

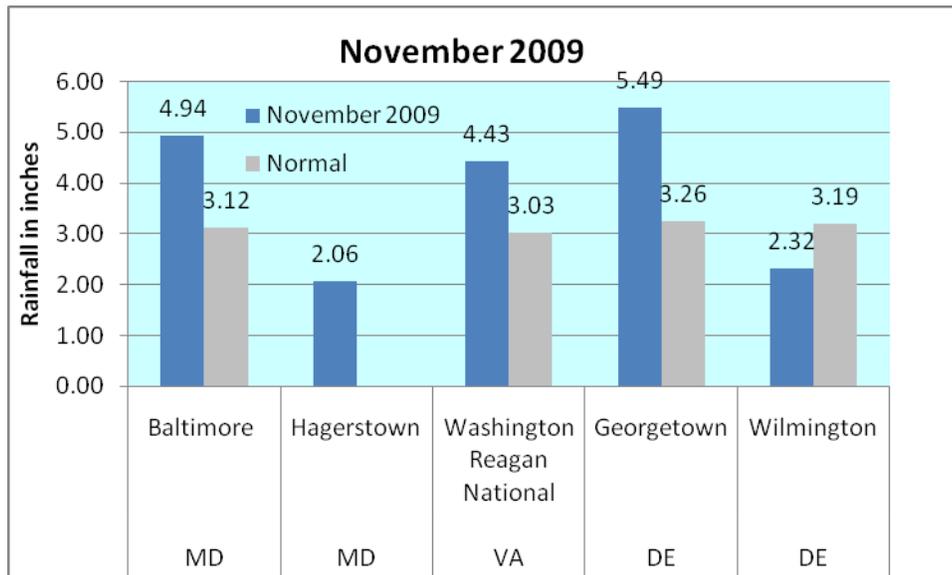
November 2009 USGS Maryland-Delaware-DC Water Conditions Summary

November water levels were normal or above normal in 28 or the 29 streams and all 26 wells used by the U.S. Geological Survey (USGS) to assess response to climatic conditions in Maryland, Delaware, and the District of Columbia. Rainfall was above normal for the second consecutive month in parts of Maryland, Delaware, and the District of Columbia, leading to 4 record high monthly mean streamflow levels and record high water levels in 4 wells.

Precipitation

Rainfall was far above normal for the second straight month in Maryland and the District of Columbia. The National Weather Service reports “the combined Oct-Nov 2009 for Baltimore rainfall of 11.18 inches ranks 6th wettest of all time-the wettest Oct-Nov period in Baltimore was 13.34 inches measured in 1932”. Rainfall at Baltimore was 1.82 inches above normal in November. Rainfall was only 2.06 inches at the Hagerstown weather station, but this station does not have enough record to calculate statistics. November was also the 22nd warmest on record at Baltimore.

Delaware rainfall ranged from 0.2 inches below normal in New Castle County to 2.2 inches above normal in Sussex County. Rainfall was close to normal with 4.1 inches in Kent County (MARFC). At Georgetown, Delaware, rainfall reached 5.49 inches for November and almost a month’s worth of rain (2.86 inches) fell on November 13, setting a new daily record high rainfall, according to the National Weather Service.



Counties with rainfall greater than 10 inches for the last 365 days include the following: Calvert, Caroline, Cecil, Dorchester, Kent, Prince George’s, Queen Anne’s, Talbot, and Worcester in Maryland; Kent and Sussex Counties in Delaware.

Sources: National Weather Service

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

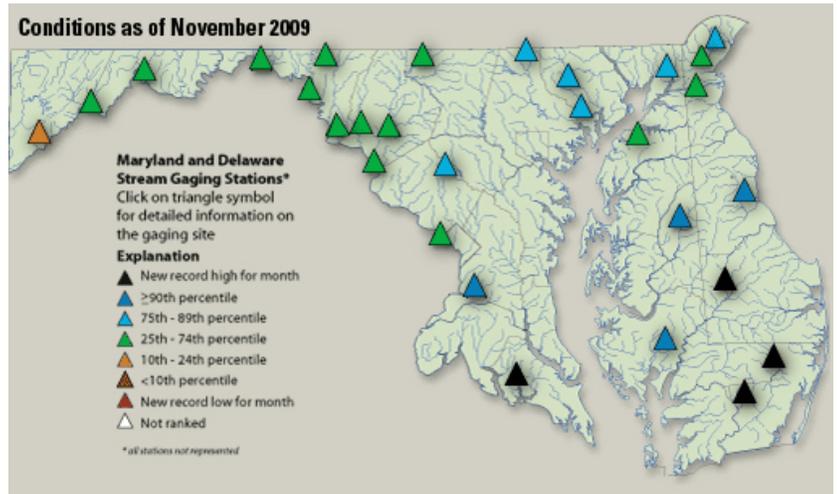
DE: <http://www.erh.noaa.gov/phi/>

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

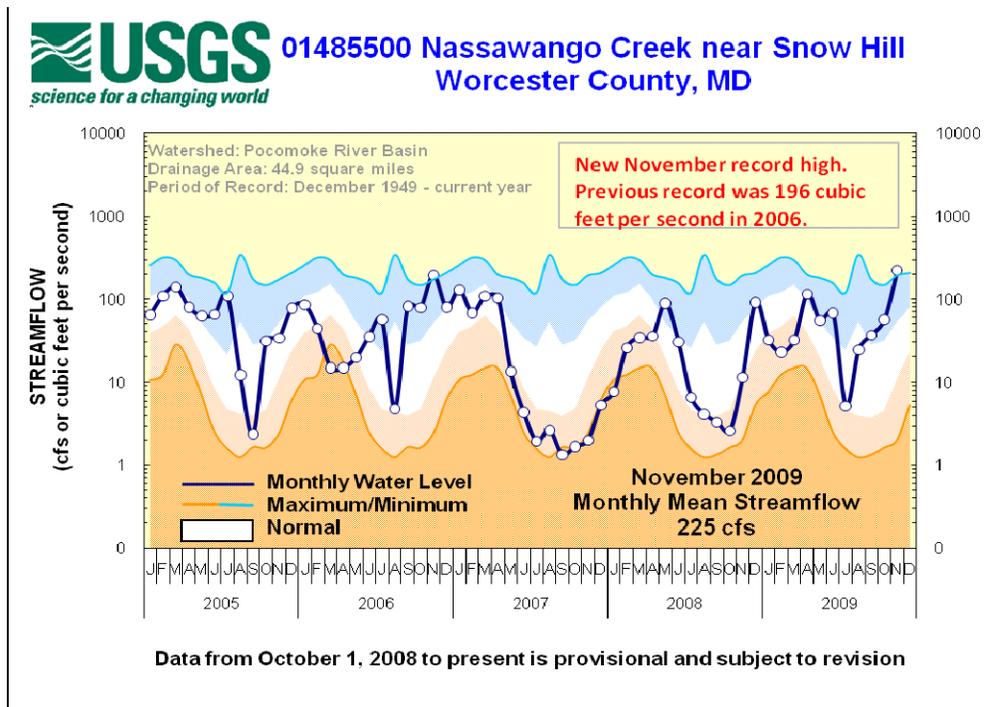
Streamflow

Streamflow was above normal in 48% of the 29 USGS streamflow stations used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Another 48% were normal, and only the Youghiogheny River was below normal in November.

There were 4 record high monthly mean streamflows in November: Nanticoke River, Nassawango Creek, Pocomoke River, and St. Clements Creek. The previous records were in 2002 for the Nanticoke River, and 2006 for the remaining three streams.



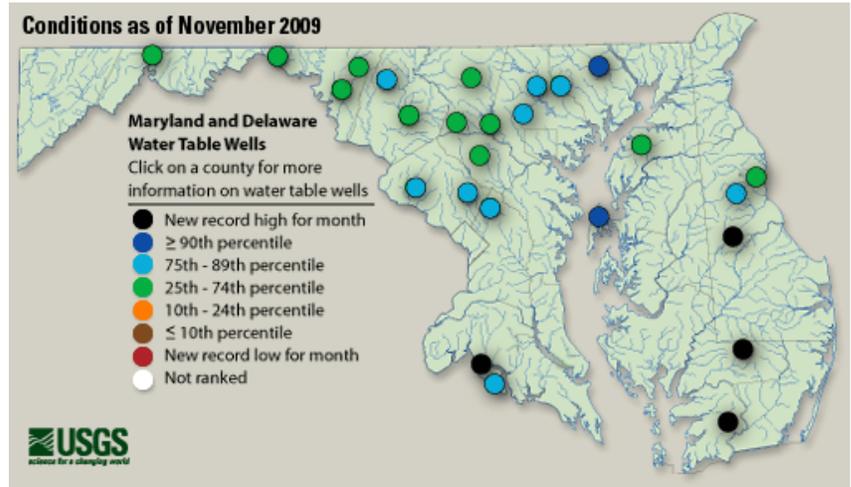
Monthly mean streamflow on Nassawango Creek set a new record high for November, exceeding the record set in 2006 by 29 cubic feet per second. The dark line in the 5-year hydrograph represents the current flow and the white band shows the normal range based on the period of record. The hydrograph below shows the streamflow level has risen faster than normal since August.



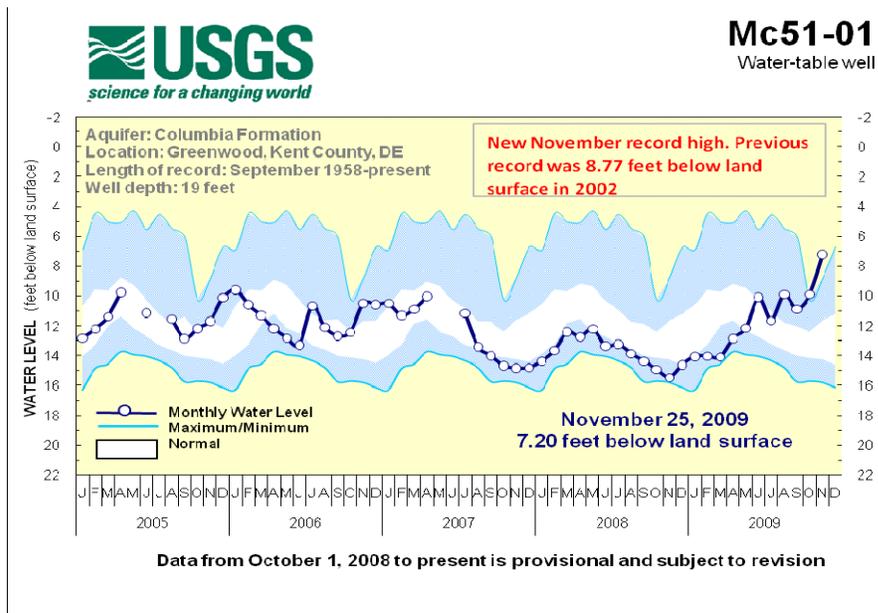
Five-year hydrographs can be viewed at: <http://md.water.usgs.gov/surfacewater/streamflow/>

Groundwater

Groundwater levels were above normal in 58%, and normal in 42% of the 26 wells used by the USGS to assess climatic conditions. The water levels in wells in Kent County, Delaware, and Somerset County, Maryland were at record highs for the second consecutive month. In November, wells in Charles and Wicomico Counties were also at record high levels.



The groundwater level in well Mc51-01 in Kent County, Delaware continued its sharp rise to a new record high for November, exceeding the record set in 2002 by 1.57 feet. The 5-year hydrograph shows the water level as a dark line and normal (between the 25th and 75th 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

Reservoir Levels

The Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) remain full with 75.85 billion gallons in available storage at the end of November 2009.

The Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, were 100% of capacity at the end of November 2009.

November 2009	Percent available /normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs			Baltimore City
Loch Raven	100%	21.20	
Liberty	100%	36.80	
Prettyboy	100%	17.85	
Total	100%	75.85	
Patuxent Reservoirs			Washington Suburban Sanitary Commission (WSSC)
Triadelphia	100%	5.83	
Duckett	100%	5.17	
Total	100%	11.00	