

POTOMAC RIVER BASIN

01636500 SHENANDOAH RIVER AT MILLVILLE, WV

LOCATION.--Lat 39°16'55", long 77°47'22", Jefferson County, Hydrologic Unit 02070007, on left bank 0.4 mi downstream from Cattail Run, 1.0 mi upstream from Millville, 5.0 mi upstream from Harpers Ferry, and at mile 4.7.

DRAINAGE AREA.--3,022 mi².

PERIOD OF RECORD.--April 1895 to March 1909, August 1928 to current year.

REVISED RECORDS.--WSP 951: 1936(M). WSP 1432: Drainage area at former site, 1895-99, 1901-02, 1905, 1907-08, 1932(M), 1935(M). WDR WV-97-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 293.00 ft above sea level. Apr. 15, 1895, to Mar. 31, 1909, nonrecording gage at site 0.8 mi downstream at datum 0.32 ft higher.

REMARKS.--Records good except those for periods of estimated daily discharges (ice effect), which are fair. Some regulation by upstream hydroelectric plants, including that of Potomac Light and Power Company, 0.5 mi upstream from station. National Weather Service gage-height telemeter and U.S. Army Corps of Engineers satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1870 reached practically same stage as flood of Mar. 18, 1936, 26.36 ft, discharge, 151,000 ft³/s.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 15,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage Height (ft)	Date	Time	Discharge (ft ³ /s)	Gage Height (ft)
Sept. 8	1500	*12,100	*7.98	No peak greater than base discharge.			

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	693	652	643	e590	1780	1360	2360	1190	1020	463	493	483
2	665	650	652	e600	1710	1330	2260	1160	990	448	435	390
3	660	639	658	760	1640	1320	2180	1160	940	479	418	342
4	668	653	646	712	1580	1750	2190	1190	939	481	448	311
5	678	684	649	924	1630	2130	2170	1120	852	519	410	401
6	669	688	636	1200	1660	1940	2040	1120	844	511	389	436
7	679	684	628	1280	1580	1870	1950	1080	821	469	378	1890
8	768	696	631	1480	1520	1770	1860	1180	824	433	379	9650
9	791	696	708	1220	1440	1690	1800	1240	860	405	328	6720
10	768	665	800	1080	1430	1700	1800	1360	799	376	295	4270
11	771	687	832	1330	1390	1690	1870	1700	729	378	248	3070
12	804	719	841	1240	1340	1640	1980	1920	658	340	253	2310
13	881	672	937	1890	1300	1690	2050	1640	620	397	251	1890
14	816	683	874	1790	1240	1850	1900	1500	629	412	269	1530
15	779	719	833	1770	1170	1960	1800	1360	609	410	280	1420
16	734	700	804	1810	1130	2230	1730	1370	559	411	337	1750
17	709	678	832	1670	1180	3050	1680	1600	545	399	353	3840
18	696	693	875	2030	1230	4600	1610	1820	550	394	299	3960
19	684	689	844	2250	1370	7670	1540	1740	551	448	294	3130
20	665	682	804	1950	1520	8110	1500	1590	539	424	397	2440
21	659	661	746	1710	1820	6270	1460	1440	516	410	393	2010
22	657	652	716	1900	1860	5970	1460	1370	477	380	330	2460
23	646	643	680	2240	1790	6890	1470	1320	463	386	372	4190
24	643	627	679	3080	1650	6050	1580	1410	422	389	378	3460
25	652	654	687	4330	1540	4990	1490	1420	361	844	408	2700
26	651	671	669	5340	1470	4370	1460	1420	362	527	628	2050
27	641	666	647	4440	1430	3810	1440	1360	345	385	649	1640
28	646	657	635	3450	1400	3300	1400	1240	498	382	556	1560
29	661	639	e620	2730	---	3010	1320	1120	487	460	466	1520
30	653	652	e610	2290	---	2760	1250	1040	478	454	478	4830
31	652	---	e600	1960	---	2500	---	1020	---	447	532	---
TOTAL	21739	20151	22416	61046	41800	101270	52600	42200	19287	13661	12144	76653
MEAN	701	672	723	1969	1493	3267	1753	1361	643	441	392	2555
MAX	881	719	937	5340	1860	8110	2360	1920	1020	844	649	9650
MIN	641	627	600	590	1130	1320	1250	1020	345	340	248	311
CFSM	.23	.22	.24	.65	.49	1.08	.58	.45	.21	.15	.13	.85
IN.	.27	.25	.28	.75	.51	1.25	.65	.52	.24	.17	.15	.94

e Estimated

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01636500 SHENANDOAH RIVER AT MILLVILLE, WV--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1939	1868	2490	3277	3959	5080	4378	3363	2397	1447	1632	1471
MAX	16250	13350	8164	13470	18100	17540	12840	8701	10380	4809	10390	14780
(WY)	1943	1986	1973	1996	1998	1936	1901	1901	1972	1972	1955	1996
MIN	343	388	410	503	542	929	992	1001	643	402	388	411
(WY)	1931	1932	1966	1966	1931	1931	1981	1969	1999	1966	1930	1963

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1895 - 1999
ANNUAL TOTAL	1773486	484967	
ANNUAL MEAN	4859	1329	2769
HIGHEST ANNUAL MEAN			5618
LOWEST ANNUAL MEAN			1111
HIGHEST DAILY MEAN	44400	Feb 19	9650
LOWEST DAILY MEAN	(e)600	Dec 31	248
ANNUAL SEVEN-DAY MINIMUM	638	Dec 25	275
INSTANTANEOUS PEAK FLOW			12100
INSTANTANEOUS PEAK STAGE			7.98
INSTANTANEOUS LOW FLOW			233
ANNUAL RUNOFF (CFSM)	1.61	.44	.92
ANNUAL RUNOFF (INCHES)	21.83	5.97	12.45
10 PERCENT EXCEEDS	12300	2300	5600
50 PERCENT EXCEEDS	1810	844	1620
90 PERCENT EXCEEDS	661	400	610

- a From floodmarks.
- b Aug. 12-14.
- e Estimated.

