



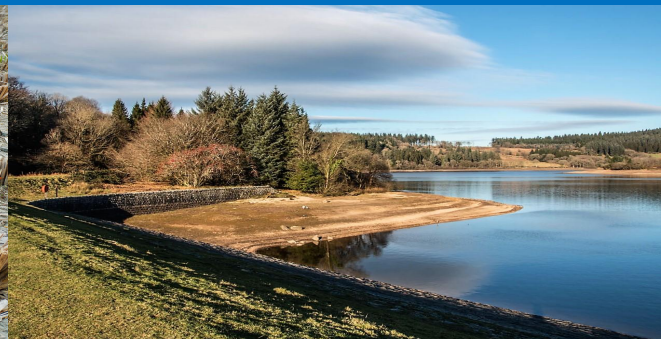
# Drought Information Statement for Eastern WV, Central and Western MD, DC, & northern and NW VA

Valid July 18, 2024

Issued By: NWS Baltimore/Washington

Contact Information: [lwz-report@noaa.gov](mailto:lwz-report@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/lwz/DroughtInformationStatement> for previous statements.



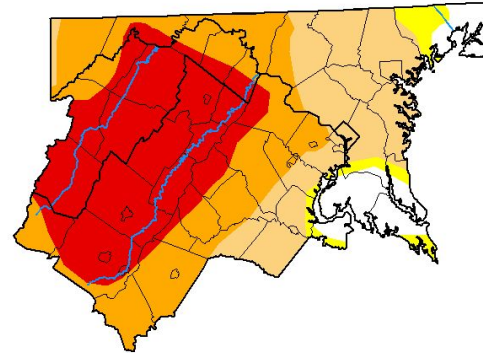


# U.S. Drought Monitor

Link to the [latest U.S. Drought Monitor](#) for [region]

- **EXTREME DROUGHT SPREADS ACROSS THE SHENANDOAH VALLEY & ALLEGHENY HIGHLANDS REGION.**
- **Drought intensity and Extent**
  - **D3 (Extreme Drought):** Over 35 percent of the forecast area is now in extreme drought. This includes the entire Shenandoah Valley, eastern WV Highlands, and southern Allegany Co. MD.
  - **D2 (Severe Drought):** Over 65 percent of the area remains in severe drought. This includes much of northern and central Virginia as well as western MD and far tip of the eastern WV Panhandle.
  - **D1 (Moderate Drought):** This includes central MD and portion of the VA Piedmont/northern neck.
  - **D0: (Abnormally Dry):** This includes parts of northeast MD and southern MD.

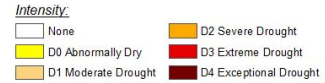
*U.S. Drought Monitor*  
**Baltimore, MD/  
 Washington, DC WFO**



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

*Drought Conditions (Percent Area)*

	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
<b>Current</b>	7.32	92.68	89.18	65.96	35.69	0.00
<b>Last Week</b> 07-09-2024	2.17	97.83	80.96	62.68	0.00	0.00
<b>3 Months Ago</b> 04-16-2024	100.00	0.00	0.00	0.00	0.00	0.00
<b>Start of Calendar Year</b> 01-01-2024	30.93	69.07	32.89	8.96	0.00	0.00
<b>Start of Water Year</b> 09-26-2023	29.91	70.09	39.52	13.18	0.00	0.00
<b>One Year Ago</b> 07-18-2023	34.50	65.50	26.31	5.60	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:*  
 Brian Fuchs  
 National Drought Mitigation Center



[droughtmonitor.unl.edu](https://droughtmonitor.unl.edu)

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



# Recent Change in Drought Intensity

Link to the latest [4-week change map](#) for [region]

- Four Week Drought Monitor Class Change.
  - Drought Worsened: Drought conditions worsened for most of the region with parts of the Shenandoah River Valley and Potomac Highlands observing the largest deterioration in drought conditions
  
  - Drought Improved: One category improvement in drought conditions occurred over parts of southern MD and King George Counties

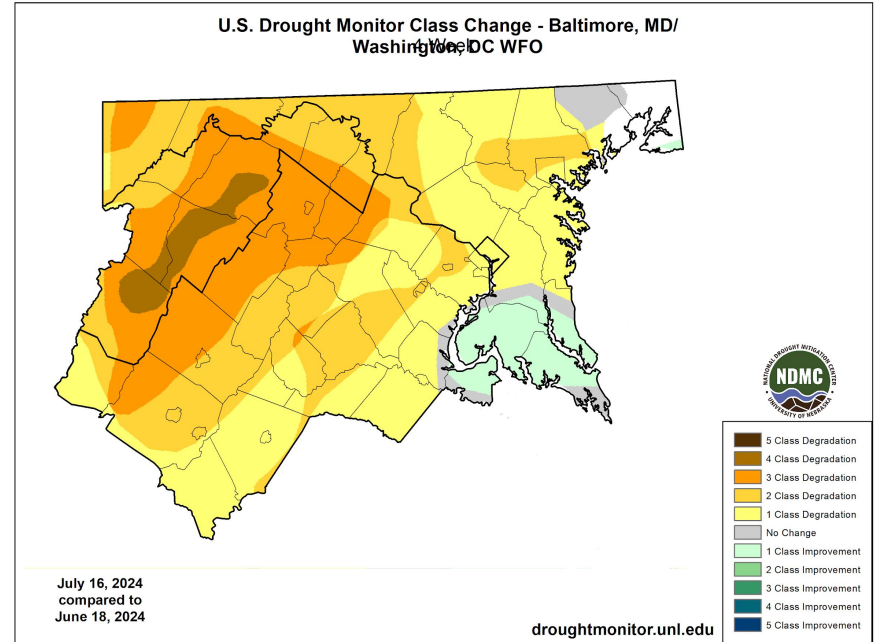


Image Caption: U.S. Drought Monitor 4-week change map valid 8am EDT July 18th.

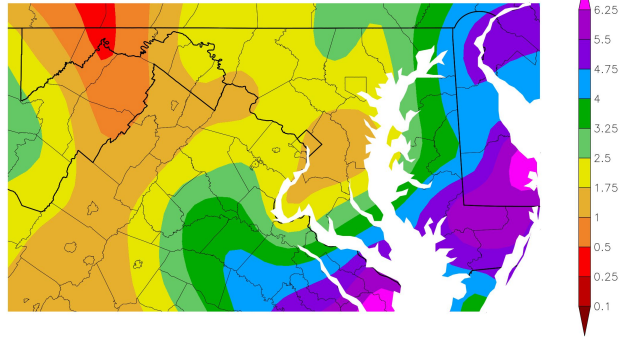




# Precipitation

- The majority of the region continues to observe well below normal precipitation during the past 30 days
- Precipitation that has occurred has been mainly convective and isolated in nature

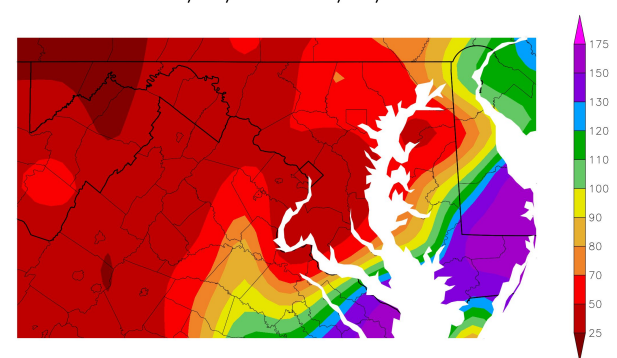
Precipitation (in)  
6/18/2024 – 7/17/2024



Generated 7/18/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Percent of Normal Precipitation (%)  
6/18/2024 – 7/17/2024



Generated 7/18/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:  
Left - Precipitation Amount for [area]  
Right - Percent of Normal Precipitation for [area]  
Data Courtesy High Plains Regional Climate Center.  
Data over the past 30 days ending July, 17, 2024



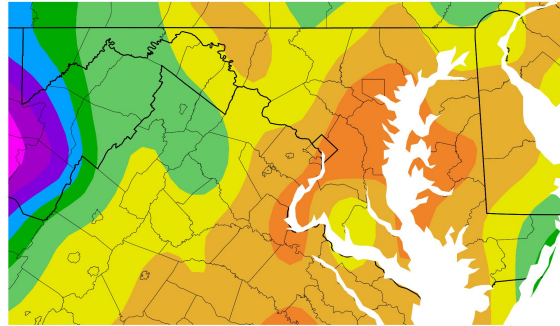




# Temperature

- Well above normal temperatures have been observed since June 18th.
- Multiple high temperature records have been broken with some locations observing four consecutive days of 100 F plus temperatures
- Most climate sites in the region have observed at least 90 degree F or higher temperatures for at least 20 out of the past 30 days

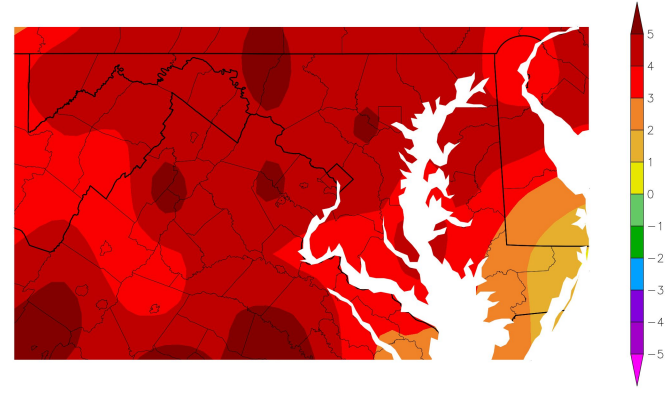
Temperature (F)  
6/18/2024 - 7/17/2024



Generated 7/18/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Departure from Normal Temperature (F)  
6/18/2024 - 7/17/2024



Generated 7/18/2024 at HPRCC using provisional data.

NOAA Regional Climate Centers

Image Captions:  
 Left - Average Temperature  
 Right - Departure from Normal Temperature  
 Data Courtesy High Plains Regional Climate Center.  
 Data over the past 30 days ending July, 17, 2024





# Summary of Impacts

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

## Hydrologic Impacts

- River stream flows and subsurface water levels are running at near record low levels
- The Interstate Commission on the Potomac River Basin has initiated monitoring of Potomac River streamflow levels as discharge values have dropped below 1000 CFS
- Multiple reports received of dry well levels throughout the Shenandoah River Valley, along the Blue Ridge Mountains and up along the Potomac Highlands

## Agricultural Impacts

- Farmers have reported stunted growth of crops and crop stress due to lack of precipitation and high temperatures. Crop losses of up to 20 percent have been reported by Ag Extension reports across the Shenandoah Valley

## Mitigation Actions

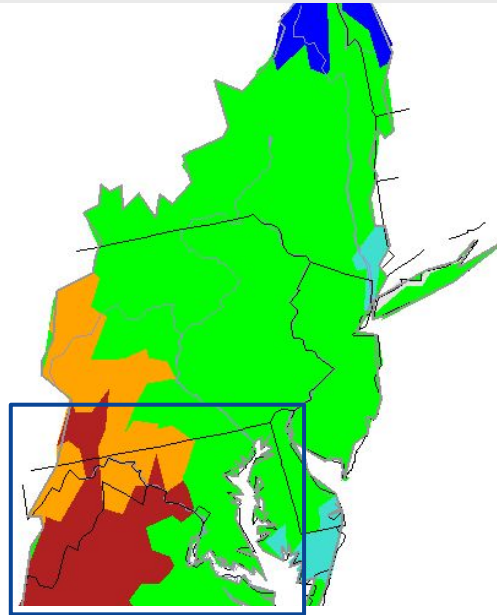
- Fauquier County, VA has instituted mandatory water conservation efforts
- The State of Virginia has a Drought Warning in effect for the Shenandoah Valley and northern VA with a drought watch for the rest of the state





# Hydrologic Conditions and Impacts

- Below to much below normal streamflows continue to be observed for areas along and west of the Blue Ridge Mountains



Explanation - Percentile classes							
Low	<10	10-24	25-75	76-90	>90	High	No Data
	Much below normal	Below normal	Normal	Above normal	Much above normal		

Image Caption: USGS 7 day average streamflow HUC map valid 07 18 2024

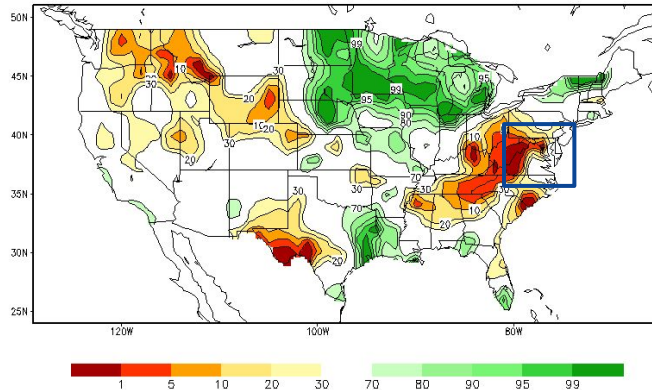




# Agricultural Impacts

- Growers have reported stunted growth in crops
- Plants are showing stress from lack of precipitation and an extended period of hot temperatures

Calculated Soil Moisture Ranking Percentile  
JUL 16, 2024



Crop Moisture Index by Division  
Weekly Value for Period Ending JUL 13, 2024  
Short Term Need vs. Available Water in a Shallow Soil Profile

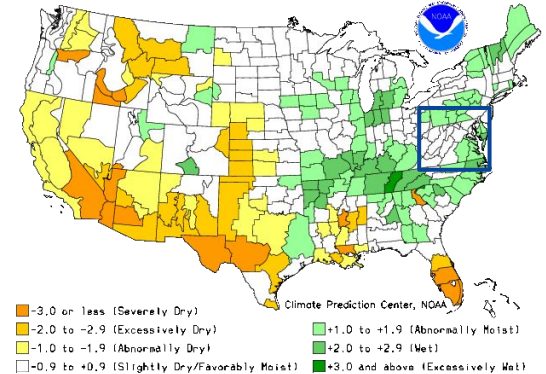


Image Captions:

Left: CPC Calculated [Soil Moisture Ranking Percentile](#) valid July 16, 2023

Right: [Crop Moisture Index by Division](#). Weekly value for period ending July 13, 2023







# Seven Day Precipitation Forecast

- The Weather Prediction Center is forecasting a more active period for precipitation with the majority of the region forecast to observe between 1 and 2 inches of precipitation over the next 7 days

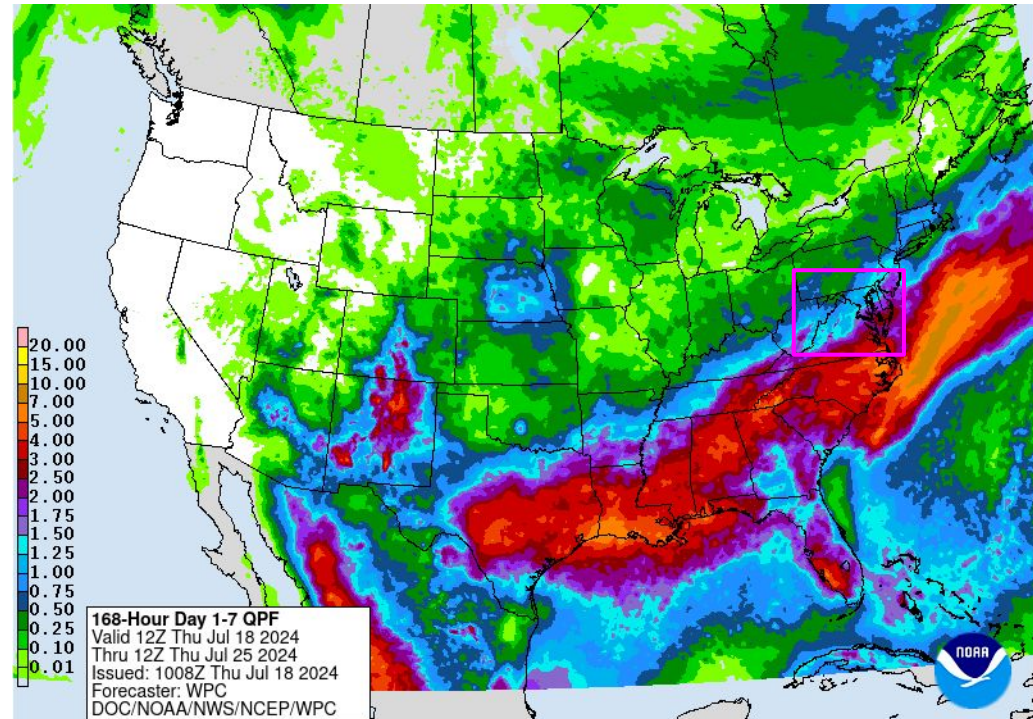


Image Caption: Weather Prediction Center [7-day precipitation forecast](#) valid Thursday July 18 to Thursday July 25



# Long-Range Outlooks

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

- Above normal temperatures are forecast for July with near normal precipitation favored

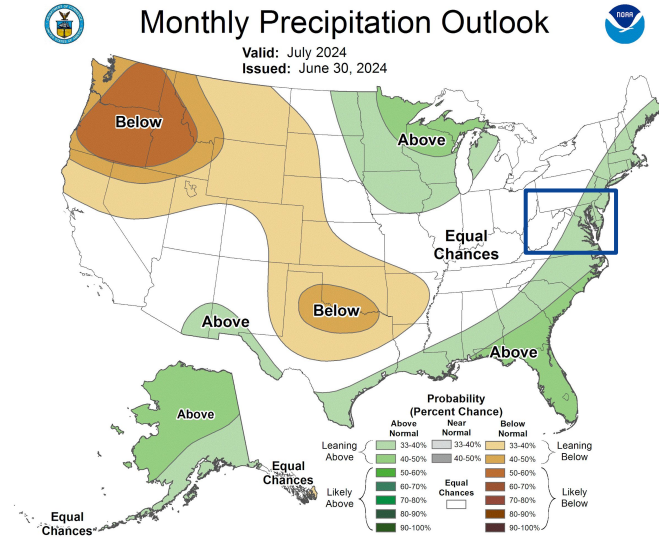
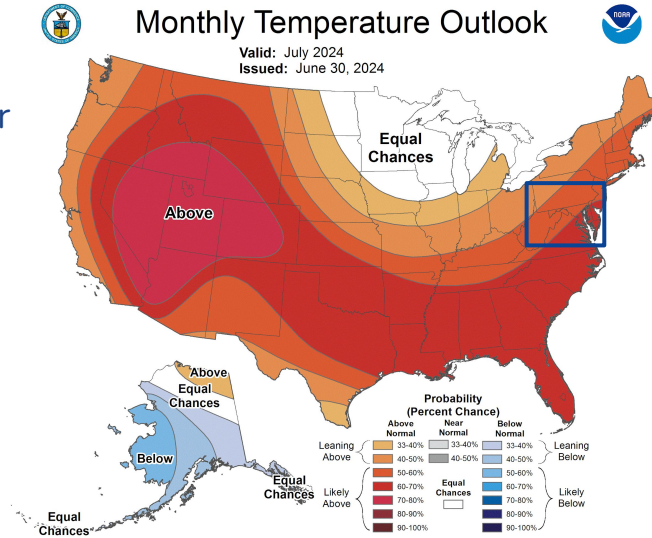


Image Captions:

Left - [Climate Prediction Center Monthly Temperature Outlook](#)

Right - [Climate Prediction Center Monthly Precipitation Outlook](#)

Valid 07 2024





# Drought Outlook

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

- Drought conditions are likely to persist into August

## U.S. Monthly Drought Outlook Drought Tendency During the Valid Period

Valid for July 2024  
Released June 30, 2024

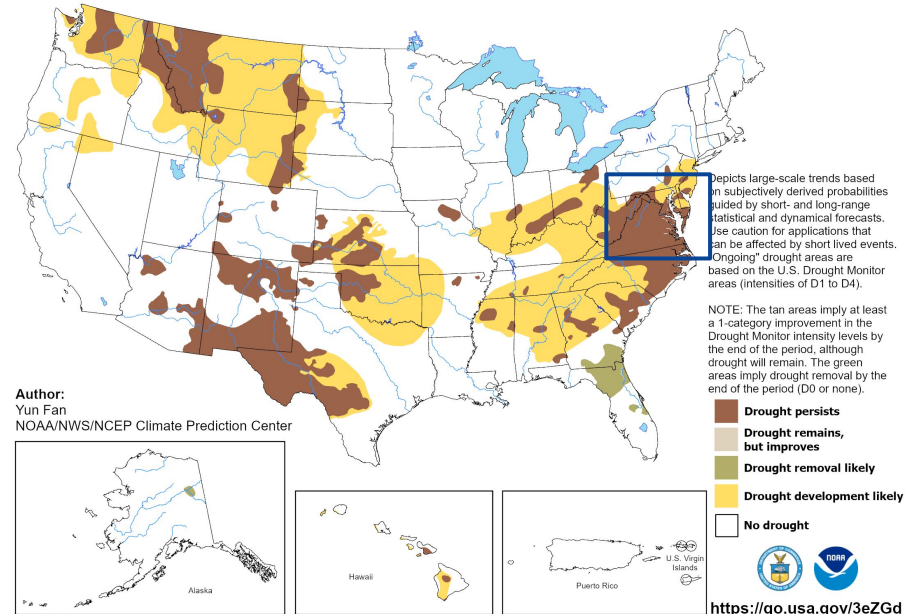


Image Caption:

Climate Prediction Center Monthly Drought Outlook Released 06 30, 2024 valid for 07 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  
Baltimore/Washington