

February 2008 USGS Maryland-Delaware-DC Water Conditions Summary

Streams and wells responded to the above normal rainfall in February throughout most of the Maryland, Delaware, and the District of Columbia area, however, water levels in Central and Southern Maryland and the Delmarva Peninsula remain very low. Sixty percent of the streams are at normal levels with 20% above and 20% below normal. Regionwide, ground-water levels have shown improvement, but have not recovered fully. In February, 62% of the wells used by the U.S. Geological Survey (USGS) to monitor water conditions were below normal, while in January, 77% were below normal.

Precipitation

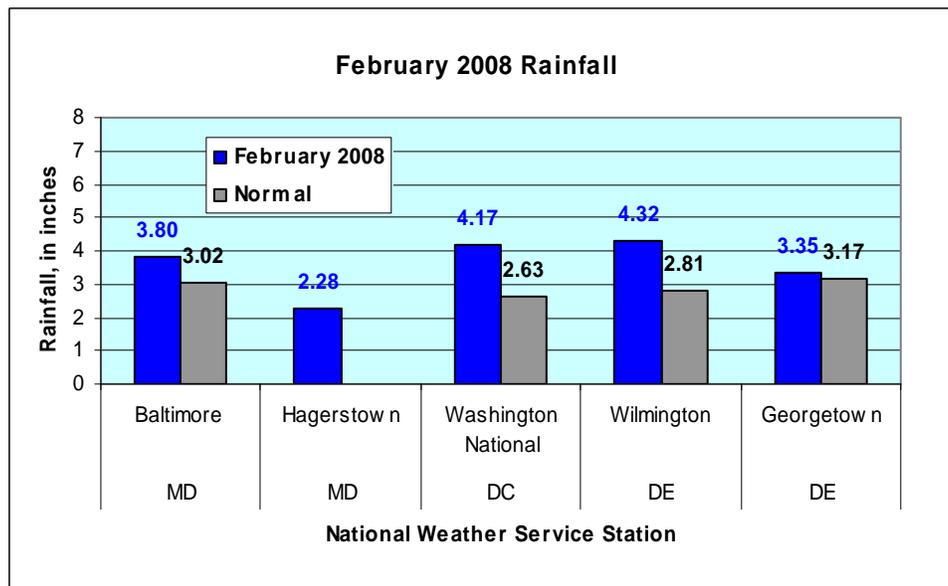
February 2008 rainfall was above normal at the National Weather Service stations in Maryland, Delaware, and the District of Columbia. However, the rainfall deficit for the past 365 days is more than 10 inches in Dorchester, Howard, Montgomery, Talbot, and Wicomico Counties in Maryland, and Sussex County in Delaware.

Source: National Weather Service

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

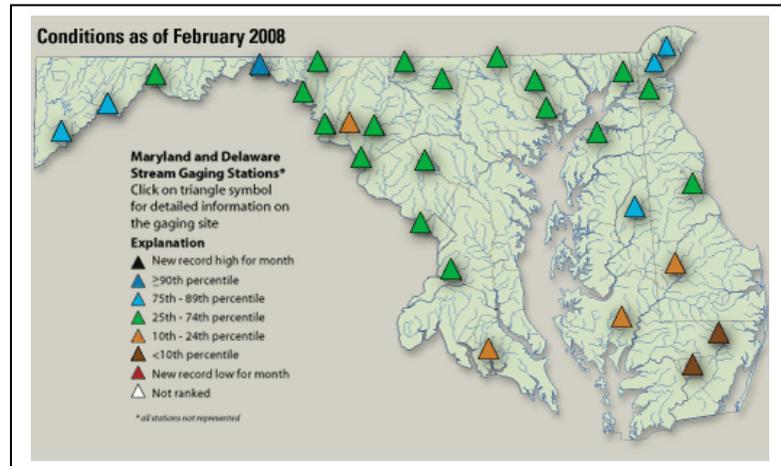
DE: <http://www.erh.noaa.gov/phi/>

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



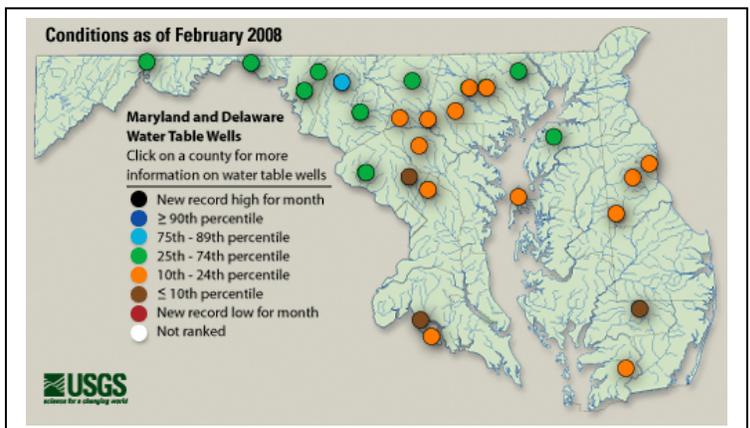
Streamflow

Streamflow at gages used by the USGS as climate indicators across the Maryland, Delaware, District of Columbia region was normal at 18 of 30 stations. Six sites were above normal and another 6 sites were below normal. The lowest streamflow levels are in southern Maryland and the Delmarva Peninsula.

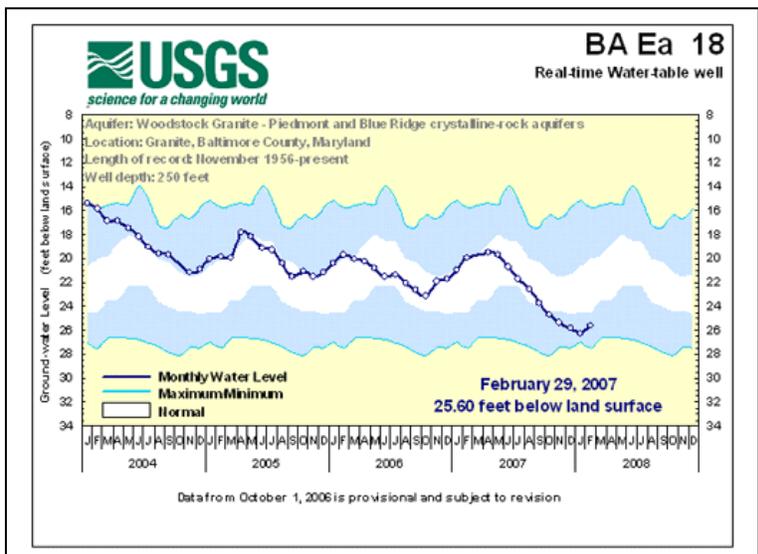


Ground Water

Ground-water levels are recovering from their low levels, although 62% of the unconfined wells used by the USGS to assess response to climatic conditions were below normal. The areas with the lowest ground-water levels are the Delmarva Peninsula and Central and Southern Maryland.



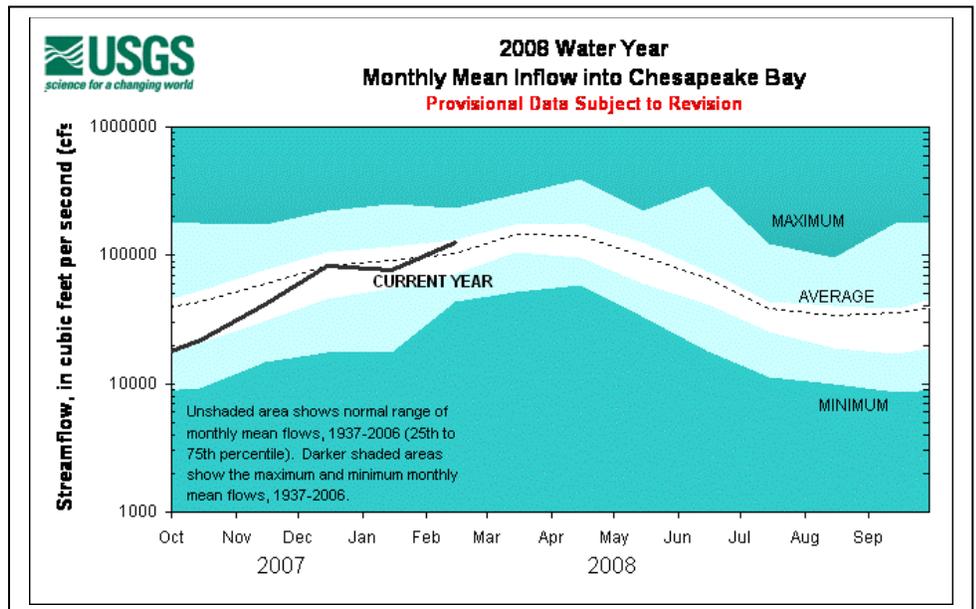
The 5-year hydrograph for this deep, unconfined well in Baltimore County shows the water level (shown as a dark line), although below normal, has begun to climb.



Chesapeake Bay Freshwater Flow

Estimated streamflow entering the Chesapeake Bay is calculated monthly based on index stations on the Susquehanna River, Potomac River, and James River. The data is presented based on the current water year (WY), the natural, annual water cycle from October through September that is used by hydrologists.

The estimated mean monthly flow to the Chesapeake Bay for February was 127,000 cfs (cubic feet per second) or about 123 percent of the long-term mean for February. Average February flow is 103,000 cfs.



Reservoirs

Water available from the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) increased 11% to 78% of the available storage (59.6 billion gallons) at the end of February.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, increased 10% to 70% of the normal capacity at the end of February.

February 2008	Percent available /normal storage	Volume (billion gallons)	Source/Comment
Baltimore Reservoirs			Baltimore City
Loch Raven	93%	19.6	Increased 15% since January 2008
Liberty	79%	27.7	Increased 7% since January 2008
Prettyboy	72%	12.3	Increased 11% since January 2008
Total	78%	59.6	Increased 11% since January 2008
Patuxent Reservoirs			Washington Suburban Sanitary Commission (WSSC)
Triadelphia	64%	3.59	Decreased 8% since January 2008
Duckett	77%	3.85	Increased 30% since January 2008
Total	70%	7.44	Increased 10% since January 2008