

November 2008 USGS Maryland-Delaware-DC Water Conditions Summary

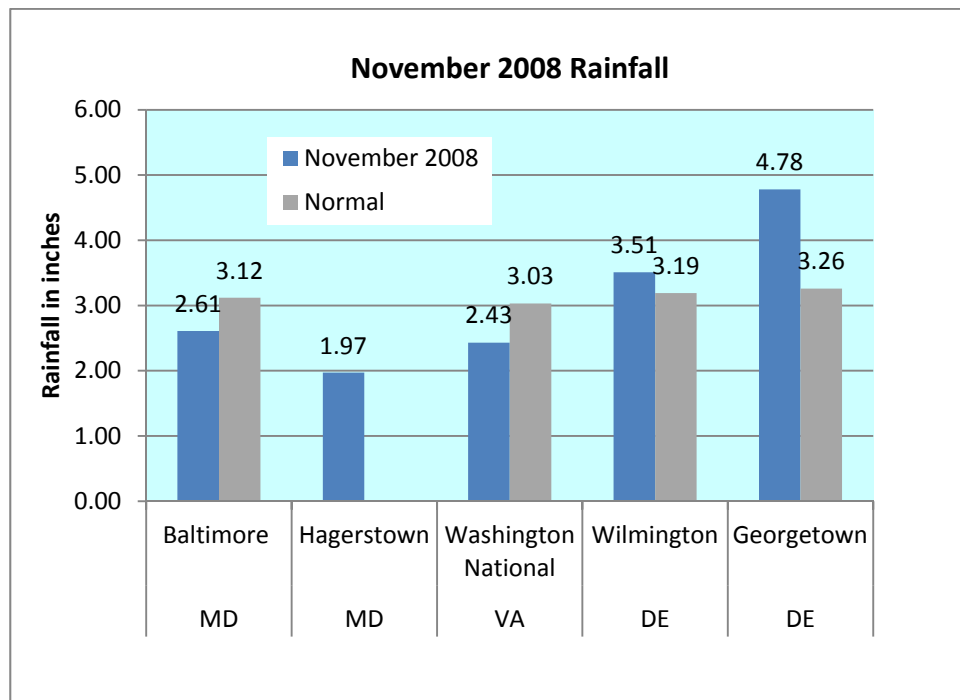
Rainfall was close to normal across Maryland, Delaware, and the District of Columbia. The percentage of streamflow and ground-water levels at normal levels in November remained close to the October levels when rainfall was much below normal. In streams used by the U.S. Geological Survey (USGS) to monitor water conditions across Maryland, Delaware, and the District of Columbia, 57% were at normal levels, 40% were below normal, and one stream was above normal.

Ground-water levels were below normal in more than half the wells (56%) used by the USGS to assess response to climatic conditions in November. The remaining 44% of wells had normal water levels. The lowest ground-water levels were located in Baltimore, Carroll, and Wicomico Counties in Maryland, and Kent County, Delaware.

Precipitation

November rainfall ranged from about an inch below normal in western Maryland, to 1.5 inches above normal in Georgetown, Delaware. Worcester County had more than 6 inches of rain, and Dorchester, Somerset, and Wicomico Counties in Maryland and Sussex County in Delaware received more than 5 inches of rain in November. Normal November rainfall is about 3-3.25 inches. The remainder of the region had close to normal rainfall, including the District of Columbia.

Rainfall levels over the last 365 days were normal throughout Maryland, Delaware, and District of Columbia.



Sources: National Weather Service

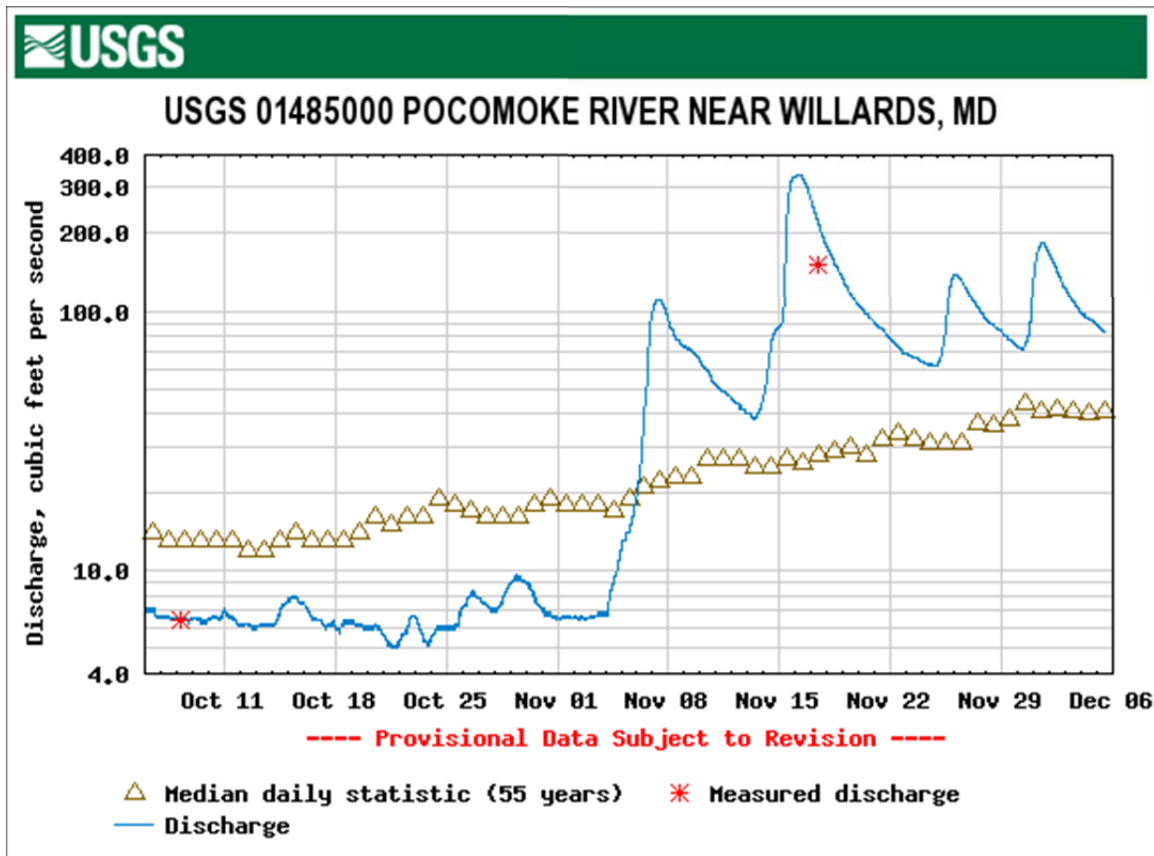
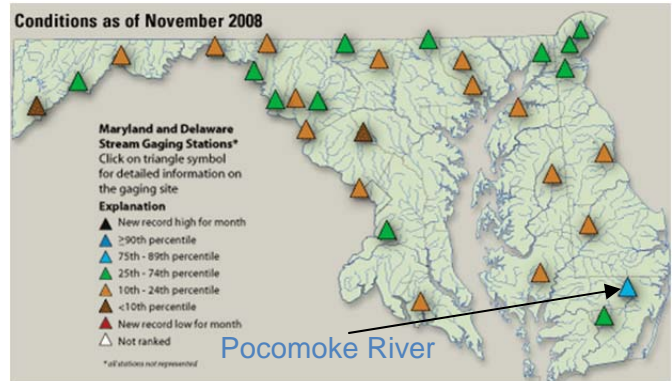
MD and DC: <http://www.weather.gov/climate/index.php?wfo=lwx>

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

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

Streamflow

Normal monthly mean streamflow levels dropped 20% since October to 17 of the 30 streams used by the USGS as climate indicators across the Maryland, Delaware, and the District of Columbia region. Many stream levels rose in response to the rainfall in November, but it was not enough to fully recover to normal levels after the dry October. The Pocomoke River was the only stream with above normal levels. The water levels in the remaining streams were normal.

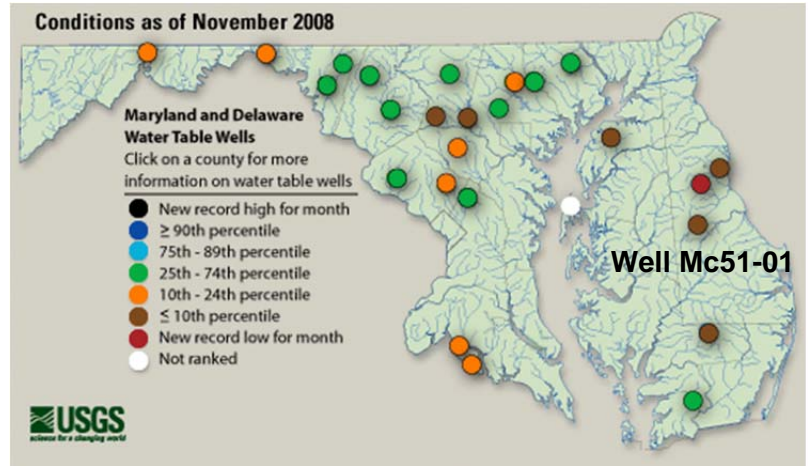


Over 6.5 inches fell in Worcester County in November which caused the monthly mean streamflow level on the Pocomoke River to rise from below normal in October to above normal in November. Normal for that day for the period of record is indicated by the triangle symbol. Streamflow levels are expected to increase during the winter months while plants are dormant and ground water is recharged.

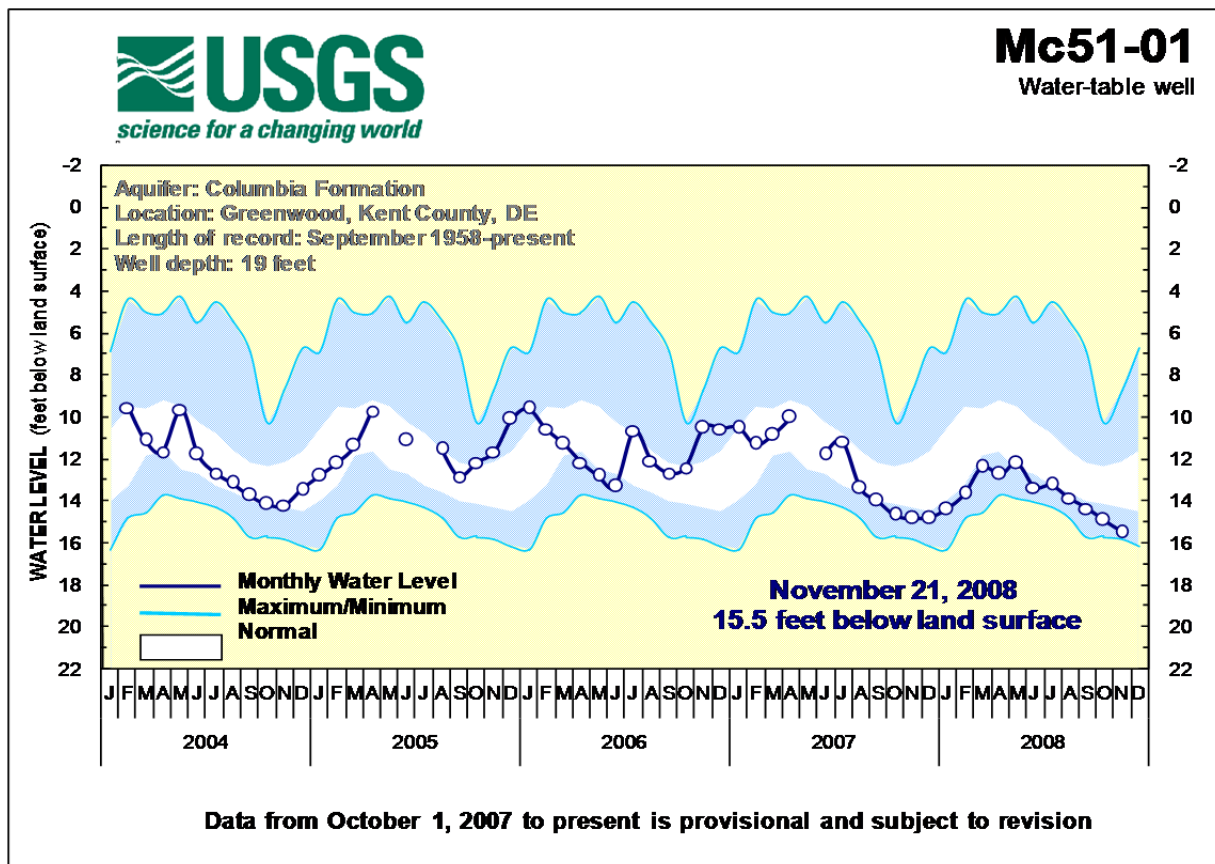
Ground Water

Ground-water levels were below normal in 14 of the 25 wells used by the USGS to assess climatic conditions. The water levels in the remaining wells were at normal levels. No wells had above normal water levels in November.

The regions with the lowest water levels were central Maryland, including Baltimore and Carroll Counties, and Kent County, Delaware. In the Wicomico County well, the water level rose in November, but it was still in the lowest 10th percentile.



The 5-year hydrograph shows the water level as a dark line and normal (between the 25th and 75th percentiles) as a white band. The water level in the well in Kent County, Delaware continued to drop despite above normal rainfall in November. The water level in the well was the 4th lowest for November since data collection began in 1958. The record for November is 15.79 feet below land surface in 1987.



Reservoirs

Water available from the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) decreased 1% to 88% of the available storage (66.69 billion gallons) at the end of November.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, decreased 7% to 45% of the normal capacity at the end of November.

November 2008	Percent available /normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs		Baltimore City	
Loch Raven	97%	20.46	Same percent as October
Liberty	81%	28.38	Decreased 1% since October
Prettyboy	100%	17.85	Increased 1% since October
Total	88%	66.69	Decreased 1% since October
Patuxent Reservoirs		Washington Suburban Sanitary Commission (WSSC)	
Triadelphia	50%	2.80	Decreased 6% since October
Duckett	40%	1.99	Decreased 7% since October
Total	45%	4.79	Decreased 5% since October