

February 2010 USGS Maryland-Delaware-DC Water Conditions Summary

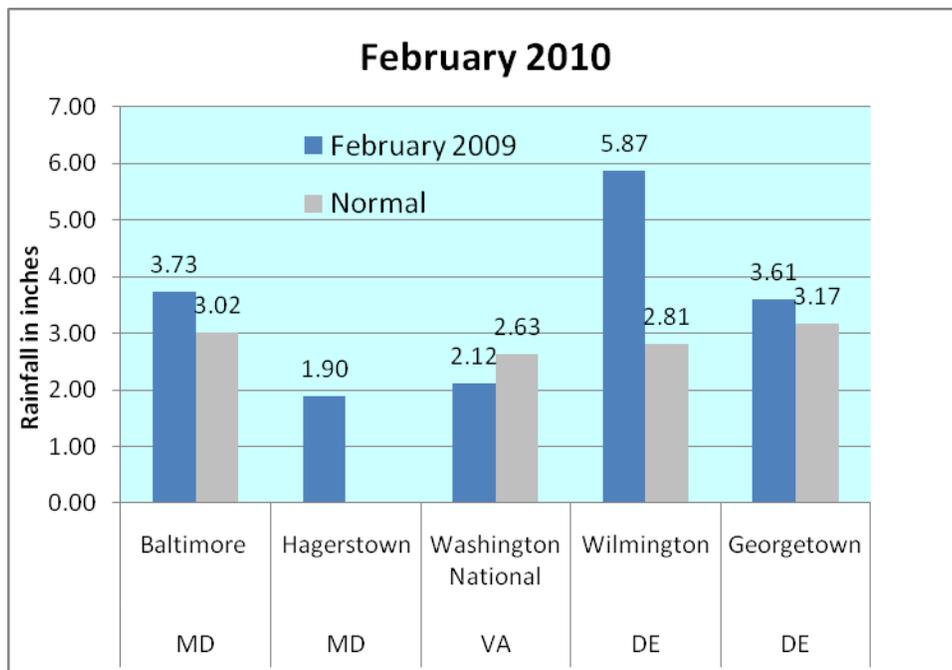
February 2010 was the snowiest month on record, with 49.7 inches of snow in Baltimore. The long term average snowfall for February is 6.4 inches. Snowfall covered most of the mid-Atlantic region resulting in significant snow pack and water in storage in the Potomac and Susquehanna River watersheds. Fortunately, temperatures stayed cool both during the day and at night, allowing for a slow snowmelt. Otherwise, high river levels and localized flooding would have been expected.

Streamflow and groundwater levels in Maryland, Delaware, and the District of Columbia were normal to above normal, except for those stream measurements that were affected by ice in western Maryland. Water levels were above normal in 14 of the 28 streams and 18 of the 22 wells used by the U.S. Geological Survey (USGS) to assess response to climatic conditions in Maryland, Delaware, and the District of Columbia in February. The remaining groundwater levels were in the normal range.

Precipitation

The water equivalent of the February snowfall was equal to about a month of rain, or 3 to 4 inches, in most places. At the weather station in Wilmington, Delaware, a record was set for the snowiest season (July – June) with 66.7 inches of snow. Precipitation was above normal in Delaware and Baltimore, Maryland, but below in the District of Columbia in February, according to the National Weather Service. The Hagerstown weather station does not have enough record to calculate statistics and therefore there is no ‘normal’ on the graph. The weather service does not measure snowfall at the Hagerstown weather station.

For the last 365 days, departures from normal precipitation ranged from 3.6 inches below normal in Garrett County to 21.1 inches above normal in Caroline County.



Sources: National Weather Service

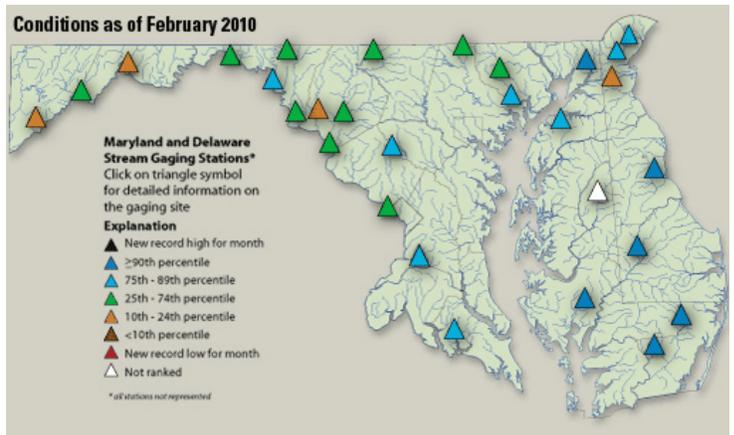
MD and DC: <http://www.weather.gov/climate/index.php?wfo=lxw>

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

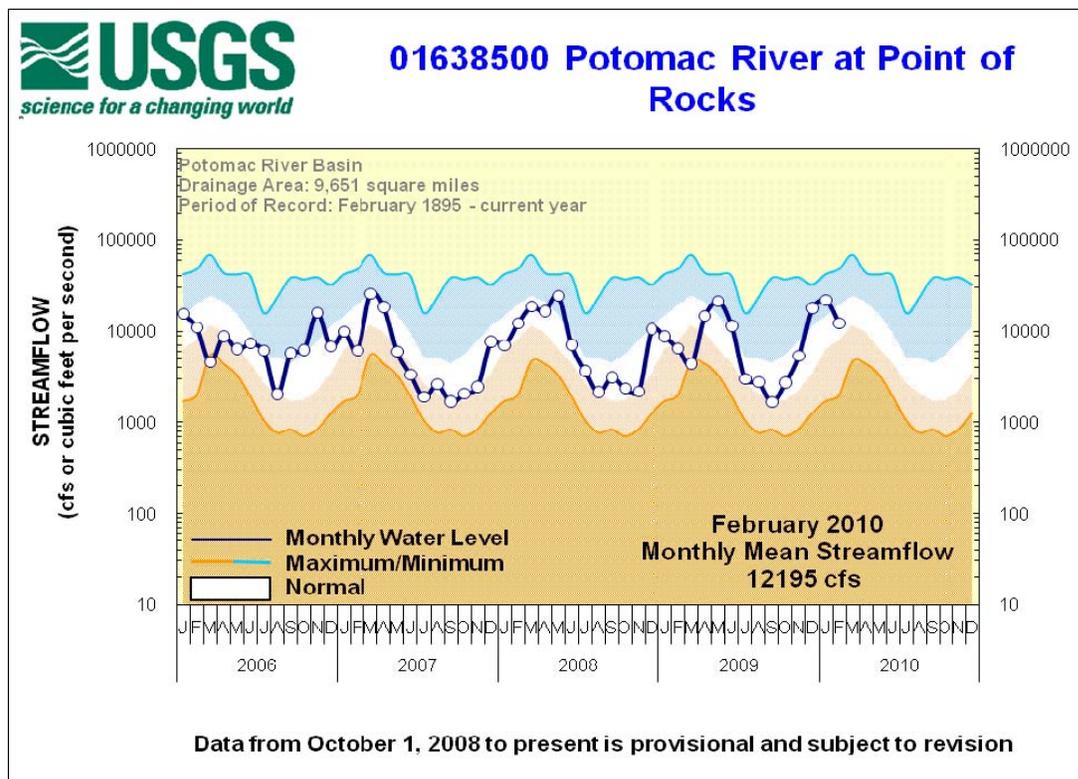
Middle Atlantic River Forecast Center (MARFC): <http://www.erh.noaa.gov/marfc/Maps/precip.html>

Streamflow

Monthly mean streamflow was normal to above normal in 86% or 24 of the 28 USGS streamflow stations used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Unranked sites are not used in the statistics. The sites in western Maryland that show below normal rankings for February may be affected by ice.



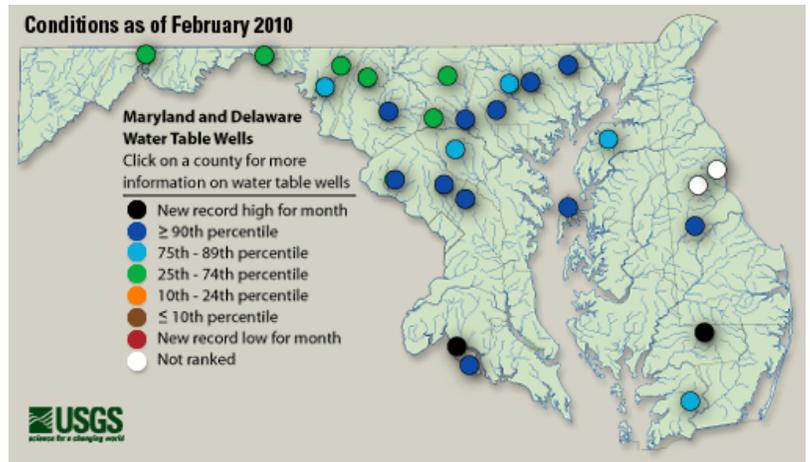
Monthly mean streamflow on the Potomac River dropped to normal in February. The actual streamflow levels may be influenced by ice and they may be adjusted in the future. The dark line in the 5-year hydrograph represents the current flow and the white band shows the normal range based on the period of record.



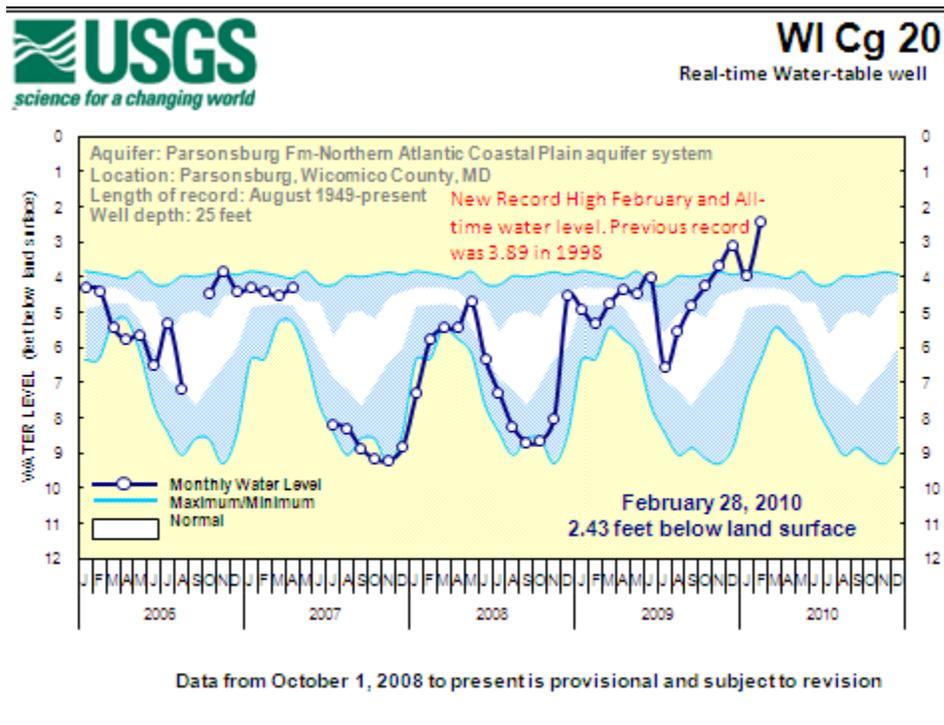
Five-year hydrographs can be viewed at: <http://md.water.usgs.gov/surfacewater/streamflow/>

Groundwater

Groundwater levels were above normal in 18 wells, and normal in 6 of the 24 wells used by the USGS to assess climatic conditions in February. Unranked sites are not used in the statistics. Groundwater levels were at record highs in Charles and Wicomico Counties.



The groundwater level in well WI Cg 20 in Wicomico County set a record high level for February and all-time at 2.43 feet below land surface. The previous February record was feet below land surface in. Record keeping began in 1949 at this well. The 5-year hydrograph shows the water level as a dark line and normal range (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

Storage in the Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) was 100% of available storage again, with 75.85 billion gallons in available storage at the end of February 2010.

The Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, dropped from the 100% of normal capacity in January to 86% or 9.15 billion gallons at the end of February 2010. Water was released to allow room for anticipated snow melt.

February 2010	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	89%	4.98	
Duckett	83%	4.17	
Total	86%	9.15	