



News Release

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

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Anticipating the Deluge: U.S. Geological Survey Prepares to Monitor the Effects of Hurricane Isabel on Streams

As Hurricane Isabel heads for the Mid-Atlantic States, USGS scientists in Maryland, Delaware, and other states in Isabel's path are preparing to head out into the storm. Their mission: collect streamflow measurements and water-quality samples to document flooding and water-quality conditions as a result of the storm. These data are used for flood prediction and for numerous short- and long-term planning and environmental studies.

Water-quality sampling is important during and after storms because storm runoff can wash large amounts of nutrients, sediment, pesticides, and other contaminants into rivers, streams, and the Chesapeake Bay. Answers to the following questions can be found at <http://chesapeake.usgs.gov/>.

- How much water has entered the Chesapeake Bay from some previous tropical storms?
- What are the current flow conditions of streams and rivers in the Bay watershed?
- What are the potential impacts on nutrients and sediment being delivered to the Bay?

When Hurricane Floyd inundated the region in 1999, the ground was much drier because of the preceding drought conditions. With the advance of Hurricane Isabel, the ground is saturated and cannot absorb much of the rain that falls which will become runoff, contributing water to streams that are already at above normal levels. For more flood information, visit the USGS Water Watch website: <http://water.usgs.gov/waterwatch>

Most streams in Maryland and Delaware are flowing at above normal levels. Groundwater levels are also above normal and the ground is saturated. To monitor streamflow on Maryland's and Delaware's rivers on the Web, visit: <http://waterdata.usgs.gov/md/nwis/rt>. These sites are ranked by color based on the comparison of the current streamflow to historical data at the site. Black and blue circles represent some of the highest historical flows for the day at these sites. While viewing the hydrograph for a site, refer to the table beneath the graph to assess how much higher the current flow is compared to the normal flow (look at how much higher the current flow is in relation to the 50 percent exceedance value, which is considered normal flow for that day.)

The USGS serves the Nation 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 enhance and protect our quality of life.

Possible photo opportunity: USGS teams will be working at several rivers across Maryland and Delaware during periods of high streamflow. If you're interested in doing a field interview, call Wendy McPherson at 410-238-4255.

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