

# **Drought Information Statement** for the NWS Blacksburg Service Area of western Virginia, southeast West Virginia, and northwest North Carolina Valid August 1, 2024

Issued By: NWS Blacksburg, VA Contact Information: <u>rnk.skywarn@noaa.gov</u>

- This product will be updated Aug. 8, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at <u>https://drought.gov/drought-information-statements</u>.
- Please visit <u>https://www.weather.gov/rnk/DroughtInformationStatement</u> for previous statements.



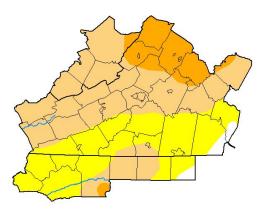




#### Link to the latest U.S. Drought Monitor for the NWS Blacksburg Service Area

- Drought Intensity and Extent
  - D2 Severe Drought: Covers the Alleghanys into the Southern Shenandoah Valley, and a small portion of Yadkin County, NC
  - D1 Moderate Drought: Southeast WV into the the Upper Tennessee, New, and Roanoke River Valleys and portions of the NC Piedmont
  - D0 Abnormal Dryness: North Carolina Mountains/Foothills and southside VA.
- Improvement in drought conditions is increasingly likely as a front moves in by Saturday with more rainfall.

#### U.S. Drought Monitor Blacksburg, VA WFO



#### **July 30, 2024** (Released Thursday, Aug. 1, 2024) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
Current	2.06	35.49	49.37	13.08	0.00	0.00
Last Week 07-23-2024	0.84	12.58	50.53	36.05	0.00	0.00
3 Month s Ago 04-30-2024	52.74	47.26	0.00	0.00	0.00	0.00
Start of Calendar Year 01-02-2024	9.25	55.96	34.78	0.00	0.00	0.00
Start of Water Year 09-26-2023	50.73	32.61	16.66	0.00	0.00	0.00
One Year Ago 08-01-2023	100.00	0.00	0.00	0.00	0.00	0.00

Intensity:



The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. For more information on the Drought Monitor, go to https://droughtmonitor.unl.edu/About.aspx

<u>Author:</u> Lindsay Johnson National Drought Mitigation Center



Image Caption: U.S. Drought Monitor valid 8 AM EDT July 30, 2024



### Recent Change in Drought Intensity

Link to the latest <u>4-week change map</u> for the NWS Blacksburg service area

- Four Week Drought Monitor Class Change
  - Drought Improvement: Nearly the entire service area of central & southwest Virginia, northwest North Carolina, and southeast West Virginia has experienced needed rainfall, and has seen drought categories drop. Exception is across portions of the Alleghanys.
  - During the past 4 weeks ending July 30th, most of the service area has experienced anywhere from a 1-class improvement with small slivers of 2-class improvement.
  - Only the Alleghanys have seen 1-class degradation.

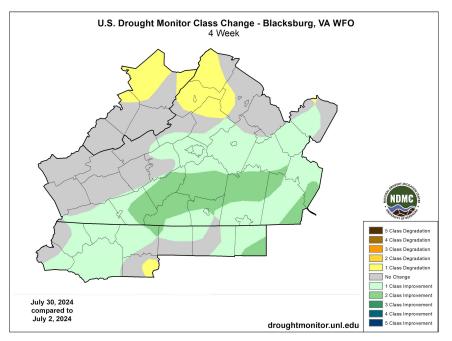


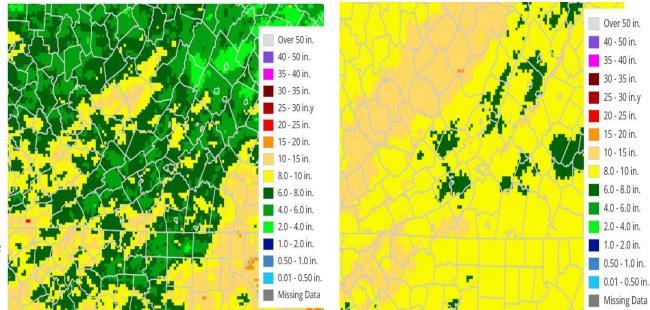
Image Caption: <u>U.S. Drought Monitor 4-week Class Change map</u> valid 8 AM EDT July 30, 2024



### **Precipitation Accumulations & Percent-of-Normals**

#### Observed over the past 60 days

- Greatest wetness over the past 60 days has occurred mainly in the NC mountains into portions of southern VA and southeast WV, with rainfall totals ranging from 10 to 15 inches, which is close to normal or just above.
- Sixty-day totals ranging from 4 to 10 inches were observed across the much of mountains, as well as across central portions of Virginia and North Carolina.



#### Image Captions:

Left - 60-Day Accumulated Precipitation Map for the NWS Blacksburg Service Area Right - 60-Day Percent of Normal Precipitation for the NWS Blacksburg Service Area Data is Courtesy of the <u>Midwest Regional Climate Center</u> Data over the past 60 days ending July 31, 2024

#### National Weather Service Blacksburg, VA





Links: See/submit Condition Monitoring Observer Reports (CMOR) and view the Drought Impacts Reporter

### Hydrologic Impacts

- Streamflows are normal to below normal across the lower Mid-Atlantic through the Carolinas, with much below normal across the Alleghanys.
- Water quality and recreational activities across some locations have been adversely impacted due to these low flows.

#### Soil Moisture

- Soil moistures have been well below normal since early June due to the combination of a lack of rainfall, abnormally warm temperatures, and long days.
- The low soil moisture occurred at a critical time of year for crop growth, with many farmer reporting impacts ranging from stunted crop growth to total losses. Impacts vary by location.

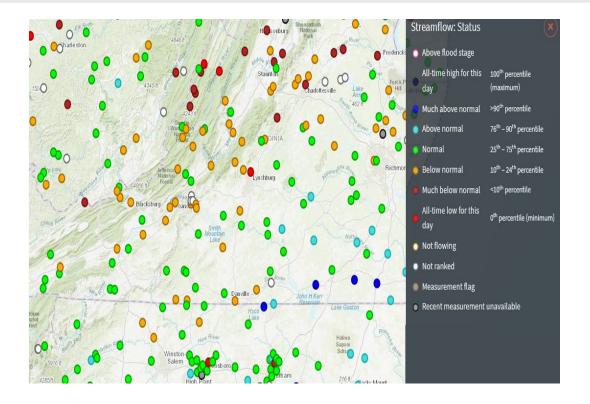
#### **Fire Hazard Impacts**

• If dryness persists, above normal wildland fire activity is possible during the second half of summer given drying vegetation and the continued potential for above normal warmth.



## Hydrologic Conditions and Impacts

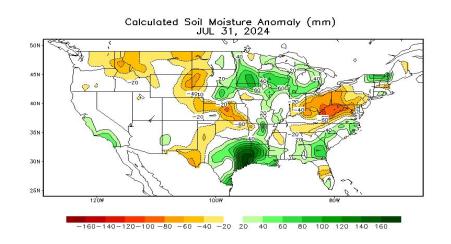
- Numerous stream gages are reporting normal to below normal flows for the month of July.
- Water quality may become adversely impacted by decreasing flows. Lowering flows may also affect water supply for communities that their water from nearby creeks and rivers.
- Stocking of live fish has been halted in some rivers due to low flows.
  Recreational activities such as boating & kayaking are also being limited in spots.
- Continued chances for storms into early August will help increase streamflows. However, these flows will lower again quickly without frequent rainfall that produces significant accumulations.







- Soil moisture remains well below normal given the persistent dryness since early June.
- The low soil moisture occurred at a critical time of year for crop growth, with many farmer reporting impacts ranging from stunted crop growth to total losses. Impacts vary by location.



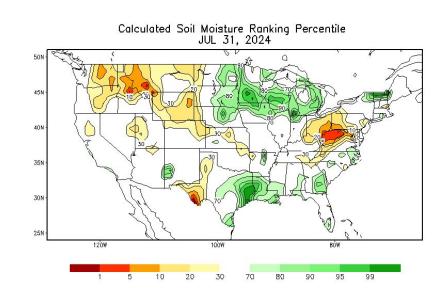


Image Captions: Above: CPC Calculated Soil Moisture Ranking Percentile valid July 31, 2024 Left: CPC Calculated Soil Moisture Anomaly valid July 31, 2024

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## Seven Day Precipitation Forecast

- A cold front is going to keep a chance for showers and storms into the weekend. A lull in rain occurs early next week but watching potential tropical moisture impacts by the middle of next week.
- Much of the service area can expect rainfall totals for the next 7 days to vary from 0.5 inches to around 2 inches, with locally higher or lower amounts.
- Given hit-and-miss nature of some of the rainfall, totals may vary significantly over short distances.
- Despite the dry conditions, rainfall may be heavy for prolonged periods of time, which may result in localized flash flooding.

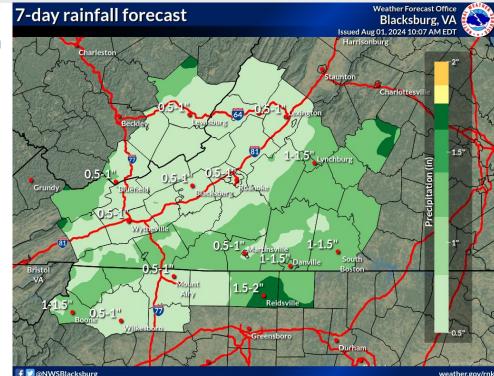


Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Thursday Aug 1, 2024 to Thursday Aug 8, 2024



Weeks 3-4 Temperature & Precipitation Outlooks

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Above normal temperatures are likely to continue on average into the mid August 2024.
- Odds are leaning towards near to slightly above normal precipitation for the lower Mid-Atlantic into the Carolinas during this period.
- Multiple rounds of rainfall are likely to help improve drought conditions over the next week, at least in the short term.

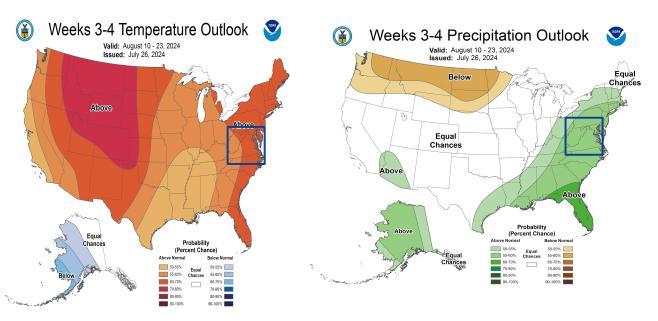


Image Captions:

Left - <u>Climate Prediction Center Weeks 3-4 Temperature Outlook.</u> Right - <u>Climate Prediction Center Weeks 3-4 Precipitation Outlook.</u> Valid July 26, 2024



### **Drought Outlook**

The latest monthly and seasonal outlooks can be found on the CPC homepage

- Drought conditions across most of the service area are expected to improve somewhat by the end of October 2024. However, drought will likely still remain across the region to some extent.
- Widespread rainfall from any tropical cyclones may affect portions of the Mid-Atlantic region into the Carolinas, bringing relief from the drought conditions.
- As mid-autumn approaches, organized large-scale weather systems may also bring more-widespread rainfall.

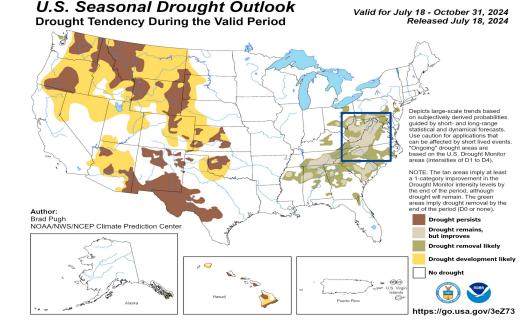


Image Caption: Climate Prediction Center Seasonal Drought Outlook Released July 18, 2024 Valid July 18, 2024 - October 31, 2024

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Links to the latest: <u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



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