

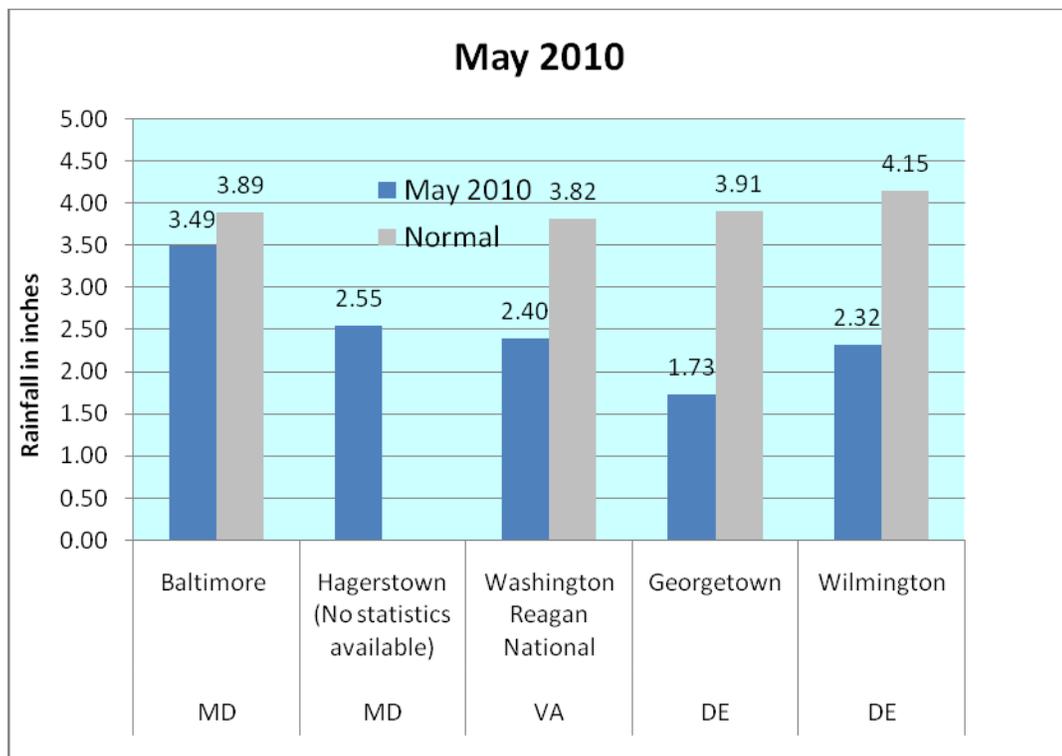
## May 2010 USGS Maryland-Delaware-District of Columbia Water Conditions Summary

Rainfall was below normal for the second consecutive month, yet 78% of the streams and 52% of the groundwater levels were normal because of the rain and snow earlier this year. Water levels were below normal in 4 of the 27 streams and 6 of the 25 wells used by the U.S. Geological Survey (USGS) to assess response to climatic conditions in Maryland, Delaware, and the District of Columbia in May. The lowest water levels were in southern Maryland and the southern part of the Delmarva Peninsula.

### Precipitation

May rainfall was below normal for the second consecutive month at all five National Weather Service stations in Maryland, Delaware, and at Washington Reagan National Airport in the District of Columbia. The largest deficit is in Georgetown, Delaware with 1.86 inches below normal in April and 2.18 inches below normal in May and for a total of 4.04 inches, which is a deficit of more than a month's worth of normal rain.

Despite the recent low water levels in the southern Delmarva Peninsula, the departures from normal precipitation for the last 365 days were above normal in this region, with the highest being a surplus of 18.8 inches in Worcester County. In Delaware, rainfall was more than 15 inches above normal over the past 365 days. Precipitation for the rest of the region was normal for the last year.



Sources: National Weather Service

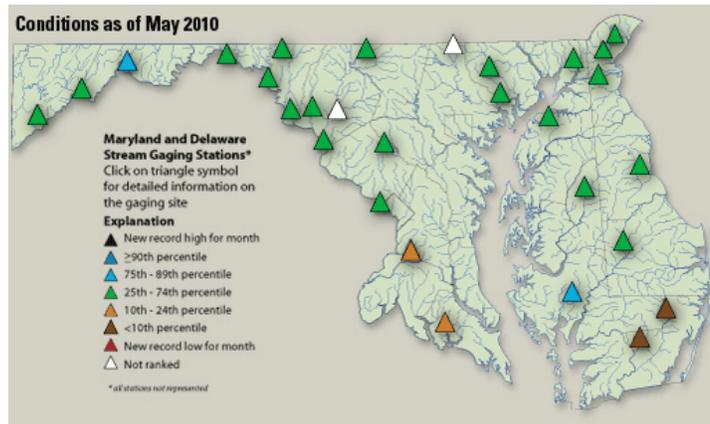
MD and DC: <http://www.weather.gov/climate/index.php?wfo=lwx>

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

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

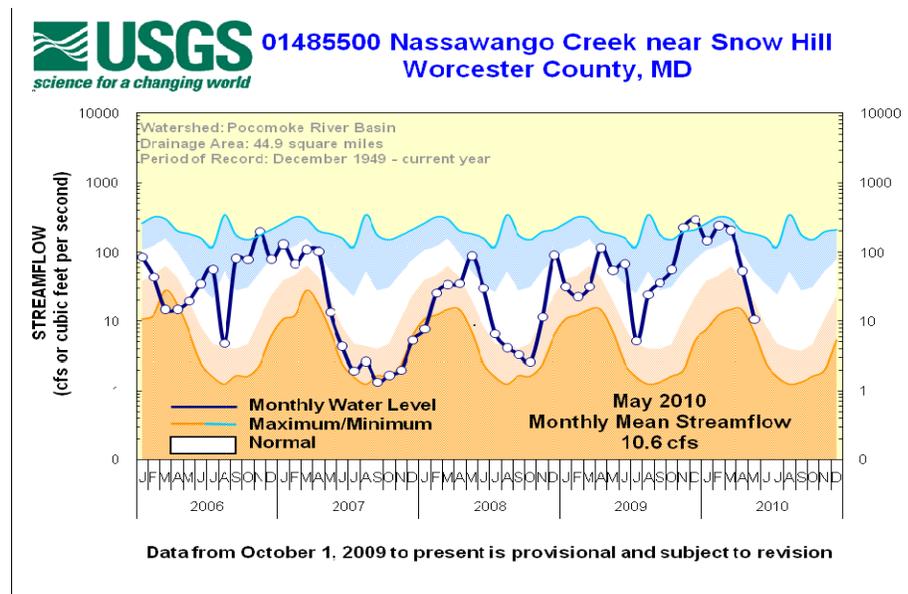
## Streamflow

Monthly mean streamflow was normal in 20 of the 29 USGS streamflow stations used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Two months of below-normal rainfall on the southern Delmarva Peninsula resulted in the Nassawango and Pocomoke Rivers reaching the lowest (< 10<sup>th</sup>) percentile for May monthly mean streamflow.



Stream levels rose in western Maryland in May despite less than normal precipitation. A possible explanation is that the weather station in Hagerstown is too far east to represent the western region. Except for streams in western Maryland, monthly mean streamflow in all others streams dropped, as is the expected pattern at this time of year.

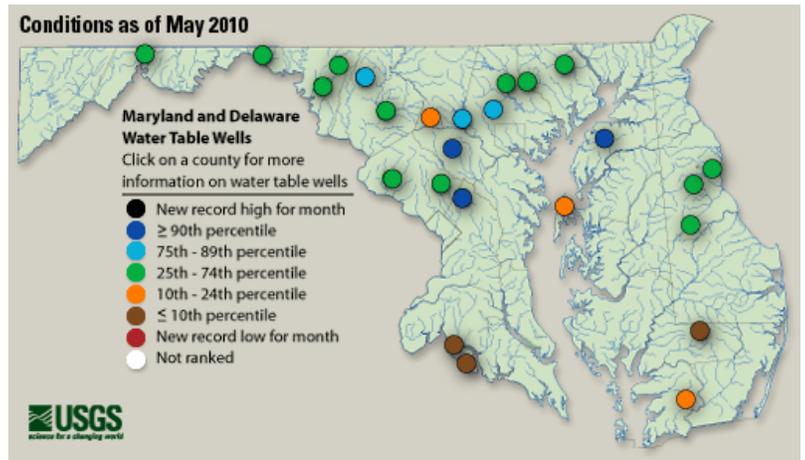
The monthly mean streamflow on Nassawango Creek dropped more quickly than the normal rate for the second consecutive month, probably due to below normal precipitation in the region over the past two months. The dark line in the 5-year hydrograph represents the current monthly mean streamflow and the white band shows the normal range (25<sup>th</sup> to 74<sup>th</sup> percentile) based on the period of record.



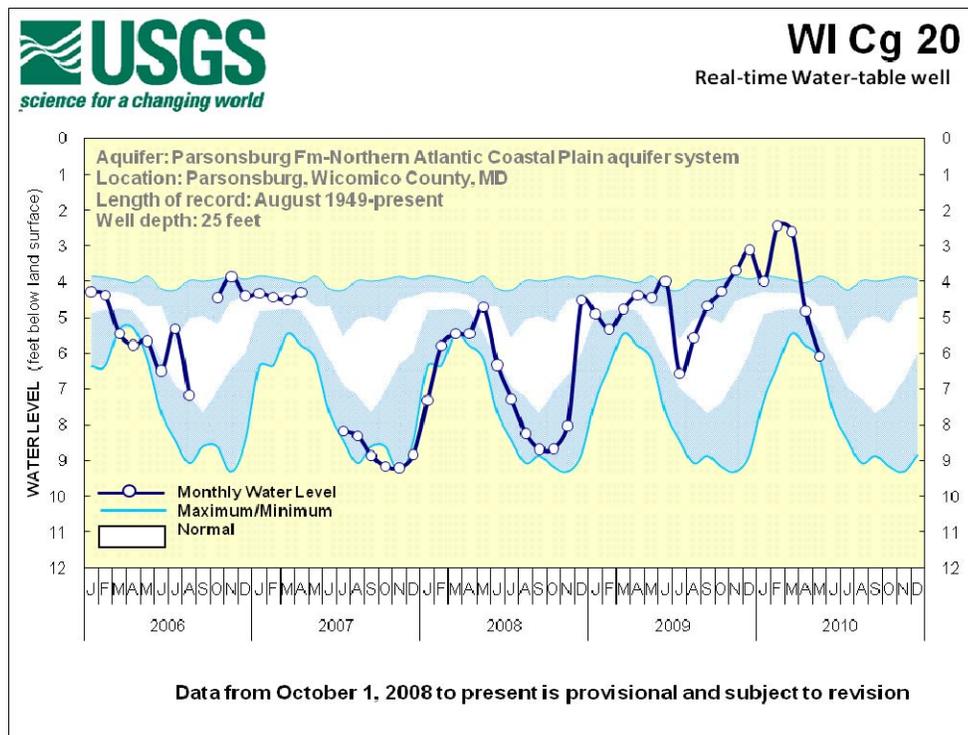
Five-year hydrographs can be viewed at: <http://md.water.usgs.gov/surfacewater/streamflow/>

## Groundwater

Water levels were normal in 13 of the 25 wells used by the USGS to assess climatic conditions in May. Groundwater levels in 6 wells were above normal in central Maryland, and below normal in another 6 wells in southern Maryland and the southern part of the Delmarva Peninsula.



The groundwater level in well WI Cg 20 in Wicomico County, Maryland has dropped faster than the normal rate since March. This could be a reflection of the below-normal rainfall in April and May. The 5-year hydrograph shows the water level as a dark line and normal range (between the 25<sup>th</sup> and 74<sup>th</sup> percentiles) as a white band.



Five-year groundwater hydrographs 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)

## Reservoir Levels

Storage in the Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) was 100% of available storage again in May, with 75.83 billion gallons in available storage.

The Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, were at 100% of normal storage with 11.06 billion gallons at the end of May 2010.

<b>May 2010</b>	<b>Percent available /normal storage</b>	<b>Volume (billion gallons)</b>	<b>Source</b>
<b>Baltimore Reservoirs</b>			<b>Baltimore City – Environmental Services Division</b>
Loch Raven	100%	21.20	
Liberty	100%	36.78	
Prettyboy	100%	17.85	
<b>Total</b>	<b>100%</b>	<b>75.83</b>	
<b>Patuxent Reservoirs</b>			<b>Washington Suburban Sanitary Commission (WSSC)</b>
Triadelphia	100%	5.75	
Duckett	100%	5.31	
<b>Total</b>	<b>100%</b>	<b>11.06</b>	