Regional Drought and Water Supply Status June 2023

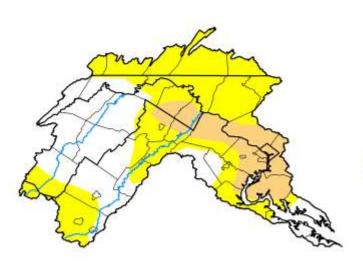
Summary of Current Conditions in the COG Region - As of June 5, 2023

As we have seen in the past, conditions can change rapidly in our region. The latest U.S. Drought monitor released on June 1 indicates that abnormal and moderate drought are present in the COG region, particularly in the eastern portion of the Potomac Basin. Streamflow levels have been steadily dropping due to the lack of rainfall, and groundwater levels are low. The short-term forecast calls for little to no rain, but long-term forecasts seem promising with above normal amounts of rainfall predicted through August. Note that 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. VADEQ issued a <u>Drought Watch Advisory</u> on April 25 for five of their evaluation regions in the Commonwealth and the Northern Virginia region was excluded in this advisory.

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



May 30, 2023 (Released Thursday, Jun. 1, 2023) Valid 8 a.m. EDT

Drought Conditions (Percent Area) None D0 D1. 36.37 46.77 16.86 0.00 0.00 0.00 59.46 5.21 0.00 3 Months Ago 65.17 0.00 34.83 0.00 0.00 0.00 99.06 0.94 0.00 0.00 0.00 0.00 One Year Ago 0.00

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

Author: Richard Heim NCEI/NOAA



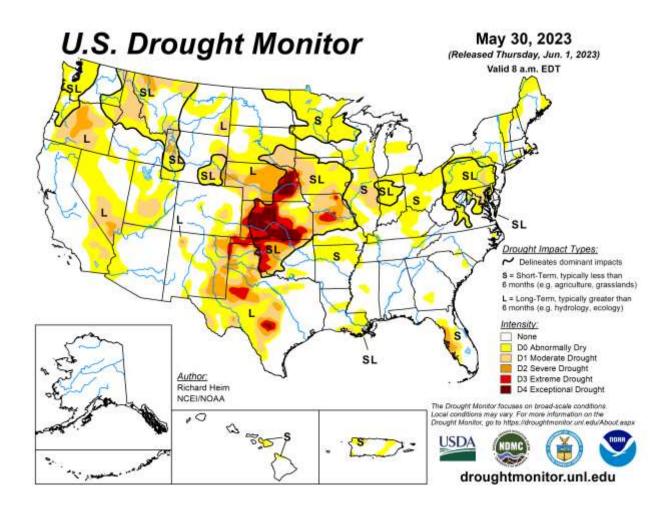






droughtmonitor.unl.edu





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.

Potomac Streamflow - Below median levels

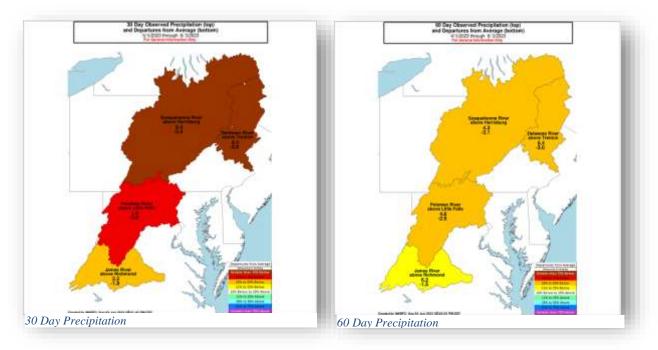
Instantaneous flows readings on June 5 were:

Little Falls: 2,410 cfs (median, 7.910 cfs) Source: <u>USGS Little Falls</u>
Point of Rocks: 2,400 cfs (median 6,470 cfs) Source: <u>USGS Point of Rocks</u>

Potomac Basin Precipitation 30 and 60 Day (through 06.03.23) - Below normal

The Potomac Basin received 1.4 inches of precipitation in the last 30 days, 2.6 inches below normal and 4.6 inches, 2.9 inches below normal over the past 60 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

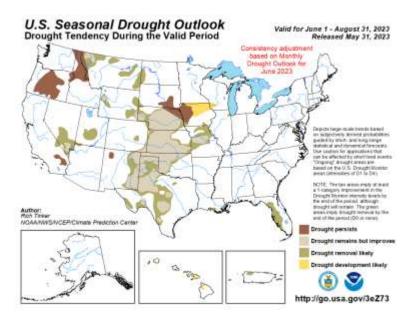
Drinking water reservoirs at Jennings Randolph and Little Seneca are currently full. There have been no water supply releases from the CO-OP shared system in the current year. The Patuxent reservoirs are below their typical combined storage level due to sediment removal efforts, and dredging may begin in a week or so.

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

Source: ICPRB

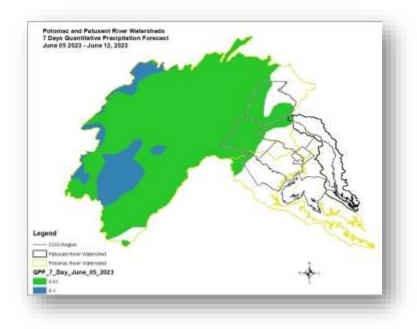
As of the June 2023 report, there is a **higher than normal probability** of releases from the Washington metropolitan area's back-up water supply reservoirs for the 2023 summer and fall seasons. Generally, the use of Jennings Randolph and Little Seneca reservoirs is triggered by low flows brought about by a combination of low precipitation and low groundwater levels. There is a **19 to 34** 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 – Above normal precipitation expected June-August, currently region is dry The Monthly Drought Outlook shows a broad area of development extending across a large part of the Midwest, the central and northern Ohio Valley, the mid-Atlantic Region, and the Northeast. Most of these areas are expected to see above-normal precipitation for June-August as a whole despite dryness in the next few weeks, so any short-term development in this region is expected to be removed by the end of summer. Source: Climate Prediction Center



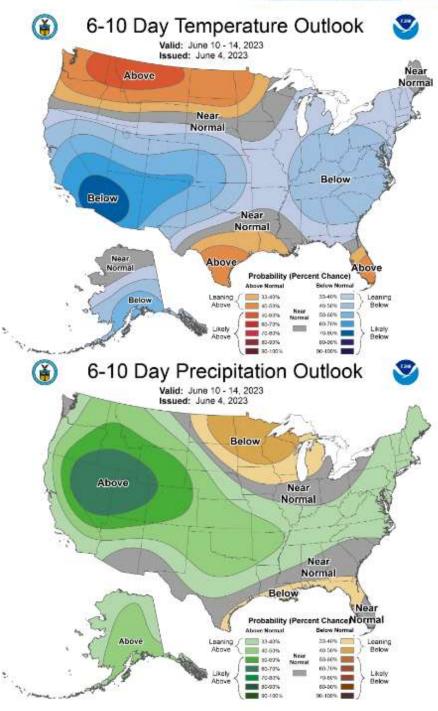
Precipitation Outlook - 7 Day

The 7 Day quantitative precipitation forecast calls little to no precipitation in the COG region. Source: NOAA and COG



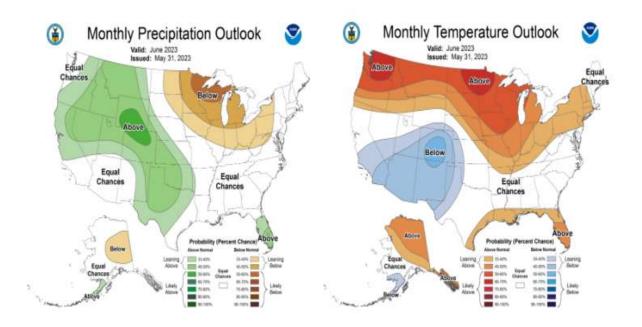
Precipitation and Temperature Outlook -6-10, Monthly, and Seasonal Temperature and Precipitation Outlook

The Climate Prediction Center 6 to 10 Day Outlook:

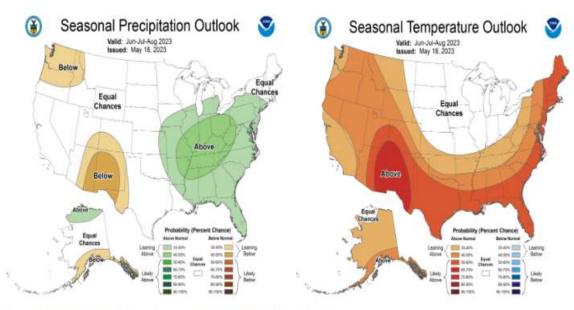


Source: https://www.weather.gov/marfc/WRO

The 30 Day Precipitation and Temperature Outlooks from the Climate Prediction Center:



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



Check out Global Weather Patterns to see weather patterns on a larger scale.