

Floods Caused by Tropical Systems: James River near Richmond

Latitude: 37.563

Period of Record: 1816-Present

Longitude: -77.547

Flood Stage: 12 ft

Last Flood: 6/26/2016

Number of Floods: 178

Date of Crest	Crest (ft)	Streamflow (cfs)	Remarks
6/23/1972	28.62	313,000	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.
8/21/1969	24.95	222,000	Remnants of Hurricane Camille produced 12-20 inches of rainfall. In Virginia, most of the rainfall occurred in a 3-5 hour period and caused several record-setting floods.
11/7/1985	24.77	218,000	Hurricane Juan produced more than 1 inch of rain in VA with more than 7 inches reported in higher elevations. A coastal low pressure system produced an additional 1-7 inches of rain and caused widespread major flooding in Virginia and Maryland.
8/18/1940	21.80	151,000	As a strong Category 1 storm, the Southeast Hurricane produced over 1 inches of rain just south of our basins and caused widespread flooding across Virginia.
9/8/1996	21.23	152,000	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.
9/7/1935	21.01	127,000	The "Labor Day Hurricane" dumped heavy rain along the East Coast. A total of 16.62 inches of rain was reported in Easton and 12.1 inches of rain was reported in Salisbury, MD.
10/17/1942	19.80	119,000	The remnants of the eighth tropical storm of the year produced torrential rains and caused the worst river flooding in the history of Virginia.
9/10/1987	18.53	108,000	Tropical Depression Nine merged with a cold front to produce over 5 inches of rain in Virginia and 3-7 inches of rain in Pennsylvania.

Drainage Area: 6753 sq mi

Tropical information before 1940 is limited.

County of Gage: Henrico

Gage Datum: 98.82 ft MSL

James Basin

County of Forecast Point: Independent City

Date of Crest	Crest (ft)	Streamflow (cfs)	Remarks
8/20/1955	18.36	98,700	Hurricane Diane made landfall 5 days after Hurricane Connie. Hurricane Diane produced several inches of rain with locally heavier amounts of 10 to 20 inches.
9/26/1975	16.10	78,300	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.
10/1/2004	15.50	72,000	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.
8/19/1985	14.94	66,000	The remnants of Hurricane Danny brought heavy rain to parts of the Mid-Atlantic region. Most of Virginia had at least one inch of rain with locally higher amounts of 7 inches. Minor flooding occurred in the James and Appomattox Basins.
9/20/1945	14.82	61,100	The 1945 Southeast Florida Hurricane brought gusty winds and heavy rains to the Mid-Atlantic region.
9/12/1950	14.60	59,500	Hurricane Dog's outer rainbands produced upwards of 3 inches of rain in parts of Virginia over a short period of time.
8/20/1939	14.37	57,900	The remnants of the second hurricane of year produced heavy rain throughout the Mid-Atlantic region with 14.81 inches observed at Tuckerton, NJ.
9/7/1979	14.28	59,800	Hurricane David dumped 3-7 inches of rainfall across Virginia, Maryland and Pennsylvania.
7/4/2003	13.33	53,830	The remnants of Tropical Storm Bill collided with a frontal system and produced over an inch of rain across most of Virginia and Maryland. Some locations in Central Virginia reported storm totals of 3 to 5 inches.

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11/14/2009	13.30	51,800	The extratropical remnants of Ida dumped more than 12 inches of rain in Coastal Virginia, 5.50 inches of rain in Richmond and 5.00 inches of rain in Farmville.
9/10/2004	12.81	48,000	The remnants of Hurricane Frances combined with a low pressure system and produced heavy rain throughout the Mid-Atlantic. Rainfall totals ranged from 2 - 3 inches in New Jersey to 2.5 - 6 inches in Central Pennsylvania.
9/1/1915	-9999.00	-9,999	A tropical system inundated the low-lying areas in Richmond. The flooding was similar to the flooding caused by Gaston in 2004.
9/28/1822	-9999.00	-9,999	A strong tropical storm caused 3.5 days of continuous rainfall. The Staunton River rose to the highest level ever observed. In Richmond, the James River was reported to rise several feet in less than one hour.
9/28/1896	-9999.00	-9,999	A hurricane knocked out communication in Richmond. Several buildings were unroofed in Petersburg. In Buena Vista, the fire department rescued people from their homes. The Potomac, Chesapeake and Ohio Canals merged into one giant canal.
9/18/1816	-9999.00	-9,999	A tropical storm caused flooding on the James River at Richmond. The flood waters invaded the first floors of some homes.
9/12/1878	-9999.00	-9,999	The Hurricane of 1878 produced tornadoes and heavy rain around Richmond, Virginia. Southeastern Virginia, West Virginia and Pennsylvania all had unprecedented flooding.

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