May 2009 USGS Maryland-Delaware-DC Water Conditions Summary

May rainfall was the second highest rainfall on record in Baltimore. The abundant rainfall has eliminated the drought conditions that were present in the winter and early spring and resulted in normal to above normal monthly mean streamflows across the region. Groundwater levels were normal in more than half of the wells used by the U.S. Geological Survey (USGS) to assess response to climatic conditions across Maryland, Delaware, and the District of Columbia. However, some groundwater levels remain below normal.

Precipitation

May rainfall was more than 8 inches in Baltimore and the District of Columbia, which is more than double the normal rainfall for May. Rainfall in Delaware was close to normal in May. According to data from the National Weather Service, May 2009 had the second wettest May rainfall on record. The first 3 months of 2009 were the second driest on record and the April and May rainfall was the second highest since 1889. The Hagerstown weather station does not have enough record to calculate statistics.



Rainfall deficits since January 1, 2009 are minimal (data from MARFC) for the region. Rainfall for the last 365 days remains in the normal range throughout Maryland, Delaware, and District of Columbia.

Sources: National Weather Service

MD and DC: http://www.weather.gov/climate/index.php?wfo=lwx

DE: http://www.erh.noaa.gov/phi/

Middle Atlantic River Forecast Center (MARFC): http://www.erh.noaa.gov/marfc/Maps/precip.html

Streamflow

Streamflow rose in many of the USGS streamflow stations used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Streamflow was normal to above normal in all sites: 16 streams were above normal and 14 were at normal levels.





Monthly mean streamflow on the Potomac River rose from below normal in March to above normal in May. The dark line in the 5-year hydrograph represents the current flow and the white band shows the normal range based on the period of record. Five-year hydrographs can be viewed at: http://md.water.usgs.gov/surfacewater/streamflow/

Groundwater

Groundwater levels ranged from below normal in central Maryland and Delaware to normal to above in other parts of these states.

In May, groundwater levels were below normal in 9 of the 26 wells used by the USGS to assess climatic conditions. The wells with below normal levels were clustered in the central Piedmont and Delaware regions. Groundwater levels were normal in 14 wells and above normal in 3 wells.





The groundwater level in well BA Ce 21 in Baltimore County, Maryland rose to close to normal levels in May, but remains below normal. The 5year hydrograph shows the water level as a dark line and normal (between the 25th and 75th percentiles) as a white band.

Reservoir Levels

Water available from the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) rose to 74.06 billion gallons in available storage at the end of May 2009.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, increased to 100% capacity at the end of May, 2009.

May 2009	Percent available /normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs			Baltimore City
Loch Raven	100%	21.11	
Liberty	95%	35.10	
Prettyboy	100%	17.85	
Total	98%	74.06	

Patuxent Reservoirs			Washington Suburban Sanitary Commission (WSSC)
Triadelphia	100%	5.87	
Duckett	100%	5.26	
Total	100%	11.13	