

Drought Information Statement for the NWS Blacksburg Service Area of western Virginia, southeast West Virginia and northwest North Carolina Valid July 12, 2024

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

- This product will be updated July. 18, 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: Now extends across the foothills of the Blue Ridge into the Piedmont.
 - D1 Moderate Drought: Encompasses large portions of North Carolina, Virginia and southeast West Virginia.
 - D0 Abnormal Dryness: Areas present stretching from Watauga County into Carroll County, as well as over Greenbrier and Summers Counties in West Virginia.
- Some relief is possible during the second half of next week as a front stalls across the lower Mid-Atlantic, triggering rounds of hit-and-miss showers and thunderstorms.

U.S. Drought Monitor Blacksburg, VA WFO



July 9, 2024 (Released Thursday, Jul. 11, 2024) Valid 8 a.m. EDT

	Drought Conditions (Percent Area)					
	None	D0	D1	D2	D3	D4
Current	0.00	8.47	49.36	42.17	0.00	0.00
Last Week 07-02-2024	0.00	4.91	59.65	35.43	0.00	0.00
3 Month s Ago 04-09-2024	100.00	0.00	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 07-11-2023	82.51	17.49	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.asp.

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Image Caption: U.S. Drought Monitor valid 8am EDT July 9, 2024.



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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 Worsened: The entire service area of central & southwest Virginia, northwest North Carolina, and southeast West Virginia has experienced flash drought conditions due to an extremely dry month of June.
 - During the past 4 weeks ending July 9th, the service area has experienced anywhere from a 1 class degradation in drought conditions to a 3 class degradation.



Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT September 19, 2023



Precipitation Accumulations & Percent-of-Normals

Last 30 days

- Greatest dryness over the past 30 days has occurred mainly across the Piedmont, with rainfall totals ranging from around 0.50 to locally 2.50 inches.
- Higher totals have been observed in spots, more so across the mountains, due to localized thunderstorm activity.
- Rainfall totals for much of the service area vary between 25% and 50% of normal for the past 30 days ending July 12th.



Accumulated Precipitation (in): Percent of 1991-2020 Normals June 13, 2024 to July 12, 2024



Image Captions:

Left - Precipitation Amount Map for the NWS Blacksburg Service Area Right - 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 30 days ending July 12, 2024





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

Hydrologic Impacts

- Streamflows remain Below Normal to Much Below Normal across the lower Mid-Atlantic through the Carolinas.
- Water quality and recreational activities across some locations have been adversely impacted due to these low flows.

Soil Moisture

- Soil Moistures have continued to diminish 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 Below Normal to Much Below Normal Average Flows for the month of June.
- 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.
- Pockets of heavy rainfall from thunderstorm activity may temporarily raise streamflows, however these flows will lower again quickly without frequent rainfall that produces significant accumulations.







- Soil moisture continues to diminish given the persistent dryness since early June.
- The low soil moisture occurred at a critical time of year for the crop growth, with many farmer reporting impacts ranging from stunted crop growth to total losses. Impacts vary by location.
 Calculated Soil Moisture Anomaly (mm)

JUL 12, 2024





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Image Captions: Above: CPC Calculated <u>Soil Moisture Ranking</u>

Percentile valid July 12, 2024 Left: CPC Calculated <u>Soil Moisture Anomaly</u> valid July 12, 2024



- Rainfall through Wednesday 7/17 will be widely scattered, with most of the service area receiving little to no rain. Localized heavy rain is possible where storms do occur, but is hard to predict.
- Coverage of showers and storms will increase from Thursday 7/18 through next weekend as a cold front crosses the Mid-Atlantic and stalls across the Carolinas.
- Highest rainfall totals are expected for northwest North Carolina, where totals of 2 inches or more are possible. Rainfall totals will be lowest along the Interstate 64 corridor (West of the City of Lexington, VA)



Image Caption: Weather Prediction Center <u>7-day precipitation forecast</u> valid Sunday July 14 to Sunday July 21



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 second week of August 2024.
- Odds are leaning towards near to slightly above normal precipitation for the lower Mid-Atlantic into the Carolinas during this period.
- Depending on the nature of this rainfall, if it occurs, it may or may not help improve drought conditions on a large scale.





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 12, 2024

> National Weather Service Blacksburg, VA



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Drought Outlook

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

- Drought conditions are expected to persist across the NWS Blacksburg Service Area given the La Niña weather pattern currently in place that will favor above-normal temperatures and irregular precipitation.
- Rainfall from thunderstorm activity may result in localized and temporary improvement of drought conditions, though it is hard to predict where this will occur.
- Widespread relief is possible from any passage of tropical systems across the Mid-Atlantic over the next few months.

Links to the latest:

<u>Climate Prediction Center Monthly Drought Outlook</u> <u>Climate Prediction Center Seasonal Drought Outlook</u>



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Image Caption: Climate Prediction Center Seasonal Drought Outlook Released June 30, 2024 Valid July 1, 2024 - September 301, 2024