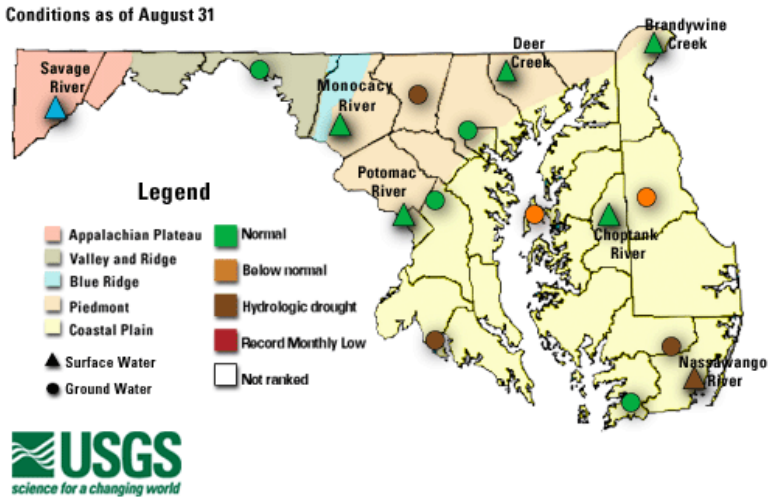
August 2007 USGS Maryland-Delaware-DC Water Conditions Summary



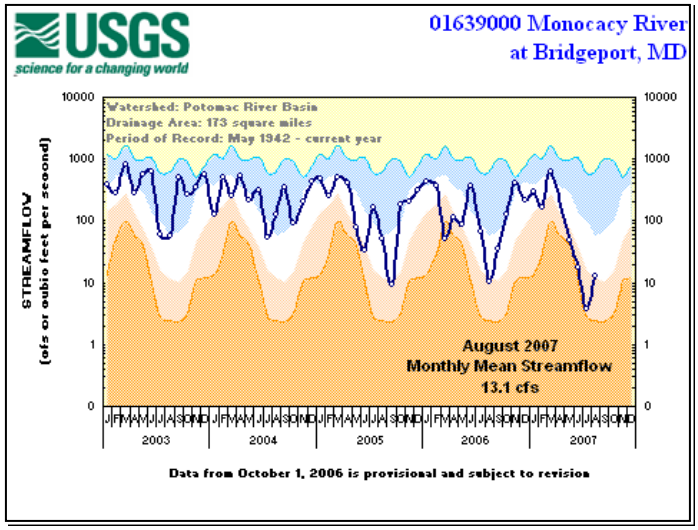
August rain caused many streams and water levels in wells to rise to normal levels, however water levels in southern Maryland and the southern part of the Delmarva peninsula remain below normal. The rain was too late in the season to help farmers and the U.S. Department of Agriculture designated the entire state of Maryland drought disaster status. Water restrictions remain in effect in Carroll and Frederick Counties.

Based on USGS streamflow and ground-water data, hydrologic conditions in Maryland and District of Columbia (DC) range from normal to hydrologic drought at the end of August 2007. Of the 22 wells used to monitor hydrologic conditions by the U.S. Geological Survey (USGS), half of the ground-water wells were below normal. The most affected regions are southern and central Maryland and the Eastern Shore. Only 25% of streams remain below normal, and several streams in western Maryland were above normal.

Streamflow

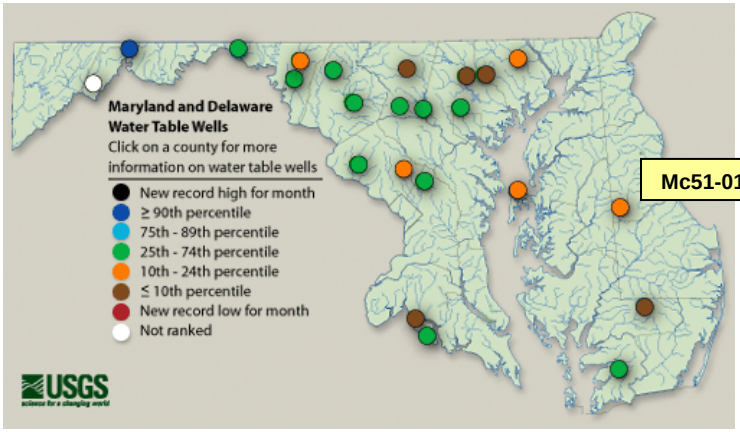
At the end of August in Maryland and Delaware, 20 USGS streamflow gaging stations were used to characterize streamflow conditions. The level in many streams across the region increased, but not in all cases. The monthly mean streamflow was normal in 10 streams in Maryland, and below normal at Nassawango Creek, Nanticoke River, Patuxent River, Pocomoke River, and Winters Run in Harford County. The Streams that were above normal were in western Maryland: Savage River, Wills Creek, and Youghiogheny River.

In Delaware, Brandywine Creek and White Clay Creek in Delaware were normal and Nanticoke River was below normal at the end of August.

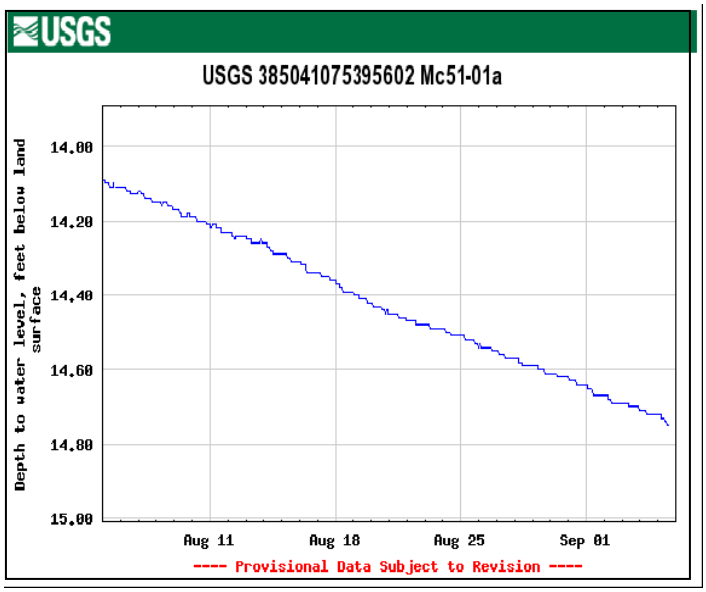


Streamflow on the Monocacy River increased from a near record monthly low to just into the normal range at 13 cfs (cubic feet per second). The monthly mean streamflow is 23 cfs.

Many ground-water levels monitored by the USGS responded to the rainfall. However, 10 of the 22 wells used to assess the water conditions in Maryland for August continue to be at below normal levels. Wells in Baltimore, Charles, Harford, and Wicomico Counties were extremely low. Without normal rainfall, many of the wells will be below normal in the coming months.

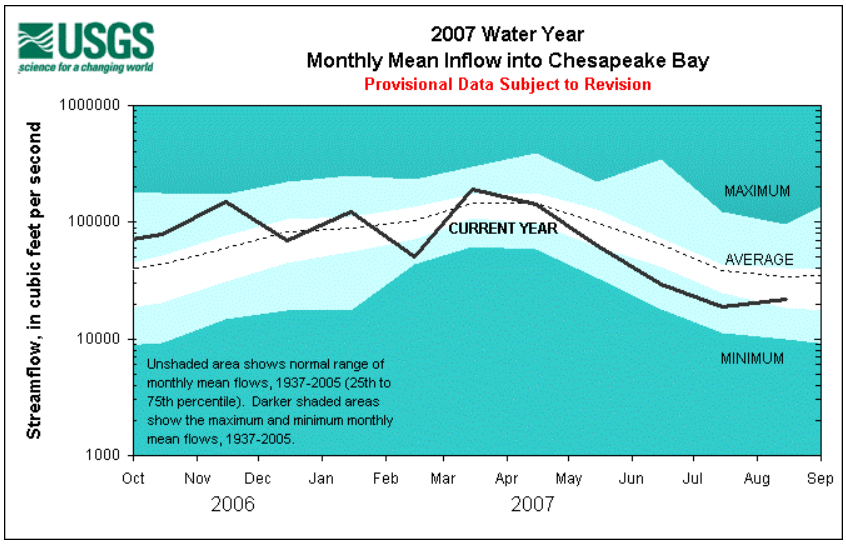


The water-table well in Allegany County was the only well above normal and has been for several months. The status of the monthly ground-water level depends on the aquifer the well taps, the well construction, and the period of record of the data, in addition to precipitation data.



The water level is shown in depth below land surface for this Kent County, Delaware well. Notice that the water level continues to drop despite the rainfall in August.

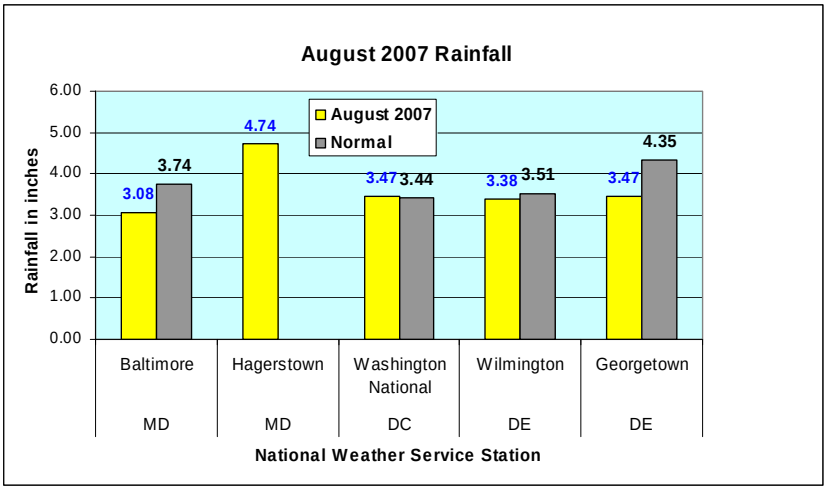
Chesapeake Bay Freshwater Flow



Rainfall in the Chesapeake Bay watershed helped to bring the monthly freshwater flow back into the normal range. The estimated mean monthly flow to the Chesapeake Bay for August was 22,100 cfs (cubic feet per second) or about 65 percent of the long-term mean for August. Average August flow is 34,000 cfs.

Precipitation

Precipitation data from the National Weather Service show that rainfall was near normal at the five weather stations below.



Data from National Weather Service:
http://www.weather.gov/climate/index.php?wfo=lwx

Reservoirs

Contents of the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) dropped 4% to 84 percent of capacity at the end of August. Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, dropped to 62 percent of the normal capacity at the end of August.