Regional Drought and Water Supply Status October 2019

SUMMARY OF CONDITIONS (as of October 4, 2019)

- Abnormal dryness (D0) and moderate drought (D1) exist in the Potomac Watershed due to the lack of rainfall, low soil moisture, and extreme temperatures during the past month. Streamflow levels fell below the monitoring threshold of 2,000 cubic feet per second at the Point of Rocks USGS streamflow gage and as a result, the CO-OP has implemented daily monitoring. COG will continue to track conditions and provide additional reports throughout the month if dry conditions persist.
- The current drought stage as defined in <u>COG's water supply and drought response awareness plan</u>
 (the <u>Plan</u>) is NORMAL. COG's Plan focuses on tracking and responding to drought conditions as it
 relates to regional water supply.
- In Maryland (MDE) and Virginia (VADEQ) all COG regions are under a normal status.
- Potomac streamflow and precipitation levels are below normal but local reservoirs remain full. The
 majority of the regional groundwater wells monitored are near normal levels.
- There is a <u>below normal probability of releases</u> from the metropolitan Washington area's back-up water supply reservoirs for the 2019 fall and winter seasons.

U.S. Drought Monitor October 1, 2019 (Released Thursday, Oct. 3, 2019) **Potomac Watershed** Valid 8 a.m. EDT Drought Conditions (Percent Area) None D0 D1 88.73 0.00 Current 0.17 11.09 0.00 0.00 Last Week 1.68 87.21 11.12 0.00 0.00 0.00 3 Months Ago 0.00 0.00 0.00 100.00 0.00 0.00 100 00 0.00 0.00 0.00 0.00 0.00 One Year Ago 0.00 D0 Abnormally Dry D3 Extreme Drought D1 Moderate Drought D4 Exceptional Drought D2 Severe Drought The Drought Monitor focuses on broad-scale conditions Local conditions may vary. See accompanying text summary for forecast statements. Author: Brian Fuchs National Drought Mitigation Cente **USDA**

The October 1st U.S. Drought Monitor for the Potomac Watershed indicates that abnormal dryness (D0) and moderate drought (D1) exist throughout the COG region Source: NOAA http://droughtmonitor.unl.edu/,

http://droughtmonitor.unl.edu/



POTOMAC STREAMFLOW LEVELS

Potomac streamflows are currently below median levels.

Instantaneous flows readings on October 4 were: Little Falls -2,070 cfs/median 2,460 cfs Point of Rocks -1,910 cfs/median 2,280 cfs

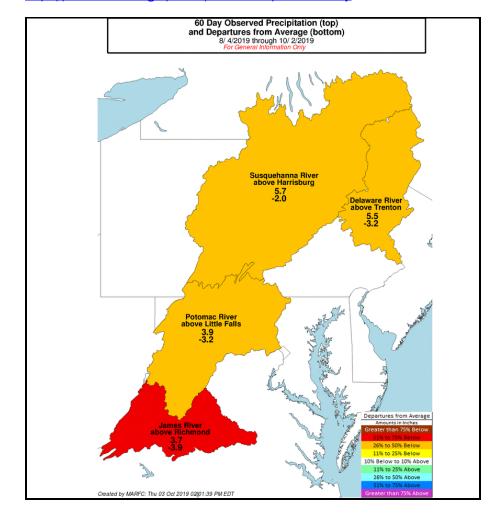
Source: USGS Little Falls: https://waterdata.usgs.gov/md/nwis/uv?01646500 Source: USGS Point of Rocks: https://waterdata.usgs.gov/md/nwis/uv?01638500

POTOMAC BASIN PRECIPITATION (as of 10/02/19)

The Potomac Basin received 3.9 inches in the last 60 days which is 26% to 50% below average.

Source: Middle Atlantic River Forecast Center

https://www.weather.gov/marfc/BasinPrecipitation60Day



GROUNDWATER LEVELS

Most of the groundwater levels are near normal for this time of year although two wells in Prince William County Virginia are below normal.

Source: USGS

https://md.water.usgs.gov/groundwater/web_wells/current/water_table/counties/index.html

https://groundwaterwatch.usgs.gov/NetMapT1L2.asp?ncd=crn&sc=51 https://www.weather.gov/marfc/wro_south

DROUGHT, PRECIPITAITON, AND TEMPERATURE OUTLOOKS

The latest U.S. Seasonal Outlook indicates that drought development is not likely in the COG region over the next three months. The National Weather Service Climate Prediction Center's thirty- day outlook calls for below average precipitation and above normal temperatures. Source: NOAA

http://www.cpc.ncep.noaa.gov/products/expert_assessment/sdo_summary.php https://www.cpc.ncep.noaa.gov/products/predictions/30day/

RESERVOIR LEVELS

Drinking water reservoirs at Jennings Randolph and Little Seneca are full.

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

There is a below normal probability of releases from the Washington metropolitan area's back-up water supply reservoirs for the 2019 fall season. 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 one to four 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.

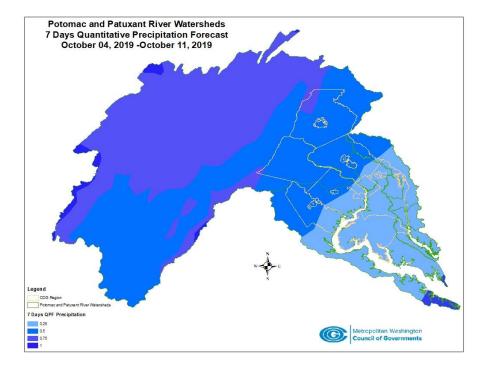
Source: ICPRB

https://www.potomacriver.org/focus-areas/water-resources-and-drinking-water/cooperative-water-supply-operations-on-the-potomac/drought-monitoring-and-operations/water-supply-outlook-status/

7 DAY PRECIPITATION FORECASTS (as of October 4)

The 7 Day quantitative precipitation forecast calls more rain in the western portion of the Potomac River Basin and between 0.25 – 0.50 inches in the COG region.

Source: COG and NOAA: http://www.wpc.ncep.noaa.gov/qpf/day1-7.shtml



For additional information please visit COG's Water Supply and Drought website: https://www.mwcog.org/drought