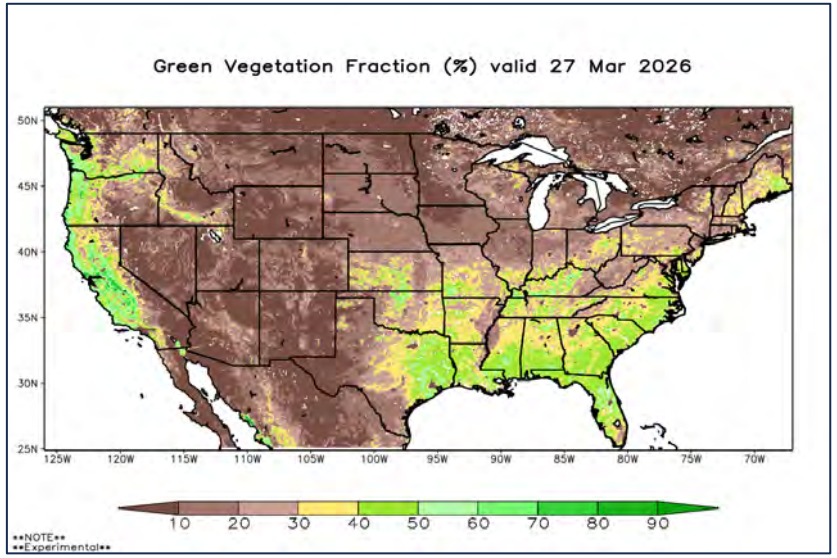
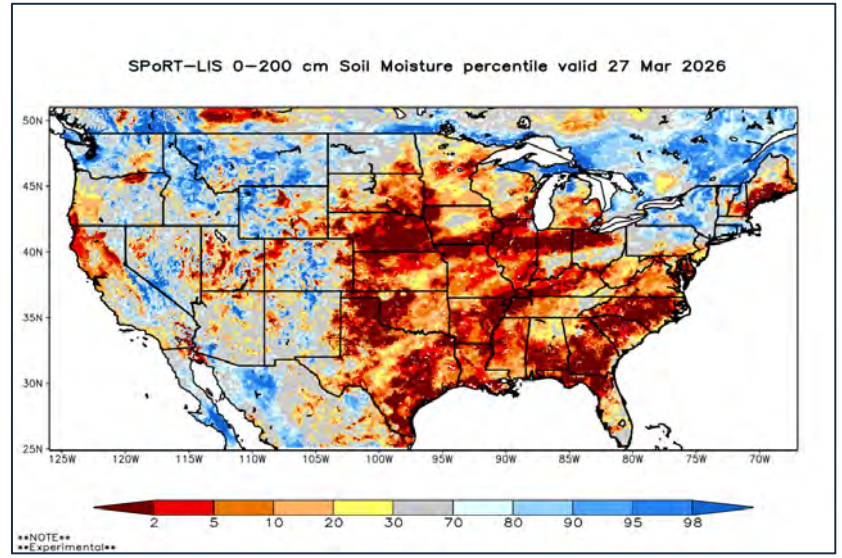
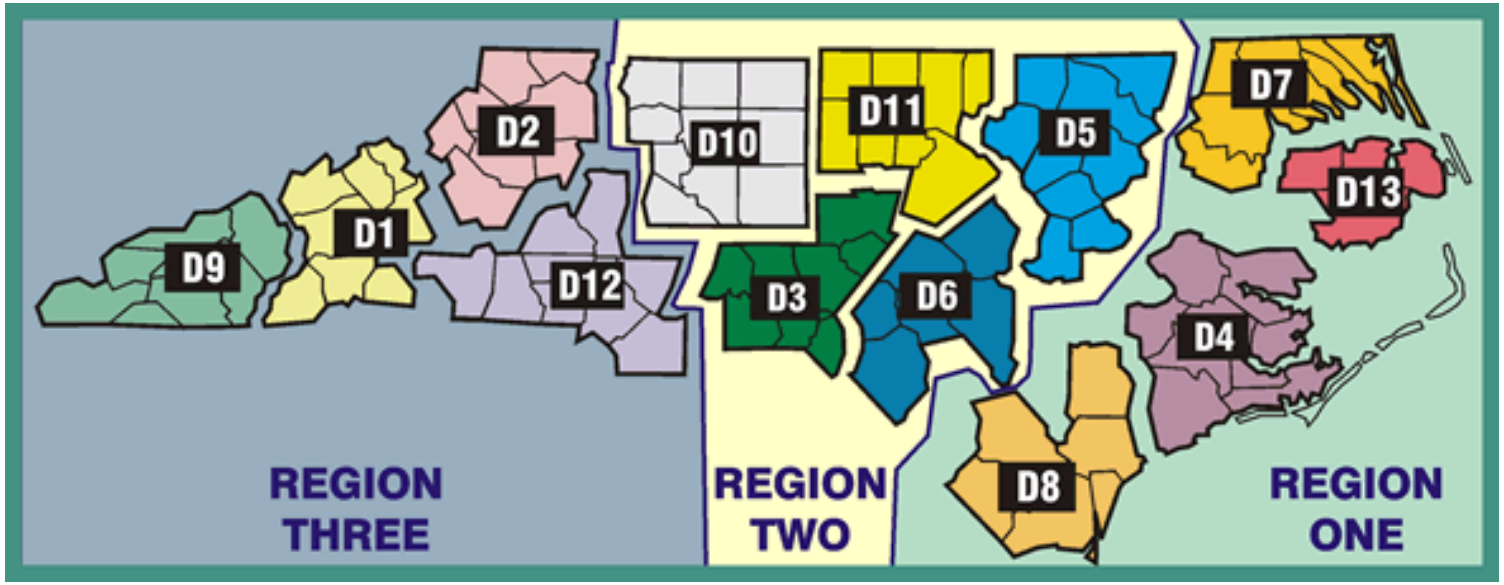
Weekly Fire Danger Assessment
NCFS – All Regions







For Time Period:

Friday (3/27/26) to Thursday (4/2/26)

Created by: Jamie Dunbar
Fire Environment Staff Forester
NC Forest Service
Created: 3/27/26

Statewide Wildfire Context

January: 10-yr avg is 339 fires for 702 acres
February: 10-yr avg is 639 fires for 1,683 acres
***March: 10-yr avg is 1,009 fires for 6,401 acres**
April: 10-yr avg is 627 fires for 6,803 acres
May: 10-yr avg is 283 fires for 1,298 acres
June: 10-yr avg is 231 fires for 2,383 acres
July: 10-yr avg is 182 fires for 551 acres
August: 10-yr avg is 126 fires for 420 acres
September: 10-yr avg is 194 fires for 422 acres
October: 10-yr avg is 265 fires for 1,996 acres
November: 10-yr avg is 534 fires for 6,173 acres
December: 10-yr avg is 372 fires for 733 acres

January: 1,083 incidents for 1,964 acres
February: 829 incidents for 1,136 acres
MTD (ending 3/26): 1,149 incidents for 4,614 acres

7-Day Activity (ending 3/26): 410 incidents for 1,413 acres

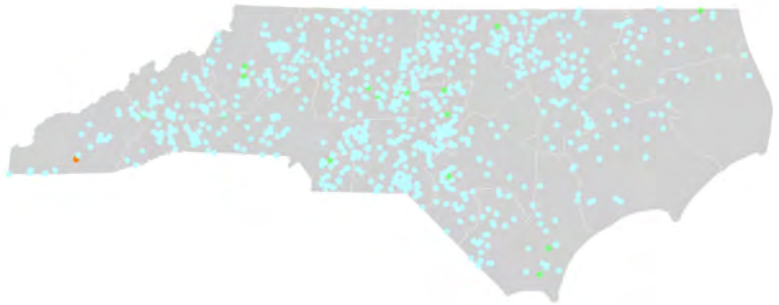
All wildfire activity data is preliminary
Does not include additional federal wildfires/acres
2016-2025 CY Average

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

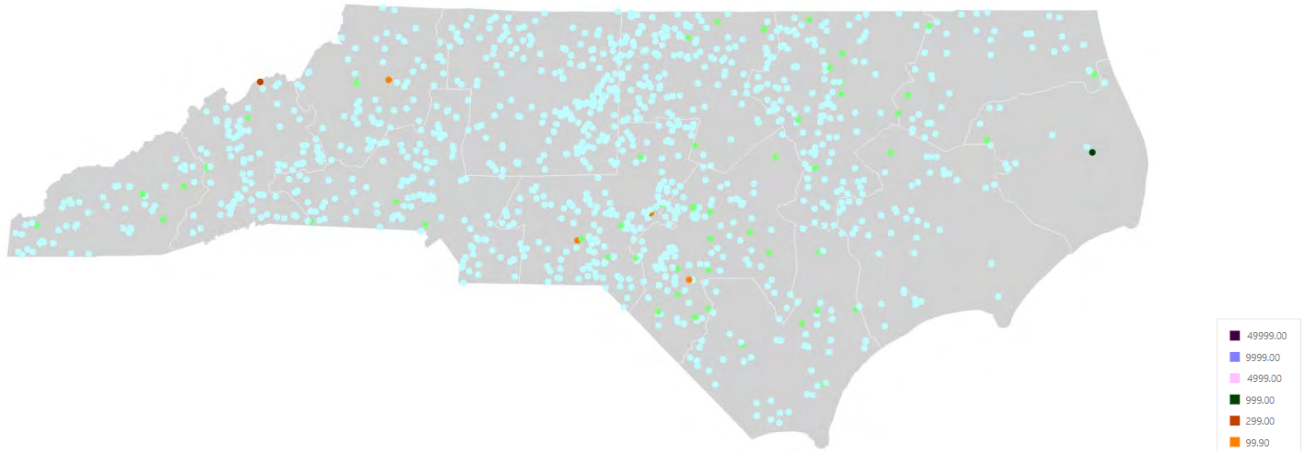
Incident Name	Discovery Date	Region	District	County	Acres
East Tower	3/4/2026	Region 1	District 13	Dare County	1410.00
Poplar	3/23/2026	Region 3	District 1	Mitchell County	343.00
TRACERS	3/11/2026	Region 2	District 3	Richmond County	220.00
Soapstone	3/21/2026	Region 3	District 2	Wilkes County	190.00
Orange Skies	3/10/2026	Region 2	District 6	Robeson County	150.63
Union Church Rd	3/20/2026	Region 2	District 3	Moore County	145.00
Deer pen	3/12/2026	Region 2	District 11	Granville County	63.00
Ruby Rd	3/4/2026	Region 2	District 6	Robeson County	60.00
Hines Branch	3/14/2026	Region 3	District 2	Caldwell County	60.00
Butterfly Man	3/10/2026	Region 2	District 6	Robeson County	59.60
Basket Creek	3/23/2026	Region 2	District 6	Harnett County	58.00
Georges Branch	3/7/2026	Region 3	District 1	Buncombe County	45.00
Nix Creek Road	3/26/2026	Region 3	District 9	Haywood County	45.00
Bennet rd	3/26/2026	Region 1	District 7	Martin County	41.00

January 2026

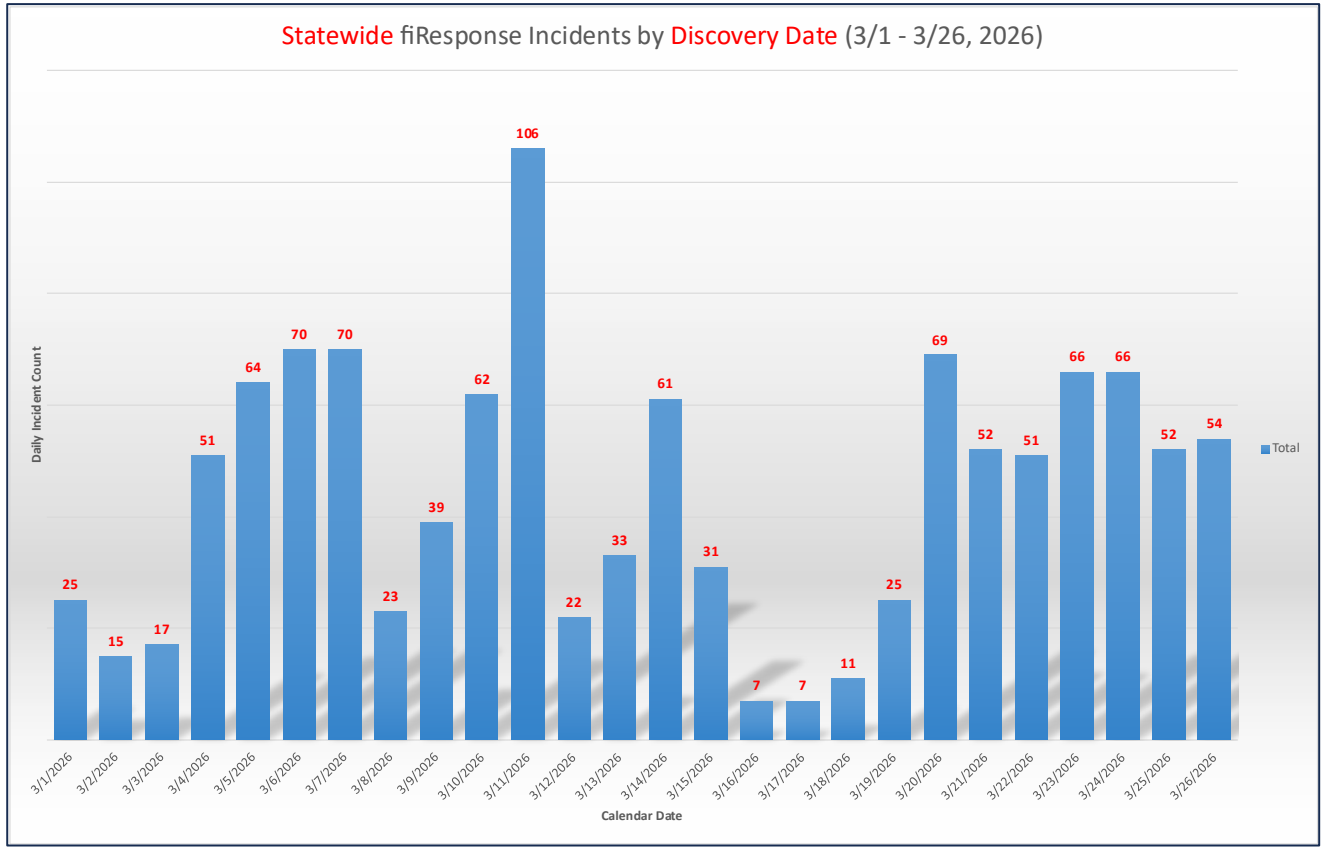
February 2026

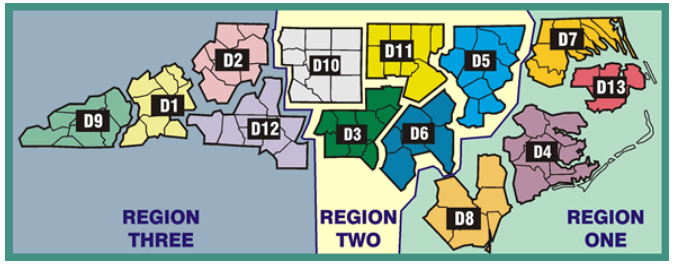


March - MTD (3/1 – 3/26)



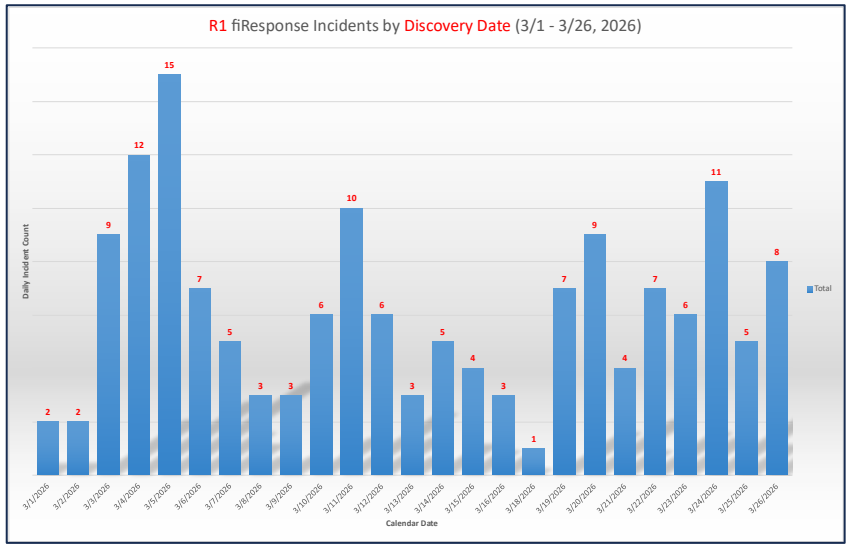
***Note: Dept. of War & other entirely federal ownership wildfires typically not shown on fiResponse, unless NCFS integrated into response.*

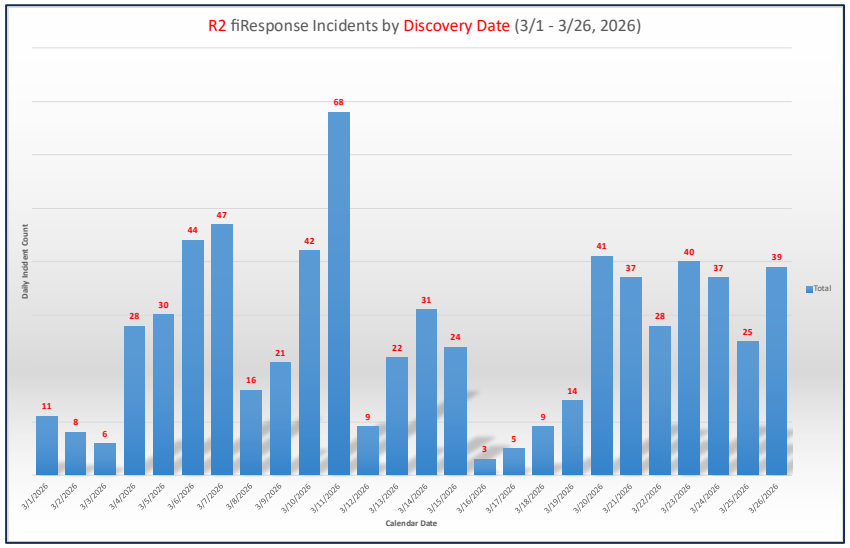


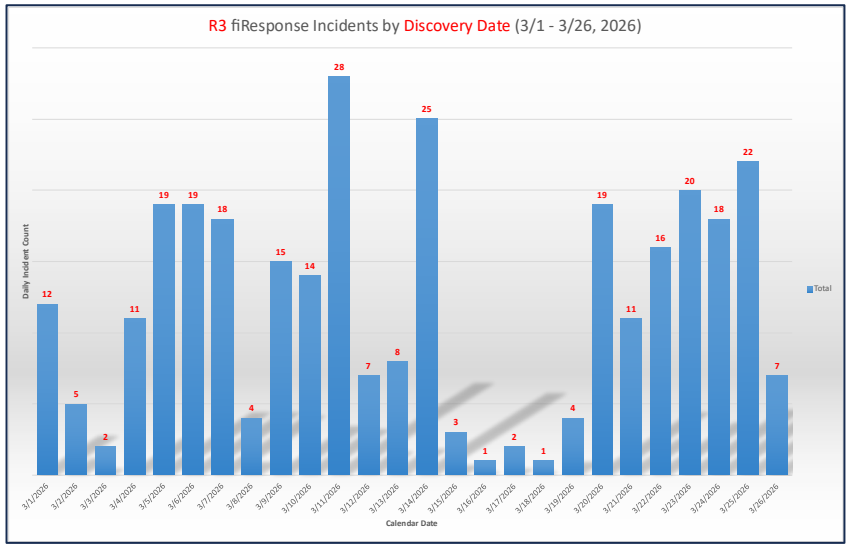


Distribution of fiResponse Incidents by **Region & Daily Count** from 3/1 to 3/26, 2026

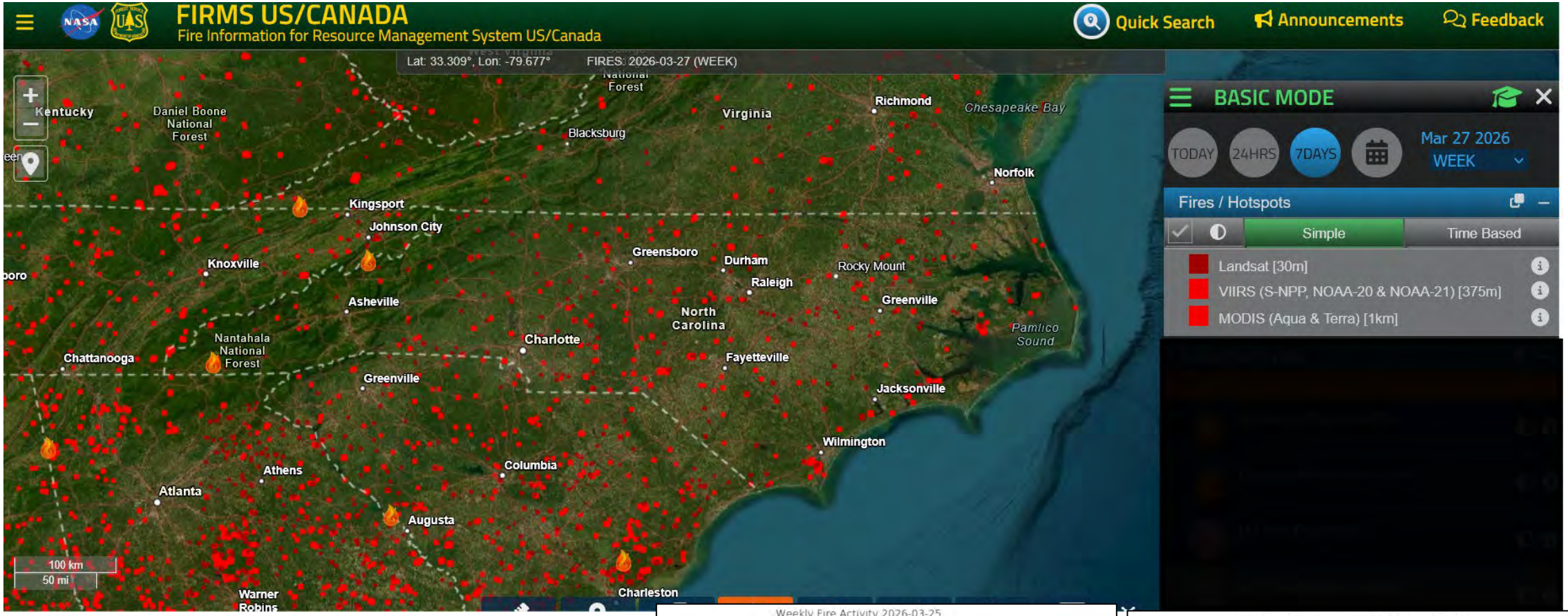
Data is preliminary and subject to change

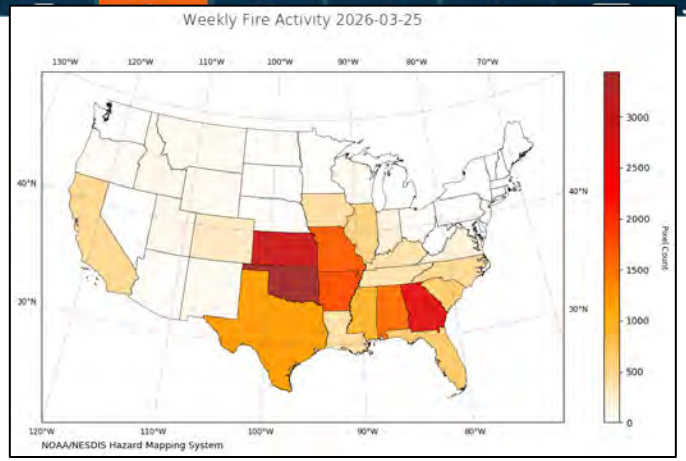


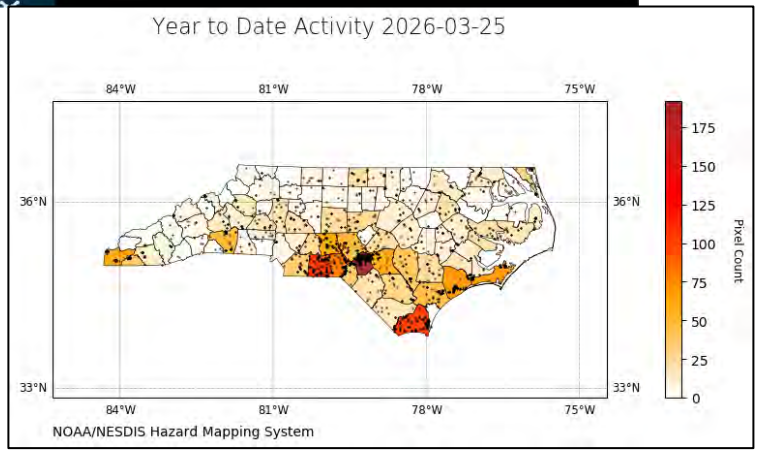




Weekly Heat Detects



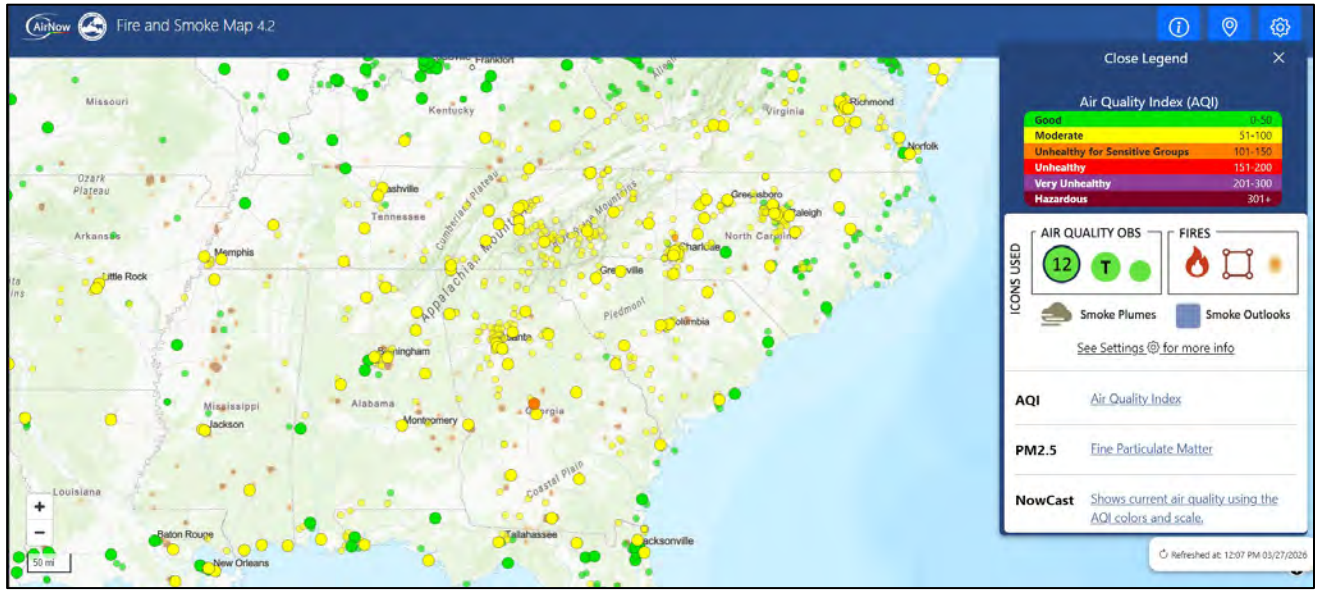




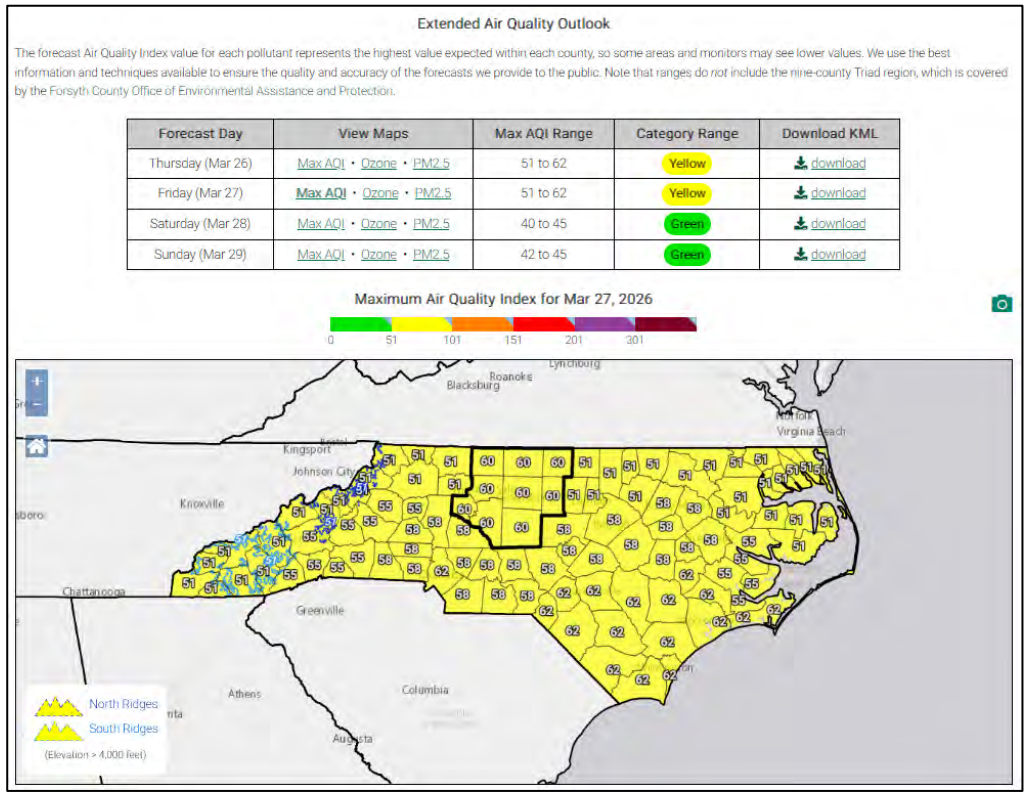
NC Map showing past week satellite detects from same source & bottom right maps display fire pixel counts. Note NC map below is by CY-Year (YTD context ending on 3/25/26) . Note that cloud cover and other factors can limit detections, not all detects may be “forestry related”. Hazard Mapping System link:

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

Air Quality Notes



Fire & Smoke Map heat detects from VIIRS (above). https://fire.airnow.gov/#



This forecast was issued on **Thursday, March 26, 2026** at **2:19 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Current daily average fine particulate levels are in the upper Green to mid Yellow range at all locations west of the Coastal Plain. Ozone levels have risen into the low Code Yellow range in portions of the western Piedmont through the Triad and north of the Triangle, with upper Code Green being observed elsewhere.

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 will approach from the north on Friday, with gusty southwesterly winds and brief light rain expected ahead of the front. With the timing of the frontal passage being in the evening, I expect daily average fine particulates to remain elevated in the moderate range as the smoky airmass lingers across the state. Ozone-wise, we may see some hourly Code Yellow readings in the afternoon but 8-hour averages should hold in the Code Green range.

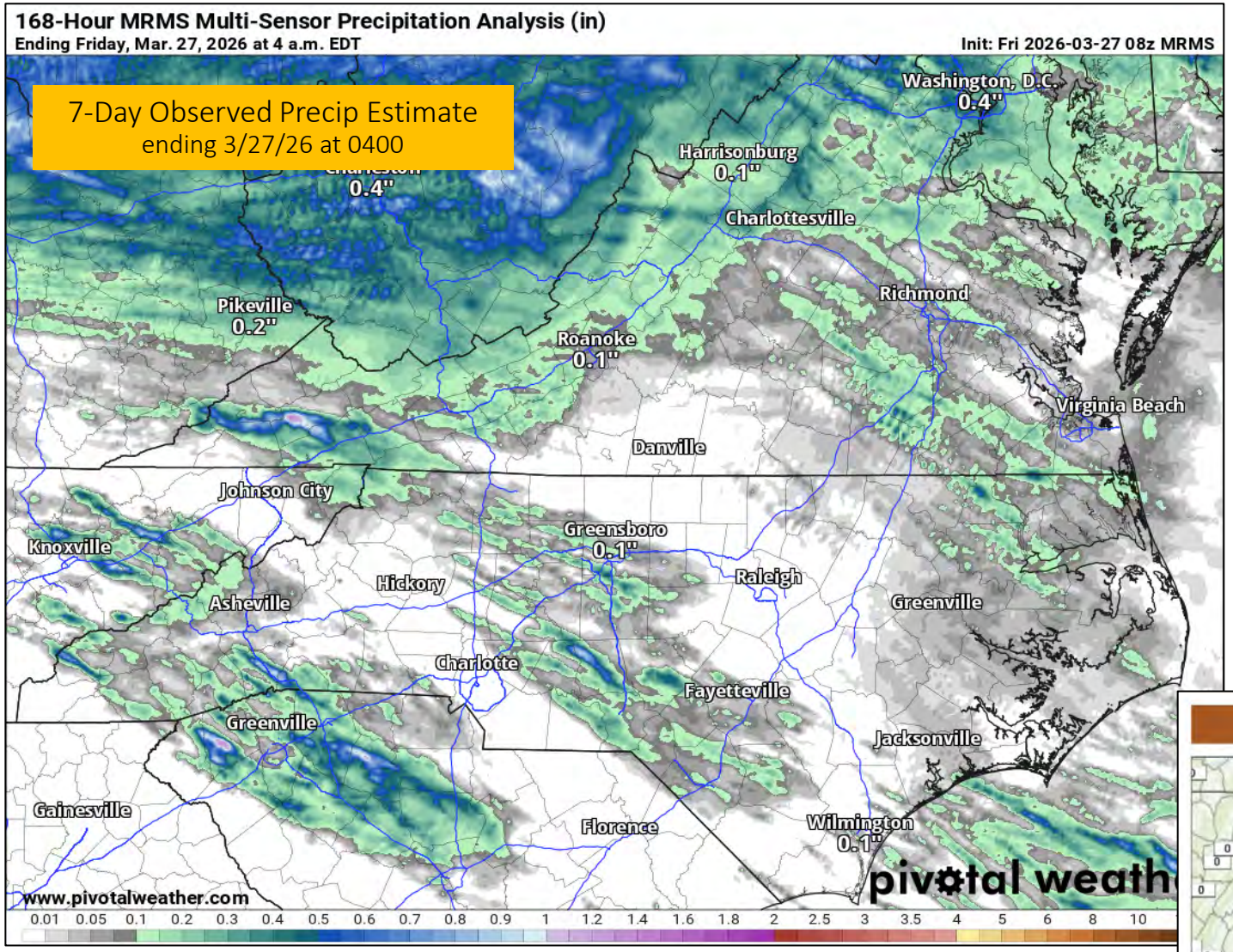
Outlook

Cleaner air will filter in behind the front on Saturday and air quality will drop back into the Code Green range. Onshore flow on Sunday will continue to provide a clean maritime airmass to our region.

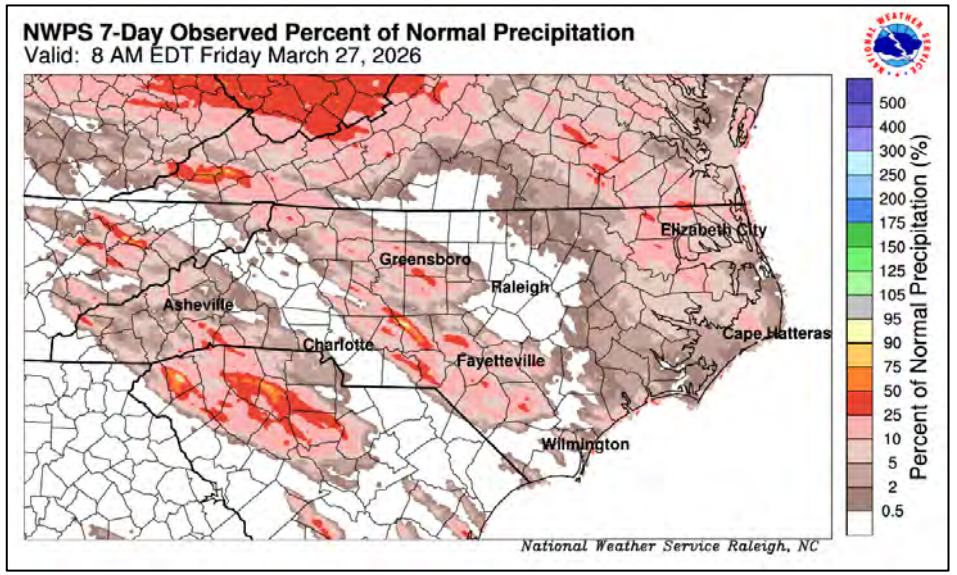
Author: *Sara Kreuser (sara.kreuser@deq.nc.gov) - NC Division of Air Quality*

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

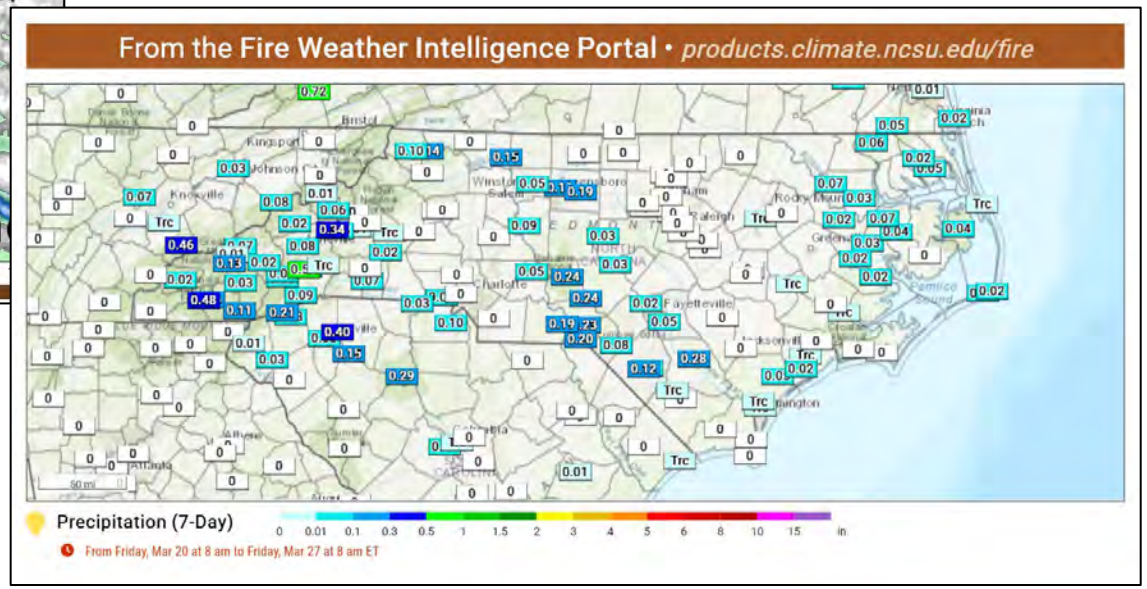
7-Day Observed Precip Estimate
ending 3/27/26 at 0400



7-Day Percent of Normal Precip
ending 3/27/26 at 0800

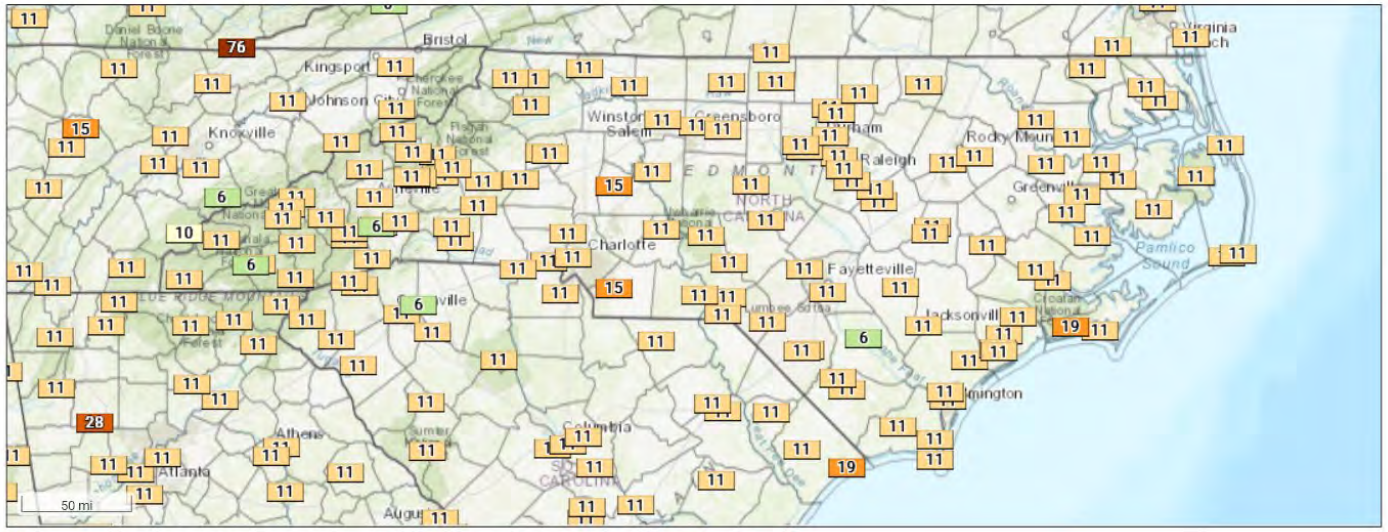


7-Day Station Precip Totals
ending 3/27/26 at 0800



Very minimal/scattered amounts over the past week.

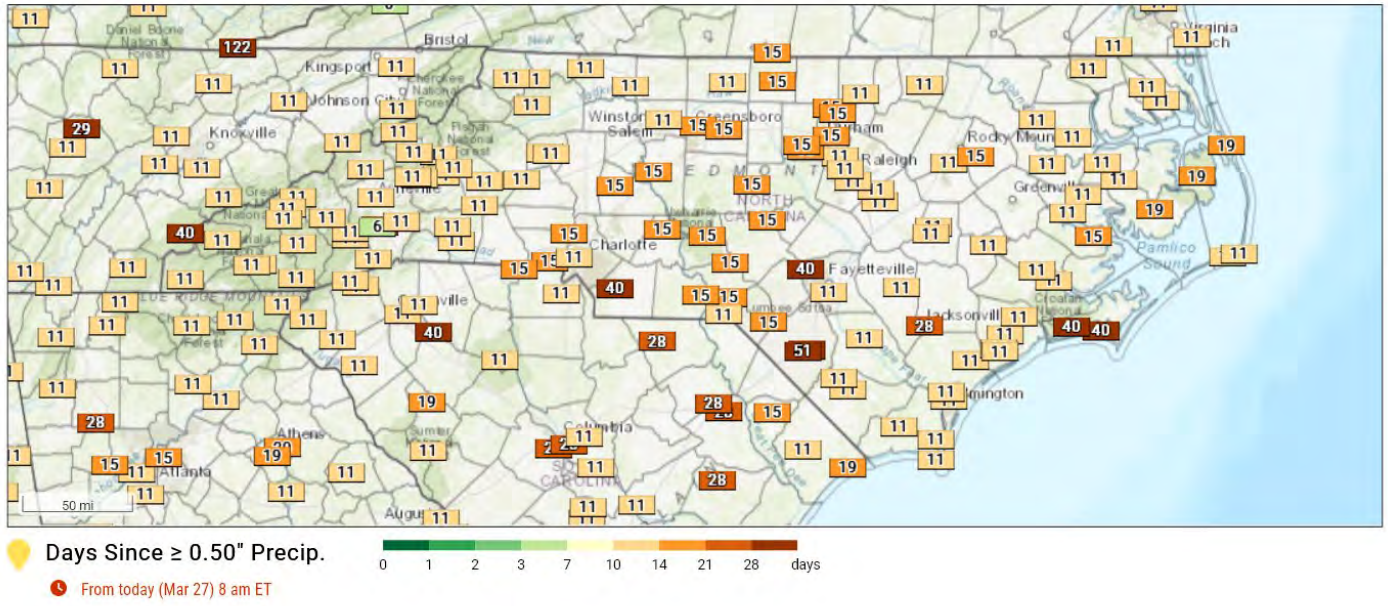
From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*



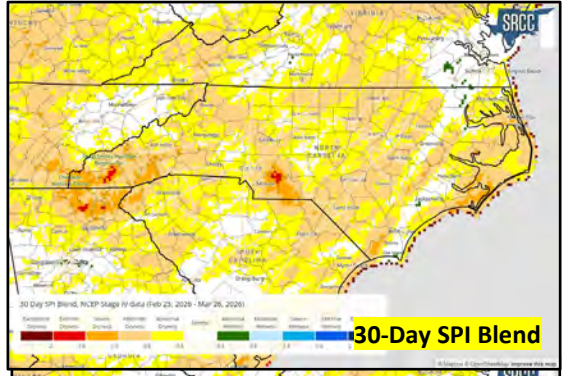
Days since ≥ 0.25” Precip Event ending 3/27/26 at 0800

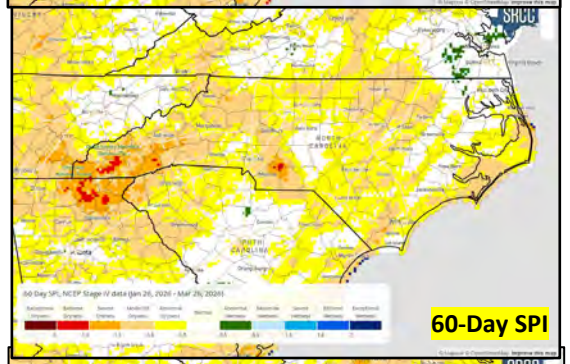
Days since ≥ 0.50” Precip Event ending 3/27/26 at 0800

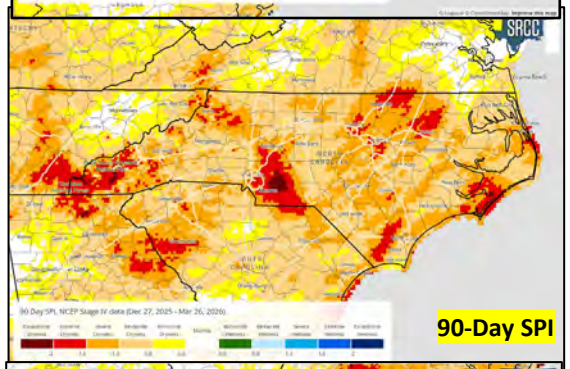
From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*

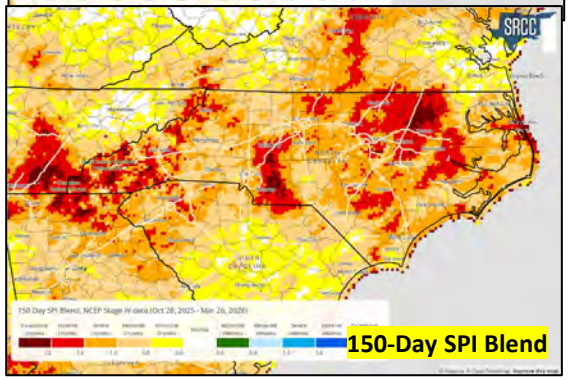


https://srcc.tamu.edu/water_portal/

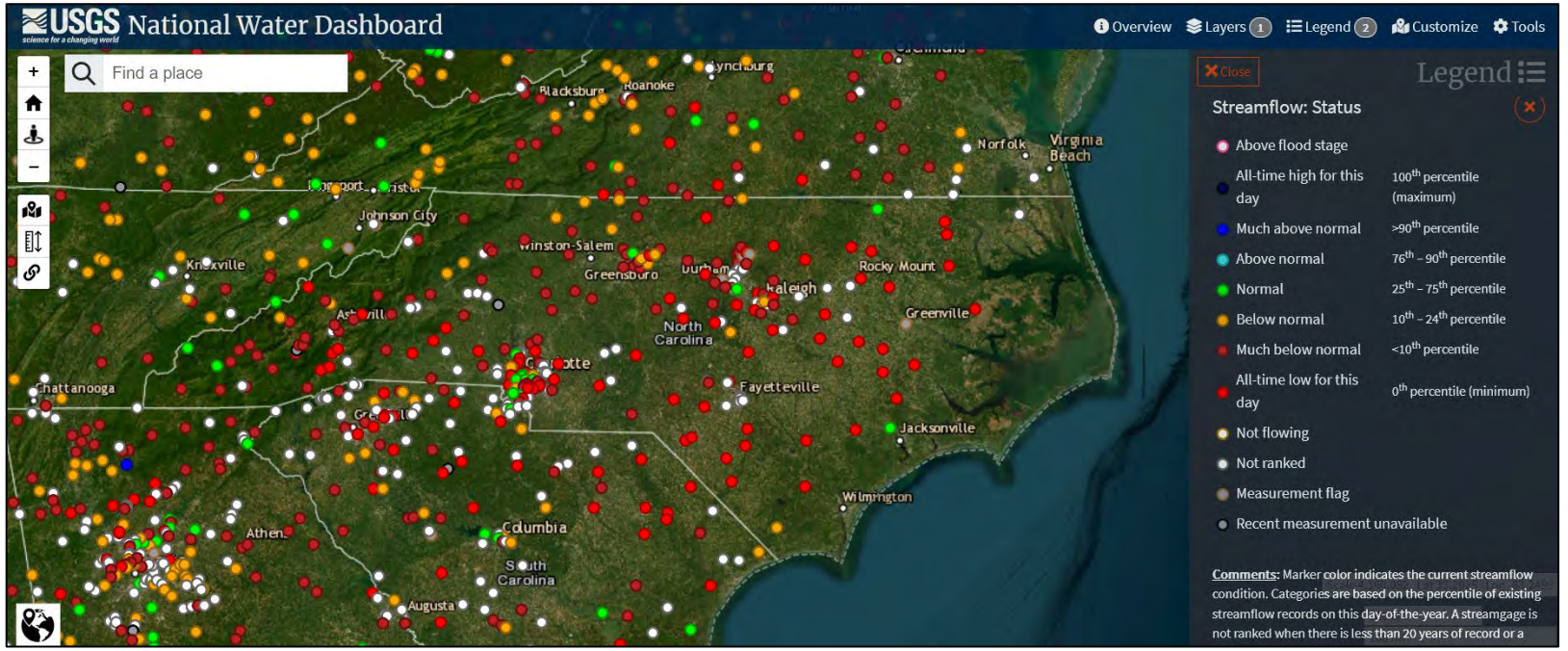








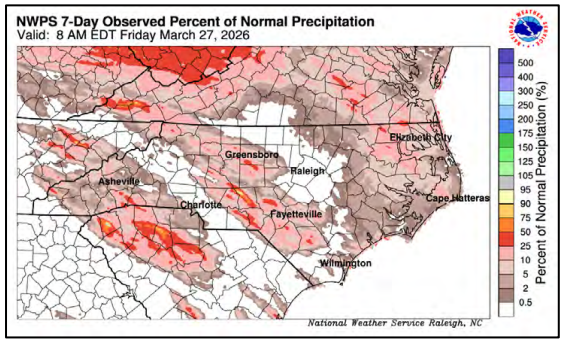
New USGS Streamflow Map: Real-time



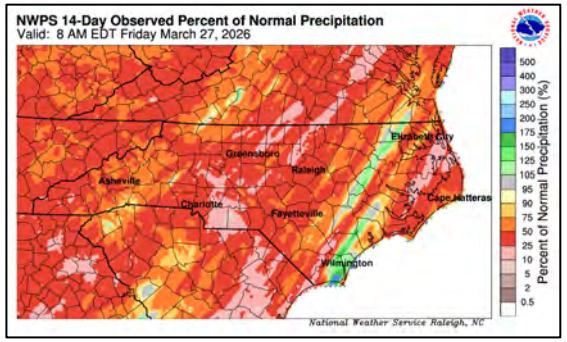
Limited precip over the past 7-days is beginning to show response on the 30-day SPI blend map, offsetting earlier reductions. Longer time scale SPI products continue to indicate entrenched conditions. As dormancy break continues – expect further decreases in streamflow and lower duff/soil moisture.

Real-time streamflow from 3/27/26 shows return of "below" to "much below" normal flow conditions for many gauges in NC. This low-flow (especially in context of baseflow) trend continues to be very significant as we move towards the growing season/spring. Many swamps & larger canal networks remain low, compared to seasonal "normal".

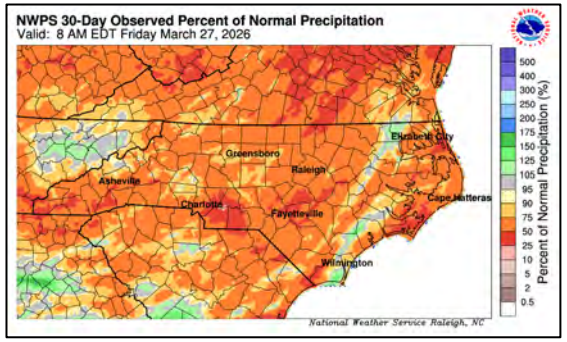
7-Day PNP



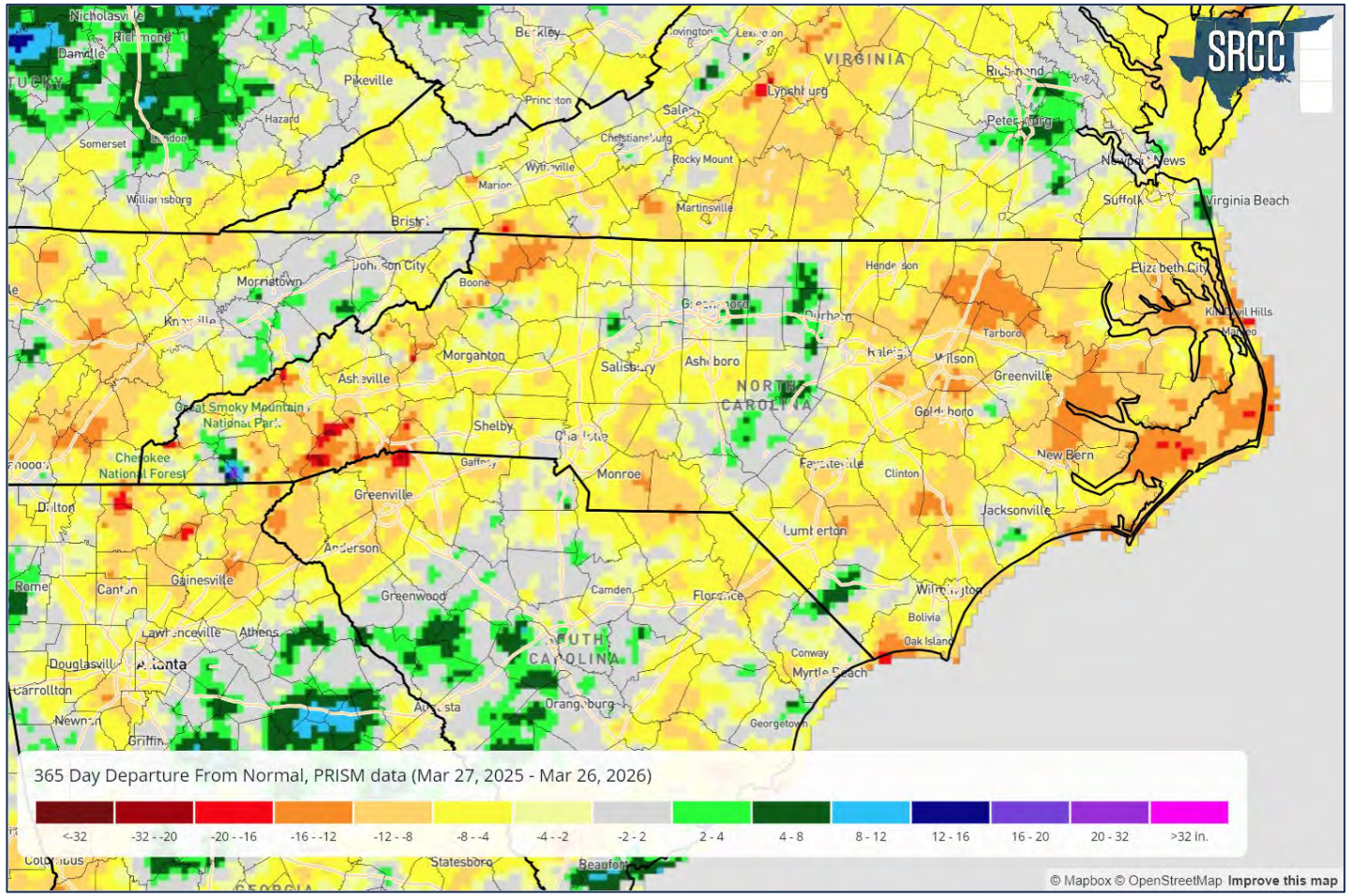
14-Day PNP



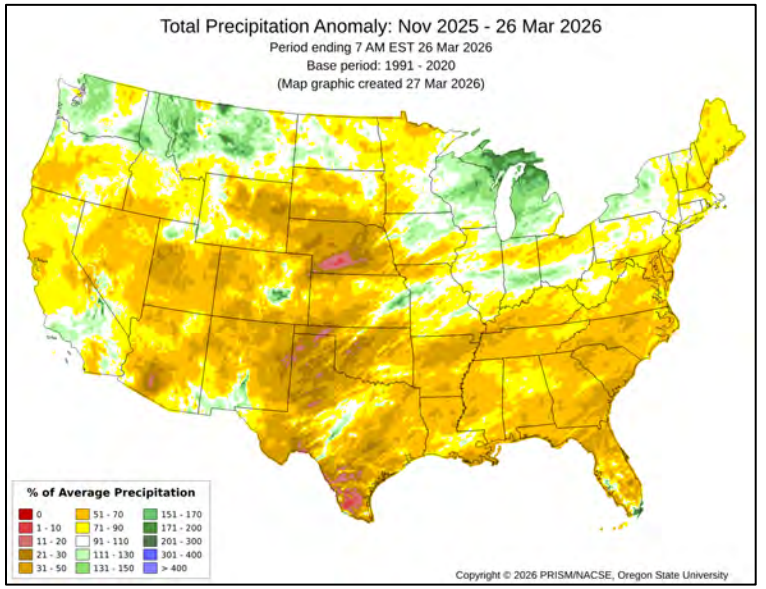
30-Day PNP



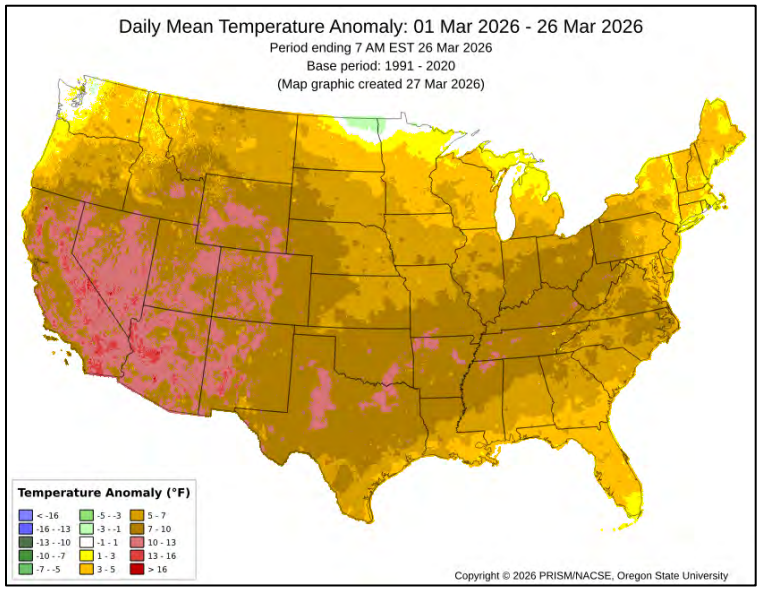
12-Month Departure From Normal (inches)



5-Month Percent of Avg Precip



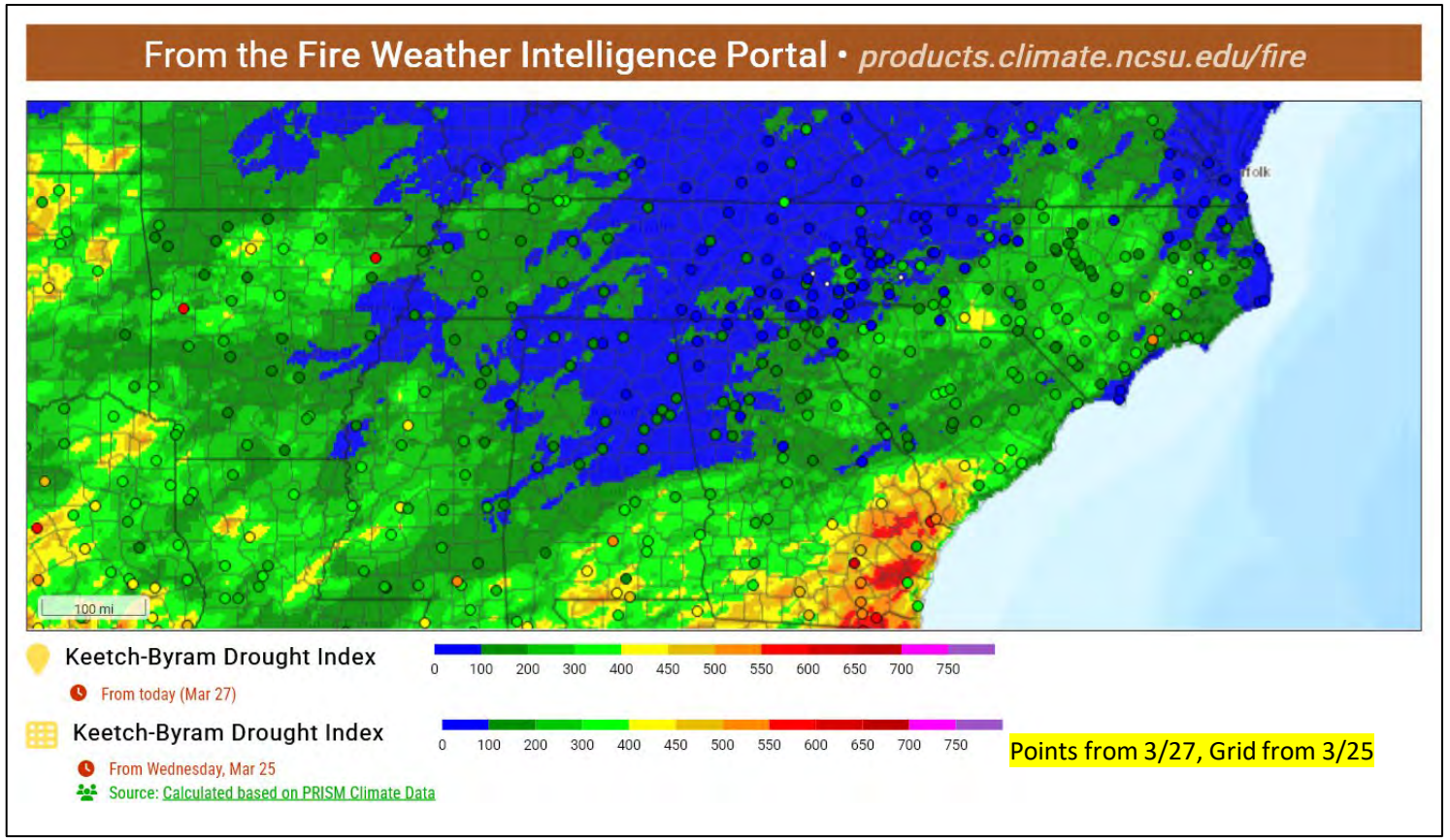
MTD Mean Temp Anomaly



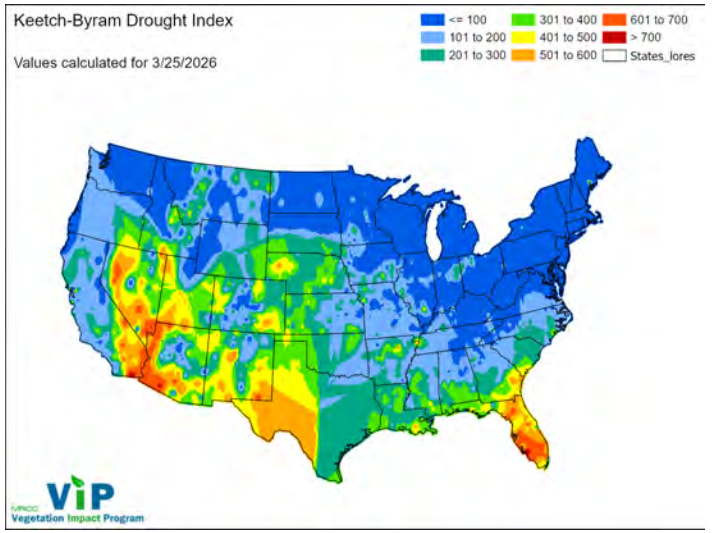
Even after earlier rain events, we are in many cases 8-12+ inches behind at the 12-month time scale.

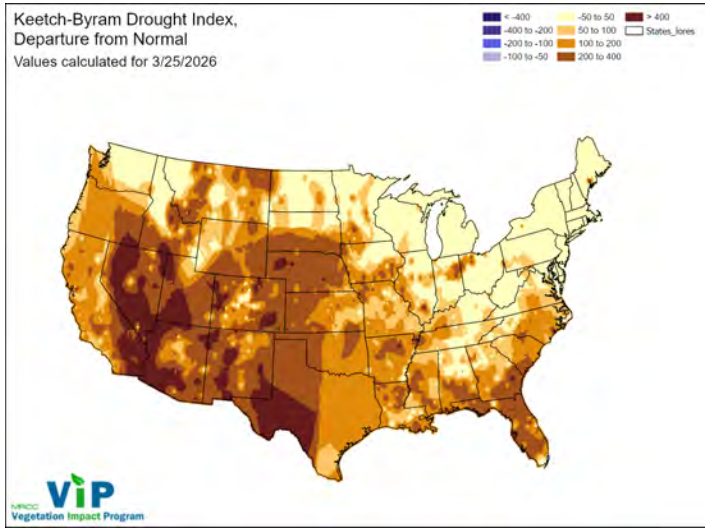
In context of Late Fall – Early Spring, most of NC remains in the 50-70 percent range of “normal”. This is very significant as we advance into Spring.

Mean temperatures have been much warmer than normal, interspersed with freeze/frost events.



Points from 3/27, Grid from 3/25





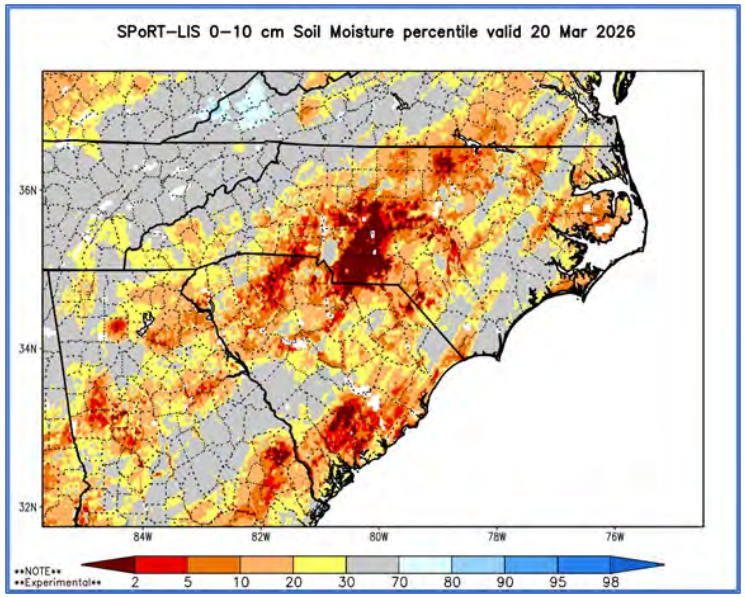
- KBDI is much less representative of the fire problem in the cold season, while max temperatures are low. A moderate rainfall can seemingly "erase" higher KBDI values, as the daily climb after the rain event is minimal (while true drought hasn't been erased). This metric is much more useful in the growing season. The map shows the impact of continued overall warm weather in daily expansion of KBDI values. Expect more rapid daily climbs when daily max temps rebound again.

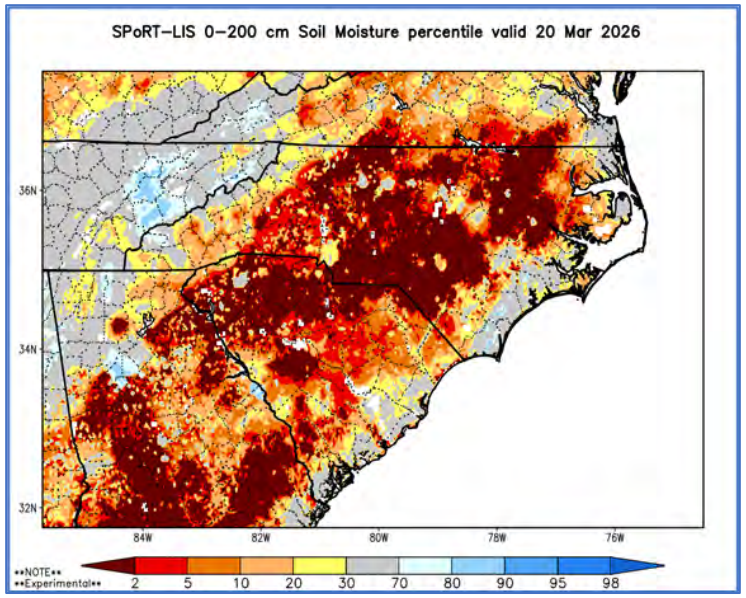
- Intense surface fire can still occur even with low KBDI values in the dormant season. Additionally, there are multiple areas still showing values in the 300's + on the gridded map above. The national maps to the right are calculated by MRCC, but paint a similar picture in a broader context.

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

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

3/20/26

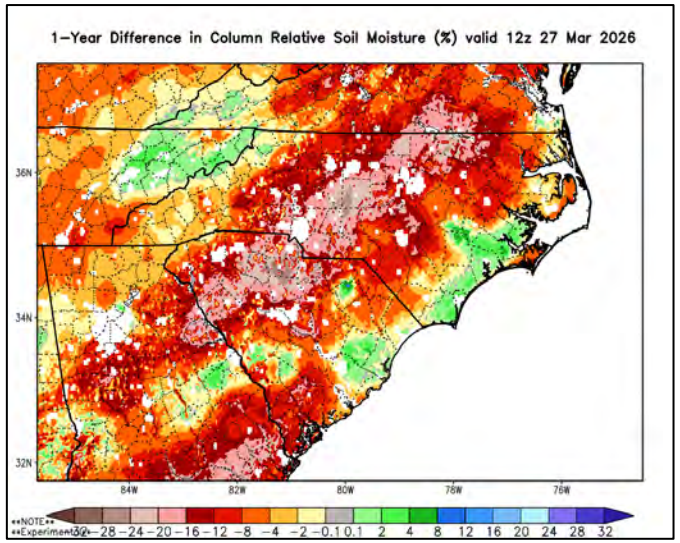




~ 1-Week ago Left, today on Right.
Just a model.

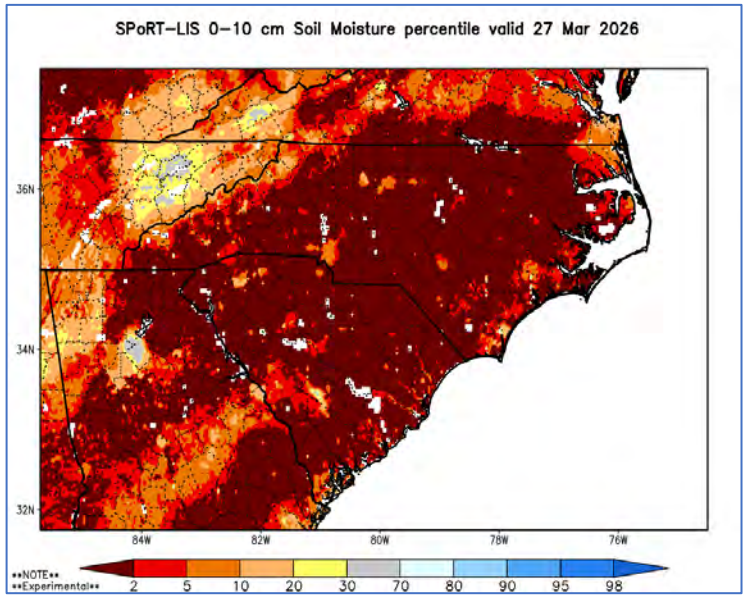
Modeled degradation as compared to last week.

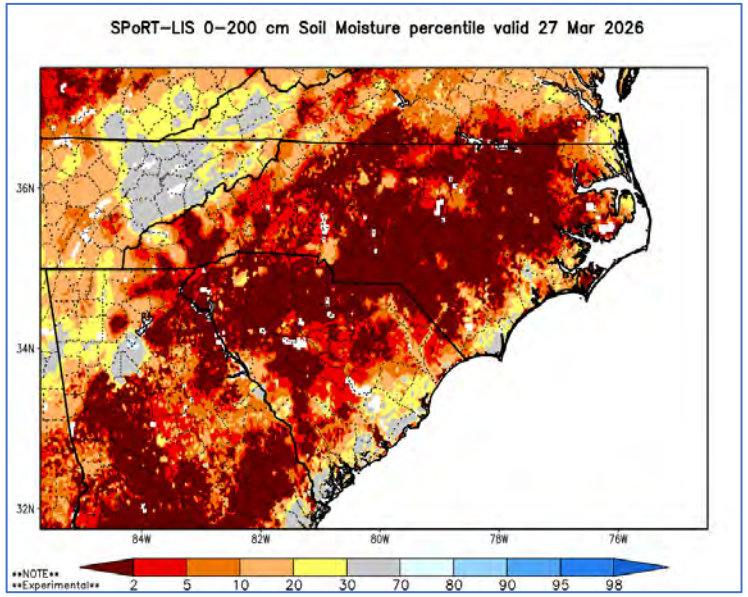
Note 1-year difference graphic below.

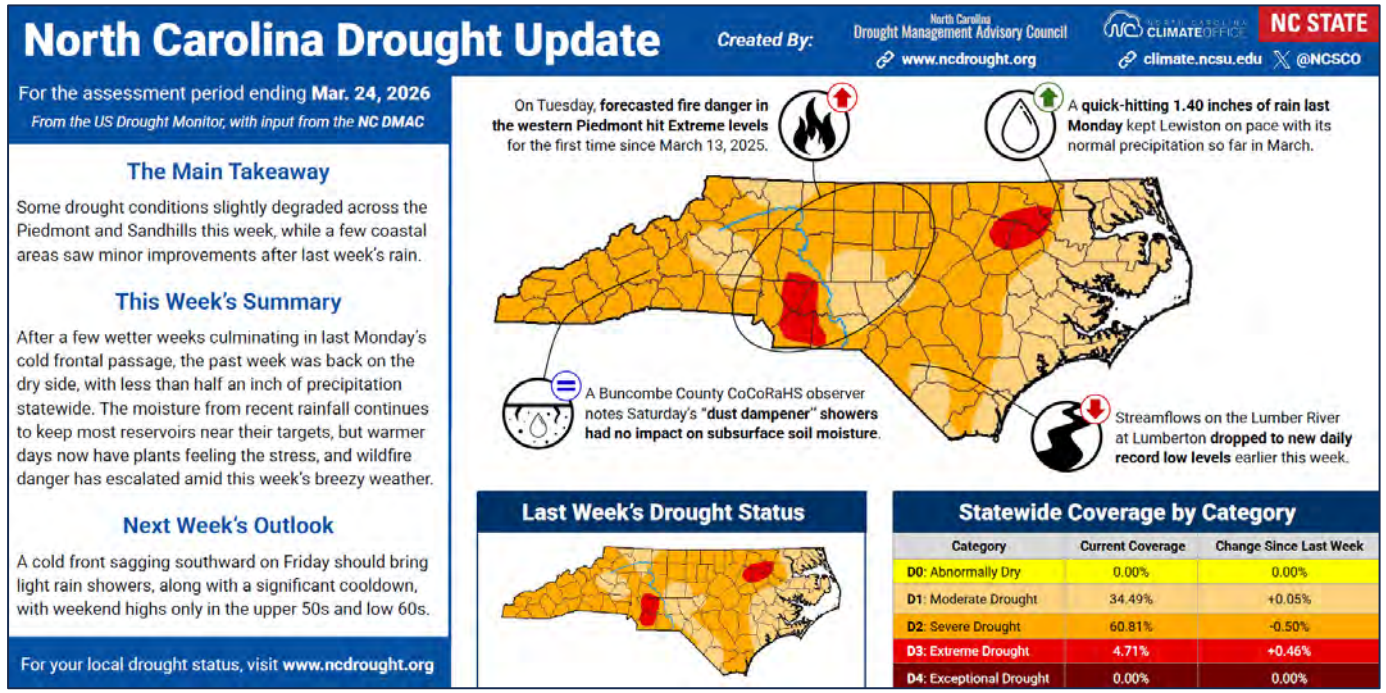


https://weather.ndc.nasa.gov/sport/case_studies/lis_NC.html

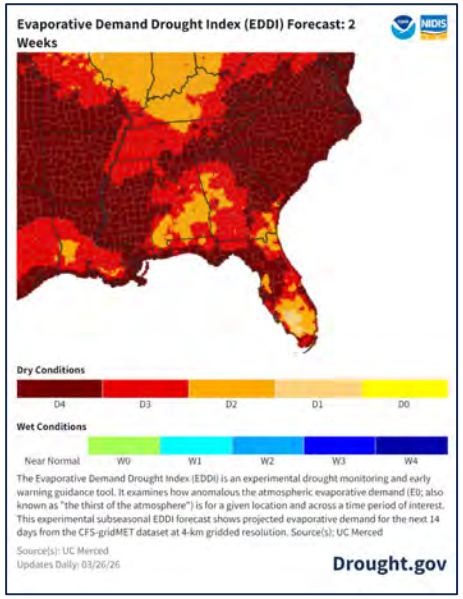
3/27/26

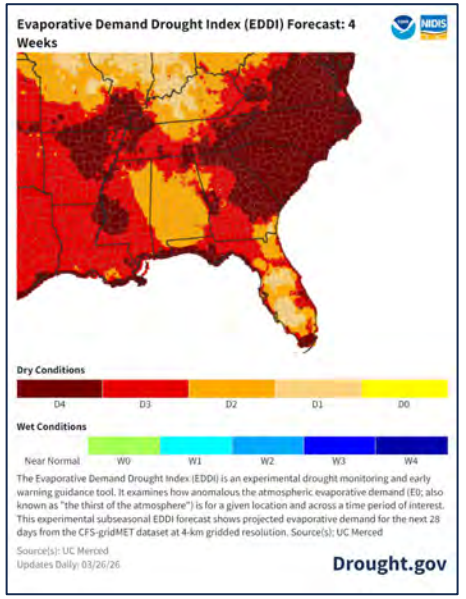






https://www.drought.gov/data-maps-tools/evaporative-demand-drought-index-eddi-subseasonal-forecasts



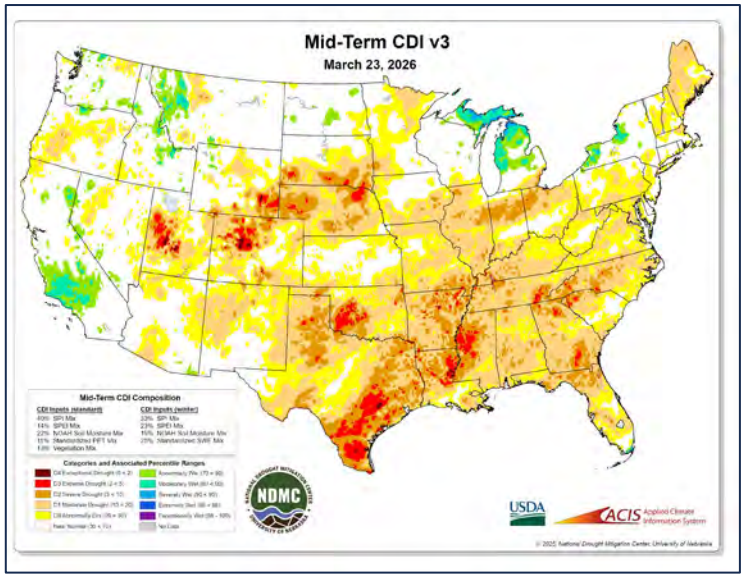


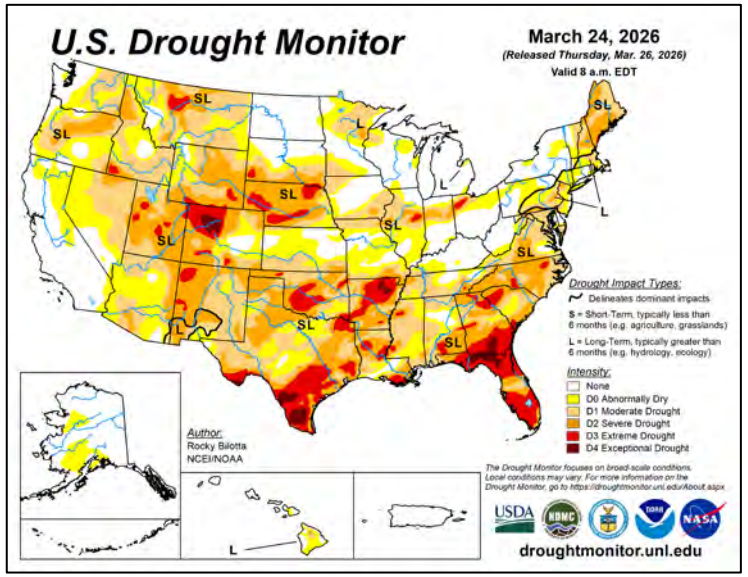
EDDI & Drought

EDDI Maps - The EDDI maps at the top right illustrate modeled evaporative demand at the two-week and four-week avg level. They are trending much drier than normal for NC in the 2 & 4-week time scale. Warmth, lack of precip and dry air accelerates this index.

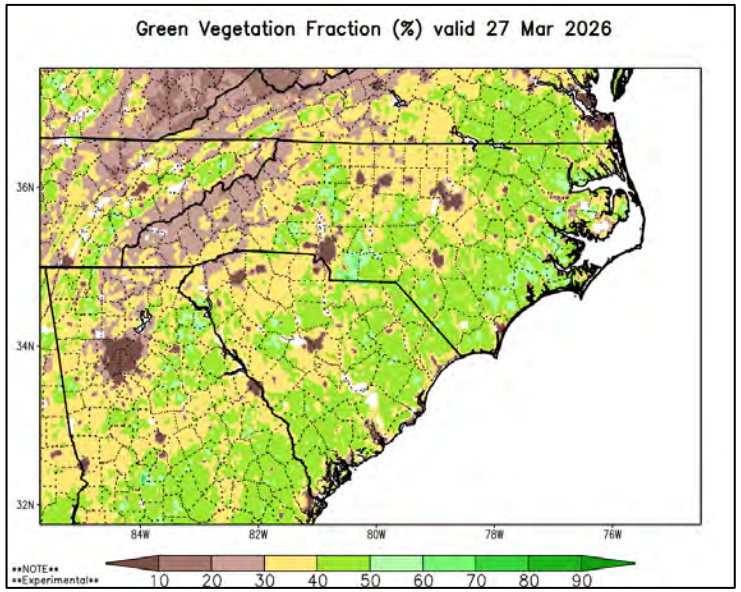
US Drought Monitor – Most recent USDM map release above (3/24/26). Drought intensification continues to be possible as we move into the growing season, should rainfall deficits continue.

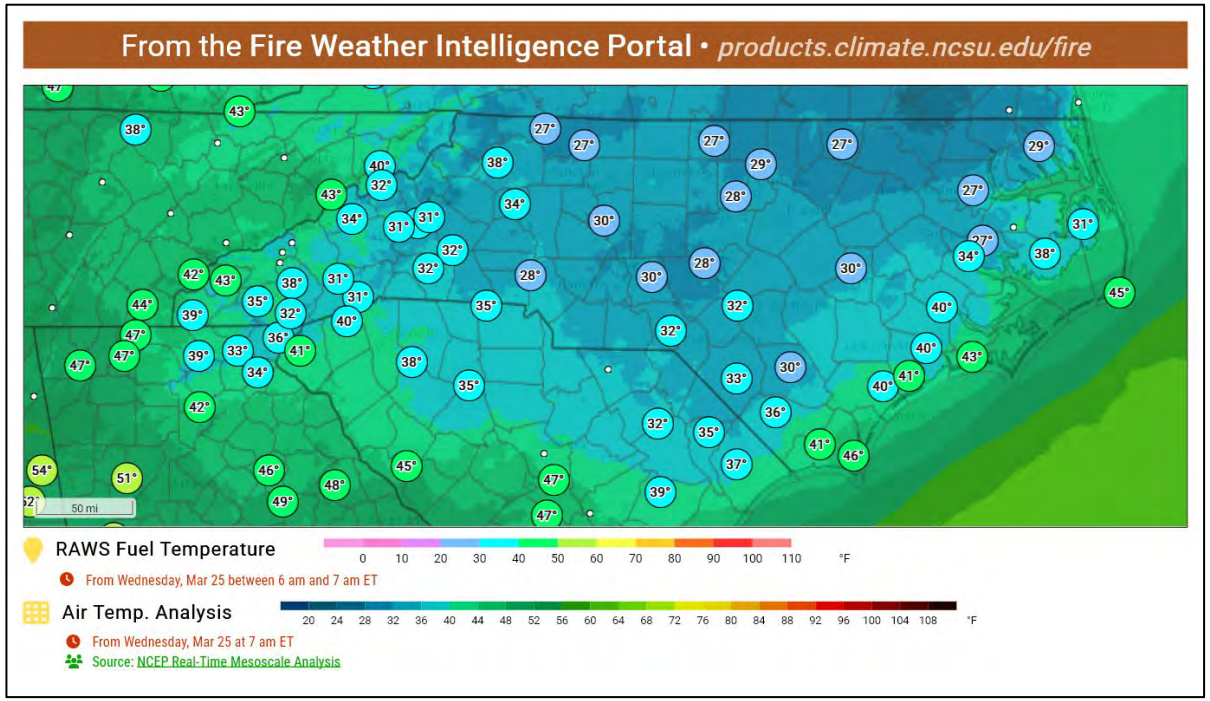
Mid-Term Composite Drought Indicator Map & Seasonal Drought Outlook - shown at right. See detailed state/regional discussions here.

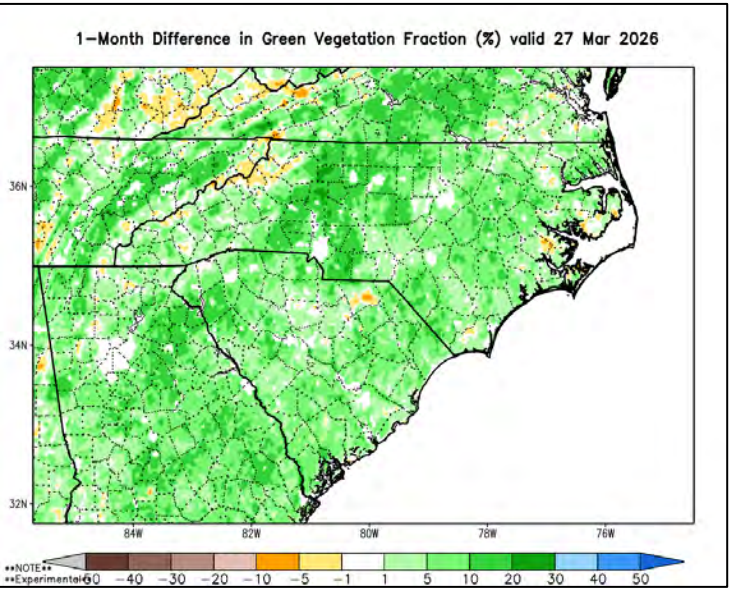


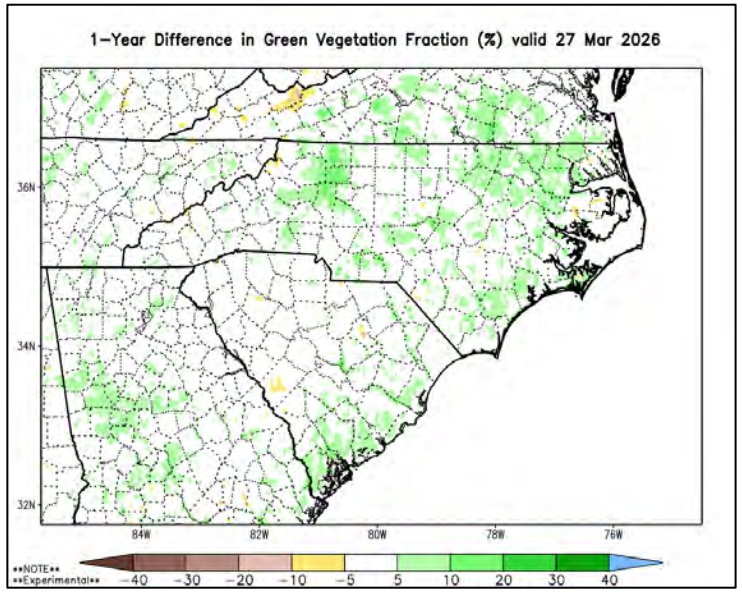


SPoRT Modeled Green Vegetation Fraction









The daily GVF graphic show an increase in overall greenness across the state (top left). The 1-mo difference graphic shows a decrease likely due to snow cover in some of our mountain counties (bottom left). The 1-year difference graphic shows a mixture conditions, as late winter has had significant bouts of both above and below normal air temps, along with changes in soil temperature.

The map above displays electronic fuel stick temperatures at 0700 on 3/25 – these being about 12” above land surface. Air temperatures constitute the gridded map background. Another round of scattered nightly freeze and frost conditions over the past week have likely impacted greenup progression based on species and local site factors.

Vegetative Greenness – Examples across the State

https://drivenc.gov/#

Again, several night of cold overnight temps in the 20's & lower 30's have had an impact on herbaceous and more sensitive shrub/tree species, slowing progression in some areas. Extent of damage will likely be localized based upon stage of plant development, wind, duration of freezing conditions, and any drought related stress.

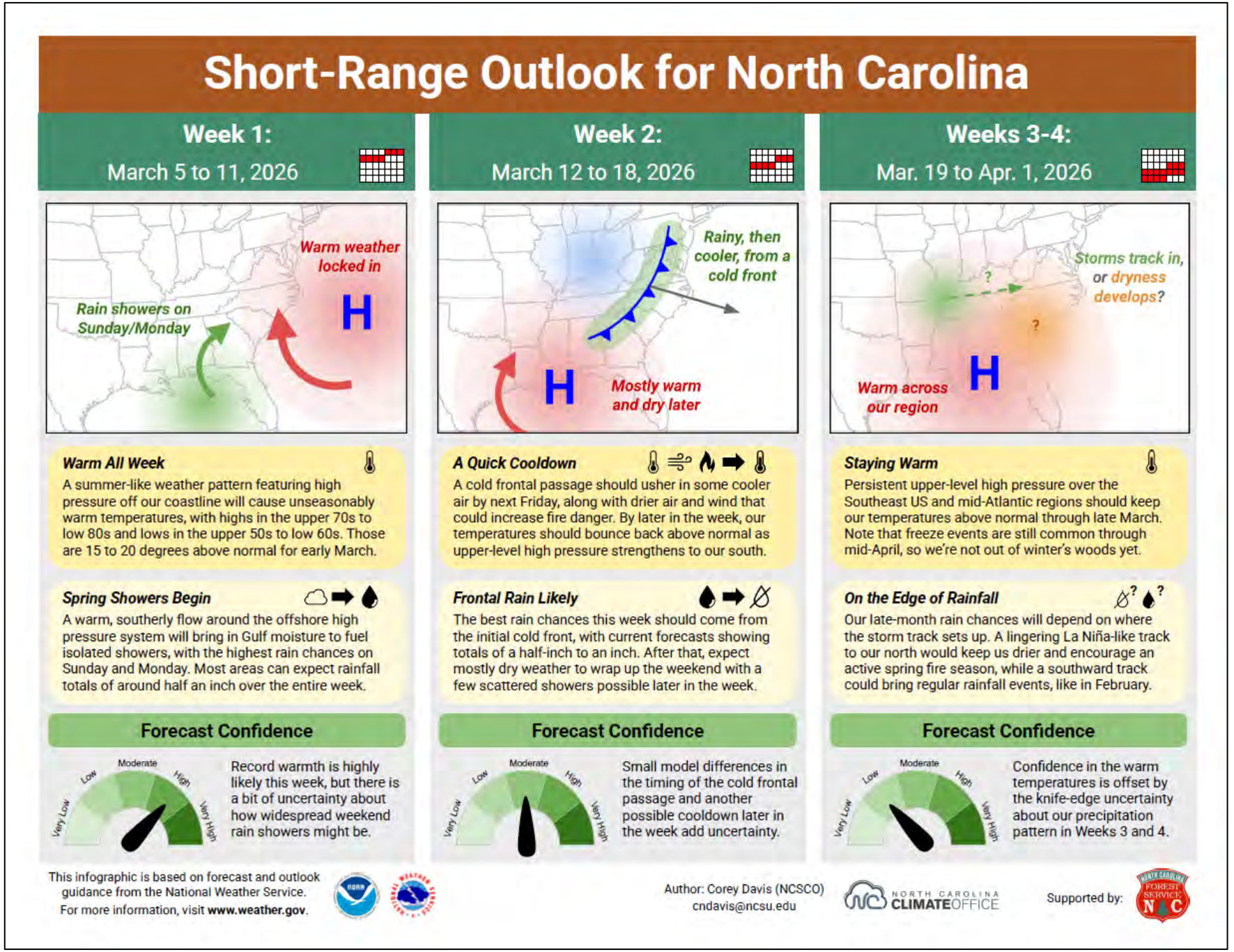
Although grasses may be greening in many areas, hardwood forest canopy is still far from being regenerated. Traffic cameras from across the state show this. **Volatility of forest fuels will remain significant until forest canopy closes, drought conditions are abated, and waxy leaved shrubs reach maturity much later this spring.**

Alignment of fire effective weather with available fuels will lead to enhanced difficulty of control, especially Helene or drought impacted areas.

The anticipated lack of significant wetting rain for the next ~2+ weeks will encourage shallow soils and duff to dry as plants increase transpiration needs.

State Climate Office: Short-Range Monthly Outlook for NC

*Released **3/5/26***
Location: https://climate.ncsu.edu/fire/outlooks/

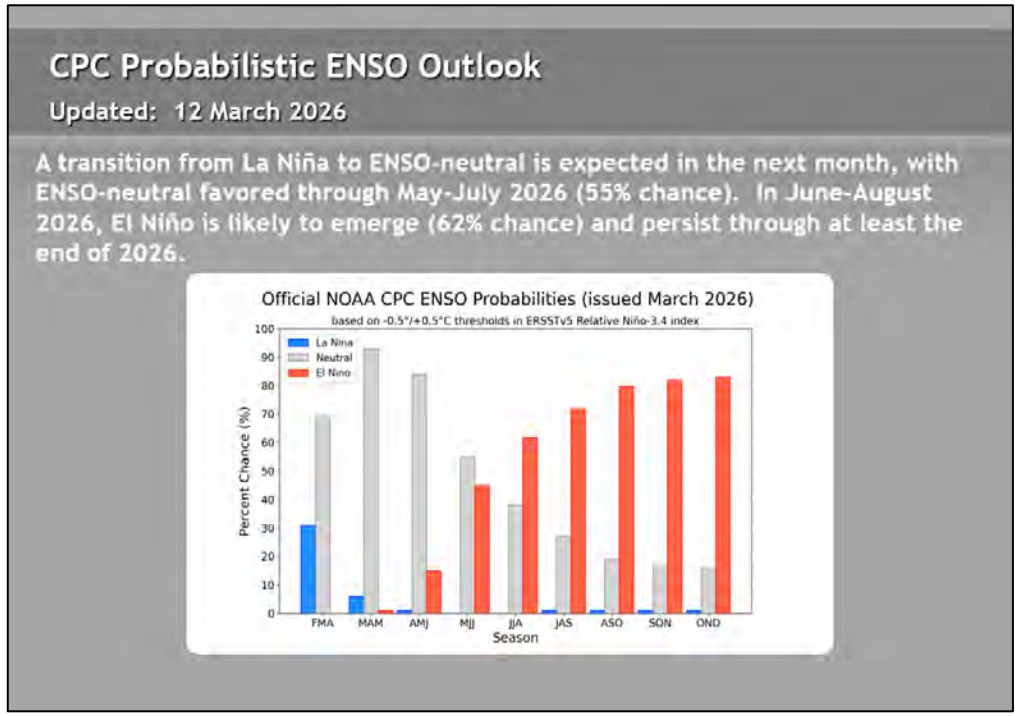


ENSO Notes from the CPC (3/12/26 Update)

ENSO Alert System Status: **La Niña Advisory / El Niño Watch**

A transition from La Niña to ENSO-neutral is expected in the next month, with ENSO-neutral favored through May-July 2026 (55% chance). In June-August 2026, El Niño is likely to emerge (62% chance) and persist through at least the end of 2026.

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. Recent changes in defining either ENSO state can be found here.



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

Recent Pacific warm (red) and cold (blue) periods based on a threshold of +/- 0.5 °C for the Relative Oceanic Nino Index (RONI) [ERSST.v5 SST anomalies]. 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 overlapping seasons.

The RONI 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
2014	-0.5	-0.5	-0.3	0.0	0.1	0.0	-0.1	-0.1	0.1	0.4	0.5	0.6
2015	0.5	0.4	0.5	0.6	0.8	1.0	1.3	1.6	1.9	2.2	2.3	2.4
2016	2.2	1.8	1.3	0.5	-0.1	-0.6	-0.9	-1.0	-1.1	-1.1	-1.1	-1.0
2017	-0.7	-0.5	-0.3	-0.1	0.1	0.1	-0.2	-0.5	-0.7	-1.0	-1.1	-1.3
2018	-1.1	-1.0	-0.9	-0.7	-0.3	0.0	0.1	0.2	0.4	0.7	0.8	0.7
2019	0.6	0.6	0.6	0.5	0.3	0.2	0.0	-0.1	0.0	0.1	0.2	0.2
2020	0.1	0.1	0.0	-0.3	-0.6	-0.8	-0.8	-0.9	-1.2	-1.5	-1.5	-1.4
2021	-1.2	-1.0	-1.0	-0.8	-0.6	-0.5	-0.6	-0.7	-0.9	-1.1	-1.2	-1.2
2022	-1.2	-1.2	-1.3	-1.3	-1.2	-1.0	-0.9	-1.0	-1.1	-1.1	-1.0	-1.0
2023	-0.8	-0.6	-0.4	-0.2	0.1	0.4	0.6	0.9	1.1	1.4	1.5	1.5
2024	1.2	0.9	0.5	0.1	-0.3	-0.5	-0.5	-0.6	-0.8	-0.8	-0.9	-1.1
2025	-1.1	-0.9	-0.7	-0.5	-0.5	0.0	-0.5	-0.6	-0.8	-0.9	-0.9	-1.0
2026	-0.9											

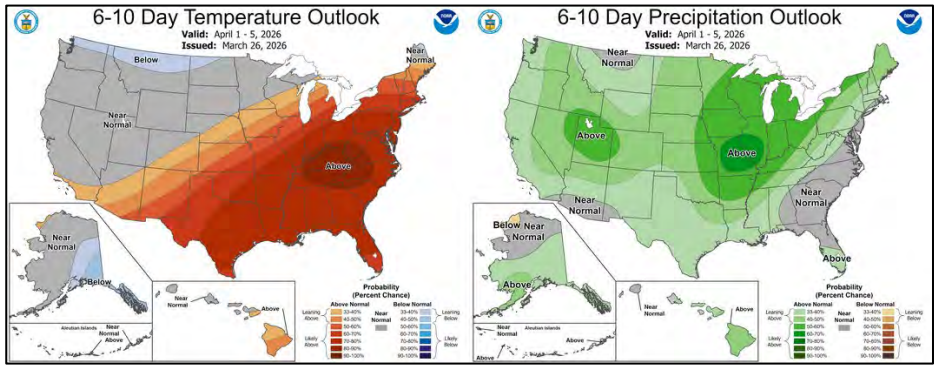
From the most recent CPC Diagnostic Discussion (ENSO Diagnostics Discussion):

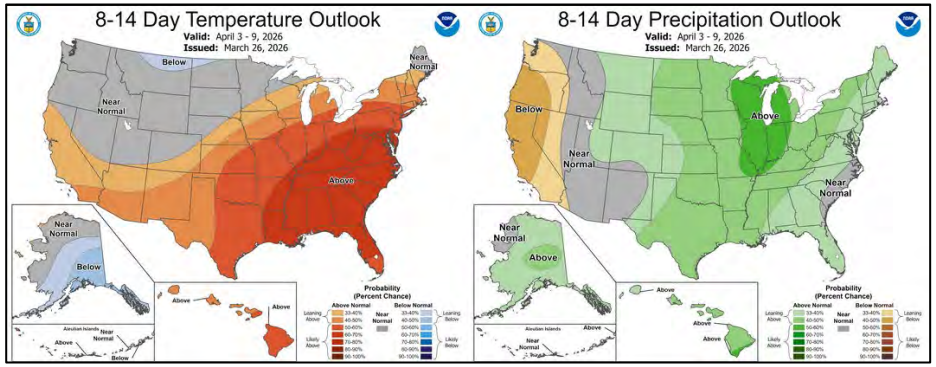
The North American Multi-Model Ensemble (NMME) average, including the NCEP CFSv2 (Fig. 6), points toward ENSO-neutral through the late Northern Hemisphere Spring 2026, with a transition to El Niño thereafter. Even though model forecasts are relatively less accurate this time of year, the increasing odds of El Niño are supported by the large amount of heat in the subsurface ocean and the expected weakening of the low-level trade winds. If El Niño forms, the potential strength remains very uncertain, with a 1-in-3 chance that it would be “strong” during October-December 2026 (Niño-3.4 +1.5C). In summary, a transition from La Niña to ENSO-neutral is expected in the next month, with ENSO-neutral favored through May-July 2026 (55% chance). In June-August 2026, El Niño is likely to emerge (62% chance) and persist through at least the end of 2026 (Fig. 7).

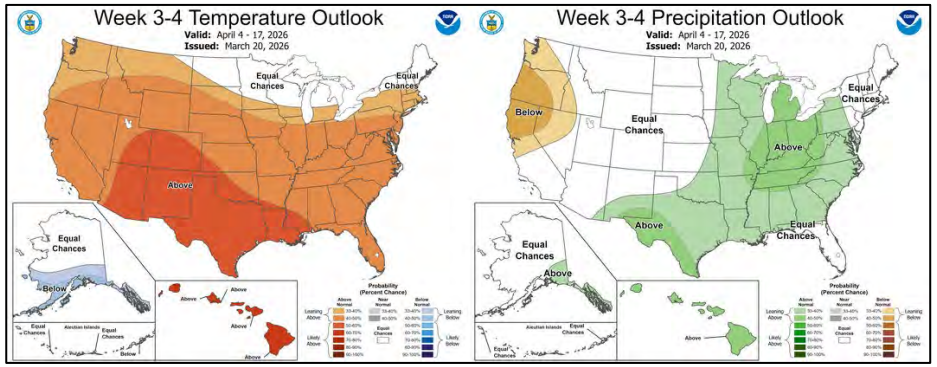
Slide Source: *https://www.cpc.ncep.noaa.gov/products/analysis_monitoring/lanina/enso_evolution-status-fcsts-web.ppt*

Temp & Precip Outlook

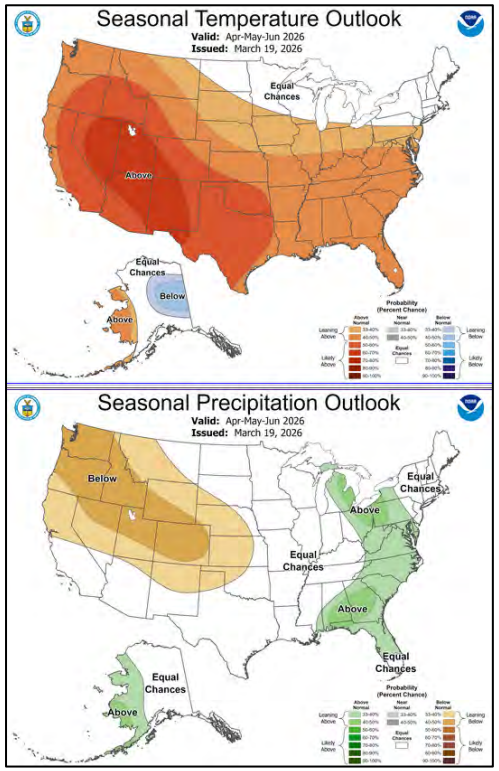
6-10 Day, 8-14 Day, Weeks 3-4, Seasonal (A/M/J, M/J/J, J/J/A)



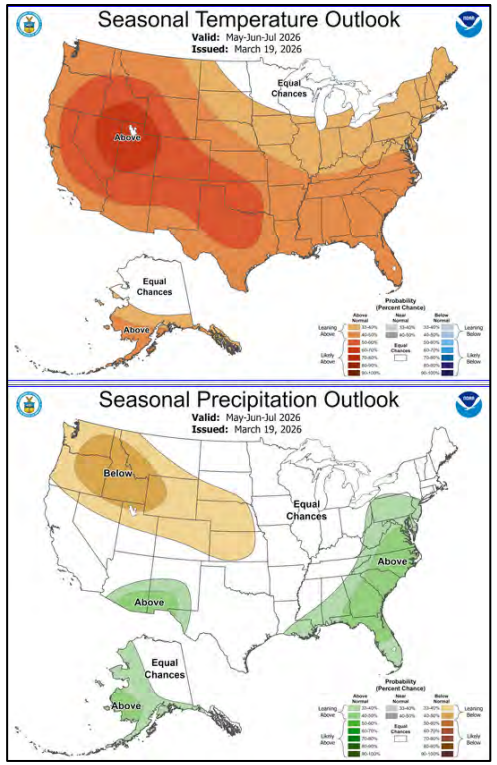




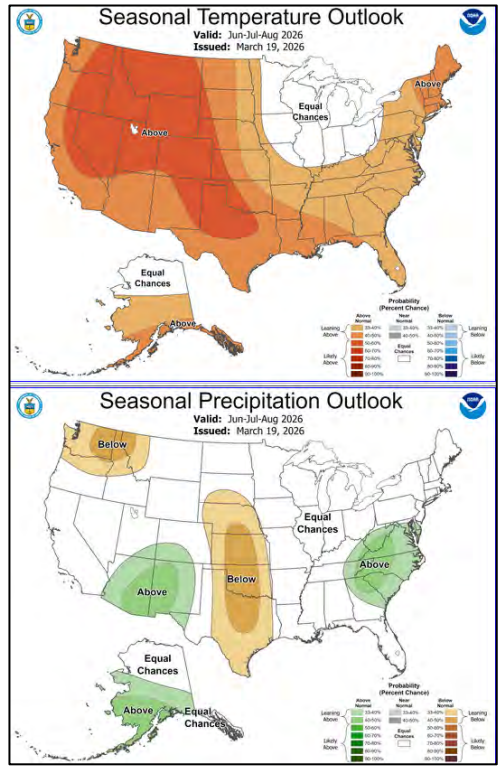
Apr-June



May-July



June-Aug



Last Updated by CPC on March 19th

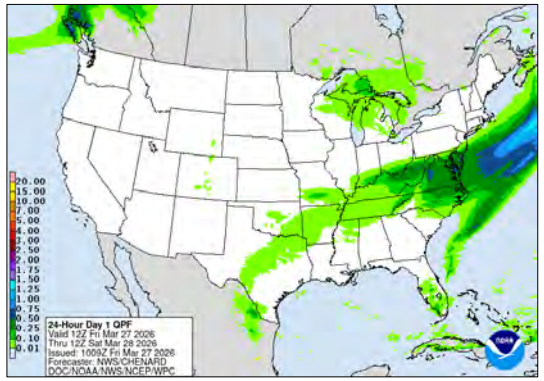
Source: https://www.cpc.ncep.noaa.gov/

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

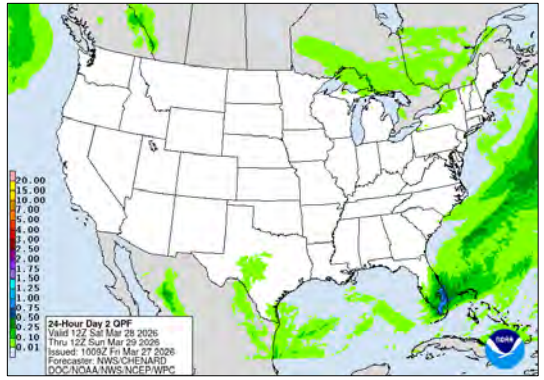
Quantitative Precipitation Forecast, 7-Day

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

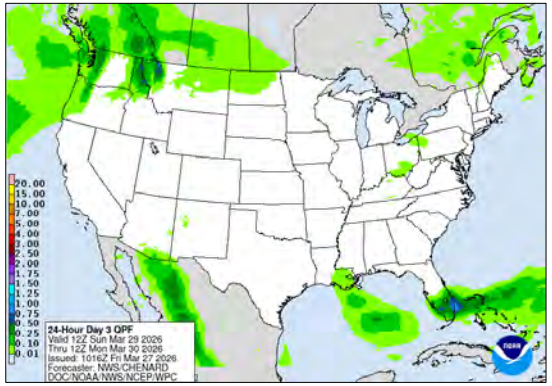
Day – 1



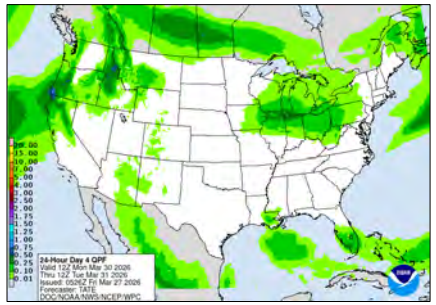
Day - 2



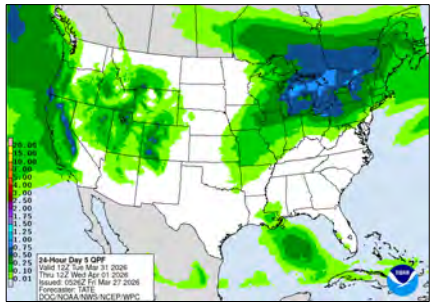
Day - 3



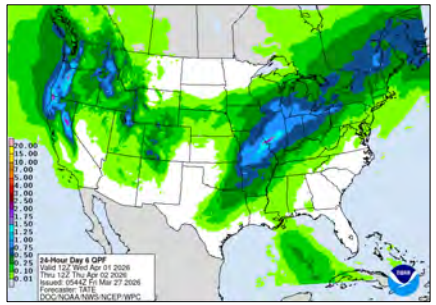
Day - 4



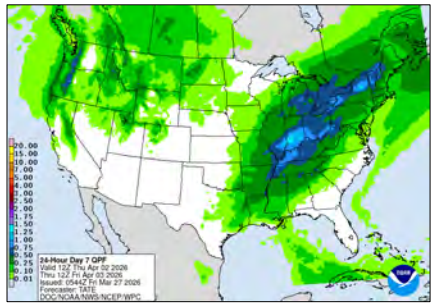
Day - 5



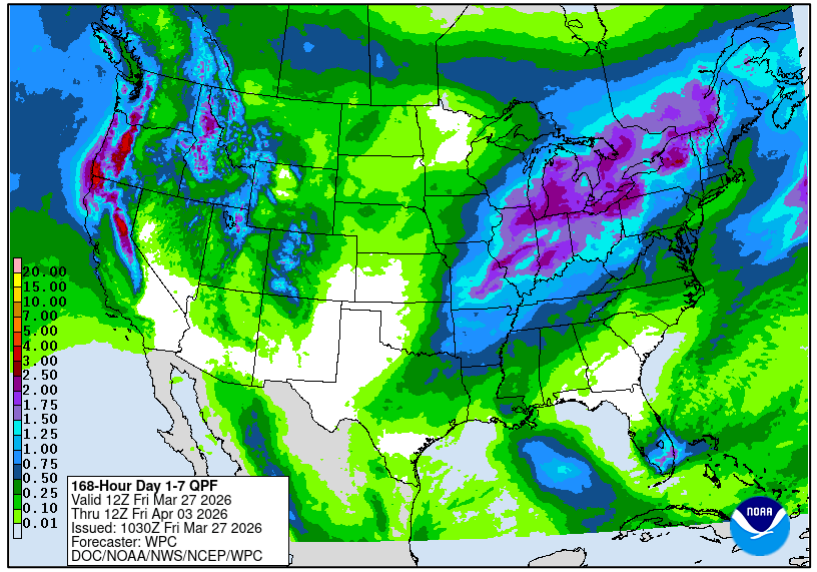
Day - 6



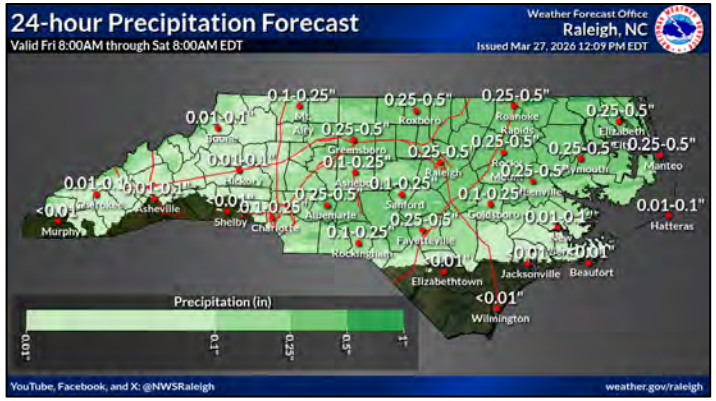
Day - 7



Days 1 – 7 QPF



Zoom - Day 1 –QPF



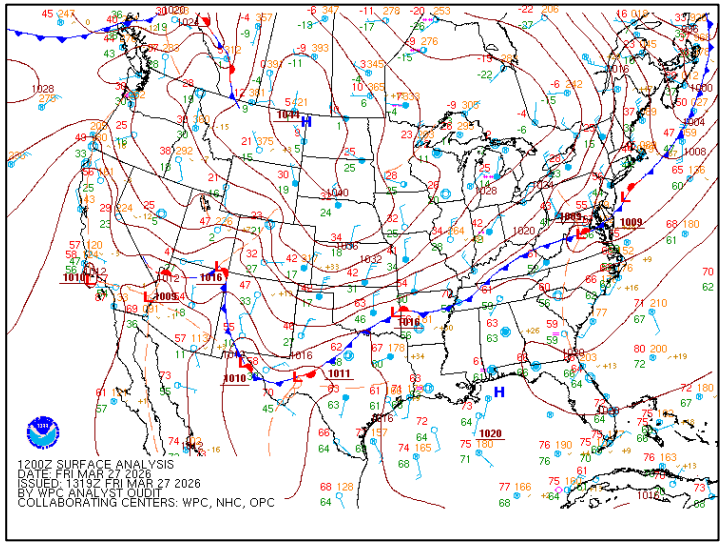
https://www.weather.gov/rah/nc#rain

Mostly dry (limited wetting rain, if any) frontal passage appear to be favored over the next 24-hr period.

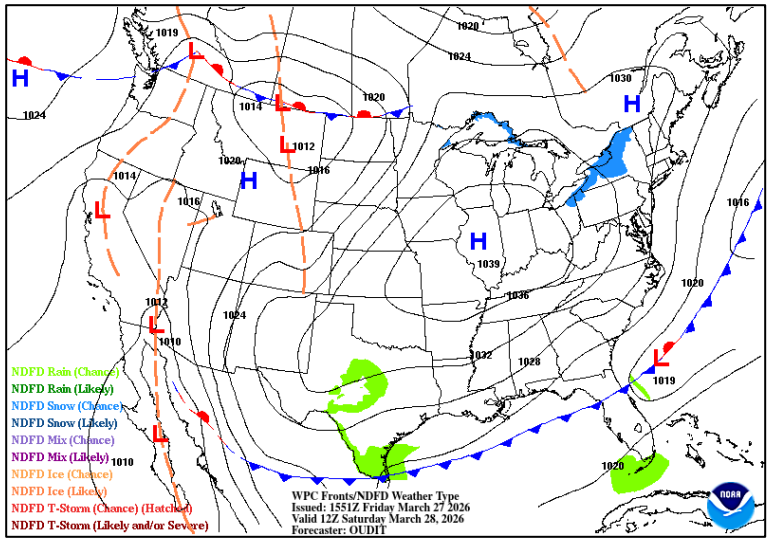
Winds and extremely dry air will quickly lead to fuel drying, even in areas that receive a wetting rain – related to the next frontal passage.

WPC Forecasted Surface Fronts & Sea-Level Pressures

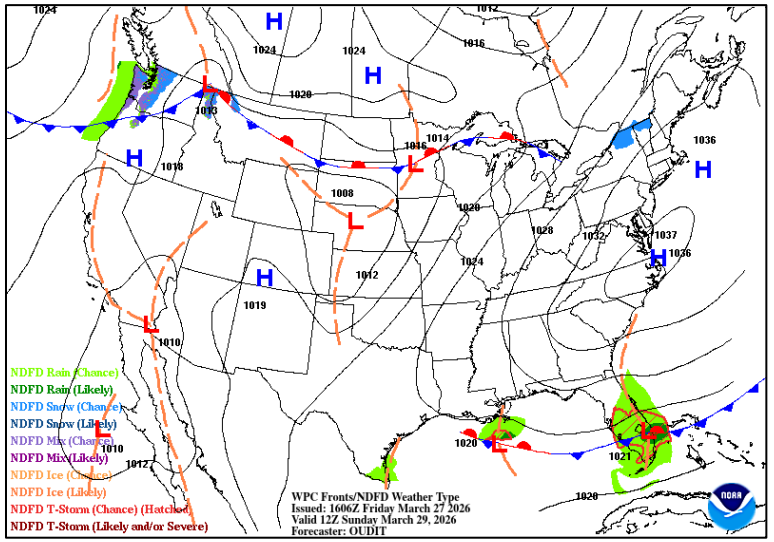
Day-1 @ 12Z Surface Analysis



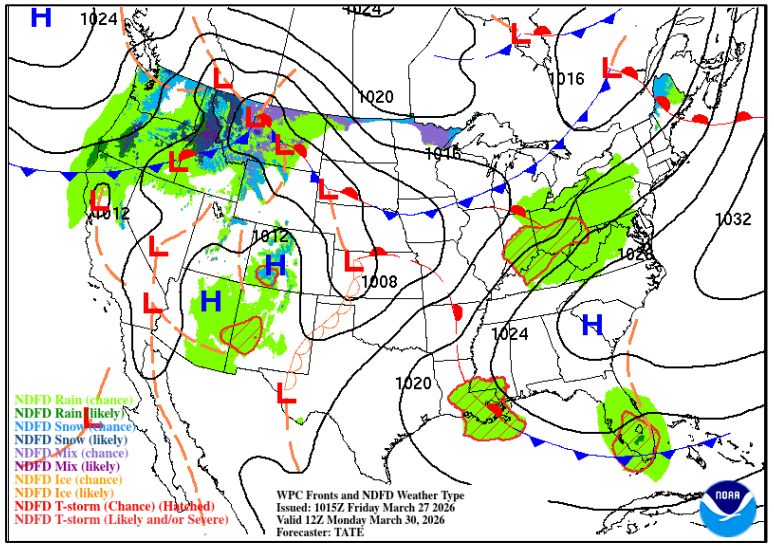
Day 2 - @ 12Z (0800 EDT)



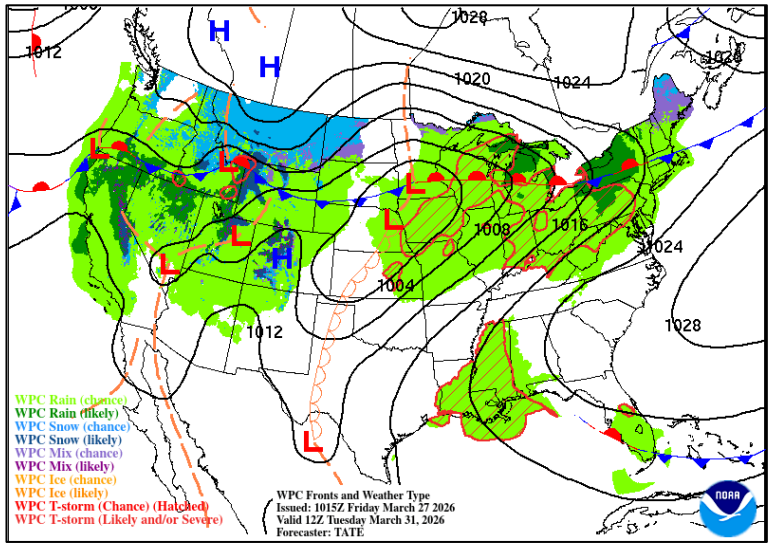
Day 3 @ 12Z (0800 EDT)



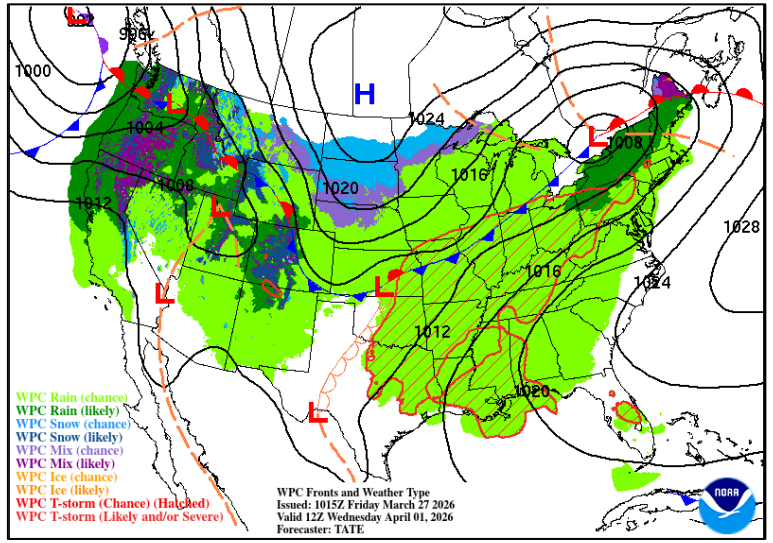
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



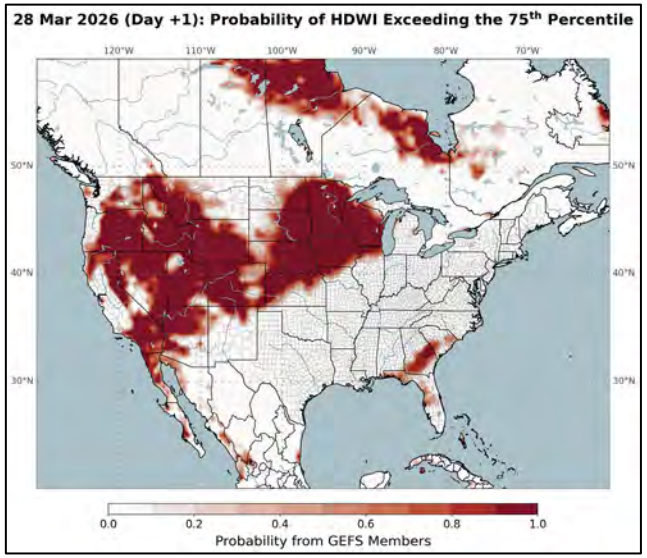
Day 6 @ 12Z (0800 EDT)



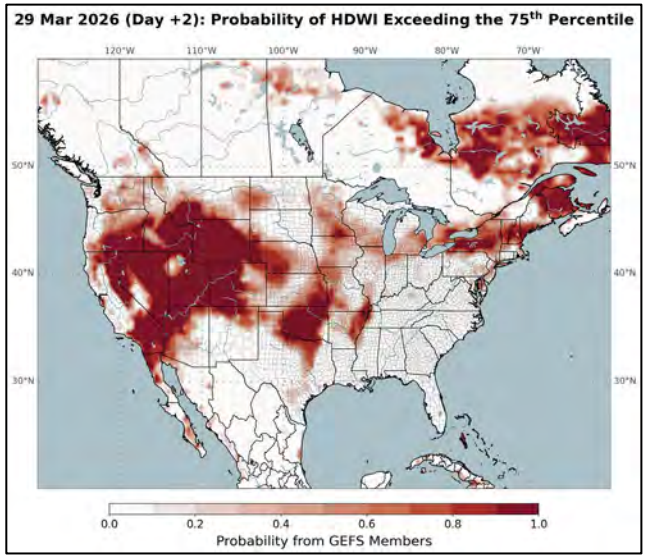
Location: https://www.wpc.ncep.noaa.gov/#

Hot-Dry-Windy Index (HDW)

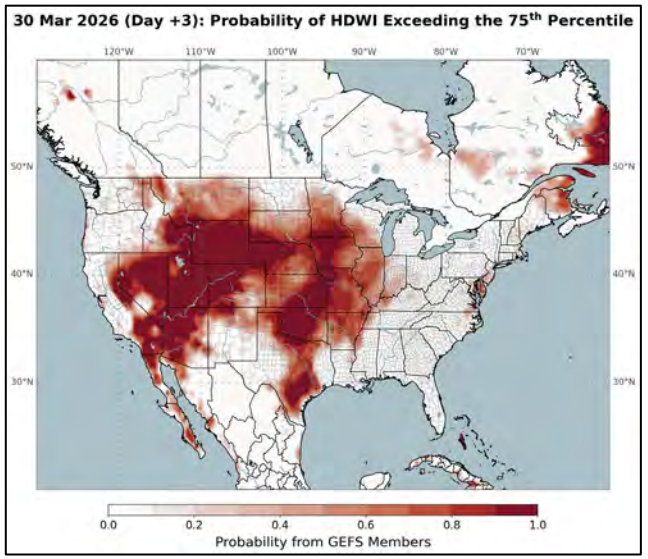
Saturday > 75th Percentile



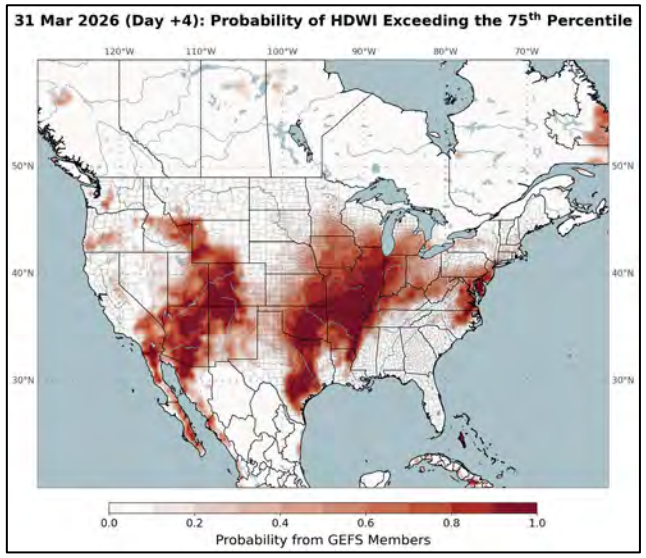
Sunday > 75th Percentile



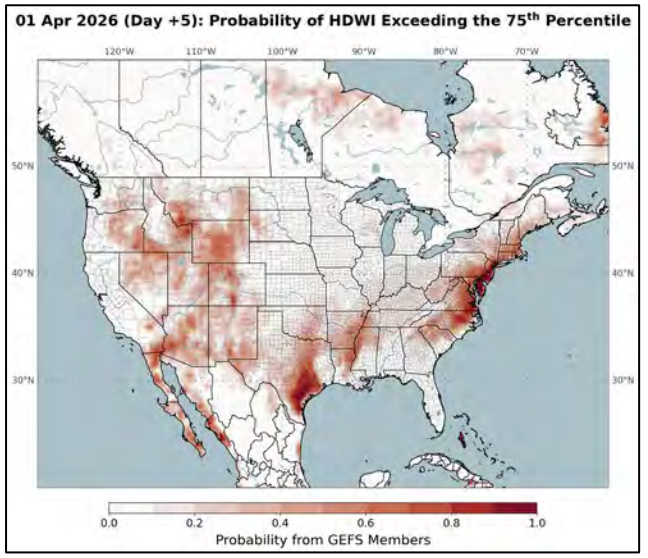
Monday > 75th Percentile



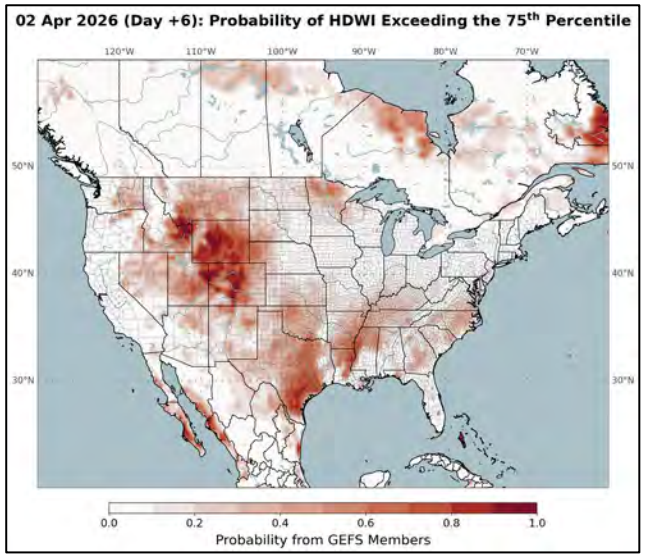
Tuesday > 75th Percentile



Wednesday > 75th Percentile



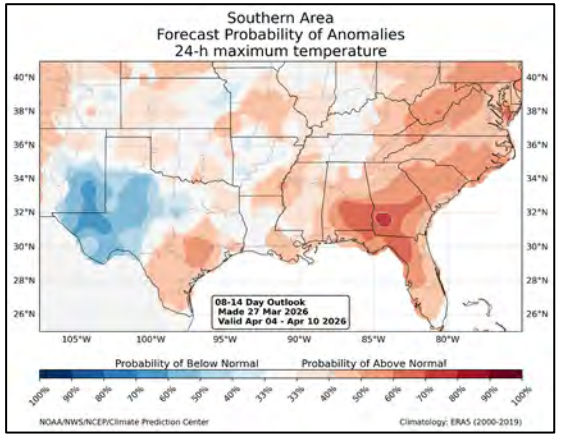
Thursday > 75th Percentile

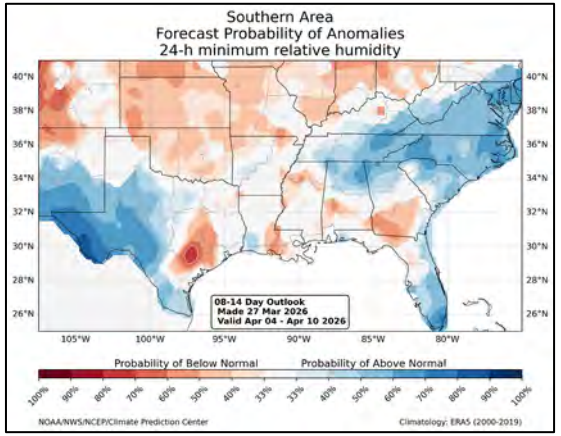


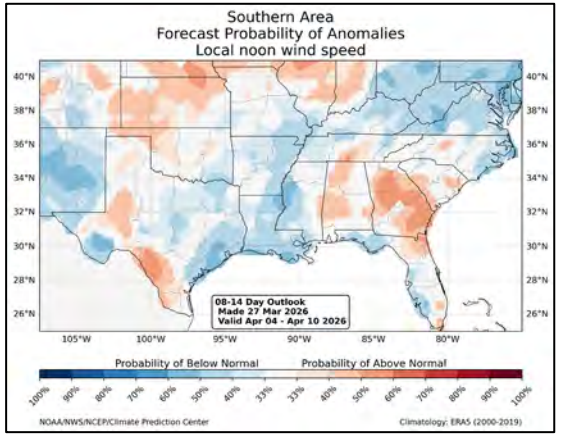
- Another visualization tool to pick up on broader weather, but with *limitations
- Only uses Max VPD (atmospheric moisture & temp) & Max Wind Speed to generate outputs
- Coarse Resolution - 0.5 Degree Grid
- No Account of Local Fuel Conditions and Topo

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

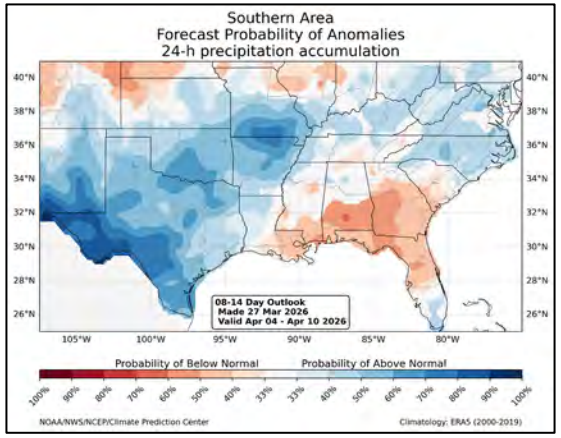
Week Two Forecast Anomalies: 4/4 – 4/10

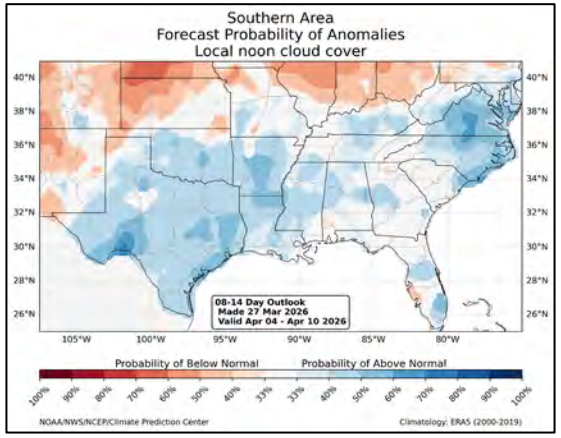






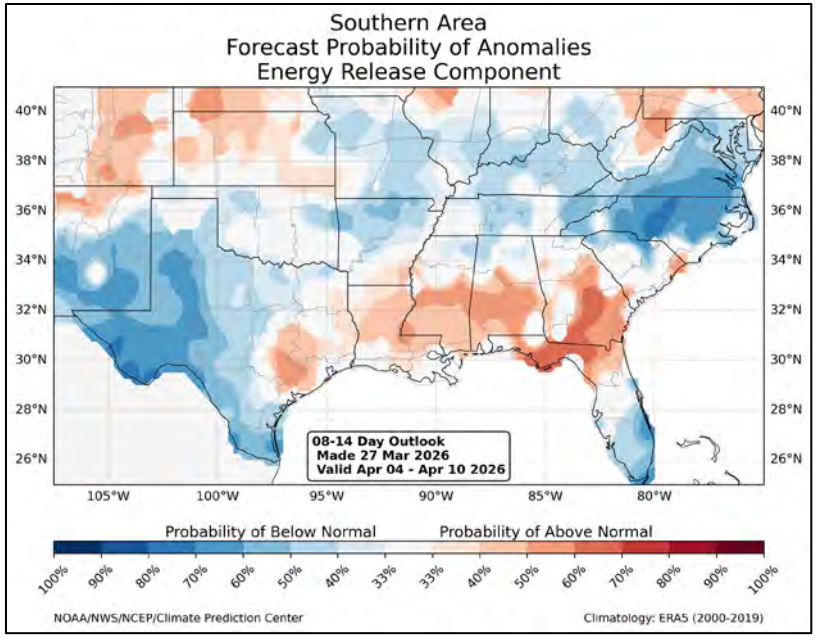
https://www.cpc.ncep.noaa.gov/products/extremes/fire-weather/cpc_wk2fw_index.html

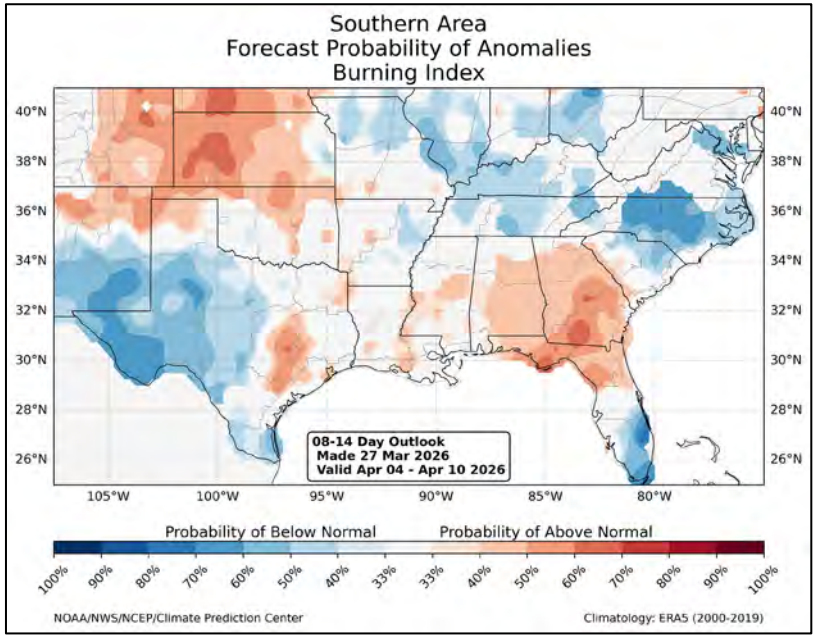




Important to note that there is significant forecast uncertainty as you go further out in time.

Generally favoring warmer than normal temps, and potential for unsettled weather, or at least higher dew points/recoveries. Model then applies those weather variables to show potential for near normal BI & ERC at week two for much of NC. Remember to apply this in seasonal context.

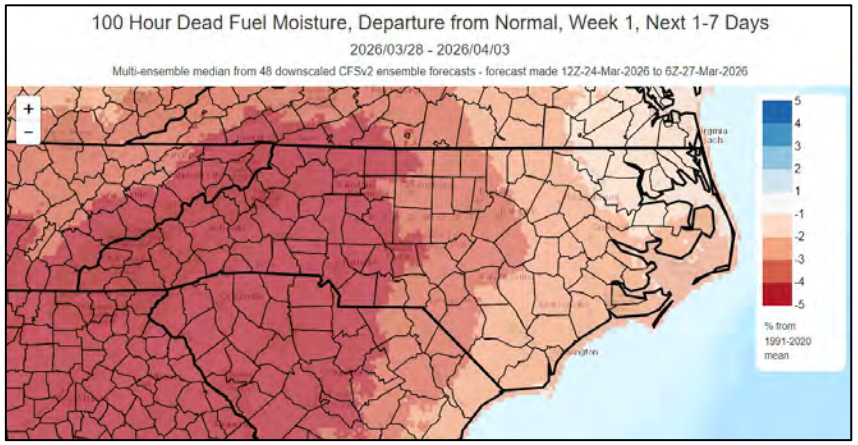




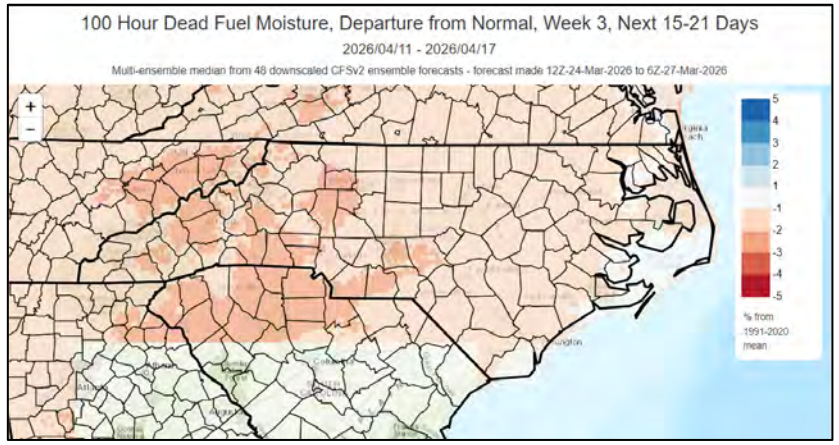
Modeled Departure from Normal by Week: 100-hr Fuels

Output relies on experimental forecast outputs and is subject to change

Week-1

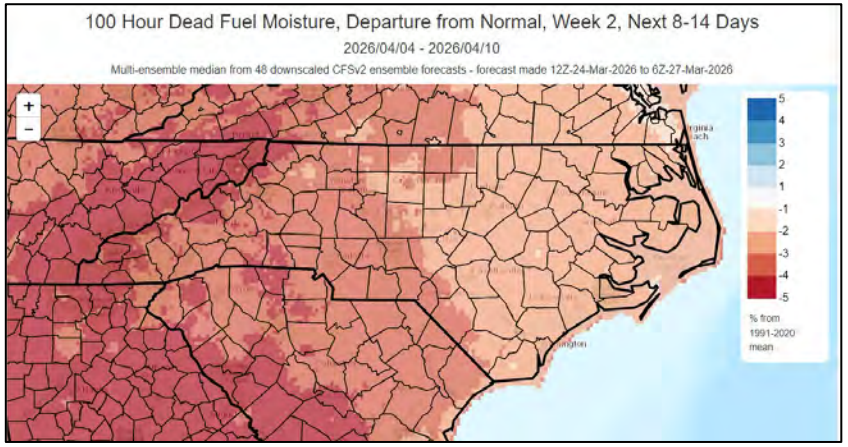


Week-3



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

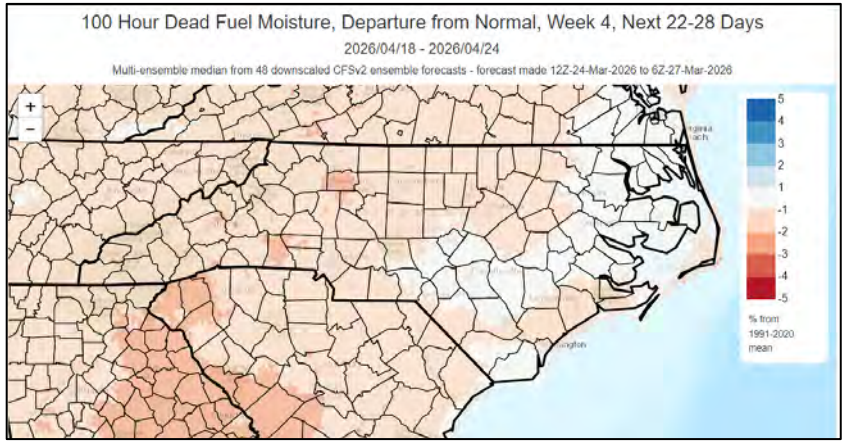
Week-2



Note that <u>modeled</u> impacts of warmer/drier conditions (lower % mc or "worse") are focused west, most intensely on Weeks1-2.

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

Week-4



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

Significant Wildland Fire Potential Outlook: *Updated 3/2/26*

March

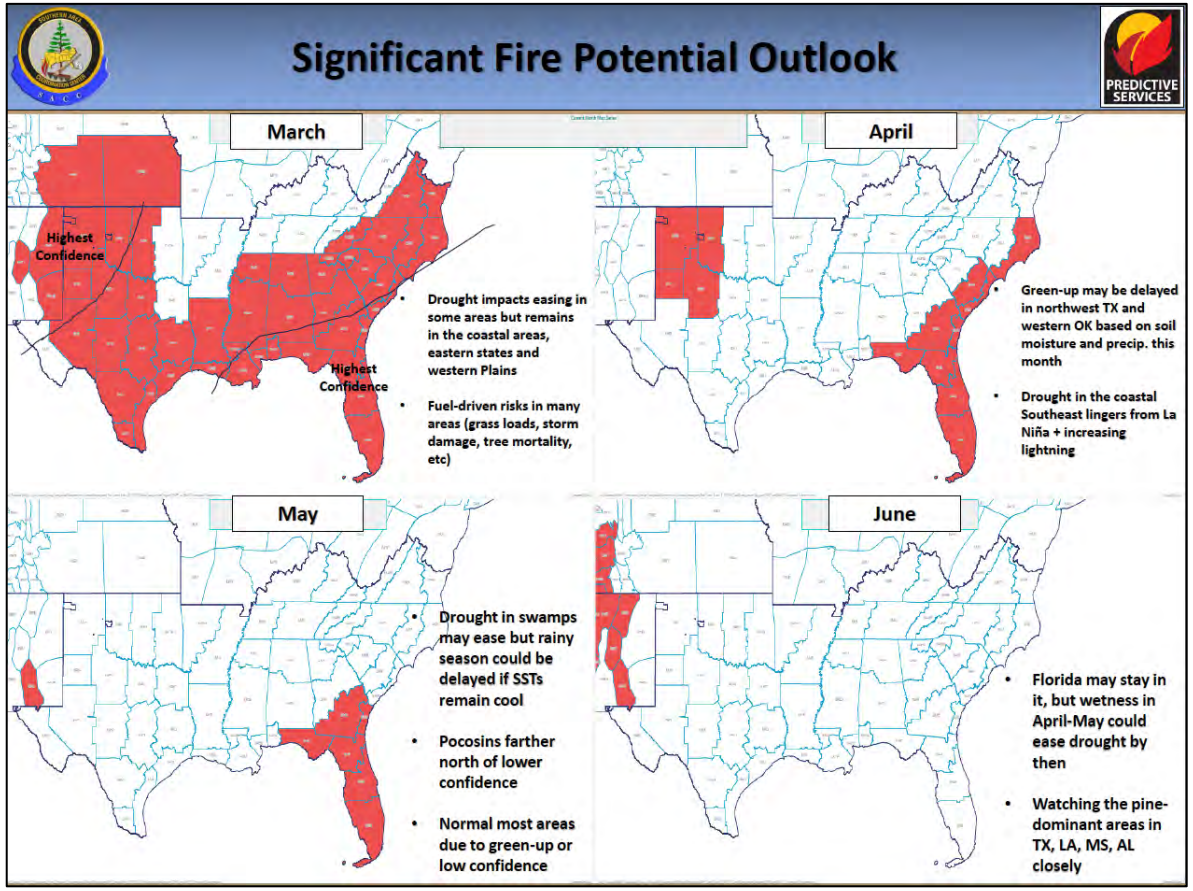
April

May

June

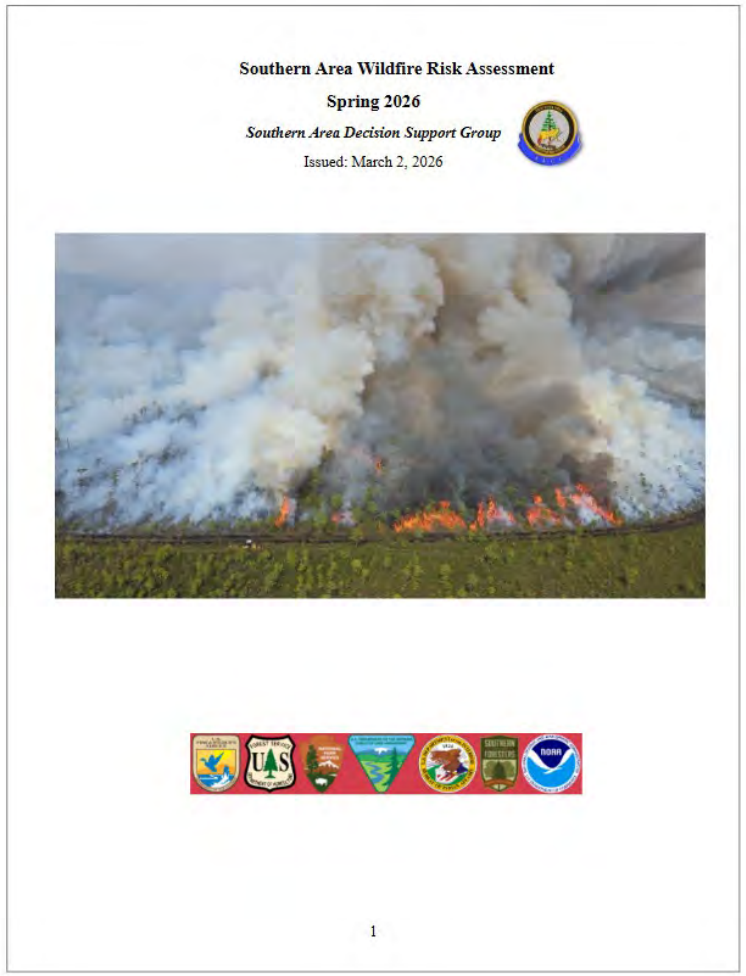
https://www.nifc.gov/nicc-files/predictive/outlooks/monthly_seasonal_outlook.pdf

From SA Fire Environment Briefing 3/6/26



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

Southern Area – Spring 2026 Wildfire Risk Assessment



Southern Area Wildfire Risk Assessment

Spring 2026

Southern Area Decision Support Group

Issued: March 2, 2026

1

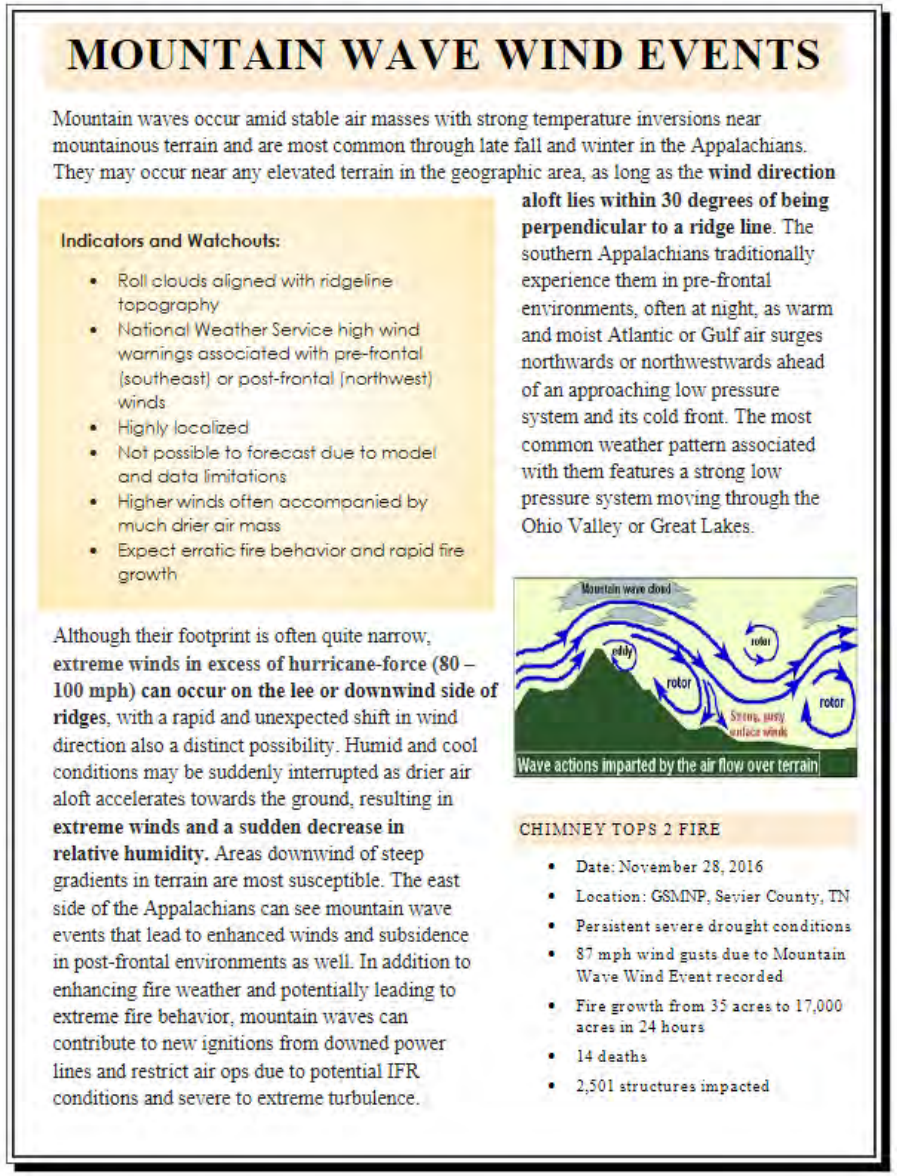
Please review the SA Wildfire Risk Assessment for Spring 2026 – it discusses overall regional concerns as well as fire effective weather patterns.

Take special note of "Appendix B – Critical Fire Weather and Environmental Conditions" starting on page 27. This is useful for anytime of year.

Spring Assessment released 3/2/26

https://gacc.nifc.gov/sacc/resources/predictive/SASpringRiskAssessment_2026_final.pdf

Southern Area – Mountain Wave Wind Event Note



MOUNTAIN WAVE WIND EVENTS

Mountain waves occur amid stable air masses with strong temperature inversions near mountainous terrain and are most common through late fall and winter in the Appalachians. They may occur near any elevated terrain in the geographic area, as long as the **wind direction aloft lies within 30 degrees of being perpendicular to a ridge line**. The southern Appalachians traditionally experience them in pre-frontal environments, often at night, as warm and moist Atlantic or Gulf air surges northwards or northwestwards ahead of an approaching low pressure system and its cold front. The most common weather pattern associated with them features a strong low pressure system moving through the Ohio Valley or Great Lakes.

Indicators and Watchouts:

- Roll clouds aligned with ridgeline topography
- National Weather Service high wind warnings associated with pre-frontal (southeast) or post-frontal (northwest) winds
- Highly localized
- Not possible to forecast due to model and data limitations
- Higher winds often accompanied by much drier air mass
- Expect erratic fire behavior and rapid fire growth

Although their footprint is often quite narrow, **extreme winds in excess of hurricane-force (80 – 100 mph) can occur on the lee or downwind side of ridges**, with a rapid and unexpected shift in wind direction also a distinct possibility. Humid and cool conditions may be suddenly interrupted as drier air aloft accelerates towards the ground, resulting in **extreme winds and a sudden decrease in relative humidity.** Areas downwind of steep gradients in terrain are most susceptible. The east side of the Appalachians can see mountain wave events that lead to enhanced winds and subsidence in post-frontal environments as well. In addition to enhancing fire weather and potentially leading to extreme fire behavior, mountain waves can contribute to new ignitions from downed power lines and restrict air ops due to potential IFR conditions and severe to extreme turbulence.

Wave actions imparted by the air flow over terrain

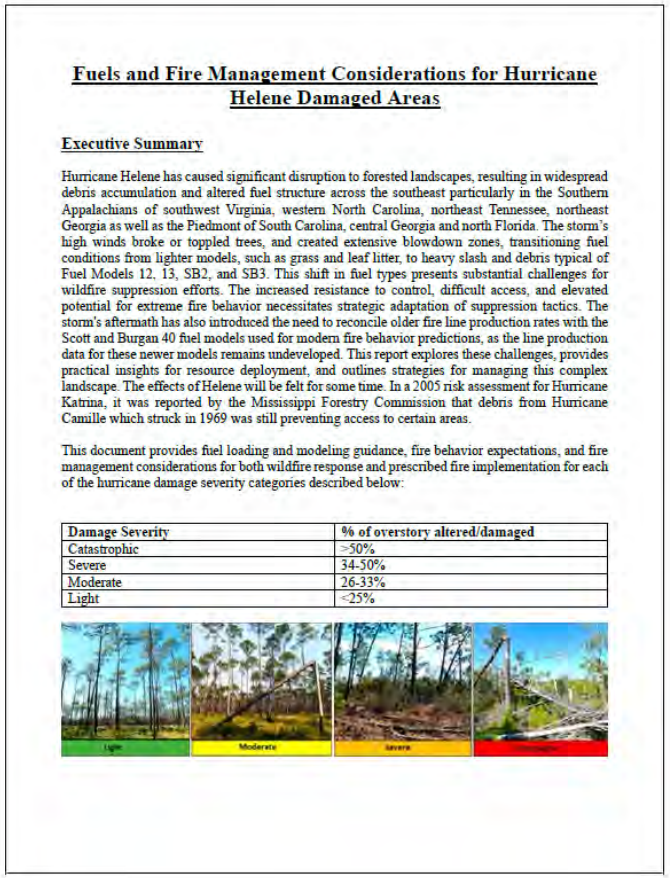
CHIMNEY TOPS 2 FIRE

- Date: November 28, 2016
- Location: GSMNP, Sevier County, TN
- Persistent severe drought conditions
- 87 mph wind gusts due to Mountain Wave Wind Event recorded
- Fire growth from 35 acres to 17,000 acres in 24 hours
- 14 deaths
- 2,501 structures impacted

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

Helene Fuels Note:

- Remember the "Fuels and Fire Management Considerations for Hurricane Damaged Areas" document is available as a potential aid.



Fuels and Fire Management Considerations for Hurricane Helene Damaged Areas

Executive Summary

Hurricane Helene has caused significant disruption to forested landscapes, resulting in widespread debris accumulation and altered fuel structure across the southeast particularly in the Southern Appalachians of southwest Virginia, western North Carolina, northeast Tennessee, northeast Georgia as well as the Piedmont of South Carolina, central Georgia and north Florida. The storm's high winds broke or toppled trees, and created extensive blowdown zones, transitioning fuel conditions from lighter models, such as grass and leaf litter, to heavy slash and debris typical of Fuel Models 12, 13, SB2, and SB3. This shift in fuel types presents substantial challenges for wildfire suppression efforts. The increased resistance to control, difficult access, and elevated potential for extreme fire behavior necessitates strategic adaptation of suppression tactics. The storm's aftermath has also introduced the need to reconcile older fire line production rates with the Scott and Burgan 40 fuel models used for modern fire behavior predictions, as the line production data for these newer models remains undeveloped. This report explores these challenges, provides practical insights for resource deployment, and outlines strategies for managing this complex landscape. The effects of Helene will be felt for some time. In a 2005 risk assessment for Hurricane Katrina, it was reported by the Mississippi Forestry Commission that debris from Hurricane Camille which struck in 1969 was still preventing access to certain areas.

This document provides fuel loading and modeling guidance, fire behavior expectations, and fire management considerations for both wildfire response and prescribed fire implementation for each of the hurricane damage severity categories described below:

Damage Severity	% of overstory altered/damaged
Catastrophic	>50%
Severe	34-50%
Moderate	26-33%
Light	<25%

Seasonal Fog Risk:

- Recent weather conditions have been favoring development of dense fog in many locations. These conditions can also enhance risk of smoke induced fog.

- Potential for "Smoke Induced Fog" or "Superfog" should be considered, along with mitigation measures, during both wildfire and prescribed fire incidents as we move towards Spring Greenup and soil moisture drawdown. Especially those areas with heavy duff, organic soils, and atypical amounts of heavy down & dead materials within drought impacted areas.

- Refer to the following links:
  - Southern Fire Exchange Superfog Publication
  - NWCG - Smoke and Roadway Safety Pocket Card
  - NWCG – Smoke and Roadway Safety Guide

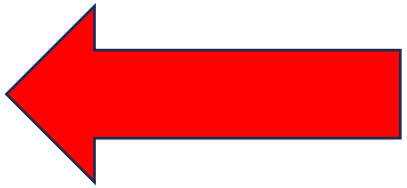
"Superfog" in area of Long Ridge Fire on 9/19/25 (R1/D4/Beaufort Co.)

FEMS Reminders

Weather Stations

•State Mesonet Stations (e.g., NC ECONet) have been added as of 1/29/26, but lack a historical period of record.

- Several North Carolina FDRAs rely on stations from our SCO mesonet (ECONet).
- Fire Danger Outputs from these newly added stations have stabilized & are included in FWIP
- ASOS stations have been removed from SIG groups & previous ECONet Stations have been added back to SIG groups.



Live Fuel Moisture (LFM) Model

•Currently set to a national preliminary standard in FEMS.
•Four main drivers are used: Day Length, Minimum Temperature, Vapor Pressure Deficit, and Running Total Precipitation.
•The GSI-derived LFM Model standard settings create fundamental limitations that directly affect FM-V, FM-W, and FM-X.
•National standard settings do not allow regional adjustments for local growing conditions. This will evolve over time as bugs are addressed, stations are added, and further analysis is completed. Not an issue as we are still in dormancy, values default to minimum until Spring – will be addressed as soon as regional adjustments go online.

Data and Modeling Updates

•FF+ Databases have been recalculated to align with new FEMS standards (see earlier documentation).
•For this interim update of the NC FDOP's data, Fuel Model - Z has been used, due to the known LFM limitations in the initial FEMS rollout.
•A reevaluation will be necessary as additional alternate gateway station types are integrated & regional GSI calibrations are carried out.

FDOP Revision Status

•NC FDOP updates were started but then paused to allow time for FEMS development through early summer 2025.
•This pause has been recommended nationwide to ensure consistency as development progresses.
•Interim breakpoints and model combinations have been established, with a complete revision needed once FEMS is adjusted further (earlier topics).

Overall

•Weather and fire occurrence data (**2010–2024**) have been processed to establish initial working breakpoints for FEMS/V4 outputs for North Carolina.
•Interim analysis has been completed – now driving fire danger products (e.g., adjective ratings and hazard levels) utilizing FM-Z and the 2010-2024 period of record.
•Remember to discontinue use of old NC Forest Service generated Pocket Cards from prior to the FEMS transition on 10/1/25.
•Replacement guidance material has been previously released (11/13/25).

Work at the national, regional, state, and FDRA levels will continue as FEMS is updated following rollout. FEMS link

Firefighter's Guide to Percentiles and Thresholds

Percentiles and thresholds are used to help us measure the significance of National Fire Danger Rating System (NFDRS) outputs as they relate to levels of fire risk, fuel conditions and fire danger. Have you ever asked a firefighter the question "How are your fires burning" and you get a response something like " Real hot"? The definition of "Real hot" will vary depending upon whom you ask. One objective of this guide is to define the NFDRS and fire weather thresholds that relate to problematic fire behavior.

Percentiles are based on a scale of 0-100. We use percentiles to sort and rank a collection of data. *Thresholds* are the actual values of NFDRS indices (ERC, BI, KBDI), weather observations (RH, windspeed) or fuel moistures (1-hr, 1000-hr) that mark the change from one category to another. As an example, the North Cove Pinnacle RAWS has calculated the burning index (BI) every day over 14 years for a total of 5169 observations. In sorting through these 5169 BI observations, we find that only 10% of these BI observations have a BI value of 122 or greater. The BI of 122 is the threshold. BI values greater than or equal to the threshold of 122 exceed the 90th percentile. We found that only 3% of the observations occur above the BI value of 153. Crossing the threshold of a 153 BI ranks in the 97th percentile.

Percentiles				
0-30	31-60	61-89	90-96	97+

Whether we are looking at fuel moistures, BI, KBDI or ERC, we generally make the same associations when rating the percentiles. At the low end of the scale in the green and blues we see normal to below normal conditions. Initial attack should be successful with few complexities. At the upper end of the scale in the orange and reds we see unusual or rare conditions, and we would expect to see complex fires where initial attack may often fail. So, the difficult category to describe and thus maybe the most important category for initial attack is the middle or transition zone in the yellow. Somewhere in the yellow, fires transition from normal to problematic.

Fire Danger Rating Areas

The underlying philosophy for determination of our Fire Danger Rating Areas (FDRAs) is that they represent areas where the weather reporting stations (RAWS) tend to react similarly to *daily* weather regimes and exhibit similar fluctuations in fire danger and climate. Nine FDRAs were delineated in North Carolina. Fire weather thresholds, fuel moisture thresholds and NFDRS thresholds have been developed for each FDRA and are unique to the designated FDRA. Threshold values developed from one FDRA should not be used in another FDRA.

Interim GUIDANCE Documents

-NCFS-
NFDRS PRIMER & FIRE DANGER RATING AREA CRITICAL THRESHOLDS

11/7/25 Update

Analysis Notes

CY 2010-2024 Weather Obs and Fires.
Based upon FEMS National Standards as of 10/1/25 & Use of Daily Extremes.

FEMS - Fire Danger Rating Area Summaries:

Updated 3/12/26

Analysis Settings				Matrix Combinations	
FDRA	Time Range	Daily Extremes	FM	Staffing/Hazard Level	Adjective Rating
Northern Coastal Plain	2010-2024	Y	Z	ERC/BI	ERC
Southern Coastal Plain	2010-2024	Y	Z	ERC/BI	ERC
Eastern Piedmont	2010-2024	Y	Z	ERC/BI	ERC
Sand Hills	2010-2024	Y	Z	ERC/BI	ERC
Western Piedmont	2010-2024	Y	Z	ERC/BI	ERC
Blue Ridge Escarpment	2010-2024	Y	Z	ERC/IC	ERC
Central Mountains	2010-2024	Y	Z	ERC/IC	ERC
Northern Highlands	2010-2024	Y	Z	ERC/BI	ERC
Southern Highlands	2010-2024	Y	Z	ERC/IC	ERC

FDRA	Special Interest Group Stations (SIG Stations)	Missing SIG Stations
Northern Coastal Plain	Dare Bomb Range, Elizabeth City, Fairfield, Greens Cross, Pocosin Lakes NWR	0
Southern Coastal Plain	Beaufort, CL1 Sandy Run, New Bern, Turnbull Creek, Hofmann, Whiteville, Sunny Point, Finch's Station	0
Eastern Piedmont	Central Crops RS**, Lake Wheeler**, Oxford Tob RS**, Upper Coastal RS**, Warrenton	0
Sand Hills	Fort Bragg, Horseshoe House, Rockingham, Sandhills RS**	0
Western Piedmont	Caswell Game Land, Duke Forest, Lexington, Mt Island Lake	0
Blue Ridge Escarpment	North Cove Pinnacle, Raven Knob, Redezvous Mtn, Rutherford Co Hq, Taylorsville (Lenior)	0
Central Mountains	Davidson River, Guion Farms, Mtn Hort RS**, Seven Mile Ridge	0
Northern Highlands	Busick, Jessen Station, Upper Mtn RS**	0
Southern Highlands	Highlands, Jackson County, Locust Gap, Tusquitee	0

- Period of Record Issues remain with all ECONet Stations and some Satellite RAWS.
- **ECONet Stations have been added to FEMS & are now back in SIG groups, as noted above.**
- Red Colored Stations = Added Satellite RAWS, ** Denoted Stations = ECONet Stations added back to SIG on 3/12/26,

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

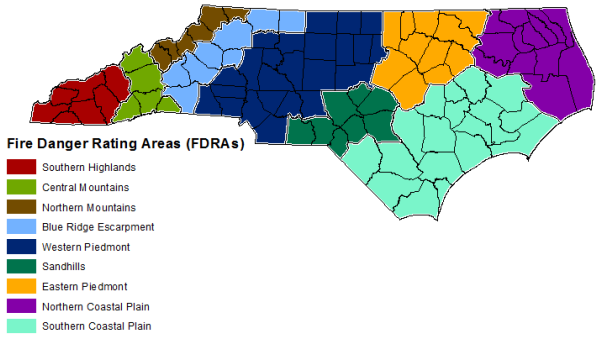
- These are extracts from FF+ using hourly observation data downloaded from FEMS
- Graphs run in calendar year format from Jan-Dec to stay consistent with FDOP and yearly Percentiles. Averages from SIG stations across each FDRA.
- Reference earlier slide for FDRA SIG Station Lists
- Using 2010-2026 Period of Record, FM-Z, FEMS Catalog Standards & set to Daily Extremes.
- **East Piedmont, Central Mountains, Northern Highlands, Sandhills analysis not included due to data gaps still being worked through.**

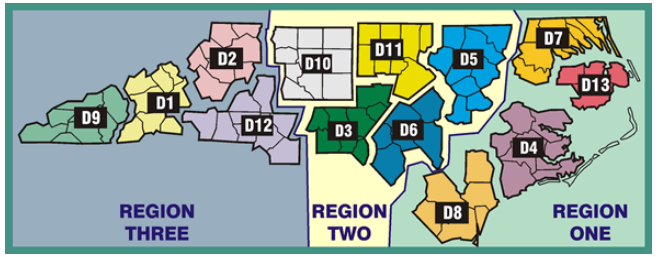
*Growing Season Index (GSI) and the resulting Woody & Herbaceous Fuel Moisture outputs show up in FEMS & subsequently FWIP. The recommendation is to not utilize these values until regional adjustments can be effectively made/incorporated into the GSI Model. This is especially important on the shoulders of the yearly growing season.

Fuel Model Parameters

NFDRS Fuel Model	Fuel Loading (tons ac^{-1})							Surface Area to Volume Ratio (ft^{-1})						Fuel Heat Content (BTU lb^{-1})	Moisture of Extinction (%)	Fuel Bed Depth (ft)	Wind Adjustment Factor (DIM)	Maximum SC
	1-hr	10-hr	100-hr	1000-hr	Herbaceous	Woody	Drought	1-hr	10-hr	100-hr	1000-hr	Herbaceous	Woody					
V	0.1	0	0	0	1	0	0	2,000	109	30	8	2,000	1,500	8,000	15	1	0.6	108
W	0.5	0.5	0	0	0.6	1	1								15	1.5	0.4	62
X	4.5	2.45	0	0	1.55	7	2.5								25	4.4	0.4	104
Y	2.5	2.2	3.6	10.16	0	0	5								25	0.6	0.2	5
Z	4.5	4.25	4	4	0	0	7								25	1	0.4	19

Important notes for next slide group:



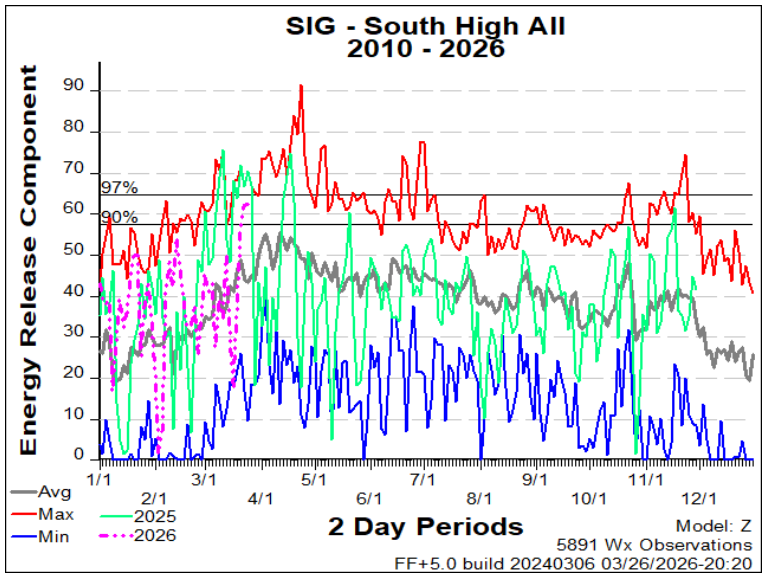


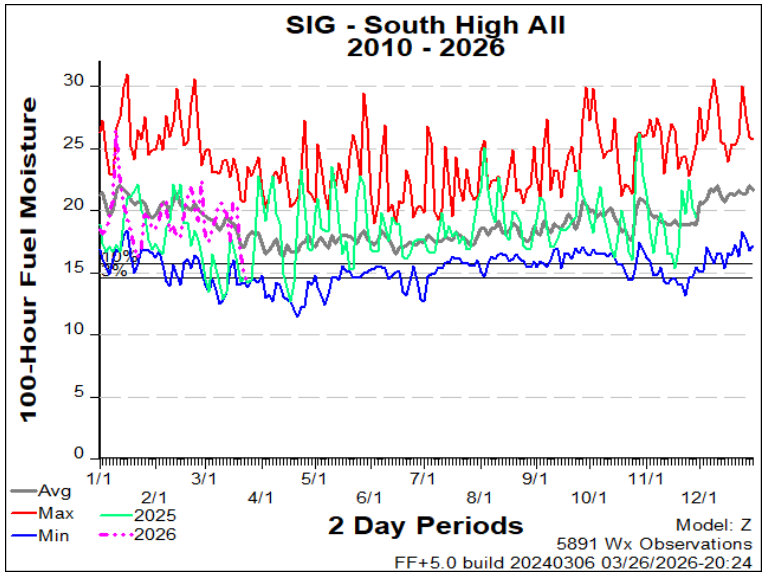
To reduce duplication & increase situational awareness, slides are organized by FDRA in this order:

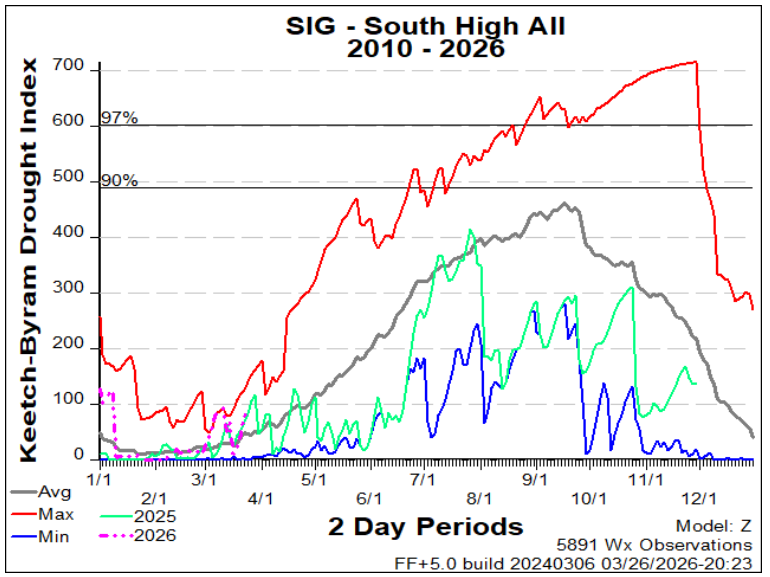
(R3 = Region 3, R2 = Region 2, R1 = Region 1)

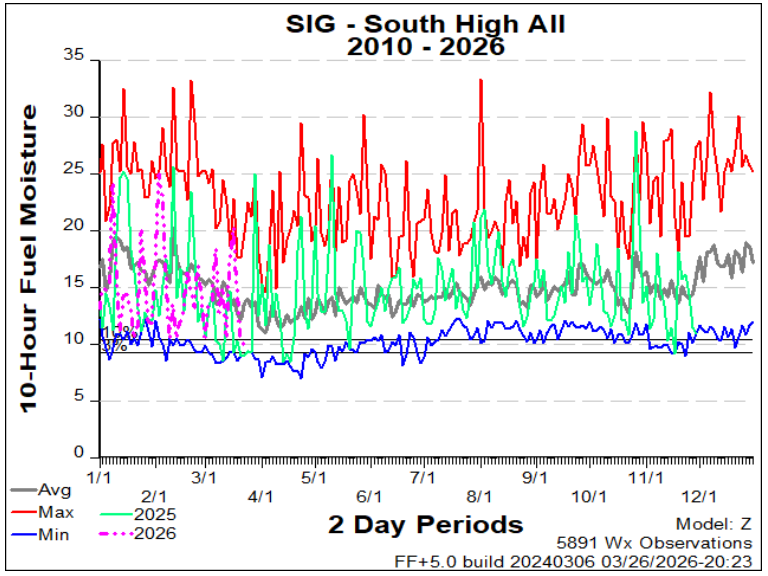
- Southern Highlands (R3)
- Central Mountains (R3)
- Northern Highlands (R3)
- Blue Ridge Escarpment (R2 & R3)
- Western Piedmont (R2 & R3)
- Eastern Piedmont (R2)
- Sandhills (R2)
- North Coast (R1)
- South Coast (R1 & R2)

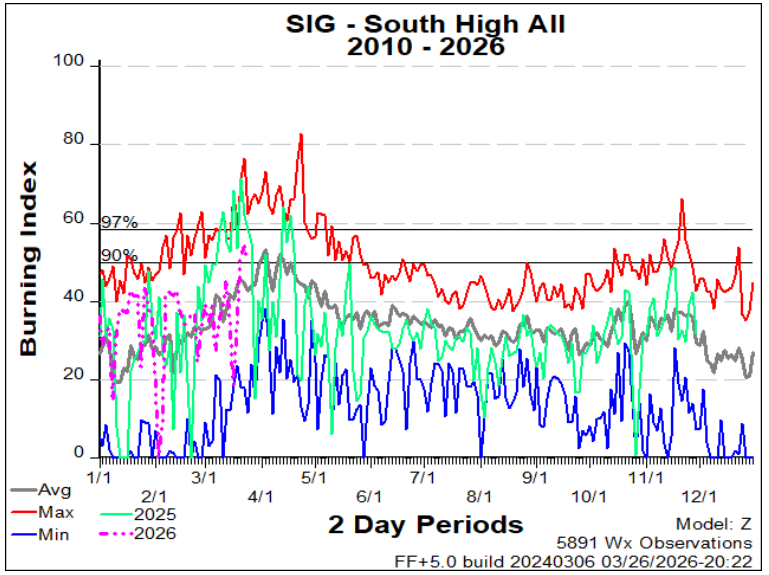
FDRA – Southern Highlands

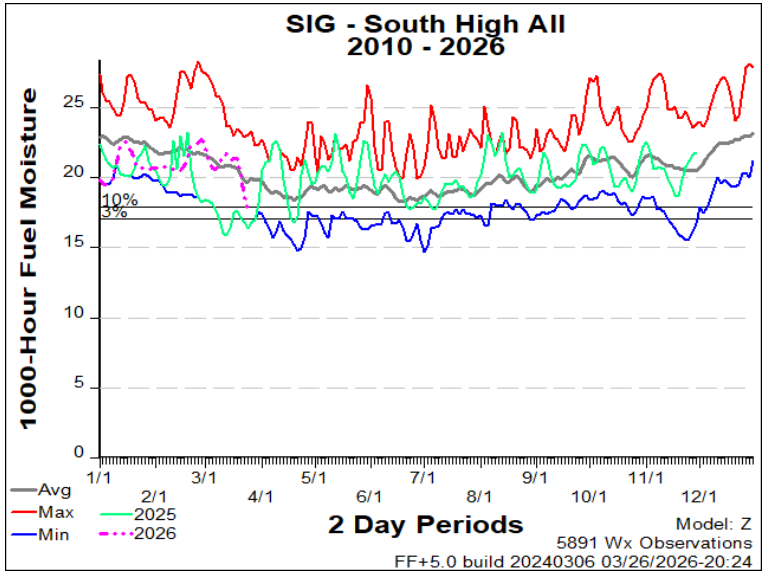




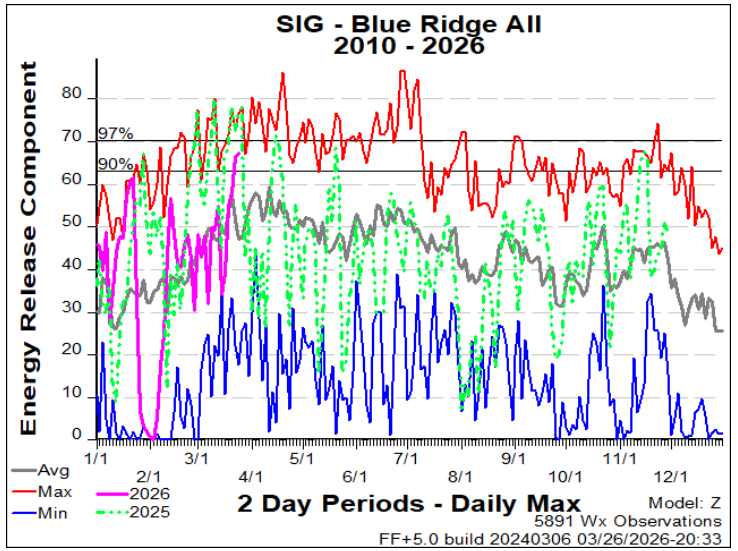


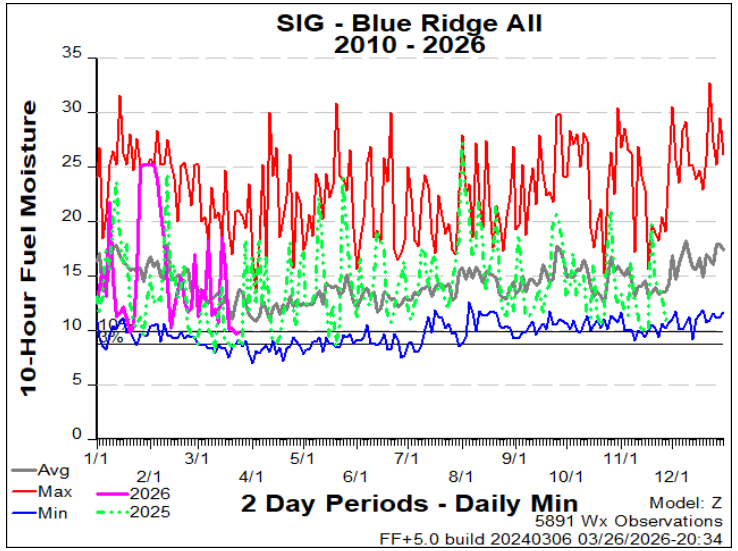


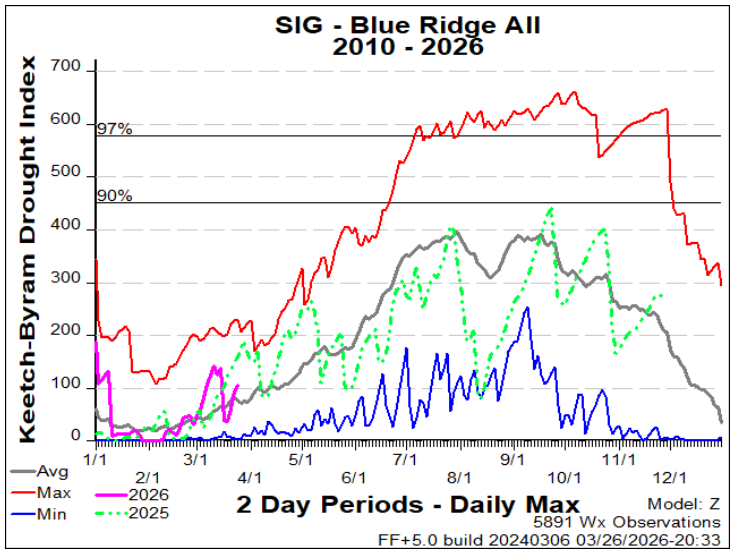


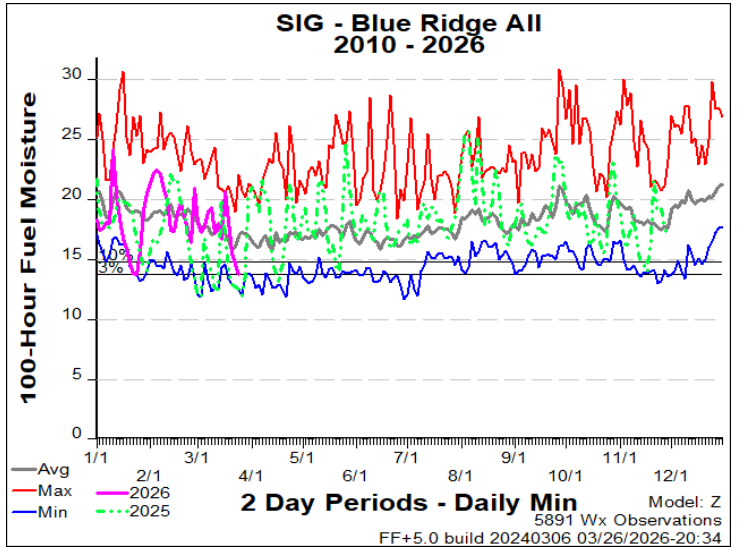


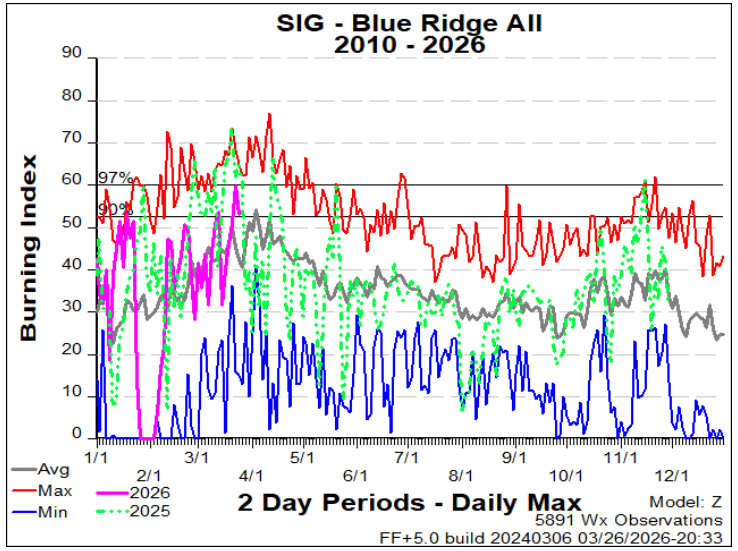
FDRA – Blue Ridge Escarpment

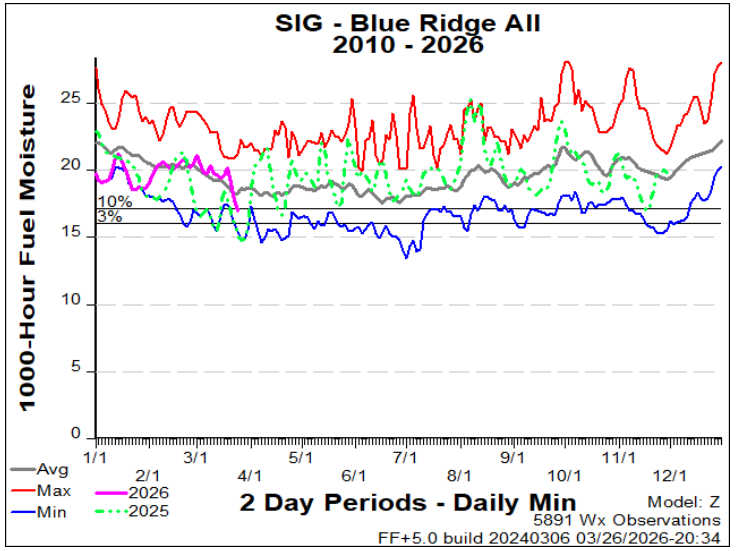




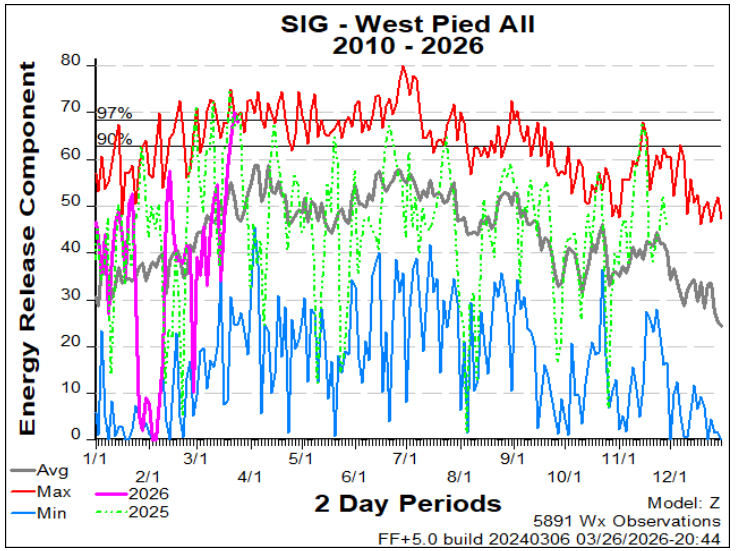


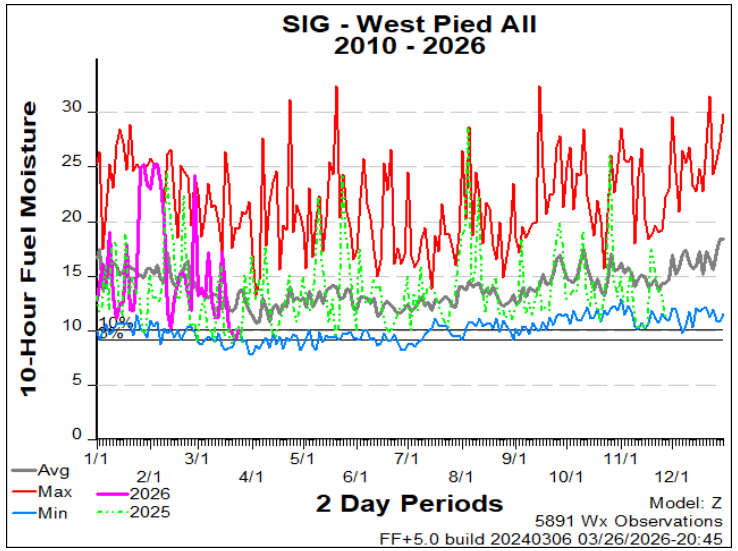


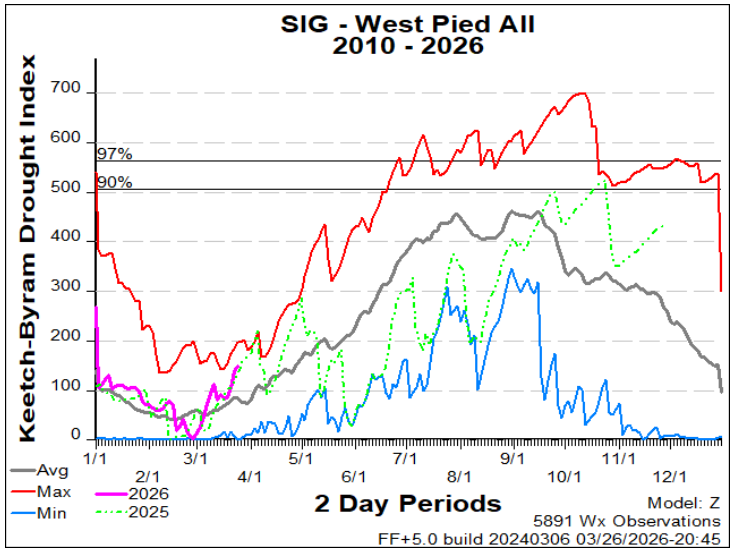


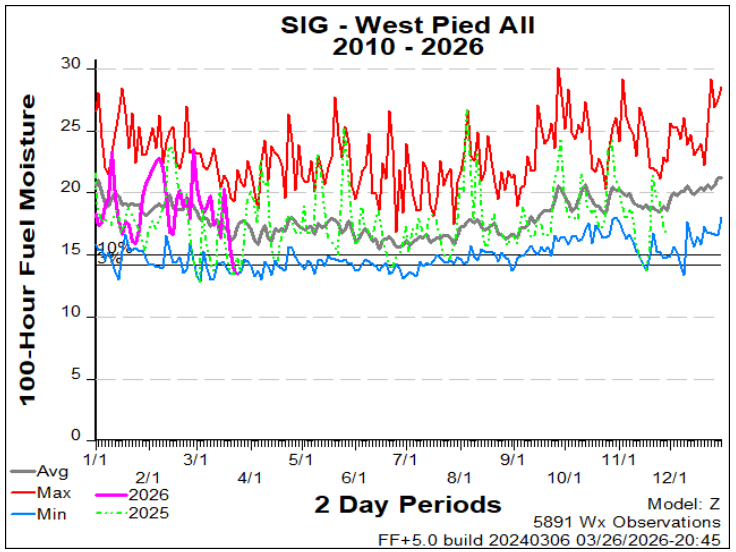


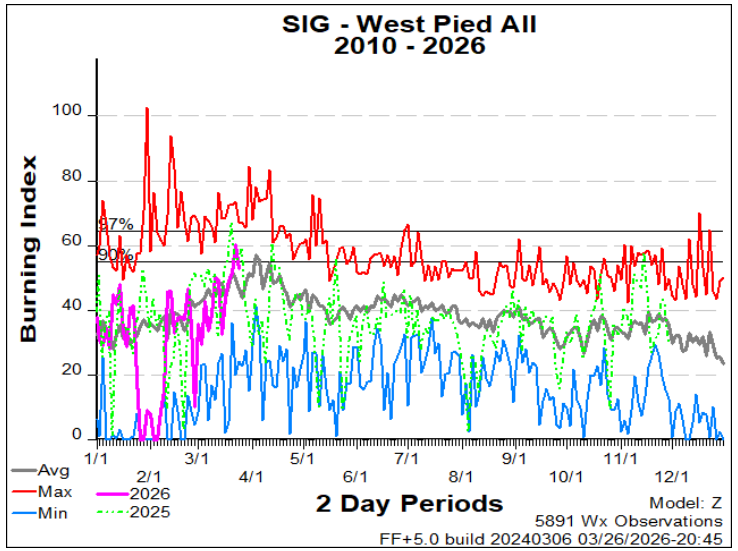
FDRA – Western Piedmont

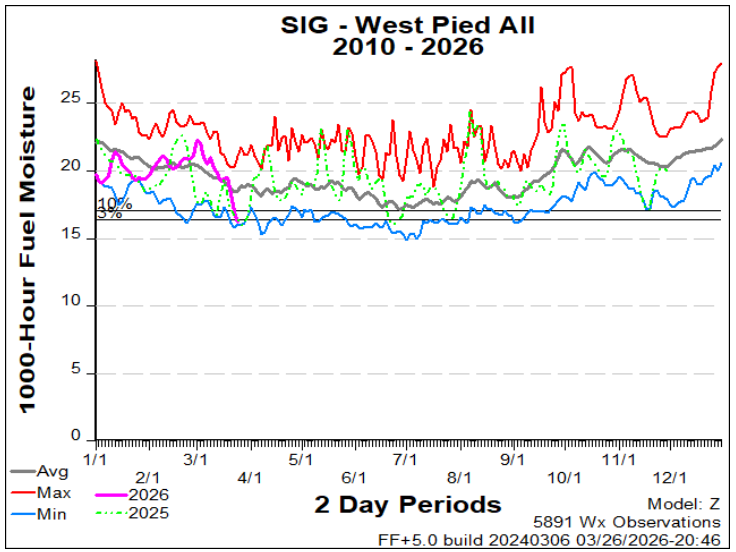




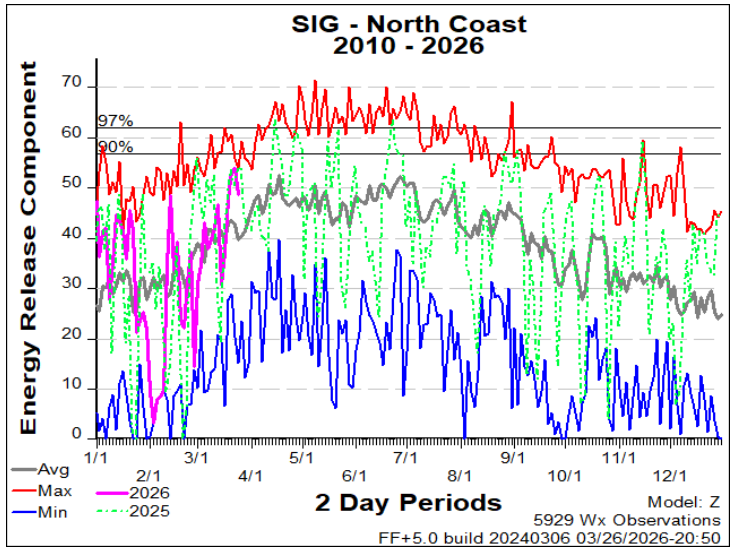


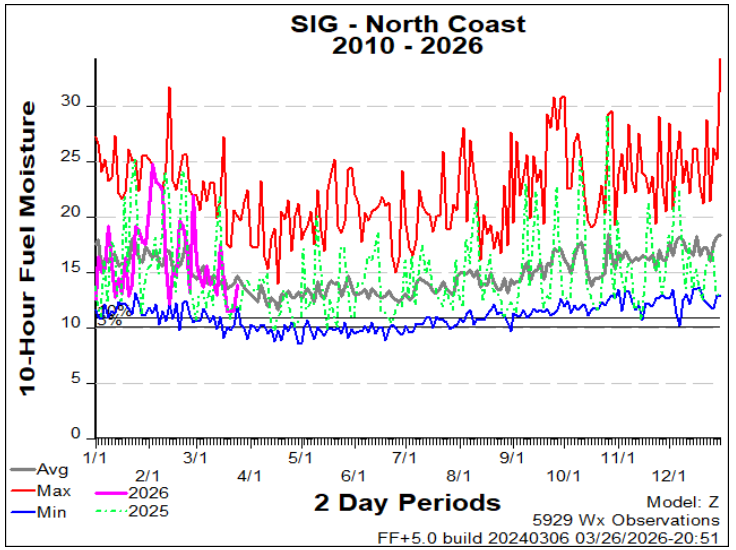


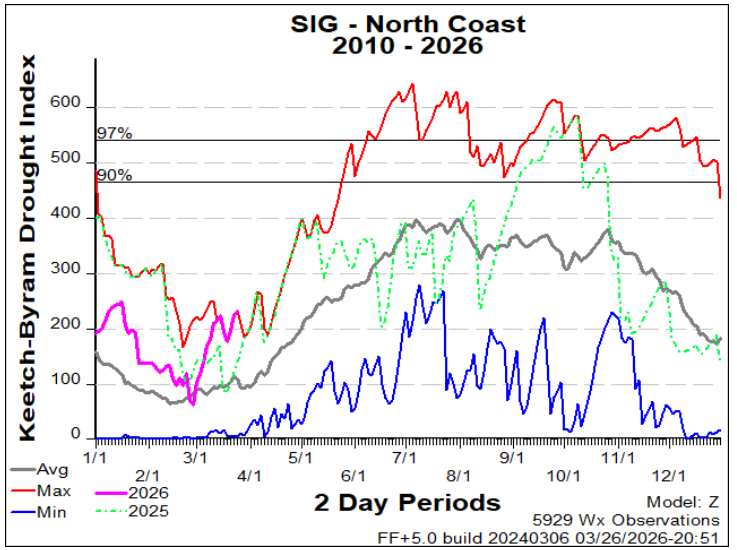


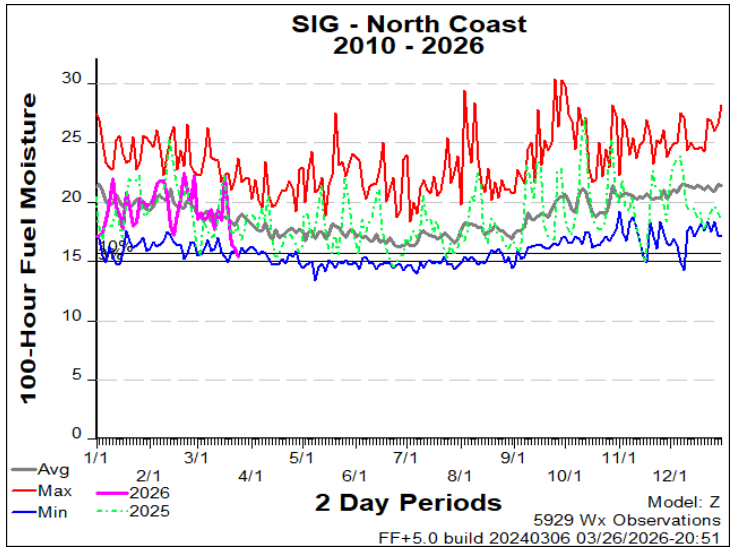


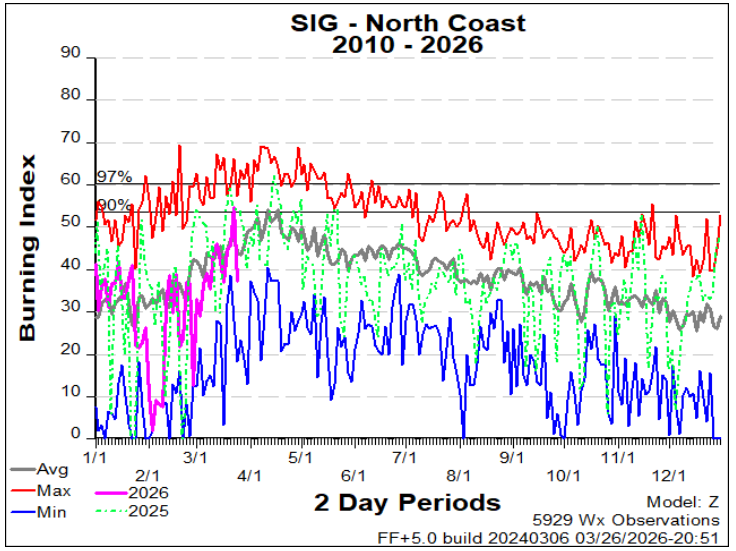
FDRA – North Coast

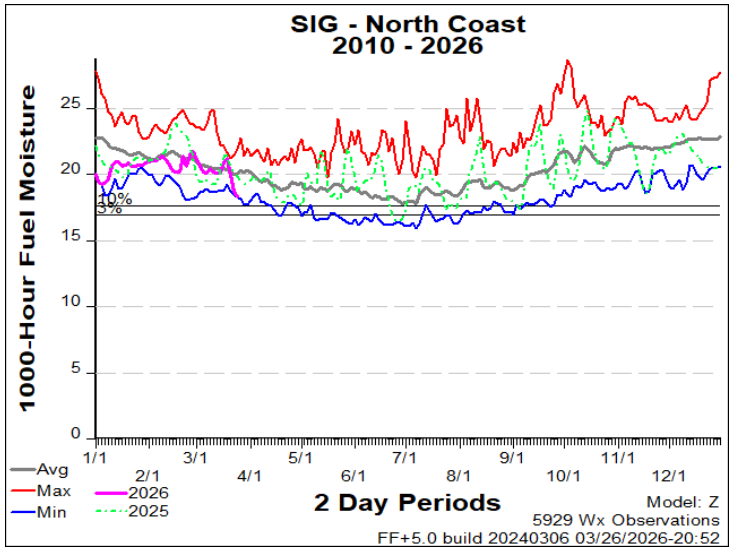




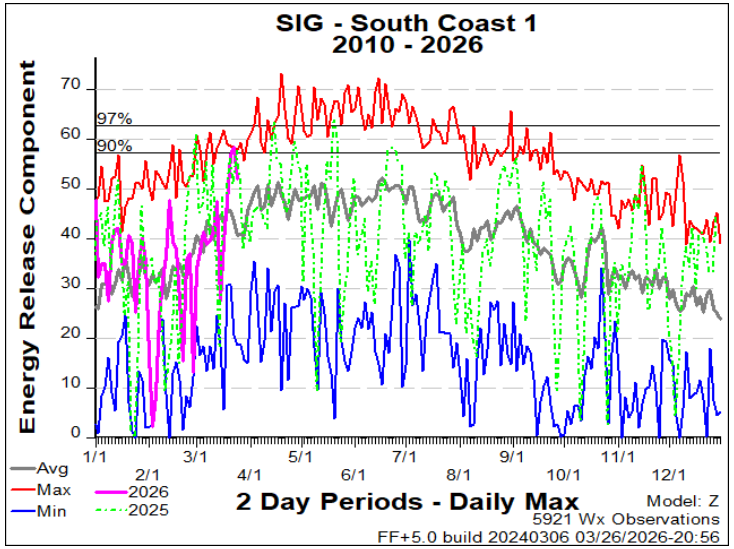


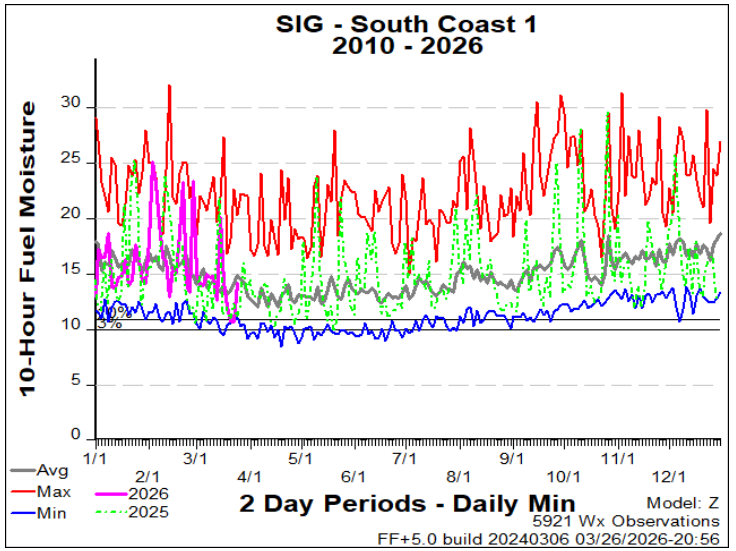


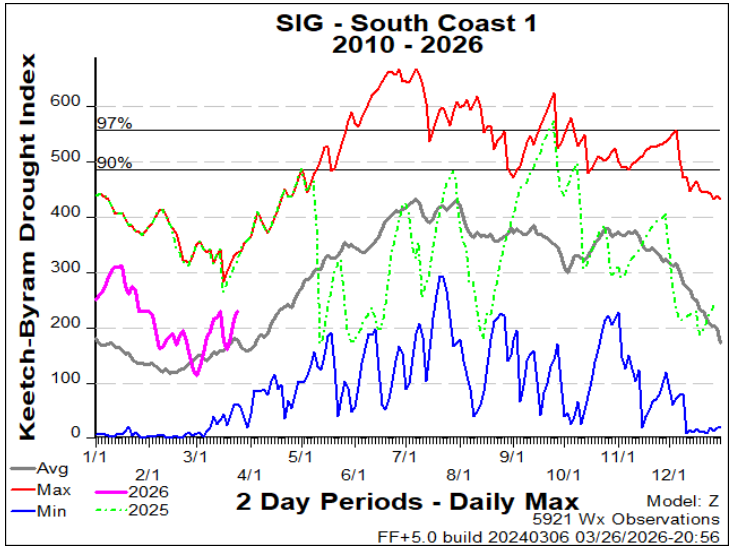


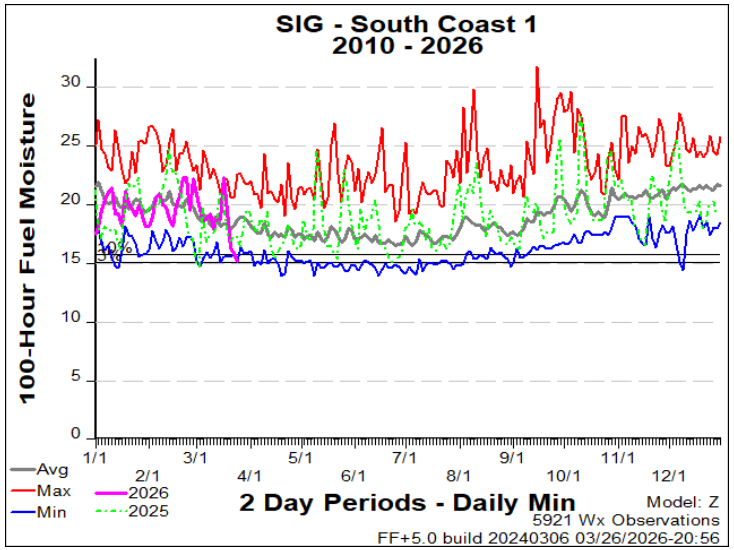


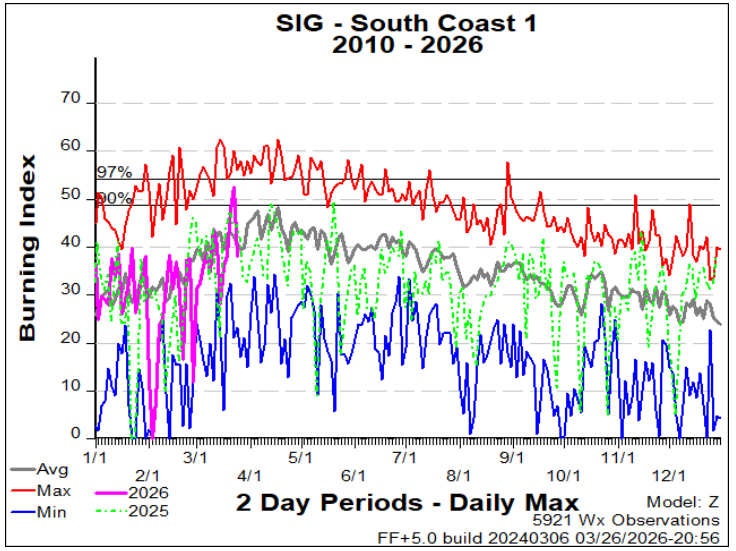
FDRA – South Coast

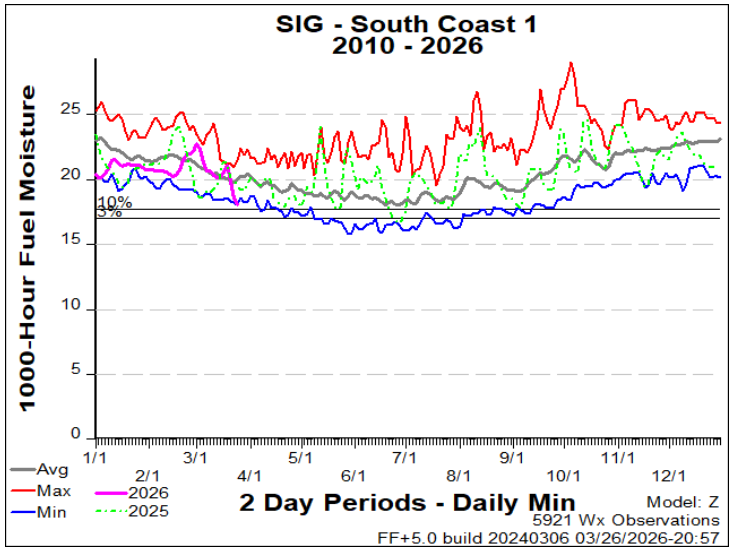












Fire Weather Intelligence Portal – Current Links & Notes

The interim breakpoints and percentiles based on FEMS implementation have been applied to the FWIP for North Carolina FDRAs. Content continues to be added and tools updated. Updated versions of the Hazard Assessment Tool, Adjective Fire Danger Rating Tool, and Daily Forecast/Observed Indices by Station have been implemented effective 3/12/26. The new versions automatically replaced the older versions.

- Public Facing Fire Danger Page & Fire Danger Digest Table
  (NC ratings based on ERC-Z analysis)
- Station Viewer Portal
  (Past, Current, Forecast Conditions Tab)
  *HOURLY Station Fire Danger Observations have been added on the PAST and CURRENT Conditions Tabs, as of 3/6/26
- Hazard Assessment Tool
  (based on ERC-Z/BI-Z or ERC-Z/IC-Z depending on FDRA)
- FEMS Forecast NFDRS Indices by Station
- FEMS Observed NFDRS Indices by Station
- Quality Control Viewer Tool
- Summary Site – Supplemental Tools

The Weekly Outlook Tool is still offline – being revised to conform to new analysis/FEMS integration.

Examples of Changes to FWIP – Daily Summary Tool (Observed and Forecasts)

Daily Summary Tool

State: North Carolina
Station Grouping: By District / By FDRA
Data Type: Observations / Forecasts
Forecast Date: Mar 28, 2026
Load Options

Daily Summary for North Carolina: Forecasts for March 28, 2026

The tables below include this day's summary of fire danger and weather forecasts, grouped by Fire Danger Rating Area.

Data Notes

- **Time Period:** All forecasts cover the period from midnight to midnight local time on the selected date.
- **Fuel Model:** Fire danger data uses the default fuel model for each station's Fire Danger Rating Area.
- **Percentiles:** For SIG stations in this state's Fire Danger Rating Areas, fire danger and fuel moisture data points are labeled and color-coded with the corresponding percentile, based on all historical days between 2010 and 2024.
- **Statistics:** For SIG stations in this state's Fire Danger Rating Areas, fire danger data is labeled with corresponding historical percentiles and KBDI departures from monthly normals. This is based on FDRA-averaged data between 2010 and 2024.
- **Weather Forecasts:** Updated daily weather forecasts are retrieved from FEMS each night. This data does *not* include an occurrence time for the extreme values.

Jump to FDRA: Go

Blue Ridge Escarpment — Permalink | Download Data | Screenshot

Station Details			Fire Danger and Fuel Moisture Data (Latest forecasts were issued on Mar 27 at 1 am EDT)									Weather Data (Forecasts from Mar 27 at 1 am)			
FEMS ID	NAME/NETWORK	MOD	MAX BI	MAX ERC	MAX IC	MAX SC	KBDI	MIN 1HR	MIN 10HR	MIN 100HR	MIN 1000H	MAX TEMP	MIN RHUM	MAX GUST	TOTAL PRCP
314301	North Cove Pinn... RAWS SIG Station Last FEMS Ob: 11 am	Z	70.8 100% 4 AM	71.8 98% 7 PM	20.9 89% 6 PM	18.3 100% 4 AM	84 +40	5.9% 6% 6 PM	11.1% 29% 11 PM	13.7% 7% 11 PM	15.5% 5% 10 PM	56°F	19%	33 MPH	0.00 IN.
316302	Rutherford Coun... RAWS SIG Station Last FEMS Ob: 12 pm	Z	63.5 98% 6 PM	72.3 98% 9 PM	32.0 98% 6 PM	11.3 94% 12 AM	210 +105	5.6% 6% 8 PM	10.4% 16% 11 PM	14.1% 7% 11 PM	16.1% 5% 11 PM	62°F	16%	20 MPH	0.00 IN.
312001	Rendezvous Mtn RAWS SIG Station Last FEMS Ob: 12 pm	Z	54.5 94% 6 PM	62.7 91% 9 PM	26.9 96% 6 PM	12.8 97% 5 AM	91 +47	5.9% 6% 8 PM	14.3% 65% 11 PM	14.8% 17% 12 AM	15.3% 1% 2 PM	56°F	17%	23 MPH	0.00 IN.
313601	Taylorsville (I... RAWS SIG Station Last FEMS Ob: 12 pm	Z	46.5 81% 5 PM	51.8 69% 9 PM	26.6 96% 5 PM	7.8 81% 5 PM	98 +54	5.7% 6% 7 PM	15.1% 71% 11 PM	16.1% 32% 12 AM	16.8% 15% 11 PM	60°F	15%	14 MPH	0.00 IN.
310301	Raven Knob (sur... RAWS SIG Station Last FEMS Ob: 11 am	Z	29.1 29% 5 PM	24.8 16% 9 PM	18.9 86% 5 PM	8.5 87% 11 AM	117 +72	6.8% 14% 7 PM	16.7% 82% 11 PM	25.1% 98% 4 AM	27.7% 100% 11 PM	55°F	21%	25 MPH	0.00 IN.

- **Summary at Bottom of Page (either by FDRA or by District)**
- **Make sure to read descriptions at top of page, as there are slight differences between forecast, observed, etc.**
- **This example is forecast for Saturday 3/28/26**

Summary by Region — Permalink | Download Data | Screenshot

Note: FDRA averages include **only the SIG stations** in each region with data available today

Region Details			Fire Danger and Fuel Moisture Averages									Weather Averages			
FDRA	NUM STN	MOD	MAX BI	MAX ERC	MAX IC	MAX SC	KBDI	MIN 1HR	MIN 10HR	MIN 100HR	MIN 1000H	MAX TEMP	MIN RHUM	MAX GUST	TOTAL PRCP
Southern Highlands	4	Z	45.6 85%	56.8 90%	24.3 95%	9.2 88%	96 +73	6.0% 4%	14.2% 58%	16.1% 20%	17.4% 6%	59°F	18%	25 MPH	0.00 IN.
Central Mountains	4	Z	45.7 90%	56.5 90%	20.2 93%	10.1 97%	106 +74	6.5% 4%	14.5% 56%	15.8% 21%	17.4% 6%	57°F	20%	25 MPH	0.00 IN.
Northern Highlands	3	Z	44.0 90%	45.7 74%	19.7 96%	13.5 100%	70 +53	7.1% 6%	17.2% 69%	16.8% 30%	18.0% 15%	51°F	23%	31 MPH	0.01 IN.
Blue Ridge Escarpment	5	Z	52.9 92%	56.7 80%	25.1 94%	11.7 96%	120 +76	6.0% 6%	13.5% 65%	16.7% 48%	18.3% 34%	58°F	18%	23 MPH	0.00 IN.
Western Piedmont	4	Z	52.2 86%	54.6 73%	23.9 91%	10.3 87%	204 +157	6.6% 15%	15.2% 75%	15.0% 18%	16.0% 4%	58°F	21%	21 MPH	0.01 IN.
Sandhills	4	Z	56.1 90%	52.9 66%	25.6 90%	13.6 97%	256 +169	6.7% 20%	14.8% 75%	16.1% 33%	16.8% 19%	60°F	24%	24 MPH	0.02 IN.
Eastern Piedmont	5	Z	53.9 86%	47.1 57%	22.0 89%	13.1 92%	142 +93	7.4% 9%	15.8% 80%	16.4% 28%	17.2% 14%	56°F	26%	23 MPH	0.02 IN.
Southern Coast	8	Z	59.1 99%	50.6 77%	24.7 97%	14.8 100%	203 +94	7.3% 8%	13.8% 57%	17.2% 35%	17.9% 21%	60°F	30%	24 MPH	0.02 IN.
Northern Coast	5	Z	53.6 91%	43.0 57%	19.1 89%	14.0 97%	200 +141	8.7% 25%	15.6% 74%	17.5% 51%	17.9% 22%	54°F	35%	25 MPH	0.04 IN.

SACC Daily Outlook, Selected Snips from Friday, 3/27/26

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

SACC Daily Outlook

Friday, March 27, 2026

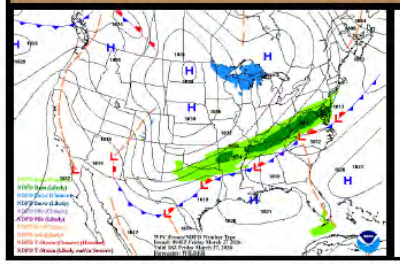
Fire Weather Watches, Warnings and Advisories as of 9 am EST this Morning

- There are Red Flag Warnings in effect fro The Texas and Oklahoma Panhandles, as well as West and Central Oklahoma for very low RH, strong wind gusts, and dry fuels for today.
- There are Fre Weather Watches in effect for portions of eastern Louisiana, the Alabama and Mississippi coasts, Central and South Mississippi, Alabama, Georgia (ecept the SE corner, the western half of the Florida Peninsula, and South Carolina for low RH, gusty wind, and dry fuels for tomorrow.

Other Watches/Warnings/Advisories in Effect as of 7AM EDT this Morning

- There are High Wind Warnings in effect for portions of the TX Panhandle north for gusts up to 70 mph today.
- There are Wind Advisories in effect for the Trans-Pecos, West TX, the TX/OK Panhandles, West/Central OK, portions of East OK, NW TX, and thefar NE corner of AR for gusts up to around 60 mph possible today.
- There are a Blowing Dust Advisories in effect for West TX and the Trans-Pecos today.
- There are Freeze Warnings in effect for almost all of KY for tonight.
- There are Dense Fog Advisories for LA and coastal MS which are set to expire at 9AM CDT this morning.

Today's Weather Outlook



- A cold front is forecast to move across the Southern Area today, stretching from the Rio Grande Plain north, into East TX north, across into North MS, North GA, and the NC mountains, and off the Atlantic coast near the VA/NC border.
- This will bring the potential for strong gusty wind along the behind the front in TX, OK, and AR.
- Showers and thunderstorms are also possible along the front, with the highest potentials from AR, east and TN/NC, north.
- FL may also see some showers and thunderstorms not associated with the front.
- The air mass behind the front is forecast to be cooler and much drier.

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

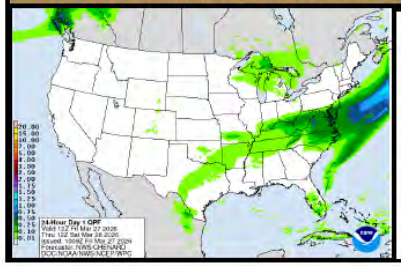
SACC Daily Outlook

Friday, March 27, 2026

Potential for Severe Thunderstorms Through Tomorrow Morning

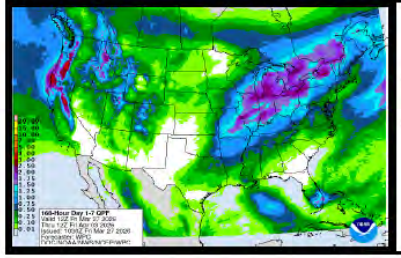
- The Storm Prediction Center is not forecasting any organized severe weather for today through the weekend.

Potential Rainfall/Liquid Equivalents Amounts Through 7am Saturday Morning



- Precipitation over the next 24 hours is forecast to be on the light side, with most accumulations forecast to be less than one half inch, with most areas only forecast to receive less than one tenth of an inch.
- The Appalachians in western VA, with up to three quarters of an inch.
- Locally higher amounts are possible, especially in the mountains.

7 Day Total Precipitation Forecast

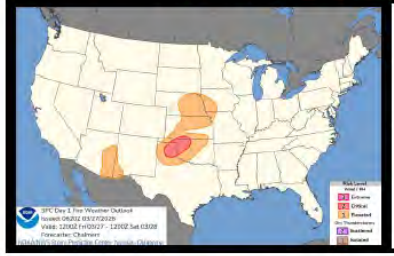


- Besides the rain today, most of the next week is forecast to be mainly dry, except for South FL.
- Wednesday and Thursday are forecast to see the next potential for significant rain, and that is mainly for AR, East OK, TN, and KY; with areas around these areas also potentially seeing wetting rains.

SACC Daily Outlook

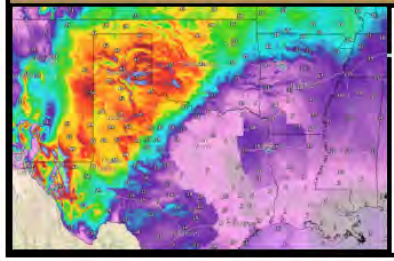
Friday, March 27, 2026

SPC's Fire Weather Outlook Today and Tomorrow



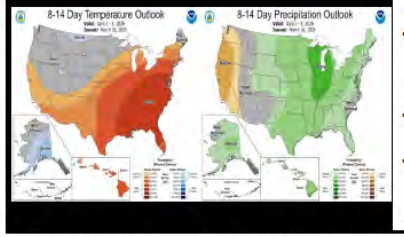
- The Storm Prediction Center has an area of Critical concern for portions of the TX/OK Panhandles, and a portion of West OK.
- There is also an Elevated concern in the areas surrounding the Critical area, reaching into Central OK, NW TX, and into East OK.

The National Weather Service Forecast for Todays Wind Gusts at 10AM CDT



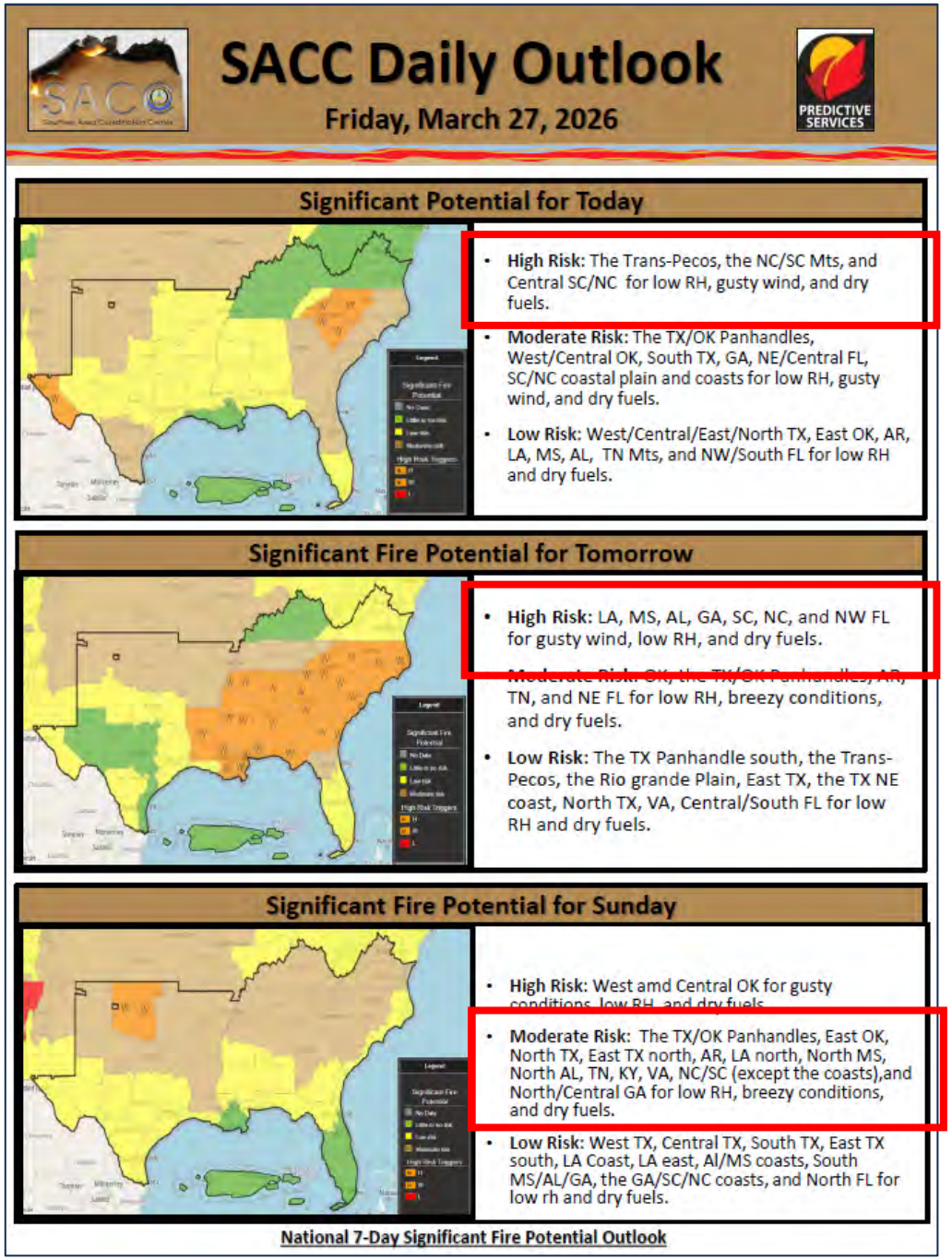
- The strongest gusts are forecast to be over the TX/OK Panhandles and West OK, where gusts of up to 70 mph may occur.
- Outside of the above area, gusts of up to 55 mph are possible, mainly in western TX and OK, with gusts up to 40 mph spreading across much of TX and into AR by this evening.
- Tomorrow, the gusty conditions are forecast to shift into the southeast, although not as strong, with forecast gusts up to around 40 mph.

8 to 14 Day Outlook



- The Climate Prediction Center is forecasting the entire Southern Area to have the potential for above normal temperatures, with the highest potential from the MS valley, east.
- The forecast calls for above normal precipitation for almost the entire of the Southern Area.
- The Atlantic coastal areas in GA, SC, and NC are forecast to see near normal precipitation.

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



Overall SA-wide message for next several days:

(provided by K. Cagle/USFS – R8 Fire Analyst in context of Southern Area States)

Energy Release values indicate fires will probably produce well above average intensity and heat this weekend. Fine fuel moistures will be at levels that will allow fires to start very easily and begin to organize and move very quickly. Spotting will likely be problematic, and it should be expected that if fires manage to get a head start on suppression resources, it may be difficult to stop fire spread.

NCFS Mountain Region Fire Behavior Notes for Saturday/Weekend:

(provided by D. Greathouse/NCFS - FBAN)

Fire Behavior implications:

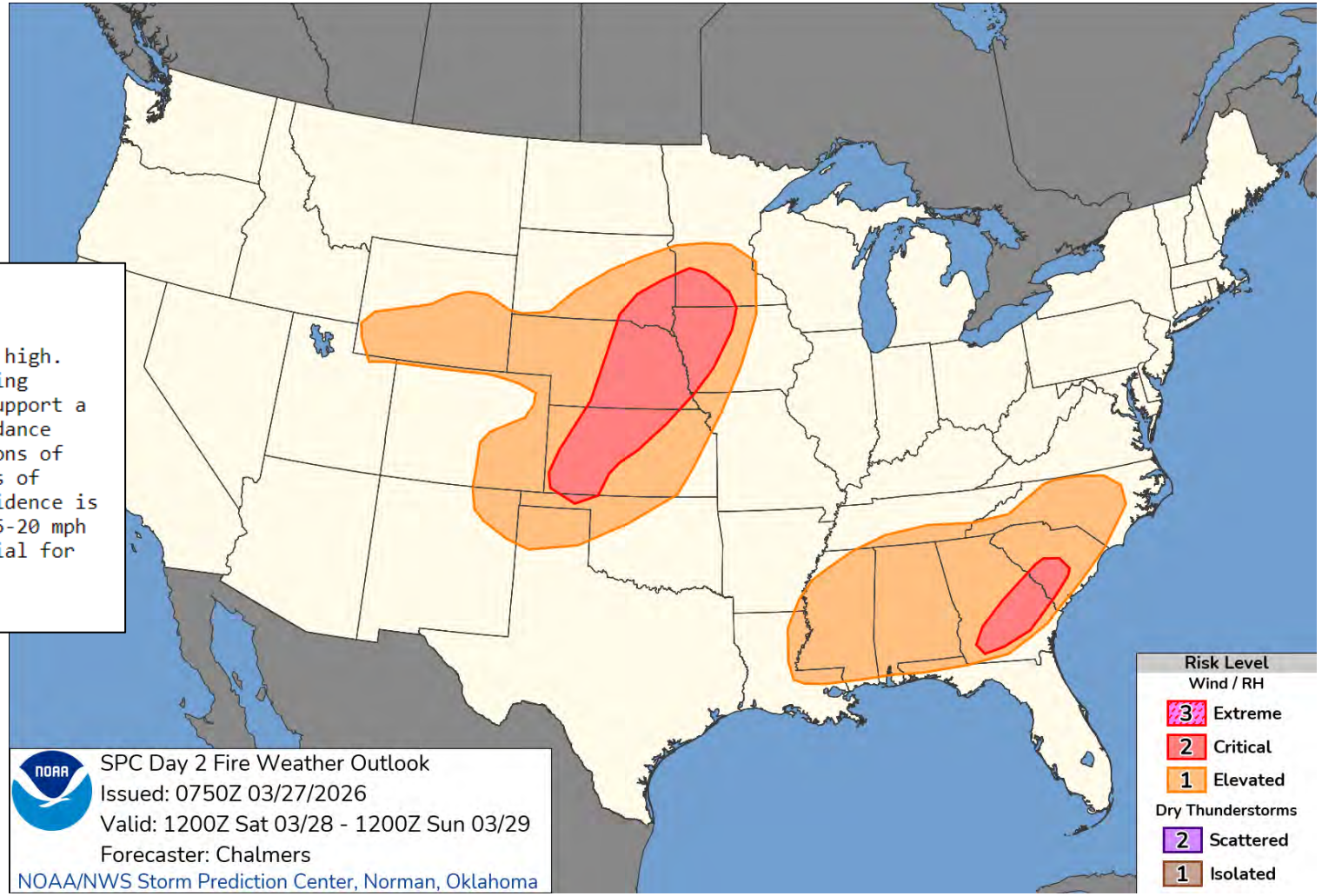
- All weather thresholds for large fire growth will be met tomorrow (temps above 60°, RH below 25%, winds above 10mph)
- The potential for high rates of spread is high, especially where terrain and slope align
- Short range spotting is probable
- The 100hr and 1000hr fuel moistures are at or below the threshold where they will contribute to fire growth and consume
- ERCs are high, meaning fire is resistant to control.

Fire Behavior Safety Considerations:

- Know what your fire is doing at all times
- Aircraft may not be available during this wind event
- Have good escape routes, safety zones and make them known
- Monitor the weather, small changes in weather can equal big changes in fire behavior
- Remember ridge tops and wide drainage bottoms are the best locations for locating fireline in these weather and fire behavior situations

Storm Prediction Center Fire Weather Outlook – Day 2 (Saturday)

...Portions of the Southeast...
Dry and breezy conditions are forecast across much of the southeastern US along the southern periphery of the surface high. Sustained northeasterly surface winds of 10-15 mph overlapping reduced RH of 25-35% amid dry, antecedent conditions will support a widespread area of elevated fire weather concerns. Some guidance indicates RH values may fall to as low as ~20% across portions of this region. Critical highlights have been added to portions of southeastern Georgia and southern South Carolina where confidence is highest in a period of overlap between sustained winds of 15-20 mph and minimum RH values of 20-25% (locally lower). The potential for expansion of this critical area will be monitored in future outlooks.



Overall Trends & Notes

- Time since the last wetting rain is approaching two weeks for much of North Carolina, the next frontal passage will produce very little wetting rain. 100-hr & 1000-hr (smaller end of scale) fuels are consuming, along with aerial snags where consecutive days of fuel drying and lack of rain have aligned.

- IA & Difficulty of Control is likely to **increase significantly into/through the weekend** due to the alignment of fire effective weather with already abnormally dry surface fuels (all size classes), mostly dormant live forest fuels and critically dry air leading to poor recoveries & extended burn periods. The Hazard Level and Adjective Rating Forecasts (right) include modeled precip influences (likely will be much less than predicted) & will likely **trend worse** as we move into the weekend.

- Access to out-of-area suppression aircraft & equipment may be limited due to the expected multi-state impact during this weather event. Winds will be worse on Saturday related to frontal passage dynamics, but fuel moistures will be lower/worse on Sunday due to poor overnight recoveries expected.

- The CPC outlook is still favoring an extended period of warmer temperatures, but a return of near normal precip at both the 6-10/8-14-day periods for most of the state. Weeks 3-4 are favoring above average temps with a lean toward slightly above normal precip for western NC. There is a significant rainfall deficit to consider.

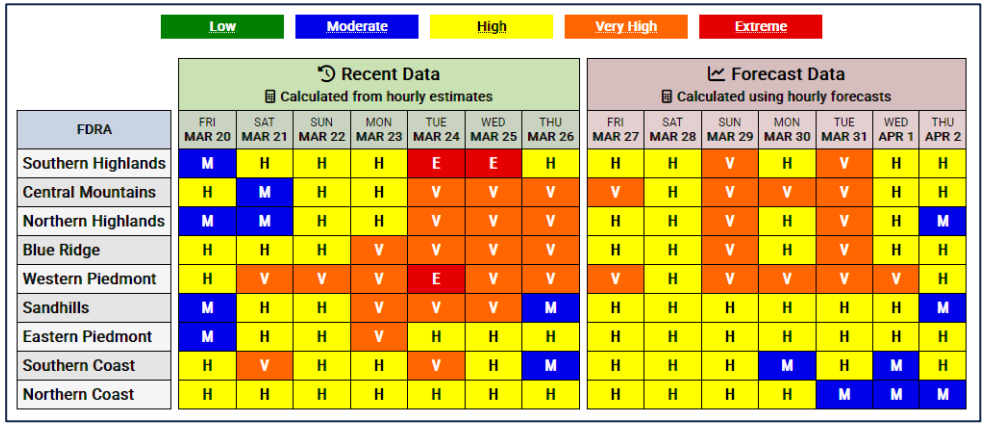
- We are still gaining ~1-2 minutes a day of extra daylight, increasing sun angle and additional heating/drying potential as we move towards Summer. Extra warmth will aid in better atmospheric mixing, preheating & drying of dead fuels, initiation of greenup, extend burn periods, etc. (in context of typical Spring Fire Season timing).

- Although dormancy is beginning to break in the typical early species, we are **still many weeks away** from effective canopy closure/wind interception/temperature/fuel volatility moderation. It has been noted that mtn. laurel & rhodo are consuming as expected, in seasonal context. Road shoulder/yard greening of cool season grasses is occurring in many areas, but may be negatively impacted by recent cold nights and lack of wetting rain.

- As previously noted, the Keetch-Byram Drought Index (KBDI) is less reflective of actual fuel and moisture conditions during the cold season due to model limitations. This can create a perception of reduced concern following modest Fall/Winter rain events.

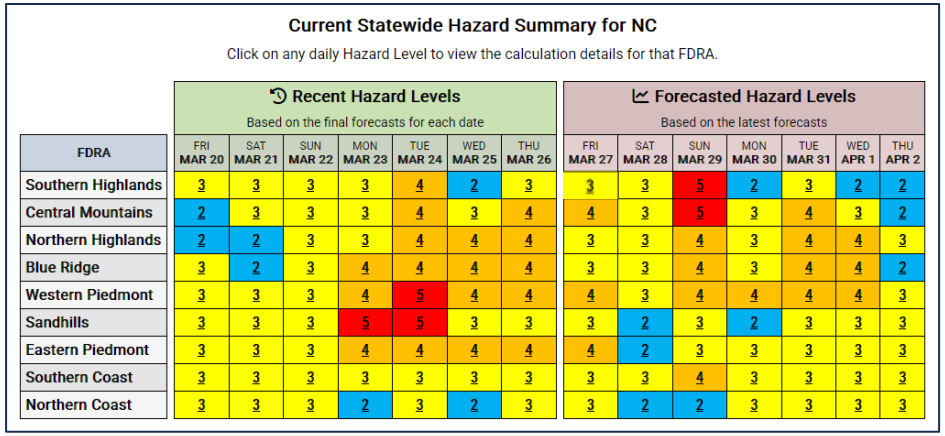
- Careful monitoring of post-burn prescribed fire units and wildfire footprints overlapping areas of abnormal dryness and low soil moisture will be critical as we move through the rest of Spring Fire Season, particularly when drying conditions/favorable weather could reinvigorate fire behavior due to freshly fallen/cured needle cast.

Daily Adjective Rating Outputs for each FDRA (ERC from FM-Z)
(Observed on Left, Forecast on Right)



FDRA	Recent Data (Calculated from hourly estimates)							Forecast Data (Calculated using hourly forecasts)						
	FRI MAR 20	SAT MAR 21	SUN MAR 22	MON MAR 23	TUE MAR 24	WED MAR 25	THU MAR 26	FRI MAR 27	SAT MAR 28	SUN MAR 29	MON MAR 30	TUE MAR 31	WED APR 1	THU APR 2
Southern Highlands	M	H	H	H	E	E	H	H	H	V	H	V	H	H
Central Mountains	H	M	H	H	V	V	V	V	H	V	V	V	H	H
Northern Highlands	M	M	H	H	V	V	V	H	H	V	H	V	H	M
Blue Ridge	H	H	H	V	V	V	V	H	H	V	H	V	H	H
Western Piedmont	H	V	V	V	E	V	V	V	H	V	V	V	V	H
Sandhills	M	H	H	V	V	V	M	H	H	H	H	H	H	M
Eastern Piedmont	M	H	H	V	H	H	H	H	H	H	H	H	H	H
Southern Coast	H	V	H	H	V	H	M	H	H	H	M	H	M	H
Northern Coast	H	H	H	H	H	H	H	H	H	H	H	M	M	M

Hazard Matrix Outputs for each FDRA (FM-Z)



FDRA	Recent Hazard Levels (Based on the final forecasts for each date)							Forecasted Hazard Levels (Based on the latest forecasts)						
	FRI MAR 20	SAT MAR 21	SUN MAR 22	MON MAR 23	TUE MAR 24	WED MAR 25	THU MAR 26	FRI MAR 27	SAT MAR 28	SUN MAR 29	MON MAR 30	TUE MAR 31	WED APR 1	THU APR 2
Southern Highlands	3	3	3	3	4	2	3	3	3	5	2	3	2	2
Central Mountains	2	3	3	3	4	3	4	4	3	5	3	4	3	2
Northern Highlands	2	2	3	3	4	4	4	3	3	4	3	4	4	3
Blue Ridge	3	2	3	4	4	4	4	3	3	4	3	4	4	2
Western Piedmont	3	3	3	4	5	4	4	4	3	4	4	4	4	3
Sandhills	3	3	3	5	5	3	3	3	2	3	2	3	3	3
Eastern Piedmont	3	3	3	4	4	4	4	4	2	3	3	3	3	3
Southern Coast	3	3	3	3	3	3	3	3	3	4	3	3	3	3
Northern Coast	3	3	3	2	3	2	3	3	2	2	3	3	3	3

*Planned intermittent interruptions to FEMS data feed for all services from 3/23-3/29, they note daily fire danger calculations will continue during maintenance periods. These interruptions may impact display of observed hourly fire danger records in FWIP.

*Changes in actual precipitation amounts, min/max rh's and other weather variables have significant impact on the model as you go further out in forecast period.