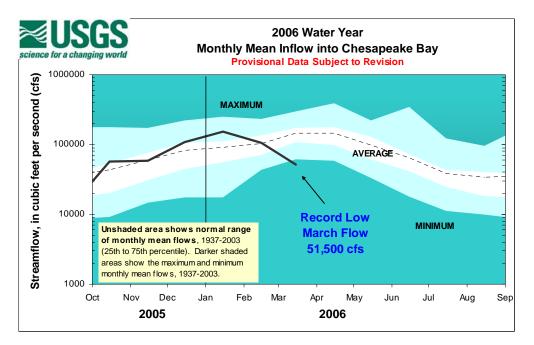
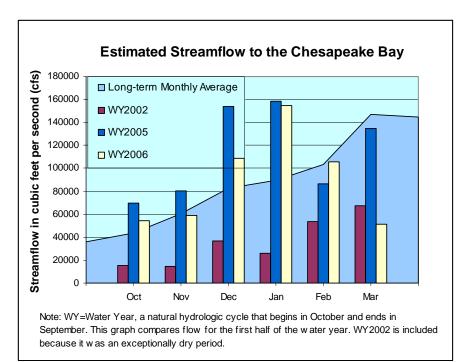


Record Low Streamflow to Chesapeake Bay in March 2006

Freshwater streamflow to the Chesapeake Bay set a March record low in 2006, according to new data gathered by the U.S. Geological Survey. Streamflow to the Bay averaged 51,500 cubic feet per second (cfs) or 33.3 billion gallons per day (bgd), which is about 65 percent below average. March flow was 10,000 cfs lower than the previous March record set in 1981. March flow in 2002 was the third lowest with 67,100 cfs.



If the low-river flow conditions continue, the reduced amount of freshwater flowing into the Bay can impact its water quality, habitats and aquatic life. Most noticeably, scientists associate "low flow conditions" with reduced amounts of nutrients and sediments entering the Bay as well as higher salinity levels in the Bay's waters. Reduced nutrient and sediment loads could result in improved water-quality conditions for fish, crabs, and underwater grasses this summer. Higher salinities could result in making oysters more susceptible to disease and impact fresh-water species of underwater grasses. And for swimmers, higher salinities allow sea nettles to show up earlier in the summer and move further north in the Bay. Flow to the Bay during the last 6 months (yellow bars in graph), averaged 89,000 cfs. During this same period in 2001-2002 (red bars), flow to the Bay averaged only 35,600 cfs and was below normal the entire 6 months. For the past 2 years, flow from October to February was at normal to above normal levels. While March 2006 flow was at record-setting low.



The nutrient and sediment pollution entering the Bay comes from different sources in the watershed and is delivered to the Bay through

streamflow and groundwater. Therefore the annual health of the Bay is largely driven by the changes in streamflow and the amount of pollution it contains. The largest amount of river flow and associated pollutants usually enter the Bay in the winter and spring. Since the fall of 2006, river flow to the Bay has been slightly above or near normal, but dropped dramatically in March.

USGS river flow data is a critical piece for Bay scientists developing an ecological forecast of summer conditions in the Bay. The Bay Program's forecast will be released in early May, once scientists have had the opportunity to analyze the data and determine its impact on summer algae blooms, bay grass abundance and dissolved oxygen levels. More information on river flow can be found at the USGS WWW site at: http://chesapeake.usgs.gov/streamflow.html

Additional information about USGS Chesapeake Bay Science Studies can be found at: <u>http://chesapeake.usgs.gov/</u>

or by contacting Scott Phillips, USGS Chesapeake Bay Coordinator 410 238-4252.