## August 2008 USGS Maryland-Delaware-DC Water Conditions Summary

Lack of rainfall led to low streamflow and ground-water levels at sites used by the U.S. Geological Survey (USGS) to monitor water conditions across Maryland, Delaware, and the District of Columbia. Conditions were especially dry in Delaware and central Maryland.

Streamflow levels were below normal in 18 of the 30 streams monitored and water levels in 8 of these streams were in the lowest 10<sup>th</sup> percentile for the period of record. Streamflow was normal in 11 streams and only the Savage River was above normal in August.

Ground-water levels were below normal in 13 of the 24 wells monitored in August 2008. Water levels in the remaining 11 wells were in the normal range.

### **Precipitation**

Rainfall was less than half the monthly normal in Maryland and Delaware in August, based on data from the National Weather Service. Rainfall was more than 3 inches below normal in Kent, Queen Anne's, and Talbot Counties in Maryland and more than 4 inches below normal in Kent and Sussex County, Delaware. Allegany County in Maryland was the only county with above normal rainfall in August. Precipitation for the past 365 days was generally normal in the Maryland, Delaware, and Washington DC area.

Sources: National Weather Service MD and DC: <u>http://www.weather.gov/climate/index.php?wfo=lwx</u> DE: <u>http://www.erh.noaa.gov/phi/</u> Middle Atlantic River Forecast Center: <u>http://www.erh.noaa.gov/marfc/Maps/precip.html</u>



#### **Streamflow**

Monthly mean streamflow levels were below normal in 18 of the 30 streams used by the USGS as climate indicators across the Maryland, Delaware, and the District of Columbia region. The Savage River in Garrett County was the only stream above normal in August.



The monthly mean streamflow level on the Choptank River dropped to nearly a record low in August. The water level has been dropping at a greater rate than normal for the last 3 months. The 5-year hydrograph shows the water level as a dark line and normal (between the 25<sup>th</sup> and 75<sup>th</sup> percentiles) as a white band.



Five-year hydrographs for these streams can be viewed at: http://md.water.usgs.gov/surfacewater/streamflow/

#### **Ground Water**

Ground-water levels in the unconfined wells used by the USGS to measure response to climatic conditions were normal in 11 of the 24 wells in Maryland and Delaware. The remaining 13 wells had below normal water levels and are located in central Maryland and Delaware.



The water level in well BA Ea 18 in Baltimore County shows the water level is dropping at the normal rate, but the trend over the last 5 years is downward.



Five-year hydrographs for these wells can be viewed at: http://md.water.usgs.gov/groundwater/web\_wells/current/water\_table/counties

# Reservoirs

Water available from the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) decreased 12% to 87% of the available storage (65.89 billion gallons) at the end of August.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, decreased to 70% of the normal capacity at the end of August.

August 2008	Percent available /normal storage	Volume (billion gallons)	Source			
Baltimore Reservoirs			Baltimore City			
Loch Raven	92%	19.41				
Liberty	84%	30.08				
Prettyboy	93%	16.40				
Total	87%	65.89				
Patuxe	nt Reservoi	rs	Washington Suburban Sanitary Commission (WSSC)			
Triadolphia	970/	1 97				

Patuxe	nt Reservoi	rs	Washington Suburban Sanitary Commission (WSSC)
Triadelphia	87%	4.87	
Duckett	52%	2.59	
Total	70%	7.46	