News Release

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U.S. Geological Survey

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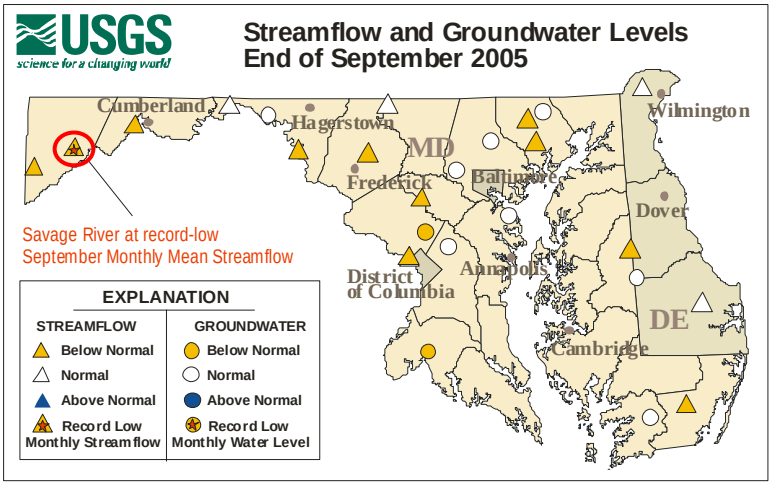
Lack of Rain Causes Water Levels to Drop—Savage River at Record Low

September was an exceptionally dry month throughout Maryland, Delaware, and Washington, D.C. Streams respond to the dry conditions quickly and many streams are at below normal levels. Groundwater levels respond more slowly to the lack of rainfall and many wells remain at normal levels. Adequate rainfall since 2003 has kept water levels at normal to above normal levels until now. The Savage River near Barton, MD set a new low monthly mean streamflow for September, according to hydrologists at the U.S. Geological Survey (USGS). This was the lowest September monthly mean streamflow and the lowest monthly flow on the Savage River since 1948.



Status of Streams and Wells

This map shows the location and status of wells and streams used by the USGS to monitor water levels in Maryland, Delaware, and Washington, D.C. at the end of September 2005. Water levels reflect the lack of rainfall in September and were normal to below normal.

Eleven of the 15 streams in Maryland were at below normal levels. For many streams, September was the first time since 2003 that water levels were below normal. The remaining 4 streams were at normal levels, but very close to below normal levels for September. The Savage River in western Maryland set a record low for September.

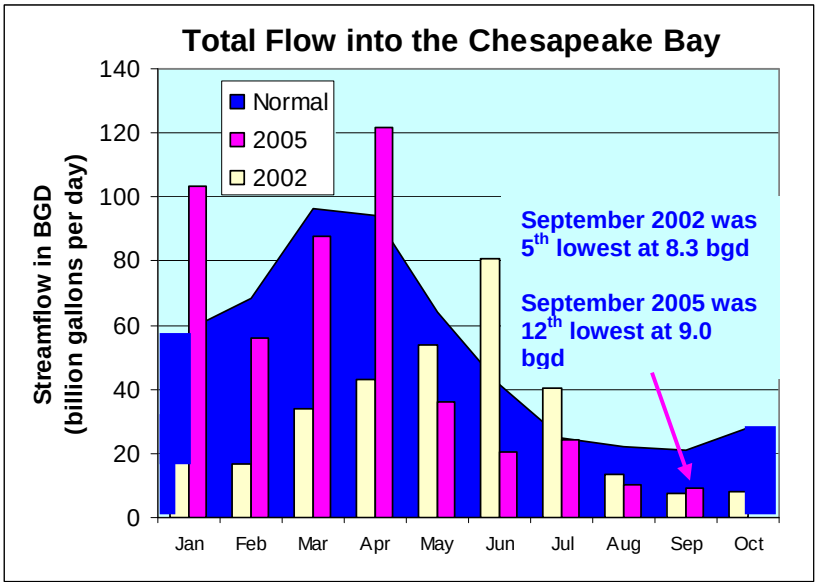
Although groundwater levels dropped because water demand from plants and people is highest during the summer and early autumn months, the water levels were in the normal range for most wells. Many wells had above normal water levels since 2003 (see hydrograph below).

Precipitation

September 2005 was the driest September since 1884 with only 0.11 inches of rain at Reagan National Airport, according to preliminary rainfall data from the National Weather Service (NWS). Rainfall in September was exceptionally low in Maryland at BWI Airport with 0.67 inches. In Delaware, rainfall was also below normal with less than a half inch in Wilmington and Georgetown--a deficit of more than 3.5 inches. Although September rainfall was minimal, in July 2005, BWI experienced more than twice the normal rainfall with 8.77 inches. August rainfall was normal. The dry weather has left the ground very hard, and intense rainfall may lead to excessive runoff and flooding.

Chesapeake Bay Flow

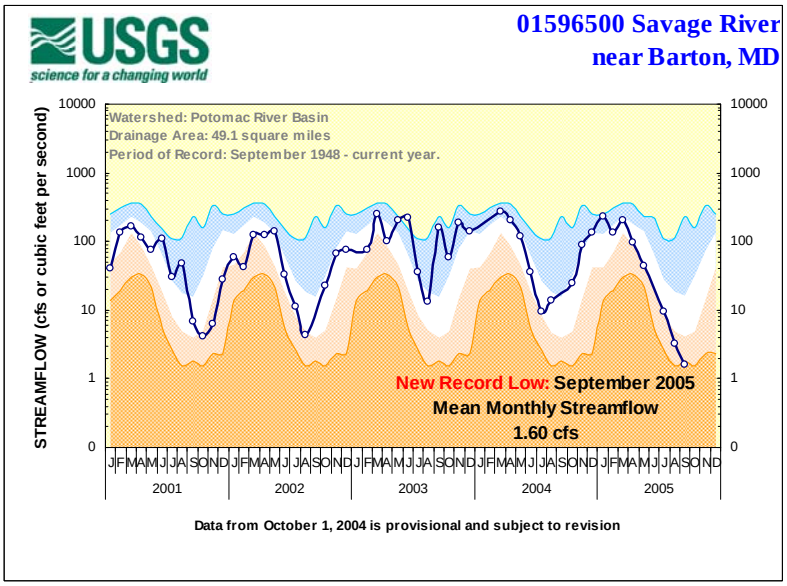
Monthly mean streamflow to the Chesapeake Bay averaged 9.0 bgd (billion gallons per day), which was 59 percent below normal. This was the 12th lowest September flow since 1937, while during the drought in 2002, September flow was the 5th lowest at 8.3 bgd. Normal flow for September is 21.92 bgd.



Low flows into the Bay generally mean less nutrients and sediment are delivered to the Bay, which may improve water quality. However, pollutants are stored until rain flushes the drainage basin, and if it happens late in the growing season, it will have less of an adverse effect on the living organisms in the Bay. Additional information about USGS studies to help with the protection and restoration of the Chesapeake Bay and its watershed can be found at http://chesapeake.usgs.gov. For information on water resources in the Chesapeake Bay, visit: http://md.water.usgs.gov/monthly/bay.html.

Streamflow

Streamflow levels were below normal in 50 percent of the wells in the Delaware, Maryland, and Washington, D.C. region in September and at record-setting lows in western Maryland (see below). Daily streamflow for the Potomac River near Washington, D.C. averaged 0.86 bgd in September, which is 60 percent below normal. Annual flow from October through September (Water Year) was at 100 percent. More information on the Potomac River is available at: http://md.water.usgs.gov/monthly/poto.html

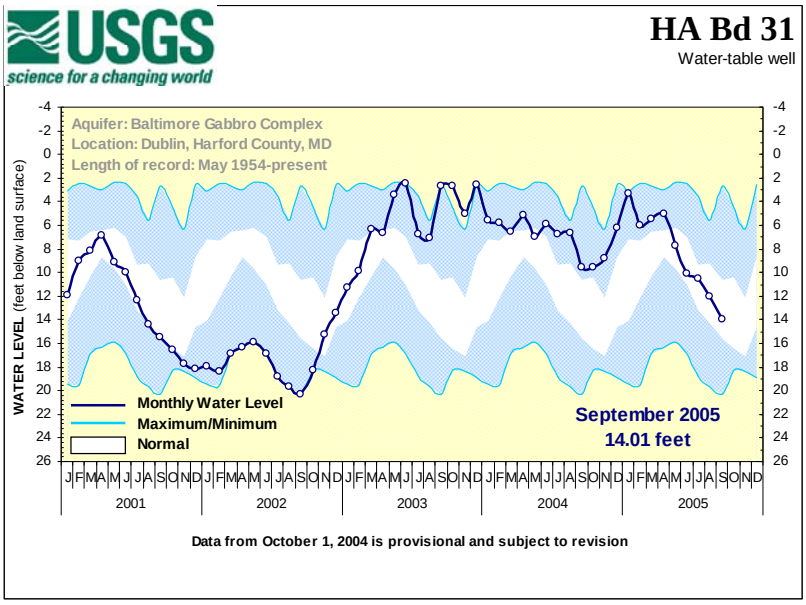


Monthly mean streamflow for the Savage River averaged 1.6 cubic feet per second (cfs) in September, which is the lowest level since record-keeping began in 1948 (see below). The previous record was 1.78 in 1991. Notice the steep drop in water levels since the spring.

Current and historical streamflow data can be found on the web at: http://waterdata.usgs.gov/. Five-year monthly streamflow hydrographs from the USGS stream-gaging network can be viewed on the web at: http://md.water.usgs.gov/surfacewater/streamflow/.

Groundwater

Groundwater levels in wells used by the USGS to monitor unconfined or shallow aquifer response to climatic conditions in Maryland and Delaware have dropped throughout the region. Many wells remain at normal water levels because of the abundance of rain in July and earlier months. The water level shown in the hydrograph of the well in Harford County, Maryland was normal to above normal since the fall of 2002 and has been in the normal range for the past five months.



Reservoir Storage

Storage in the Baltimore reservoir system dropped 11 percent to about 87 percent of capacity at the end of September. The Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) had been nearly full since May 2003. The Triadelphia and Duckett Reservoirs on the Patuxent River, which serve Montgomery and Prince Georges Counties, dropped to 72 percent of capacity at the end of September.

U.S. Geological Survey

Streamflow and groundwater levels are used to assess current water conditions and can be used to predict the potential for flooding and drought conditions. These USGS data have been provided to State and local water resource managers and are critical for making appropriate decisions on water regulation. For more information on streamflow and groundwater levels in Maryland, Delaware, and Washington, D.C., visit Water Watch at: http://md.water.usgs.gov/waterwatch/.

The USGS, a Bureau within the Department of the Interior, has served the Nation and the world for 125 years by providing reliable scientific information to describe and understand the Earth; minimize loss of life and property from natural disasters; manage water, biological, energy, and mineral resources; and make important decisions and enhance and protect our quality of life.

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