



Wildfire Activity: A Look Back and Outlook for Fall / Winter

The Drought Management Advisory Council
Annual Meeting
September 29th, 2020

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NC Forest Service



NC Forest Service Wildfire Activity

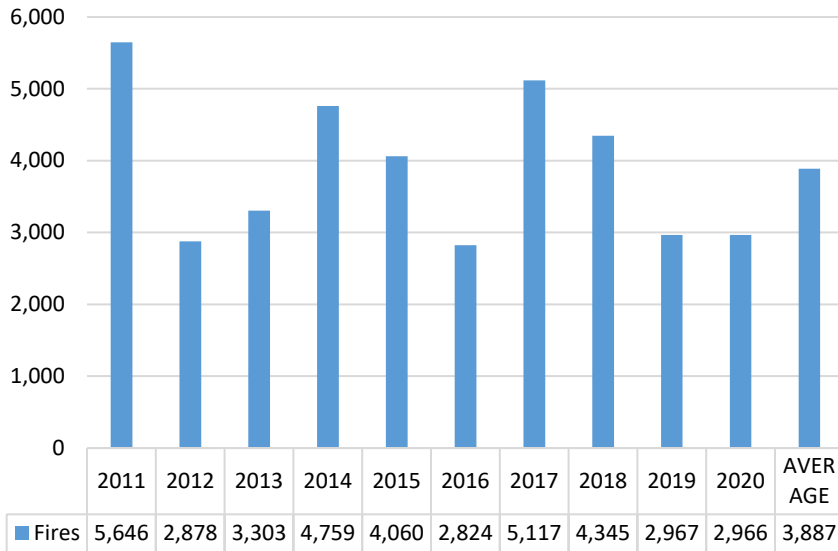
Period	# Fires*	# Acres*
9/1/19-8/31/20	2,966	8,904
Previous Year	2,967	7,975
10 Year AVG	3,887	13,771
Deviation from AVG %	-24	-35

* These numbers do not include fires on federal lands.

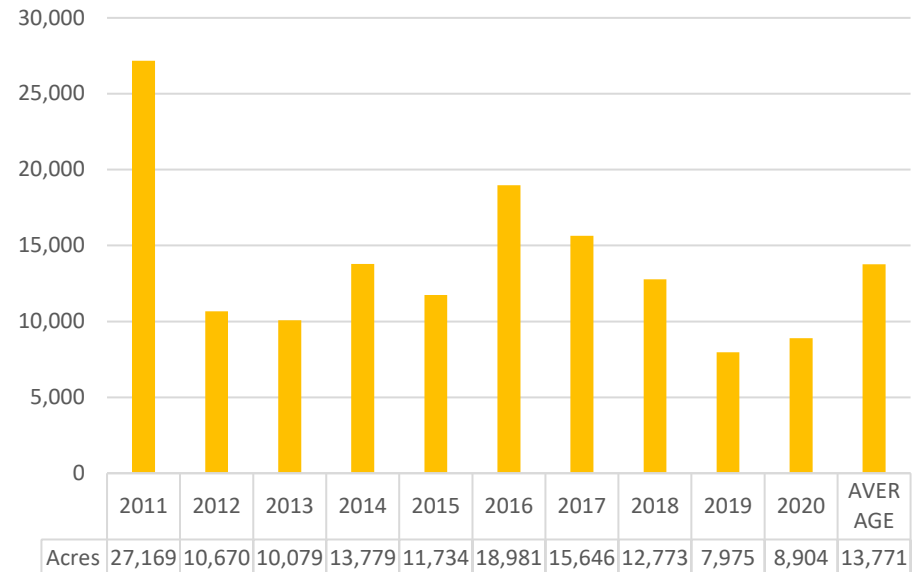


NC Forest Service Wildfire Activity, 2011-2020

Fires



Acres



* These numbers do not include fires on federal lands.



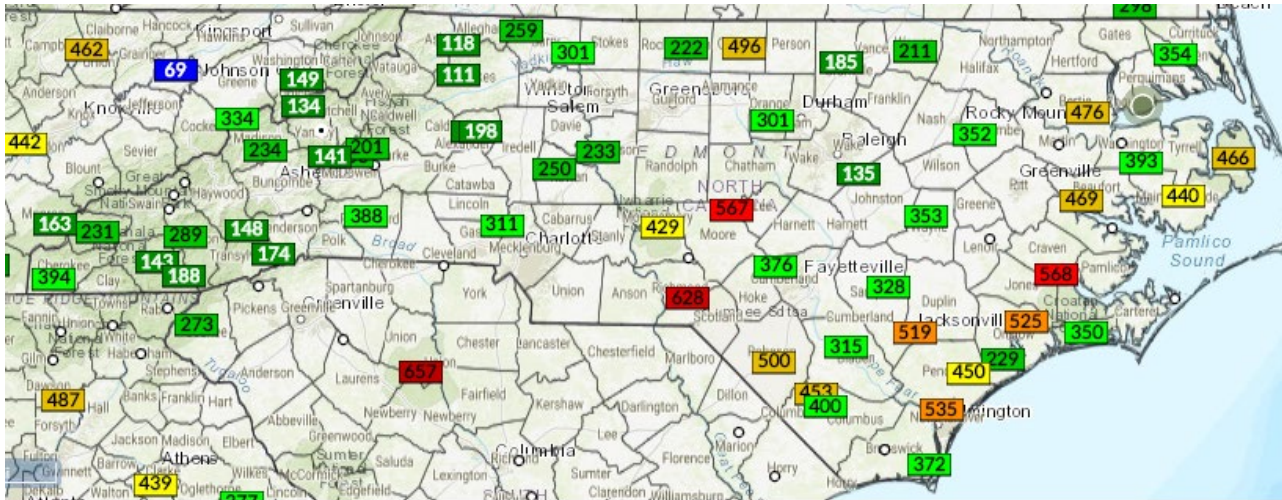
Keetch-Byram Drought Index (KBDI)

KBDI is a soil/duff drought index that ranges from 0 (no drought) to 800 (extreme drought) and is based on soil capacity of 8 inches of water. Factors include latitude, maximum daily temperature, daily precipitation, antecedent precipitation, and annual average precipitation.

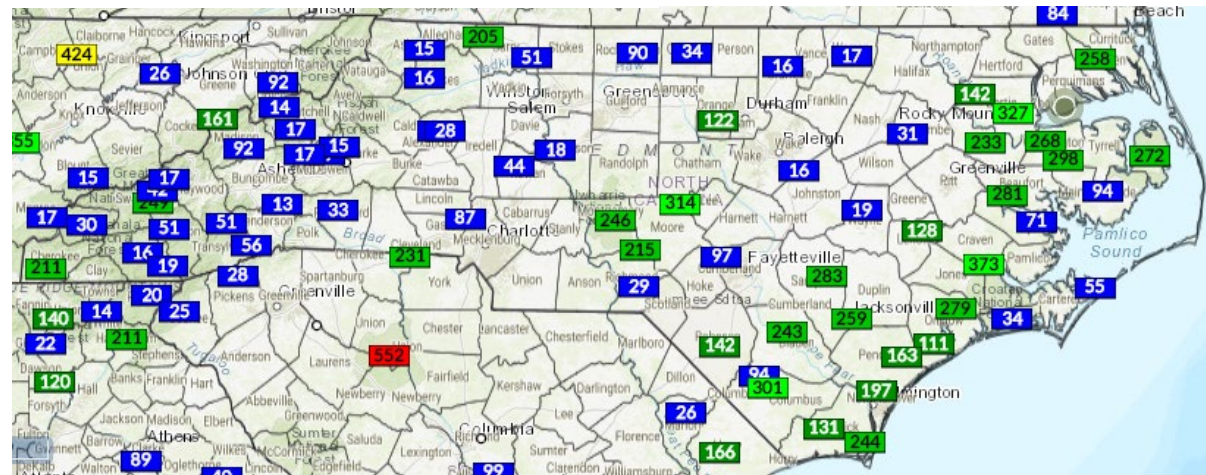
- Between **0 and 200**, soil moisture and large class fuel moistures are high and do not contribute significantly to fire intensity.
- Readings of **201-400** are typical of late spring, early growing season. Lower litter and duff layers are drying and beginning to contribute to fire intensity.
- Readings of **401-600** indicate a possible burgeoning drought and are seen in late summer/early fall in drier years. Lower litter and duff layers burn intensely.
- Readings of **601-800** are associated with severe drought. Intense, deep burning fires with significant downwind spotting. Extensive mop-up required. Live fuels burn actively.



KBDI Map



<https://climate.ncsu.edu/fwip/>

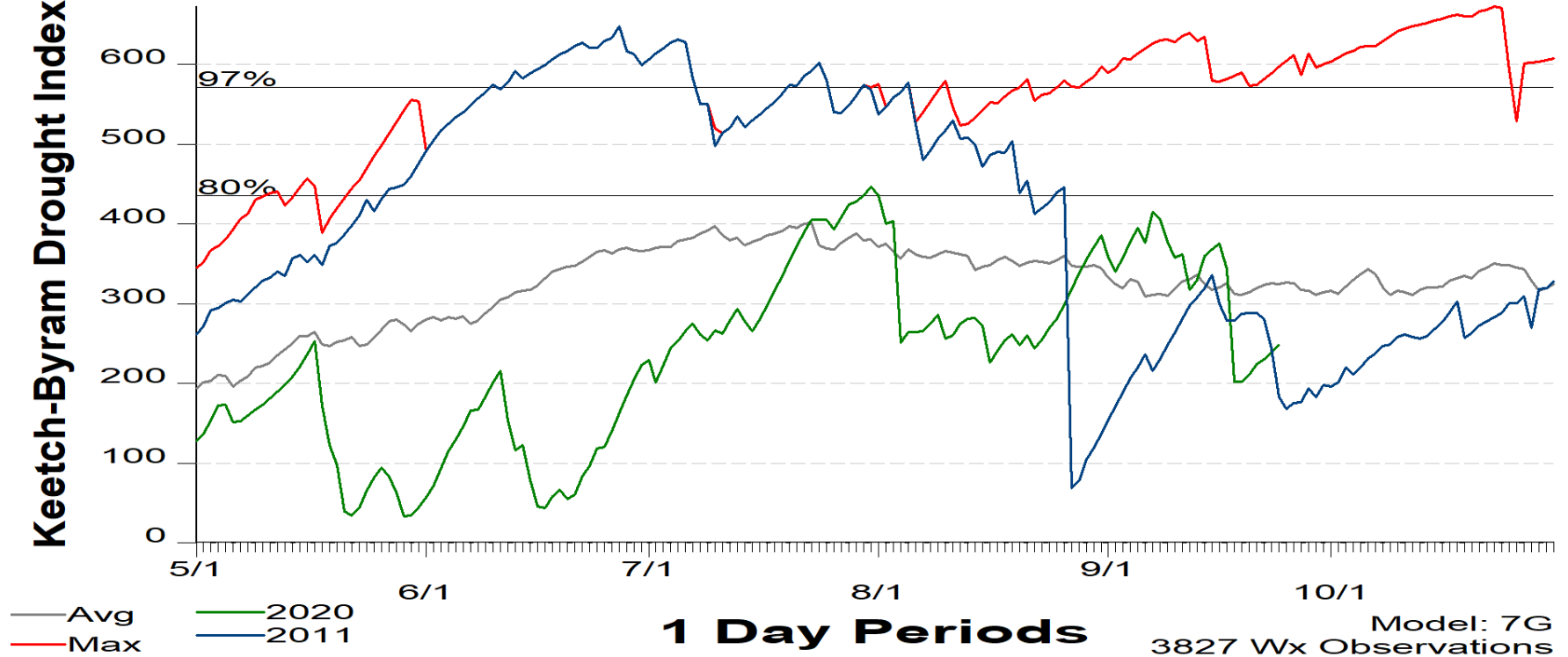




Coastal KBDI, Summer 2020

**SIG - Coastal
2000 - 2020**

Keetch-Byram Drought Index



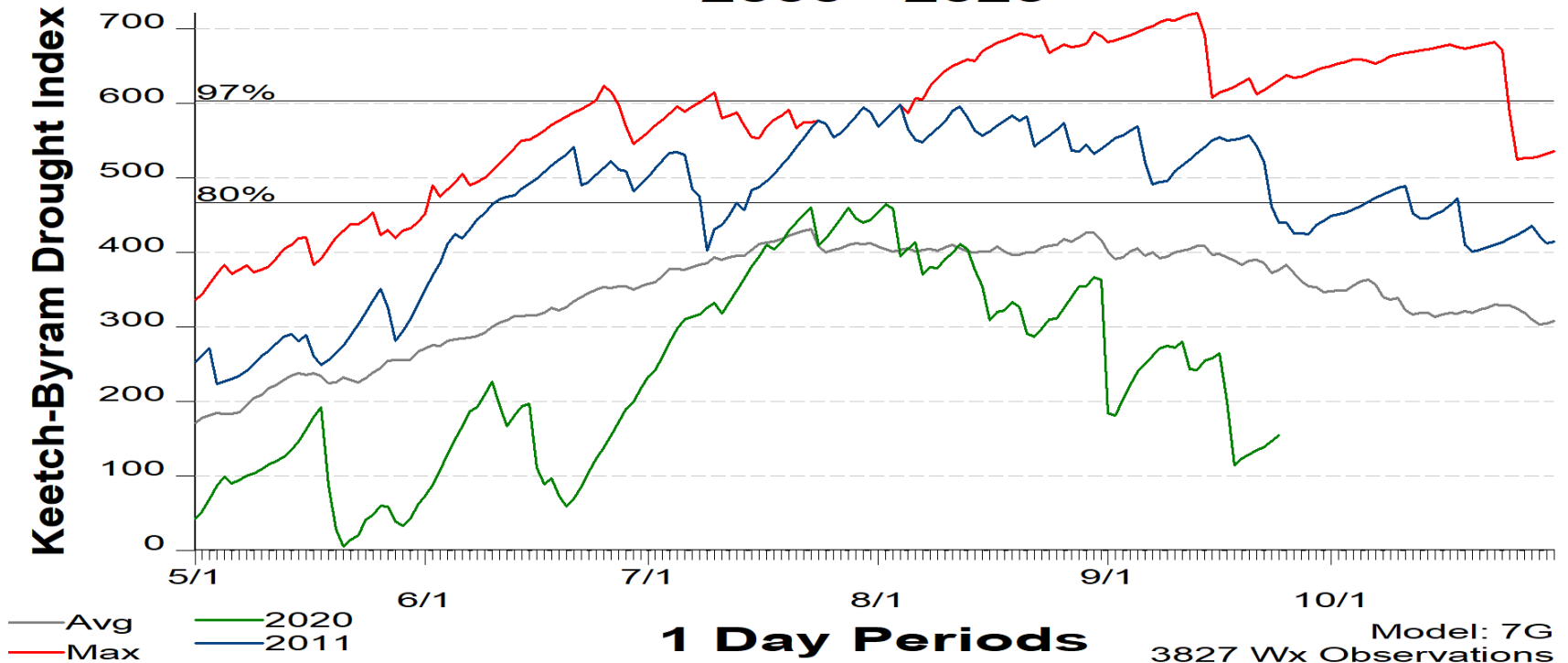
1 Day Periods

Model: 7G
3827 Wx Observations
FF+4.2 build 24.19 09/25/2020-11:02



Piedmont KBDI, Summer 2020

SIG - Piedmont 2000 - 2020



1 Day Periods

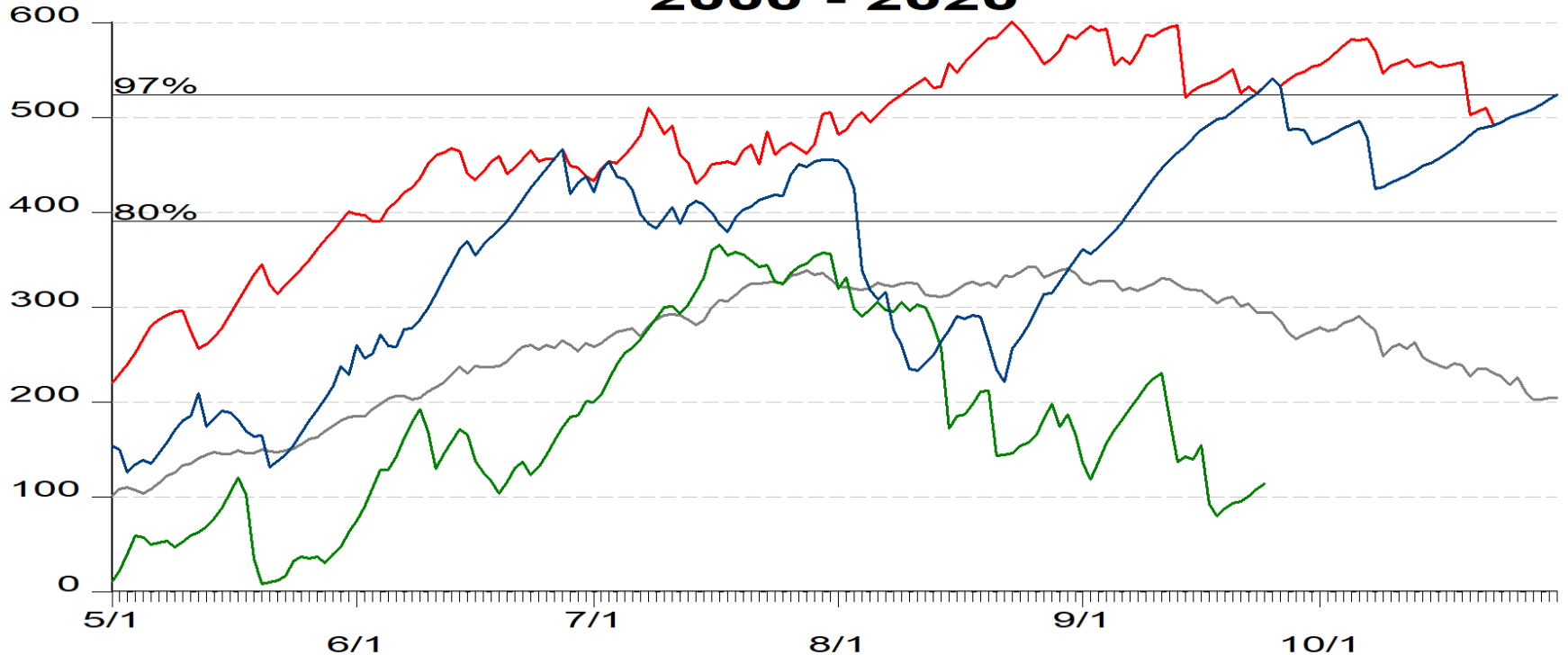
Model: 7G
3827 Wx Observations
FF+4.2 build 24.19 09/25/2020-10:59



Mountains KBDI, Summer 2020

SIG - Mountains 2000 - 2020

Keetch-Byram Drought Index



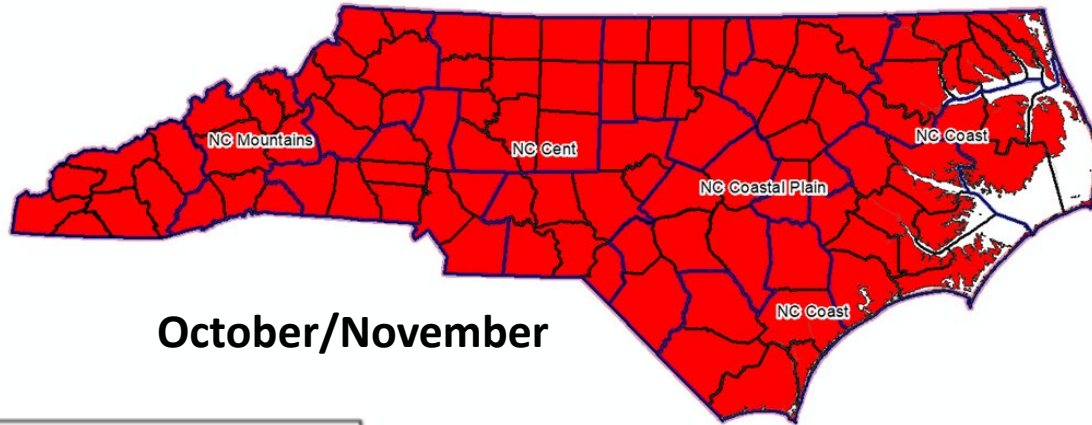
— Avg — 2020
 — Max — 2016

1 Day Periods

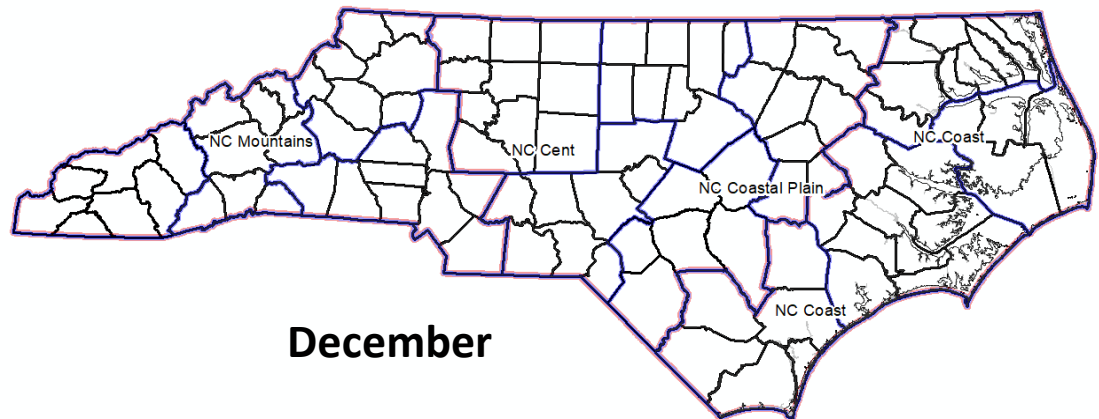
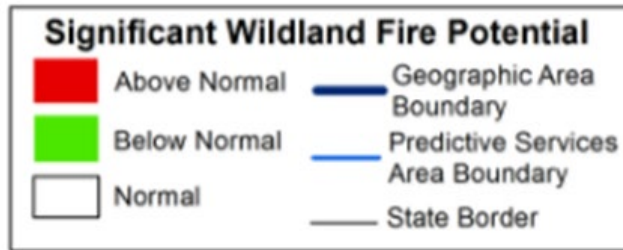
Model: 7G
 3826 Wx Observations
 FF+4.2 build 24.19 09/25/2020-10:53



SIGNIFICANT WILDLAND FIRE POTENTIAL OUTLOOK



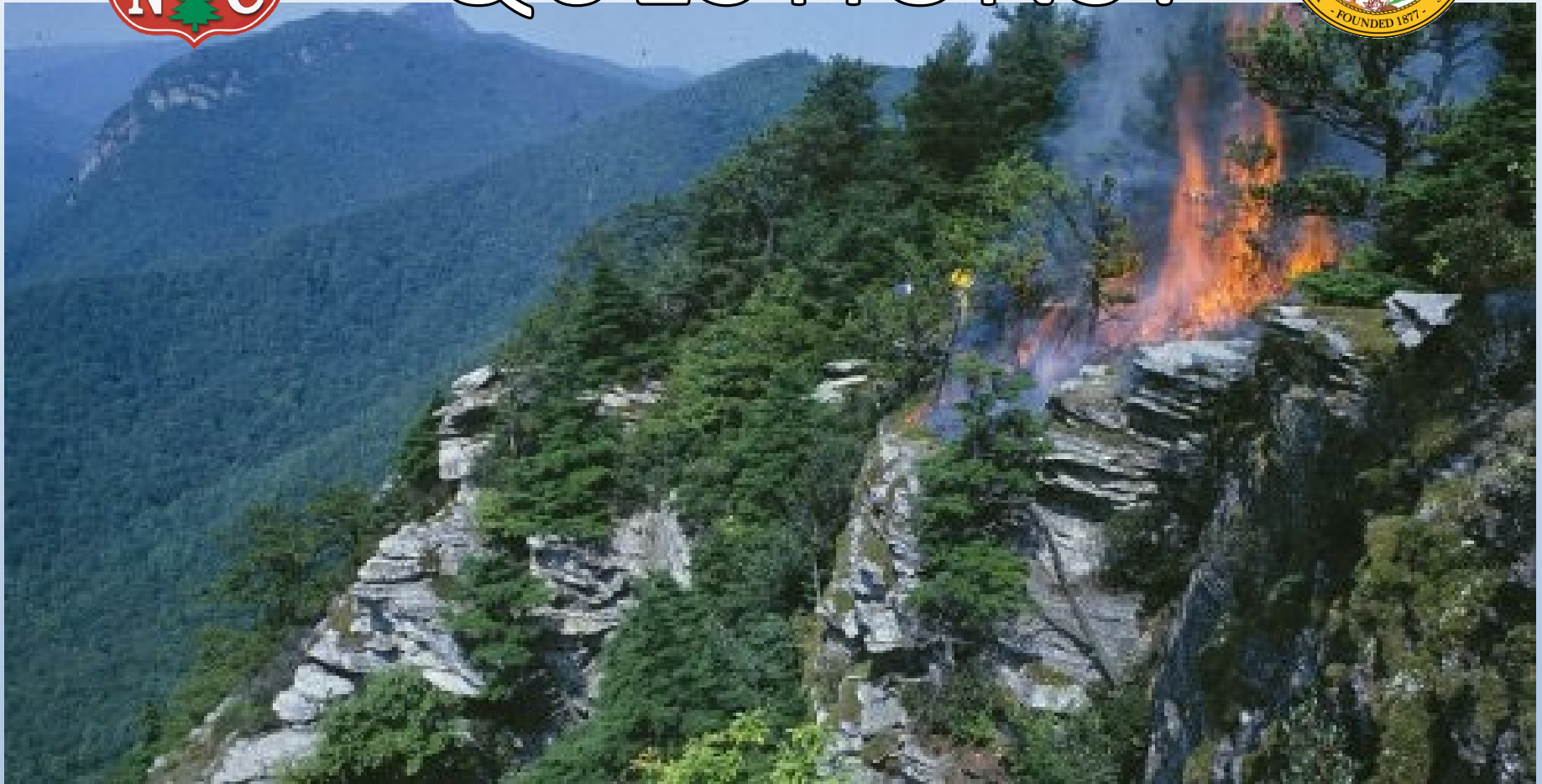
October/November



December



QUESTIONS?



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