Historical Floods: James River near Richmond, VA

Latitude: 37.563 Period of Record: 1816-Present Longitude: -77.547 Flood Stage: 12 Last Flood: 4/22/2019 Number of Floods: 193

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Date of Floo	od Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
9/18/1816	-9999	-9,999	Missing	C1	5/18/1942	14.4	57,900	Minor	C2
9/28/1822	-9999	-9,999	Missing	C1	5/24/1942	15.74	68,600	Moderate	C2
9/12/1878	-9999	-9,999	Missing	C1	10/17/1942	19.8	119,000	Moderate	C2
9/28/1896	-9999	-9,999	Missing	C1	9/20/1944	21.8	150,000	Moderate	C2
9/1/1915	-9999	-9,999	Missing	C1	9/20/1945	14.82	61,100	Minor	C2
12/3/1934	19.08	109,000	Moderate	C2	1/9/1946	12.2	41,300	Minor	C2
1/25/1935	18.55	102,000	Moderate	C2	2/16/1948	15.45	66,000	Moderate	C2
9/7/1935	21.01	127,000	Moderate	C2	4/2/1948	16.45	75,000	Moderate	C2
1/5/1936	16.73	78,300	Moderate	C2	8/6/1948	15.5	66,800	Moderate	C2
1/21/1936	16.7	78,300	Moderate	C2	12/1/1948	14.3	57,100	Minor	C2
2/17/1936	14.68	60,300	Minor	C2	12/5/1948	20.9	136,000	Moderate	C2
3/19/1936	23.42	175,000	Major	C2	3/24/1949	16.22	73,000	Moderate	C2
1/4/1937	15.25	64,400	Moderate	C2	4/16/1949	14.67	60,300	Minor	C2
1/22/1937	7 15.95	71,100	Moderate	C2	8/16/1949	13.38	50,100	Minor	C2
4/27/1937	7 22.65	152,000	Major	C2 F1	9/12/1950	14.6	59,500	Minor	C2
10/21/193	7 18.2	92,500	Moderate	C2	12/6/1950	13.76	53,200	Minor	C2
10/30/193	7 13.54	50,900	Minor	C2	12/10/1950	14.85	61,100	Minor	C2
8/20/1939	14.37	57,900	Minor	C2	6/15/1951	13.53	50,900	Minor	C2
6/2/1940	13.5	50,900	Minor	C2	12/22/1951	14.53	58,700	Minor	C2
8/18/1940	21.8	151,000	Moderate	C2	1/30/1952	13.82	53,200	Minor	C2

Drainage Area: 6753 square miles Gage Datum: 98.82 ft MSL

Data represent all historical events.

James Basin

County of Gage: Henrico
County of Forecast Point: Independent City

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
3/13/1952	14.22	56,300	Minor	C2	10/26/1971	13.95	57,000	Minor	C2
2/24/1953	14.45	57,900	Minor	C2	2/14/1972	13.88	56,100	Minor	C2
3/27/1953	15.95	71,100	Moderate	C2	2/29/1972	13.95	57,000	Minor	C2
3/3/1954	14.54	58,700	Minor	C2	6/23/1972	28.62	313,000	Major	C2
3/8/1955	16.1	72,000	Moderate	C2	10/7/1972	21.76	162,000	Moderate	C2
8/20/1955	18.36	98,700	Moderate	C2	11/15/1972	14.04	57,000	Minor	C2
4/8/1957	15	62,700	Moderate	C2	2/4/1973	16.46	82,700	Moderate	C2
4/2/1958	13.35	50,100	Minor	C2	3/19/1973	14.26	59,800	Minor	C2
6/4/1959	12.05	39,800	Minor	C2	5/30/1973	14.82	64,600	Minor	C2
4/2/1960	14.92	61,900	Minor	C2	12/22/1973	15.66	73,900	Moderate	C2
4/7/1960	15.7	68,600	Moderate	C2	12/29/1973	15.94	76,100	Moderate	C2
4/14/1961	12.63	44,200	Minor	C2	9/8/1974	13.31	50,800	Minor	C2
10/23/1961	17.98	94,000	Moderate	C2	3/16/1975	14.33	59,800	Minor	C2
3/14/1962	14.86	61,900	Minor	C2	3/21/1975	20.08	133,000	Moderate	C2
3/24/1962	13.94	54,000	Minor	C2	9/26/1975	16.1	78,300	Moderate	C2
3/15/1963	16.42	81,600	Moderate	C2	1/2/1976	14.08	57,900	Minor	C2
2/9/1965	15.32	69,600	Moderate	C2	10/11/1976	15.63	72,800	Moderate	C2
2/15/1966	13.75	55,200	Minor	C2	4/7/1977	14.88	65,600	Minor	C2
3/9/1967	15.37	70,600	Moderate	C2	1/28/1978	19.36	122,000	Moderate	C2
8/21/1969	24.95	222,000	Major	C2	3/17/1978	14.18	58,800	Minor	C2
1/2/1970	14.92	65,600	Minor	C2	3/28/1978	14.55	62,600	Minor	C2
2/16/1971	14.24	58,800	Minor	C2	4/28/1978	15.12	67,600	Moderate	C2
6/1/1971	17.02	88,500	Moderate	C2	1/23/1979	13.2	50,000	Minor	C2

Data represent all historical events.

James Basin

County of Gage: Henrico County of Forecast Point: Independent City

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
2/27/1979	20.38	138,000	Moderate	C2	5/7/1989	17.7	96,900	Moderate	C2
3/7/1979	15.02	66,600	Moderate	C2	5/30/1990	14.01	57,100	Minor	C2
6/5/1979	18	100,000	Moderate	C2	10/24/1990	15.17	68,300	Moderate	C2
9/7/1979	14.28	59,800	Minor	C2	1/13/1991	14.91	65,700	Minor	C2
9/24/1979	16.13	78,300	Moderate	C2	3/6/1991	13.24	50,300	Minor	C2
10/1/1979	13.52	52,600	Minor	C2	4/24/1992	19.24	119,000	Moderate	C2
4/11/1980	13.3	50,800	Minor	C2	3/6/1993	18.87	114,000	Moderate	C2
4/16/1980	14.74	63,600	Minor	C2	3/26/1993	14.43	61,000	Minor	C2
2/5/1982	13.8	55,200	Minor	C2	3/29/1993	13.47	52,300	Minor	C2
6/15/1982	15.65	73,400	Moderate	C2	4/17/1993	13.24	50,300	Minor	C2
4/4/1983	14.14	58,300	Minor	C2	11/29/1993	15.3	69,600	Moderate	C2
4/12/1983	15.66	73,500	Moderate	C2	2/24/1994	13.72	54,500	Minor	C2
4/16/1983	13.2	50,000	Minor	C2	3/3/1994	13.45	52,100	Minor	C2
4/26/1983	13.78	55,100	Minor	C2	3/30/1994	17.48	94,300	Moderate	C2
2/16/1984	17.27	91,700	Moderate	C2	1/18/1995	16.42	81,800	Moderate	C2
3/30/1984	16.75	85,500	Moderate	C2	6/24/1995	13.25	50,400	Minor	C2
8/19/1985	14.94	66,000	Minor	C2	6/30/1995	16.26	80,000	Moderate	C2
11/7/1985	24.77	218,000	Major	C2	1/21/1996	20.61	141,000	Moderate	C2
3/3/1987	14.33	60,000	Minor	C2	1/29/1996	13.87	55,900	Minor	C2
4/18/1987	21.91	163,000	Moderate	C2	9/8/1996	21.23	152,000	Moderate	C2
4/27/1987	16.5	82,700	Moderate	C2	12/3/1996	15.72	74,500	Moderate	C2
9/10/1987	18.53	108,000	Moderate	C2	1/10/1998	15.7	74,300	Moderate	C2
5/3/1989	15.06	67,200	Moderate	C2	1/29/1998	16.77	87,000	Moderate	C2

Data represent all historical events.

James Basin

County of Gage: Henrico County of Forecast Point: Independent City

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code	Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
2/6/1998	16.73	86,500	Moderate	C2	4/17/2007	13.82	56,000	Minor	C2
2/19/1998	16.66	85,700	Moderate	C2	11/14/2009	13.3	51,800	Minor	C2
3/22/1998	16.76	86,900	Moderate	C2	12/10/2009	13.74	55,300	Minor	C2
10/1/2000	15.43	73,200	Moderate	C2	12/27/2009	13.31	51,900	Minor	C2
2/25/2003	18.73	113,000	Moderate	C2	1/27/2010	18.1	104,000	Moderate	none
3/21/2003	14.44	63,740	Minor	C2	3/15/2010	13.38	52,500	Minor	none
4/12/2003	12.99	50,931	Minor	C2	3/8/2011	12.69	47,100	Minor	none
5/20/2003	14.4	63,370	Minor	C2	3/12/2011	14.78	64,400	Minor	none
7/4/2003	13.33	53,830	Minor	C2	4/18/2011	15.07	67,400	Moderate	none
11/21/2003	14.57	62,400	Minor	C2	12/9/2011	15.51	68,600	Moderate	none
12/12/2003	13.54	53,723	Minor	C2	3/3/2012	13.24	51,400	Minor	none
2/8/2004	12.61	46,496	Minor	C2	3/26/2012	13.63	41,400	Minor	none
4/15/2004	13.36	52,292	Minor	C2	5/16/2012	12.58	33,100	Minor	none
9/10/2004	12.81	48,000	Minor	C2	1/18/2013	12.64	33,500	Minor	none
10/1/2004	15.5	72,000	Moderate	C2	2/2/2013	14.95	53,100	Minor	none
1/15/2005	14.4	60,800	Minor	C2	5/10/2013	15	66,700	Moderate	none
3/30/2005	12.17	43,200	Minor	C2	5/1/2014	14.92	65,800	Minor	none
12/1/2005	14.36	60,500	Minor	C2	5/17/2014	15.36	70,500	Moderate	none
6/29/2006	15.81	75,500	Moderate	C2	3/7/2015	12.71	47,300	Minor	none
10/8/2006	15.42	71,100	Moderate	C2	4/22/2015	12.18	43,300	Minor	none
11/18/2006	13.63	54,500	Minor	C2	2/5/2016	12.02	42,100	Minor	none
3/4/2007	12.22	43,600	Minor	C2	2/25/2016	13.4	52,600	Minor	none
3/18/2007	12.92	48,900	Minor	C2	6/26/2016	12.17	43,200	Minor	none

Data represent all historical events.

James Basin

County of Gage: Henrico County of Forecast Point: Independent City

Date of Flood	Crest (ft)	Streamflow (cfs)	Category	Code
5/7/2017	13.92	56,800	Minor	none
5/27/2017	14.27	59,700	Minor	none
2/12/2018	15.4	70,900	Moderate	none
4/18/2018	13.64	54,500	Minor	none
5/20/2018	14.67	63,300	Minor	none
9/19/2018	15.12	67,900	Moderate	none
9/30/2018	13.7	55,000	Minor	none
10/13/2018	15.02	66,900	Moderate	none
11/17/2018	14.22	59,300	Minor	none
12/17/2018	13.78	55,700	Minor	none
12/22/2018	15.15	68,200	Moderate	none
12/29/2018	12.57	46,200	Minor	none
2/25/2019	16.22	80,300	Moderate	none
3/22/2019	12.78	47,800	Minor	none
4/22/2019	12.35	44,600	Minor	none

Date of Flood Crest (ft) Streamflow (cfs)

Category

Code

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.
- 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.
- 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.
- 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

Drainage Area: 6753 square miles Gage Datum: 98.82 ft MSL

Data represent all historical events.

James Basin

County of Gage: Henrico

County of Forecast Point: Independent City