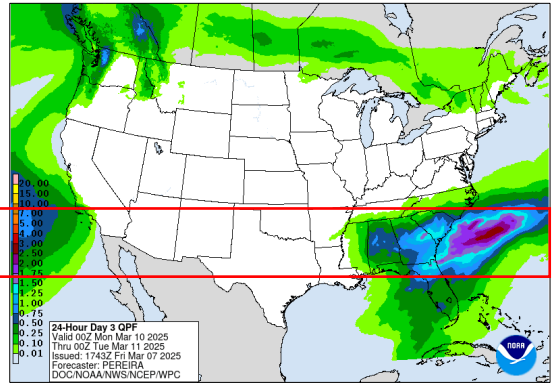
Day – 1



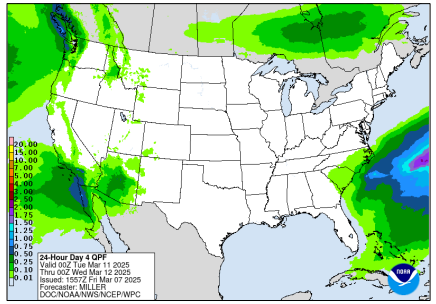
Day - 2



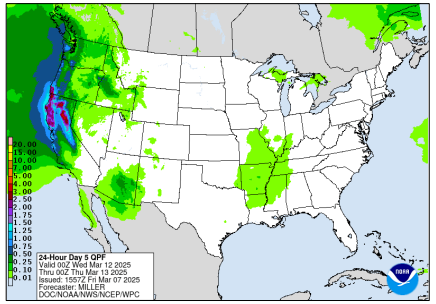
Day - 3



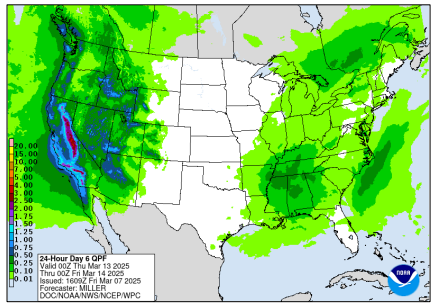
Day - 4



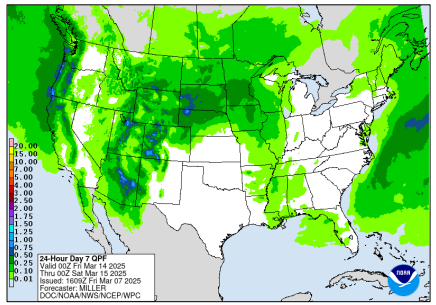
Day - 5



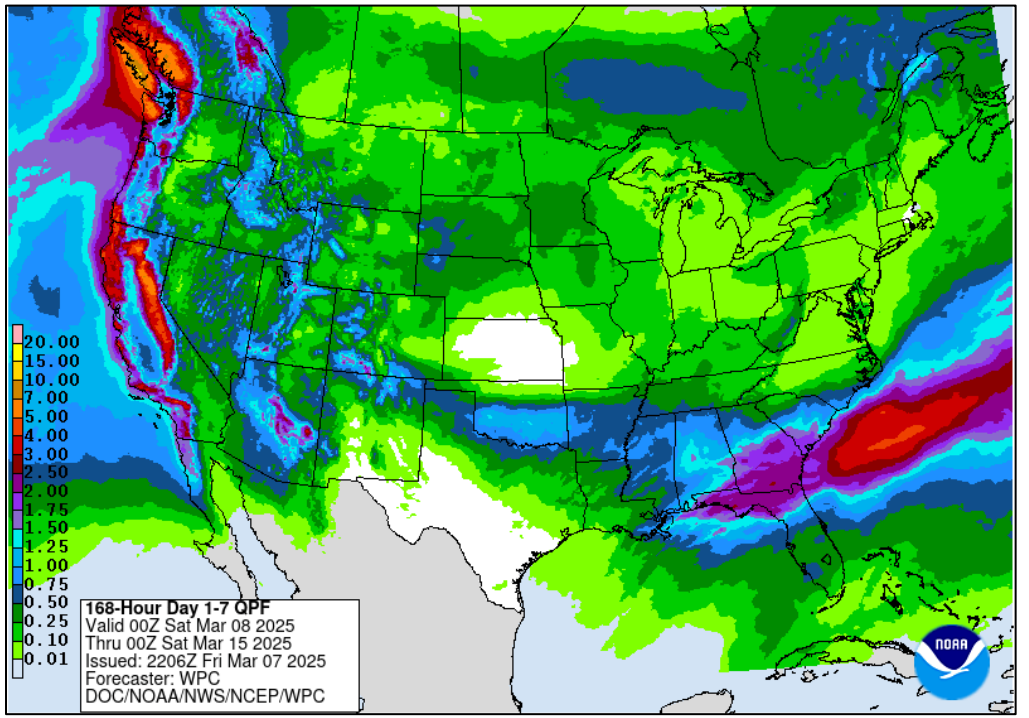
Day - 6



Day - 7



Days 1 – 7 QPF

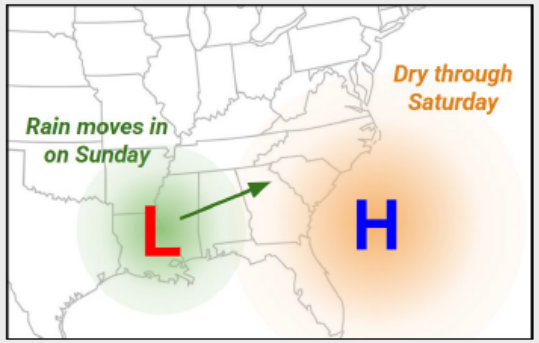


State Climate Office: Short-Range Monthly Outlook for NC

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

Short-Range Outlook for North Carolina

Week 1: March 6 to 12, 2025



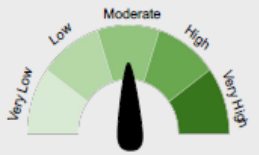
Windy, then Warmer

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

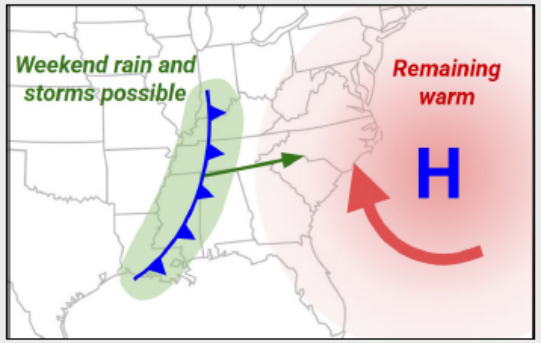
High pressure over the Southeast will keep us dry to begin this week, with rain chances returning by early Sunday morning as a low-pressure system skirts to our south. Current forecasts show light rainfall totals of a tenth of an inch to half an inch from that event.

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



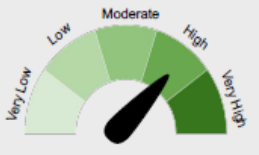
Warmth Continues Mid-Month

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

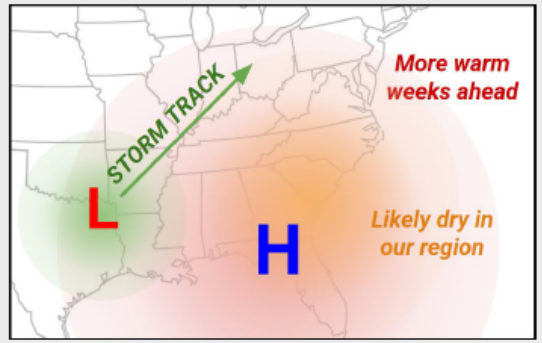
The best chance of widespread rain and possibly strong thunderstorms should come next weekend as a cold front moves in from the west. More rain is possible at other times this week, but based on current guidance, it may be light or more localized.

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



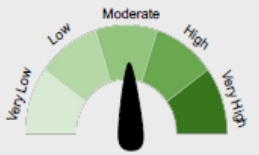
A Warm End to March

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.

Think in Context of Percentiles:

How does today differ from yesterday?
How about the season?
How about year to year?

Hard numbers can mean different things depending on FDRA, same goes with fuel model selection. Example: differences between a mountain cove and sandhills station extremes. Percentiles normalize the difference.

Keetch-Byram Drought Index (KBDI): How dry?
Burning Index (BI): How difficult?
Energy Release Component (ERC): How hot?
Spread Component (SC): How fast?
Ignition Component (IC): How receptive?

3/7/25 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	2	2025-03-07	140.55 98.5%	59.25 98.0%	17.30 97.6%	71.85 96.5%	2.50	10.10 11.3%	16.33 31.1%	16.83 17.0%	24.14 93.9%	30.00	50.00	55.0°F	24.0%	S 5.5 mph	0.00 in.	0.0
Central Mountains	3	2025-03-07	86.50 80.5%	45.17 86.4%	4.33 63.0%	33.50 75.3%	3.67	13.93 54.7%	16.06 31.2%	16.19 8.1%	21.19 68.1%	30.00	50.00	41.3°F	44.0%	SSE 1.7 mph	0.02 in.	0.7
Northern Highlands	2	2025-03-07	109.85 87.1%	44.05 86.5%	9.05 86.7%	60.60 88.9%	15.50	11.76 28.5%	14.90 23.3%	16.32 10.4%	21.09 66.8%	50.00	80.00	42.0°F	33.0%	SSE 5.5 mph	0.00 in.	0.0
Blue Ridge Escarpment	3	2025-03-07	100.80 80.8%	53.50 91.0%	7.93 72.3%	40.43 75.3%	27.67	11.78 46.8%	13.55 22.6%	16.85 23.5%	16.53 9.3%	30.00	56.67	45.3°F	37.0%	SW 3.3 mph	0.00 in.	0.0
Western Piedmont	3	2025-03-07	98.10 80.8%	50.17 83.2%	6.20 57.2%	39.83 79.8%	10.00	12.79 63.5%	15.68 50.3%	18.93 62.7%	21.16 76.6%	30.00	50.00	49.0°F	34.3%	SW 5.0 mph	0.02 in.	1.7
Sandhills	2	2025-03-07	33.90 43.6%	44.15 58.8%	7.25 44.7%	4.40 32.9%	97.00	11.17 46.1%	14.04 23.9%	17.78 40.5%	20.59 77.5%	40.00	65.00	50.7°F	37.0%	WSW 5.7 mph	0.00 in.	0.0
Eastern Piedmont	4	2025-03-07	107.05 74.0%	52.13 71.7%	8.75 58.9%	45.43 69.4%	15.50	11.61 51.1%	14.23 22.7%	18.97 55.5%	20.84 78.3%	30.00	60.00	48.5°F	41.8%	WSW 8.0 mph	0.00 in.	0.0
Southern Coastal	7	2025-03-07	71.71 57.7%	52.79 84.4%	8.37 66.0%	19.11 43.6%	319.14	10.02 22.6%	14.79 26.9%	19.69 60.0%	22.48 77.3%	50.00	90.00	55.7°F	30.1%	SW 2.4 mph	0.00 in.	0.0
Northern Coastal	4	2025-03-07	77.33 58.5%	51.43 81.9%	10.10 72.7%	22.68 44.8%	126.25	9.54 22.0%	14.61 34.8%	19.56 64.9%	22.76 91.6%	50.00	90.00	56.3°F	31.8%	WSW 4.8 mph	0.00 in.	0.0

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

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

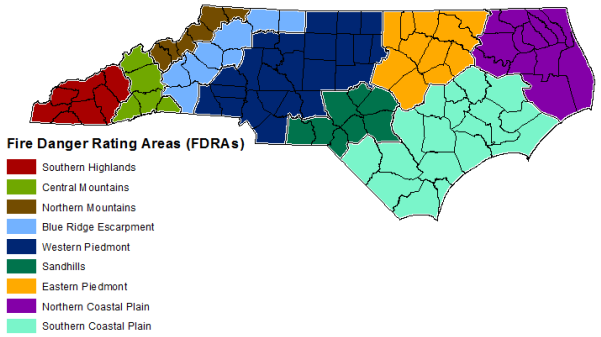
Note cumulative impact of longer duration dry air from last week, most significantly on the 100-hr & 1000-hr dead fuels in the mtn FDRAs.

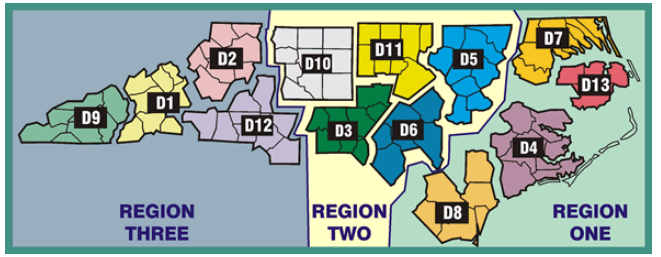
Important notes for next slide group:

A. FF+ graphics will be included in next week's update.

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 22-30 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

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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	60	55	62	69	70	65	
Avg. Min. Humidity (%)	48	50	29	26	29	49	
Avg. 20' Wind Speed (mph)	8	1	2	2	3	5	
Avg. Wind Direction*	WNW	E	WSW	SSW	S	SSW	
Avg. Probability of Precip. (%)	39	45	19	1	50	51	
Days Since a Wetting Rain**	3.0	4.0	5.0				
Forecast ERC (Fuel Model X)	47.6	43.0	42.6	54.8	56.2	49.8	36.5
Forecast BI (Fuel Model X)	151.5	93.2	100.4	110.0	127.7	117.7	99.2
Forecast IC (Fuel Model X)	11.3	4.8	5.6	9.7	12.3	9.9	6.9
Forecast 100-Hr. FMC	17.3	17.4	17.2	17.0	16.4	16.1	16.0
Forecast 1000-Hr. FMC	23.9	23.8	23.6	23.4	23.1	22.8	22.5
KBDI	2.5						

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

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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	65	56	62	72	74	68	
Avg. Min. Humidity (%)	39	43	29	25	26	42	
Avg. 20' Wind Speed (mph)	9	2	3	3	4	5	
Avg. Wind Direction*	NW	SW	NW	WSW	SW	SW	
Avg. Probability of Precip. (%)	24	35	20	1	43	51	
Days Since a Wetting Rain**	2.3	3.3	4.3				
Forecast ERC (Fuel Model X)	42.2	48.2	48.8	56.6	59.1	53.3	40.3
Forecast BI (Fuel Model X)	159.9	88.1	99.2	106.0	121.6	117.0	97.1
Forecast IC (Fuel Model X)	8.8	5.0	6.0	9.4	12.3	10.0	5.8
Forecast 100-Hr. FMC	16.6	16.7	16.5	16.1	15.5	15.2	15.2
Forecast 1000-Hr. FMC	21.1	21.1	21.0	20.9	20.8	20.6	20.4
KBDI	3.7						

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

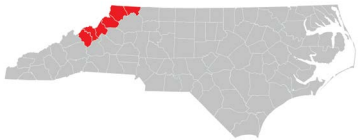
Values in the table above are averages from 3 stations in this FDRA:

- **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



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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	57	54	60	68	70	65	
Avg. Min. Humidity (%)	45	41	31	30	32	48	
Avg. 20' Wind Speed (mph)	14	4	5	5	6	8	
Avg. Wind Direction*	WNW	WNW	NW	W	WSW	SW	
Avg. Probability of Precip. (%)	18	18	10	0	30	45	
Days Since a Wetting Rain**	1.7	2.7	3.7				
Forecast ERC (Fuel Model X)	32.8	39.1	42.8	46.1	49.8	44.9	31.2
Forecast BI (Fuel Model X)	127.4	80.0	90.5	94.2	103.8	106.4	85.1
Forecast IC (Fuel Model X)	8.2	5.0	6.8	8.7	11.3	10.0	5.5
Forecast 100-Hr. FMC	16.8	16.5	16.3	15.7	15.1	14.7	14.8
Forecast 1000-Hr. FMC	21.0	21.0	20.9	20.9	20.8	20.6	20.4
KBDI	15.5						

Data Source:

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

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

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

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

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

FDRA – Blue Ridge Escarpment

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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	66	56	64	71	73	68	
Avg. Min. Humidity (%)	36	37	26	26	26	41	
Avg. 20' Wind Speed (mph)	8	2	3	4	4	5	
Avg. Wind Direction*	WNW	WSW	WSW	W	WSW	SW	
Avg. Probability of Precip. (%)	15	24	14	1	29	46	
Days Since a Wetting Rain**	3.0	4.0	5.0				
Forecast ERC (Fuel Model X)	51.2	53.0	54.4	57.4	56.3	48.2	37.5
Forecast BI (Fuel Model X)	146.8	88.2	100.6	106.7	115.5	109.8	83.8
Forecast IC (Fuel Model X)	12.6	6.6	8.5	11.0	13.4	11.5	7.0
Forecast 100-Hr. FMC	16.0	15.3	14.7	14.1	13.6	13.4	13.5
Forecast 1000-Hr. FMC	16.8	16.8	16.8	16.5	16.2	15.8	15.7
KBDI	27.7						

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:

- **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

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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	72	58	64	73	77	74	
Avg. Min. Humidity (%)	33	36	31	28	29	44	
Avg. 20' Wind Speed (mph)	7	2	3	4	5	6	
Avg. Wind Direction*	W	SSE	ENE	W	SW	SW	
Avg. Probability of Precip. (%)	10	22	17	2	17	36	
Days Since a Wetting Rain**	2.7	3.7	4.7				
Forecast ERC (Fuel Model X)	54.2	57.2	49.6	53.5	53.2	52.4	42.9
Forecast BI (Fuel Model X)	139.9	76.7	95.1	96.7	99.5	112.9	88.3
Forecast IC (Fuel Model X)	13.1	6.1	6.0	8.1	9.3	10.5	6.3
Forecast 100-Hr. FMC	18.3	17.2	16.5	16.0	15.7	15.5	15.8
Forecast 1000-Hr. FMC	21.1	21.1	21.0	20.9	20.8	20.6	20.4
KBDI	10.0						

Data Source:

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

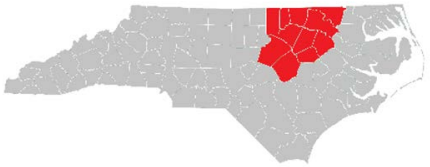
Values in the table above are averages from 3 stations in this FDRA:

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

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

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

FDRA – Eastern Piedmont



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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	73	59	63	72	76	75	
Avg. Min. Humidity (%)	37	37	35	29	30	46	
Avg. 20' Wind Speed (mph)	7	2	3	4	5	6	
Avg. Wind Direction*	W	SW	NE	W	SSW	SSW	
Avg. Probability of Precip. (%)	10	18	17	8	6	29	
Days Since a Wetting Rain**	1.0	2.0	3.0				
Forecast ERC (Fuel Model X)	52.9	52.5	45.5	49.2	48.5	42.7	33.7
Forecast BI (Fuel Model X)	133.6	74.6	91.6	93.4	89.9	100.2	71.4
Forecast IC (Fuel Model X)	13.3	5.8	5.9	8.0	9.1	10.4	6.1
Forecast 100-Hr. FMC	18.3	17.2	16.5	16.0	15.6	15.5	15.8
Forecast 1000-Hr. FMC	20.6	20.6	20.6	20.5	20.3	20.1	19.9
KBDI	15.5						

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

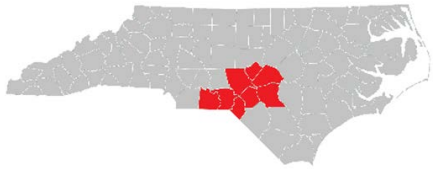
Values in the table above are averages from 4 stations in this FDRA:

- **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



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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	77	59	64	73	78	76	
Avg. Min. Humidity (%)	31	37	32	26	27	42	
Avg. 20' Wind Speed (mph)	8	3	4	3	5	6	
Avg. Wind Direction*	WSW	ENE	NNE	W	SSW	SSW	
Avg. Probability of Precip. (%)	12	31	33	5	7	26	
Days Since a Wetting Rain**	2.3	3.3	4.3				
Forecast ERC (Fuel Model Z)	44.8	49.7	44.2	45.4	46.0	41.4	35.3
Forecast BI (Fuel Model Z)	48.4	28.8	38.3	34.8	38.3	43.2	31.0
Forecast IC (Fuel Model Z)	13.2	6.4	5.8	7.0	9.3	9.6	5.6
Forecast 100-Hr. FMC	17.3	16.3	15.7	15.3	15.1	15.0	15.6
Forecast 1000-Hr. FMC	20.5	20.5	20.4	20.3	20.1	19.9	19.7
KBDI	68.7						

Data Source:

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

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

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

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

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

FDRA – North Coast

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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	67	57	61	71	75	75	
Avg. Min. Humidity (%)	45	41	43	35	39	51	
Avg. 20' Wind Speed (mph)	8	4	4	4	5	6	
Avg. Wind Direction*	S	E	ENE	SSE	SSW	SSW	
Avg. Probability of Precip. (%)	15	19	20	1	10	28	
Days Since a Wetting Rain**	3.0	4.0	5.0				
Forecast ERC (Fuel Model X)	45.3	41.9	36.8	39.2	39.7	38.2	32.3
Forecast BI (Fuel Model X)	104.9	61.3	69.3	64.9	78.1	93.0	59.6
Forecast IC (Fuel Model X)	11.3	4.9	5.1	5.8	7.8	9.4	4.7
Forecast 100-Hr. FMC	19.1	18.1	17.4	17.1	17.0	17.0	17.4
Forecast 1000-Hr. FMC	22.7	22.6	22.5	22.3	22.1	21.8	21.6
KBDI	126.3						

Data Source:

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

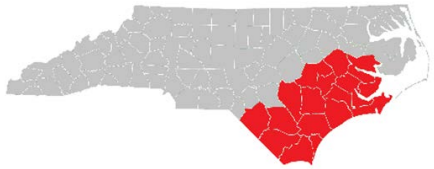
Values in the table above are averages from 4 stations in this FDRA:

- **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



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 08-Mar	SUN 09-Mar	MON 10-Mar	TUE 11-Mar	WED 12-Mar	THU 13-Mar	FRI 14-Mar
Avg. Max. Temp. (°F)	75	59	62	72	76	76	
Avg. Min. Humidity (%)	39	44	46	34	36	50	
Avg. 20' Wind Speed (mph)	7	3	4	3	4	5	
Avg. Wind Direction*	WSW	ESE	NE	S	SSW	SSW	
Avg. Probability of Precip. (%)	12	33	36	3	9	33	
Days Since a Wetting Rain**	3.0	3.4	4.3				
Forecast ERC (Fuel Model X)	48.6	46.9	34.1	42.5	40.9	39.2	32.8
Forecast BI (Fuel Model X)	118.8	67.3	79.8	78.5	79.2	91.2	64.4
Forecast IC (Fuel Model X)	13.4	5.6	5.1	7.0	7.5	8.8	5.0
Forecast 100-Hr. FMC	18.9	17.6	17.2	17.0	16.9	16.8	17.3
Forecast 1000-Hr. FMC	22.4	22.3	22.2	22.0	21.8	21.5	21.3
KBDI	319.1						

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:

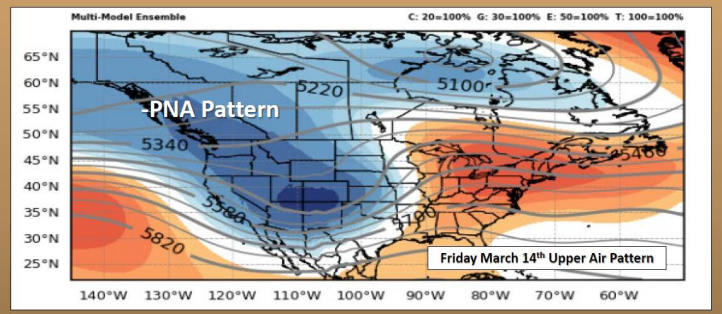
- **Finch's Station** (317501)
- **Beaufort** (317801)
- **New Bern** (319004)
- **Turnbull Creek** (319302)
- **Hofmann Forest** (319507)
- **Whiteville** (319701)
- **Sunny Point** (319803)

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



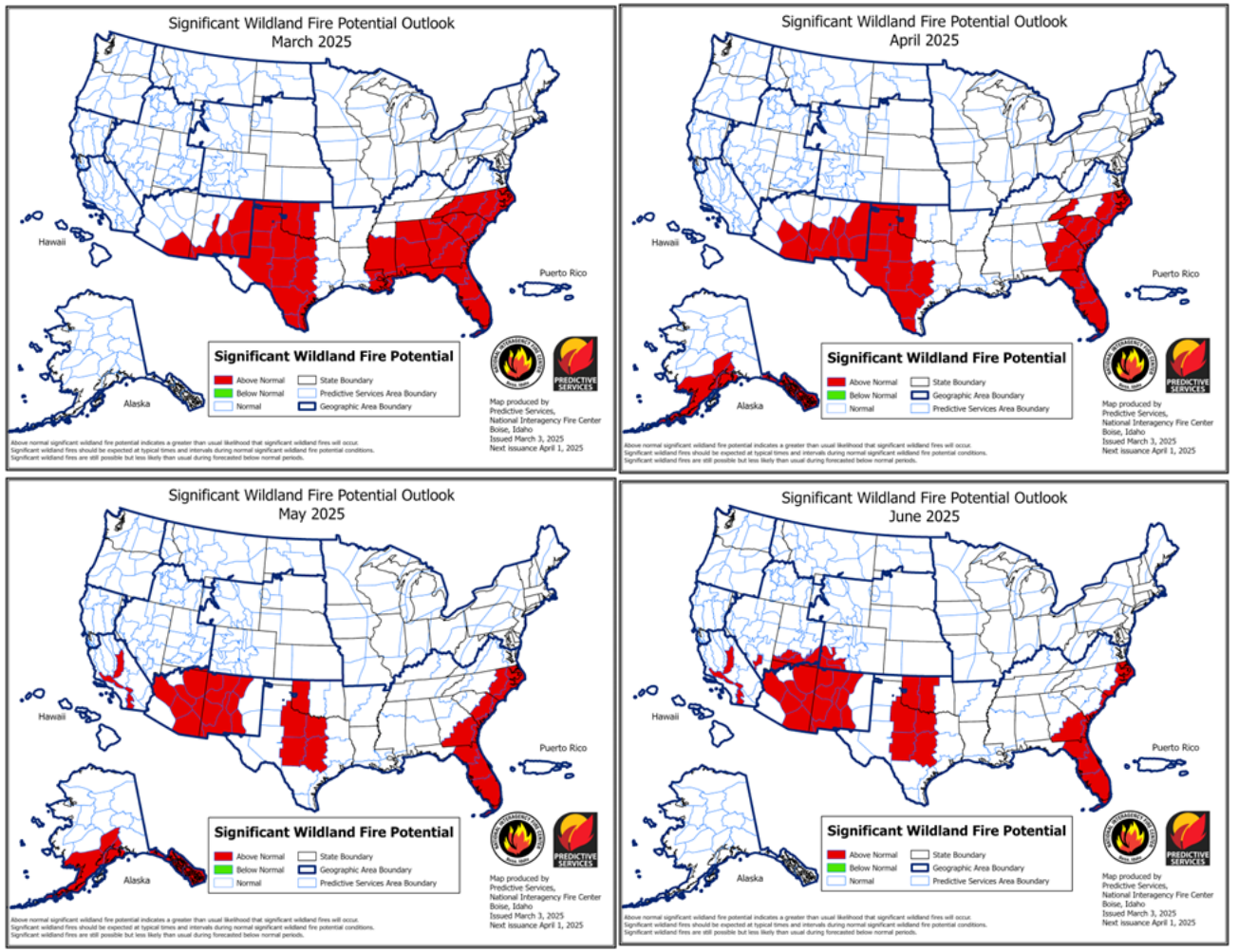
- Plenty of potential Red Flag days in the Plains next week
- Classic spring storm expected late next week, potentially resulting in a Southern Great Plains Wildfire Outbreak (consistently modeled on Friday)
- Windy elsewhere, and another east Tennessee mountain wave wind event appears likely Saturday, 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:

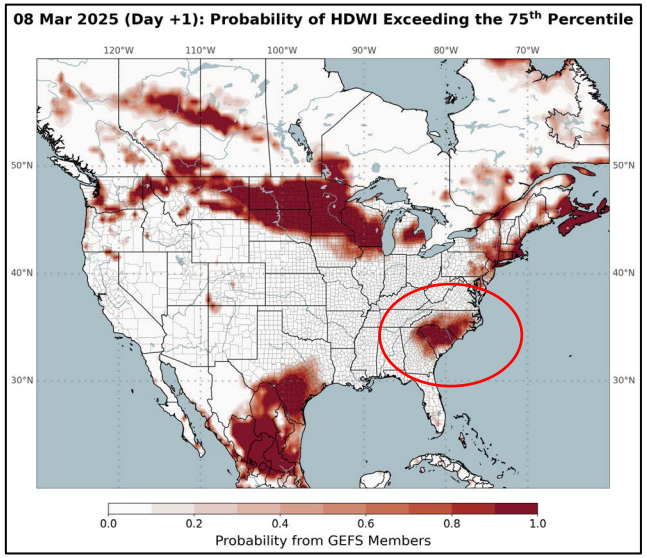
Updated 3/3/25 – Next Update on 4/1/25



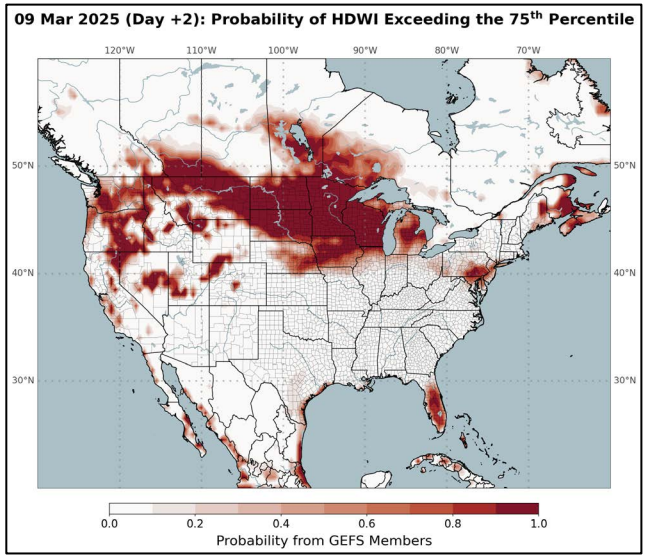
**A significant fire is one that requires resources from outside the district (other than aviation). IA potential is based more on shorter term weather factors. Just a few days of dry weather can increase IA activity considerably as we have consistently seen this year.*

Hot-Dry-Windy Index (HDW)

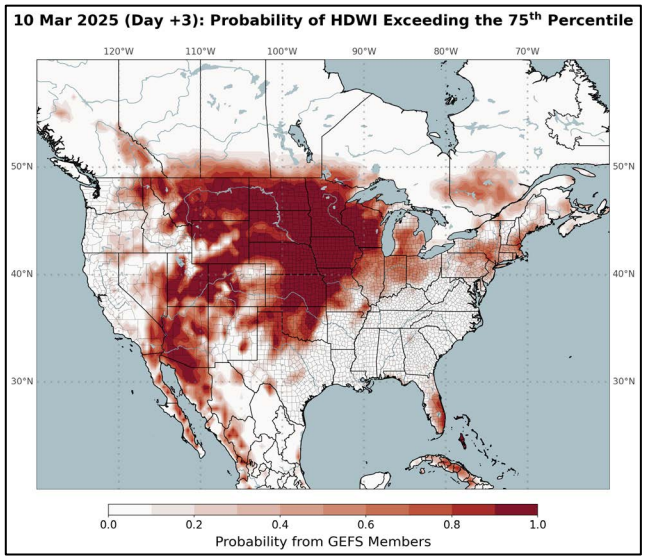
Saturday > 75th Percentile



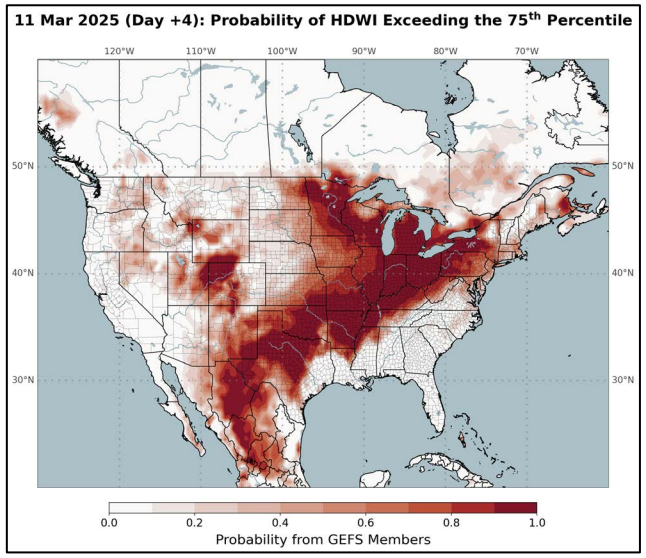
Sunday > 75th Percentile



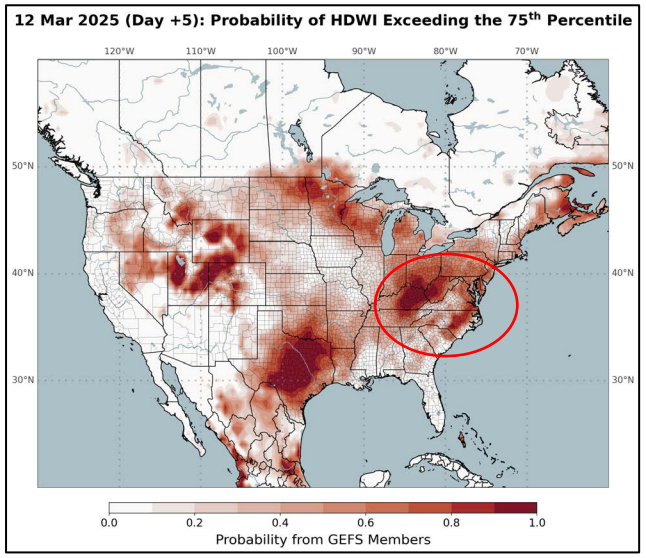
Monday > 75th Percentile



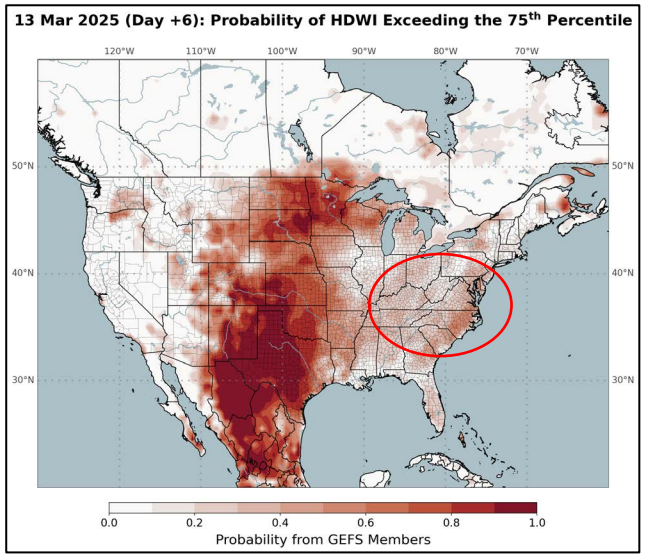
Tuesday > 75th Percentile



Wednesday > 75th Percentile



Thursday > 75th Percentile



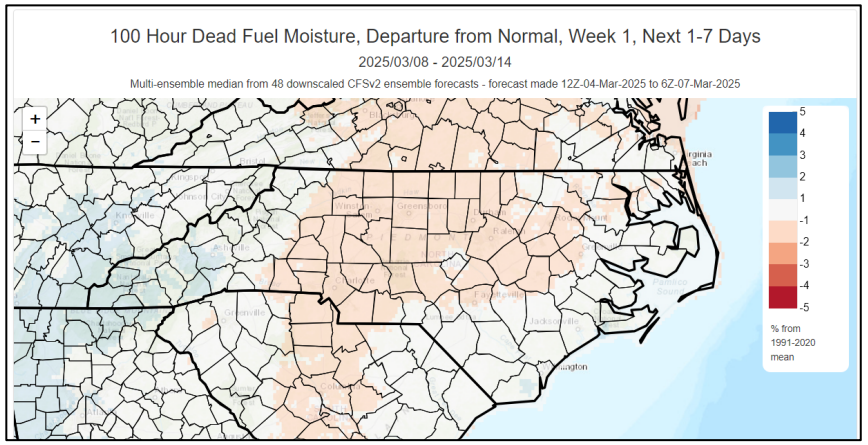
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

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

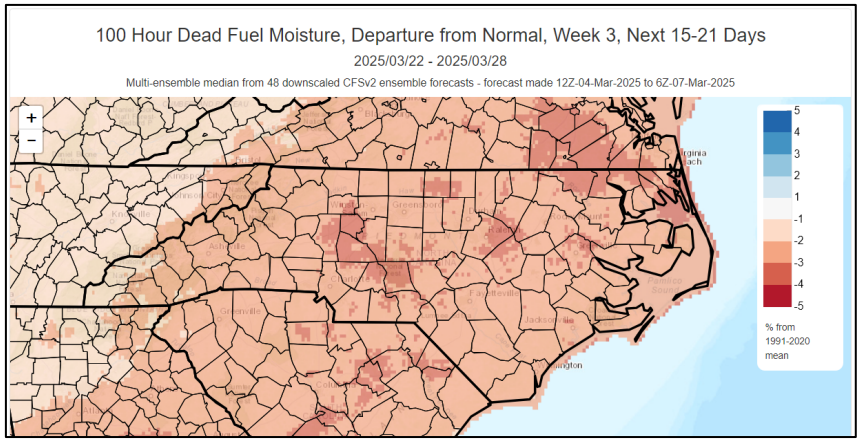
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1



Week-3



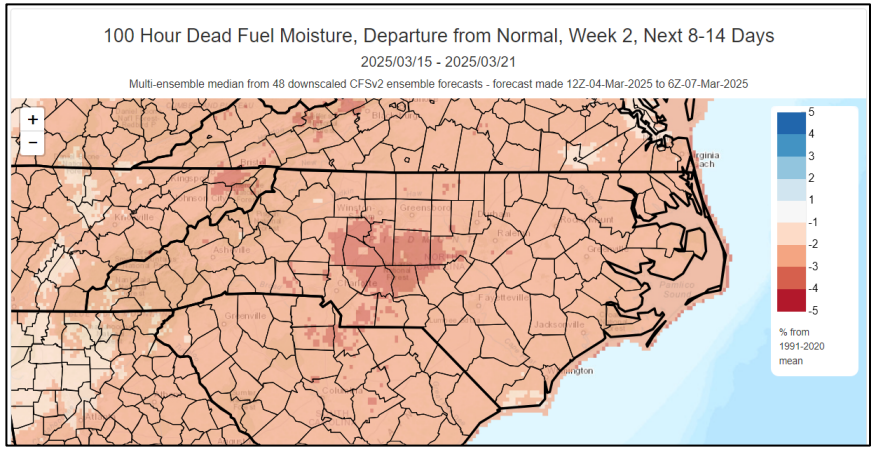
This output can provide insight into general drying trends and potential impacts to overall fire danger, especially prior to full green-up.

Note the return to near normal for Wk-1 as compared to the past week. Wks. 2-4 show potential for fuel moistures to dry significantly as condition warm up & rain chances are uncertain.

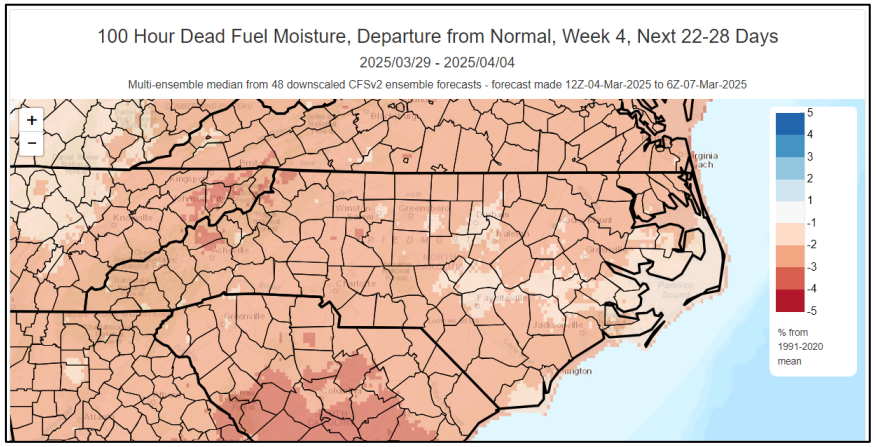
Relates to interactions of warmer/colder temps, moist/dry air masses, precip amt/duration and overnight RH recovery trends.

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

Week-2



Week-4



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

R3 Staff Comments from this week:

- Wednesday's precipitation event brought much needed rain to R3, however amounts varied from 0.5-2" and the duration occurred over just a few hours.
- The BRE and CM FDRAs received the least rainfall on average.
- Most areas had not received wetting rain since February 16th.
- The lack of rainfall, on top of poor humidity recovery and critically dry air during peak burning conditions allowed 1hour fuels to fall well below 10% for several days.
- Across WNC 100-hour fuel moistures were at or below 15% this past weekend, with stations along the BRE showing 11-13%.
- Heavy fuels (large) on the ground associated with TS Helene have remained unavailable for consumption but continue to cause access issues and safety concerns. Attached smaller branches and leaves/needles have been contributing.
- Existing dead snags were noted as being available & consuming.
- Adequate remaining soil moisture, no significant duff consumption noted.
- Handlines were effective when located on favorable terrain and away from heavy fuels.

Images from R3/D1/Polk County 3910 Fire; NCFS provided

Statewide Comments:

Frontal Transitions - fire danger increased due to drying 1's, 10's, 100's this past week – most FDRAs. Saturday 3/1 was in alignment (critically dry fuels + wind/warmth). Around 250 fires for around 1,700 final acres not including federal fires – on Saturday. Near or at historical minimum dead fuel moistures for the period.

- 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. Normal "natural barriers" may not be effective based on drought and storm related loading impacts. This will become very problematic in the Spring, should lack of significant rain continue.

- It is also important to note the risk of prescribed fire reburn & mop-up concerns in drought impacted areas, aligning with deep duff/abnormally heavy fuel loading/organic soils that are available for consumption. D8 noting consumption of duff/organics, snags on several larger wildfires.

- Trafficability concerns when topsoil wet but surface fuels dry – stuck equipment but running fire. Also hearing this from other states relating to heavy equipment trafficability problems with running/higher intensity surface fires.

Live Fuels/Greenness – live fuels remain in seasonal dormant/cured status, also reflected in the NFDRS models. Note that daylength is slowly increasing each day, post Winter Solstice, which will provide more opportunity for fuel heating/drying as we move towards Spring. Early green-up started but frost/freeze setbacks as we've seen the past few days.

Spells of very dry & cold air have been experienced over the past 1.5 months. The return of very dry air will quickly cause small to medium sized dead fuels to dry out, especially where repeated poor overnight recovery happens. Continue to be watchful for situations where consecutive days of dry air aligns with increasing air temps & day length, vegetative dormancy, wind and heavy loading of drying storm debris as we progress further through the dormant season.

Warming trend coming again, conditions look to more closely mimic more traditional La Nina conditions. Severe storm risk for SE looks to be enhanced.

Storm Damage Concerns – Comments received after several of the larger fires over the past few weeks in hurricane fuel areas point out that curing of downed tree tops & smaller branches (leaves/needles are still attached) is progressing. This drying has led to further containment challenges due to spotting, along with existing access/trafficability issues. They noted enhanced ember production, heat/lofting and receptivity of adjoining/nearby fuels. Larger down and dead fuels will continue to dry/become available as we move through the year, further enhancing difficulty of control and overall risk.

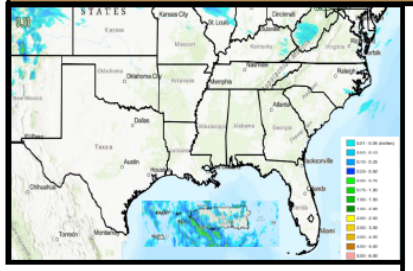
Southern Area Daily Outlook Page:

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

Product provides weekly context for Southern Area (Portion of Friday - 3/7 Outlook shown) & is typically updated daily during high SA Planning Levels.

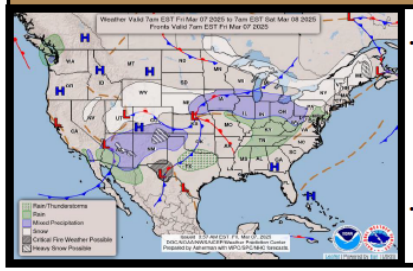
SACC Daily Outlook
Friday, March 7, 2025

Rainfall Accumulations for the Past 24 Hours



- The Southern Area was mostly dry for the last 24 hours, except for some showers in the Appalachians and the North Carolina coast, as well as Puerto Rico.
  - The showers over the North Carolina coast were isolated and light with up to .02 inches.
  - Showers over the Appalachians were mainly over the mountains in North Carolina, South Carolina, and Tennessee and accumulations were below a tenth of an inch, except for a couple of stations that reported .12 inches in the western tip of North Carolina.
  - There may have been a few more isolated showers bringing less that one tenth of an inch
  - Puerto Rico saw accumulations up to three quarters of an inch.

The Weather Outlook for Today



- A low-pressure system is forecast to trek across the central Plains today. This is forecast to bring the potential for:
  - Precipitation to the area between the Mississippi Valley and the Appalachians.
  - Showers and thunderstorms for North Texas and southern Oklahoma.
  - Snow showers to the TX/OK Panhandles
- A second low is forecast to be over West Texas, bringing fire weather concerns to that area.

Watches, Warnings and Advisories as of 8 am This Morning

- **Red Flag Warnings/Fire Weather Watch:** Red Flag Warnings have been issued for the West Texas Mountains. A Fire Weather Watch is in effect for south-central and South Texas.
- **Winter Weather Advisories/Watches, and Warnings:** There is a Winter Storm warning and a Winter Weather Advisory for the TX/OK Panhandles.
- **Wind Watches/Warnings/Advisories:** Wind Advisory for the W Texas Mountains.

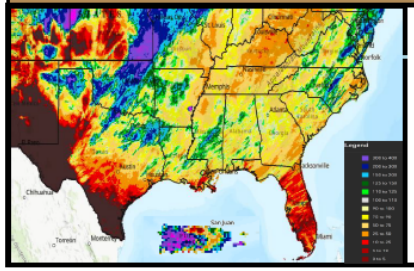
Please contact your local National Weather Service office for spot forecasts and the latest watches and warnings.

SACC Daily Outlook
Friday, March 7, 2025

Observed/Forecast ERC

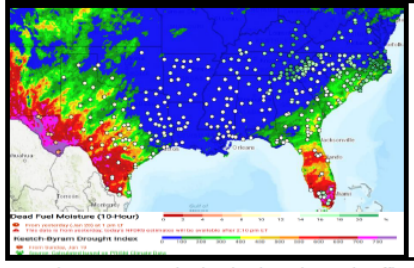
- ERCs across the Southern area are now averaging above the 70th percentile except for North Carolina, Puerto Rico, and coastal Virginia.
- The West TX Mts are reporting the highest average just above the 97th percentile.
- North Carolina and Puerto Rico are between the 40th and 50th percentile and the Virginia coast is at the 59th percentile.
- The forecast over the next 3 days is showing ERCs:
- Decreasing or stationary for nearly the entire Southern Area.
- South Texas/the Texas coast is the only area forecast to increase.

7-Day Percent of Normal PrecipitationObserved



- Most of the Southern Area has see significant improvement in the last 7 days, with much of the area seeing 75% or more of the normal precipitation.
- West and South Texas, and Florida are the areas remaining dry with most of the areas under 50% of normal and large areas of 0%-5%.

10 Hour Dead Fuel Moisture with the KBDI(shaded)

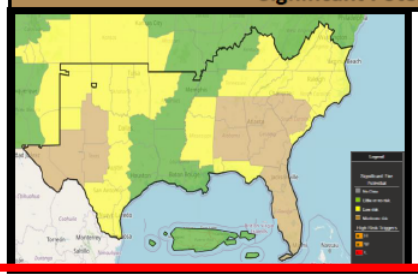


- The Southern Area is reporting 10-hour Fuel Moistures generally above 13% except for OK, TX (except for East TX), and the northern Gulf coast, the southern Atlantic coast, and portions of North and Central Florida.
- West Texas is the driest with fuel moistures of 5-9%.
- Other areas are mostly 10-13%
- 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.

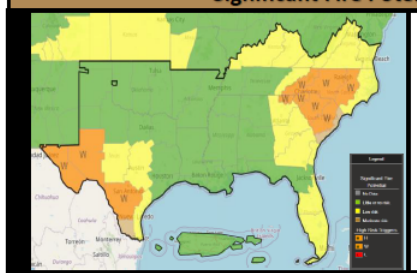
SACC Daily Outlook
Friday, March 7, 2025

Significant Potential for Today



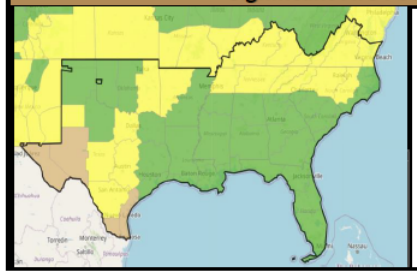
- **High Risk:** None.
- **Moderate Risk:** West TX, West and north Central TX, AL, GA, SC, and NE/Central/ S FL for very low RH and dry Fuels.
- **Low Risk:** The TX/OK Panhandles, NW TX, W Central TX, OK, W AR, MS, Central TN, TN and KY Mts, NC, SC Coast, NW FL, and the AL coast for low RH and dry fuels.

Significant Fire Potential for Tomorrow



- **High Risk:** W TX, the N Rio Grande Valley, the GA/SC/NC Mts, Central NC/SC, and the NC/SC coastal plains for windy conditions, low RH, and dry fuels.
- **Moderate Risk:** S Rio Grande Plain and SC coast for very low RH and dry fuels.
- **Low Risk:** Central TX, S TX coast, GA, TN mts, VA, KY, the NC coast, and Central/S FL for low RH and dry fuels.

Significant Fire Potential for Sunday



- **High Risk:** None.
- **Moderate Risk:** W TX, S Rio Grande Plain, and the TX coast for very low RH and dry fuels.
- **Low Risk:** S TX Panhandle, Central TX, N Rio Grande Plain, E OK, TN, KY, VA, NC Mts, Central and coastal plain of NC 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 7	Sat Mar 8	Sun Mar 9	Mon Mar 10	Tue Mar 11	Wed Mar 12	Thu Mar 13	Fri Mar 14
Southern Highlands ⚙ X	H	H	H	H	H	V	V	N/A
Central Mountains ⚙ X	H	H	H	H	H	E	V	N/A
Northern Highlands ⚙ X	H	H	H	H	H	V	H	N/A
Blue Ridge ⚙ X	H	H	V	V	V	V	V	N/A
Western Piedmont ⚙ X	H	H	H	H	H	H	H	N/A
Sandhills ⚙ Z	M	M	H	H	H	H	H	N/A
Eastern Piedmont ⚙ X	M	M	M	M	H	H	H	N/A
Southern Coast ⚙ X	H	V	V	H	H	H	H	N/A
Northern Coast ⚙ X	H	H	H	H	H	H	H	N/A

Important to note that the model outputs can change significantly farther out in time. Changes due to shifts in precip, timing, 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.