

Flood Event of 6/17/1949 - 6/20/1949

Potomac

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Harpers Ferry	18.00	6/19/1949	18.50	-9,999	Minor	Potomac	Potomac River	Jefferson	Jefferson
Little Falls (Washington DC)	10.00	6/20/1949	13.00	135,000	Moderate	Potomac	Potomac River	Montgomery	Montgomery
Paw Paw	25.00	6/19/1949	33.91	85,200	Major	Potomac	Potomac River	Allegany	Morgan
Point of Rocks	16.00	6/20/1949	21.20	132,000	Moderate	Potomac	Potomac River	Frederick	Frederick
Shepherdstown	15.00	6/19/1949	19.84	82,300	Moderate	Potomac	Potomac River	Jefferson	Jefferson

Shenandoah

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Front Royal	12.00	6/19/1949	19.20	52,900	Major	Shenandoah	Shenandoah River	Warren	Warren
Luray	14.00	6/18/1949	20.46	58,100	Moderate	Shenandoah	South Fork Shenandoah River	Page	Page
Lynnwood	16.00	6/18/1949	23.60	53,600	Major	Shenandoah	Shenandoah River	Rockingham	Rockingham
Millville	13.50	6/20/1949	15.92	53,400	Moderate	Shenandoah	Shenandoah River	Jefferson	Jefferson

South Branch Potomac

Site	Flood Stage	Date	Crest	Flow	Category	Basin	Stream	County of Gage	County of Forecast Point
Franklin	7.00	6/17/1949	11.40	15,000	Major	South Branch Potomac	South Branch Potomac River	Pendleton	Pendleton
Moorefield	10.00	6/18/1949	16.10	39,000	Major	South Branch Potomac	South Fork South Branch Potomac River	Hardy	Hardy

Petersburg	10.00	6/17/1949	22.83	62,000	Major	South Branch Potomac	South Branch Potomac River	Grant	Grant
Springfield	15.00	6/18/1949	29.85	104,000	Major	South Branch Potomac	South Branch Potomac River	Hampshire	Hampshire

Weather Summary

June 1949: Severe flash flooding struck the southern Shenandoah Valley of Virginia and Potomac Highlands of West Virginia in June 1949. High pressure over New England combined with a tropical low near Georgia to set up a flow of moist, tropical air from the Virginia Coast westward against the east slopes of the Appalachians. As the air lifted along the mountain slopes, rain began. Flood-producing rains occurred from mid-day on the 17th into the morning of the 18th while the tropical low moved from the North Carolina Coast to southern Virginia. In Virginia, the heaviest rain fell in the Bridgewater-Stokesville area of Rockingham and Augusta Counties. Witnesses say that rain fell in sustained torrents from midafternoon to past midnight. Car headlights could not penetrate the rain more than 5 feet. At the North River Dam Station nearly 10 inches of rain was recorded over three days with 7.75 inches of it falling in a 24 hour period beginning the morning of the 17th. However, much greater rainfall amounts fell in the hardest hit area. Rainfall was so great in the upper reaches of the Little River that it caused large landslides on the steep slopes. The North River and its tributaries above the mouth of the Dry River were all at record breaking stages. Interviews (by the Division of Water Resources) with the oldest inhabitants established that this flood was higher than the 1877 flood. The USGS gage on the North River near Burkettown (downstream from Bidgewater) indicated a crest of 36.3 feet, about 4 feet higher than the October 1942 flood crest. A preliminary report by the Weather Bureau read as follows: Stokesville, Va., where heavy damage occurred, is located just below the confluence of the Little River and the North River. It received the combined flow of both streams, which apparently peaked at about the same time. From eyewitnesses' accounts, this combined flow made such a sudden rise that it gave the effect of a "wall of water" traveling down the channel and causing extreme damage all the way to Bridgewater. The path of the high-intensity rainfall also included the headwaters of Briery Branch, causing a great flood on this stream. The town of Bridgewater, Va., received the flood waters from the combined North River -- Little River -- Briery Branch drainage areas, apparently with their peak flows nearly simultaneous. The Stokesville area is a community of 76 families. This area saw 14 homes destroyed, 29 homes damaged, 20 brooder

Source: Watson, Barbara. "NWS Sterling, VA - Virginia Floods." Virginia Floods. National Weather Service Eastern Region Headquarters, 28 Dec. 2005. Web. <<http://www>

Crest Statistics and Flood Information

First flood of 2 that occurred in Jun, 1949

Fourth flood of 10 that occurred in 1949

Number of Floods at MARFC Forecast Points - 13

Number of Floods Cresting in Minor Range - 1

Number of Floods Cresting in Moderate Range - 5

Number of Floods Cresting in Major Range - 7

Number of Floods Cresting in Missing Range - 0