



Drought Information Statement

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

Valid September 19, 2024

Issued By: NWS Blacksburg, VA

Contact Information: rnk.skywarn@noaa.gov

- This product will be updated Sep. 26, 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.



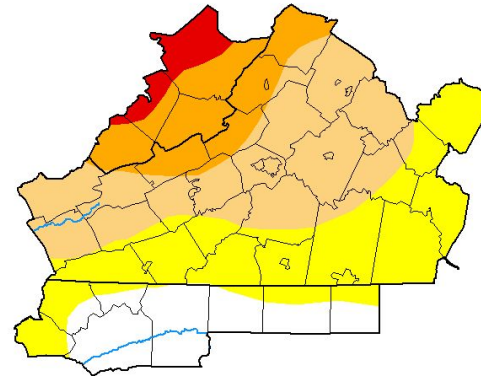


U.S. Drought Monitor

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

- Drought Intensity and Extent
 - **D3 Extreme Drought:** Covers portions of Greenbrier, Summers and Mercer Counties.
 - **D2 Severe Drought:** Covers the remainder of southeast West Virginia and neighboring counties in Virginia.
 - **D1 Moderate Drought:** Covers portions of western Virginia.
 - **D0 Abnormal Dryness:** Covers much of central Virginia into northwest North Carolina.
- Much of the rain that fell on Tuesday, Sept. 17th occurred after the 8 AM cutoff and was not considered in this week's rendition of the U.S. Drought Monitor.

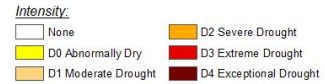
U.S. Drought Monitor Blacksburg, VA WFO



September 17, 2024
(Released Thursday, Sep. 19, 2024)
Valid 8 a.m. EDT

Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	14.73	33.57	33.12	14.91	3.67	0.00
Last Week 09-10-2024	17.69	38.90	29.93	10.59	2.89	0.00
3 Months Ago 06-18-2024	0.46	73.10	26.44	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 09-19-2023	50.73	32.61	14.99	1.68	0.00	0.00



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:
Brad Rippey
U.S. Department of Agriculture



droughtmonitor.unl.edu

Image Caption: U.S. Drought Monitor valid 8 AM EDT September 17, 2024





Recent Change in Drought Intensity

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

Key Takeaways

- Drought conditions have deteriorated over large portions of southeast West Virginia, central and western Virginia, and the High Country of North Carolina over the past 4 weeks.
- The only improvements in drought conditions observed were across the foothills into the Piedmont of northwest North Carolina.

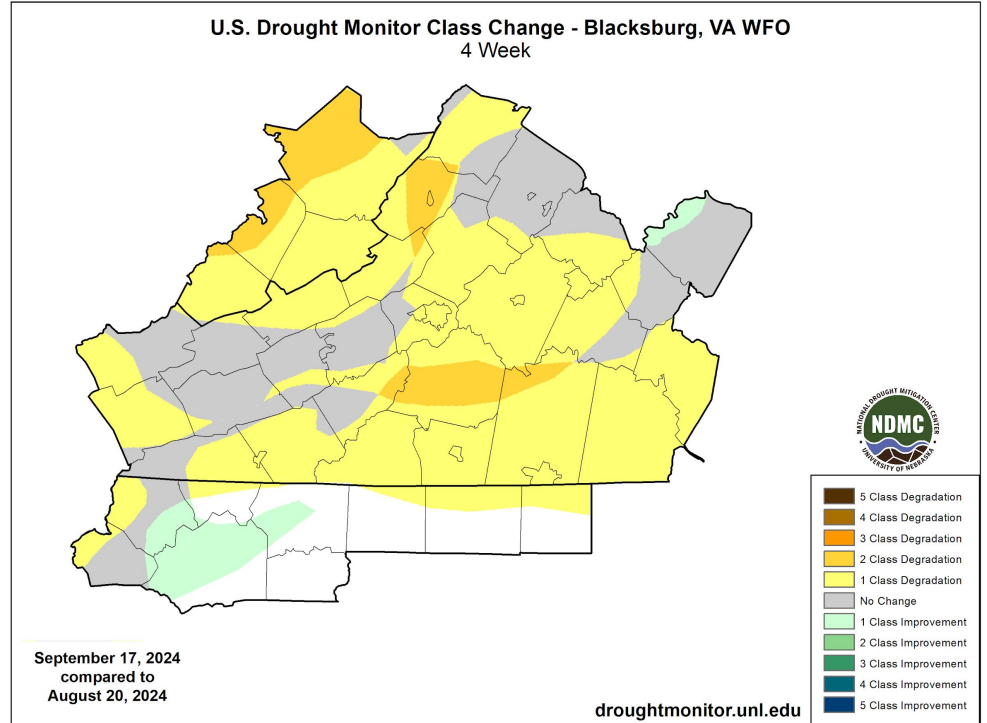


Image Caption: [U.S. Drought Monitor 4-week Class Change map](#) valid 8 AM EDT September 17, 2024





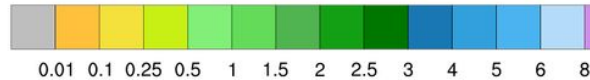
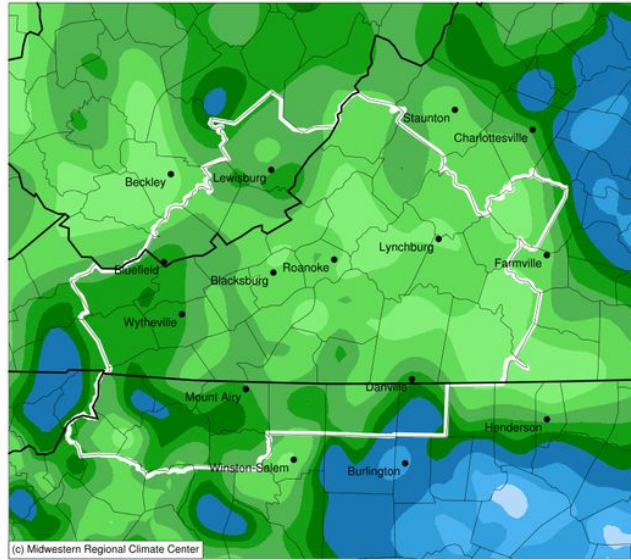
Precipitation Accumulations & Percent-of-Normals

Data Valid from August 19th to September 17th, 2024

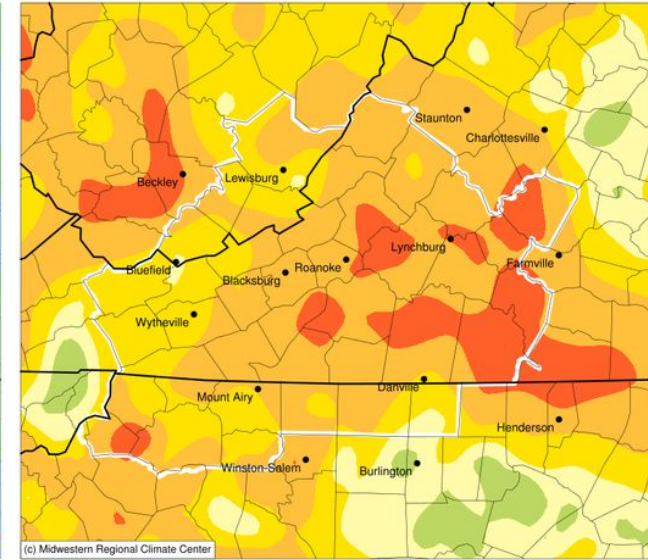
Key Takeaways

- Over the past 30 days, rainfall has been the result of widely scattered showers & T-storms, often occurring several days apart from each other.
- Rainfall totals for much of the service area are less than 50% of the normal totals for the past 30 days, and less than 25% of normal for portions of the Piedmont.
- Rain falling after 8 AM on Tuesday, Sept. 17th was not included in these maps.

Accumulated Precipitation (in)
August 19, 2024 to September 17, 2024



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



Left - 30-Day Accumulated Precipitation Map for the NWS Blacksburg Service Area
 Right - 30-Day Percent of Normal Precipitation for the NWS Blacksburg Service Area
 Data is Courtesy of the [Midwest Regional Climate Center](#)
 Data over the past 30 days ending September 17, 2024





Summary of Impacts

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

Hydrologic Impacts

- Several stream gages and wells continue to report water levels that are below normal to much below normal compared to seasonal normals across southeast West Virginia and central Virginia.
- Water quality has become adversely impacted by the lack of precipitation. Low precipitation has also affected water supply for communities that draw their water from local surface waterways and wells.

Soil Moisture

- Lowest soil moisture is found across southeast West Virginia, where moisture levels range from between the 10th percentile to as low as the 2nd percentile.
- Soil moisture deficits across central Virginia are not as critical, with moisture levels ranging from the 10th percentile to above the 30th percentile.

Fire Hazard Impacts

- If dryness persists, above normal wildland fire activity is increasingly likely given drying of fallen leaves and the seasonal die-off of fine vegetation, in addition to the continued potential for above normal warmth.

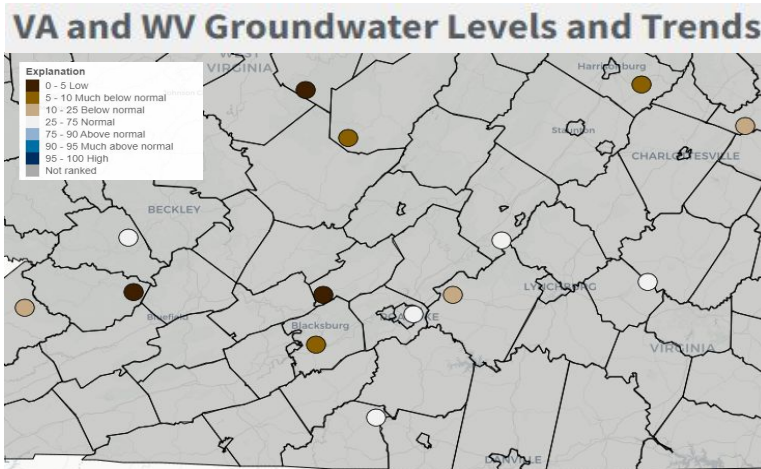




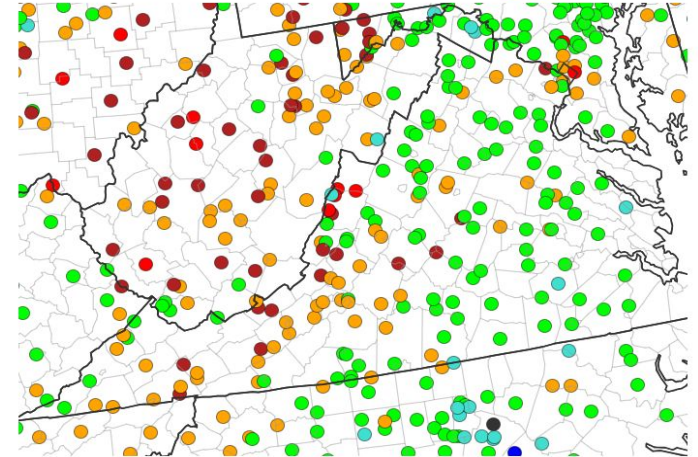
Hydrologic Conditions and Impacts

Key Takeaways

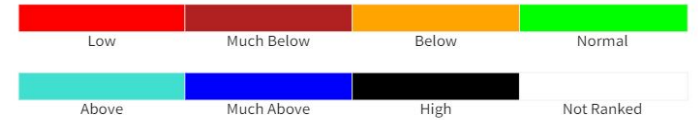
- Several stream gages and wells are reporting water levels that are below normal to much below normal compared to seasonal normals across southeast West Virginia and central Virginia.
- Water quality and water supply for some communities across southeast West Virginia has become adversely impacted by the lack of rainfall occurring over a majority of the summer months.



28-Day Average Streamflow



Streamflow Conditions



Source(s): U.S. Geological Survey
Data Valid: 09/16/24

Drought.gov

Left: [USGS Groundwater Levels and Trends](#)

Above: [USGS WaterWatch 28-Day Average Streamflows](#)

valid September 17, 2024



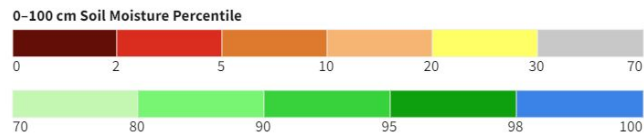
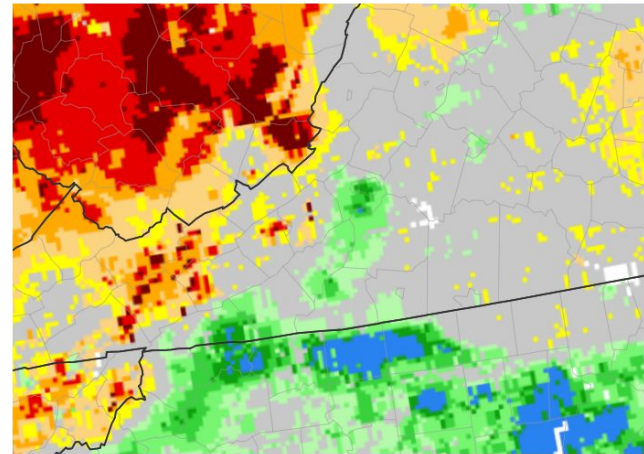


Soil Moisture

Key Takeaways

- Driest soil conditions continue to be observed across southeast West Virginia into western Virginia.
- Dry soils contributing to significant degradation of crop yields and pasture grasses.

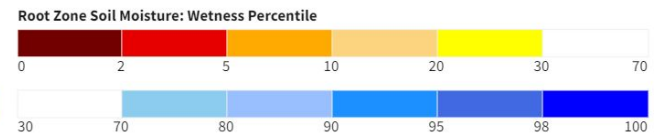
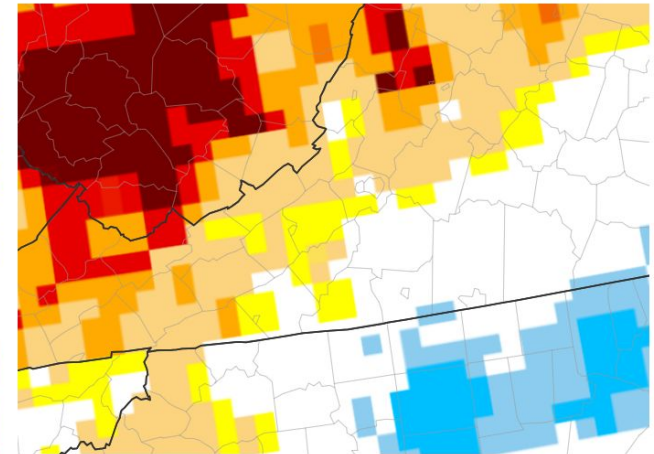
0-100 cm Soil Moisture Percentile



Source(s): NASA
Data Valid: 09/19/24

Drought.gov

GRACE Root Zone Soil Moisture Percentile



Source(s): NASA, National Drought Mitigation Center
Data Valid: 09/17/24

Drought.gov

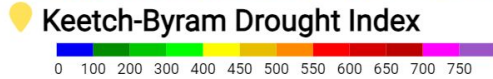
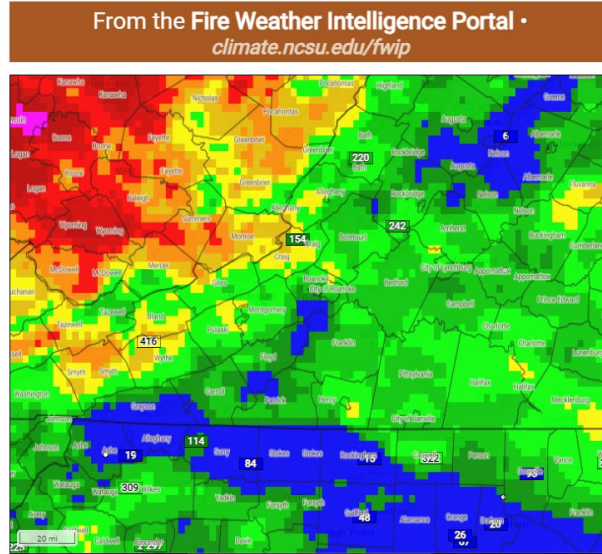
Left Image: NASA SPoRT LIS 0-100 cm Soil Moisture Percentile
 Right Image: NASA GRACE Root Zone Soil Moisture Percentile
 Images valid: September 19th, 2024



Fire Hazard Impacts

Link to [Wildfire Potential Outlooks from the National Interagency Coordination Center](#).

- [Keetch Byram Drought Index values](#) have increased into the 400 to locally 600 range across portions of southeast West Virginia, as well as pocket of southwest Virginia.
- If dryness persists, above normal wildland fire activity is possible later this month into October given drying of fallen leaves and the seasonal die-off of fine vegetation.



From today (Sep 19) at 1 pm LT

Image caption: Keetch Byram Drought Index
Additional information is available at the [Fire Weather Intelligence Portal](#).

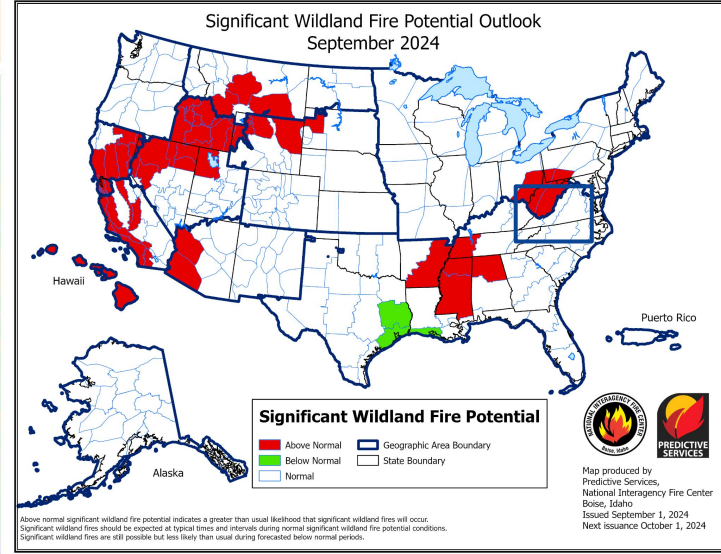


Image Caption: [Significant Wildland Fire Potential Monthly Outlook](#) for September 2024



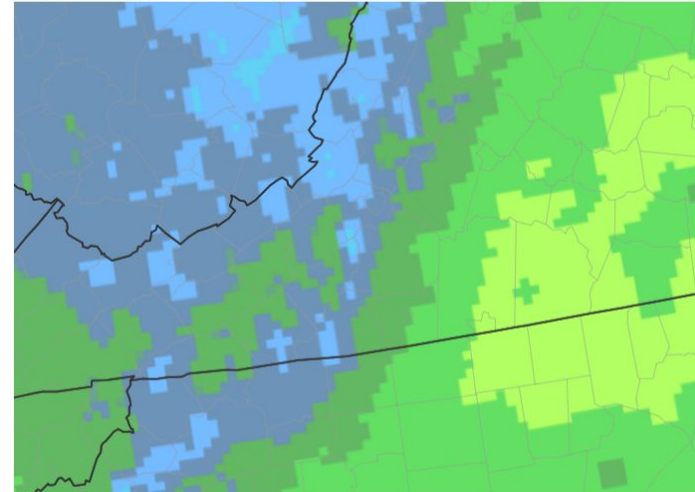


Seven Day Precipitation Forecast

Key Takeaways

- Only widely scattered shower activity is expected across the lower Mid-Atlantic through the evening of Sunday, September 22nd, with rainfall totals through the period less than 0.50”.
- A cold front will arrive early next week that will bring a somewhat better organized possibility of rainfall to the Mid-Atlantic.
- Southeast West Virginia, where driest conditions have been observed, has the potential of receiving the highest rainfall totals over the next 7 days, with totals ranging from 0.50” to 1.50”.
- Lowest rainfall totals are expected east of the Blue Ridge, where 7-day totals will likely remain below 0.50”.

7-Day Quantitative Precipitation Forecast for September 19-26, 2024



Predicted Inches of Precipitation



Source(s): National Weather Service Weather Prediction Center
Last Updated: 09/19/24

Drought.gov

Weather Prediction Center [7-day Precipitation Forecast](#)
valid September 19-26, 2024





Weeks 3-4 Temperature & Precipitation Outlooks

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

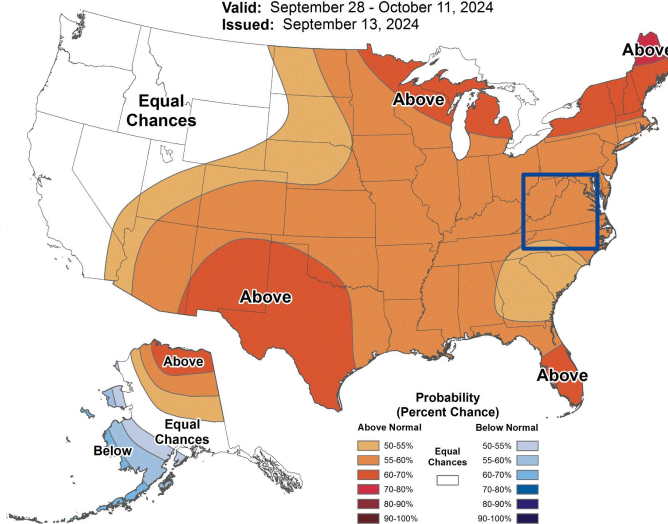
Key Takeaways

- The weather pattern during the end of September into mid-October favors temperatures that will most-likely be above normal through the period.
- There are no signals during this period that favor either above or below normal rainfall.



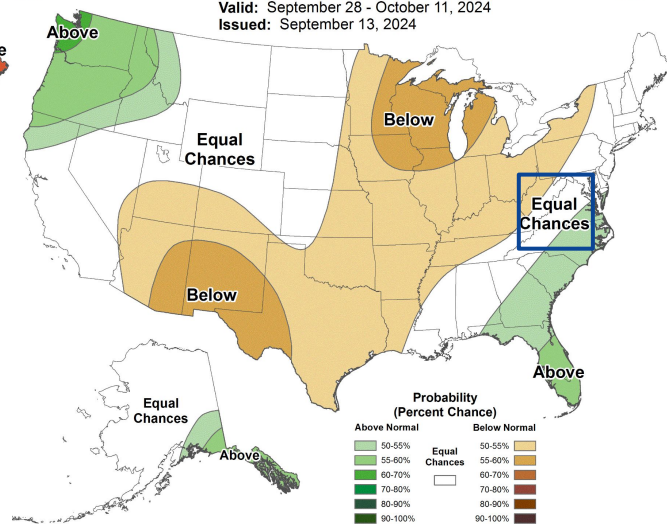
Weeks 3-4 Temperature Outlook

Valid: September 28 - October 11, 2024
Issued: September 13, 2024



Weeks 3-4 Precipitation Outlook

Valid: September 28 - October 11, 2024
Issued: September 13, 2024



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

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

Released September 13, 2024

Valid September 28 - October 11, 2024





Drought Outlook

The latest monthly and seasonal outlooks can be found on the [CPC homepage](#)

Key Takeaways

- Drought conditions are expected to persist for much of southeast West Virginia through the end of 2024.
- Improvements in drought conditions are expected across portions of central and western Virginia, through drought may persist in these areas.
- Rainfall during early autumn may come from landfalling tropical systems, which are difficult to predict very far into the future.
- During mid to late autumn, rainfall will more likely come from organized low pressure systems passing across the Mid-Atlantic region.

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

Valid for September 19 - December 31, 2024
Released September 19, 2024

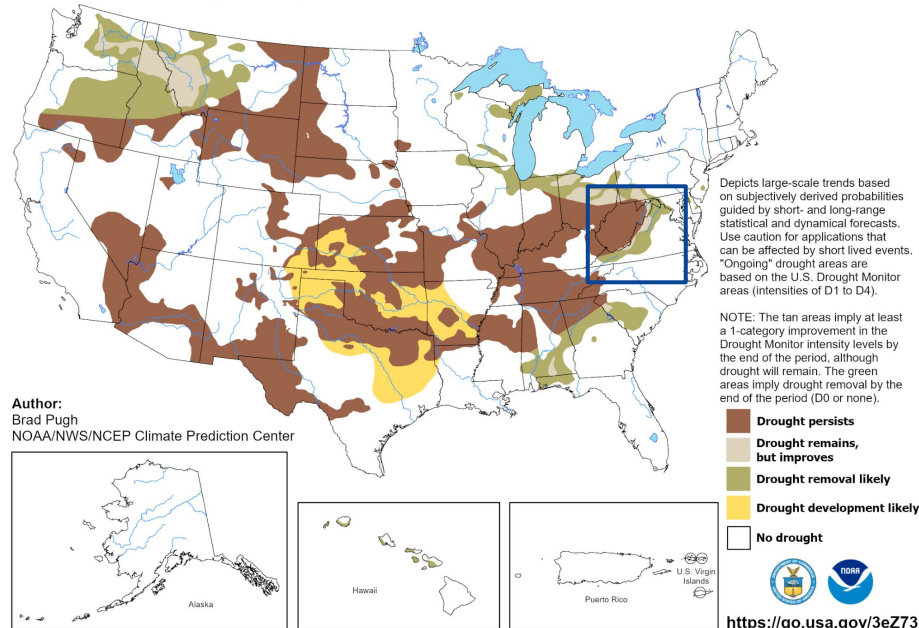


Image Caption:

[Climate Prediction Center Seasonal Drought Outlook](#)

Released September 19, 2024

Valid September 19, 2024 - December 31, 2024

Links to the latest:

[Climate Prediction Center Monthly Drought Outlook](#)

[Climate Prediction Center Seasonal Drought Outlook](#)



National Oceanic and
Atmospheric Administration
U.S. Department of Commerce

National Weather Service
Blacksburg, VA