August 2010 USGS Maryland-Delaware-District of Columbia Water Conditions Summary

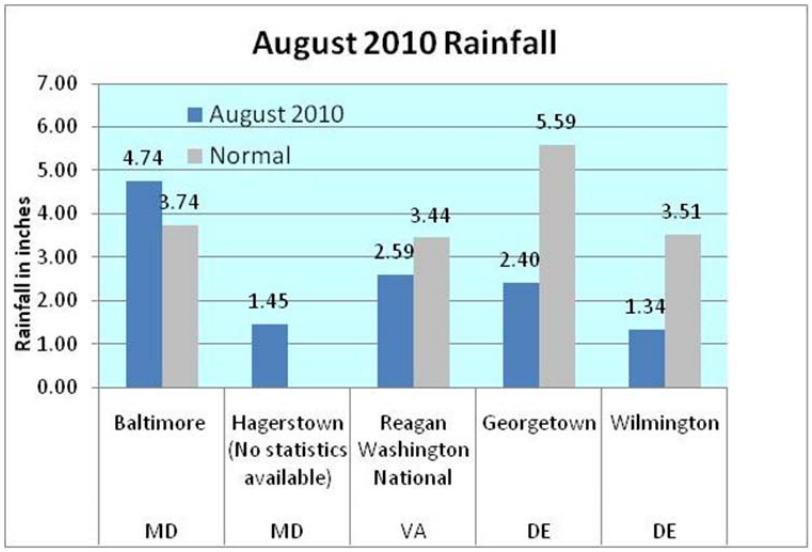
Groundwater and streamflow levels were normal to below normal in the Maryland, Delaware, and District of Columbia region in August. Western and southern Maryland and the southern Delmarva region had below normal water levels, which reflect the lack of rain for the past 5 months in these areas.

August streamflow was normal in 19 and below normal in 14 of the 33 streams used by the U.S. Geological Survey (USGS) to assess the response to climatic conditions in Maryland, Delaware, and the District of Columbia. Groundwater levels were normal in 13of the 25 wells and below normal in the remaining 12 wells.

Precipitation

Rainfall in August was less than 2 inches in Hagerstown, Maryland (1.45 inches), and Wilmington, Delaware (1.34 inches). At the Baltimore-Washington International Thurgood Marshall Airport (BWI), rainfall was an inch above normal with 4.54 inches. Temperatures were above normal, with 77 degrees Fahrenheit or greater at all five National Weather Service stations in Maryland, Delaware, and at Ronald Reagan Washington National Airport in Virginia.

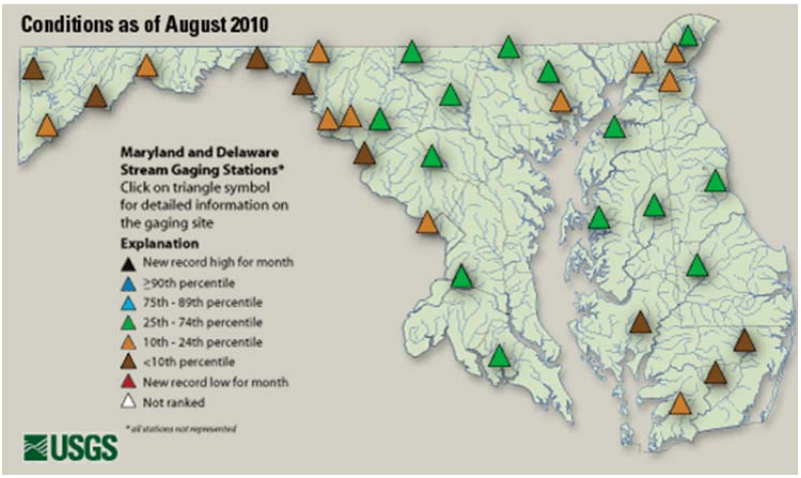
The Middle Atlantic River Forecast Center's 365-day and "year-to-date" departure from the average precipitation maps show most of the region within the normal range.



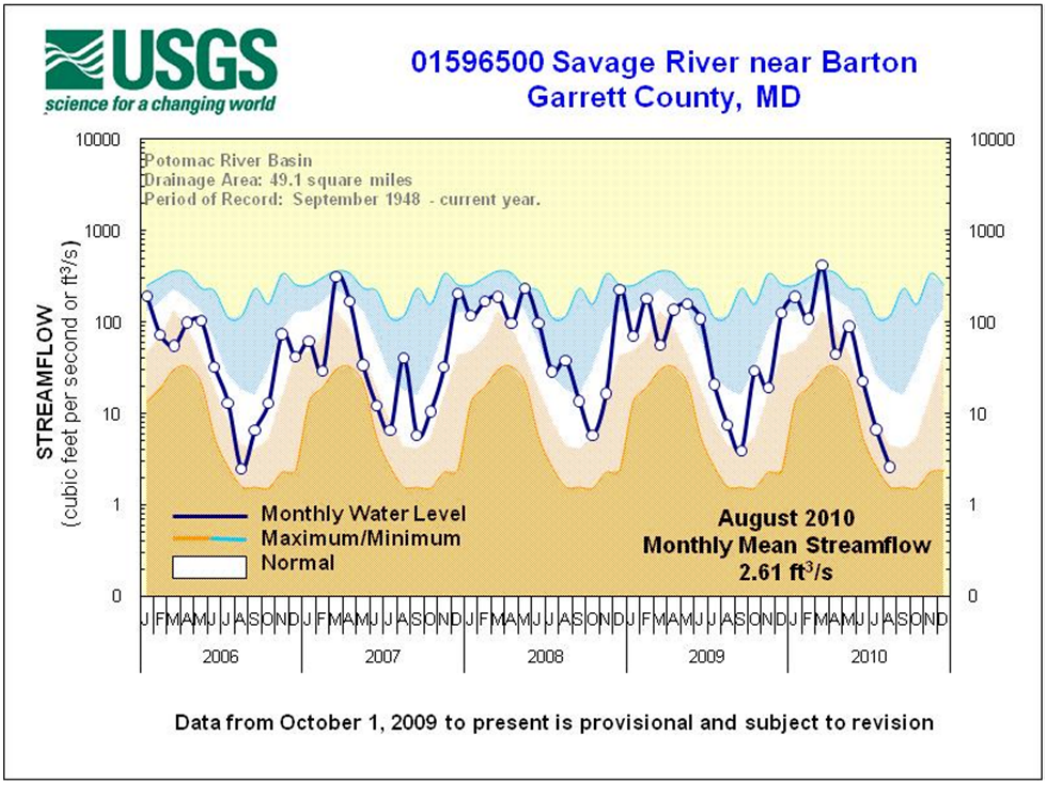
Sources: National Weather Service
MD and DC: http://www.weather.gov/climate/index.php?wfo=lwx
DE: http://www.erh.noaa.gov/phi/
Middle Atlantic River Forecast Center (MARFC): http://www.erh.noaa.gov/marfc/Maps/precip.html

Streamflow

Monthly mean streamflow was in the lowest 10th percentile in 8 of the 33 USGS streamflow stations used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. The regions with the lowest streamflow levels were in western Maryland and the southern part of the Delmarva Peninsula. August streamflow was normal in 14 of the stations, mostly in central Maryland.



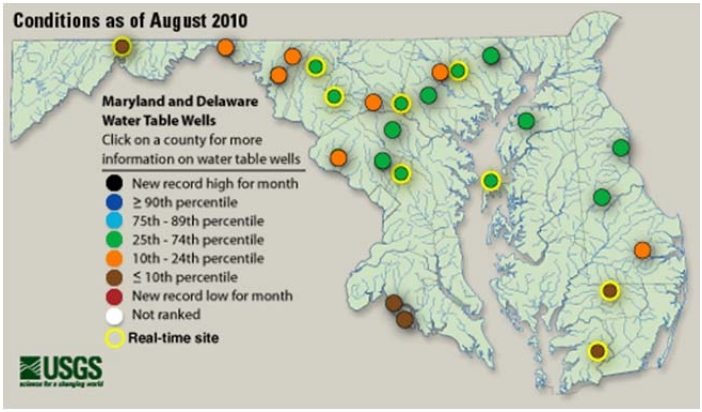
The August monthly mean streamflow on the Savage River was below normal. The streamflow level dropped from a record high in March (from snowmelt), to the below normal flow we see now. The streamflow dropped more quickly than the normal rate for the third consecutive month. Precipitation in this region has been below normal for the past 5 months. The dark line in the 5-year hydrograph represents the current monthly mean streamflow and the white band shows the normal range (25th to 74th percentile) based on the period of record (1948 to current year).



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

Groundwater

In August, groundwater levels were normal in 13 of the 25 wells used by the USGS to assess climatic conditions, mostly in central Maryland and Delaware. Below normal groundwater levels were found in western and southern Maryland, and the lower Delmarva Peninsula. Wells with water levels in the lowest 10th percentile were in Allegany, Charles, Somerset, and Wicomico Counties.



The August groundwater level in well CH Bg 12 in Charles County, Maryland was below normal at 9.90 feet below land surface. The water levels have been following the long term downward trend for this time of year, although the water level is in the lowest 10th percentile for the fifth consecutive month. The 5-year hydrograph shows the water level as a dark line and the normal range (between the 25th and 74th percentiles) as a white band based on the period of record (1983 to present).

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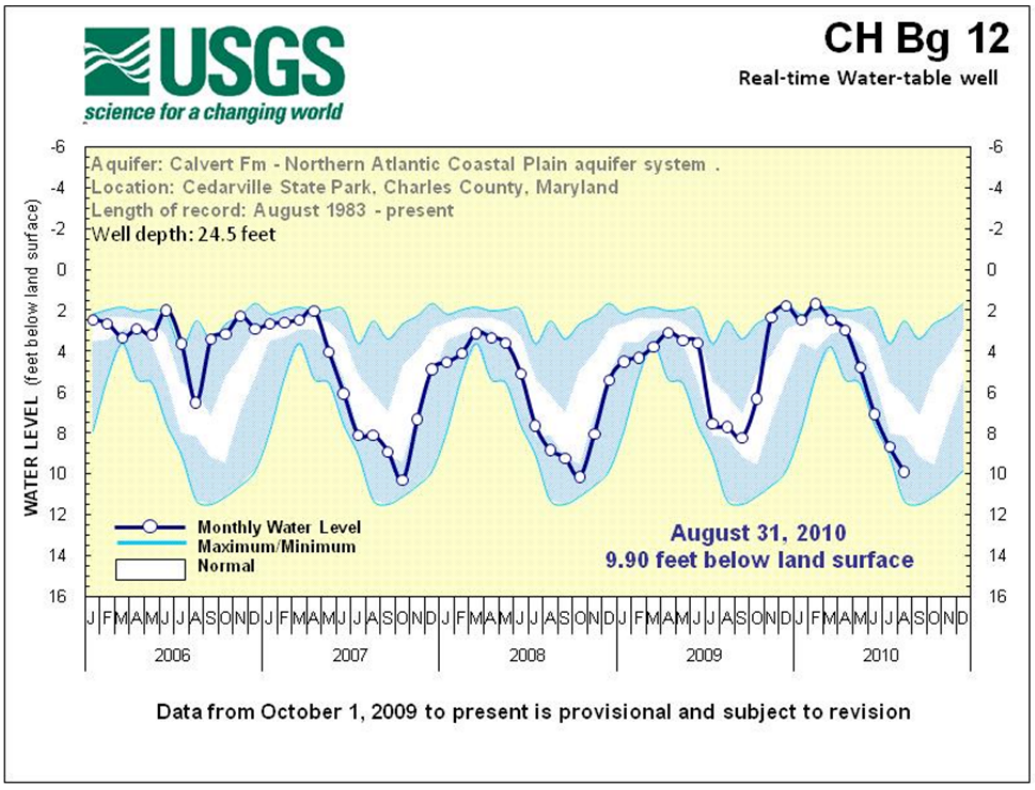

Five-year groundwater hydrographs can be viewed at:
http://md.water.usgs.gov/groundwater/web_wells/current/water_table/counties

Reservoir Levels

Storage in the Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) dropped from 100 percent of available storage in May to 91 percent at the end of August, with 68.76 billion gallons in available storage.

The Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, were at 85 percent of normal storage capacity, with 8.98 billion gallons at the end of August 2010.

August 2010	Percent available/ normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs			**Baltimore City – Environmental Services Division**
Liberty	88%	32.55	
Loch Raven	88%	18.73	
Prettyboy	98%	17.48	
Total	91%	68.76	
Patuxent Reservoirs			**Washington Suburban Sanitary Commission (WSSC)**
Triadelphia	84%	4.72	
Duckett	85%	4.26	
Total	85%	8.98	