Wildfire Activity: A Look Back and Outlook for Spring / Summer 2018

The Drought Management Advisory Council Annual Meeting
April 4th, 2019

Cabe Speary
Fire Environment Forester
NC Forest Service
### NC Forest Service Wildfire Activity

<table>
<thead>
<tr>
<th>Period</th>
<th># Fires*</th>
<th># Acres*</th>
</tr>
</thead>
<tbody>
<tr>
<td>4/1/18-3/31/19</td>
<td>2,951</td>
<td>9,490</td>
</tr>
<tr>
<td>Previous Year</td>
<td>3,784</td>
<td>10,179</td>
</tr>
<tr>
<td>10 Year AVG</td>
<td>4,815</td>
<td>17,904</td>
</tr>
<tr>
<td>Deviation from AVG %</td>
<td>-39</td>
<td>-47</td>
</tr>
</tbody>
</table>

* 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

http://climate.ncsu.edu/fwip/index.php
Coastal KBDI,
Winter/Spring 2019

Keetch-Byram Drought Index

SIG - Coastal 2000 - 2019

1 Day Periods

Model: 7G
2404 Wx Observations
FF+4.2 build 24.19 04/03/2019-12:32
Mountains KBDI, Winter/Spring 2019

SIG - Mountains 2000 - 2019

Keetch-Byram Drought Index

1 Day Periods

Model: 7G
2370 Wx Observations
FF+4.2 build 24.19 04/03/2019-12:37
SIGNIFICANT WILDLAND FIRE POTENTIAL OUTLOOK

April

May-July

Significant Wildland Fire Potential

- Above Normal
- Below Normal
- Normal

- Increasing to Above Normal
- Decreasing to Below Normal
- Returning to Normal

Geographic Area Boundary
Predictive Services Area Boundary
QUESTIONS?

Meyer M. “Cabe” Speary, R.F 899
Fire Environment Forester
cafe.speary@ncagr.gov
252-325-3089

http://www.ncforestservice.gov/