

## **National Weather Service Determination of Flood Stages for Small Fast Responding Streams in Complex Terrain**

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It is crucial to accurately assess flood stages for small streams, as the onset of flooding occurs quickly and can negatively impact many people with little advance warning. Understanding site specific characteristics and potential flooding dangers of a particular stream leads to enhanced knowledge of the area, and more accurate flooding level forecasts. The National Weather Service at Binghamton, NY has set flood stages for three small streams in the Catskill Mountains of Delaware County, all of which are prone to flash flooding. East Brook near Walton, Trout Creek near town of Trout Creek, and Tremper Kill near Andes were all visited during the summer of 2009 to set flood stages for minor, moderate and major flooding. This poster will present the methods utilized to determine where to set flood stages based on features of a particular stream. Existing bridges and structures can be used to determine the magnitude flow that would impact them, and set flood stages accordingly. Also historical flows are examined and often county or town supervisors are contacted to determine if a given flow has caused damage in the past, and where that damage may have occurred.