Floods Caused by Tropical Systems: Monocacy River at Jug Bridge near Frederick, MD

Latitude: 39.403 Period of Record: 1889-Present Longitude: -77.366
Flood Stage: 15 Last Flood: 12/16/2018 Number of Floods: 123

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|---------------|------------|------------------|---|
| Date of Flood | Crest (ft) | Streamflow (cfs) | Weather Summary |
| 9/17/1933 | 15.98 | 20,000 | Heavy downpours from a stalled front ahead of a tropical circulation. |
| 9/19/1945 | 15.5 | 16,300 | The 1945 Southeast Florida Hurricane brought gusty winds and heavy rains to the Mid-Atlantic region. |
| 8/13/1955 | 15.98 | 17,300 | Hurricane Connie produced 4 to 8 inches of rainfall across the Mid-Atlantic region, with locally heavier amounts exceeding 10 inches. |
| 9/26/1975 | 30.8 | 61,200 | The remnants of Hurricane Eloise combined with a cold front and produced very heavy rainfall in the Mid-Atlantic. Washington, D.C. reported 9.08" of rainfall. Total damage for Virginia was estimated to be \$17.2 million |
| 6/23/1972 | 35.9 | 81,600 | Hurricane Agnes made landfall again over southeastern New York on June 22 and moved westward into Pennsylvania. Rainfall totals from June 20-25 range from 2-3 inches in the Upper Potomac to 18 inches near Shamokin, Pennsylvania. |
| 10/3/1929 | 16 | 18,500 | Rainfall from the most powerful hurricane of the 1929 season measured 1 to 4 inches across the Mid-Atlantic states and led to minor flooding across parts of Pennsylvania and Maryland. |
| 10/16/1942 | 16.97 | 19,700 | The remnants of the eighth tropical storm of the year produced torrential rains and caused the worst river flooding in the history of Virginia. |
| 9/24/2003 | 19.71 | 24,100 | Hurricane Isabel combined with another system and produced more than 3 inches of rain in VA with locally heavier amounts of 10 inches. Another low pressure system moved through the region and produced a few additional inches of rain. |
| 9/6/1979 | 22.03 | 33,700 | Hurricane David dumped 3-7 inches of rainfall across Virginia, Maryland and Pennsylvania. |

Drainage Area: 817 square miles Gage Datum: 231.21 ft MSL

Data represent all historical events.
Potomac Basin

County of Gage: Frederick County of Forecast Point: Frederick

| Date of Flood | Crest (ft) | Streamflow (cfs) | Weather Summary |
|---------------|------------|------------------|--|
| 9/9/2011 | 17.04 | 18,000 | The remnants of tropical storm (TS) Lee moved up the Appalachian Mountains and interacted with a quasi- stationary east-west frontal boundary. 10 to 15 inches fell at numerous locations in Central PA and NY. |
| 9/7/1996 | 17.74 | 21,600 | Hurricane Fran produced up to 16 inches of rain in the western part of Virginia and up to 7 inches in the Juniata Basin in Pennsylvania. Fran was the worst flood even to hit Maryland since Hurricane Hazel and the January 1996 Flood. |
| 10/30/2012 | 21.78 | 29,700 | Hurricane Sandy moved across NJ through PA producing 3 to 7 inches of rain with locally higher amounts in areas that saw flooding. The hurricane rapidly lost its tropical characteristics as it moved northwest. |
| 8/24/1933 | 28.1 | 51,000 | A strong Category 1 storm, the Chesapeake-Potomac Hurricane brought more than 10 inches of rain to Maryland, Delaware and Southern New Jersey. Other locations throughout the Mid-Atlantic measured more than 4 inches of rain. |
| 9/1/1940 | 17.85 | 24,100 | The outer rainbands from Hurricane Four caused minor and moderate flooding at three MARFC forecast points. |
| 9/29/2004 | 17.65 | 19,100 | Hurricane Jeanne stalled a cold front and supplied the front with much-needed moisture. As a result, 1-day rainfall totals ranged from 1 - 6 inches throughout the Mid-Atlantic region. |
| 9/10/2018 | 21.36 | 29,100 | Remnants of Tropical Storm Gordon produced rain of 4-9 inches on very wet soils leading to major flooding in spots. |

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