United States Department of the Interior
U.S. Geological Survey
5522 Research Park Drive
Baltimore, MD 21228
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USGS Maryland-Delaware-District of Columbia Water Science Center

Seminar Series

Tuesday, June 20, 2017 11:00 a.m.

Maryland/DC Flood Frequency and Extreme Events

Jason Elliott, Senior Service Hydrologist, NOAA/National Weather Service, Baltimore/Washington

Flooding is one of the United States' highest-impact natural disasters, causing billions of dollars in property damage, and claiming over 300 lives in the last two years alone. Over the past several years, the local National Weather Service (NWS) office, located in Sterling, Virginia, has conducted a study of flood frequency in its three state service area -- including most of Maryland and the District of Columbia -- using mainly USGS gages as the determining points for flood occurrence. The study utilized field surveys and flood maps to determine property and/or infrastructure that would be affected in the vicinity of the observed data from the streamgages, then assessed how frequently such events occurred during the period of record. In this presentation, results of this flood frequency study will be discussed along with the critical nature of observed data in the NWS forecast and warning process. A case review of recent extreme events will also be presented, along with other new tools being used to anticipate flooding and warn the public in advance of such events.

Jason Elliott is the Senior Service Hydrologist at the National Weather Service Baltimore/Washington Forecast Office, located adjacent to Dulles Airport. In this role, Jason serves as the hydrology and flooding expert for a service area which includes 22 counties and 10 independent cities in northern Virginia, as well as the District of Columbia, much of Maryland, and the eastern West Virginia panhandle. Jason has held this position since November 2010. Previously, Jason was a meteorologist at National Weather Service offices in Huntsville, Alabama; Memphis, Tennessee; and Mobile, Alabama. Jason holds a Bachelor of Science in Geography with a concentration in Meteorology from the University of South Alabama, and a Master of Education in Human Resource Education, specializing in Distance Learning, from the University of Illinois, Urbana-Champaign.

This presentation will also be available remotely via Webex:
https://usgs.webex.com/usgs/j.php?MTID=m1362c5e3739ed42ce3747d33bd7c602c
Phone: 703-648-4848 Code 39026# or 39026000#

For directions to the USGS MD-DE-DC WSC: http://md.water.usgs.gov/directions/baltimore.html.