



# News Release

U.S. Department of the Interior  
U.S. Geological Survey

**Address:**  
Maryland-Delaware-D.C.  
Water Science Center  
8987 Yellow Brick Road  
Baltimore, MD 21237

**Email and Homepage:**  
wsmcpher@usgs.gov  
<http://md.water.usgs.gov/>

**Release:**  
July 6, 2005

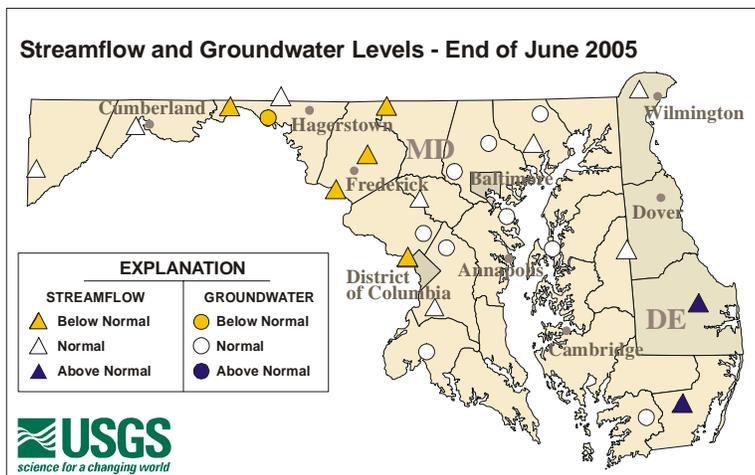
**Contact:**  
Wendy S. McPherson

**Phone:**  
(410) 238-4255

**Fax:**  
(410) 238-4210

## Water Levels Fall as Summer Arrives

During the summer months, water demand from plants and people is highest, and consequently, water levels drop. Water levels in Maryland, Delaware, and Washington, D.C. at the end of June ranged from below normal in western and central Maryland to above normal on the Delmarva Peninsula. Streams respond to the dry conditions quickly and several streams are at below normal levels in Maryland. Streams in southern Delaware and Wicomico County were at above normal flows because of abundant rainfall. Flow to the Chesapeake Bay was nearly 50 percent below normal in May and June, according to hydrologists at the U.S. Geological Survey (USGS).



### 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 June 2005. Water levels reflect rainfall amounts and were normal to below normal in the central and western part of Maryland. In southern Delaware and Wicomico County, streamflow was above normal.

### Chesapeake Bay Flow

Rainfall in the Chesapeake Bay basin was below normal in May and June 2005. Monthly mean streamflow into the Chesapeake Bay during June averaged 20.5 bgd (billion gallons per day), which was 52 percent below normal. Normal flow for June is 42.2 bgd. Flow in May was 43 percent below normal. 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 affect 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>.

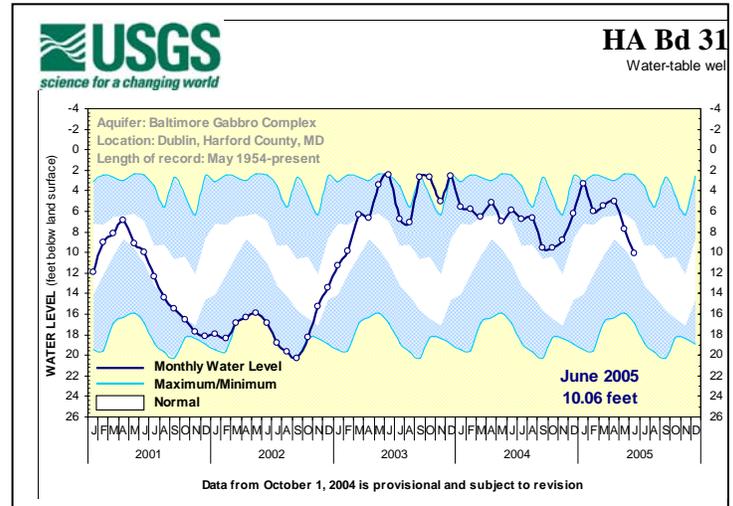
## Streamflow

Streamflow levels were normal to below normal in most of Maryland and Washington, D.C. in June. The exception was southern Delaware and Wicomico County, Maryland where 4.38 inches of rain fell in June. Current and historical streamflow data can be found on the web at: <http://waterdata.usgs.gov/>.

Daily streamflow for the Potomac River near Washington, D.C. averaged 3.3 bgd in June, which is 44 percent below normal. More information on the Potomac River is available at: <http://md.water.usgs.gov/monthly/poto.html>.

## 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 had above normal water levels at the start of the summer, and have now dropped into the normal range. This is expected because of the growing season and consequent increased demands from plants and animals (primarily humans). The highest groundwater levels are typically in March or April before the growing season begins and they continue to drop until cooler temperatures arrive in the fall. The water level 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 two months.



## Precipitation

Rainfall for June ranged from a low at Hagerstown, Maryland of only 1.34 inches to 4.38 inches in Georgetown, Delaware, according to preliminary rainfall data from the National Weather Service (NWS). Rainfall in Baltimore and Washington D.C. was near normal.

## Reservoir Storage

Storage in the Baltimore reservoir system dropped to about 98 percent of capacity in June. The Baltimore reservoirs (Loch Raven, Liberty, and Prettyboy) have been nearly full since May 2003. The Triadelphia and Duckett Reservoirs on the Patuxent River, which serve Montgomery and Prince Georges Counties, were also nearly full in June.

## 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.

\* \* \* USGS \* \* \*