

Weekly Fire Danger Assessment NCFS - Region **THREE**

For Time Period:

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

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

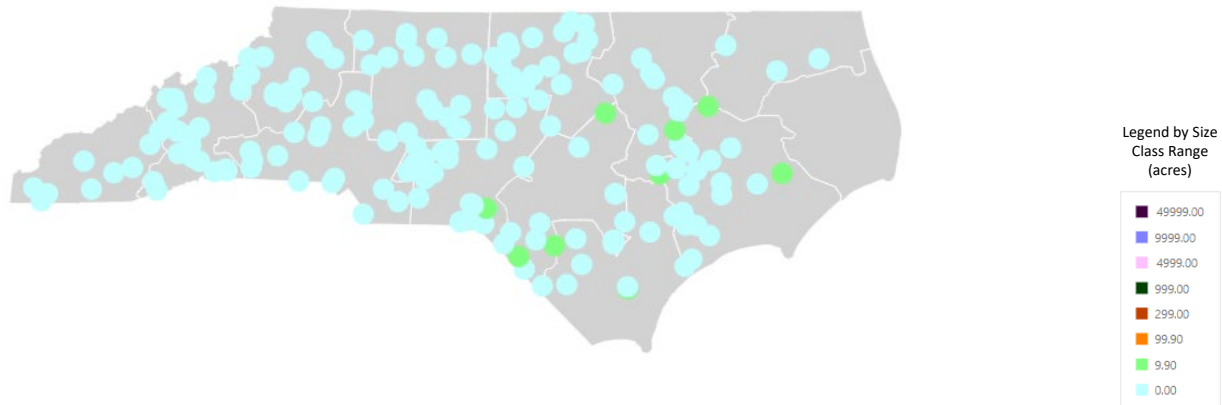
Past Week's Signal 14 Activity

NCFS - Region 3			
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:	60	131.7	
Prescribed Fires:	10	409	

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

R3

Regional Comments for this Week – R3

- No significant issues with mainly surface fire & not duff
 - No special mop-up or tactics being employed
 - Normal levels of IA with increases during alignment of warm, windy weather and dry fuels.
- 100's and 1000's generally not contributing
- However – snags are burning readily
- Several good frost/freeze events but damage seems limited to very tender new growth
- Green-Up note: about 2-weeks ahead of “normal”
 - Example - Yellow Poplar along escarpment areas

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

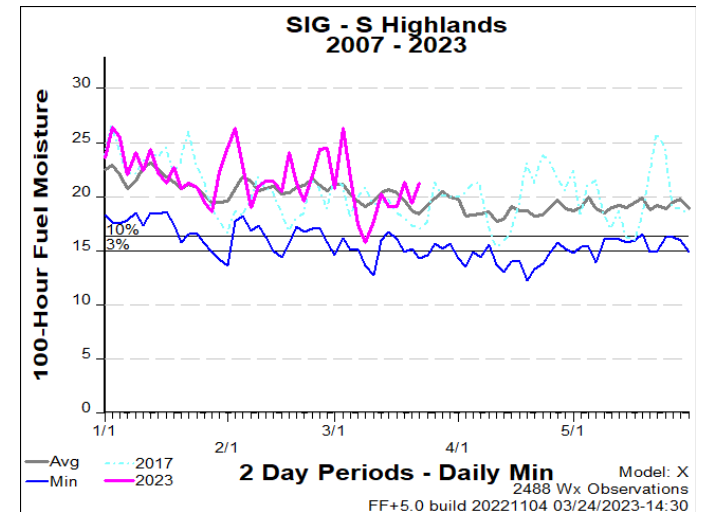
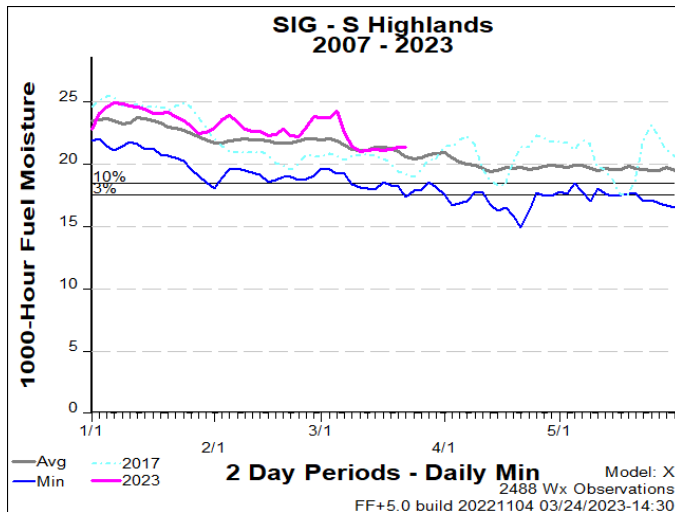
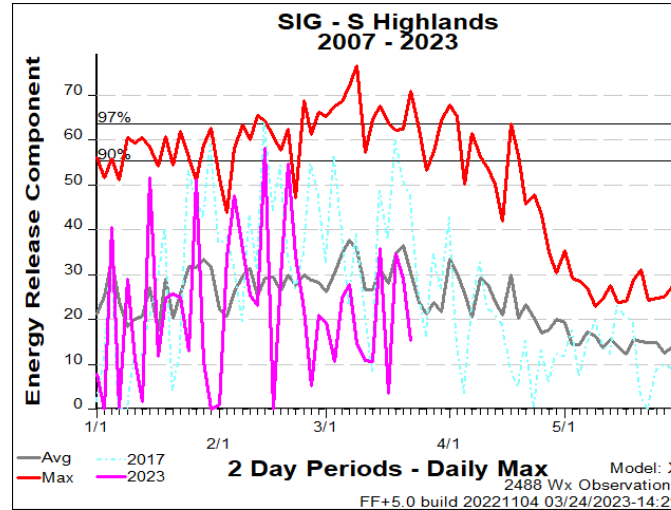
Dead fuel moisture forecast values are grouped into three categories based on historical percentiles, assessed using the FF+ All Days filter through 2021:

- 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 – Southern Highlands



Weekly Outlook

Southern Highlands FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

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

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	71	70	68	60	60	64	65
Avg. Min. Humidity (%)	41	35	47	44	27	41	60
Avg. 20' Wind Speed (mph)	16	7	8	10	9	7	10
Avg. Wind Direction*	WSW	WSW	SW	NW	W	SSW	S
Avg. Probability of Precip. (%)	41	53	37	32	5	49	63
Days Since a Wetting Rain**	0.0	0.0	0.0				
Forecast ERC (Fuel Model X)	43.9	51.9	43.5	45.5	54.3	55.5	41.7
Forecast BI (Fuel Model X)	214.5	161.4	137.1	157.8	146.1	148.0	140.4
Forecast IC (Fuel Model X)	11.7	13.9	10.0	10.2	12.8	13.7	9.1
Forecast 100-Hr. FMC	19.9	19.3	18.9	18.6	18.2	17.4	17.3
Forecast 1000-Hr. FMC	24.3	24.1	23.9	23.6	23.5	23.3	23.0
KBDI	23.0						

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.

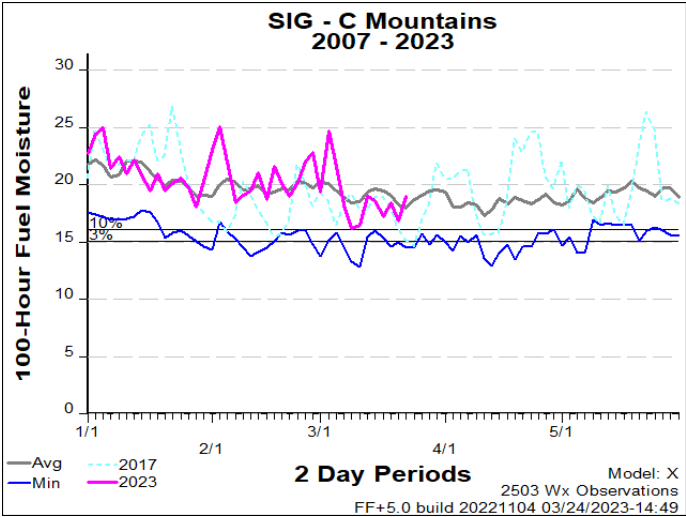
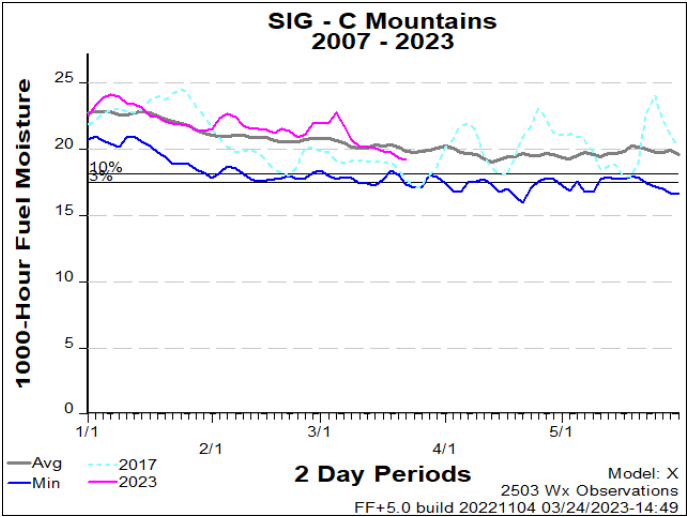
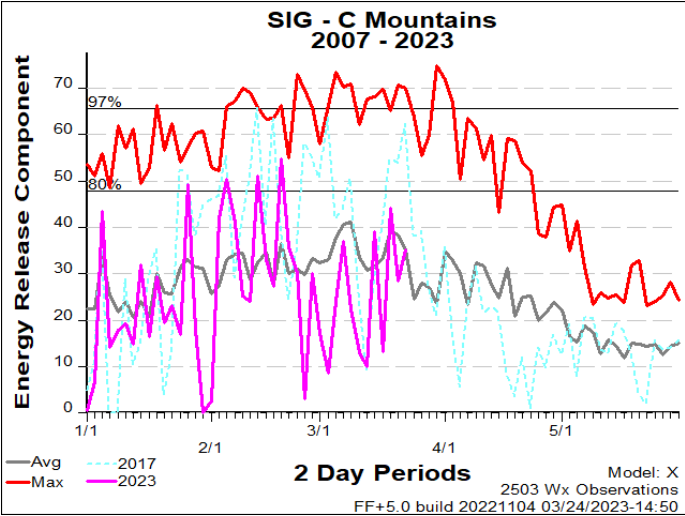
Values in the table above are averages from 3 stations in this FDRA:

- 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

Region Specific – Central Mountains



Weekly Outlook

Central Mountains FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

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

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	74	73	71	62	60	66	67
Avg. Min. Humidity (%)	30	29	41	40	25	36	53
Avg. 20' Wind Speed (mph)	18	8	9	11	11	8	10
Avg. Wind Direction*	SW	W	SSW	NW	NW	SSW	S
Avg. Probability of Precip. (%)	52	47	35	34	4	45	59
Days Since a Wetting Rain**	0.0	0.3	1.0				
Forecast ERC (Fuel Model X)	46.0	51.9	40.3	40.6	49.2	48.0	33.1
Forecast BI (Fuel Model X)	209.0	151.1	117.6	139.7	132.8	127.9	113.4
Forecast IC (Fuel Model X)	15.3	16.3	11.3	11.9	13.0	13.5	9.2
Forecast 100-Hr. FMC	18.5	18.1	17.7	17.5	17.2	16.6	16.5
Forecast 1000-Hr. FMC	22.5	22.3	22.2	22.0	21.9	21.7	21.5
KBDI	33.3						

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

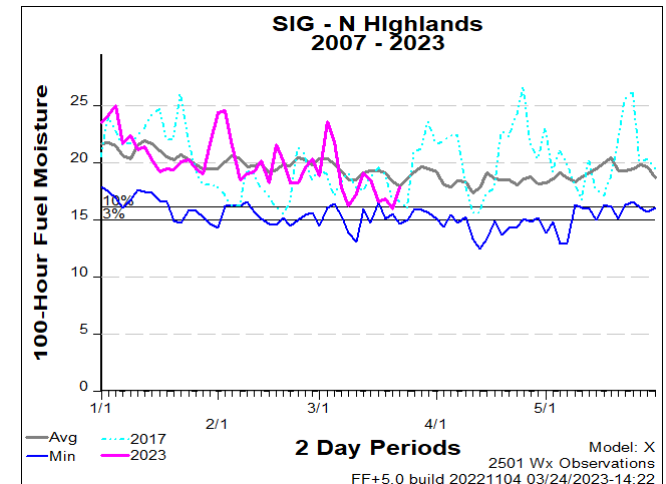
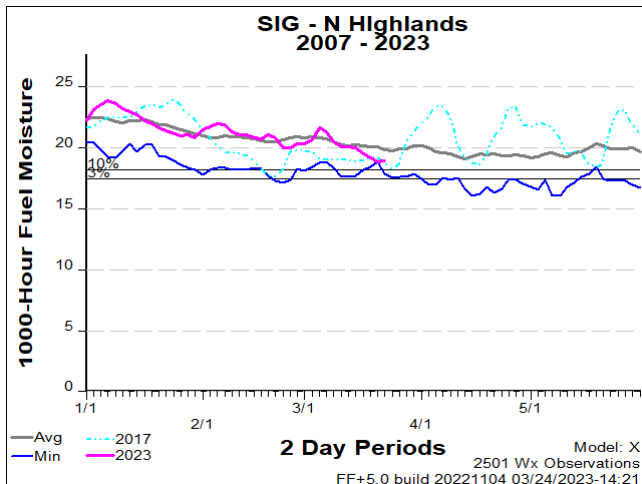
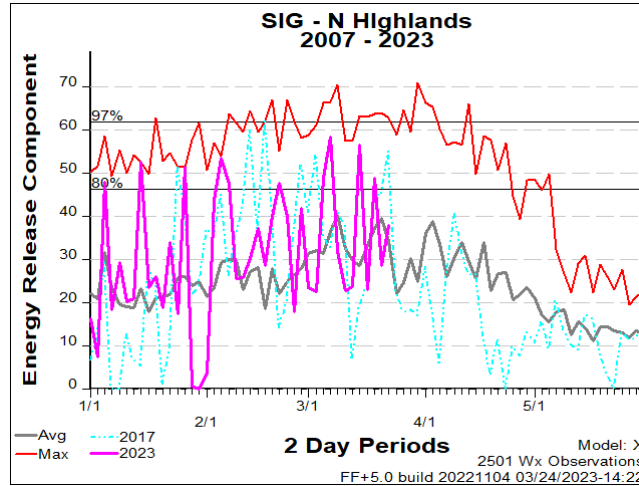
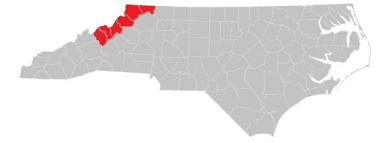
Values in the table above are averages from 3 stations in this FDRA:

- 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

Region Specific – Northern Highlands



Weekly Outlook

Northern Highlands FDRA - General Fire Danger Forecast

For planning purposes only; forecast is subject to change

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

DAY	SAT 25-Mar	SUN 26-Mar	MON 27-Mar	TUE 28-Mar	WED 29-Mar	THU 30-Mar	FRI 31-Mar
Avg. Max. Temp. (°F)	68	69	64	56	54	60	58
Avg. Min. Humidity (%)	33	30	48	44	27	37	63
Avg. 20' Wind Speed (mph)	19	11	8	12	12	9	10
Avg. Wind Direction*	WSW	W	SSE	NW	WNW	WSW	SSW
Avg. Probability of Precip. (%)	66	33	30	38	3	46	58
Days Since a Wetting Rain**	0.0	1.0	2.0				
Forecast ERC (Fuel Model X)	38.0	44.2	41.7	37.9	44.5	48.0	33.2
Forecast BI (Fuel Model X)	154.9	125.9	98.4	119.7	117.0	122.9	100.3
Forecast IC (Fuel Model X)	14.9	15.3	10.2	10.7	12.0	13.8	7.7
Forecast 100-Hr. FMC	18.0	17.6	16.8	16.2	15.9	15.5	15.5
Forecast 1000-Hr. FMC	21.8	21.6	21.5	21.3	21.2	21.0	20.8
KBDI	28.5						

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.

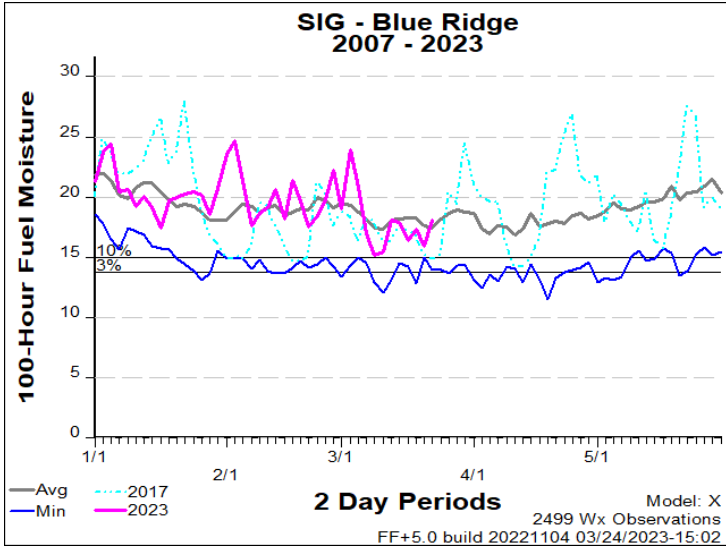
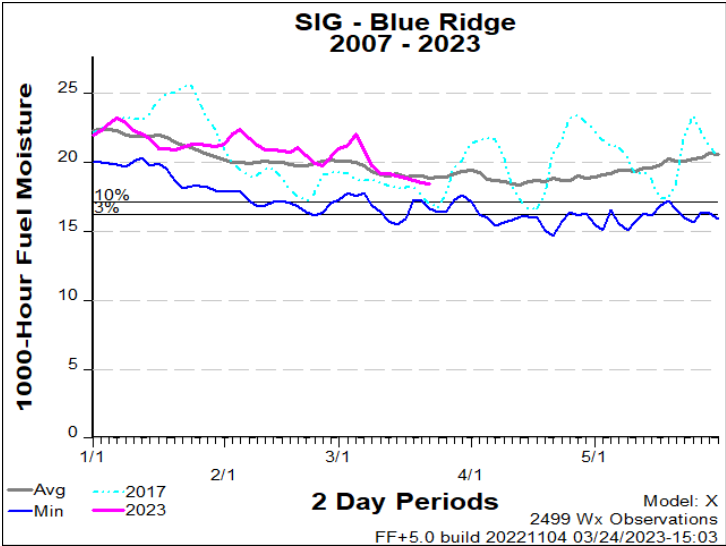
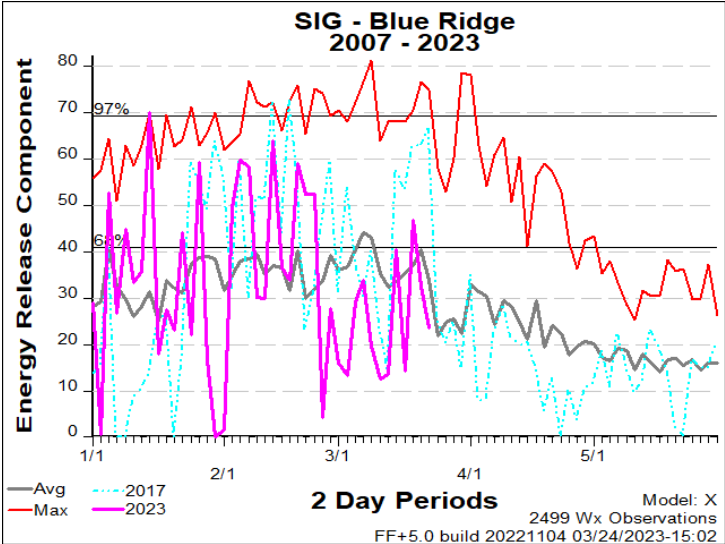
Values in the table above are averages from 3 stations in this FDRA:

- 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

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.

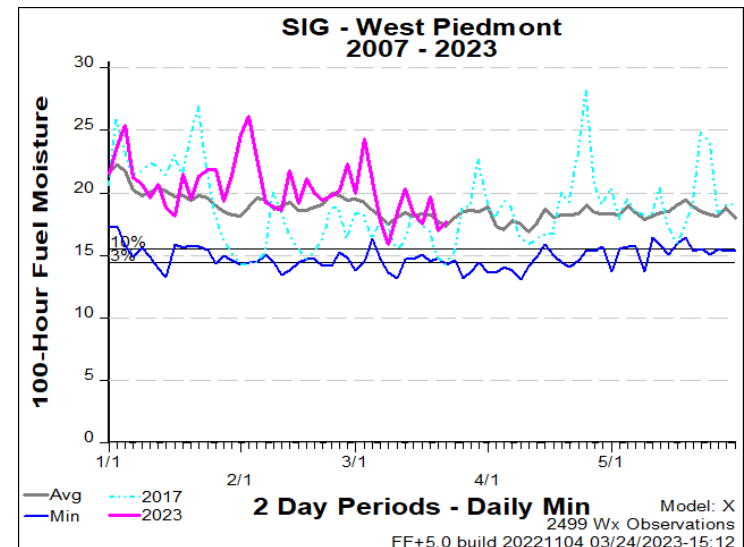
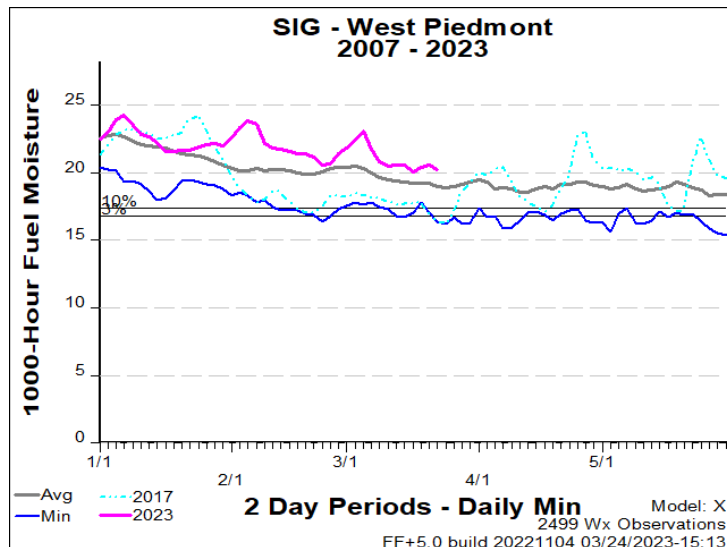
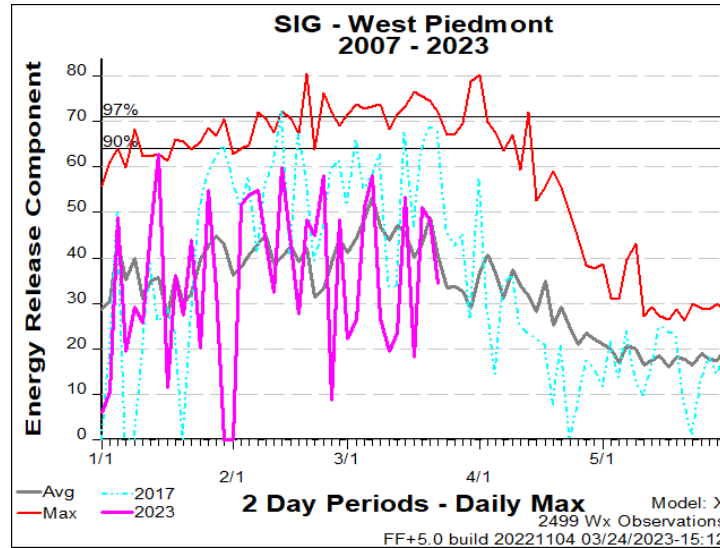
Values in the table above are averages from 3 stations in this FDRA:

- 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			

Outlook Summary Table – R3

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 3				
		Southern Highlands	Central Mountains	Northern Highlands	Blue Ridge Escarp	Western Piedmont
25-Mar	Sat	High	Critical	Critical	Critical	Critical
26-Mar	Sun	High	Critical	Critical	Critical	Critical
27-Mar	Mon	High	High	Critical	Critical	High
28-Mar	Tues	High	Critical	Critical	Critical	High
29-Mar	Weds	Critical	Critical	Critical	Critical	Critical
30-Mar	Thurs	High	Critical	Critical	Critical	Critical
31-Mar	Fri	High	High	High	Critical	Critical

Weather Outlook Discussion

Greenville-Spartanburg NWS (PM Fire WX Forecast Discussion):

...VERY DEEP MIXING HEIGHTS AND STRONG WINDS DEVELOPING SATURDAY...

.DISCUSSION...

A line of showers with embedded thunderstorms will cross the area overnight into mid-day Saturday. Dry and warm weather will return for Sunday. Rainfall chances return Monday and Tuesday as a warm front approaches from the south.

Blacksburg NWS (PM Fire WX Forecast Discussion):

.DISCUSSION...

A warm front will remain just to the north through tonight, but a cold front should arrive by Saturday morning to bring showers with possibly a few embedded thunderstorms. After the frontal passage, winds could gust up to 40 MPH in the higher elevations of southeast West Virginia by Saturday afternoon and up to 30 MPH elsewhere. Minimum relative humidities on Saturday could drop toward 35 percent. High pressure will follow on Saturday night to provide drier conditions for Sunday, but an area of low pressure could bring the next chance of rain during the early part of the work week.

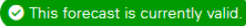
NC DAQ – Statewide Air Quality Forecast Information

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

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.

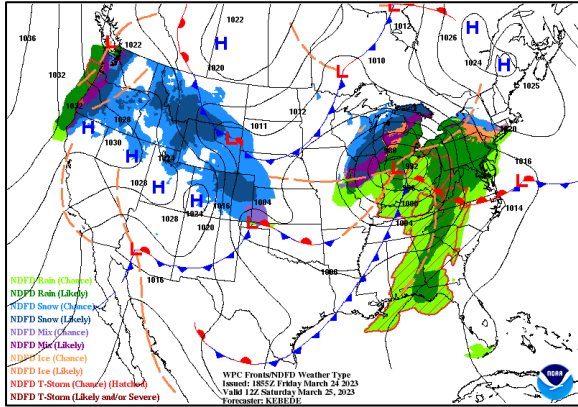
Forecast Day	AQI Range	Category Range
Friday (Mar 24)	45 to 55	 to 
Saturday (Mar 25) 	45	
Sunday (Mar 26)	45 to 47	
Monday (Mar 27)	45	

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

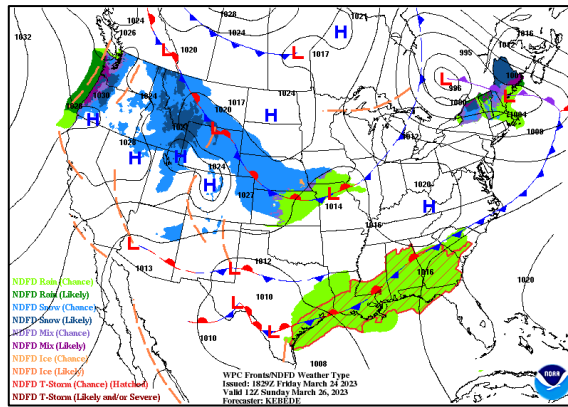
DAQ Air Quality Portal: <https://airquality.climate.ncsu.edu/>

WPC Forecasted Surface Fronts & Sea-Level Pressures

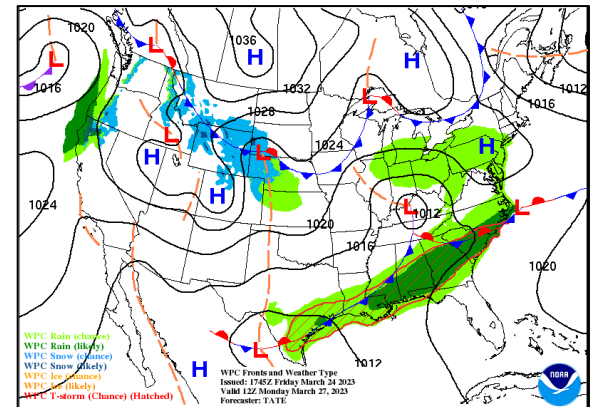
Saturday - 700 am



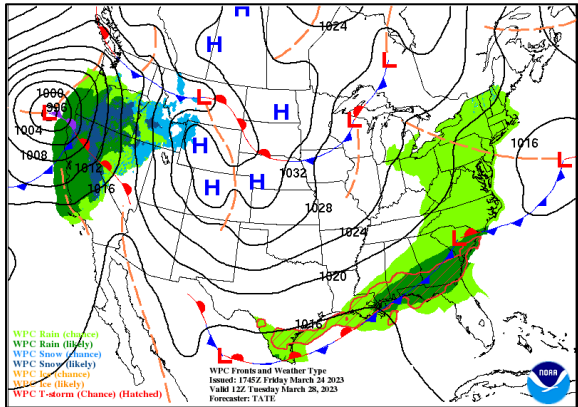
Sunday - 700 am



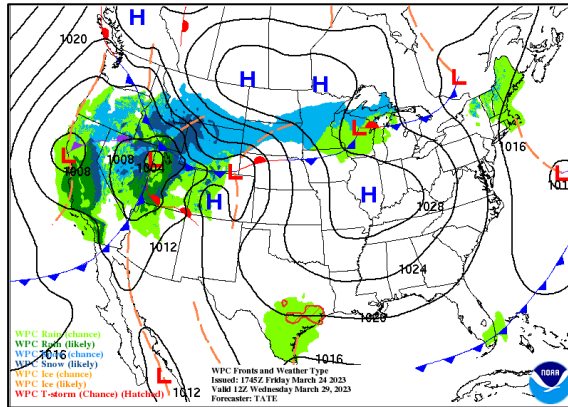
Monday - 700 am



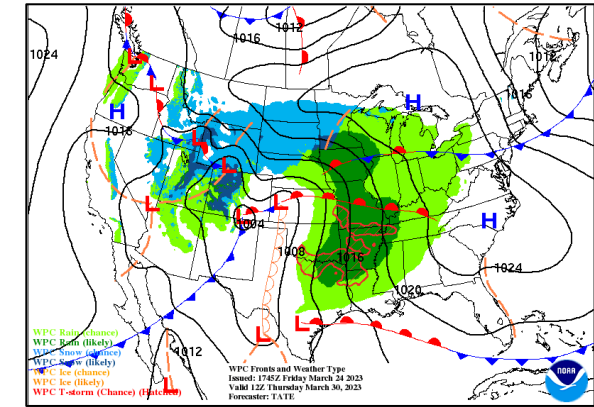
Tuesday - 700 am



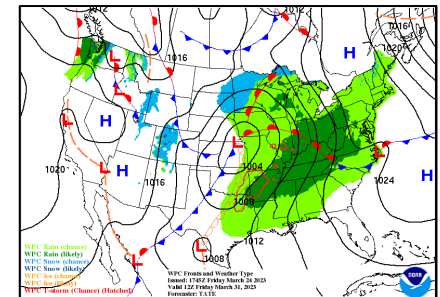
Wednesday - 700 am



Thursday - 700 am

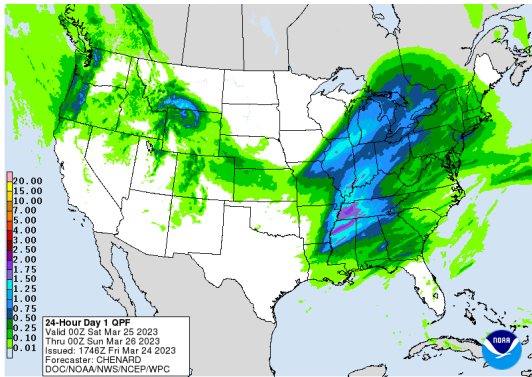


Friday - 700 am

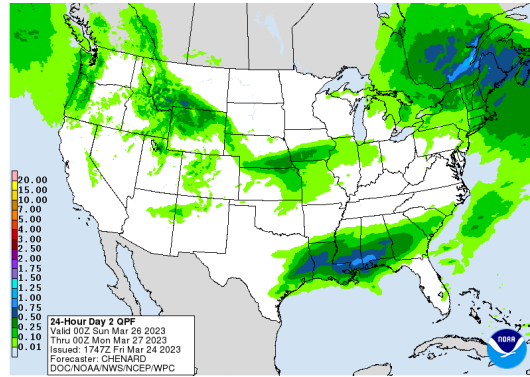


Quantitative Precipitation Forecast, 7-Day

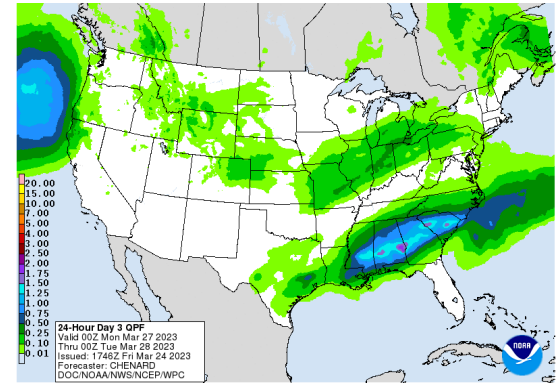
Day - 1



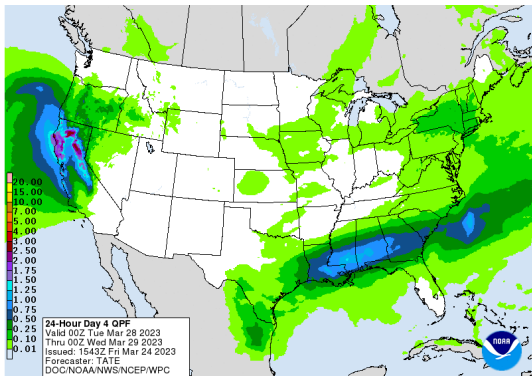
Day - 2



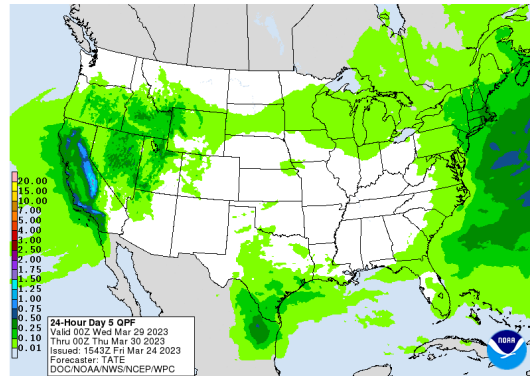
Day - 3



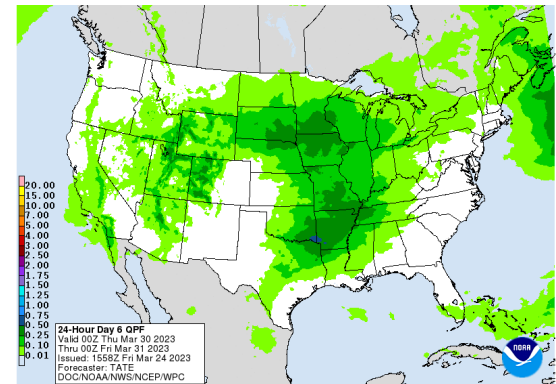
Day - 4



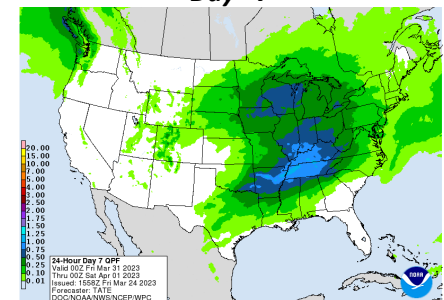
Day - 5



Day - 6

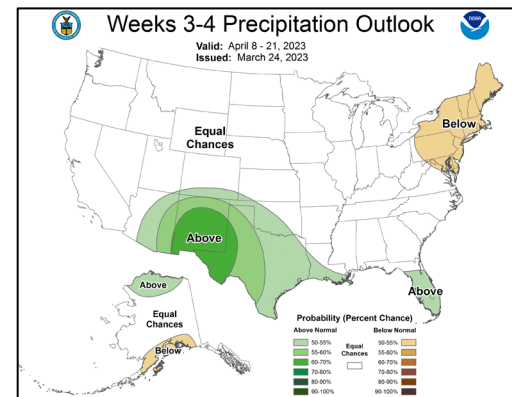
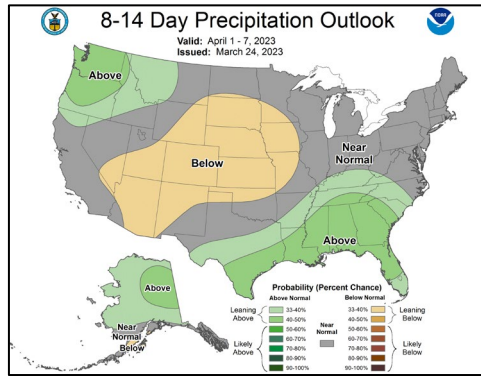
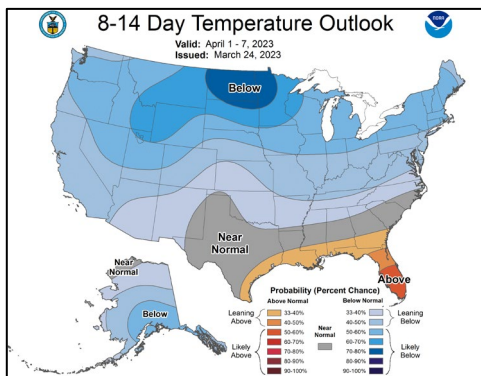
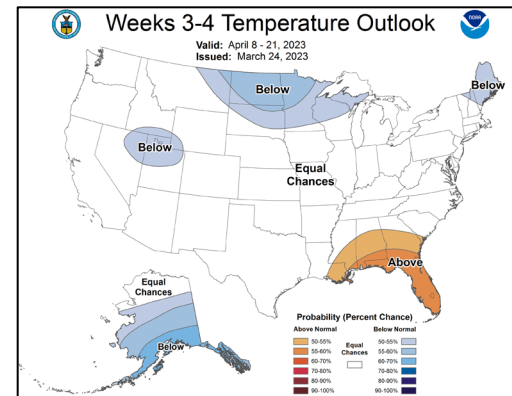
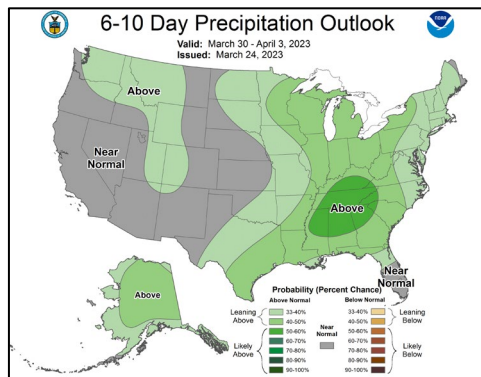
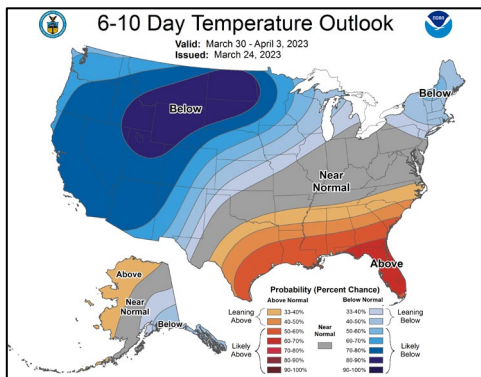


Day - 7



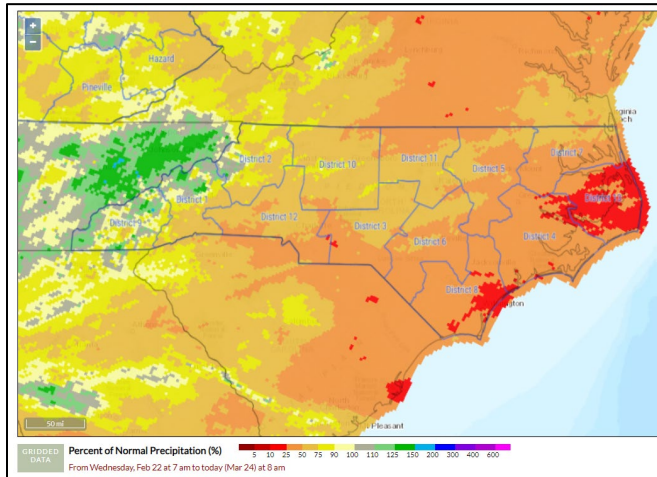
Temp & Precip Outlook

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

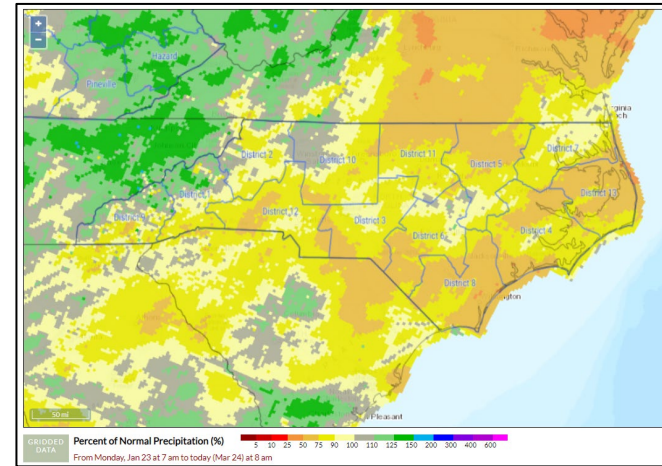


Percent of Normal Precip, FWIP (Ending 0800 3/24)

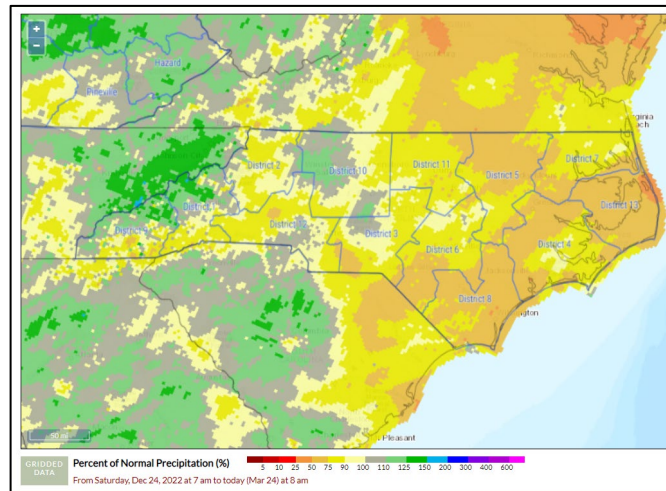
30-Day % of Normal



60-Day % of Normal

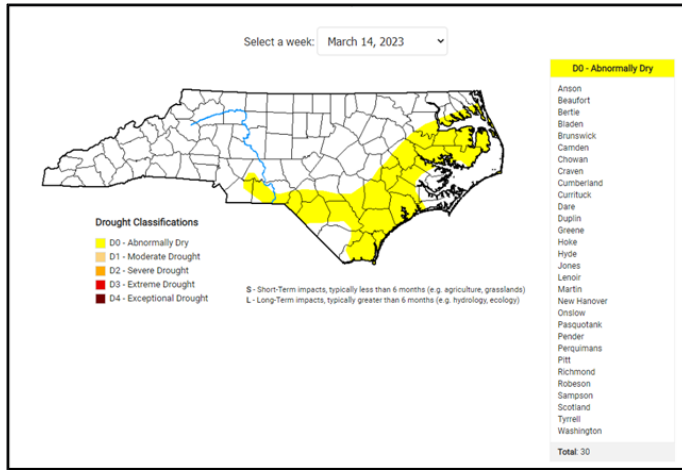


90-Day % of Normal

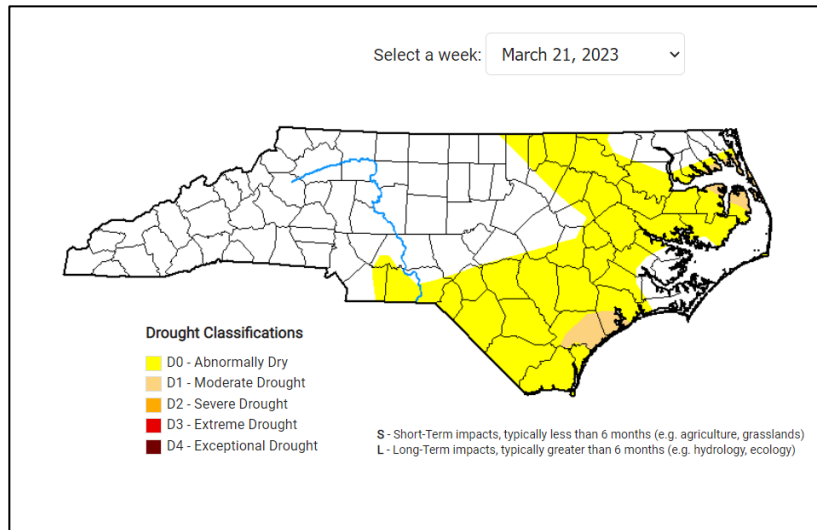


Drought Situation

Previous Week:



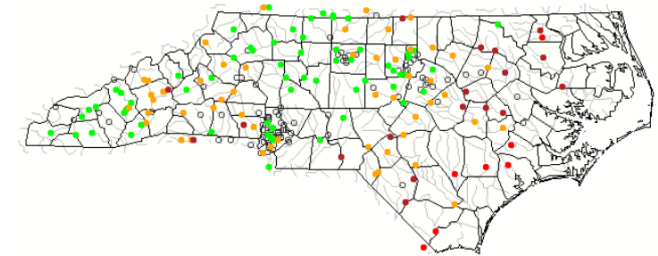
Current Week:



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

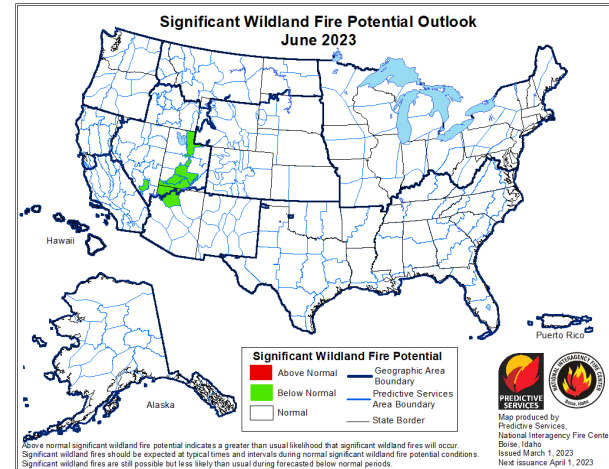
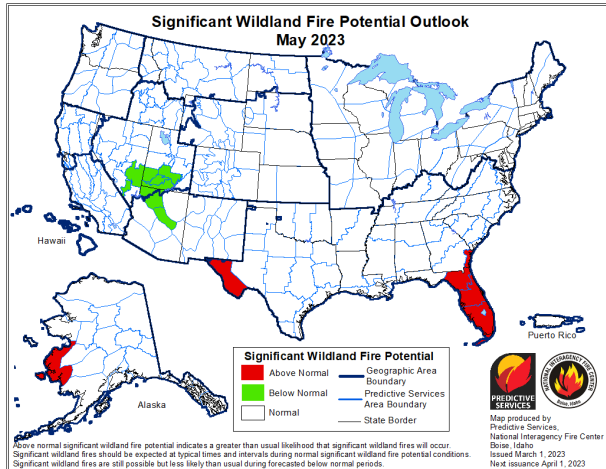
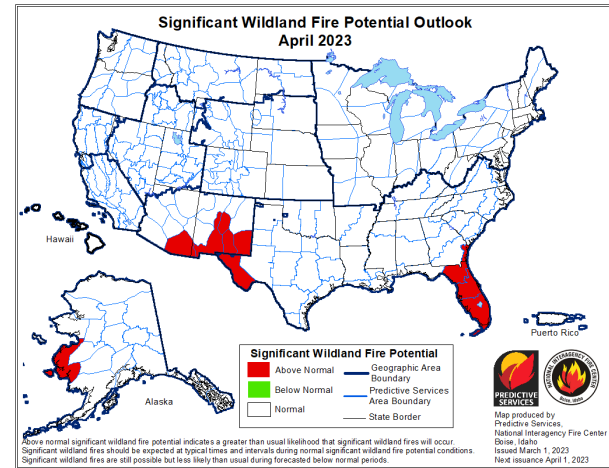
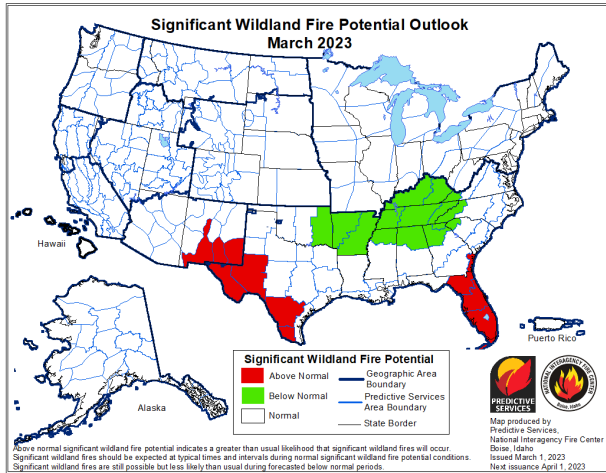
List of all stations Single station Nearest stations

Explanation - Percentile classes						
Low	<10 Much below normal	10-24 Below normal	25-75 Normal	76-90 Above normal	>90 Much above normal	High
						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.

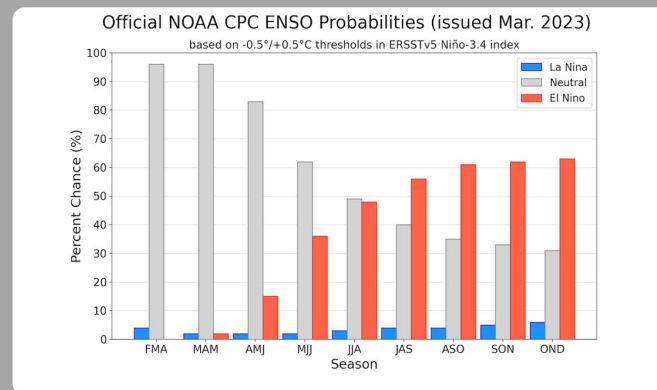
ENSO Note

- 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

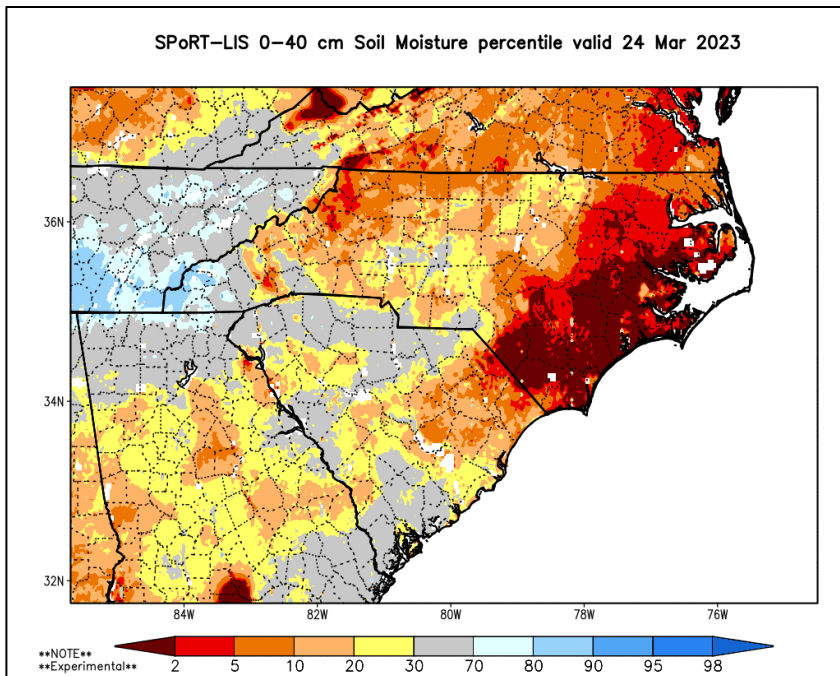
Updated: 9 March 2023

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.



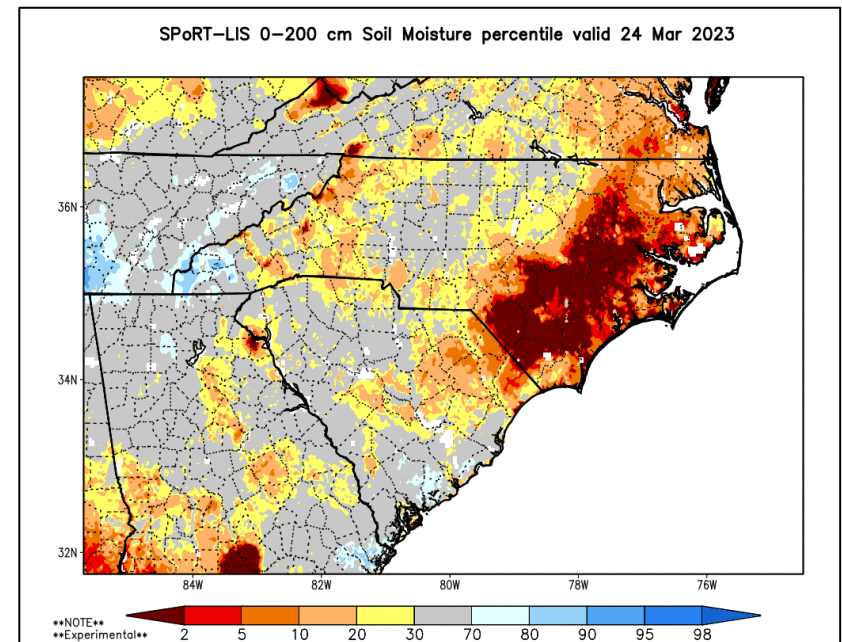
SPoRT Relative Soil Dryness

0-40 cm Depth



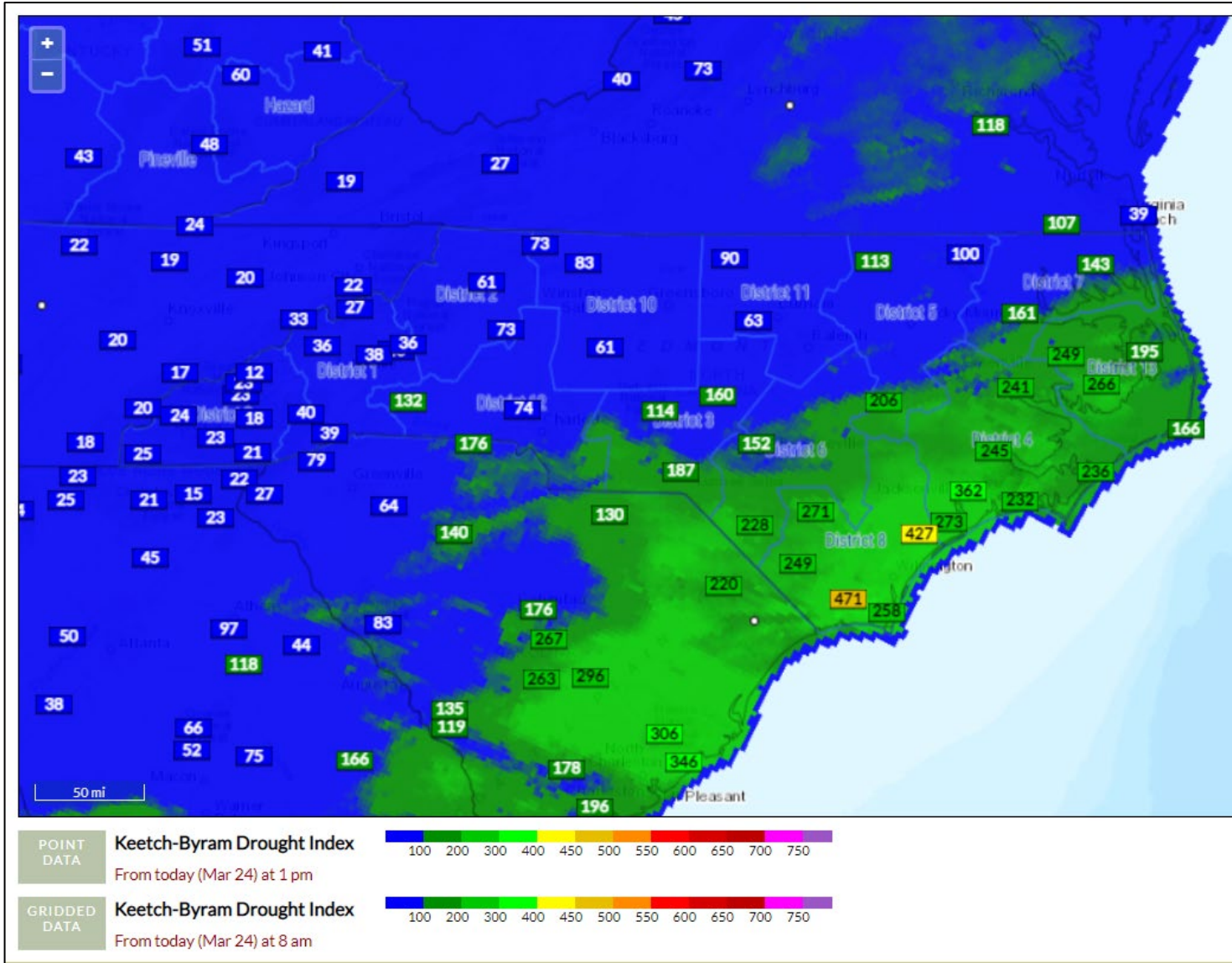
- Modeled Drying Trend Continues
- Deeper levels of dryness still focused to the East & South

0-200 cm Depth



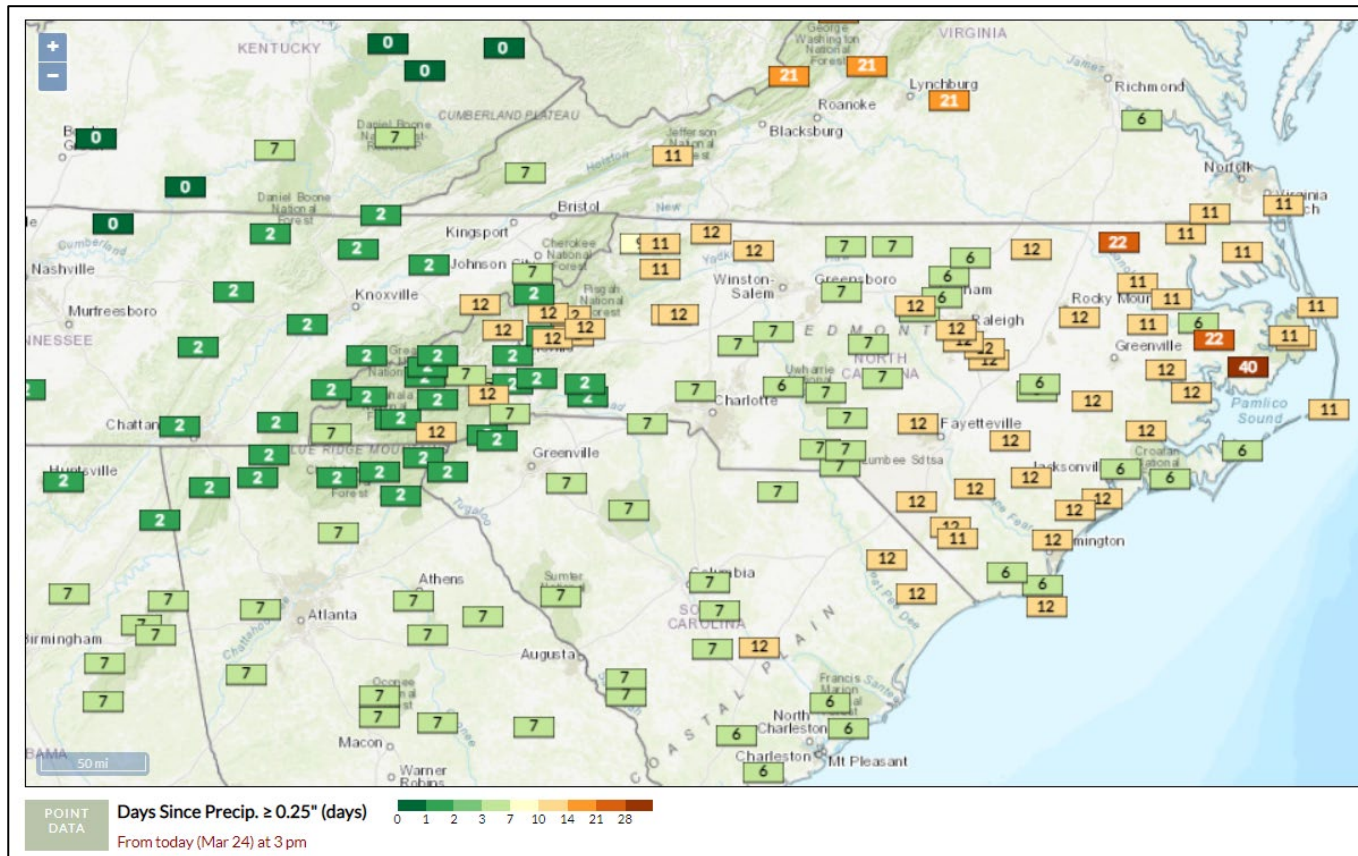
KBDI - Gridded & Station Points

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

