Regional Drought and Water Supply Status July 2023

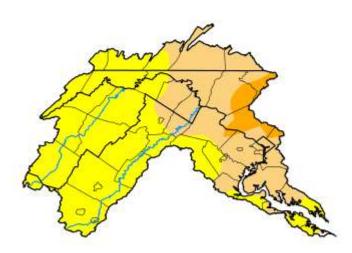
Summary of Current Conditions in the COG Region - As of July 6, 2023

The latest U.S. Drought monitor released on July 6 indicates that moderate drought conditions are still present in the COG region along with an area of severe drought in Frederick, Montgomery, and Prince George's, Maryland. Potomac River streamflow and short-term precipitation levels have improved since last month, yet our region still holds a long-term precipitation deficit. This deficit combined with the predicted above average temperatures during the summer months and low groundwater levels could lead to a longer period of drought. Note that the 7-day precipitation forecast calls for up to 2 inches of rain and the NOAA forecast for July is for above normal precipitation and for drought conditions in the region to improve. Local drinking water reservoirs at Jennings Randolph and Little Seneca are currently full.

The areas monitored in the COG region by the Maryland Department of the Environment (MDE) and the Virginia Department of Environmental Quality (VADEQ) are under a normal status. The <u>Drought Watch Advisory</u> that VADEQ issued in June for the Northern Piedmont drought evaluation region has been lifted.

COG will continue to closely monitor conditions and provide additional updates if needed throughout the month. For more information, please visit COG's Water Supply and Drought website: https://www.mwcog.org/drought

U.S. Drought Monitor
Potomac Watershed



July 4, 2023 (Released Thursday, Jul. 6, 2023) Valid 8 a.m. EDT

Drought Conditions (Percent Area) 0.14 59:19 35.61 5.06 0.00 0.00 Last Week 55,30 38.37 0.00 3 Months Ago 23.18 66.00 10.52 0.00 0.00 0.00 Start of Calendar Yea 99.06 0.94 0.00 0.00 0.00 0.00 Start of 89.89 10.11 0.00 0.00 0.00 0.00 One Year Ago 13.02 0.00 0.00 0.00



The Drought Manifor facuses on broad-scale conditions.
Local conditions may vary. For more information on the
Drought Monifor, go to https://droughtmonitor.uni.edu/About.aspx

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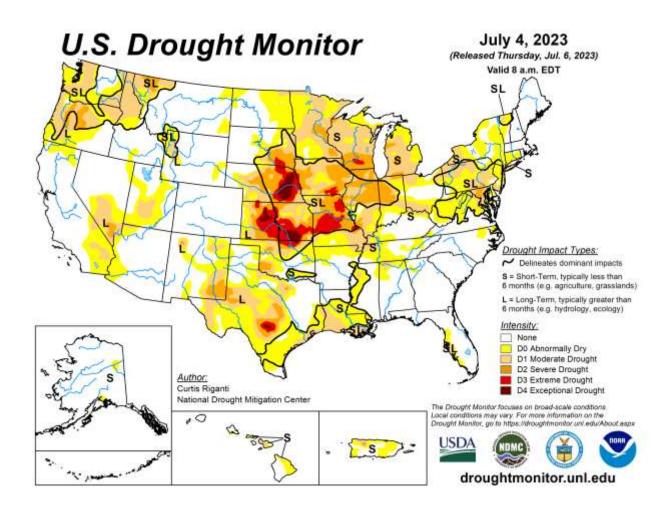






droughtmonitor.unl.edu





Drought Stage - Normal

The current drought stage as defined in COG's water supply and drought response awareness plan (the Plan) is Normal in the COG region. COG's Plan focuses on tracking and responding to drought conditions as it relates to regional water supply. The areas monitored in the COG region by the Maryland Department of the Environment (MDE) and the Virginia Department of Environmental Quality (VADEQ) are under a normal status. The Drought Watch Advisory that VADEQ issued in June for the Northern Piedmont drought evaluation region has been lifted.

Potomac Streamflow - Near median levels

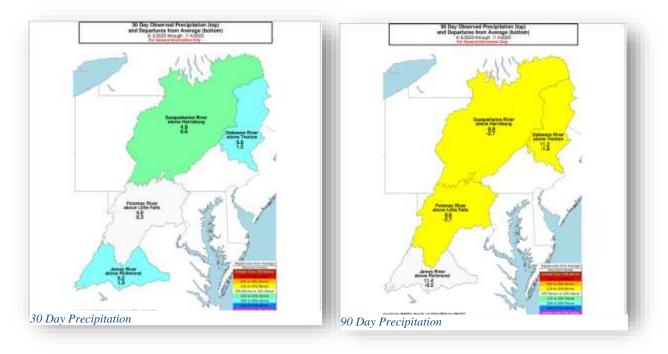
Instantaneous flows readings on July 6 were:

Little Falls: 3.990 cfs (median, 3.980 cfs) Source: <u>USGS Little Falls</u>
Point of Rocks: 3.880 cfs (median 3,640 cfs) Source: <u>USGS Point of Rocks</u>

Potomac Basin Precipitation 30 and 90 Day (through 07.04.23) -Normal for 30 day/below normal for 90

The Potomac Basin received 4.0 inches of precipitation in the last 30 days, 0.3 inches above normal and 8.6 inches, 2.7 inches below normal over the past 90 days.

Source: Middle Atlantic River 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

Reservoir Levels - Normal

Drinking water reservoirs at Jennings Randolph and Little Seneca are currently full. The CO-OP shared system has not released any water supply storage this year. Due to ongoing sediment removal efforts, the Patuxent reservoirs' combined storage level is below normal.

Source: http://www.nab-wc.usace.armv.mil/nab/potopub.html

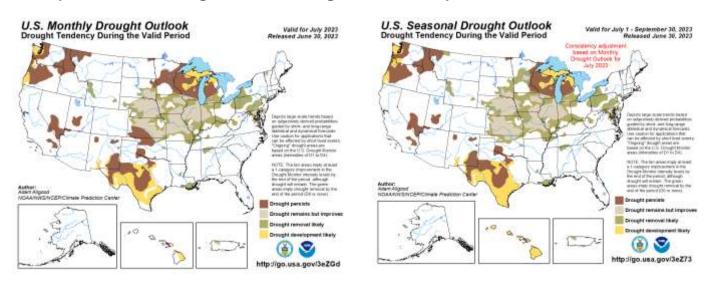
Source: ICPRB

As of the July 2023 report, there is an **above normal probability** of releases from the Washington metropolitan area's back-up water supply reservoirs for the 2023 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 **27 to 45** 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

Water Resources and Supplies Outlook by the Mid Atlantic Forecast Center - Fair

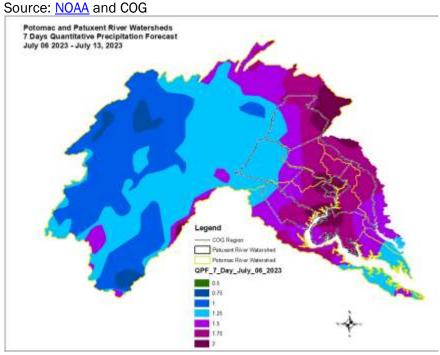
The water resources and supplies outlook is "fair" for the entire Mid-Atlantic Region. As Summer arrives, showers and thunderstorms can be expected from time to time. However, this type of rainfall can be hit or miss. Rainfall over the past 2 or 3 months has been running below average for most parts of the Mid-Atlantic, which has now become unusually dry. There are no strong indicators for heavy rainfall over the next several weeks with indicators suggesting a continuation of dry conditions for most areas. The threat of drought is increasing for much of the Mid-Atlantic until rainfall returns to normal or above normal. Source: MARFC

Monthly and Seasonal Drought Outlook - Drought Removal Likely



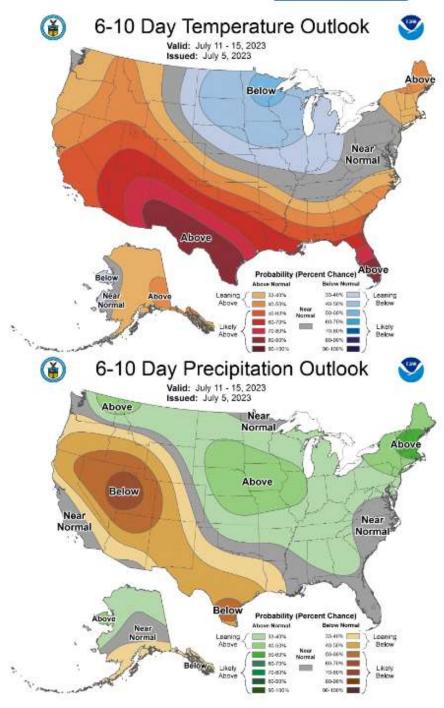
Precipitation Outlook - 7 Day

The 7 Day quantitative precipitation forecast calls for 1.50 – 2.00 inches of rain in the COG region.

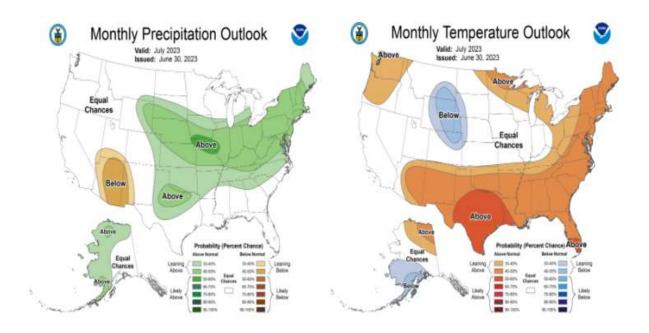


Precipitation and Temperature Outlook -6-10, Monthly, and Seasonal Temperature and Precipitation Outlook

The Climate Prediction Center 6 to 10 Day Outlook:



Source: https://www.weather.gov/marfc/WRO



The 90 Day Precipitation and Temperature Outlooks from the Climate Prediction Center:

