

Regional Drought and Water Supply Status August 2024

Summary of Current Conditions in the COG Region – As of August 9, 2024

Our region is currently experiencing periods of intense rainfall, flash flooding, and tornado warnings due to post tropical storm Debby. We are hopeful that the U.S. Drought Monitor released next Thursday will show some areas of improvement, but the current version indicates that moderate, severe, and extreme drought are still present in the Potomac Basin.

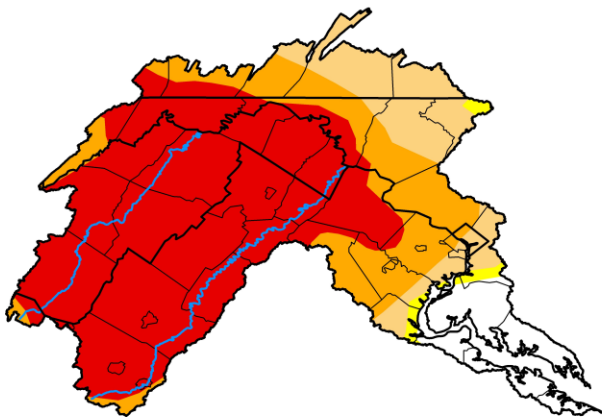
COG's Drought Coordination Committee declared a Drought Watch as defined in COG's [Metropolitan Washington Water Supply and Drought Awareness Response Plan](#) on July 29 due to record low groundwater, precipitation, and streamflow levels and extreme drought conditions. A [press release](#) was issued asking residents and businesses in the metropolitan Washington region to take voluntary measures to conserve water and help reduce demand on the region's water supply systems. Officials emphasized that while there currently is an adequate supply of water in the Potomac River and back-up reservoirs, implementing voluntary water conservation practices across the region will help complement measures already in place and reduce water demand and environmental needs of the river.

The Virginia Department of Environmental Quality issued a [drought warning advisory](#) for their Northern Virginia region and the areas monitored in the COG region by the Maryland Department of the Environment are currently under a [Drought Watch](#).

COG will continue to closely monitor conditions and consider convening the Drought Monitoring Technical Committee and Drought Coordination Committee to discuss lifting the Drought Watch if conditions improve over the next few weeks. Please visit COG's Water Supply and Drought Website at www.mwcog.org/drought for additional information.

U.S. Drought Monitor Potomac Watershed

August 6, 2024
(Released Thursday, Aug. 8, 2024)
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

	None	D0	D1	D2	D3	D4
Current	7.54	1.28	13.09	19.24	58.85	0.00
Last Week <i>08-01-2024</i>	5.49	3.39	13.03	19.24	58.85	0.00
3 Months Ago <i>05-09-2024</i>	98.77	1.23	0.00	0.00	0.00	0.00
Start of Calendar Year <i>01-04-2024</i>	29.14	40.05	18.78	12.03	0.00	0.00
Start of Water Year <i>09-28-2023</i>	26.87	34.54	23.45	15.13	0.00	0.00
One Year Ago <i>08-10-2023</i>	42.07	37.95	19.98	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

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:

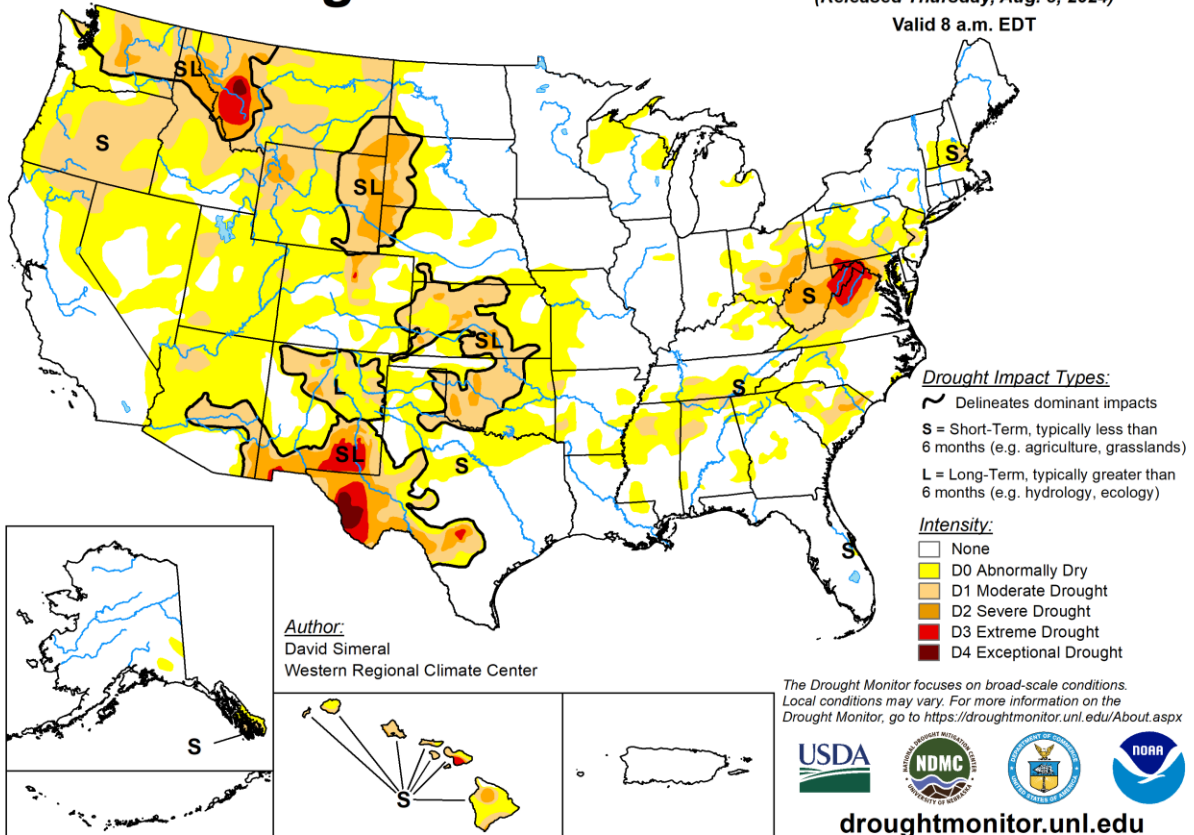
David Simeral
Western Regional Climate Center



droughtmonitor.unl.edu

U.S. Drought Monitor

August 6, 2024
 (Released Thursday, Aug. 8, 2024)
 Valid 8 a.m. EDT



Potomac Streamflow – Above median levels

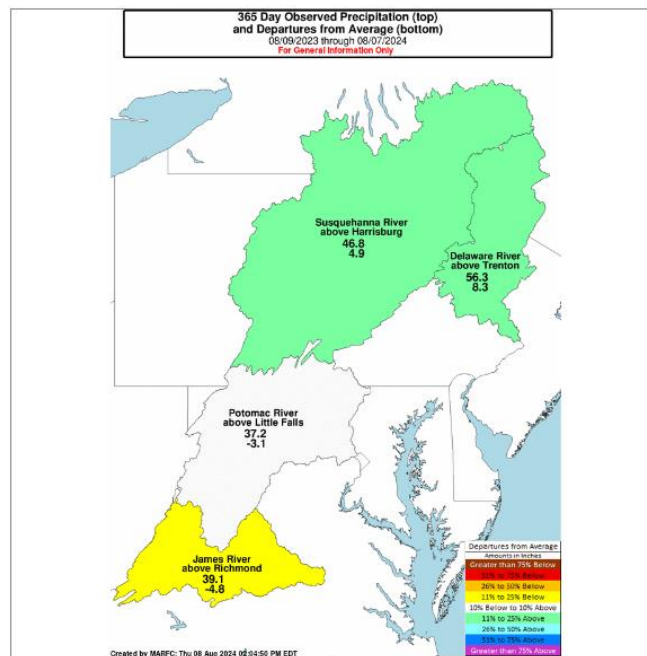
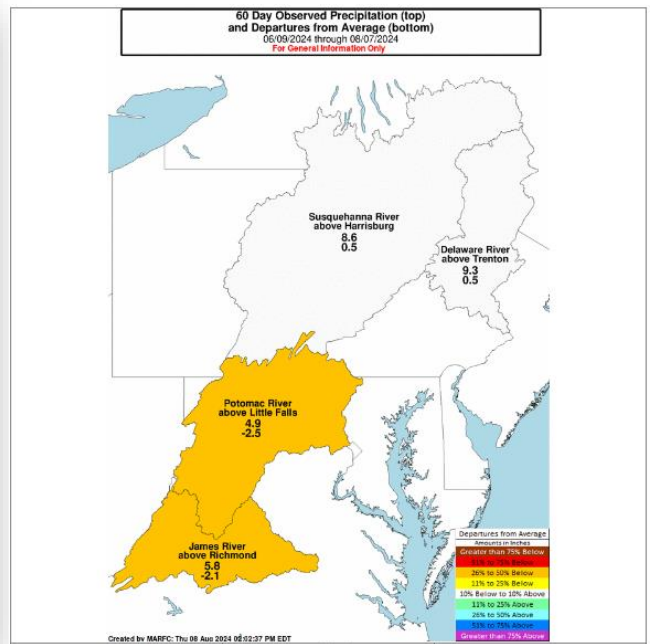
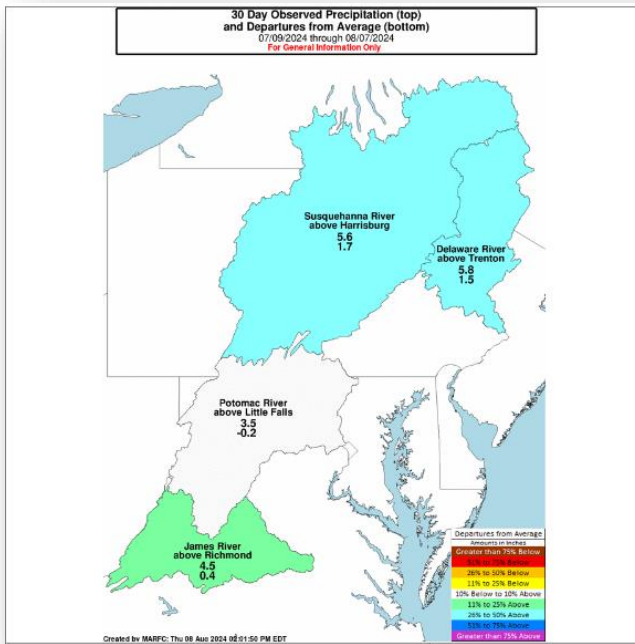
Instantaneous flows readings:

Little Falls: 9,500 cfs (median 2,910 cfs) Source: as of August 9 [USGS Little Falls](#)
 Point of Rocks: 7,450 cfs (median 2,810 cfs) Source: as of August 9 [USGS Point of Rocks](#)

30, 90, and 365 Day Observed Precipitation Levels and Departures from Average

The Potomac Basin received (through 08/07):

30 Day 3.5 inches of precipitation, 0.2 below normal
 90 Day 4.9 inches, 2.5 inches below normal
 365 Day 37.2 inches, 3.1 inches below at normal
 Source: [Middle Atlantic Regional Forecast Center](#)



Groundwater Levels –Below Normal

In the COG region, groundwater levels are below normal.

Source: <https://dashboard.waterdata.usgs.gov/app/nwd/?region=lower48&aoi=default>
<https://waterdata.usgs.gov/va/nwis/current/?type=gw>
<https://waterdata.usgs.gov/md/nwis/current/?type=gw>

Reservoir Levels – Near Normal Levels

Drinking water reservoirs at Jennings Randolph and Little Seneca are currently near normal levels. Source: <http://www.nab-wc.usace.army.mil/nab/potopub.html>

Probability of Reservoir Releases – Above Normal

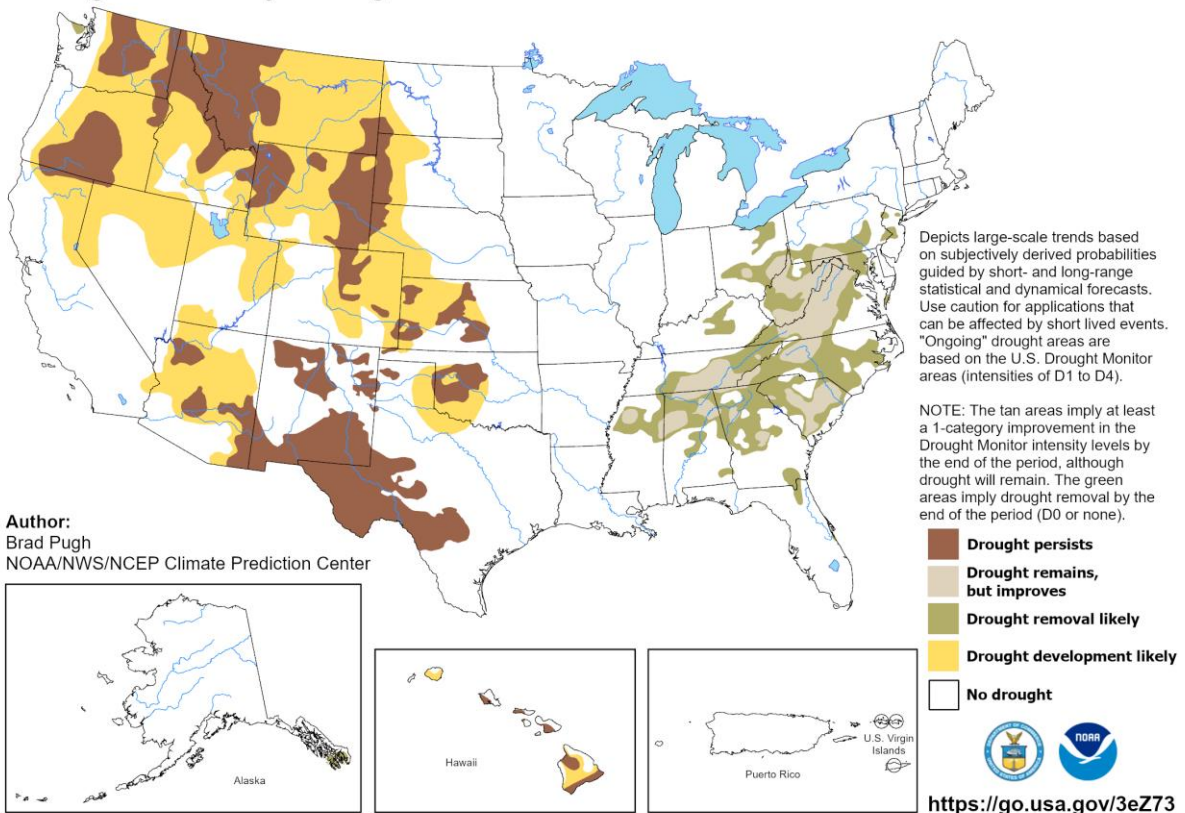
As of the August 2024 report released on August 8, there is an above normal probability of releases from the Washington metropolitan area’s back-up water supply reservoirs for the 2024 summer and fall seasons. Generally, the use of Jennings Randolph and Little Seneca reservoirs is triggered by low flows brought about by a combination of low precipitation and low groundwater levels. There is a **19 to 36** percent conditional probability that natural Potomac flow will drop below 600 to 700 million gallons per day (MGD) at Little Falls through December 31 of this year. Source: [ICPRB](#)

Seasonal Drought Outlook

The U.S. Seasonal Drought Outlook released on July 18 predicts drought removal or improvement over the next three months. Source: [National Weather Service Climate Prediction Center](#)

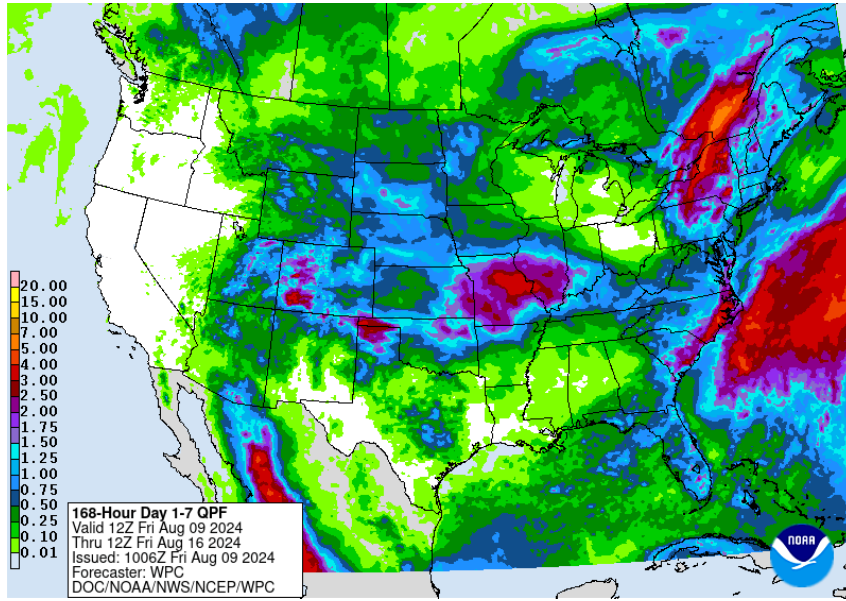
U.S. Seasonal Drought Outlook Drought Tendency During the Valid Period

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



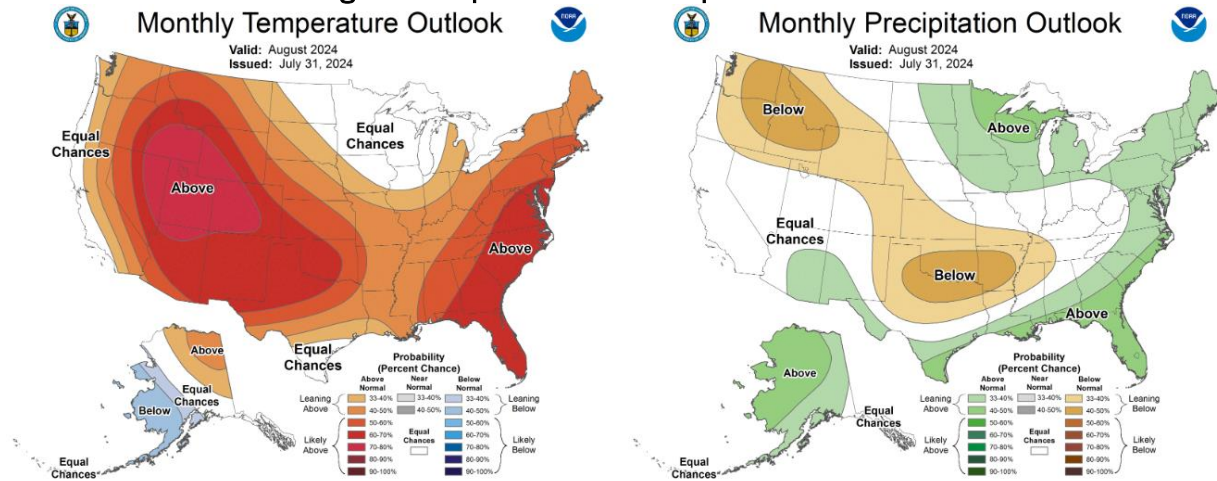
Short Term Precipitation Outlook

The 7 Day quantitative precipitation forecast calls for roughly 0.25 – 0.75 inches of rain in the COG region.



Source: [NOAA NWS Weather Prediction Center](https://www.weather.gov/wpc)

U.S. Climate Outlook for August – Temperature and Precipitation



For more details on how to interpret these maps [Understanding NOAA's monthly climate outlooks](https://www.climate.gov/understanding-noaa-monthly-climate-outlooks). Map by NOAA Climate.gov, based on data from the Climate Prediction Center.