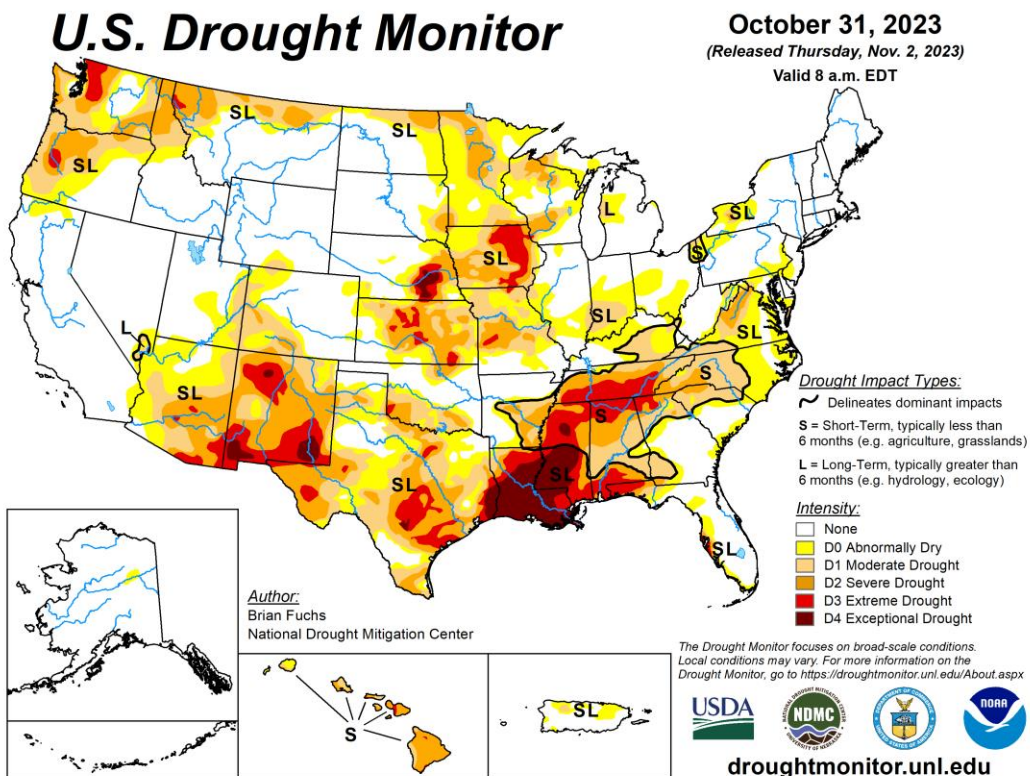


# Regional Drought and Water Supply Status November 2023

## Summary of Current Conditions in the COG Region - As November 3, 2023

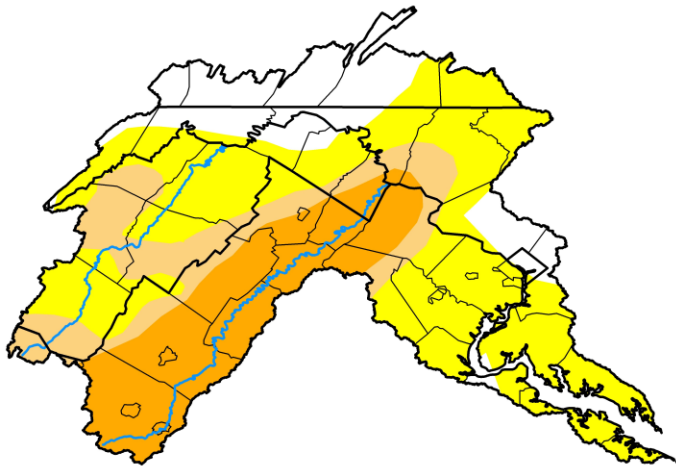
Potomac streamflow and groundwater levels continue to decline due to the lack of precipitation in our region. The most recent U.S. Drought monitor released on October 31 indicates that a range of abnormal, moderate, and severe drought exists in the Potomac Watershed. The Potomac’s Section for Cooperative Water Supply Operations ([CO-OP](#)) has been actively involved in enhanced drought monitoring activities since the beginning of October due to low streamflow levels at the U.S. Geological Survey (USGS) stream gauge in Point of Rocks, Maryland. CO-OP staff and regional experts note the Potomac River’s current flows sufficiently meet the total metropolitan area’s water demands without needing releases from upstream reservoirs. The region has well-established drought-contingency plans to ensure water supply reliability and prevent shortages.

The current drought stage as defined in COG’s [Metropolitan Washington Water Supply and Drought Awareness Response Plan](#) (the Plan) is Normal. 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

**October 31, 2023**  
(Released Thursday, Nov. 2, 2023)  
Valid 8 a.m. EDT



Drought Conditions (Percent Area)

|  | None  | D0    | D1    | D2    | D3   | D4   |
|--|-------|-------|-------|-------|------|------|
| <b>Current</b>                                     | 16.68 | 45.42 | 15.44 | 22.45 | 0.00 | 0.00 |
| <b>Last Week</b><br><i>10-26-2023</i>              | 29.35 | 33.19 | 18.48 | 18.98 | 0.00 | 0.00 |
| <b>3 Months Ago</b><br><i>08-03-2023</i>           | 37.52 | 39.20 | 17.91 | 5.37  | 0.00 | 0.00 |
| <b>Start of Calendar Year</b><br><i>01-05-2023</i> | 99.06 | 0.94  | 0.00  | 0.00  | 0.00 | 0.00 |
| <b>Start of Water Year</b><br><i>09-28-2023</i>    | 26.87 | 34.54 | 23.45 | 15.13 | 0.00 | 0.00 |
| <b>One Year Ago</b><br><i>11-03-2022</i>           | 94.63 | 5.37  | 0.00  | 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:

Brian Fuchs  
National Drought Mitigation Center



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

### Drought Stages for COG, VADEQ, and MDE

The current drought stage as defined in [COG's water supply and drought awareness response 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.

As of October 21, [the Maryland Department of the Environment \(MDE\)](#) has classified Maryland's drought status as a Watch for Western Maryland, Warning for Central Maryland, and Normal for Eastern and Southern Maryland. As of October 31, the [Virginia Department of Environmental Quality \(VADEQ\)](#) shows a Drought Watch status for the Eastern Shore, Northern Virginia, and York James evaluation regions, with a continued Drought Warning in the Shenandoah drought evaluation region.

### Potomac Streamflow – Below median levels

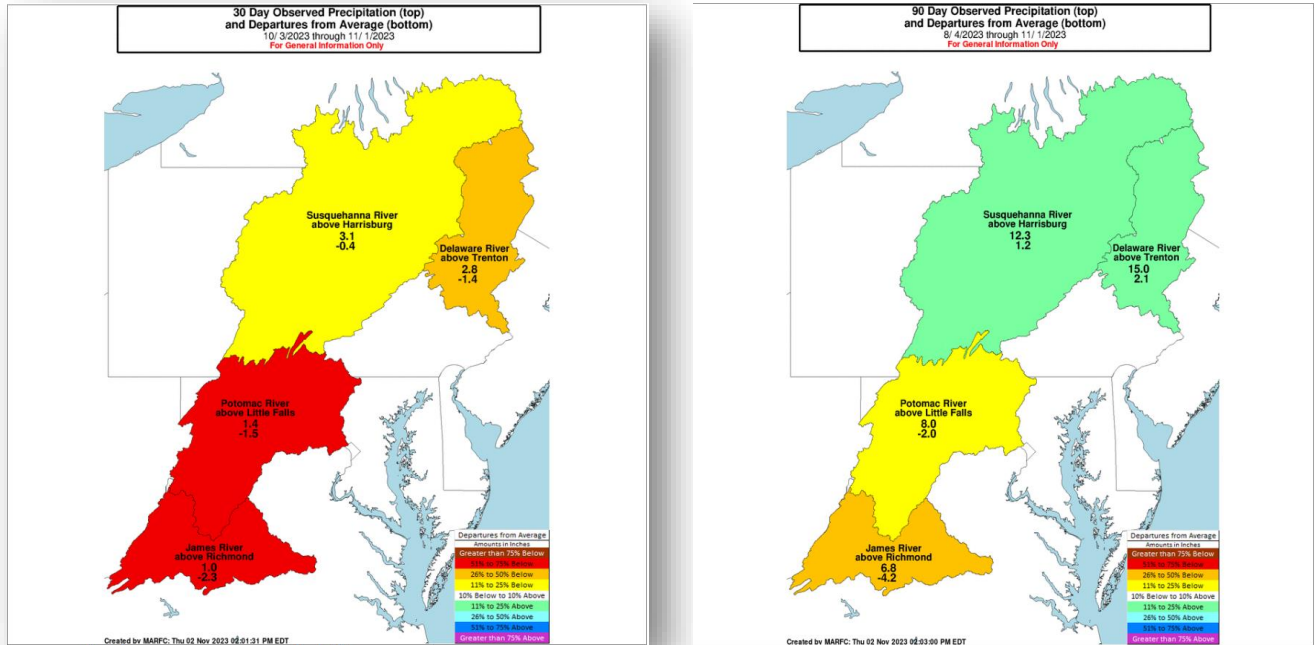
Instantaneous flows readings:

Little Falls: 1,010 cfs Source: as November 3 [USGS Little Falls](#)  
Point of Rocks: 1,050 cfs Source: as November 3 [USGS Point of Rocks](#)

## Potomac Basin Precipitation 30 and 90 Day (through 11.02.23) –Below Normal

The Potomac Basin received 1.4 inches of precipitation in the last 30 days, 1.5 inches below normal and 8.0 inches, 2.0 inches below normal over the past 90 days.

Source: [Middle Atlantic River Forecast Center](https://www.marfc.com/)



## Groundwater Levels – Below Normal

In the COG region, groundwater levels are well 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 slightly below and near normal pool levels.

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

## Summary of ICPRB's November 2023 Water Supply Outlook

The Potomac's Section for Cooperative Water Supply Operations (CO-OP) has been actively involved in its latest "Drought Monitoring" period since October 4. CO-OP commences drought monitoring when the flow at the U.S. Geological Survey (USGS) stream gauge in Point of Rocks, Maryland, falls below 2,000 cubic feet per second. During this phase, CO-OP issues daily email reports summarizing flow, weather, and demand conditions to stakeholders. These updates are accessible daily via the [CO-OP Data Portal](#).

Due to the persistent dry conditions, the publication period for the Water Supply Outlook has been extended into November, even though the ICPRB's Low-Flow Outlook model does not cover this month. Currently, the basin is experiencing a range of dry conditions, including 43.89% classified as abnormally dry (D0), 14.89% as moderate drought (D1), and 21.65% as severe drought (D2), as indicated by the U.S. Drought Monitor report for November 2.

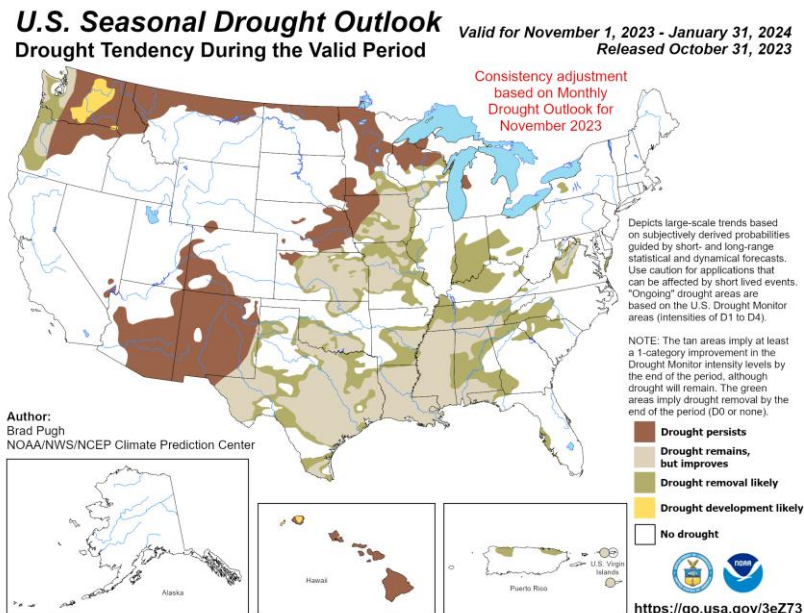
With only 1.4 inches of precipitation in October, there is a 1.6-inch deficit from the typical average for the past month. Consequently, both streamflow and groundwater levels have decreased. These inadequate precipitation and depleted groundwater levels can lead to low flow conditions requiring releases from backup water supply reservoirs. For example, the graph of Adjusted Daily Flow at Little Falls ([see webpage or PDF](#)) illustrates that this year's river flow closely resembles fall flows observed in the pre-drought years of 1965, 1988, and 2001, leading up to historic CO-OP "Drought Operations" periods with significant reservoir releases. CO-OP begins drought operations when flow in the Potomac River at the U.S. Geological Survey gage at Little Falls dam drops below the total Washington metropolitan area supplier daily withdrawals plus the 100 million gallons per day flow-by, or when CO-OP flow forecasts indicate that there is a significant chance that releases from Jennings Randolph and/or Little Seneca reservoirs will be needed within the next nine days. However, it is important to emphasize that the Potomac River's current flows sufficiently meet the total metropolitan area's water demands without needing releases from upstream reservoirs. The region has well-established drought-contingency plans to ensure water supply reliability and prevent shortages.

[Click here to visit ICPRB's Water Supply Outlook webpage where you can access a PDF version.](#)

### Seasonal Drought Outlook

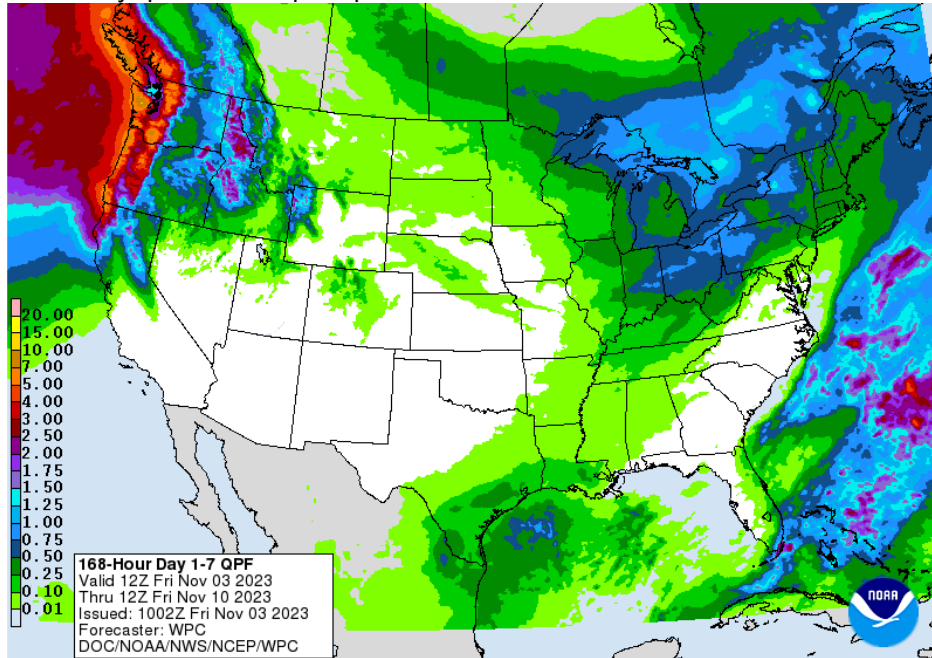
The October 31 release from the Climate Prediction Center's U.S. Seasonal Drought Outlook indicates that drought remains but could show improvement in areas surrounding the region. Yellow areas are likely to see drought develop. Brown areas are likely to see drought persist. Tan means drought is likely to improve at least one category, and green means drought is likely to end, and drought removal is likely. Source:

[https://www.cpc.ncep.noaa.gov/products/expert\\_assessment/sdo\\_summary.php](https://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php)



## Short Term Precipitation Outlook

The 7 Day quantitative precipitation forecast calls little to no rain in the COG region.

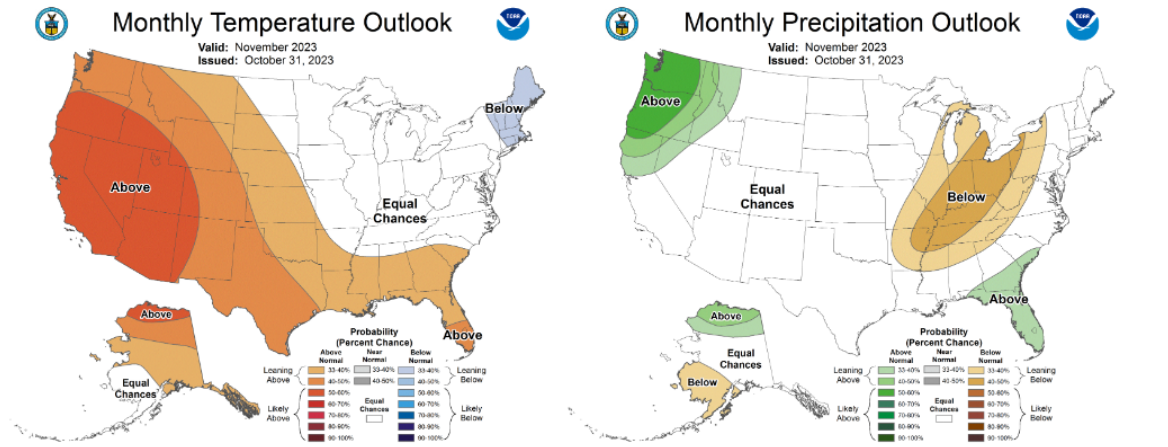


Source: [NOAA NWS Weather Prediction Center](https://www.weather.gov/wpc)

## U.S. Climate Outlook for November– Temperature and Precipitation

# Updated OFFICIAL 30-Day Forecasts

Issued: October 31, 2023



NOAA/ National Weather Service  
 National Centers for Environmental Prediction  
 Climate Prediction Center  
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