

Drought Information Statement

for the NWS Blacksburg Service Area of western Virginia,
southeast West Virginia and northwest North Carolina

Valid July 18, 2024

Issued By: NWS Blacksburg, VA

Contact Information: rnk.skywarn@noaa.gov

- This product will be updated July. 25, 2024 or sooner if drought conditions change significantly.
- Please see all currently available products at <https://drought.gov/drought-information-statements>.
- Please visit <https://www.weather.gov/rnk/DroughtInformationStatement> for previous statements.





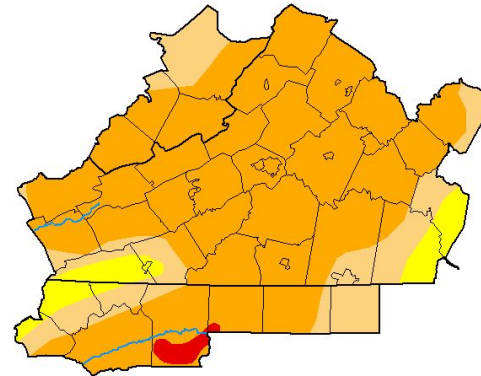
U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for the NWS Blacksburg Service Area

- Drought intensity and Extent
 - D3 Extreme Drought: Introduced this week across much of Yadkin County, NC into southwest Stokes County.
 - D2 Severe Drought: Covers large portions of central & southwest Virginia, northwest North Carolina and southeast West Virginia.
 - D1 Moderate Drought: Present in slivers across the service area.
 - D0 Abnormal Dryness: Present in slivers across the service area.
- Improvement in drought conditions is increasingly likely as a front stalled across the Carolinas and the Mid-Atlantic through the middle of next week will provide the focus for daily showers and thunderstorms for much of the service area.

U.S. Drought Monitor Blacksburg, VA WFO

July 16, 2024
(Released Thursday, Jul. 18, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	0.00	6.09	17.81	75.02	1.08	0.00
Last Week 07-09-2024	0.00	8.47	49.36	42.17	0.00	0.00
3 Months Ago 04-16-2024	100.00	0.00	0.00	0.00	0.00	0.00
Start of Calendar Year 01-01-2024	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 07-18-2023	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>

Author:

Brian Fuchs
National Drought Mitigation Center



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8am EDT July 16, 2024.





Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for the NWS Blacksburg service area

- Four Week Drought Monitor Class Change
 - Drought Worsened: Nearly 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 into the first half of July.
 - During the past 4 weeks ending July 16th, most of the service area has experienced anywhere from a 1-class degradation in drought conditions to a 3-class degradation.
 - Only 2 relatively small pockets of the service area have experienced no change in class. One pocket is located across south-central Virginia, while the other exists along the Virginia-North Carolina border from Carroll County westward across Ashe County.

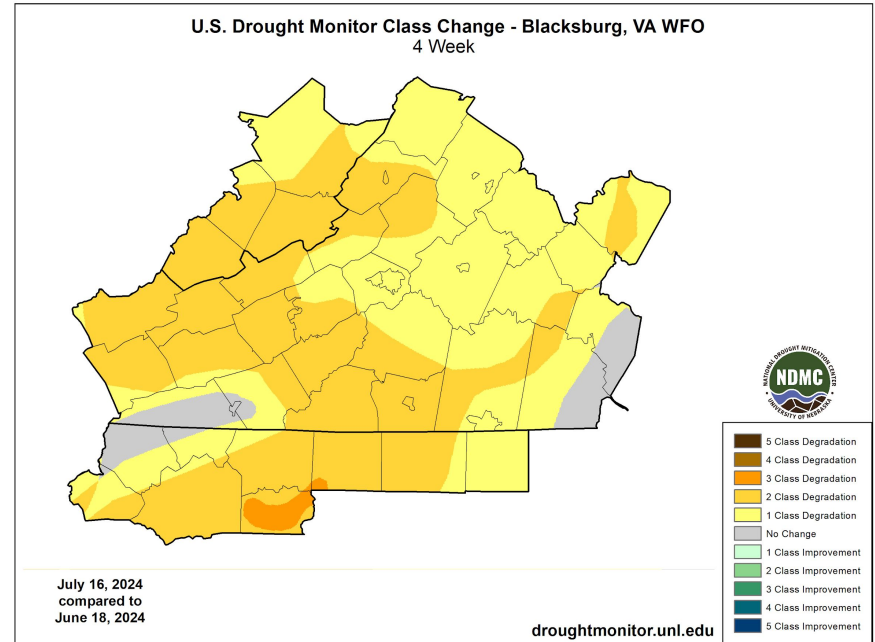


Image Caption: [U.S. Drought Monitor 4-week Class Change map](#) valid 8am EDT July 16, 2024



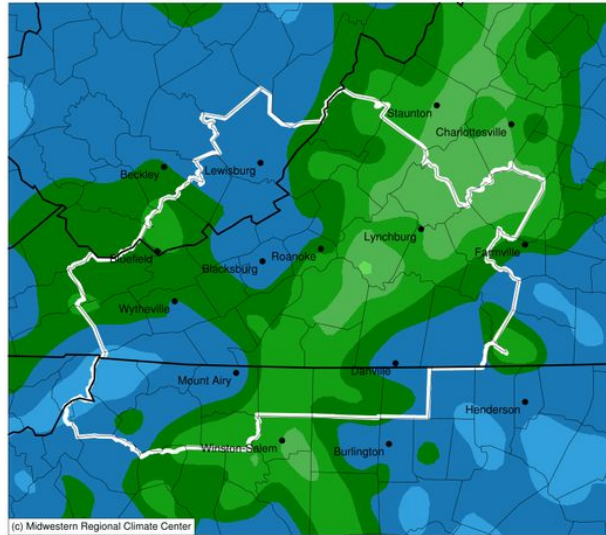


Precipitation Accumulations & Percent-of-Normals

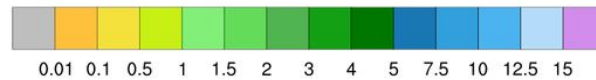
Observed over the past 60 days

- Greatest dryness over the past 60 days has occurred mainly across the Piedmont, with rainfall totals ranging from 2 to 4 inches. This is generally less than half the normal amount.
- Sixty-day totals ranging from 4 to 7.5 inches were observed across the much of mountains, as well as across central portions of Virginia and North Carolina. These amounts varied from between 50 and 75 percent of normal.

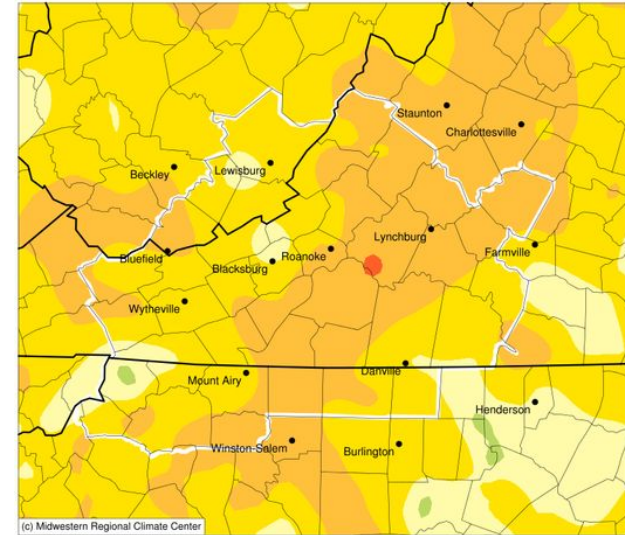
Accumulated Precipitation (in)
May 19, 2024 to July 17, 2024



(c) Midwest Regional Climate Center



Accumulated Precipitation (in): Percent of 1991-2020 Normals
May 19, 2024 to July 17, 2024



(c) Midwest Regional Climate Center



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 [Midwest Regional Climate Center](https://www.mrcclimate.com/)

Data over the past 60 days ending July 17, 2024





Summary of Impacts

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 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

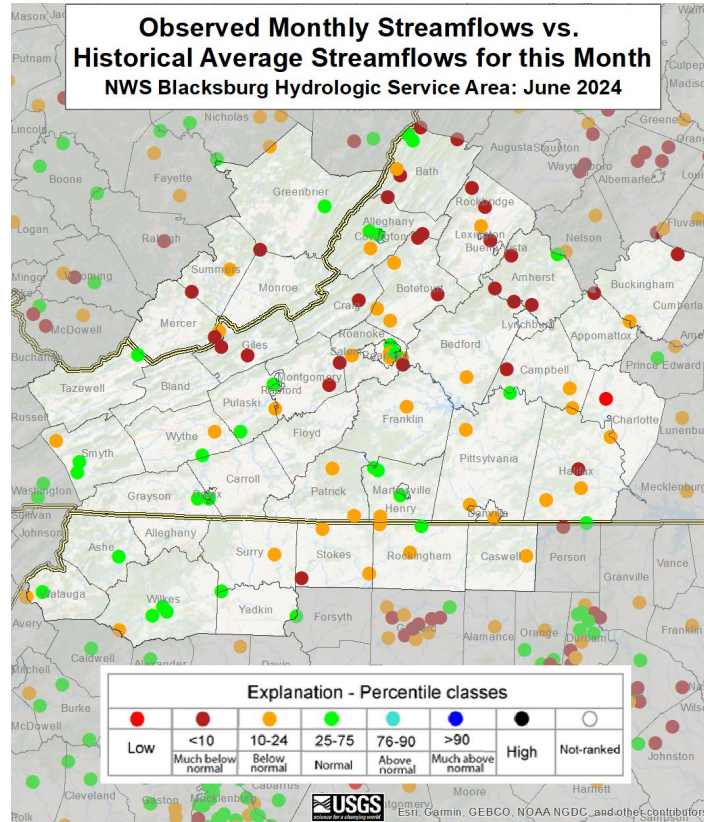
- If dryness persists, above normal wildland fire activity is possible during the second half of summer given drying vegetation and the continued potential for above normal warmth.





Hydrologic Conditions and Impacts

- Numerous stream gages are reporting 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.

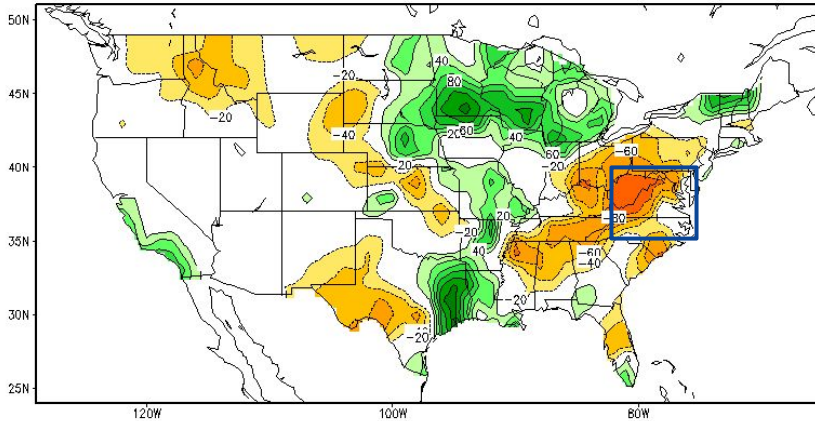




Soil Moisture

- 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.

Calculated Soil Moisture Anomaly (mm)
JUL 17, 2024



Calculated Soil Moisture Ranking Percentile
JUL 17, 2024

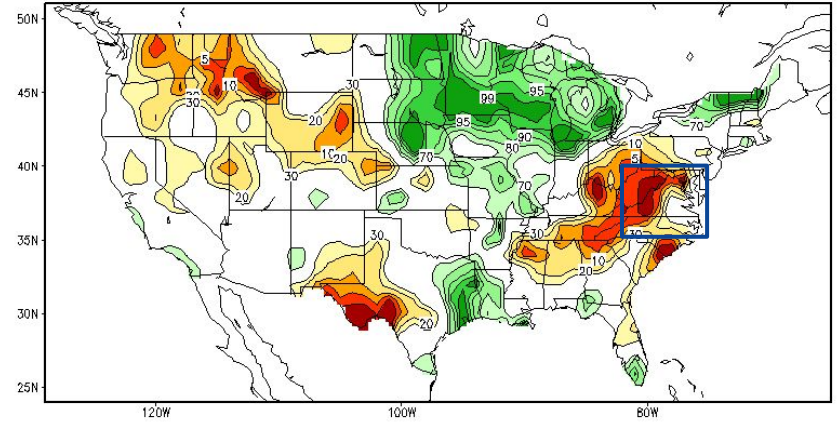


Image Captions:

Above: CPC Calculated [Soil Moisture Ranking Percentile](#)
valid July 17, 2024

Left: CPC Calculated [Soil Moisture Anomaly](#)
valid July 17, 2024





Seven Day Precipitation Forecast

- Daily showers and thunderstorms are expected through much of the next 7 days due to a cold front stalled across the Mid-Atlantic into the Carolinas.
- Much of the service area can expect rainfall totals for the next 7 days to vary from 1.5 inches to around 3 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.

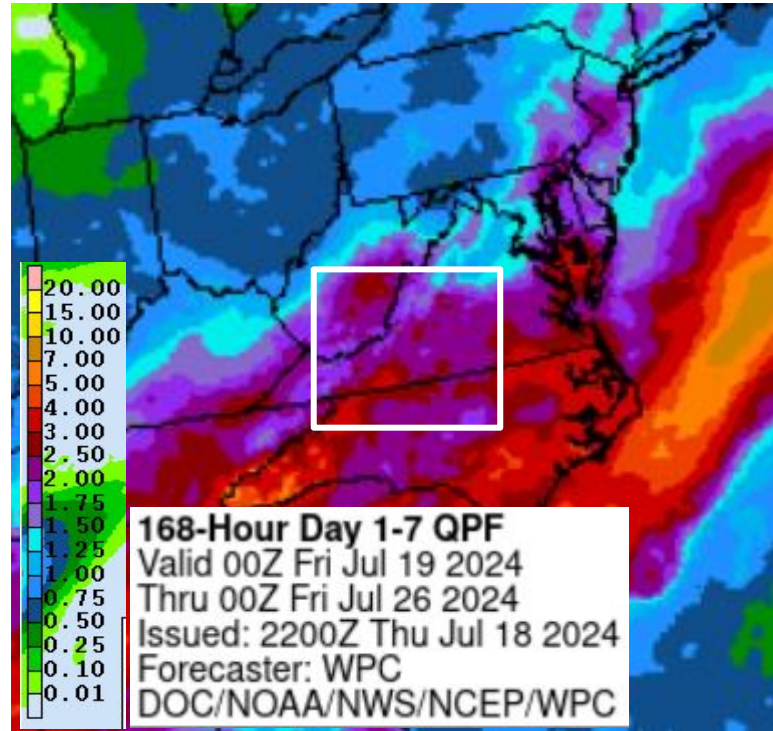


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Friday July 19th, 2024 to Friday July 26th, 2024





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 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.
- Multiple rounds of rainfall are likely to help improve drought conditions over the next week, at least in the short term.

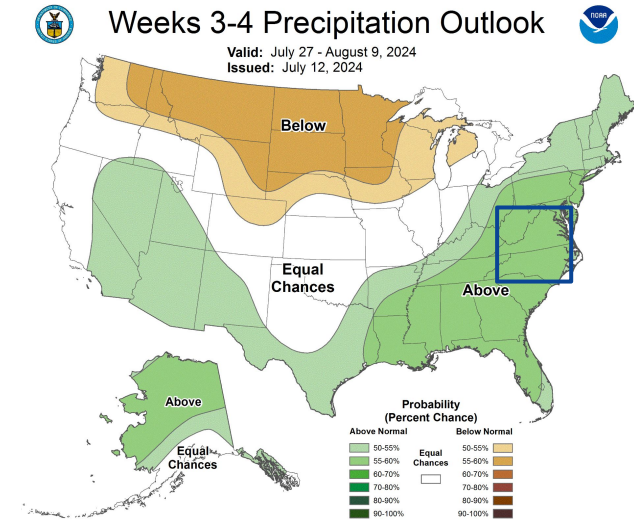
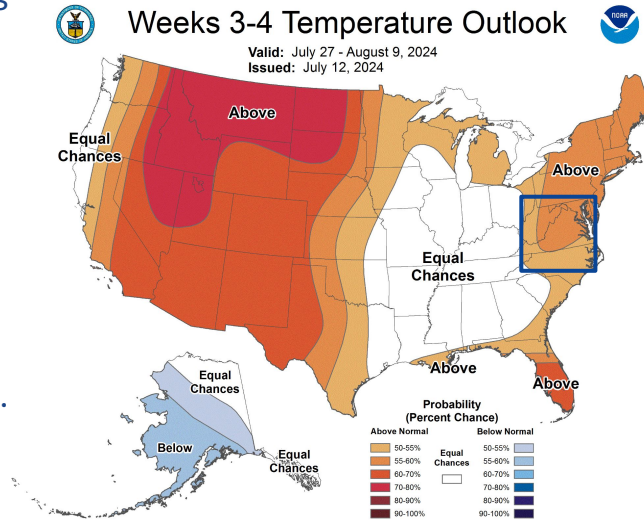


Image Captions:

Left - [Climate Prediction Center Weeks 3-4 Temperature Outlook](#),

Right - [Climate Prediction Center Weeks 3-4 Precipitation Outlook](#),

Valid July 12, 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.

U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

Valid for July 18 - October 31, 2024
Released July 18, 2024

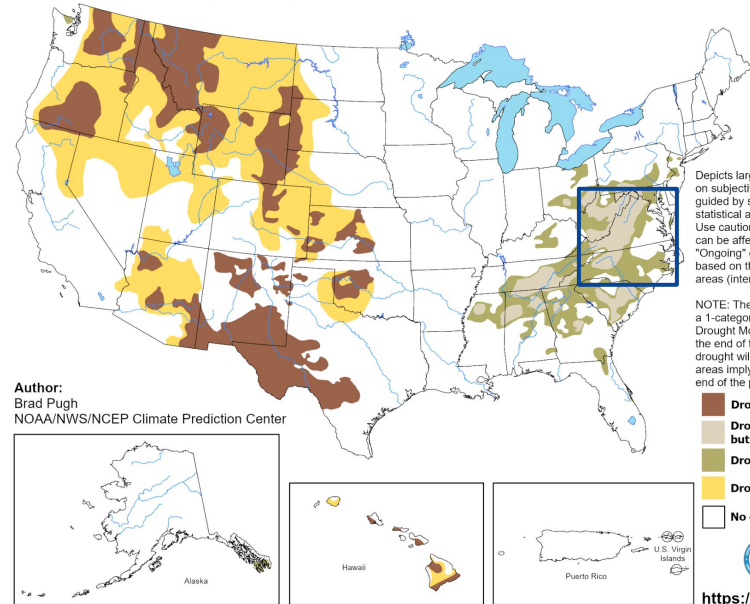


Image Caption:
Climate Prediction Center Seasonal Drought Outlook
Released July 18, 2024
Valid July 18, 2024 - October 31, 2024

Links to the latest:

- [Climate Prediction Center Monthly Drought Outlook](#)
- [Climate Prediction Center Seasonal Drought Outlook](#)

