

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

Streamflow and ground-water levels continue to be at or near normal at most sites used by the U.S. Geological Survey (USGS) to monitor water conditions across Maryland, Delaware, and the District of Columbia. Streamflow levels were normal in 83% of streams, and ground-water levels were normal in 56% of the wells in July 2008. Water levels in 40% of the wells were below normal.

### Precipitation

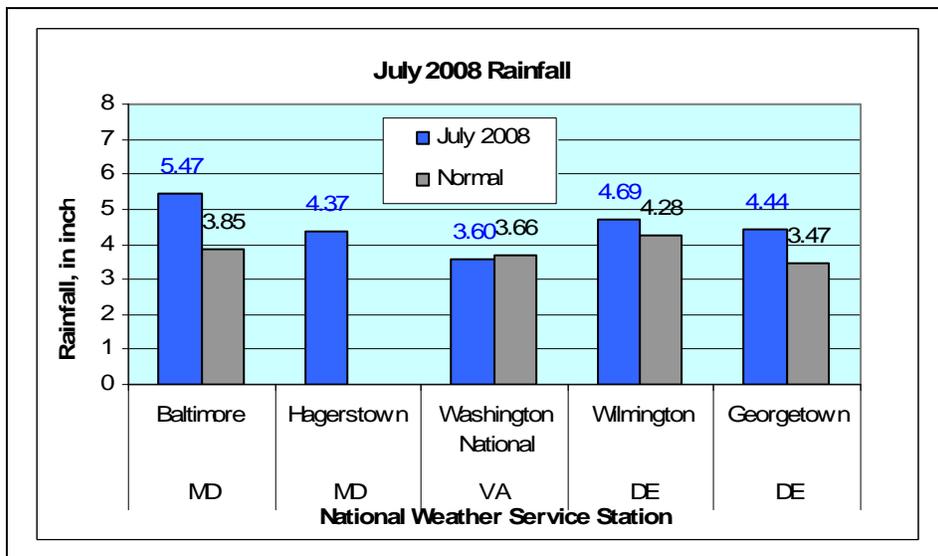
Rainfall was above normal in Maryland and Delaware in July, but slightly below normal near Washington D.C. at the Washington National Airport based on data from the National Weather Service. Precipitation for the past 365 days was normal to above normal in all regions of Maryland, Delaware, and Washington DC.

Sources: National Weather Service

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

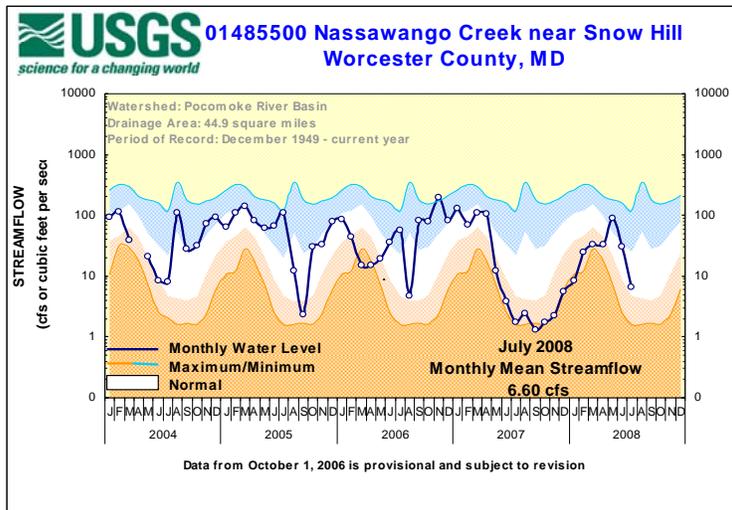
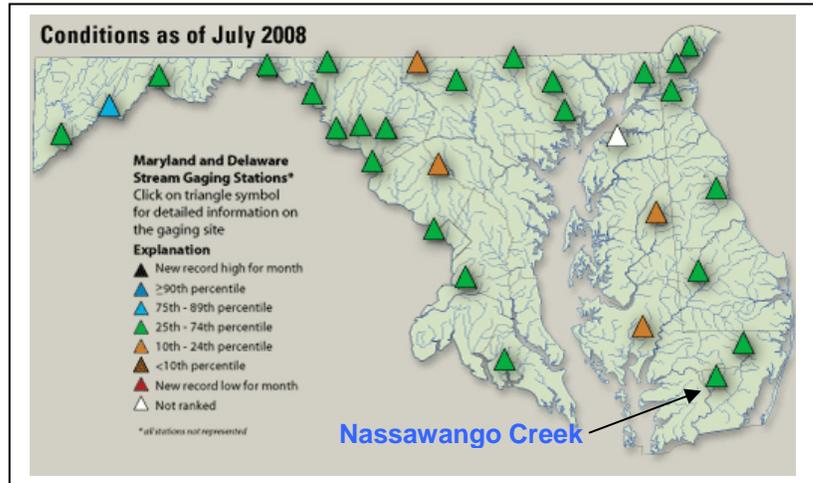
DE: <http://www.erh.noaa.gov/phi/>

Middle Atlantic River Forecast Center: <http://www.erh.noaa.gov/marfc/Maps/precip.html>



## Streamflow

Monthly mean streamflow levels were normal in 24 of the 29 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 July. Streamflow levels typically decline this time of year as temperatures and demand from humans, animals, and vegetation is high.

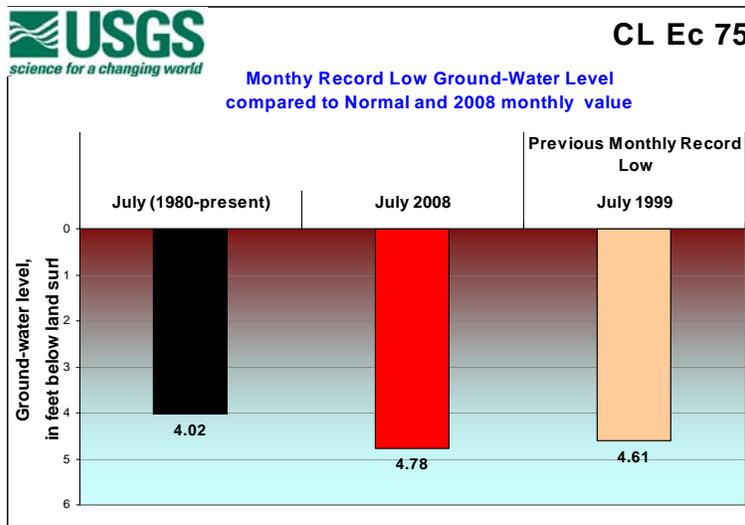
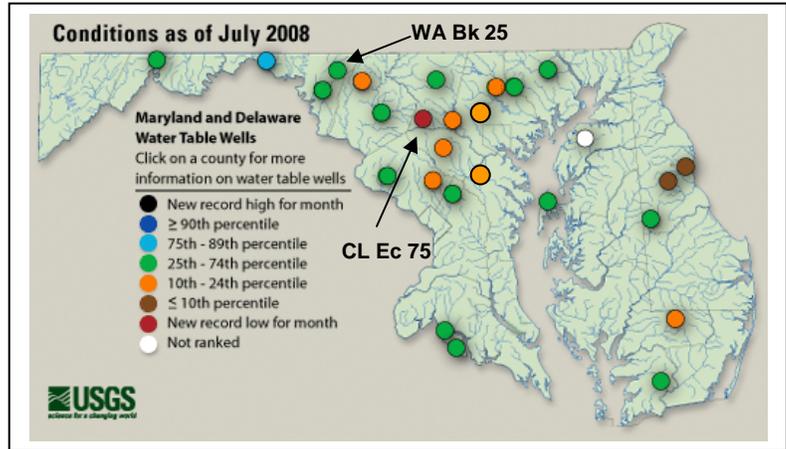


In Worcester County, the monthly mean streamflow level has dropped more quickly than the normal rate. The 5-year hydrograph shows the water level as a dark line and normal (between the 25<sup>th</sup> and 75<sup>th</sup> percentiles) as a white band.

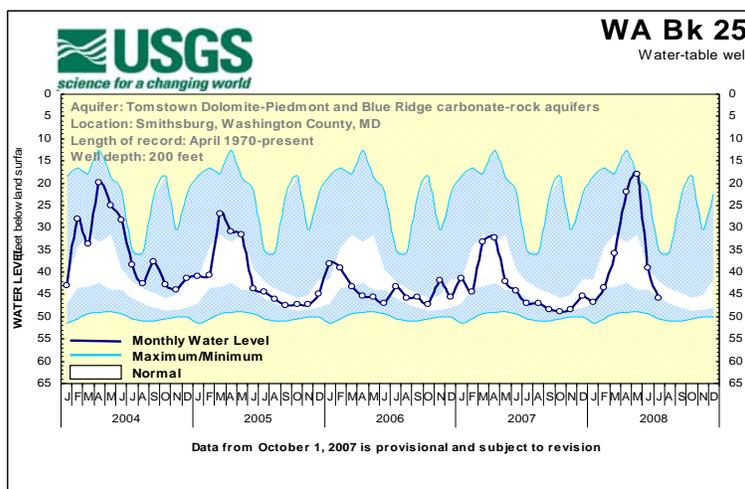
Five-year hydrographs for these streams can be viewed at:  
<http://md.water.usgs.gov/surfacewater/streamflow/>

## Ground Water

Ground-water levels in the unconfined wells used by the USGS to measure response to climatic conditions were normal in 56% of the wells in Maryland and Delaware. The wells with below normal water levels were in Baltimore, Carroll, Frederick, Howard, Montgomery, and Wicomico Counties in Maryland, and in Kent County, Delaware.



The water level in well CL Ec 75 near Gillis Falls in Carroll County set a new record low for July. The previous record was in 1999. Monthly data has been collected at this well since October 1998. The water level during the drought of 2002 was 4.41 feet below land surface.



In Washington County, the water level in well WA Bk 25 dropped from the record-setting high in May to close to below normal levels in July. 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 wells can be viewed at:  
[http://md.water.usgs.gov/groundwater/web\\_wells/current/water\\_table/counties](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) increased to 99% of the available storage (74.81 billion gallons) at the end of July.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, decreased to 86% of the normal capacity at the end of July.

July 2008	Percent available /normal storage	Volume (billion gallons)	Source
<b>Baltimore Reservoirs</b>			<b>Baltimore City</b>
Loch Raven	100%	23.60	
Liberty	94%	34.32	
Prettyboy	100%	16.89	
<b>Total</b>	<b>99%</b>	<b>74.81</b>	
<b>Patuxent Reservoirs</b>			<b>Washington Suburban Sanitary Commission (WSSC)</b>
Triadelphia	95%	5.31	
Duckett	77%	3.86	
<b>Total</b>	<b>86%</b>	<b>9.17</b>	

## Chesapeake Bay freshwater flow

The estimated mean monthly flow to the Chesapeake Bay for July was 26,370 cfs (cubic feet per second) or about 68% percent of the long-term mean for July. Average July flow is 38,730 cfs.

