

December 2008 USGS Maryland-Delaware-DC Water Conditions Summary

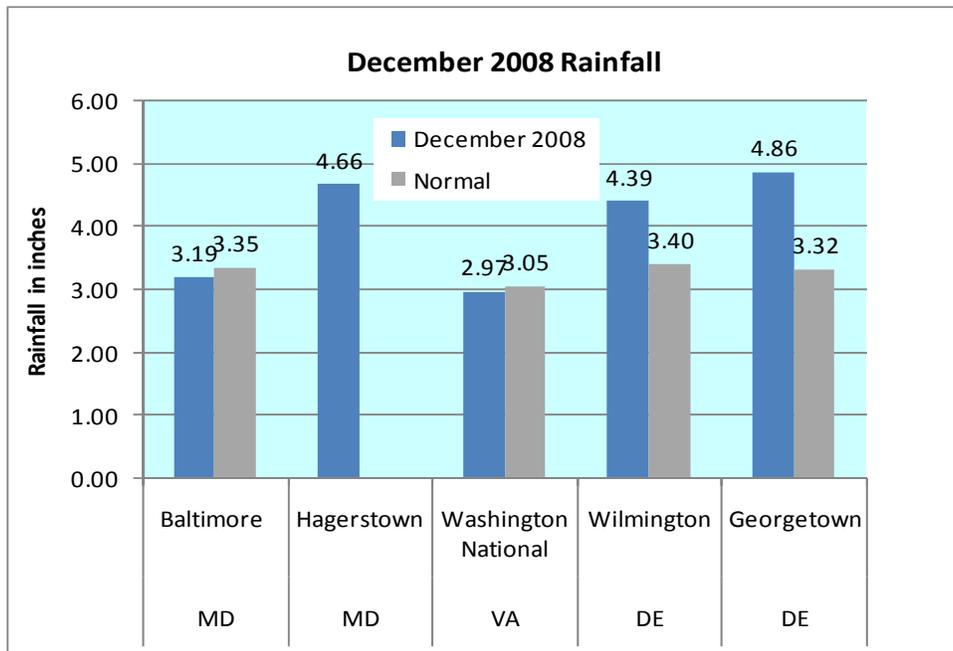
December monthly mean streamflow rose to normal or above normal in all 30 streams used by the U.S. Geological Survey (USGS) to monitor water conditions across Maryland, Delaware, and the District of Columbia. Seventy percent of streams were in the normal range and the remaining 30% were above normal. The largest change from November was in the Youghiogheny River which went from the 10th percentile to the 90th percentile in December.

Rainfall was close to normal in central Maryland and the District of Columbia, but above normal in western Maryland and Delaware.

Ground-water levels rose in most of the wells used by the USGS to assess response to climatic conditions during December. More than half the wells (58%) were at normal levels, 31% were below normal, and 11% were above normal.

Precipitation

Rainfall was above normal at National Weather Service stations in western Maryland and Delaware in December. December rainfall was near normal in Baltimore and the District of Columbia. Rainfall for the entire year of 2008 was in the normal range throughout Maryland, Delaware, and District of Columbia.



Sources: National Weather Service

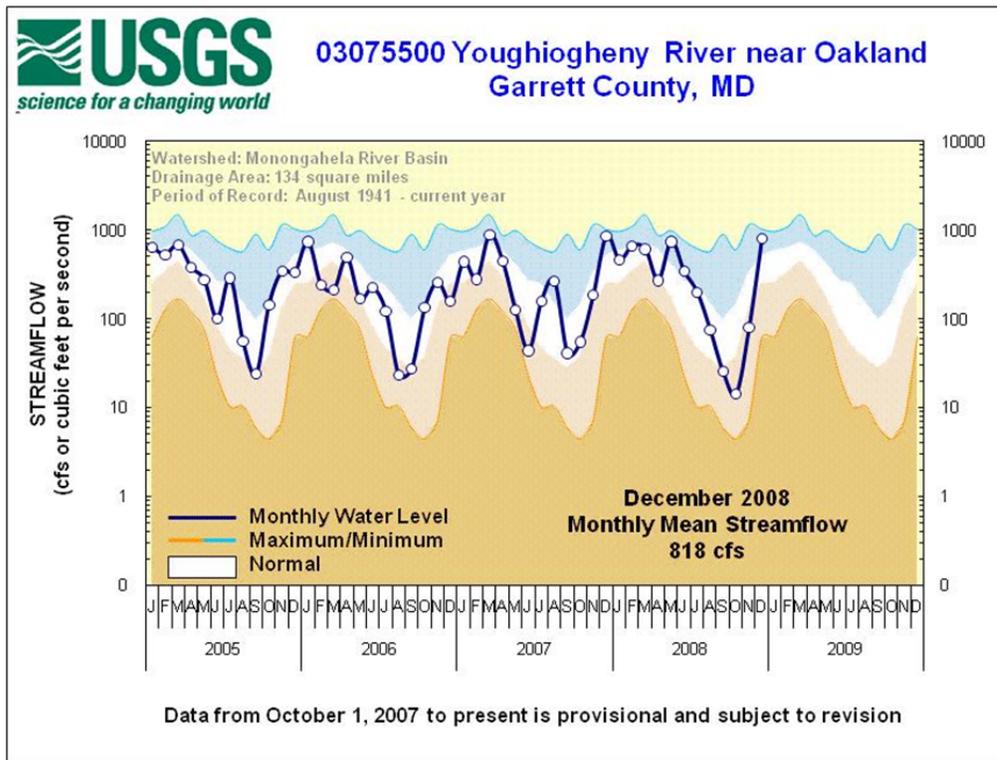
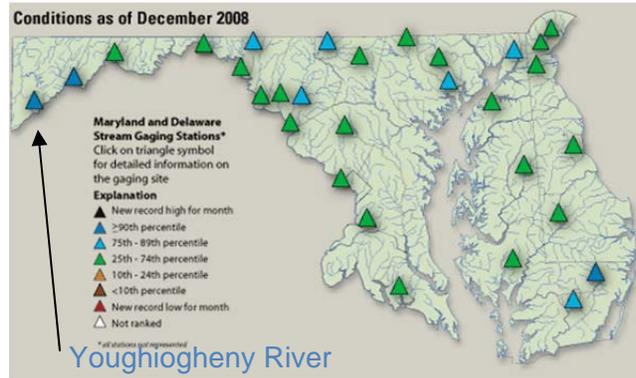
MD and DC: <http://www.weather.gov/climate/index.php?wfo=lwx>

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

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

Streamflow

Normal to above normal rainfall caused streamflows to increase in all 30 streams used to assess climatic conditions in Maryland, Delaware, and the District of Columbia. Twenty three of the 30 streams increased a full level, such as from normal to above normal. In December, 70% of streams were in the normal range and the remaining 30% were above normal. This was a noticeable change from November where 17 streams were below normal and 2 were in the 10th percentile. Only the Pocomoke River was above normal in November.

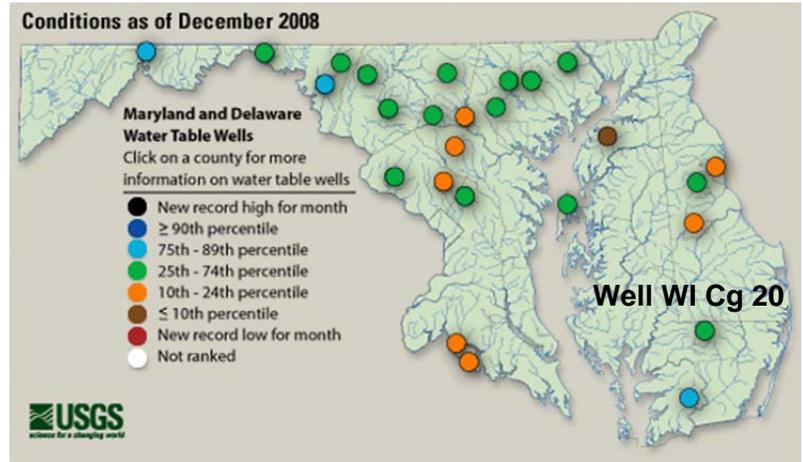


Five-year hydrographs can be viewed at:
<http://md.water.usgs.gov/surfacewater/streamflow/>

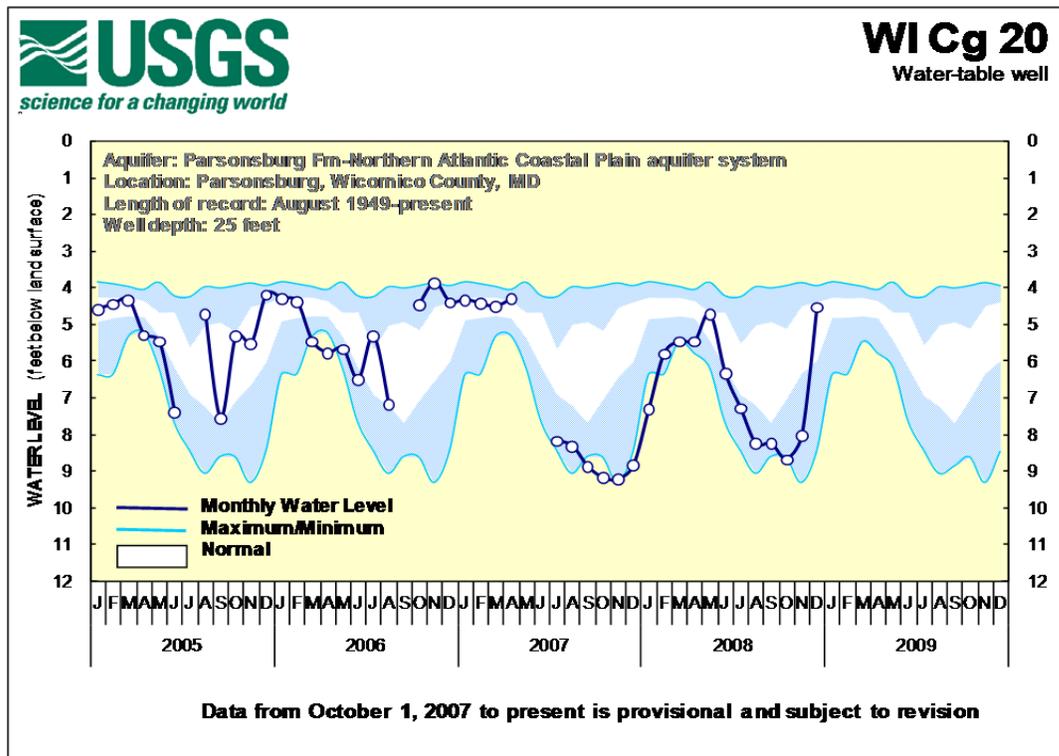
The monthly mean streamflow in the Youghiogheny River increased from the 10th percentile in November to the 90th percentile in December. The 5-year hydrograph shows the monthly mean streamflow as a dark line and normal (between the 25th and 75th percentiles) as a white band.

Ground Water

Ground-water levels rose in 24 of the 26 wells used by the USGS to assess climatic conditions. Water levels improved since November when more than half the wells were below normal. In December, 15 of the 26 wells (58%) were normal. Only three wells had above normal water levels in December. The remaining 8 wells had water levels below normal, although they have risen since November.



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 Wicomico County, Maryland rose from below normal in November to normal in December.



Five-year hydrographs can be viewed at:
http://md.water.usgs.gov/groundwater/web_wells/current/water_table/counties

Summary of 2008 Streamflow and Ground-water levels

Monthly mean streamflows were in the normal range 58% of the time in 2008. Twenty eight percent of the time, streamflows were below normal, and 14% of the time streamflows were above normal. There were two record low monthly streamflows for 2008, both set in January. January, August, and November were months with more than 50% of the streams at below normal. May had the highest streamflows, but there were no monthly record high streamflows set in 2008.

In 2008, monthly ground-water levels in the 26 wells used to assess climatic conditions were normal 44% of time. Fifty percent of the time, the water levels were below normal. The remaining 6% were above normal. Monthly record lows were set 4 times (twice in both Carroll and Wicomico Counties) and 5 months were below the 10th percentile. January through and April, and November had the greatest number of wells with below normal ground-water levels in 2008. There was a record high in May in the Washington County well. Wells BA Ea 18 in Baltimore County and HO Cd 79 were below normal the entire year. Well WI Cg 20 in Wicomico County was below normal every month except May and December.

Reservoirs

Water available from the Baltimore reservoir system (Loch Raven, Liberty, and Prettyboy) increased 3% to 91% of the available storage (69.38 billion gallons) at the end of December.

Water stored in the Triadelphia and Duckett Reservoirs, which serve Montgomery and Prince George's Counties, increased 10% to 55% of the normal capacity at the end of December. The level in Tridelphia is being kept low for gate maintenance.

December 2008	Percent available /normal storage	Volume (billion gallons)	Source
Baltimore Reservoirs			Baltimore City
Loch Raven	100%	21.20	Increased 3% since November
Liberty	85%	30.33	Increased 4% since November
Prettyboy	100%	17.85	Same as November
Total	91%	69.38	Increased 3% since November
Patuxent Reservoirs			Washington Suburban Sanitary Commission (WSSC)
Triadelphia	49%	2.74	Decreased 1% since November
Duckett	61%	3.07	Increased 21% since November
Total	55%	5.74	Increased 10% since November