

# Weekly Fire Danger Assessment NCFS - Region **TWO**

For Time Period:

Saturday (3/25/23) to Friday (3/31/23)

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NC Forest Service*

# Past Week's Signal 14 Activity

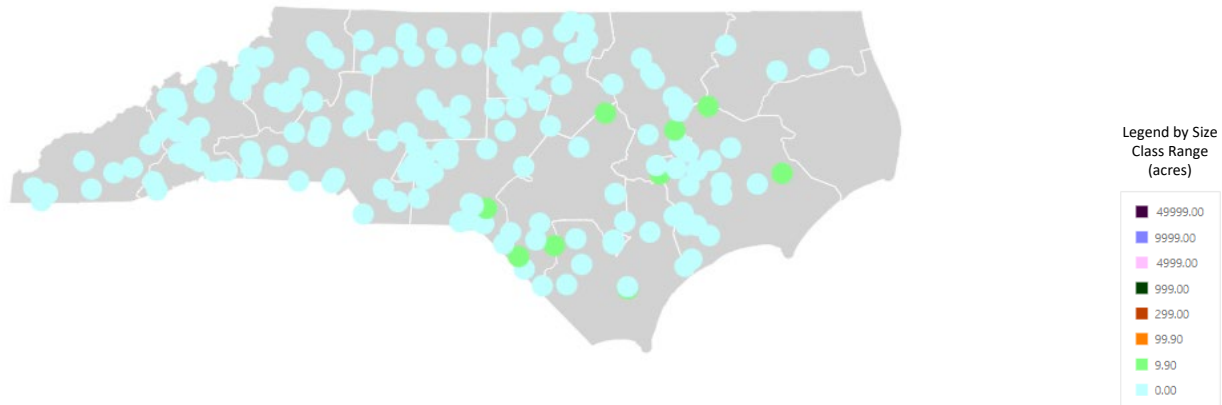
NCFS - Region 2			
Previous 7-Day Fire Activity (Does Not Include Federal Ownerships)			
Data Source:	Signal 14 Regional Activity Summary Report (Signal 14 is a snapshot in time)		
Date Range:	3/17 - 3/23, 2023		
Type	Number	Acres	
Wildfires:	106	145.3	
Prescribed Fires:	51	3,335	

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fiResponse Incident Location Map (for general context)

Date Range: 3/17 – 3/23, 2023

Report: Business Intelligence Module, Response Trends Map



# Current and Forecasted Fire Danger Conditions by FDRA

R2

## Regional Comments for this Week – R2

- The heavy freeze/frost this week has slowed green-up.
- Wildfires and prescribed burns have been spotting and burning hot this week.
- Higher air temps will help enhance fire danger this upcoming week while also encouraging further green-up.

# Important notes for next slide group:

## A. Current ERC, 100-Hr & 1000-Hr Graphics:

- These are extracts from FF+ using weekly observation data downloaded from WIMS.

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

- Available on the FWIP within the “[Resources for NCFS](#)” page.
- The operation link is: <https://products.climate.ncsu.edu/fwip/outlook.php>
- The matrix updates daily - please review the tool notes below for more details.

### Tool Summary:

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

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

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

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

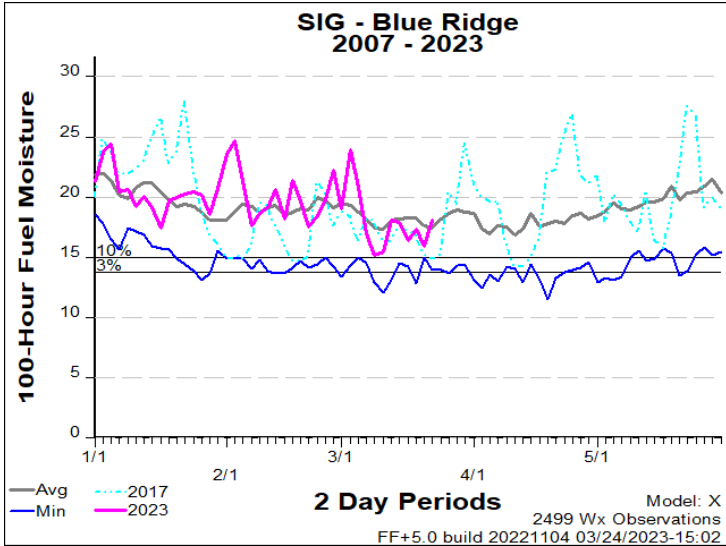
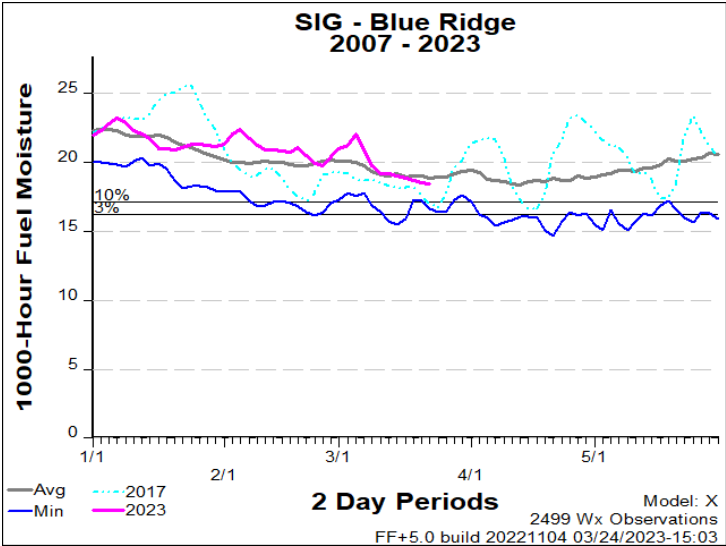
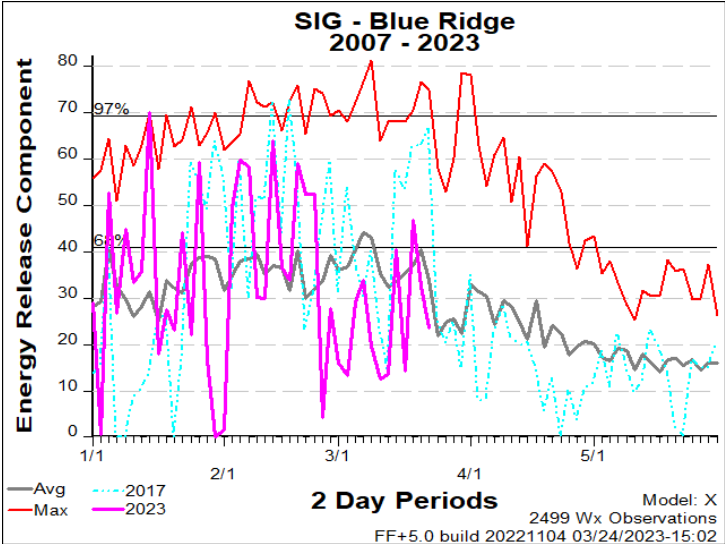
**Dead fuel moisture forecast values** are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

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

### Other Notes:

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

# Region Specific – Blue Ridge Escarpment



# Weekly Outlook

## Blue Ridge Escarpment FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more RED blocks in a day signals the potential for a Critical Fire Day

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	76	75	70	62	60	64	64
Avg. Min. Humidity (%)	28	29	46	41	25	36	58
Avg. 20' Wind Speed (mph)	15	7	6	10	10	7	8
Avg. Wind Direction*	SW	W	SSE	NW	WNW	WSW	SSW
Avg. Probability of Precip. (%)	67	41	32	33	3	43	53
Days Since a Wetting Rain**	0.0	1.0	1.3				
Forecast ERC (Fuel Model X)	48.0	57.6	54.4	50.9	56.8	57.3	46.1
Forecast BI (Fuel Model X)	182.4	147.2	124.8	147.7	139.4	147.4	131.2
Forecast IC (Fuel Model X)	15.1	19.2	13.5	13.4	15.4	17.0	10.8
Forecast 100-Hr. FMC	17.9	17.0	15.8	15.4	15.0	14.4	14.4
Forecast 1000-Hr. FMC	18.4	18.2	17.8	17.5	17.3	17.0	16.8
KBDI	76.3						

### Data Source:

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

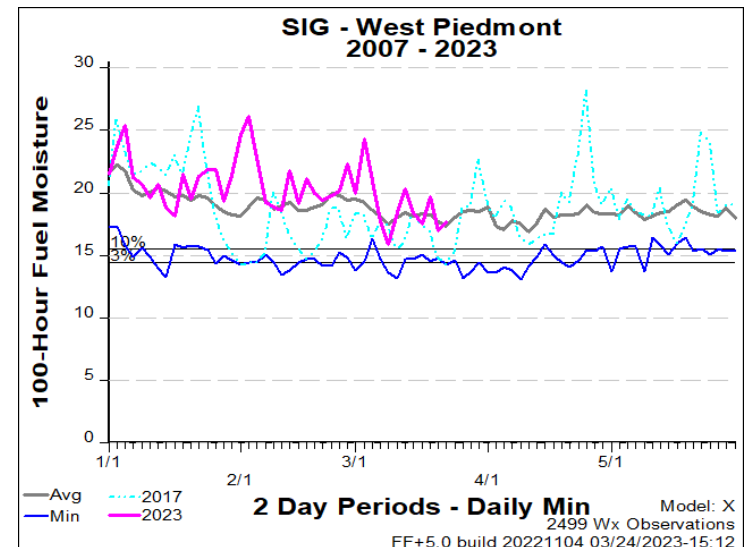
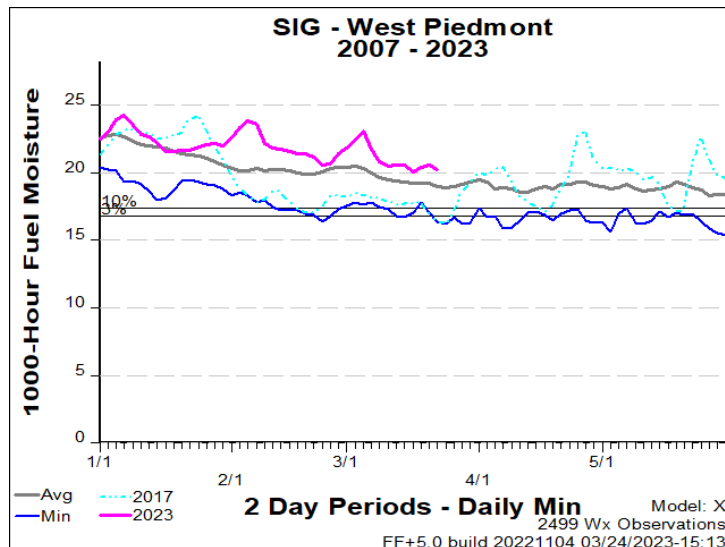
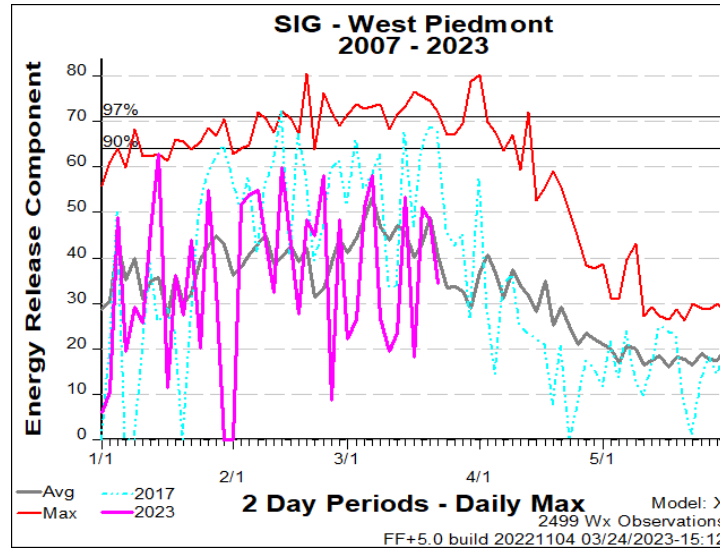
Values in the table above are averages from 3 stations in this FDRA:

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

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

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

# Region Specific – Western Piedmont





# Weekly Outlook

## Western Piedmont FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	80	79	72	66	64	69	71
Avg. Min. Humidity (%)	39	33	52	40	25	31	53
Avg. 20' Wind Speed (mph)	12	6	8	10	11	9	11
Avg. Wind Direction*	SSW	WSW	SE	WSW	NW	SW	S
Avg. Probability of Precip. (%)	48	50	32	37	2	35	46
Days Since a Wetting Rain**	4.3	5.3	0.0				
Forecast ERC (Fuel Model X)	51.6	54.3	48.6	47.4	59.0	57.2	48.5
Forecast BI (Fuel Model X)	171.0	124.4	124.3	140.9	149.8	151.4	140.3
Forecast IC (Fuel Model X)	16.2	13.6	10.7	11.0	16.3	17.7	13.1
Forecast 100-Hr. FMC	17.1	17.2	17.1	17.3	17.3	16.6	16.3
Forecast 1000-Hr. FMC	22.8	22.5	22.2	21.9	21.8	21.6	21.4
KBDI	66.0						

### Data Source:

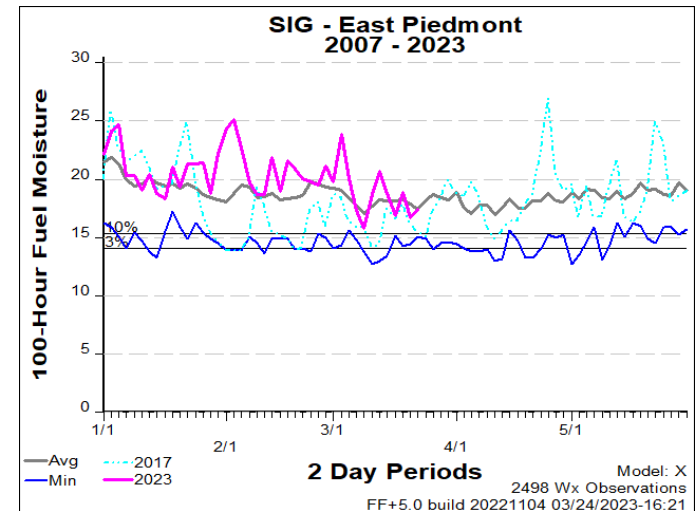
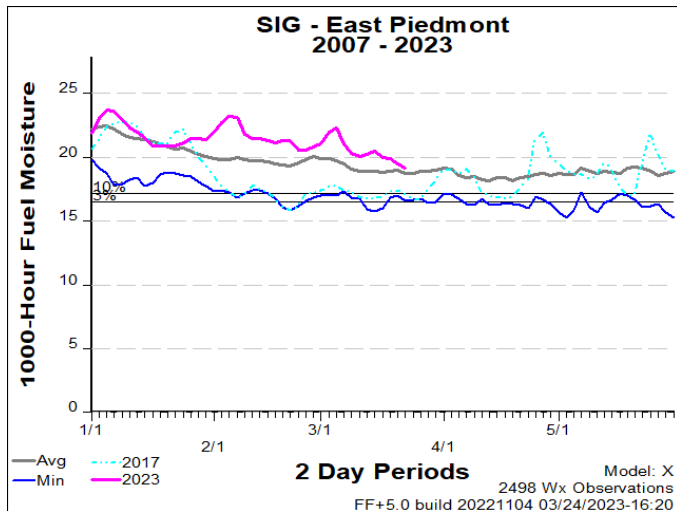
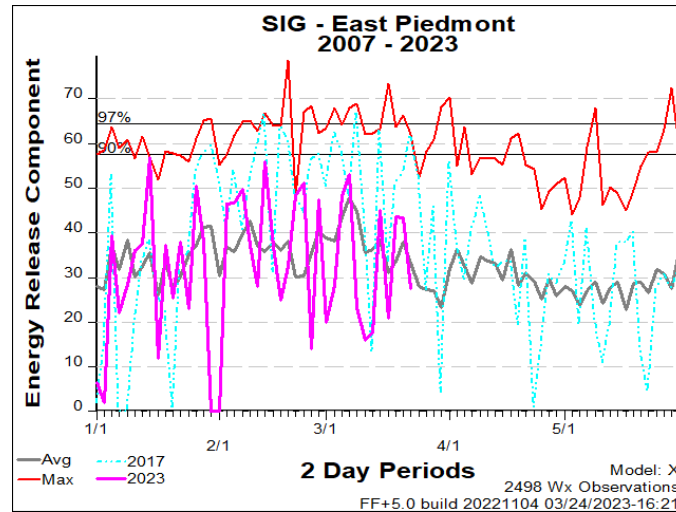
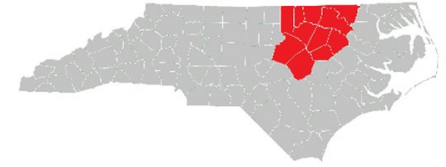
- Weather forecasts come from the National Weather Service's [Digital Forecast Database](#). The wind speed and direction, and probability of precipitation, are calculated as averages of the 1 am, 7 am, 1 pm, and 7 pm forecasts. The 20-foot wind speed is estimated from the 10-meter forecast using the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

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

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

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

# Region Specific – Eastern Piedmont



## Weekly Outlook

### Eastern Piedmont FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	82	80	72	65	63	69	72
Avg. Min. Humidity (%)	47	33	54	45	27	30	50
Avg. 20' Wind Speed (mph)	11	6	9	11	12	10	11
Avg. Wind Direction*	SSW	W	E	SW	NW	SW	S
Avg. Probability of Precip. (%)	32	44	34	41	1	25	42
Days Since a Wetting Rain**	0.8	1.8	0.0				
Forecast ERC (Fuel Model X)	40.4	40.7	38.7	29.8	47.4	47.7	41.3
Forecast BI (Fuel Model X)	133.4	89.1	110.2	97.2	121.5	122.9	112.6
Forecast IC (Fuel Model X)	15.0	10.0	10.5	7.0	14.0	15.6	12.6
Forecast 100-Hr. FMC	17.5	17.4	17.4	17.4	17.7	16.9	16.4
Forecast 1000-Hr. FMC	21.9	21.7	21.4	21.3	21.2	21.1	20.9
KBDI	65.8						

#### Data Source:

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

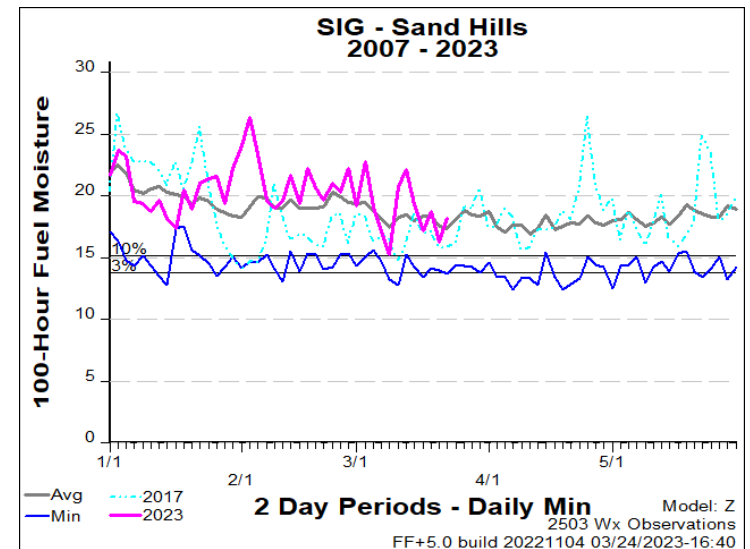
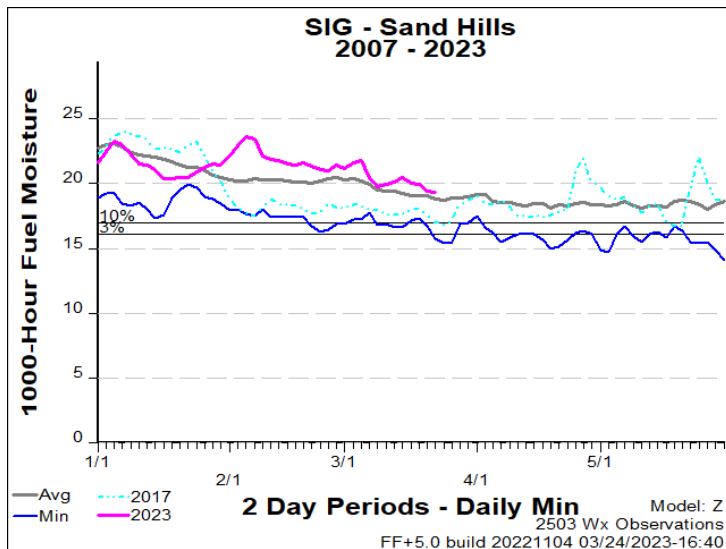
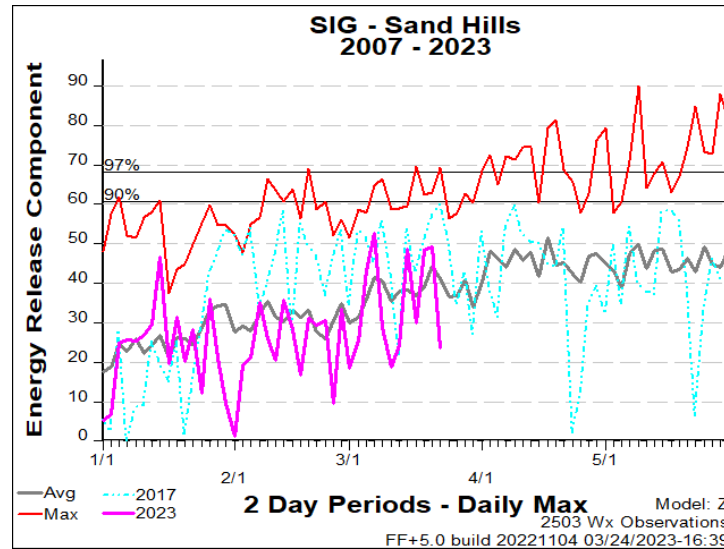
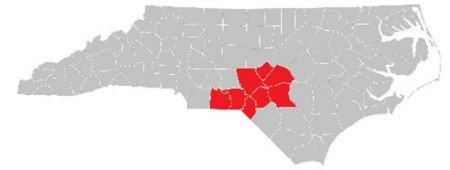
Values in the table above are averages from 4 stations in this FDRA:

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

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

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

# Region Specific – Sandhills



# Weekly Outlook

## Sandhills FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more **RED** blocks in a day signals the potential for a **Critical Fire Day**

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	80	82	74	68	65	71	75
Avg. Min. Humidity (%)	45	32	56	44	25	29	47
Avg. 20' Wind Speed (mph)	12	6	9	10	11	9	11
Avg. Wind Direction*	SSW	WSW	SSW	WSW	NW	SSW	S
Avg. Probability of Precip. (%)	32	56	39	40	2	24	35
Days Since a Wetting Rain**	5.7	6.7	0.0				
Forecast ERC (Fuel Model Z)	34.2	32.2	31.7	29.7	44.2	46.8	39.6
Forecast BI (Fuel Model Z)	52.0	34.4	45.2	40.6	49.9	55.1	50.8
Forecast IC (Fuel Model Z)	13.7	7.7	8.5	6.7	13.5	15.6	12.4
Forecast 100-Hr. FMC	18.1	18.0	17.9	18.1	18.2	17.2	16.9
Forecast 1000-Hr. FMC	22.1	21.8	21.6	21.6	21.4	21.3	21.2
KBDI	124.3						

### 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.

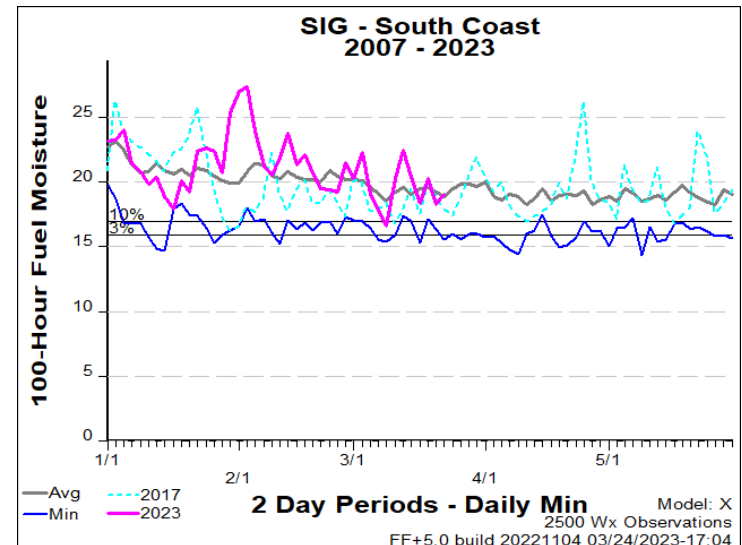
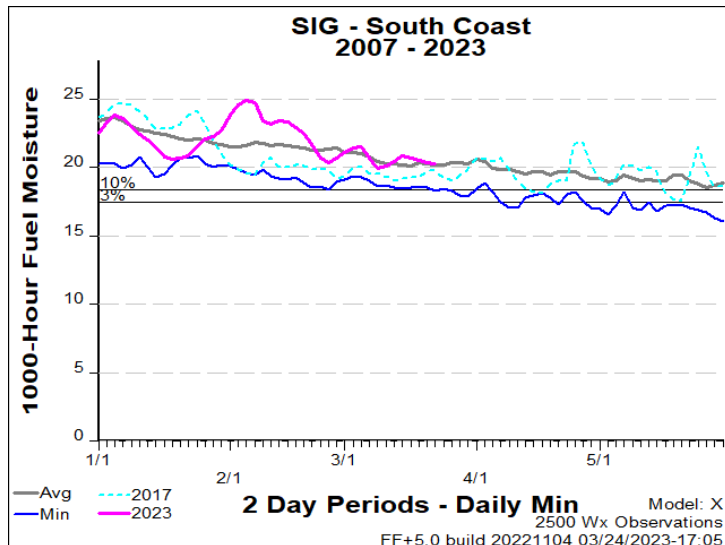
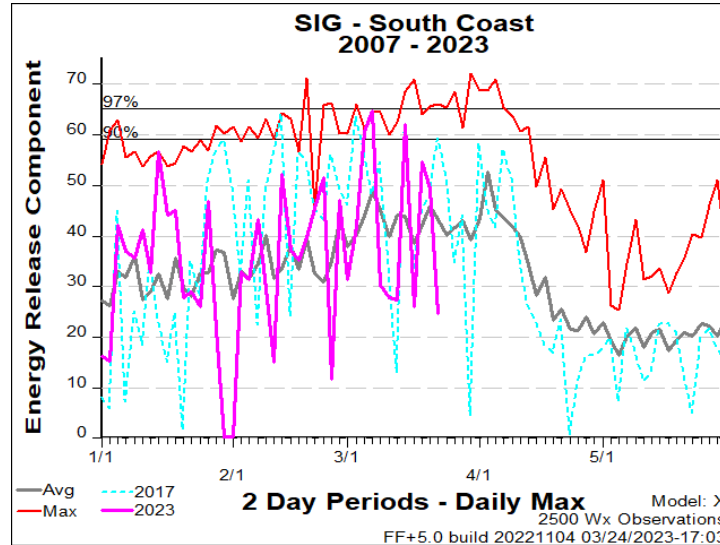
Values in the table above are averages from 3 stations in this FDRA:

- Sandhills Research Station (317040)
- Rockingham (318202)
- Fort Bragg (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

# Region Specific – South Coast



## Weekly Outlook

### Southern Coastal FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

Four or more RED blocks in a day signals the potential for a Critical Fire Day

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	83	81	73	70	65	69	74
Avg. Min. Humidity (%)	53	45	58	53	29	33	47
Avg. 20' Wind Speed (mph)	11	5	6	6	9	6	8
Avg. Wind Direction*	SSW	SW	S	SW	NW	SW	S
Avg. Probability of Precip. (%)	21	53	52	44	1	14	27
Days Since a Wetting Rain**	8.1	9.1	0.0				
Forecast ERC (Fuel Model X)	36.4	33.2	28.7	26.5	47.3	46.1	40.3
Forecast BI (Fuel Model X)	121.9	67.5	82.5	65.2	112.8	101.6	96.8
Forecast IC (Fuel Model X)	13.4	6.0	6.0	4.4	12.2	10.7	10.0
Forecast 100-Hr. FMC	19.0	18.6	18.4	18.6	18.3	17.5	17.3
Forecast 1000-Hr. FMC	22.3	22.1	21.9	21.8	21.7	21.6	21.4
KBDI	261.7						

#### 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 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

# Outlook Summary Table – R2

Summary Table by FDRA using count of colored blocks in a day’s forecast.

## Forecast Subject to Change

Key: 4+ Red Blocks on a Day = “Critical” Day Potential; Red Color  
 4+ Yellow or Combo of Yellow/Red = “High” Day Potential; Yellow Color  
 6+ Blue-Green Blocks = “Low to Mod” Potential Day; Blue-green Color

Date	Day of Week	FDRA Matrix Summary - NCFS Region 2				
		Blue Ridge Escarp	Western Piedmont	Eastern Piedmont	Sandhills	South Coast
25-Mar	Sat	Critical	Critical	High	High	Critical
26-Mar	Sun	Critical	Critical	Low/Mod	Low/Mod	Low/Mod
27-Mar	Mon	Critical	High	Low/Mod	Low/Mod	Low/Mod
28-Mar	Tues	Critical	High	Low/Mod	Low/Mod	Low/Mod
29-Mar	Weds	Critical	Critical	High	High	Critical
30-Mar	Thurs	Critical	Critical	High	Critical	High
31-Mar	Fri	Critical	Critical	High	High	High



# Weather Outlook Discussion

## Raleigh NWS (PM Fire WX Forecast Discussion):

...INCREASED FIRE DANGER IN EFFECT FROM SATURDAY AFTERNOON THROUGH SATURDAY EVENING...

### **.DISCUSSION...**

Warm southwesterly flow will persist through tonight. A weak cold front will approach from the northwest Saturday, then stall over the deep south into Sunday.

.MONDAY...Mostly cloudy. Chance of rain showers. Lows in the upper 50s. Highs in the lower 70s. Southeast winds 10 to 15 mph.

.TUESDAY...Mostly cloudy with chance of rain. Lows in the lower 50s. Highs in the mid 60s. North winds 10 to 15 mph.

.WEDNESDAY...Mostly clear. Lows in the lower 40s. Highs in the mid 60s. Northwest winds 10 to 15 mph.

.THURSDAY...Mostly clear. Lows around 40. Highs in the upper 60s. Southwest winds 10 to 15 mph.

.FRIDAY...Mostly cloudy. Chance of rain. Lows in the lower 50s. Highs in the lower 70s. South winds 5 to 10 mph.

# NC DAQ – Statewide Air Quality Forecast Information

## Next Three Days

### Forecast Discussion

The North Carolina Division of Air Quality issues forecasts for fine particulate matter year-round and ozone from March through October. Forecasts and discussions are updated each afternoon for the next three days, and are sometimes updated in the morning to reflect the latest ambient conditions.

View:  The latest forecast discussion  The  forecast discussion from

This forecast was issued on **Friday, March 24, 2023 at 2:34 pm.** ✔ This forecast is currently valid.

#### Today's Air Quality Conditions

Current daily average particle pollution levels are in the low-mid Code Yellow range across most of the interior, with upper Code Green concentrations elsewhere. Ozone levels are in the Code Green range statewide today.

[↗](#) 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 weak cold front will move through the state on Saturday with associated cloud cover keeping ozone formation down in the Code Green range. Precipitation amounts will not be significant enough for a washout but strong transport winds and good mixing should keep fine particulates in the upper Code Green range. Will keep an eye on any influence from local/regional burning and update the forecast if needed tomorrow.

#### Outlook

Sunday will be warm and sunny, but likely cleaner air out of the west will help keep both ozone and fine particulates in the Code Green range. Monday will be a bit more unsettled, with more chances for rain and increased cloud cover and continued good air quality.

Author: *Kreuser* - NC Division of Air Quality

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#### 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.

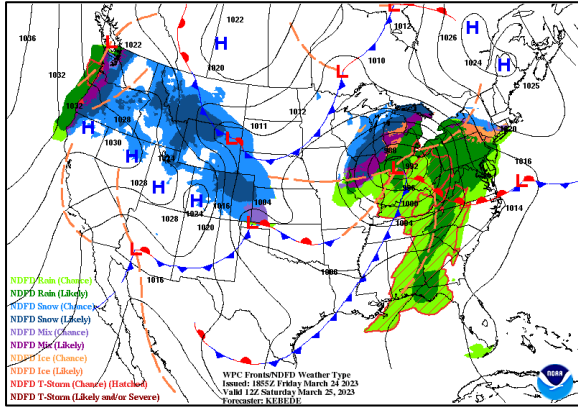
Forecast Day	AQI Range	Category Range
<a href="#">Friday (Mar 24)</a>	45 to 55	<span style="background-color: green; border-radius: 50%; padding: 2px;">Green</span> to <span style="background-color: yellow; border-radius: 50%; padding: 2px;">Yellow</span>
<a href="#">Saturday (Mar 25)</a> 🌧️	45	<span style="background-color: green; border-radius: 50%; padding: 2px;">Green</span>
<a href="#">Sunday (Mar 26)</a>	45 to 47	<span style="background-color: green; border-radius: 50%; padding: 2px;">Green</span>
<a href="#">Monday (Mar 27)</a>	45	<span style="background-color: green; border-radius: 50%; padding: 2px;">Green</span>

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

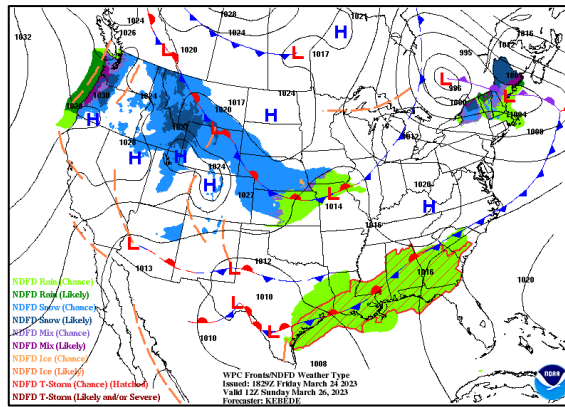
DAQ Air Quality Portal: <https://airquality.climate.ncsu.edu/>

# WPC Forecasted Surface Fronts & Sea-Level Pressures

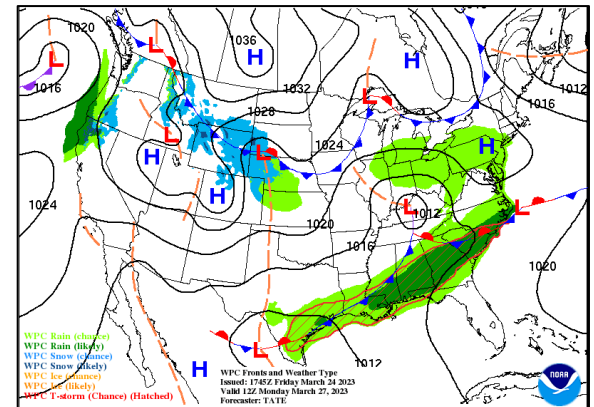
Saturday - 700 am



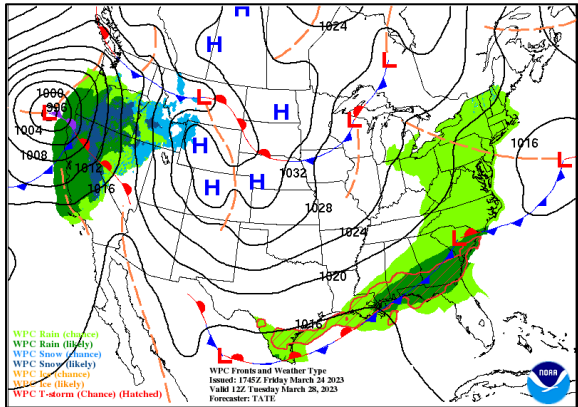
Sunday - 700 am



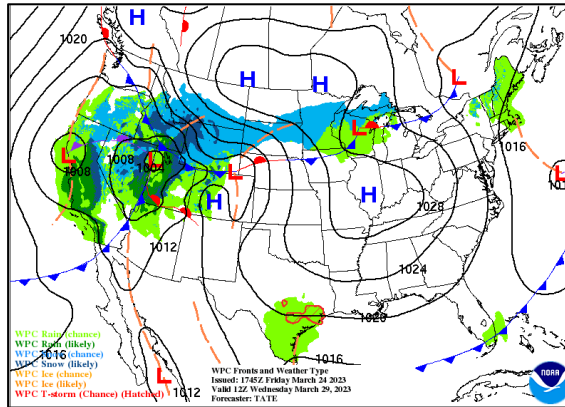
Monday - 700 am



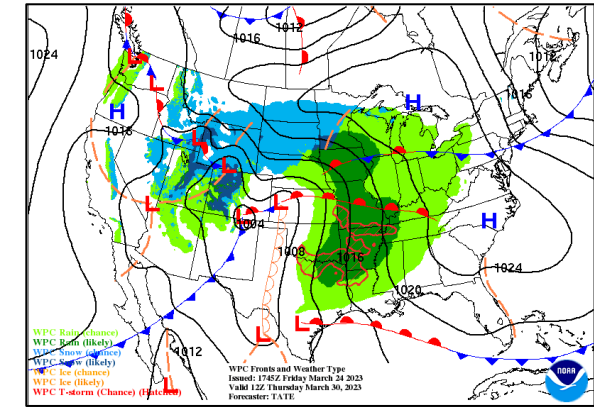
Tuesday - 700 am



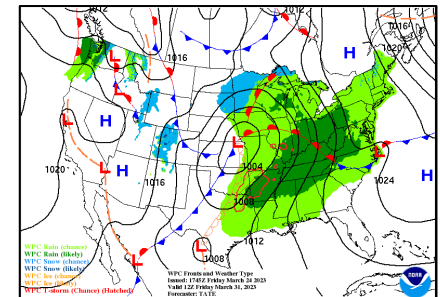
Wednesday - 700 am



Thursday - 700 am

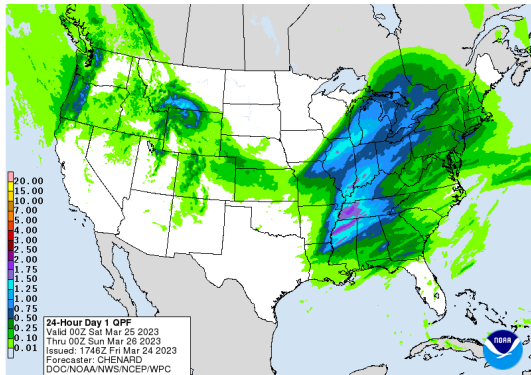


Friday - 700 am

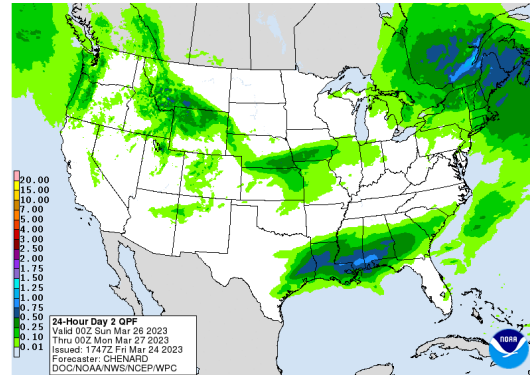


# Quantitative Precipitation Forecast, 7-Day

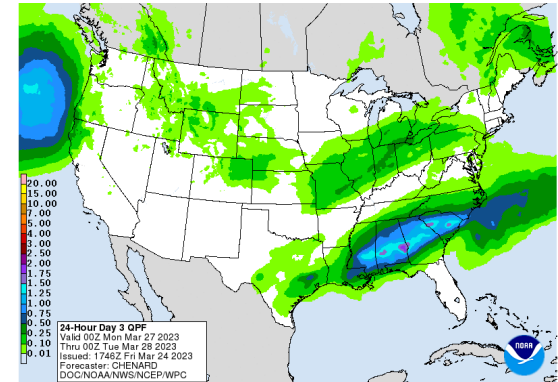
Day - 1



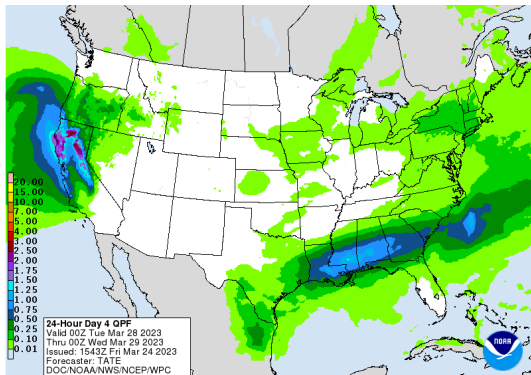
Day - 2



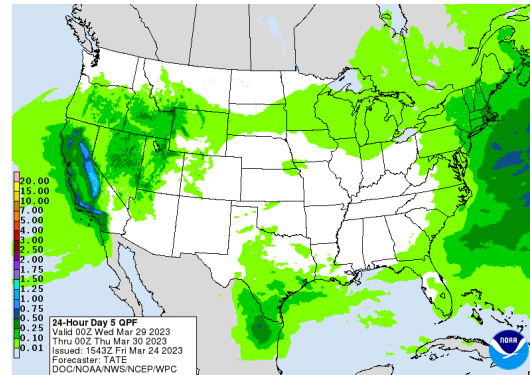
Day - 3



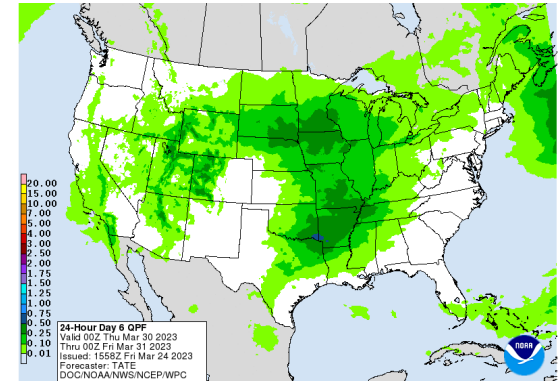
Day - 4



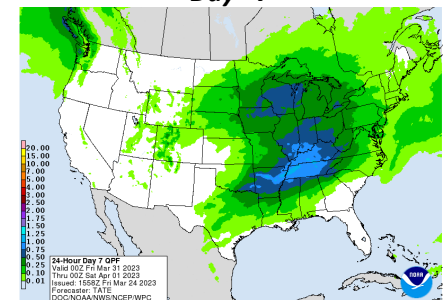
Day - 5



Day - 6

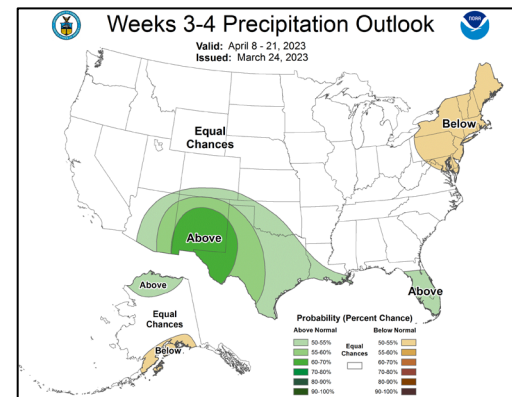
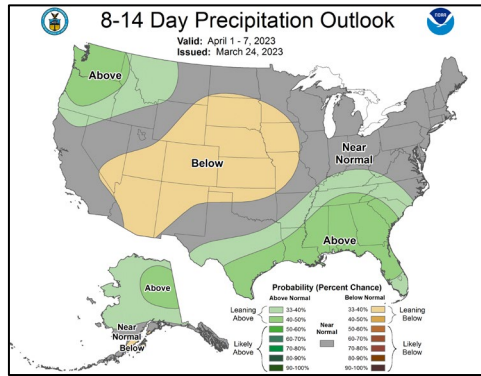
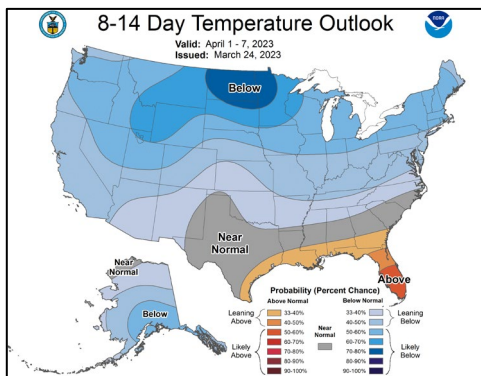
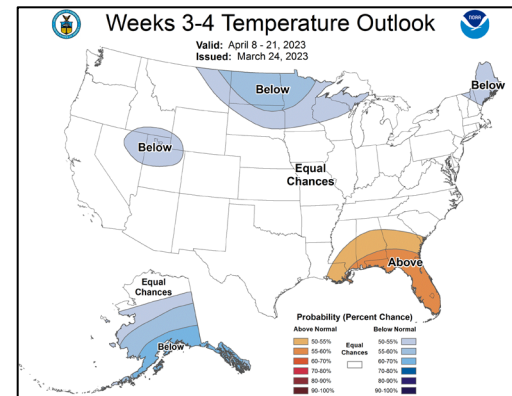
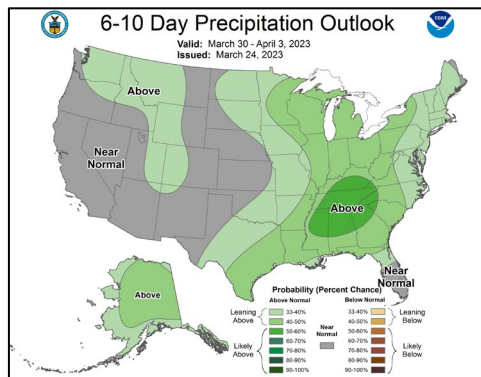
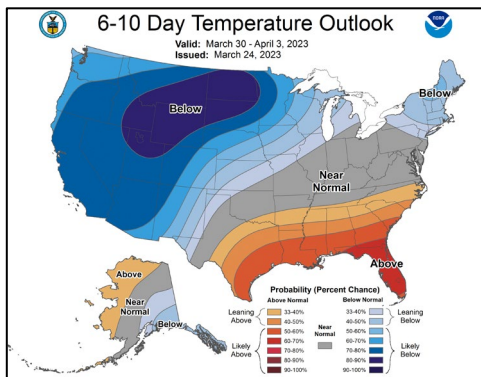


Day - 7



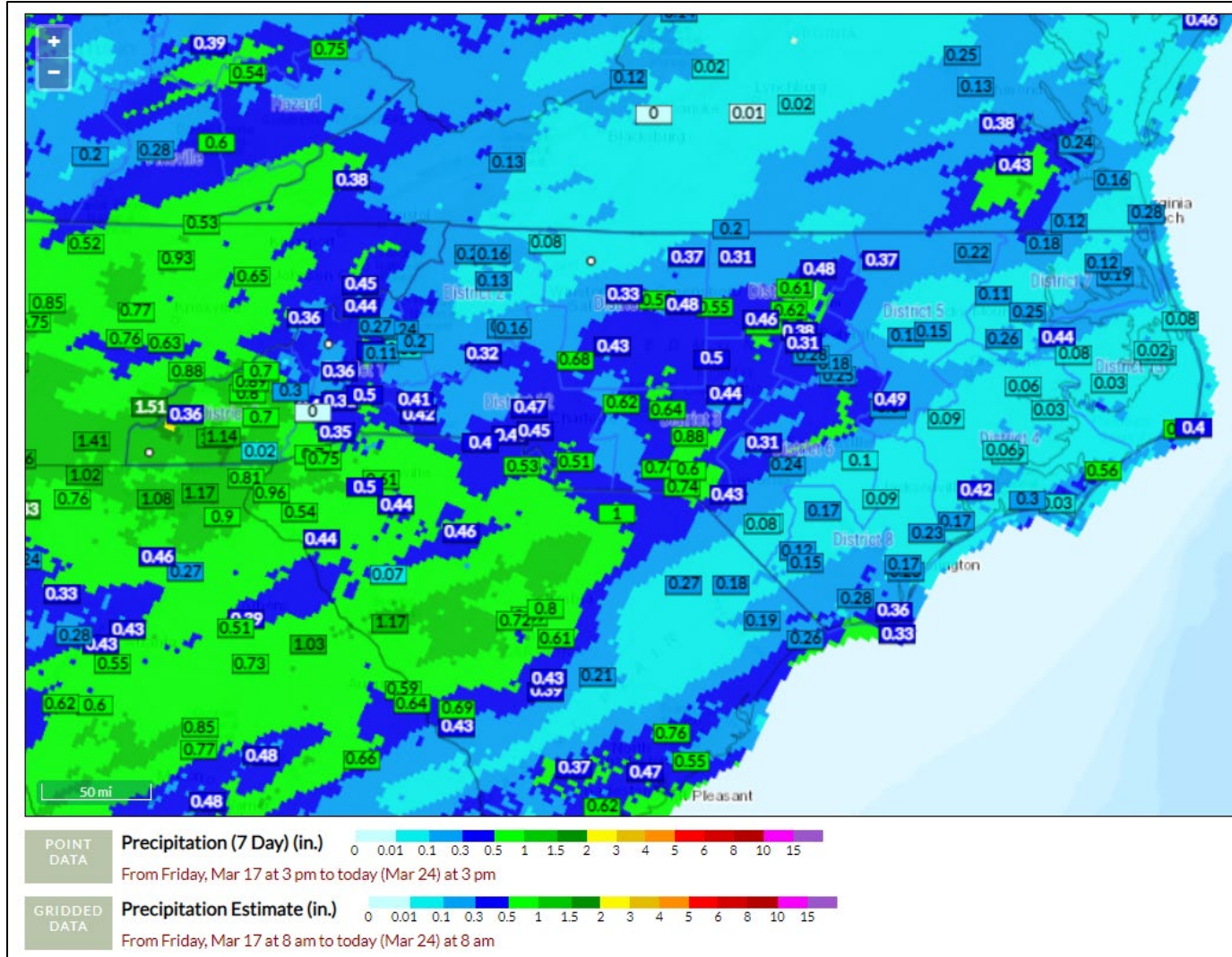
# Temp & Precip Outlook

## 6-10 Day, 8-14 Day & Week 3-4



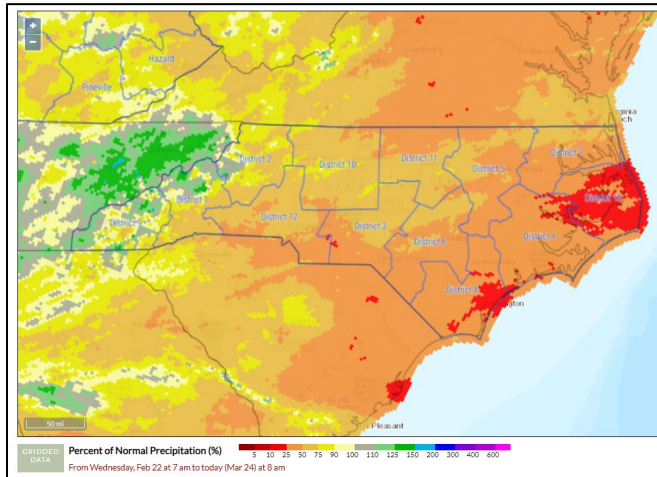
# 7 Day Precipitation Totals

*FWIP (Point accumulation ending at 1500 on 3/24, Grid ending 0800 3/24)*

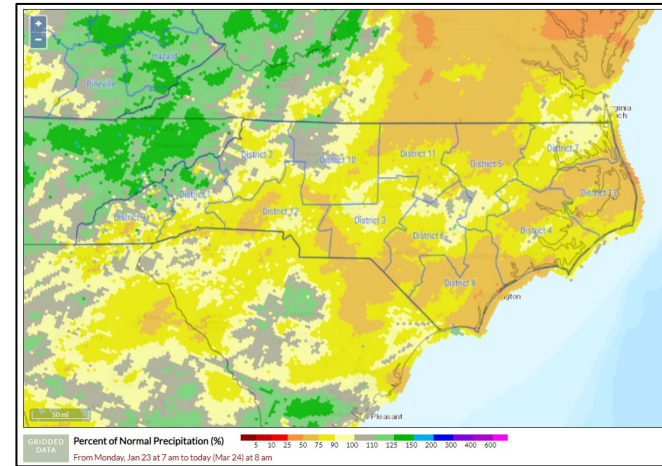


# Percent of Normal Precip, FWIP (Ending 0800 3/24)

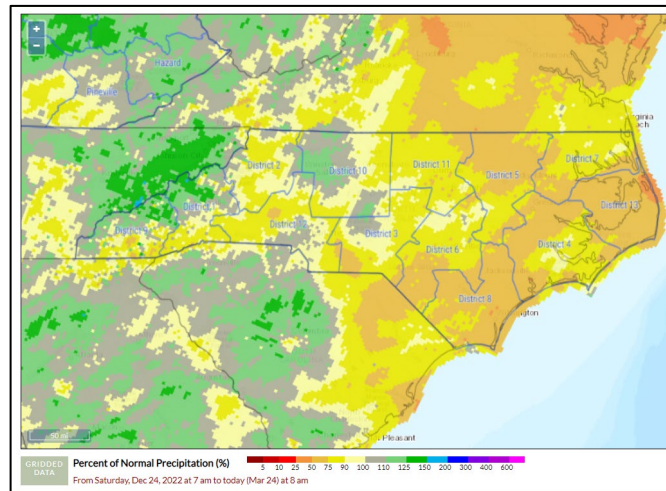
## 30-Day % of Normal



## 60-Day % of Normal

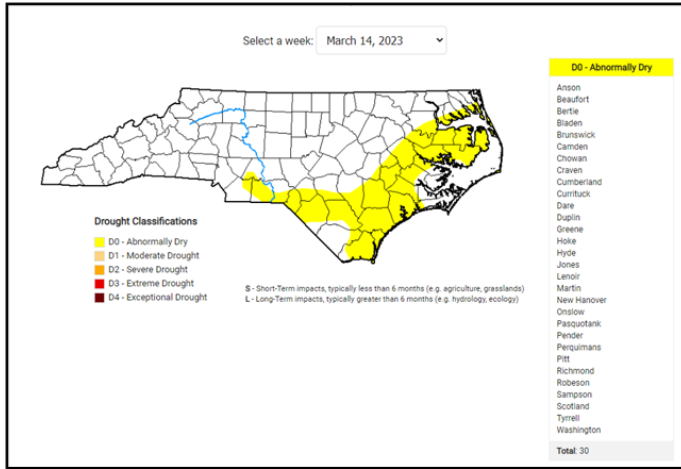


## 90-Day % of Normal

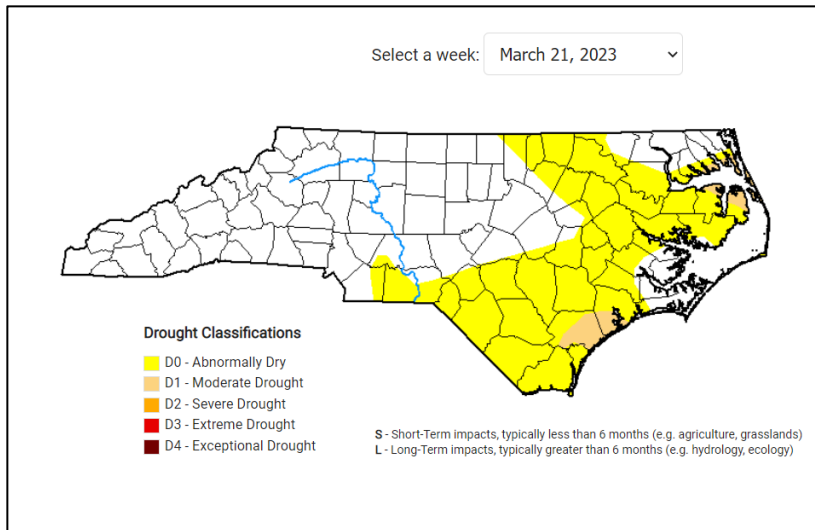


# Drought Situation

## Previous Week:



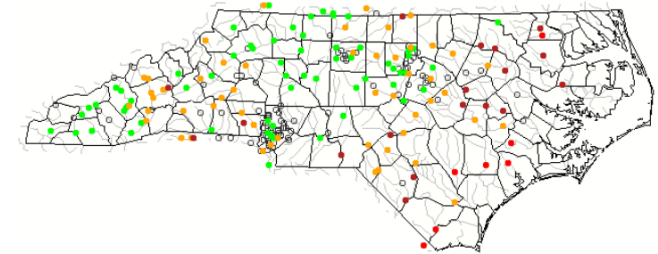
## Current Week:



## Map of 7-day average streamflow compared to historical streamflow for the day of the year (North Carolina)

North Carolina or Water-Resources Regions All Days

Thursday, March 23, 2023



Choose a data retrieval option and select a location on the map

List of all stations  Single station  Nearest stations

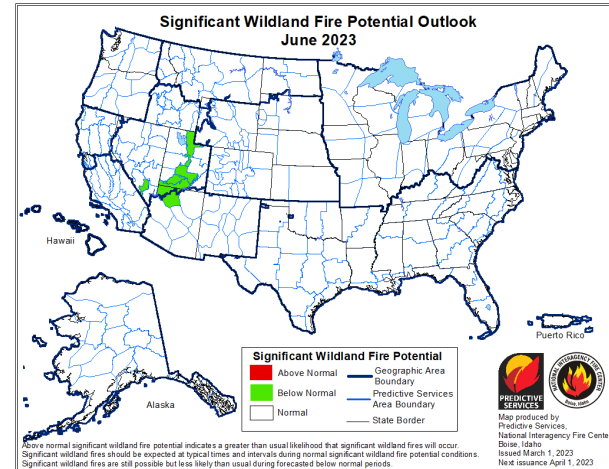
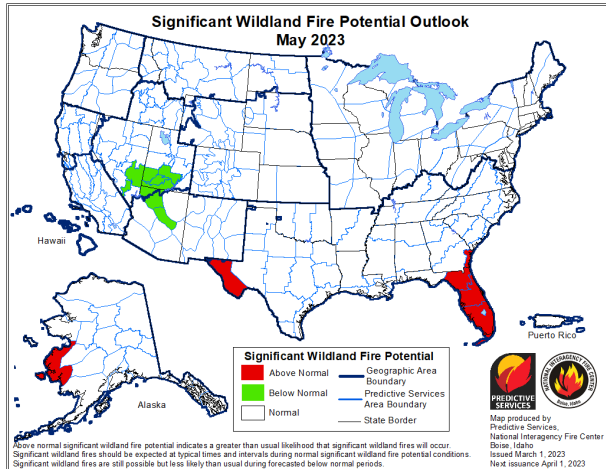
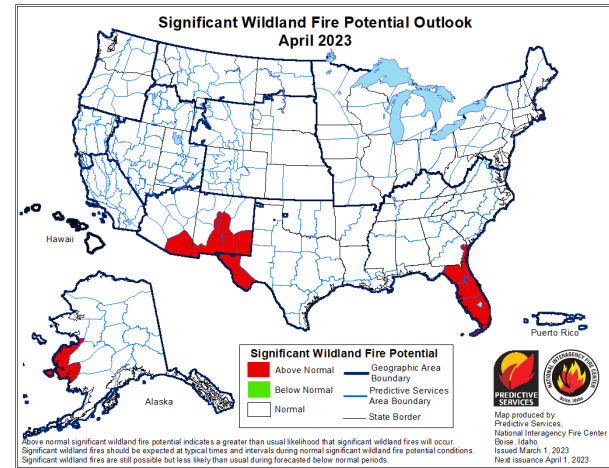
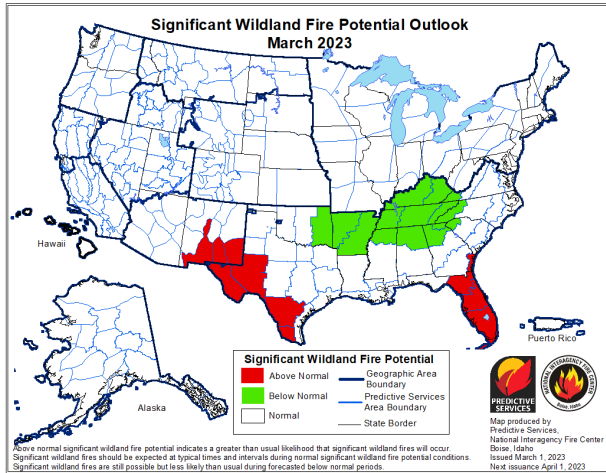
Explanation - Percentile classes						
Low	<10	10-24	25-75	76-90	>90	High
	Much below normal	Below normal	Normal	Above normal	Much above normal	Not-ranked

- D-0 Abnormally Dry Conditions within 39 Counties (~38% of State)
- D-1 Moderate Drought has begun to develop in several counties. (~2% of State)
- 7-Day Stream flow averages continue to decline, intensifying east & advancing west.



# Significant Wildland Fire Potential Outlook:

Updated 3/1/23 – Next Update on 4/1/23



*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 already seen this year.*

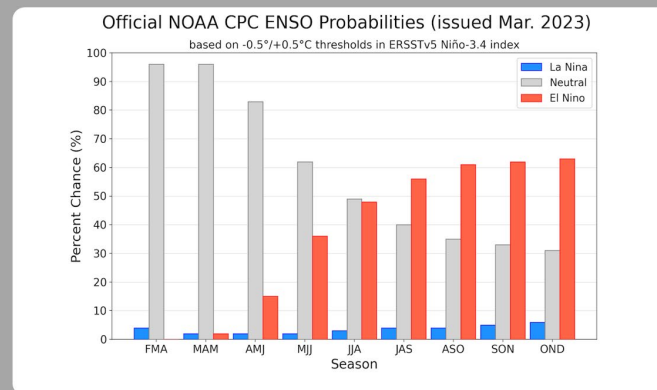
# ENSO Note

- 3/9/23 Update - La Nina has officially ended.
- ENSO-Neutral conditions expected to continue through spring and early summer of 2023. Signs point to El Nino development in late summer.

## CPC Probabilistic ENSO Outlook

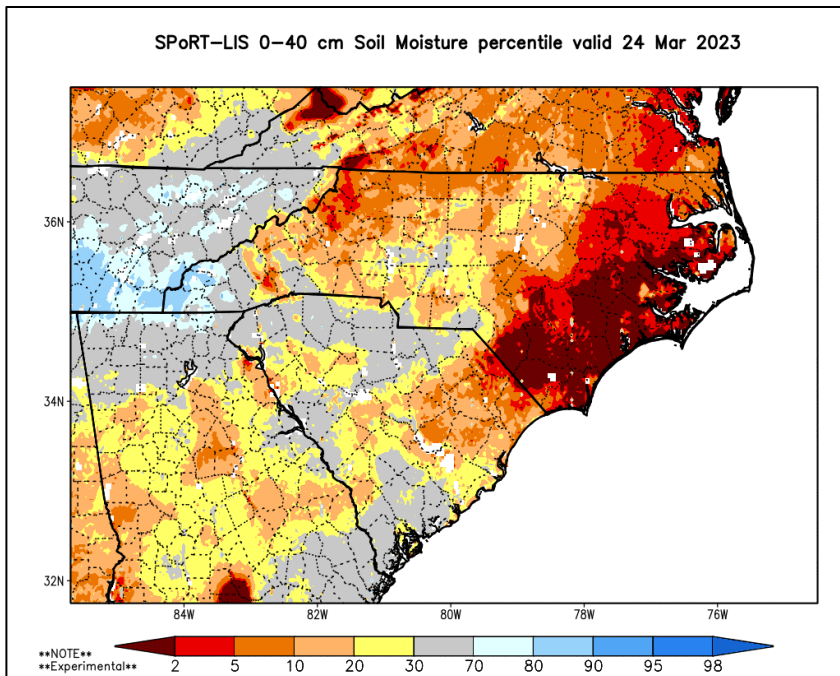
Updated: 9 March 2023

ENSO-neutral is expected to persist through the Northern Hemisphere early summer 2023. A transition to El Niño is favored by July-September 2023, with chances of El Niño increasing through the fall.



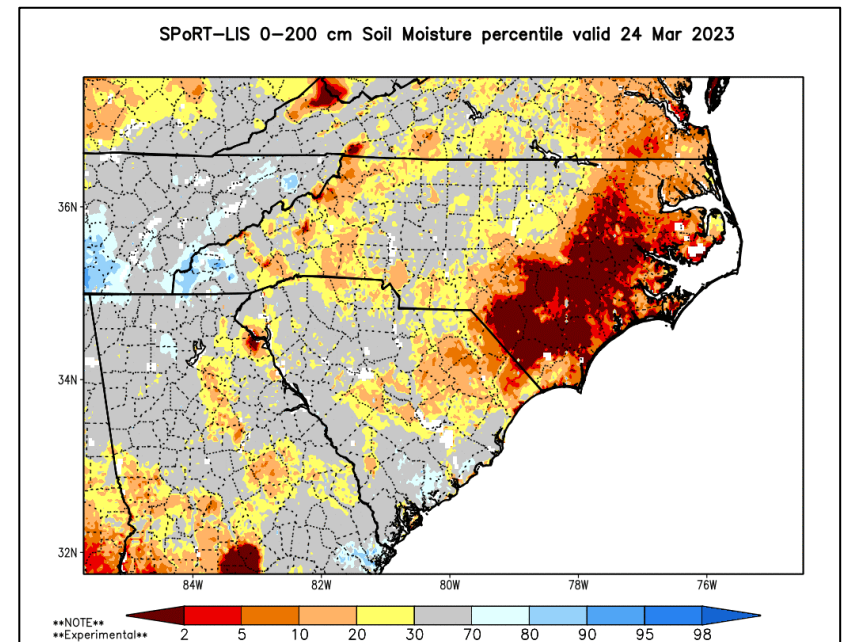
# SPoRT Relative Soil Dryness

## 0-40 cm Depth



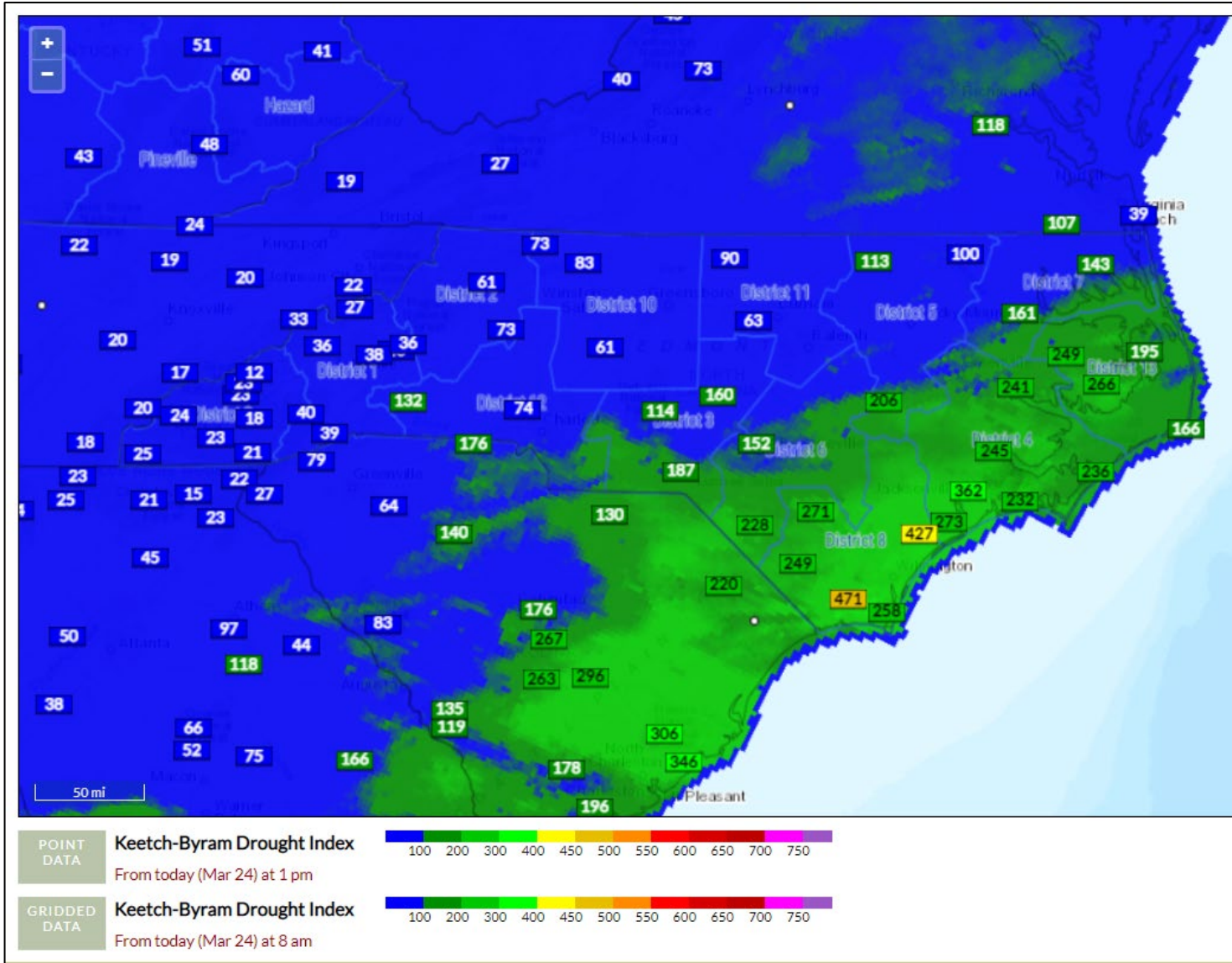
- Modeled Drying Trend Continues
- Deeper levels of dryness still focused to the East & South

## 0-200 cm Depth



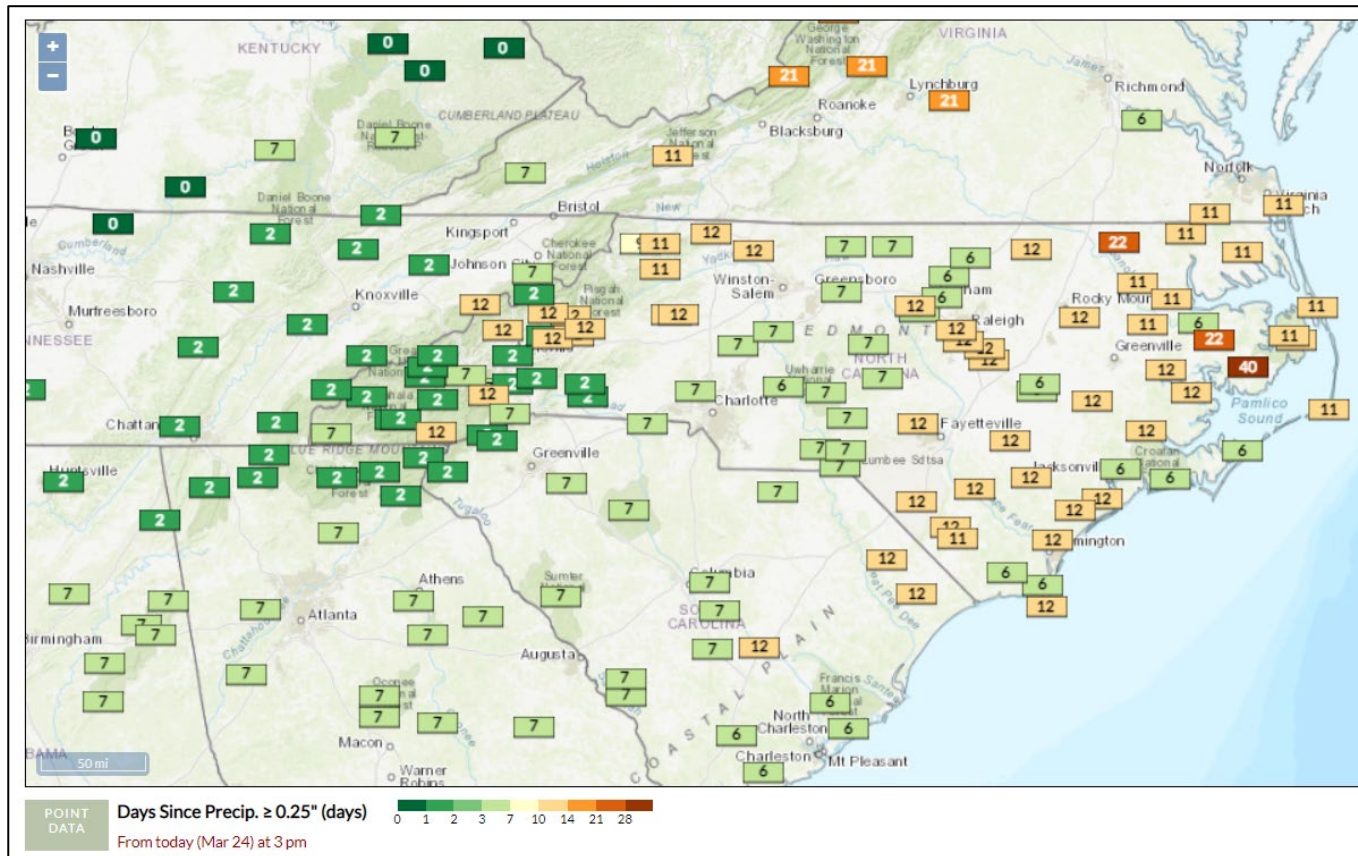
# KBDI - Gridded & Station Points

FWIP (Point calculation from 1300 on 3/24, Grid ending 0800 3/24)



# Days Since Daily Precip $\geq 0.25''$

Note – Latest product run was on 3/24/23 at 1500.  
Does not consider rainfall after that point.



# Green Fraction & Green-Up Anomaly

- Generally, 2-3 Weeks Ahead of 30-Yr Avg
- Comments that multiple frosts/freezes setback grasses and slowed larger species, warmer weather now encouraging growth again.

*(Some areas previously shown with green color followed later by brown color in coastal areas likely due to larger scale agricultural activities.)*

Last Week

Current

