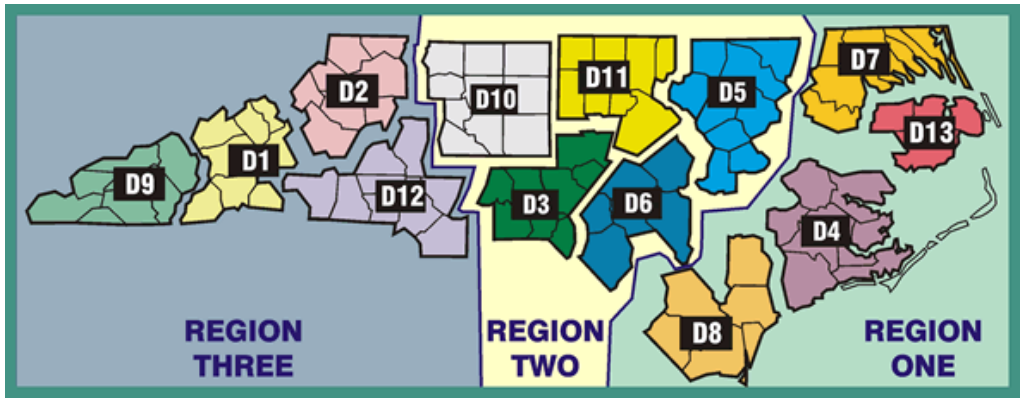


Weekly Fire Danger Assessment
NCFS – All Regions

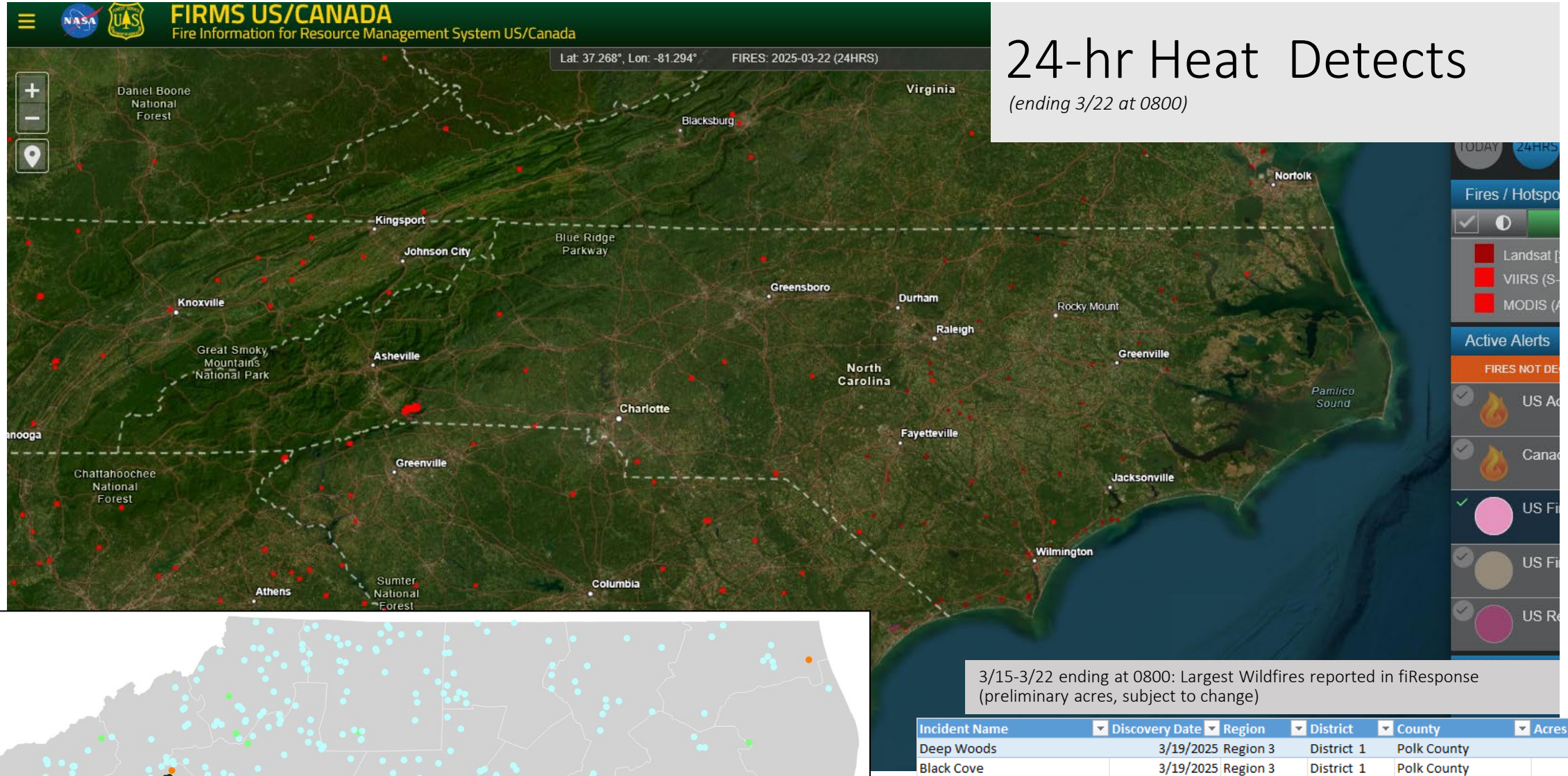
For Time Period:

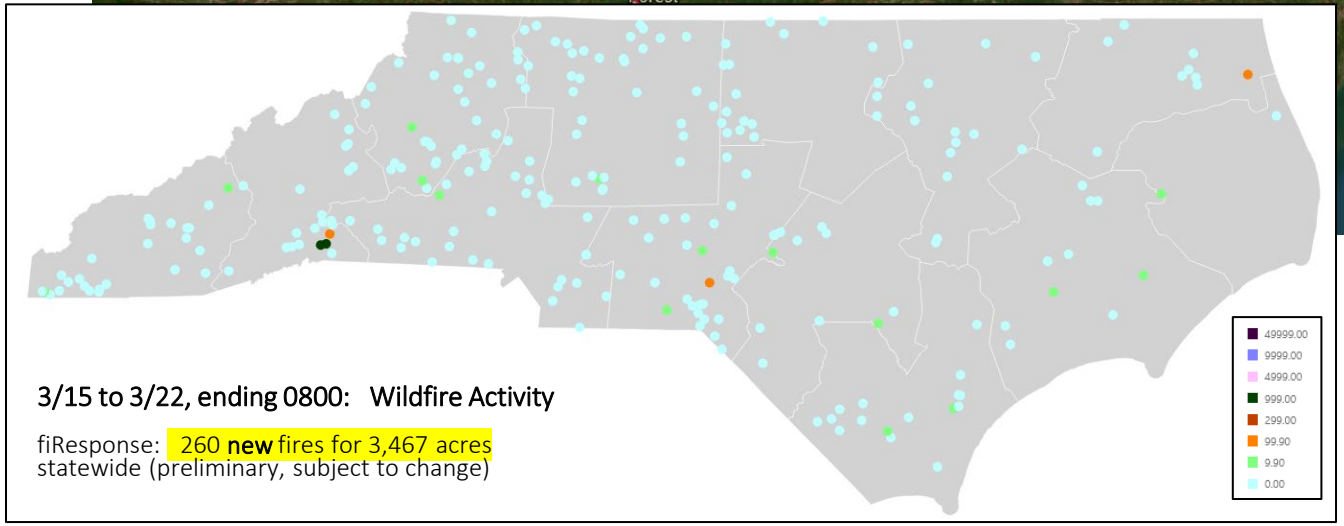
Saturday (3/22/25) to Thursday (3/27/25)

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

24-hr Heat Detects

(ending 3/22 at 0800)





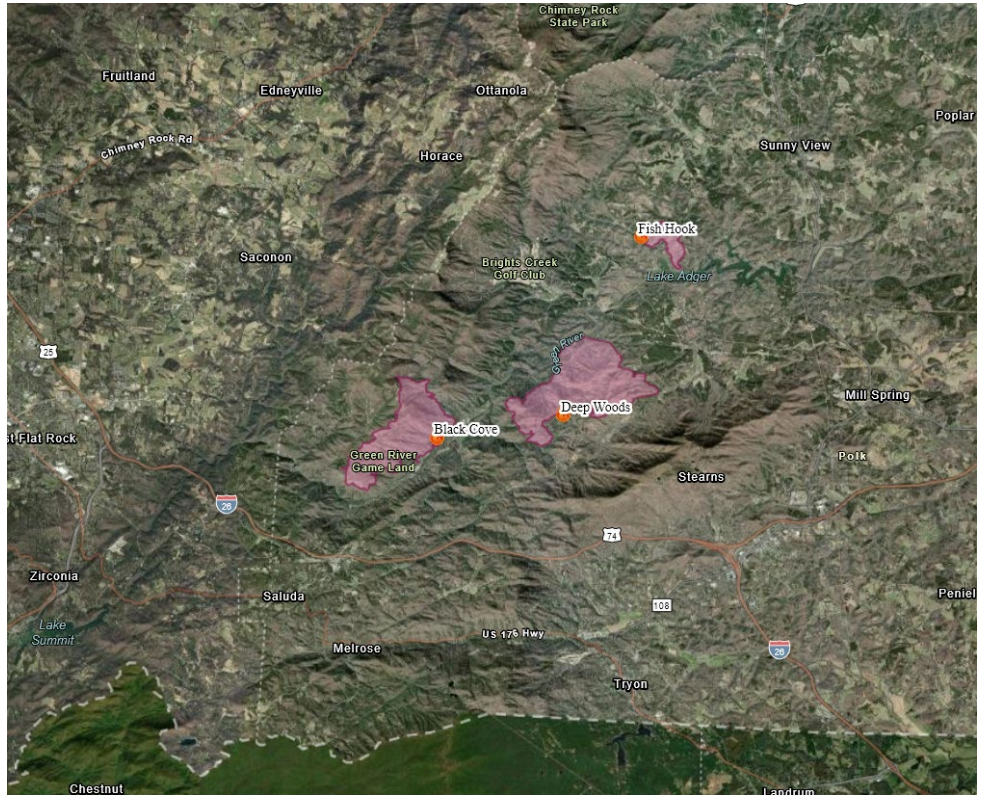
3/15 to 3/22, ending 0800: Wildfire Activity

fiResponse: 260 **new** fires for 3,467 acres statewide (preliminary, subject to change)

3/15-3/22 ending at 0800: Largest Wildfires reported in fiResponse (preliminary acres, subject to change)

Incident Name	Discovery Date	Region	District	County	Acres
Deep Woods	3/19/2025	Region 3	District 1	Polk County	1102.00
Black Cove	3/19/2025	Region 3	District 1	Polk County	1083.00
Deaton Ln	3/19/2025	Region 2	District 3	Richmond County	279.00
Carolina Club	3/20/2025	Region 1	District 7	Currituck County	250.00
Fish Hook Fire	3/20/2025	Region 3	District 1	Polk County	152.00
Tomahawk Ridge	3/21/2025	Region 3	District 2	Caldwell County	65.00
Old Tom Morris Rd.	3/15/2025	Region 2	District 6	Sampson County	58.00
Leechville Bridge Fire	3/19/2025	Region 1	District 13	Hyde County	45.00
Martin Rd	3/19/2025	Region 2	District 3	Moore County	30.00
Bellhammon tract	3/20/2025	Region 1	District 8	Pender County	28.00
Longhorn	3/19/2025	Region 3	District 2	Wilkes County	26.00

Project Fire Information (subject to rapid change)



R3/D1/Polk County

*Snip from FIRMS Viewer on 3/22/25 at 1715hrs show **general** fire locations, polygons are not accurate representations/old.*

Black Cove Complex

Incident Action Plan

Saturday, March 22, 2025

Day Operational Period 0800 - 2000
Night Operational Period 2000 - 0800

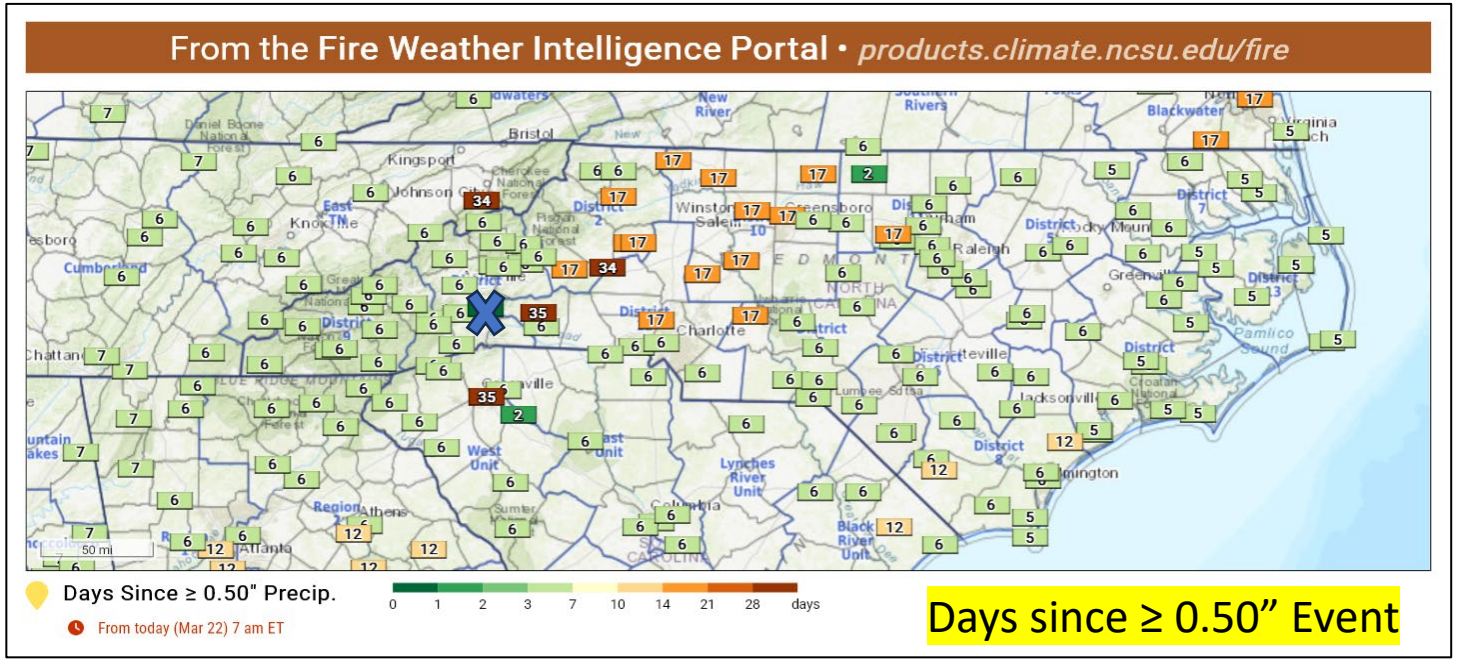
NCDA&CS

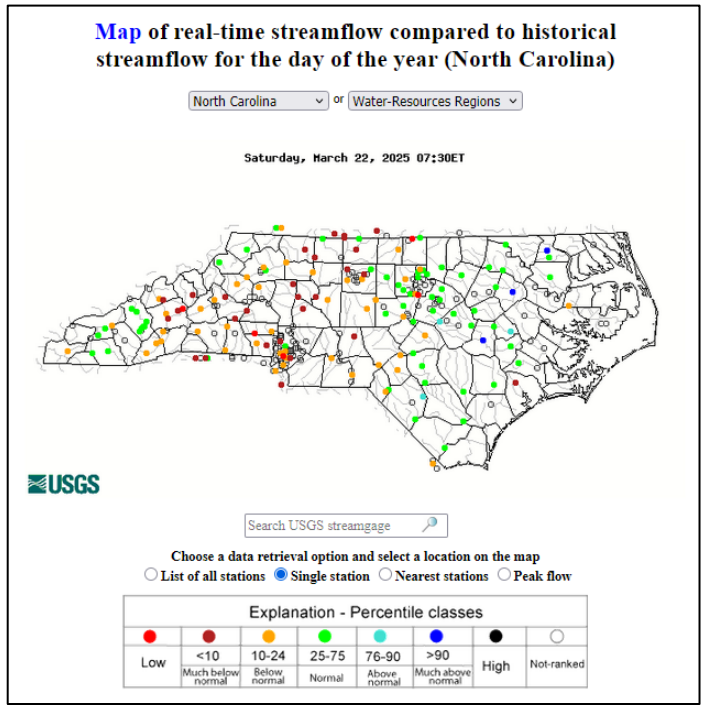
Fire #: NC-NCS-250019 Black Cove
Fire #: NC-NCS-250021 Deep Woods

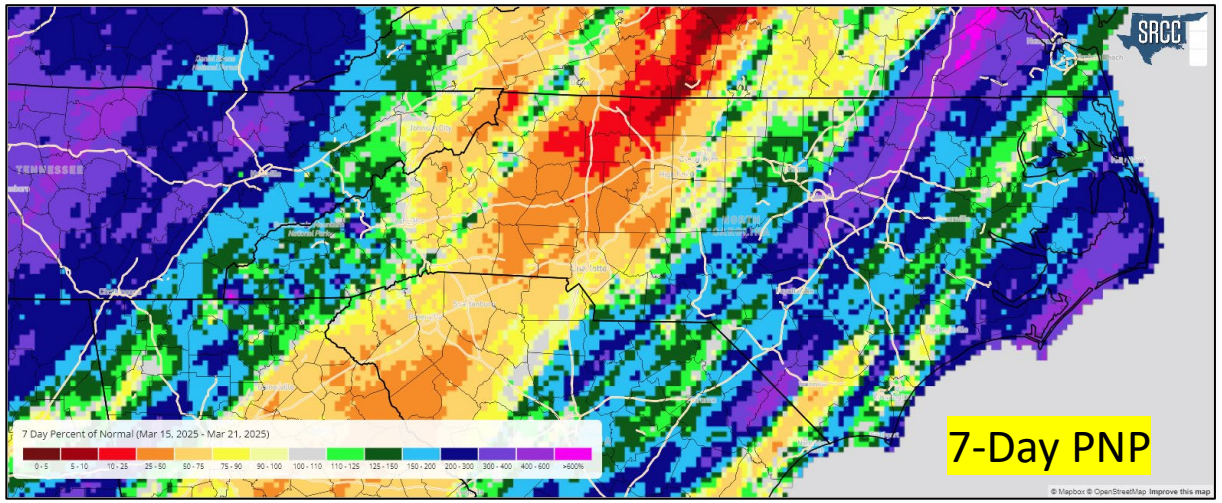
Published ICS 209 Summary Info for three fires shown in snip as of the 3/22/25 4PM Update

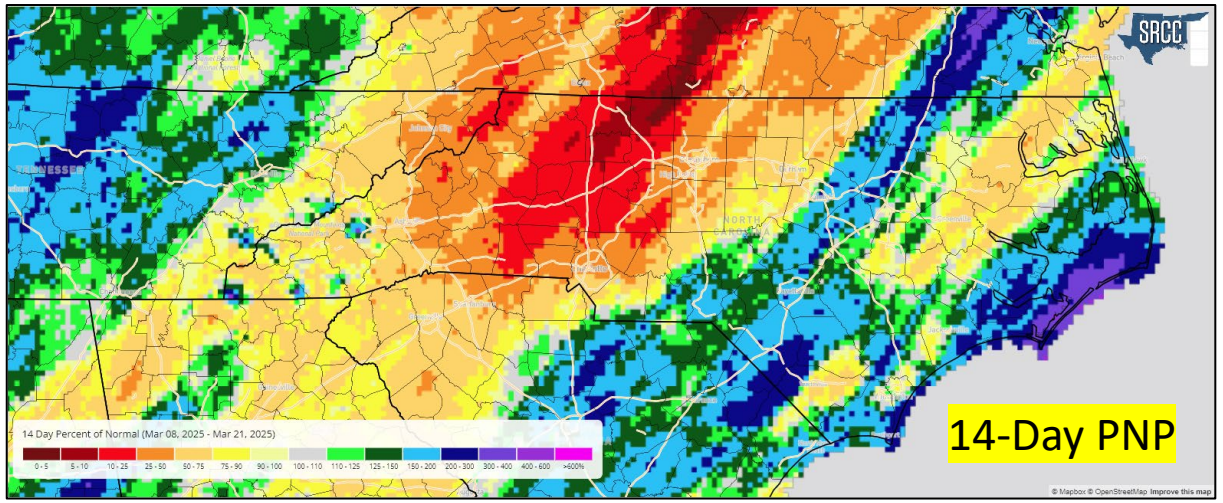
CIMT and additional resources have been mobilized for these fires, all three are in complex terrain & within the TS Helene Impact area. There are significant amounts of storm impacted downed/damaged timber & infrastructure, along with critically dry fuel conditions & fire-effective weather.

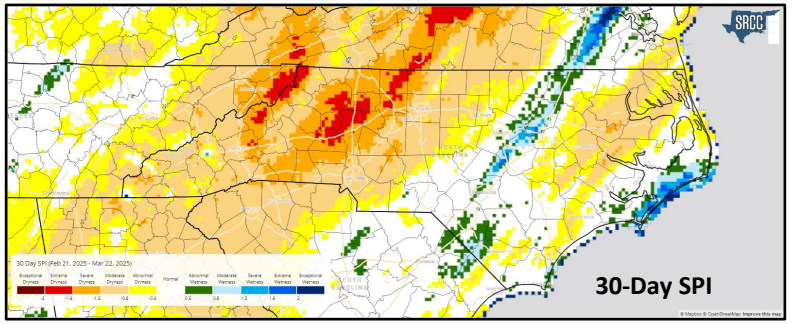
- Fish Hook – 152 acres & 50% containment
- Deep Woods – 1,102 acres & 0% containment
- Black Cove – 1,239 acres & 0% containment

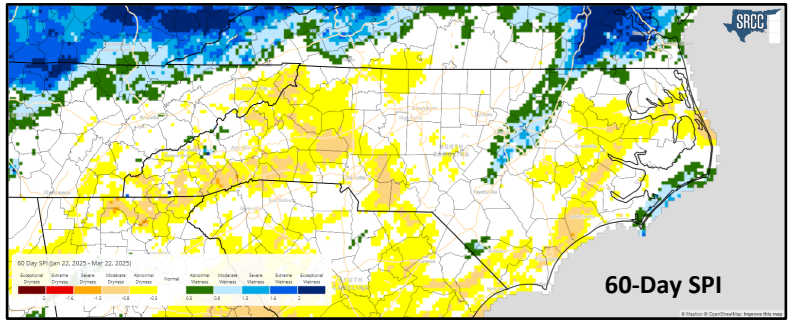

From the Fire Weather Intelligence Portal • products.climate.ncsu.edu/fire
Days Since ≥ 0.50" Precip.
0 1 2 3 7 10 14 21 28 days
From today (Mar 22) 7 am ET
Days since ≥ 0.50” Event

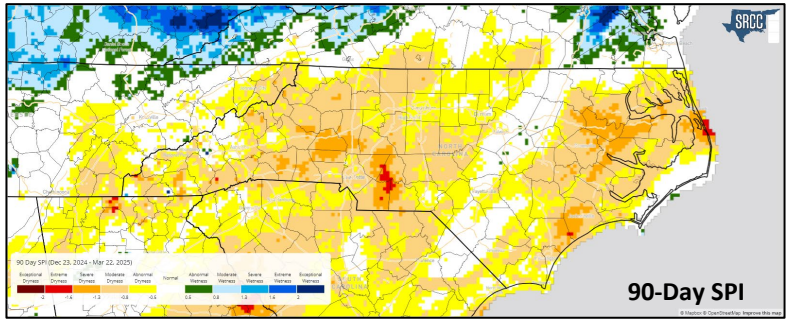

Map of real-time streamflow compared to historical streamflow for the day of the year (North Carolina)
North Carolina or Water-Resources Regions
Saturday, March 22, 2025 07:30ET
USGS
Search USGS streamgage
Choose a data retrieval option and select a location on the map
List of all stations Single station Nearest stations Peak flow
Explanation - Percentile classes
Low <10 Much below normal 10-24 Below normal 25-75 Normal 76-90 Above normal >90 Much above normal High Not-ranked

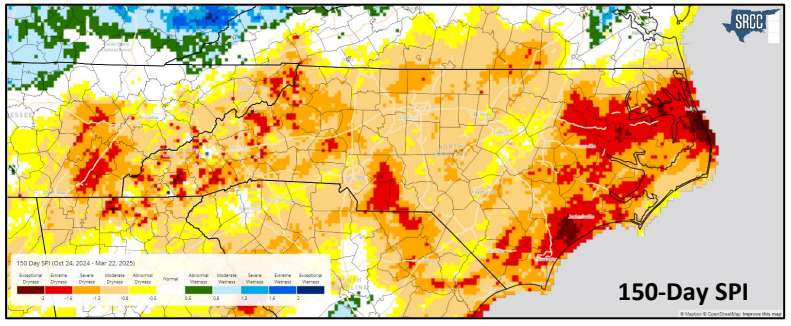

SRCC
7 Day Percent of Normal (Mar 15, 2025 - Mar 21, 2025)
7-Day PNP


SRCC
14 Day Percent of Normal (Mar 08, 2025 - Mar 21, 2025)
14-Day PNP



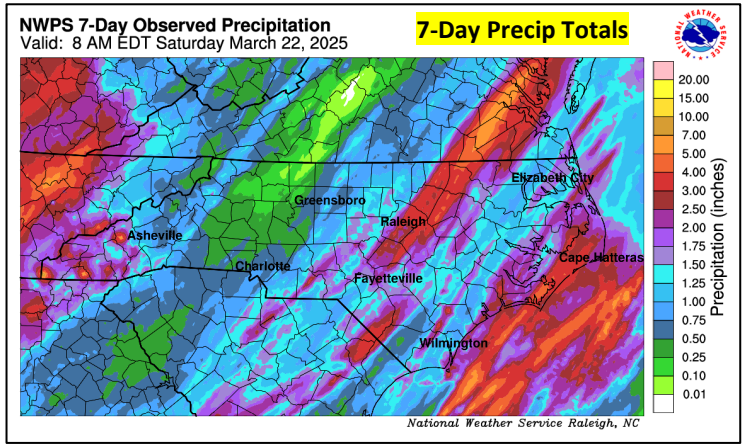


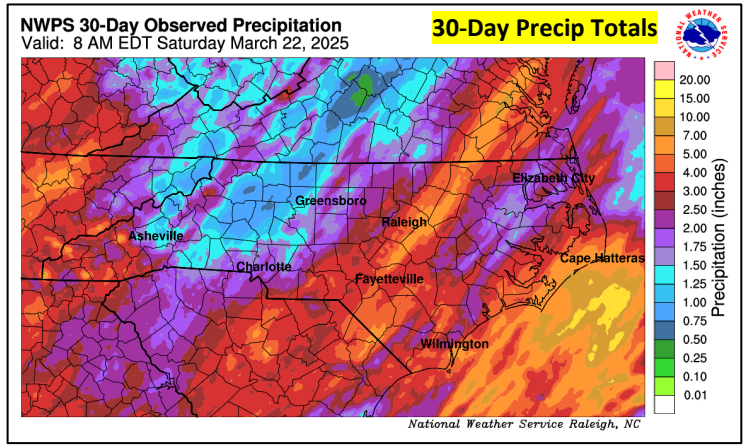


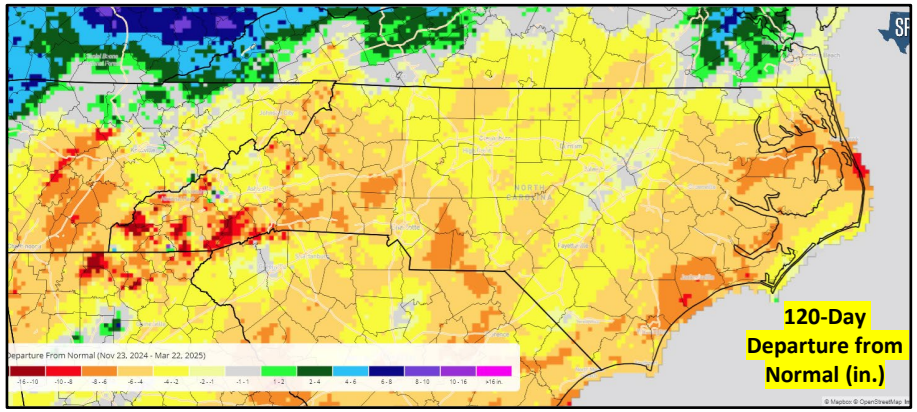


- Note the 7 & 30 day observed precip graphics (top right). Minimal rainfall for many of the Western Piedmont and Central/Northern Mountain counties.
- 120-Day Departure from Normal Precip – areas in darker orange & red represent 6-8” & 8-10” (bottom right).
- 30-Day SPI Map shows short-term increase in NW portion of state. (top left).
- 60/90/150-Day SPI picking up on longer-term deficits (left).

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



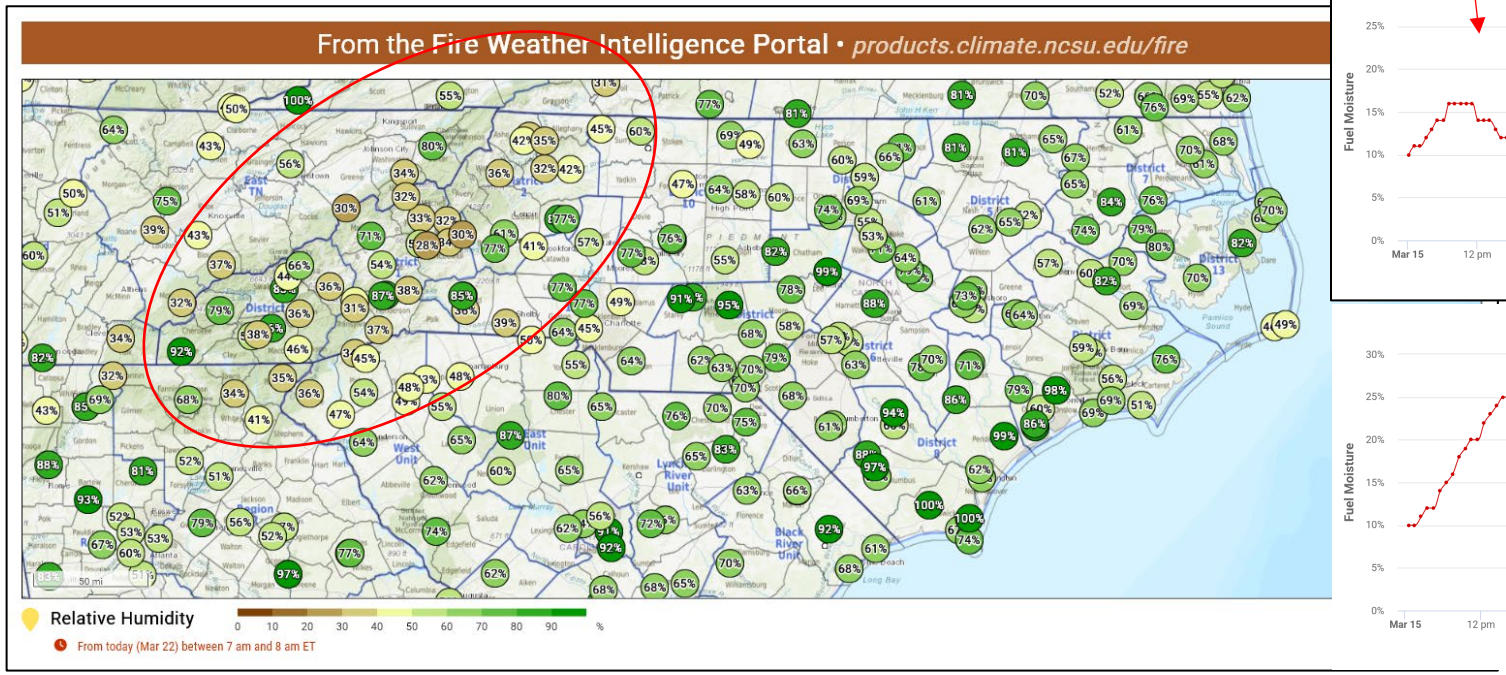


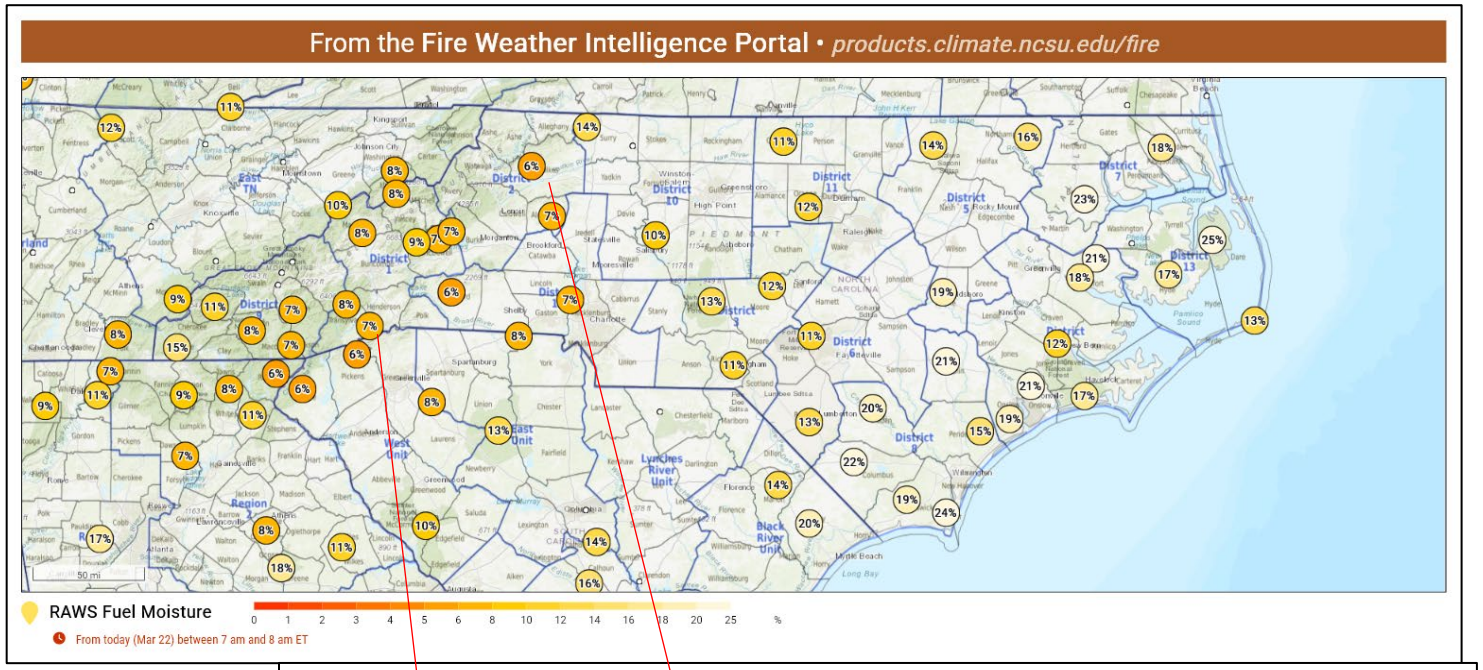


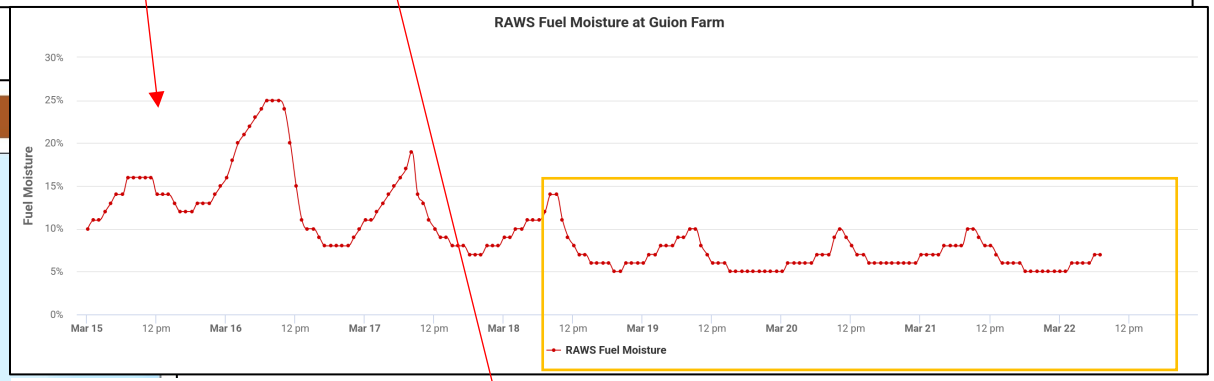
Today's Morning Recovery

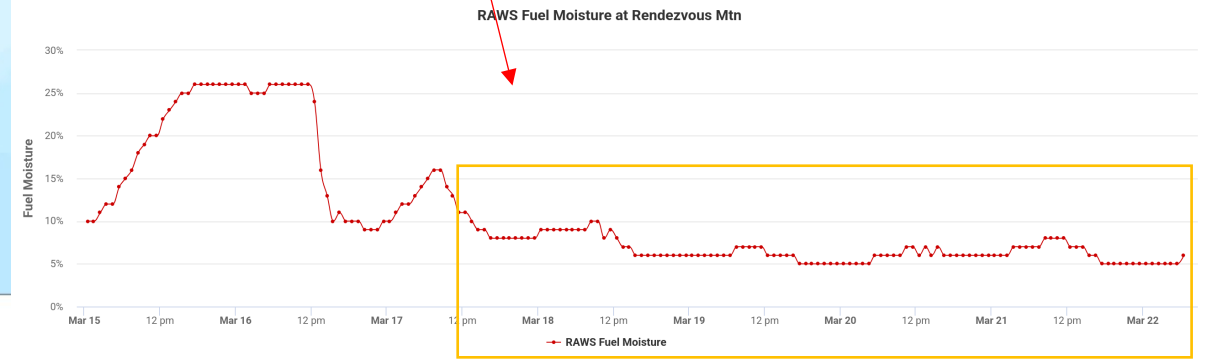
RH &
10-hr Electronic FM Stick Readings
@ 0800 Obs Hr.

-Better recovery along coastal counties
-Poor recovery continued for mtns and west pied.

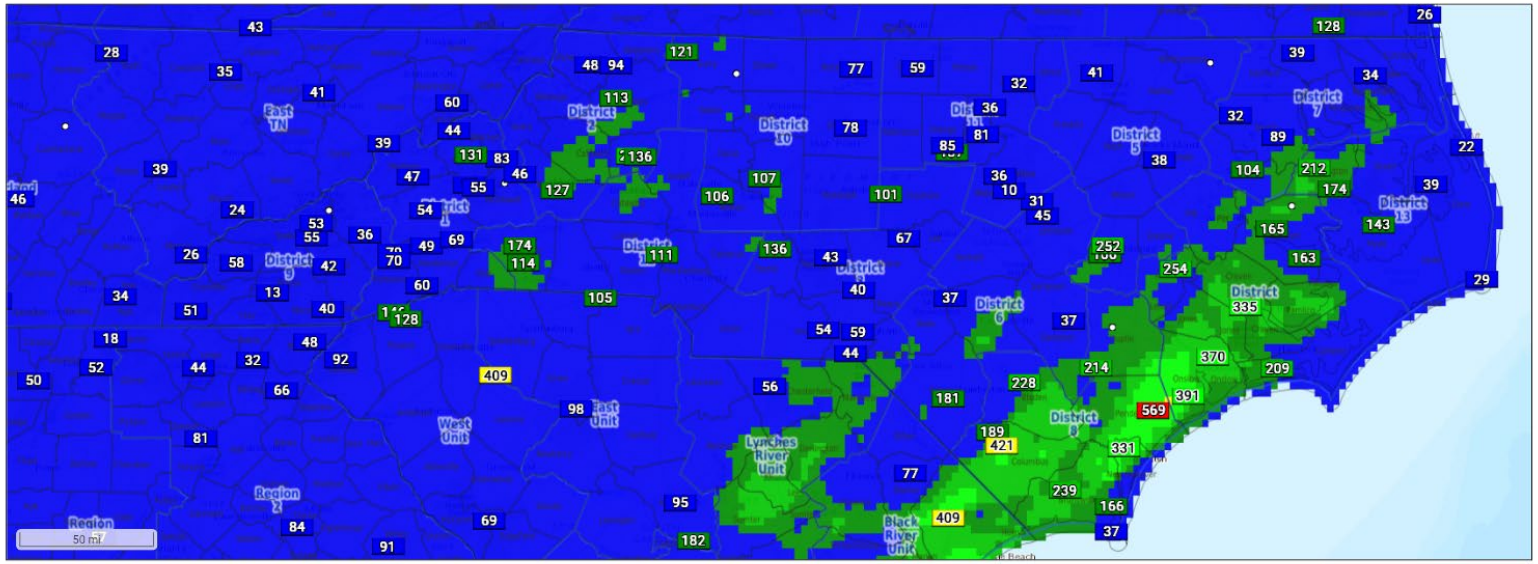


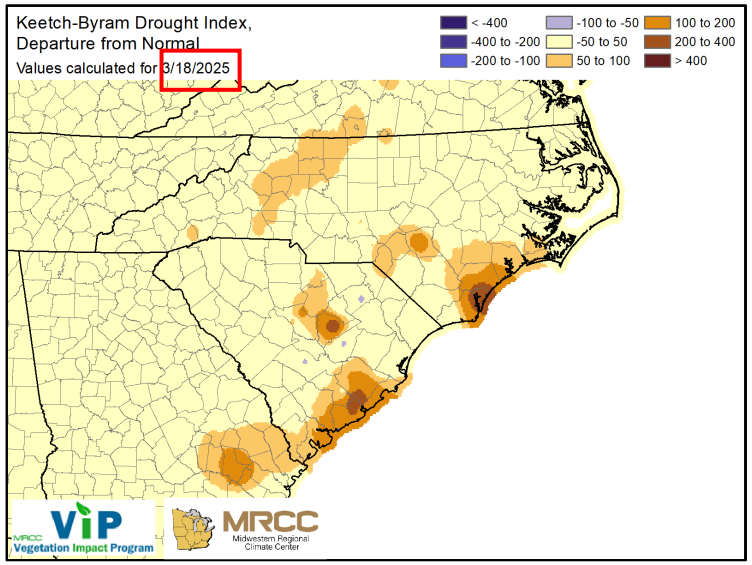






From the Fire Weather Intelligence Portal • *products.climate.ncsu.edu/fire*





*Even in areas with lower KBDI values (west), surface fuels have been readily available due to extremely dry air/poor recoveries + heat + wind.

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. 18, 2025**

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

The Main Takeaway

Last weekend's heavy rain led to improvements across eastern North Carolina, while Moderate Drought (D1) has expanded slightly into the northern Mountains.

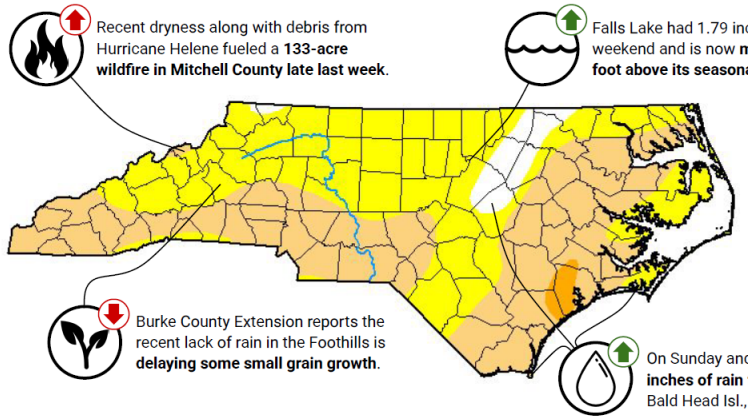
This Week's Summary

What a difference a month makes! In mid-February, a series of precipitation events affected our northern and western counties while missing the southeast; now, in mid-March, recent rains have targeted those coastal areas, bringing welcome improvements to streamflows and soil moisture levels, and chipping away at rainfall deficits that had been building since October last year.

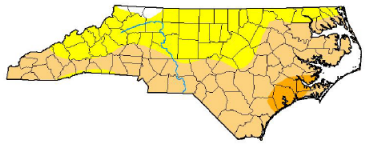
Next Week's Outlook

Two minor rain events are likely on Thursday afternoon and Monday evening. Each should bring a half-inch or less, so many areas will be below normal for the week.

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



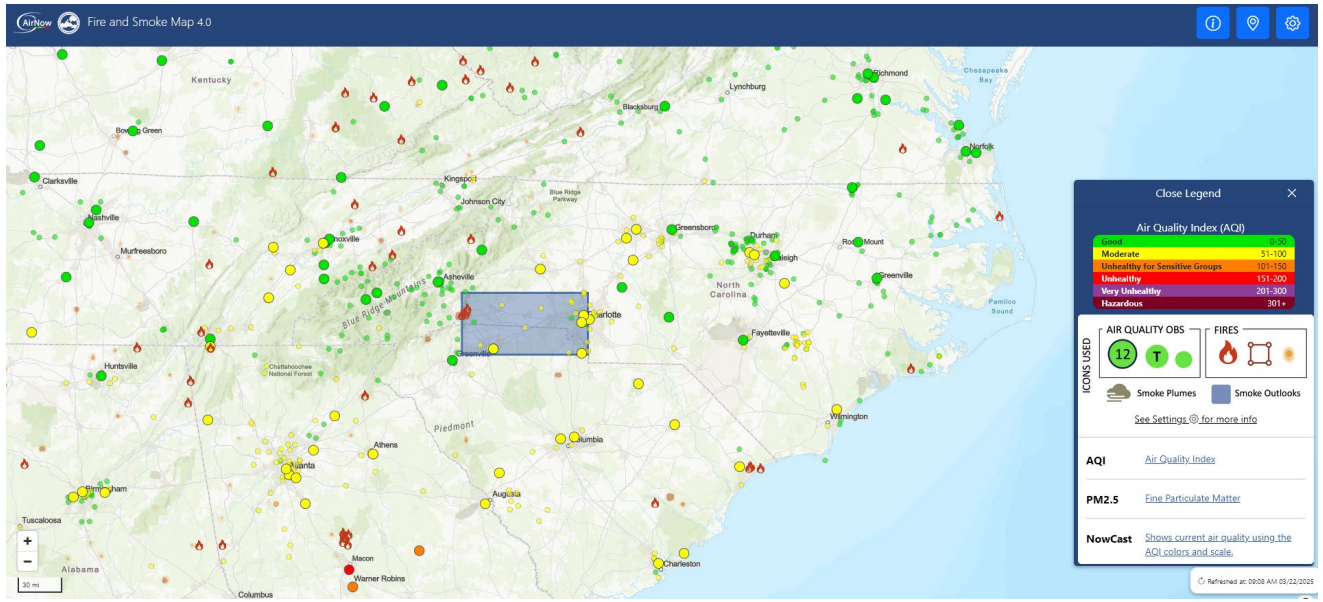
Last Week's Drought Status



Statewide Coverage by Category

Category	Current Coverage	Change Since Last Week
D0: Abnormally Dry	47.83%	+8.52%
D1: Moderate Drought	46.23%	-9.32%
D2: Severe Drought	1.34%	-2.56%
D3: Extreme Drought	0.00%	0.00%
D4: Exceptional Drought	0.00%	0.00%

Air Quality Notes



https://fire.airnow.gov/#

Statewide Burn Ban in Effect (NCFS Protection Zone).

Smoke Outlook being published daily for Polk County Fires via USFS D.S. ARA – click on the online box for digital version.

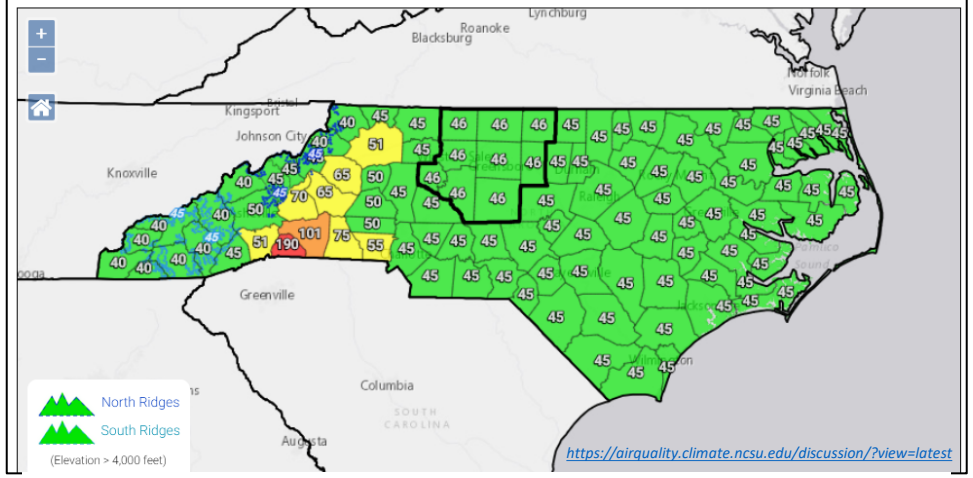
Extended Air Quality Outlook

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 21)	Max AQI · Ozone · PM2.5	38 to 175	Green to Red	download
Saturday (Mar 22)	**Max AQI** · Ozone · PM2.5	40 to 190	Green to Red	download
Sunday (Mar 23)	Max AQI · Ozone · PM2.5	40 to 100	Green to Yellow	download
Monday (Mar 24)	Max AQI · Ozone · PM2.5	45 to 75	Green to Yellow	download

Maximum Air Quality Index for Mar 22, 2025

0 51 101 151 201 301



This forecast was issued on **Friday, March 21, 2025** at **6:02 pm**. This forecast is currently valid.

Today's Air Quality Conditions

Multiple large wildfires (Fish Hook, Black Cove, and Deep Woods fires) across Polk County have been and will continue to produce smoky conditions and degraded air quality near and downstream of the fires. Satellite imagery continues to show alot of smoke being emitted from the wildfires. Recent DOT camera images in Polk County show worsening visibility, which indicates that smoke concentrations are likely increasing near the surface. Given this, along with a strong inversion and light to calm winds expected to develop tonight into Saturday morning, we are upgrading to a Code Red Air Quality Action Day for Polk County through Saturday night at midnight. We are also issuing a Code Orange Air Quality Action Day for Rutherford County effective now through Saturday night at midnight.

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

The main focus continues to be on several wildfires (Fish Hook, Black Cove, and Deep Woods fires) and resultant smoke in and around Polk County. With weak high pressure over the region Friday night and Saturday, strong low-level inversions are expected to develop overnight into Saturday morning. Surface winds will also likely be light to calm. Both factors will lead to unhealthy air quality due to smoke that is trapped near the surface and lingering because of limited air movement. Vertical mixing will increase heading into the afternoon and winds will increase and turn more out of the west-northwest as a weak front moves through, but air quality will remain degraded due to continued smoke in the area. As for the rest of the state, the overall condition of the airshed will still be rather clean, so we expect Code Green air quality once again. There may be a slight uptick in fine particulates due to widespread prescribed burning taking place on Friday across the Southeast, and that airmass projected to move into our state on Saturday before a weak cold front moves through.

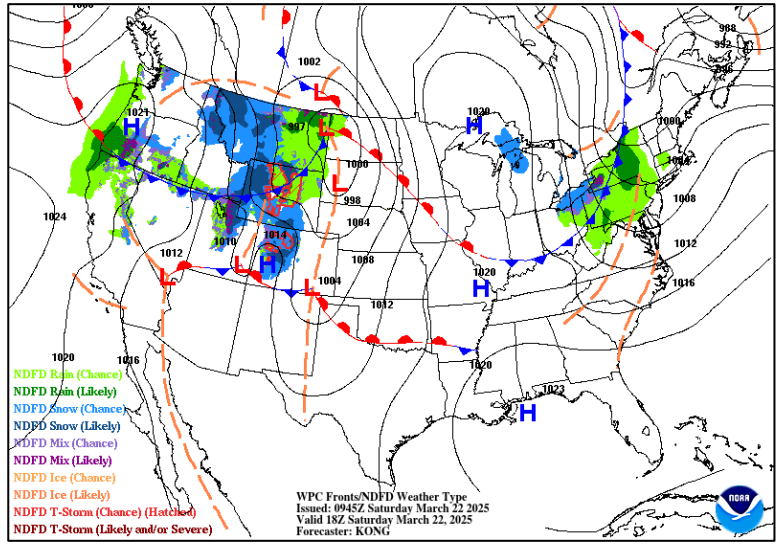
Outlook

Saturday's weak cold front will lift northward across the state on Sunday as a warm front. Southerly winds will then increase behind the front. Air quality should stay in Code Green range Sunday, but fine particulates are expected to rise a notch with the southerly wind advecting more pollutants in. The only exception will be Polk County and surrounding counties where continued impacts from wildfire smoke are still likely. A cold front will approach the state on Monday and bring an increase in clouds and rain chances, which will lower ozone averages. However, fine particulates may rise into low Code Yellow with the continued southerly flow ahead of the front.

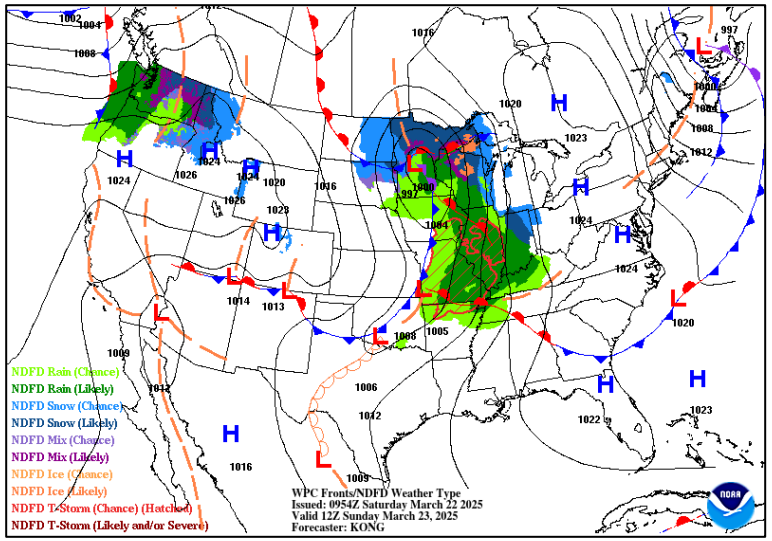
Author: *Jordan Root (jordan.root@deq.nc.gov) - NC Division of Air Quality*

WPC Forecasted Surface Fronts & Sea-Level Pressures

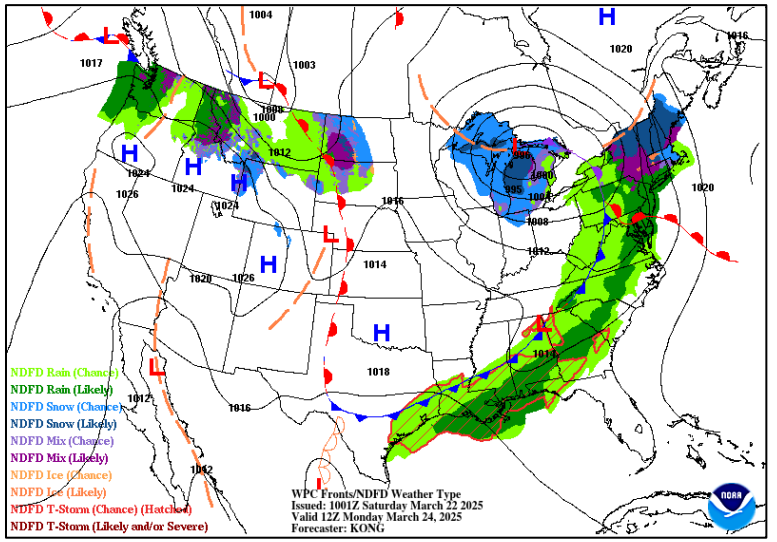
Day-1 @ 18Z (1400 EDT)



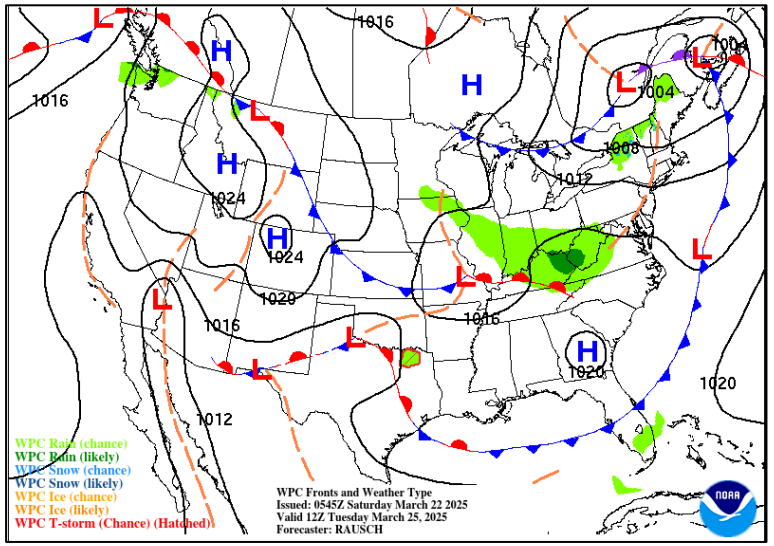
Day 2 - @ 12Z (0800 EDT)



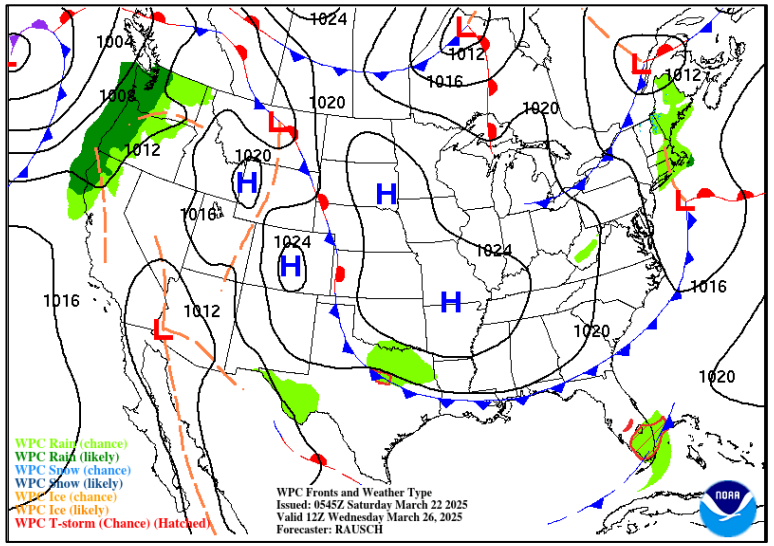
Day 3 @ 12Z (0800 EDT)



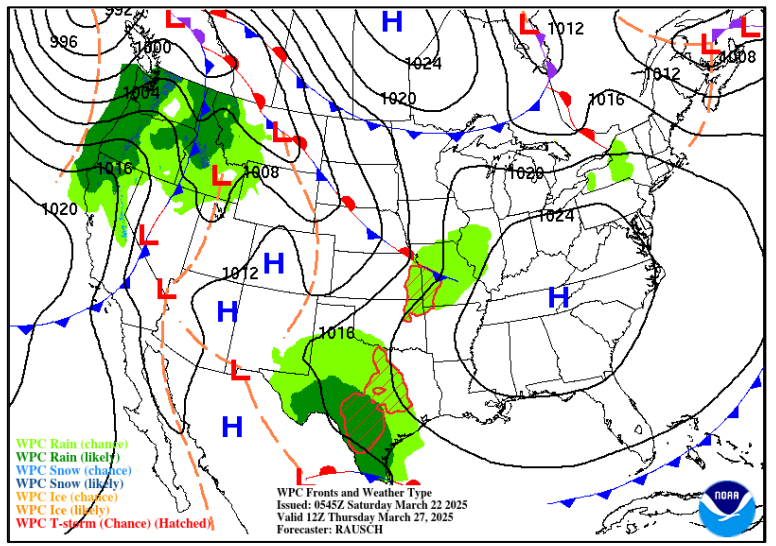
Day 4 @ 12Z (0800 EDT)



Day 5 @ 12Z (0800 EDT)



Day 6 @ 12Z (0800 EDT)

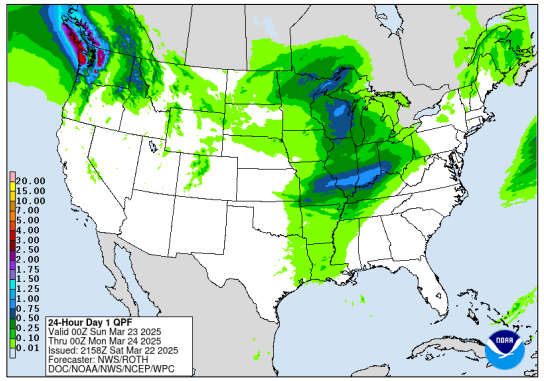


Location: https://www.wpc.ncep.noaa.gov/#

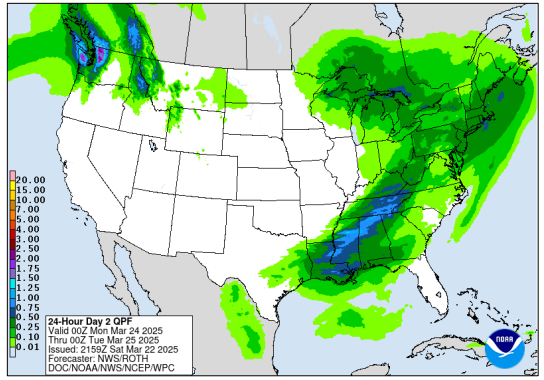
Quantitative Precipitation Forecast, 7-Day

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

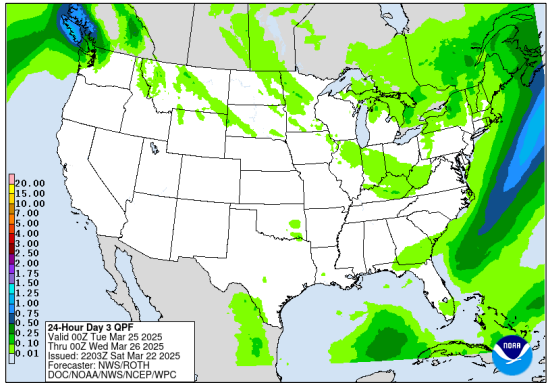
Day – 1



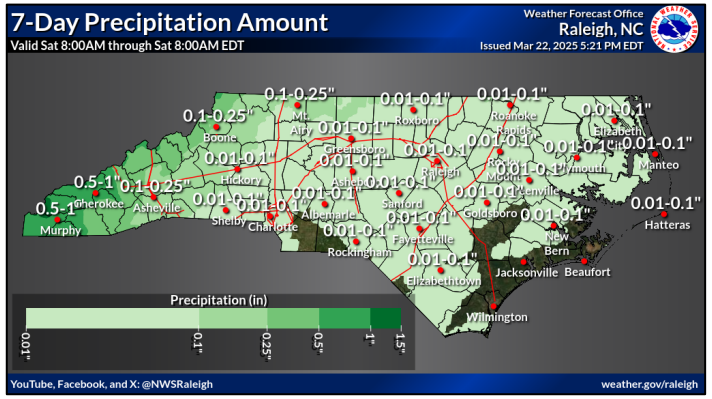
Day - 2



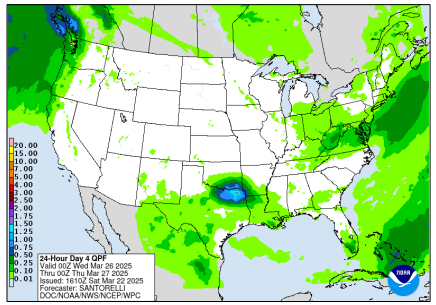
Day - 3



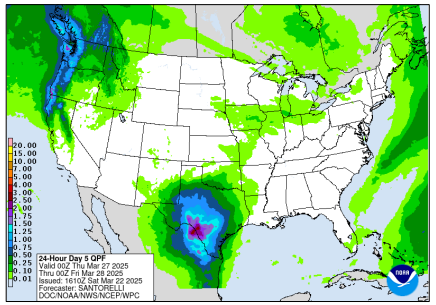
Zoom - Days 1 – 7 QPF



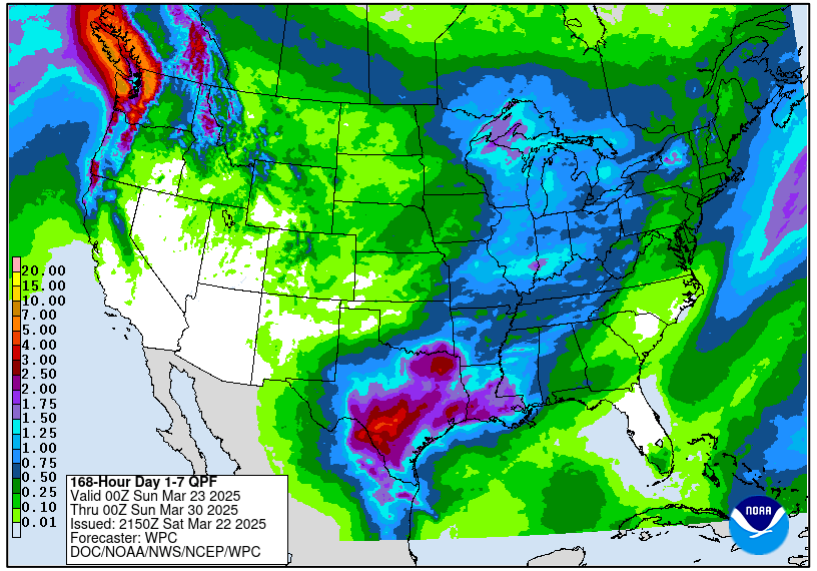
Day - 4



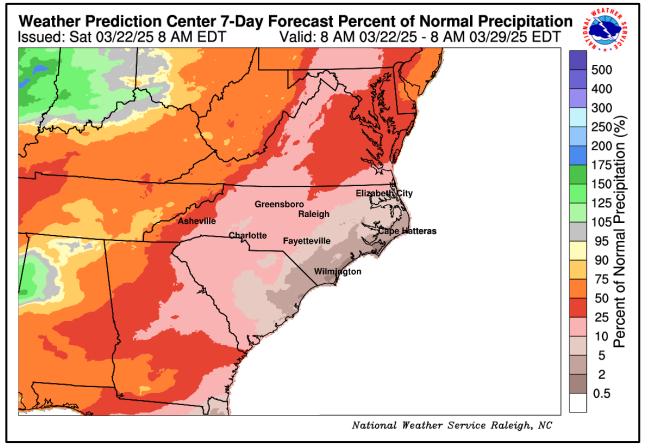
Day - 5



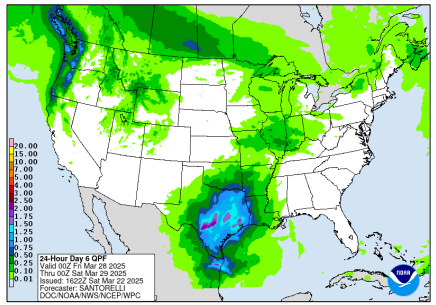
Days 1 – 7 QPF



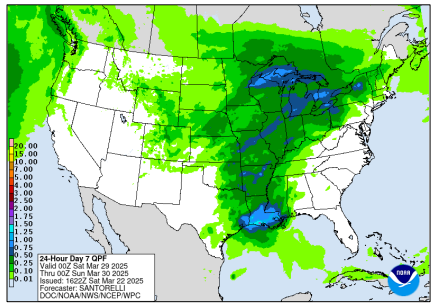
7-Day QPF, PNP



Day - 6

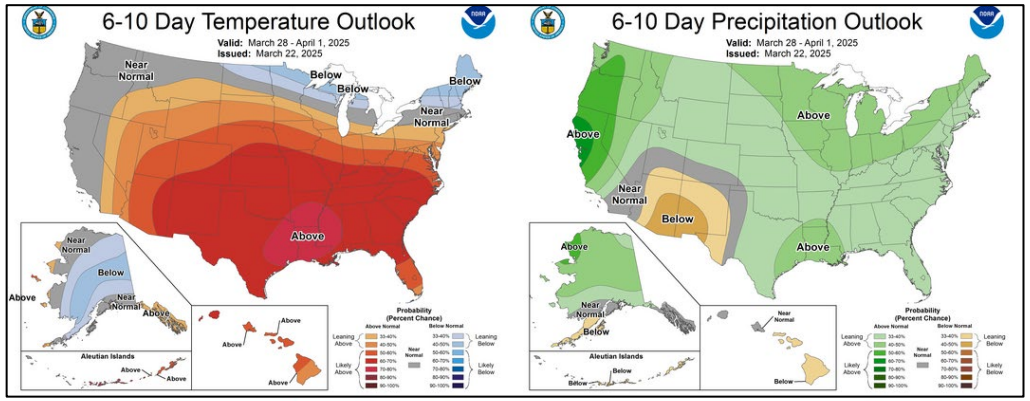


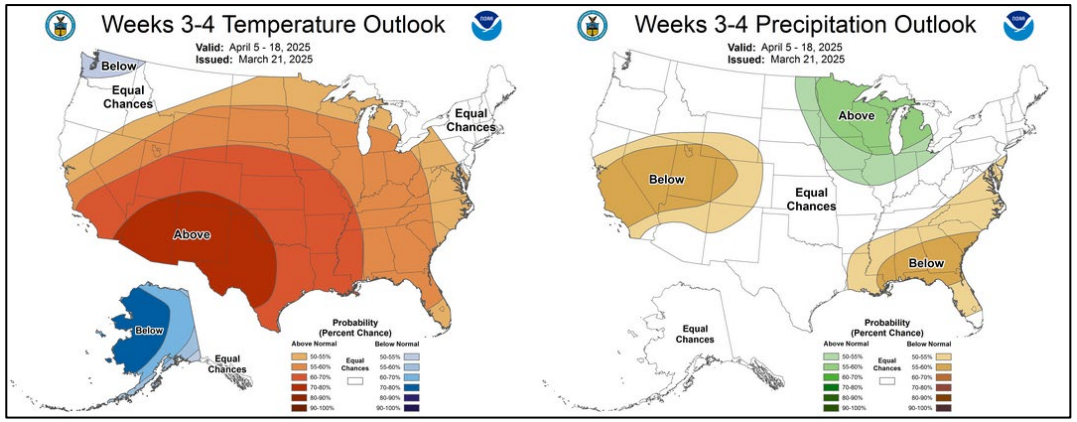
Day - 7

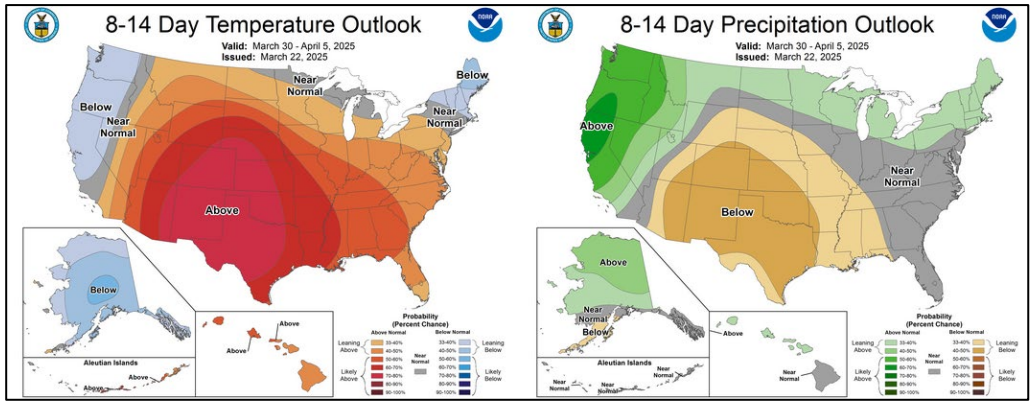


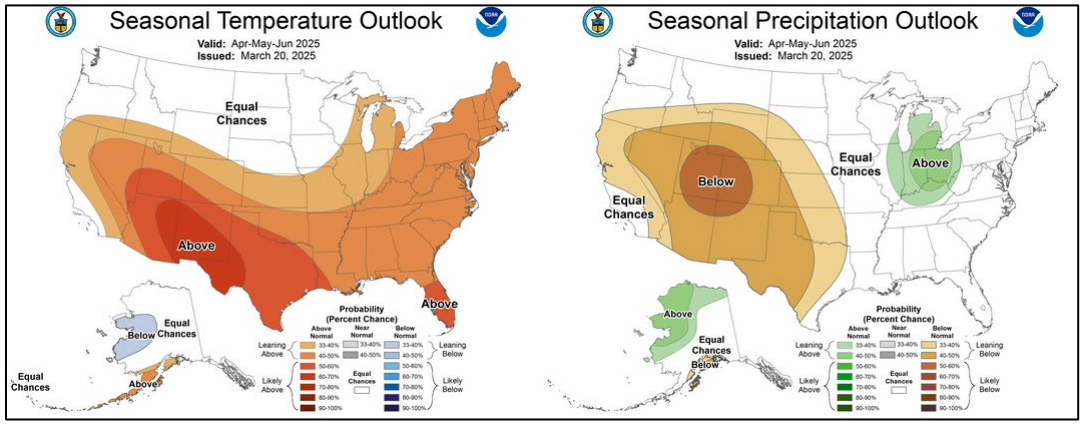
Temp & Precip Outlook

6-10 Day, 8-14 Day, Weeks 3-4, Seasonal (Apr-May-June)



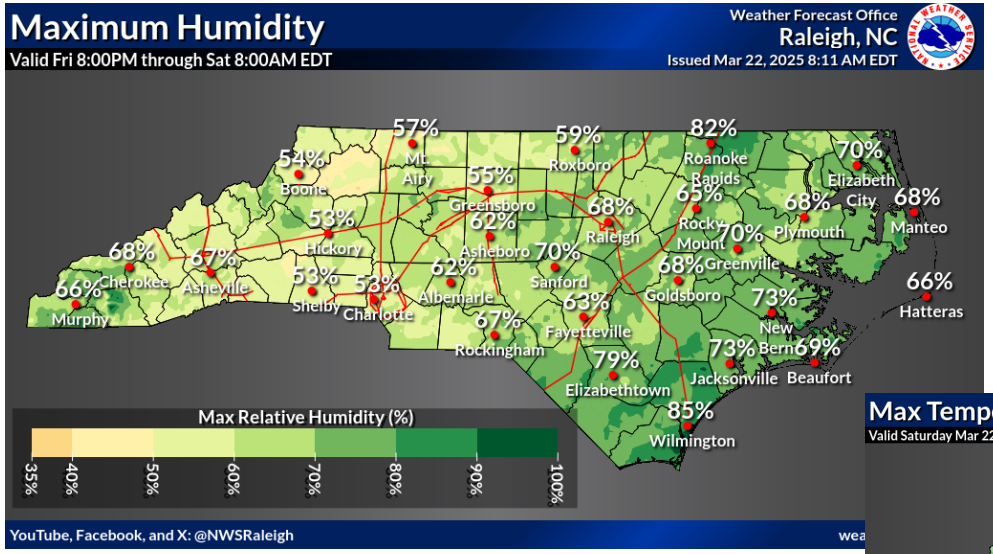




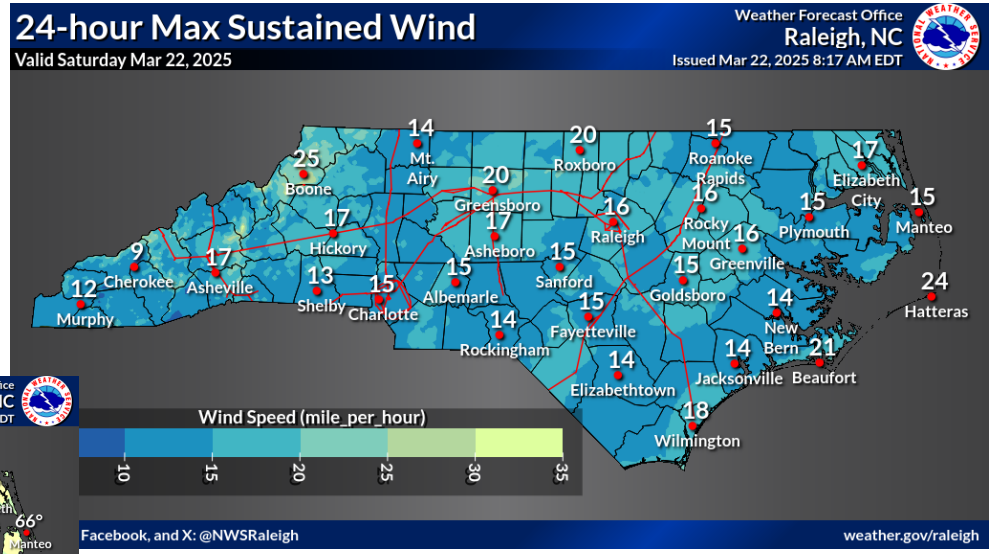


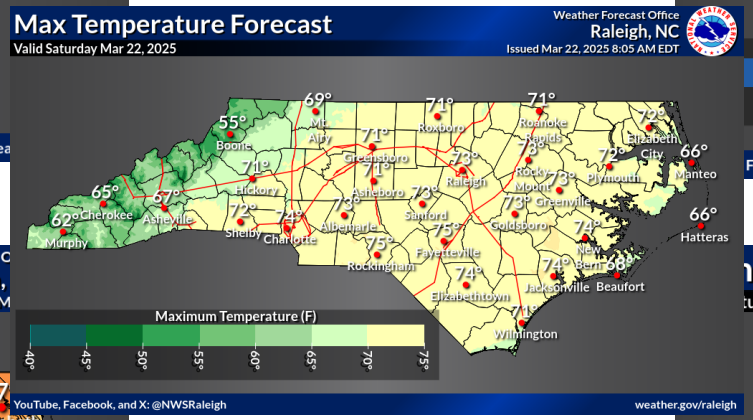
Source: https://www.cpc.ncep.noaa.gov/

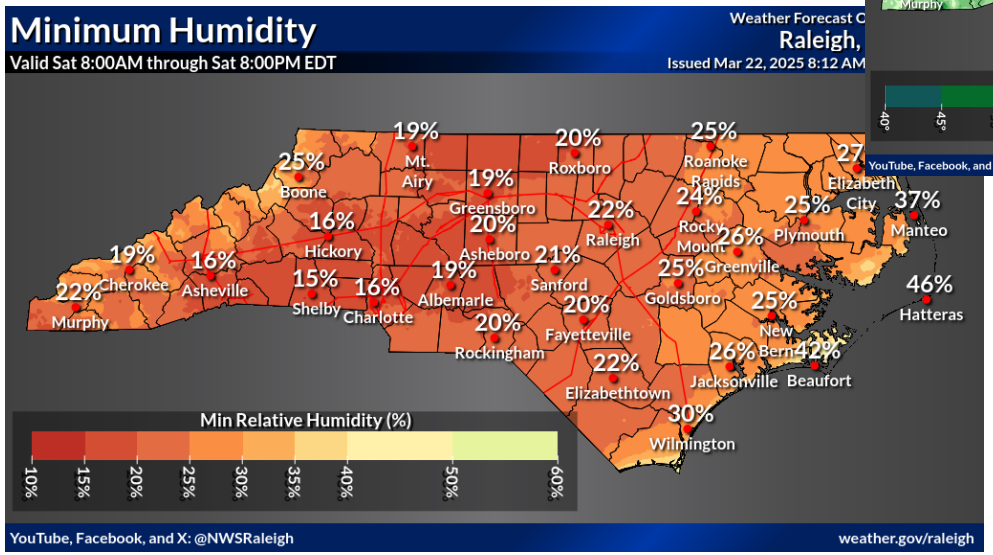
RH modeled “Max” last night

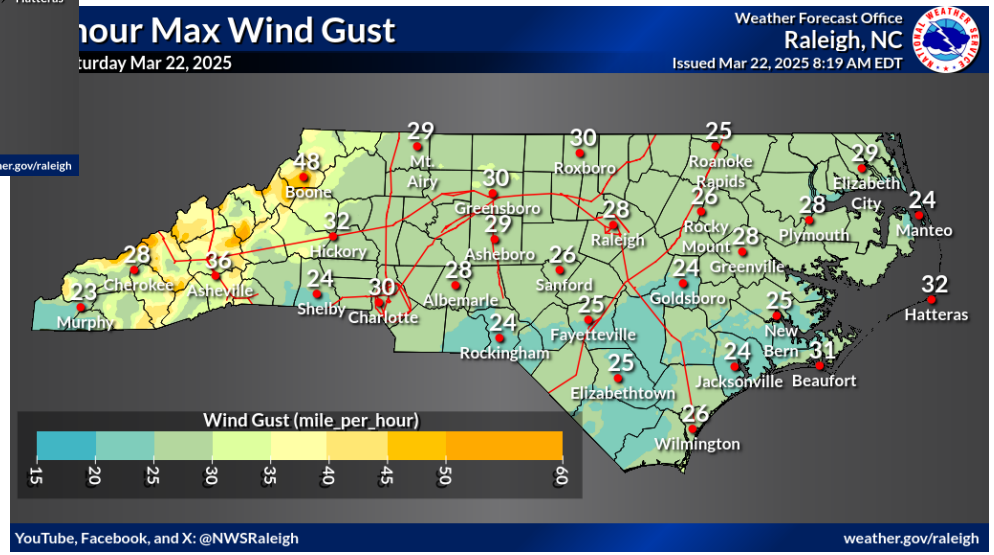


Day-1 24hr Max Sustained Winds









RH modeled “Minimums” today

Day-1 Max 24hr Wind Gusts

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

NFDRS Observations for Today

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

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

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

Averages by FDRA

FDRA	STATION_COUNT	NFDR_DATE	BI	ERC	IC	SC	KBDI	1HR	10HR	100HR	1000HR	HRB	WOODY	TEMP	RH	WIND	PREC
Southern Highlands	3	2025-03-22	155.73 99.6%	62.50 99.1%	21.53 99.4%	91.40 99.3%	48.00	8.69 5.6%	12.57 7.7%	16.74 17.0%	21.19 63.0%	46.50	64.33	61.7°F	22.0%	WNW 8.7 mph	0.00 i
Central Mountains	3	2025-03-22	142.40 98.3%	67.50 99.6%	21.30 98.9%	64.87 95.1%	60.67	8.66 6.9%	12.41 4.1%	15.68 8.1%	20.06 51.7%	41.53	53.00	64.7°F	18.7%	SW 5.3 mph	0.00 i
Northern Highlands	2	2025-03-22	164.70 99.1%	62.60 98.7%	25.80 99.6%	99.40 98.2%	77.50	8.06 1.7%	11.37 2.1%	15.72 10.4%	20.03 51.1%	50.00	80.00	58.5°F	23.5%	SW 8.5 mph	0.00 i
Blue Ridge Escarpment	3	2025-03-22	139.77 96.3%	60.80 96.0%	29.03 99.6%	69.27 93.1%	116.67	7.18 2.5%	10.04 2.0%	13.71 3.5%	17.64 20.5%	85.13	92.00	69.0°F	15.3%	WNW 10.3 mph	0.00 i
Western Piedmont	3	2025-03-22	126.40 92.2%	60.73 94.9%	21.73 97.9%	56.00 89.0%	106.33	8.26 7.0%	12.57 14.3%	15.81 17.5%	20.61 76.6%	68.03	72.00	71.3°F	18.3%	W 8.7 mph	0.00 i
Sandhills	3	2025-03-22	78.80 99.7%	53.70 79.6%	17.20 86.4%	31.03	51.33	9.06 19.9%	13.17 15.8%	16.82 25.7%	20.24 64.0%	36.67	63.33	70.3°F	22.3%	W 10.7 mph	0.00 i
Eastern Piedmont	4	2025-03-22	140.48 93.9%	54.05 76.1%	18.10 92.9%	79.48 93.6%	31.00	10.01 24.4%	13.69 22.7%	17.64 39.7%	20.59 78.3%	49.70	71.00	67.3°F	29.8%	WSW 10.8 mph	0.00 i
Southern Coastal	7	2025-03-22	101.49 82.7%	54.70 87.6%	15.43 92.9%	43.50 82.7%	281.86	9.03 11.4%	15.93 38.7%	18.74 46.5%	22.54 88.7%	50.00	90.00	71.0°F	23.4%	SW 5.0 mph	0.00 i
Northern Coastal	4	2025-03-22	103.30 80.3%	53.53 87.4%	17.03 95.1%	41.93 74.3%	116.50	8.71 11.2%	15.19 34.8%	19.23 52.8%	22.52 91.6%	50.00	90.00	71.0°F	23.8%	WSW 7.8 mph	0.00 i

NFDRS Forecast Observations for Tomorrow

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

Forecasted indices for western FDRAs continue to show critical dryness in 10's, and 100's. Note IC near or above 90th percentile.

Averages by FDRA

FDRA	STATION_COUNT	NFDR_DATE	BI	ERC	IC	SC	KBDI	1HR	10HR	100HR	1000HR	HRB	WOODY	TEMP	RH	WIND	DUR1
Southern Highlands	3	2025-03-23	133.77 97.2%	52.37 93.8%	14.70 96.1%	73.20 96.7%	48.00	10.78 20.2%	12.48 3.9%	16.06 6.7%	21.11 63.0%	58.00	69.33	61.7°F	34.0%	S 8.3 mph	0.0
Central Mountains	3	2025-03-23	128.23 96.2%	58.57 96.7%	13.63 94.8%	61.57 94.1%	60.67	10.63 24.4%	12.47 4.1%	15.14 2.9%	19.96 51.7%	39.73	56.67	64.0°F	27.7%	S 6.0 mph	0.0
Northern Highlands	2	2025-03-23	121.40 91.1%	54.70 94.9%	14.25 94.4%	56.55 87.3%	77.50	10.12 10.2%	11.11 2.1%	15.11 4.0%	19.93 51.1%	50.00	80.00	57.5°F	32.5%	S 6.0 mph	0.0
Blue Ridge Escarpment	3	2025-03-23	98.23 79.6%	46.90 84.9%	13.93 89.8%	43.17 77.0%	116.67	9.51 24.9%	11.26 5.2%	13.04 0.9%	17.10 9.3%	96.67	99.33	62.0°F	27.0%	S 5.7 mph	0.0
Western Piedmont	3	2025-03-23	79.20 71.4%	49.20 81.9%	10.27 78.4%	24.97 65.7%	106.33	10.02 29.8%	12.89 14.3%	15.15 6.2%	20.58 76.6%	76.30	82.67	67.0°F	26.7%	S 4.0 mph	0.0
Sandhills	3	2025-03-23	55.53 93.7%	53.30 77.9%	10.53 64.7%	13.20 97.2%	51.33	9.98 32.4%	12.92 15.8%	15.94 14.6%	20.30 64.0%	36.67	63.33	67.7°F	27.0%	S 3.7 mph	0.0
Eastern Piedmont	4	2025-03-23	67.45 35.1%	46.23 59.6%	7.75 53.7%	18.70 24.8%	31.00	10.59 39.1%	13.60 22.7%	16.74 22.6%	20.68 78.3%	66.65	84.25	64.0°F	32.8%	S 2.8 mph	0.0
Southern Coastal	7	2025-03-23	73.47 58.4%	52.23 82.8%	8.80 71.7%	20.34 45.5%	281.86	10.26 22.6%	13.85 13.1%	17.99 30.4%	22.58 88.7%	50.00	90.00	67.3°F	33.4%	S 2.9 mph	0.0
Northern Coastal	4	2025-03-23	69.05 50.9%	46.98 74.8%	7.50 61.0%	19.93 39.2%	116.50	10.73 36.6%	13.95 21.1%	18.28 38.0%	22.55 91.6%	50.00	90.00	60.3°F	43.0%	SE 4.3 mph	0.0

Important notes for next slide group:

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

- These will be included in next week's slides

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

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

*Growing Season Index (GSI) is beginning to green the live herbaceous & woody vegetation in several of the Fire Danger Rating Areas (FDRAs) within the NFDRS model. This greening directly impacts Fuel Model X outputs. Remember that it is only a model, and this Spring is not shaping up to be normal based on recent snows, freezes, rain events, and warm spells relating to actual plant growth. Model adjustments may be needed to more accurately reflect conditions moving through Spring.

Tool Summary:

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

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

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

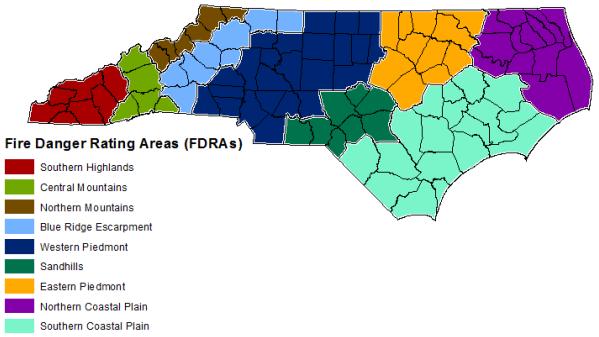
- Low to Moderate (0 to 74th percentile); shown in blue-green
- High (75th to 89th percentile); shown in yellow
- Very High to Extreme (90th+ percentile); shown in red and labeled as Critical

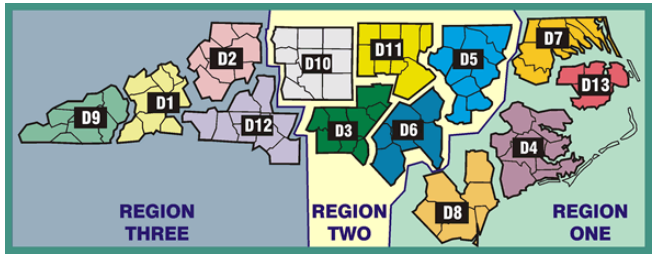
Dead fuel moisture forecast values are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

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

Other Notes:

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





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

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

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

FDRA – Southern Highlands

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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	66	60	64	61	62	68	68
Avg. Min. Humidity (%)	31	30	32	34	27	33	48
Avg. 20' Wind Speed (mph)	6	7	6	8	4	4	5
Avg. Wind Direction*	SW	WSW	W	WNW	WSW	SSW	SSE
Avg. Probability of Precip. (%)	85	49	12	8	1	5	16
Days Since a Wetting Rain**	3.3	0.0	1.0				
Forecast ERC (Fuel Model X)	52.4	30.5	42.8	38.5	38.1	36.8	29.3
Forecast BI (Fuel Model X)	133.8	89.0	116.2	111.9	75.2	75.7	71.8
Forecast IC (Fuel Model X)	14.7	7.7	13.5	12.0	8.3	10.7	8.8
Forecast 100-Hr. FMC	16.1	15.9	16.7	16.7	16.4	15.9	15.7
Forecast 1000-Hr. FMC	21.1	21.0	20.8	20.7	20.6	20.5	20.3
KBDI	48.0						

Data Source:

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

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

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

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

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

FDRA – Central Mountains

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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	68	65	68	65	65	74	74
Avg. Min. Humidity (%)	28	27	28	29	24	29	39
Avg. 20' Wind Speed (mph)	5	6	5	6	3	3	4
Avg. Wind Direction*	SSW	WSW	W	NW	W	SSW	SSW
Avg. Probability of Precip. (%)	76	54	18	9	1	5	14
Days Since a Wetting Rain**	5.0	0.0	1.0				
Forecast ERC (Fuel Model X)	58.6	39.8	47.2	45.2	43.3	42.8	34.8
Forecast BI (Fuel Model X)	128.2	96.1	106.3	111.5	82.2	81.0	75.9
Forecast IC (Fuel Model X)	13.6	9.0	12.6	12.0	8.6	11.5	9.5
Forecast 100-Hr. FMC	15.1	15.6	16.2	16.1	15.8	15.3	15.1
Forecast 1000-Hr. FMC	20.0	19.8	19.7	19.6	19.5	19.3	19.2
KBDI	60.7						

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

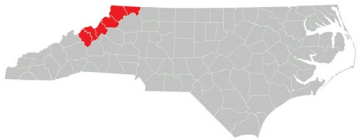
Values in the table above are averages from 3 stations in this FDRA:

- **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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	62	61	61	59	59	70	70
Avg. Min. Humidity (%)	30	28	31	35	23	31	46
Avg. 20' Wind Speed (mph)	8	10	10	11	7	6	7
Avg. Wind Direction*	SW	WSW	W	WNW	WNW	WSW	SSW
Avg. Probability of Precip. (%)	69	44	25	13	4	7	12
Days Since a Wetting Rain**	3.0	0.0	1.0				
Forecast ERC (Fuel Model X)	54.7	43.1	52.1	45.4	45.5	48.8	40.4
Forecast BI (Fuel Model X)	121.4	112.5	122.7	127.8	94.2	100.6	94.3
Forecast IC (Fuel Model X)	14.3	11.1	15.6	14.1	10.5	15.5	12.4
Forecast 100-Hr. FMC	15.1	15.0	14.8	14.6	14.4	14.0	13.8
Forecast 1000-Hr. FMC	19.9	19.8	19.6	19.5	19.4	19.2	19.0
KBDI	77.5						

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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	67	67	68	66	64	73	74
Avg. Min. Humidity (%)	26	25	25	27	22	27	39
Avg. 20' Wind Speed (mph)	5	7	7	8	4	4	5
Avg. Wind Direction*	SW	WSW	W	WNW	W	SW	SSW
Avg. Probability of Precip. (%)	58	41	17	8	2	5	9
Days Since a Wetting Rain**	7.0	0.0	1.0				
Forecast ERC (Fuel Model X)	46.9	36.0	43.9	39.4	38.9	41.0	36.3
Forecast BI (Fuel Model X)	98.2	79.7	97.6	95.7	59.3	77.1	76.3
Forecast IC (Fuel Model X)	13.9	10.1	15.3	13.3	7.8	12.2	10.3
Forecast 100-Hr. FMC	13.0	13.2	13.5	13.3	13.1	12.8	12.7
Forecast 1000-Hr. FMC	17.1	16.6	16.4	16.1	15.9	15.6	15.3
KBDI	116.7						

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**

GSI values for relative greenness impacting live fuel load transfer, will evaluate FM-X model for adjustment.

***Note 100-hr and 1000-hr dryness, not included in FM-X index values & forecast to be in the ≤ 10th percentile (extremely dry).*

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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	71	72	71	71	66	75	80
Avg. Min. Humidity (%)	22	39	26	24	22	28	37
Avg. 20' Wind Speed (mph)	4	9	5	7	3	4	5
Avg. Wind Direction*	S	SW	W	WNW	WNW	SSW	SSW
Avg. Probability of Precip. (%)	32	53	16	7	0	6	9
Days Since a Wetting Rain**	4.3	2.7	3.7				
Forecast ERC (Fuel Model X)	49.2	39.7	36.8	35.7	35.7	33.5	24.7
Forecast BI (Fuel Model X)	79.2	86.5	66.9	72.7	54.3	57.7	46.6
Forecast IC (Fuel Model X)	10.3	12.0	10.2	10.9	7.3	9.6	7.3
Forecast 100-Hr. FMC	15.1	14.9	14.6	14.3	14.2	14.0	14.0
Forecast 1000-Hr. FMC	20.6	20.3	20.1	19.9	19.7	19.5	19.3
KBDI	106.3						

Data Source:

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

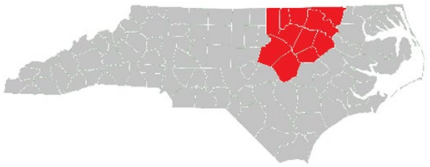
Values in the table above are averages from 3 stations in this FDRA:

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

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

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

FDRA – Eastern Piedmont



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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	69	70	70	69	63	74	79
Avg. Min. Humidity (%)	25	52	28	28	26	32	41
Avg. 20' Wind Speed (mph)	3	9	4	6	4	5	6
Avg. Wind Direction*	SSW	SSW	W	W	WNW	SSW	SSW
Avg. Probability of Precip. (%)	16	60	23	11	0	7	7
Days Since a Wetting Rain**	1.0	2.0	3.0				
Forecast ERC (Fuel Model X)	46.2	35.8	35.5	29.3	25.8	24.0	19.7
Forecast BI (Fuel Model X)	67.5	102.4	67.9	66.0	41.3	37.3	33.4
Forecast IC (Fuel Model X)	7.8	12.7	9.8	9.8	5.7	6.3	5.4
Forecast 100-Hr. FMC	16.7	16.4	16.0	15.6	15.3	15.0	14.9
Forecast 1000-Hr. FMC	20.7	20.8	20.7	20.5	20.3	20.1	19.9
KBDI	31.0						

Data Source:

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

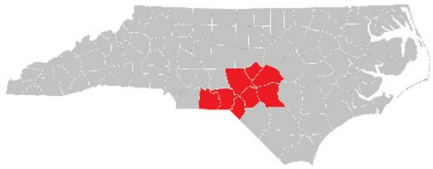
Values in the table above are averages from 4 stations in this FDRA:

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

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

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

FDRA – Sandhills



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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	73	72	73	72	66	76	80
Avg. Min. Humidity (%)	23	47	24	23	21	28	38
Avg. 20' Wind Speed (mph)	4	8	4	7	4	4	5
Avg. Wind Direction*	S	SW	W	W	SSW	SSW	SSW
Avg. Probability of Precip. (%)	13	59	13	5	0	6	8
Days Since a Wetting Rain**	2.3	3.3	4.3				
Forecast ERC (Fuel Model Z)	50.5	47.3	51.9	52.0	54.1	54.2	44.6
Forecast BI (Fuel Model Z)	35.7	54.2	41.4	50.6	39.0	42.2	39.5
Forecast IC (Fuel Model Z)	10.1	14.2	12.1	15.2	10.5	12.2	10.1
Forecast 100-Hr. FMC	15.9	15.5	15.1	14.8	14.5	14.2	14.1
Forecast 1000-Hr. FMC	20.3	20.3	20.1	19.9	19.7	19.5	19.2
KBDI	51.3						

Data Source:

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

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

- **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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	63	74	68	68	62	71	75
Avg. Min. Humidity (%)	43	53	29	34	29	36	48
Avg. 20' Wind Speed (mph)	5	9	5	6	5	6	6
Avg. Wind Direction*	SE	SSW	W	W	WNW	SSW	SSW
Avg. Probability of Precip. (%)	2	46	16	11	2	2	2
Days Since a Wetting Rain**	4.5	5.5	6.5				
Forecast ERC (Fuel Model X)	47.0	34.0	43.1	41.4	44.4	43.9	39.1
Forecast BI (Fuel Model X)	69.1	120.8	83.2	101.3	91.0	85.2	79.9
Forecast IC (Fuel Model X)	7.5	10.9	9.1	10.5	9.3	9.1	8.2
Forecast 100-Hr. FMC	18.3	17.9	17.6	17.4	17.2	16.8	16.6
Forecast 1000-Hr. FMC	22.5	22.5	22.3	22.2	22.0	21.9	21.6
KBDI	116.5						

Data Source:

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

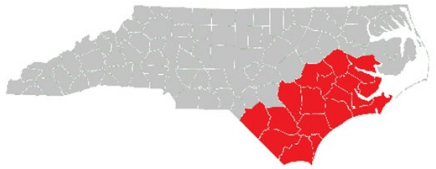
Values in the table above are averages from 4 stations in this FDRA:

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

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

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

FDRA – South Coast



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	SUN 23-Mar	MON 24-Mar	TUE 25-Mar	WED 26-Mar	THU 27-Mar	FRI 28-Mar	SAT 29-Mar
Avg. Max. Temp. (°F)	71	76	72	73	65	74	79
Avg. Min. Humidity (%)	32	48	25	29	25	34	44
Avg. 20' Wind Speed (mph)	4	7	4	6	4	4	5
Avg. Wind Direction*	S	SSW	W	WSW	WNW	SSW	SSW
Avg. Probability of Precip. (%)	1	39	8	4	0	1	1
Days Since a Wetting Rain**	4.9	5.9	6.9				
Forecast ERC (Fuel Model X)	52.2	40.9	47.7	48.8	53.4	48.9	40.8
Forecast BI (Fuel Model X)	73.5	128.1	82.6	105.9	87.4	91.8	93.0
Forecast IC (Fuel Model X)	8.8	13.4	9.7	12.9	10.4	10.5	9.9
Forecast 100-Hr. FMC	18.0	17.6	17.3	17.1	16.7	16.1	16.0
Forecast 1000-Hr. FMC	22.6	22.6	22.4	22.2	22.0	21.8	21.5
KBDI	281.9						

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)

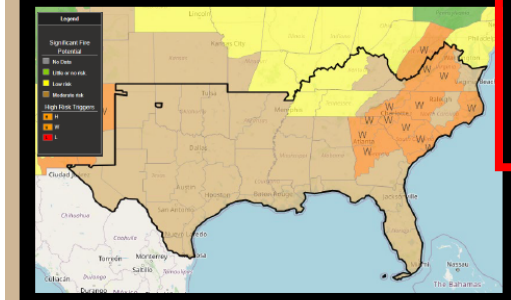
KEY	Low to Moderate Burning Conditions	Burning Conditions Can be High CAUTION	Burning Conditions Can be Critical WATCH OUT!
Avg. Max. Temp.	Less than 50°F	Between 50°F and 65°F	Greater than 65°F
Avg. Min. Humidity	Greater than 40%	Between 35% and 40%	Less than 35%
Avg. 20' Wind Speed	Less than 5 mph	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**

SACC Daily Outlook

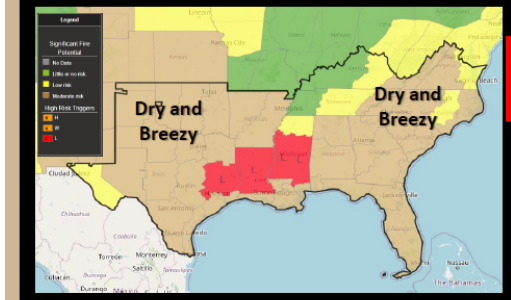
Saturday, March 22, 2025

Significant Fire Potential Outlook Today



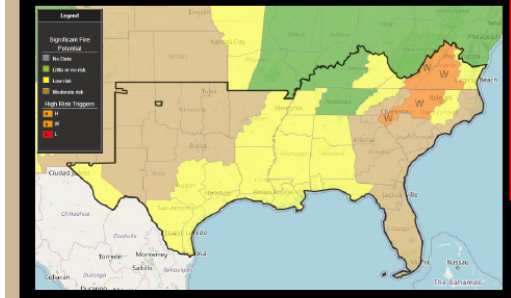
- Extremely dry fuels will align with critical fire weather across portions of VA, NC, SC and GA today, leading to a **potential wildfire outbreak**; established fires may also experience escaped containment and significant growth
- RH in the higher terrain is in the 20s and 30s this morning; look for widespread minimum RH from 10-20% ahead of an approaching dry cold front; W/SW to W winds will gust from 25-40 mph in lower elevations and 40-50 mph east of ridges; winds will turn NW tonight and remain elevated in the mountains, where the burn period may extend into tomorrow
- A sea breeze front will hover near the coast in NC and SC, potentially leading to multiple unexpected wind shifts
- The rest of the Apps, Mid-Mississippi Valley and Southeast will be dry and warm, with IA likely; sea breezes will also affect the eastern Gulf Coast and all of FL
- Dry and breezy conditions could lead to growth on existing incidents over AR, OK and TX, while RH will increase from south to north later today and tonight; thunderstorms in the northern tier of the region could produce new ignitions
- Far western TX and OK will see RH below 15%, with SW to W wind gusts up to 40 mph

Significant Fire Potential Outlook Sunday



- Well above normal temperatures will quickly return to the eastern states ahead of a low pressure system and cold front in the Mississippi Valley and Southern Plains
- The Appalachians and Piedmont may see wind triggers added, with SW gusts of 20-40 mph developing by the afternoon, highest N/NE of ridges and locally stronger at night, while RH throughout the Southeast will range from 15-30%, locally in the single digits in the mountains early
- Look for a line of showers and thunderstorms to develop ahead of the cold front across KY and TN into northern MS, with scattered thunderstorms farther south potentially leading to new wildfire ignitions over east TX, LA and MS; additional lightning triggers may be needed from AR into northeast TX and the Hill Country; some lightning starts could occur for the west side of the Appalachians overnight
- Dry post-frontal conditions will return to OK and northwest TX, with RH as low as 10-20% accompanied by N/NE wind gusts of 30-45 mph, highest in the morning; these areas may require wind triggers given the sensitivity of fuels and ongoing incidents in the region
- Sea breezes will be likely for the East Coast, eastern Gulf Coast and FL

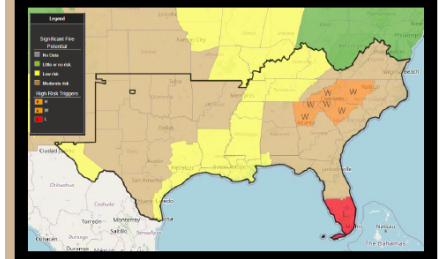
Significant Fire Potential Outlook Monday



- Thunderstorms are expected to quickly dissipate over the Appalachians early, with a dry cold frontal passage appearing more likely from VA into the NC Piedmont and SC mountains; changes to the outlook may be required depending on observed rainfall and the timing of the front
- Otherwise, downslope winds behind the front will quickly lead to RH falling below 20%, with gusts of 25-40 mph likely, locally higher near terrain features
- Warm, windy and unstable conditions ahead of the front will affect the coastal Carolinas, with isolated storms possibly developing; otherwise, RH will fall to 25-35%, and SW winds are forecast to gust from 25-45 mph, highest in NC
- The FL peninsula may require wind triggers as gusts increase ahead of the approaching front and dry air lingers inland from sea breezes
- Scattered thunderstorms will affect the Gulf Coast into South TX, while areas just to the north will be very dry, warm and breezy

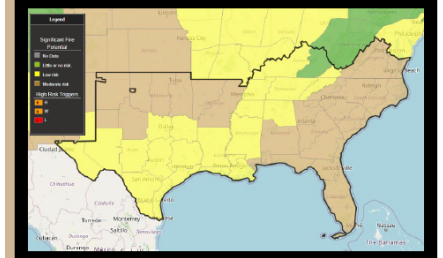
National 7-Day Significant Fire Potential Outlook

Significant Fire Potential Outlook Tuesday



- A front will stall near South FL Tuesday, allowing for scattered thunderstorms to develop atop highly receptive fuels; lightning ignitions are likely, while erratic winds could affect any ongoing or new incidents
- The south and east side of the Appalachians into the Piedmont will continue to see dry, warm and breezy conditions, with extremely dry fine fuels likely; RH will be as low as 15-25%, while W winds gust from 25-45 mph, highest in the mountains; the burn period may extend into the overnight hours as poor recovery occurs in the mountains
- The rest of the Southeast into the Mississippi Valley will be dry and warm, while the Plains will see another dry cold front move into north TX and OK; the Gulf Coast will see higher humidity as onshore flow persists

Significant Fire Potential Outlook Wednesday

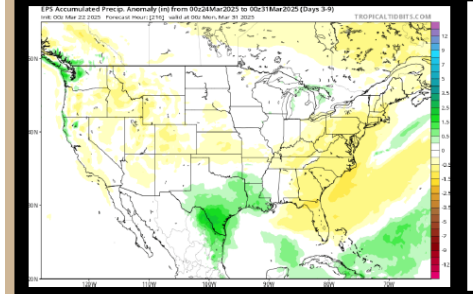


- Critical fire weather may return to the Appalachians and Southeast once again, but there are differences in the timing of a mostly dry cold front
- Look for dry and warm conditions across most of the FL peninsula, but isolated to widely scattered thunderstorms are possible over southern parts of the state
- A front will stall across TX, potentially resulting in widespread clouds and increasing showers and thunderstorms; rainfall will be most likely in South TX by the overnight hours; otherwise, lightning could lead to new ignitions
- Far northern TX into OK and AR will be very dry unless the front stalls farther north than anticipated; winds will be light

SACC Daily Outlook Snips
Saturday - 3/22

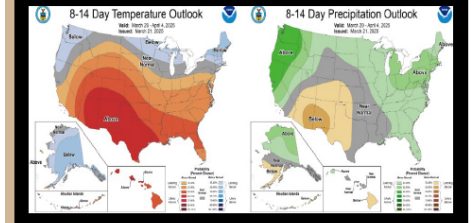
https://gacc.nifc.gov/sacc/resources/predictive/sacc-daily-outlook.pdf

Beneficial Rainfall Coming for Some



- Showers and thunderstorms in the Mississippi Valley tomorrow into early Monday are unlikely to produce widespread drought-easing rain, but localized flooding will be possible
- This front will likely pass through the rest of the Southeast dry, with several more dry cold fronts likely for the Appalachians to FL and the East Coast during the upcoming week
- A wet weather pattern developing across South TX late Wednesday into Thursday promises to bring heavy rain, with some potential for significant drought relief in Deep South TX to as far north as the Hill Country
- Models are in poor agreement on the track of this disturbance, but some beneficial rain could spread north into north TX, OK and AR by late in the week or next week, with heavy rain perhaps more likely farther east in TX, OK and the Lower Mississippi Valley
- The eastern states will likely remain dry or nearly dry, resulting in deepening drought and increasing significant fire potential until perhaps early April

Late March into Early April



- Heat over the West will at times affect the Plains next week, but a more significant heat wave may set in across the Plains behind whatever rain occurs at the end of March; above normal temperatures are likely for most of the geographic area in the week two period
- 100-degree heat is possible throughout TX into OK where soils remain driest during this period
- Dry weather should return to the Plains as a high pressure ridge builds in from the Southwest, while rainfall is less certain east of the Mississippi River
- Probabilities for above normal rainfall will probably go up for some areas and decrease for others as confidence increases in the details; most guidance points towards a typical La Niña pattern of wet weather in the Mississippi Valley and Appalachians, with drier than normal conditions along the Gulf Coast, FL and Southeast Coast

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

Saturday Info:

- Poor/No Real Recovery last night for many western stations – 3 + days.
  Seeing active burning throughout the night, etc.

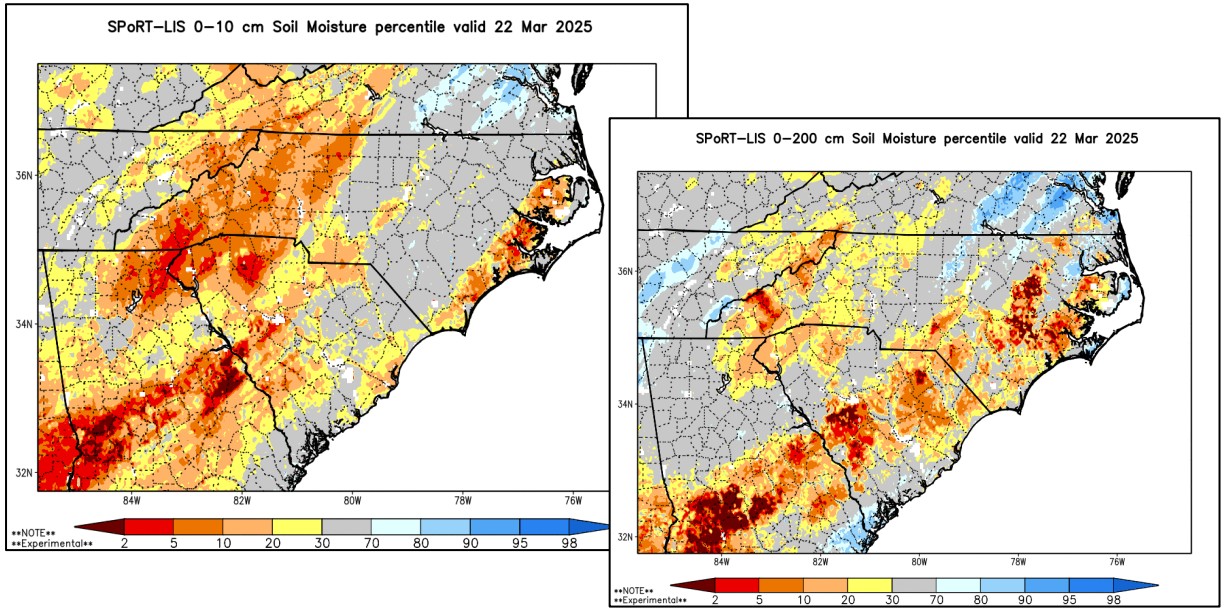
- Red Flag Warnings or Fire Danger Statements posted for the entire state today. Critical Fire Weather today aligning with receptive fuels. Dry Cold Front with associated wind concerns. Minimal moisture likely with next frontal passage on Monday.

- From FBAN (DG) – for current/potential fires today in most mtn locations: expect long range spotting, wind driven runs and associated behavior.

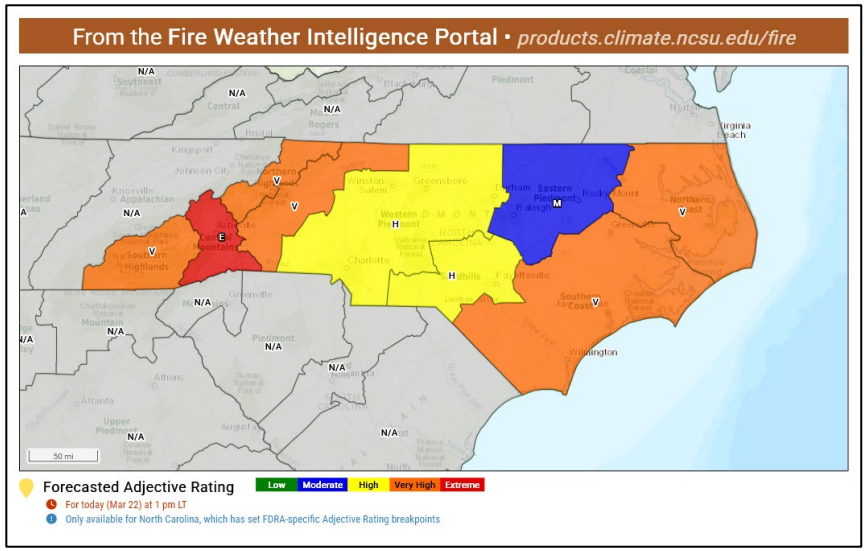
- Statewide Burn Ban (NCFS Protection Areas) in place.

- Shallow soil dryness increasing, relationship with general fine fuel receptiveness.

- Remember that premise of NFDRS is landscape scale FIRE DANGER relating to initiating fires, not fire specific FIRE BEHAVIOR. Also working on GSI tweaks in some FDRAs.



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



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

Forecasted Adjective Rating for FDRAs in North Carolina

FDRA	Sat Mar 22	Sun Mar 23	Mon Mar 24	Tue Mar 25	Wed Mar 26	Thu Mar 27	Fri Mar 28
Southern Highlands X	V	V	H	V	H	H	H
Central Mountains X	E	E	V	V	V	V	V
Northern Highlands X	V	V	H	V	H	H	H
Blue Ridge X	V	V	V	V	V	V	V
Western Piedmont X	H	V	V	H	H	H	H
Sandhills Z	H	H	H	H	V	V	V
Eastern Piedmont X	M	M	M	H	H	H	H
Southern Coast X	V	V	H	V	V	V	V
Northern Coast X	V	V	H	H	H	H	H