

# Historical Floods: Shenandoah River at Front Royal, VA

Latitude: 38.914  
Flood Stage: 12

Period of Record: 1901-Present  
Last Flood: 9/18/2018

Longitude: -78.211  
Number of Floods: 51

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
4/21/1901	-9999	46,200	Missing	C1 F1 G1	12/27/1973	13.32	29,000	Minor	none
3/1/1902	23.5	76,800	Major	C1 G1	3/20/1975	18.74	50,500	Major	none
3/1/1903	13.7	22,800	Minor	C1 G1	10/10/1976	14.12	31,900	Moderate	none
12/2/1934	17.99	47,400	Moderate	none	11/8/1977	12.03	24,400	Minor	none
9/6/1935	12.94	27,500	Minor	none	1/27/1978	14.13	32,000	Moderate	none
2/16/1936	12.9	27,500	Minor	none	3/15/1978	12.33	25,500	Minor	none
3/18/1936	26.01	98,000	Major	none	2/26/1979	14.43	33,100	Moderate	none
4/27/1937	18.94	51,500	Major	none	9/7/1979	13.92	31,200	Minor	none
8/17/1940	15.86	40,400	Moderate	none	3/20/1983	12.61	26,500	Minor	none
5/23/1942	16.2	41,400	Moderate	none	2/15/1984	15.85	38,500	Moderate	none
10/16/1942	34.8	130,000	Major	none	3/30/1984	12.86	27,400	Minor	none
9/19/1945	17.8	49,200	Moderate	none	11/6/1985	32.43	120,000	Major	none
12/5/1948	12.31	25,400	Minor	none	4/18/1987	18.51	49,400	Major	none
6/19/1949	19.2	52,900	Major	none	4/23/1992	15.03	35,300	Moderate	none
12/5/1950	13.64	30,000	Minor	none	3/5/1993	16.55	41,200	Moderate	none
3/26/1953	12.44	25,800	Minor	none	1/20/1996	25.2	81,000	Major	none
8/19/1955	22.54	68,200	Major	none	9/7/1996	32.57	121,000	Major	none
5/31/1971	17.86	46,600	Moderate	none	1/9/1998	15.42	36,800	Moderate	none
6/22/1972	23.98	75,100	Major	none	2/5/1998	13.82	30,800	Minor	none
10/7/1972	21.35	62,500	Major	none	2/18/1998	15.01	35,300	Moderate	none

Drainage Area: 1634 square miles  
Gage Datum: 468.93 ft MSL

Data represent all historical events.  
Shenandoah Basin

County of Gage: Warren  
County of Forecast Point: Warren

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
2/24/2003	12.76	27,053	Minor	none					
9/19/2003	18.07	47,500	Major	none					
9/23/2003	13.78	30,690	Minor	none					
9/29/2004	14.77	34,400	Moderate	none					
11/30/2005	13.64	30,200	Minor	none					
1/26/2010	14.96	35,100	Moderate	none					
3/14/2010	13.14	28,400	Minor	none					
4/18/2011	15.67	37,800	Moderate	none					
5/16/2014	12.07	25,700	Minor	none					
6/3/2018	16.52	43,900	Moderate	none					
9/18/2018	14.34	35,100	Moderate	none					

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Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
Code	Description								
C1	Crest information looks unreliable and incomplete and not used in frequency calculations. Some of the floods are based on current flood stage and nearby gage information.								
C2	Crest information looks reliable despite potential problems. This data was used in frequency calculations.								
C3	Crest height estimated by the USGS.								
C4	Crest height is from the National Weather Service.								
C5	Crest height affected by backwater.								
C6	Crest occurred at a previous flood stage that is lower than the current flood stage. The crests below the new flood stage are not used in flood frequency calculations.								
C7	Crest from USGS yearly peak and/or date is different than the crest we provide. In many cases MARFC uses crest based on backwater or ice effects.								
C8	Crest month or day of occurrence has been estimated by The Middle Atlantic River Forecast Center usually based on nearby gage information.								
C9	Crest date (day) in the month is unknown.								
F1	Flow is an estimate.								
F2	Flow affected by regulation or diversion and in some cases to an unknown degree.								
F3	Flow effected by snow-melt, ice jam or debris jam break up.								
F4	Flow affected by dam failure.								
F5	Flow - All or part of the record affected by urbanization, mining, agricultural changes, channelization or other factors.								
G1	Gage height at a different site and/or datum.								
G2	Gage is not an official USGS gage with crests provided by the NWS. Crest information looks unreliable and incomplete and not used in flood frequency calculations.								
G3	Gage datum changed during this year.								
none	No code; Good Data								