February 2009 USGS Maryland-Delaware-DC Water Conditions Summary

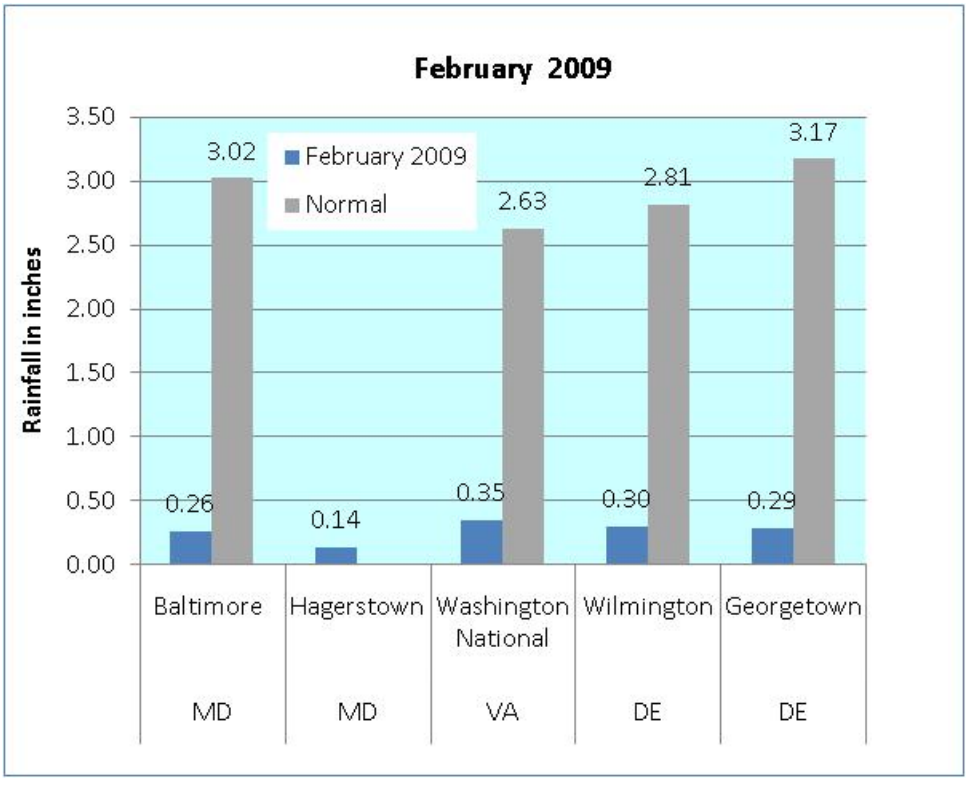
February 2009 was the driest February since 1871 in Maryland. It was also dry in Delaware and the District of Columbia. Streamflows responded quickly to the lack of precipitation resulting in 26 of the 30 streams used by the U.S. Geological Survey (USGS) to monitor water conditions across Maryland, Delaware, and the District of Columbia having below normal values. The remaining 4 streams had normal to above normal streamflows and they were in western Maryland.

Ground-water levels respond more slowly to the lack of precipitation, with water levels below normal in 20 of the 26 wells used by the USGS to assess response to climatic conditions.

Precipitation

February rainfall and snowfall was less than an inch at weather stations across Maryland, Delaware, and the District of Columbia, according to data from the National Weather Service. At the weather station in Baltimore, rainfall was only 0.26 inch, which is a record low for February, beating the record set in 2002 of 0.36 inches. Precipitation data collection began at this station in 1971. There were only 5 days of precipitation in February and 4 of those days had less than 0.1 inch of precipitation. Temperature was 1.9 degrees Fahrenheit above normal. New record high temperatures were set in Delaware and the District of Columbia.

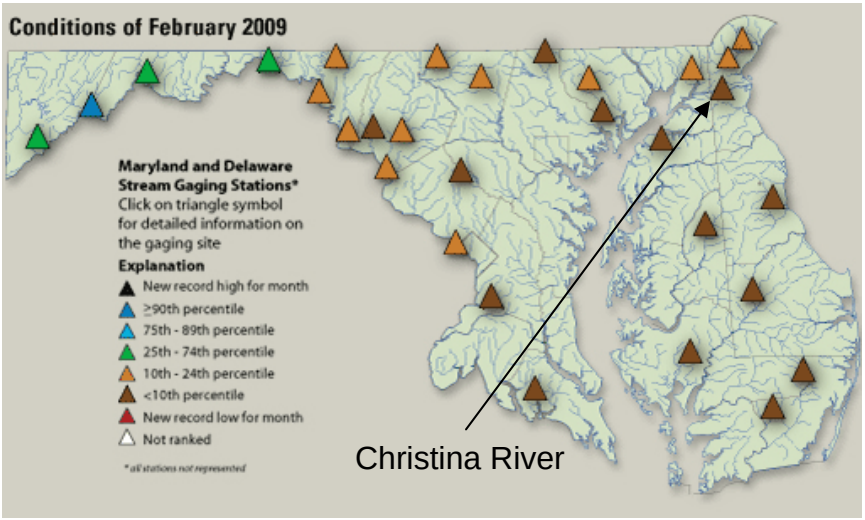
At the Hagerstown weather station, there was only 0.14 inches of precipitation, but this station does not have enough record to calculate statistics.



Statewide in February, all counties in Maryland, except Allegany and Garrett, were more than 75% below normal for February precipitation (data from MARFC). Delaware precipitation was also ranked among the lowest February rainfalls. For 2009 so far this year, precipitation is normal to below normal. Rainfall for the last 365 days remains in the normal range 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 (MARFC): http://www.erh.noaa.gov/marfc/Maps/precip.html

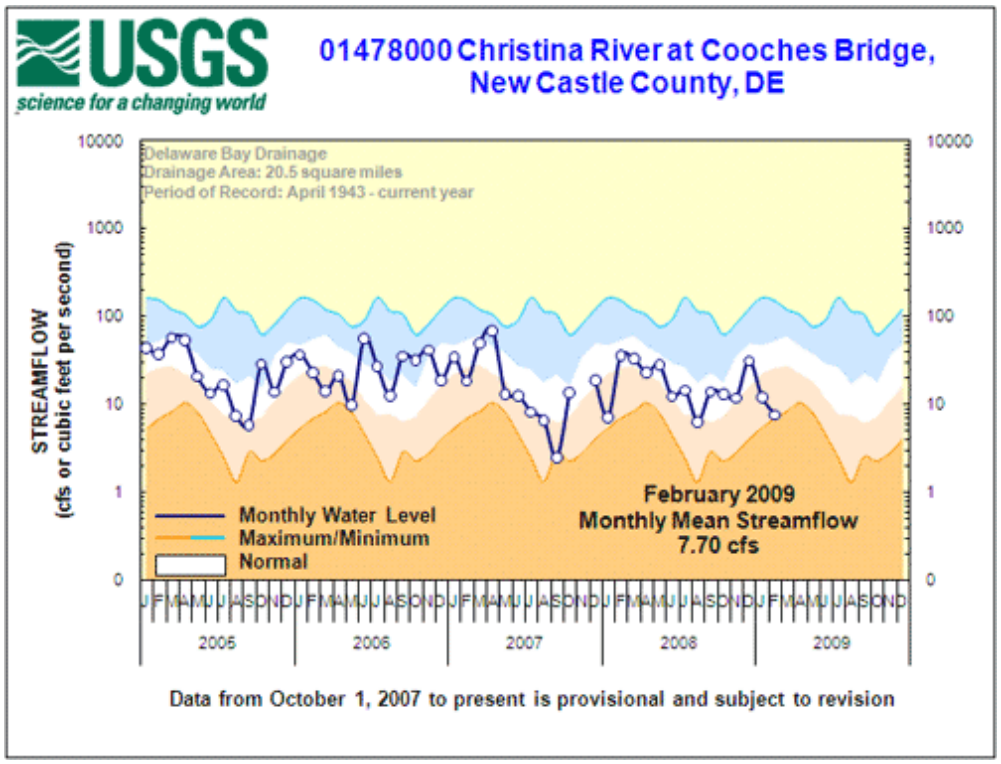
Streamflow



Monthly mean streamflow was below normal in 26 of the 30 streams used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Streamflow was normal to above normal in four streams in western Maryland.

Streamflow at 15 streams were in the lowest 10th percentile, or only 10% of the time have streamflow measurements been lower at these stations. For 10 of these stations, it was the second lowest on record. Many of the record lows were set in 2002.

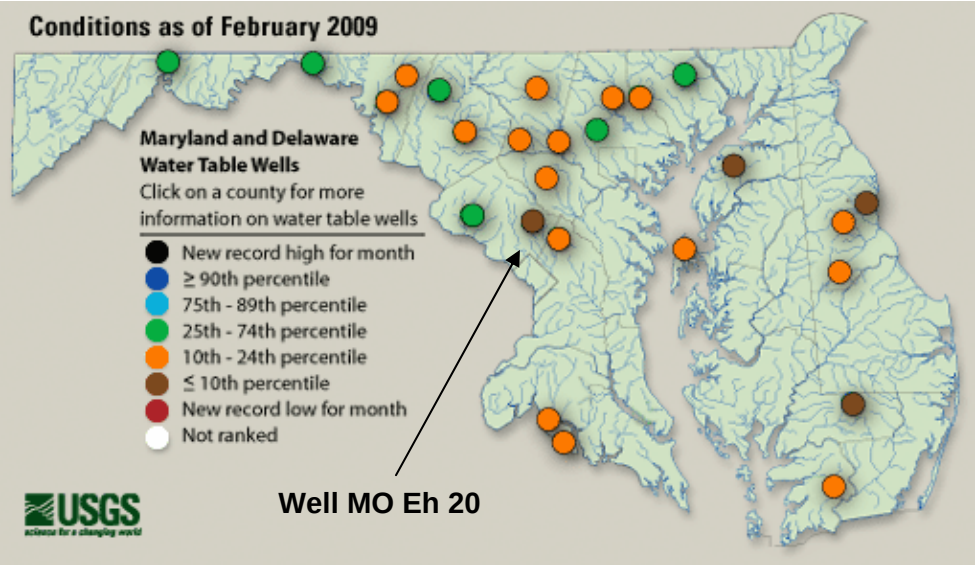
The monthly mean streamflow for the Christina River decreased sharply since January and is only 0.80 cubic feet per second away from the February record low set in 2002. The 5-year hydrograph shows the monthly mean streamflow as a dark line and normal (between the 25th and 75th percentiles) as a white band.



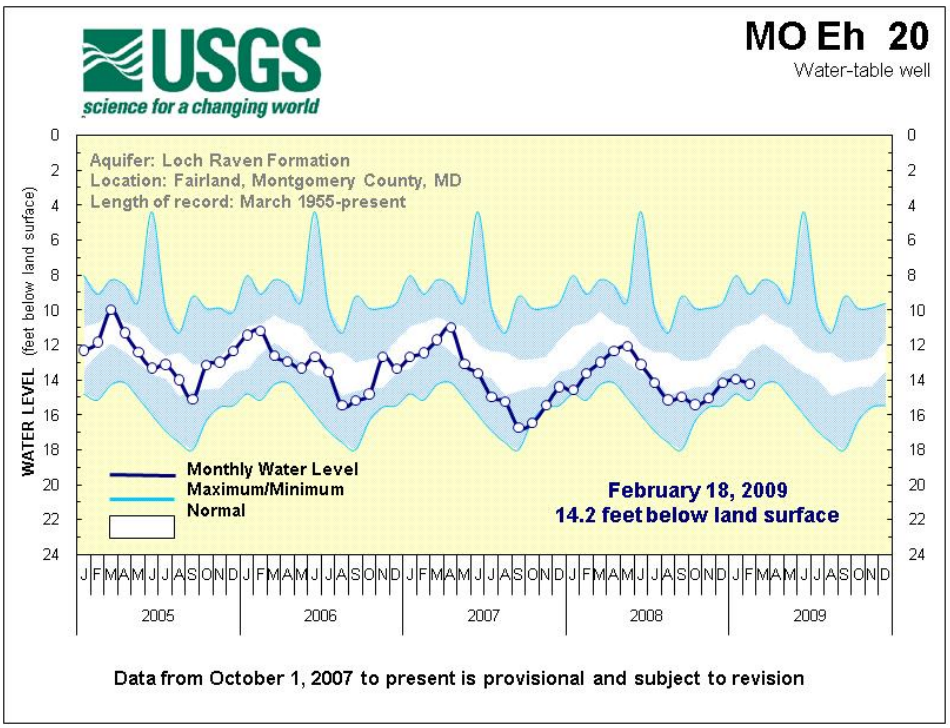
Five-year hydrographs can be viewed at:
http://md.water.usgs.gov/surfacewater/streamflow/

Ground Water

Ground-water levels were below normal in 20 of the 26 wells used by the USGS to assess climatic conditions. The remaining 6 wells had normal water levels. The below normal water levels were primarily in central and southern Maryland, and Delaware.



The water level in the well in Montgomery County, Maryland continues to be below normal and it is the second lowest February measurement, the lowest was 15.15 in 2002. 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 hydrographs can be viewed at:
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) showed little change in the available storage (69.66 billion gallons) at the end of February, 2009.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, also showed little change in the normal capacity at the end of February, 2009. The level in Triadelphia is being kept low for gate maintenance.

February 2009	Percent available /normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs			**Baltimore City**
Loch Raven	99%	20.93	
Liberty	86%	30.88	
Prettyboy	100%	17.85	
Total	92%	69.66	Little change since January, 2009
Patuxent Reservoirs			**Washington Suburban Sanitary Commission (WSSC)**
Triadelphia	41%	41.42	
Duckett	76%	76.03	
Total	58%	117.45	Little change since January, 2009

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