

POTOMAC RIVER BASIN

01634000 NORTH FORK SHENANDOAH RIVER NEAR STRASBURG, VA

LOCATION.--Lat 38°58'36", long 78°20'11", Warren County, Hydrologic Unit 02070006, on right bank at downstream side of bridge on State Highway 55, 1.5 mi southeast of Strasburg, 2.2 mi upstream from Cedar Creek, and 10 mi upstream from confluence with South Fork.

DRAINAGE AREA.--768 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1925 to current year.

REVISED RECORDS.--WSP 951: 1936(M). WSP 1001: 1931. WSP 1171: 1929(M), 1933(M), 1936-37. WSP 1302: 1928(M), 1930(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 494.03 ft above sea level. Prior to Sep. 21, 1930, nonrecording gage at same site and datum.

REMARKS.--Records good. Large diurnal fluctuation at low and medium flow from unknown cause. Water-level elevations at the site were affected during the 1992-93 water years by construction of a new bridge about 50 ft downstream from the gage. National Weather Service gage-height telemeter at station. Maximum discharge, 114,000 ft³/s, from rating curve extended above 46,000 ft³/s. Minimum gage height, 1.52 ft, Feb. 9, 1934. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1870, that of Sep. 7, 1996.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 7	1730	*3,700	*6.69	No peak greater than base discharge.			

Minimum discharge, 48 ft³/s, Jul 4-6, 11, 13, 15, 16, 17-21, gage height, 1.56 ft.

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	127	101	99	101	284	206	405	200	149	73	55	126
2	123	100	97	147	272	201	394	195	125	73	55	108
3	121	102	96	178	261	204	394	191	105	66	55	102
4	131	104	99	146	260	237	368	192	101	53	55	100
5	127	101	99	142	246	257	348	183	113	50	55	170
6	126	102	98	e150	231	269	332	187	110	53	54	422
7	113	102	100	149	222	247	310	185	108	61	54	2950
8	83	102	104	115	217	234	295	209	105	58	54	2440
9	91	102	118	135	209	241	286	246	88	54	55	1190
10	87	102	107	150	205	264	282	518	86	54	55	714
11	113	104	99	130	198	275	309	377	78	52	53	495
12	126	105	118	249	194	274	308	308	73	52	51	380
13	115	102	124	185	189	279	306	267	73	52	53	296
14	112	102	106	388	184	303	285	238	73	53	62	247
15	105	101	97	376	181	381	273	226	73	52	70	223
16	103	101	99	359	167	502	266	260	73	52	73	521
17	104	102	107	302	175	669	263	309	81	51	63	622
18	96	106	113	298	197	1870	255	269	82	51	60	558
19	93	107	110	277	200	2800	242	246	74	50	58	376
20	91	102	92	286	276	1850	235	225	72	50	65	322
21	89	99	84	309	291	1300	233	207	72	50	78	329
22	93	98	85	421	273	1390	236	203	71	55	75	566
23	103	96	84	747	253	1480	240	244	68	70	132	721
24	103	97	87	833	237	1180	238	264	65	76	135	563
25	103	98	86	1590	230	964	227	284	65	62	142	438
26	103	98	95	1110	224	796	231	253	66	59	123	358
27	101	98	108	714	215	676	223	219	68	55	106	308
28	98	98	94	532	213	597	215	194	74	55	154	280
29	98	98	95	431	---	535	208	179	73	54	204	293
30	99	99	94	365	---	477	204	176	73	55	184	675
31	100	---	94	316	---	431	---	167	---	55	148	---
TOTAL	3277	3029	3088	11631	6304	21389	8411	7421	2537	1756	2636	16893
MEAN	106	101	99.6	375	225	690	280	239	84.6	56.6	85.0	563
MAX	131	107	124	1590	291	2800	405	518	149	76	204	2950
MIN	83	96	84	101	167	201	204	167	65	50	51	100
CFSM	.14	.13	.13	.49	.29	.90	.37	.31	.11	.07	.11	.73
IN.	.16	.15	.15	.56	.31	1.04	.41	.36	.12	.09	.13	.82

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	402	420	536	702	879	1155	975	762	469	296	355	324
MAX	3488	2813	1955	3394	3466	5017	2876	1821	2234	1169	2510	3838
(WY)	1943	1986	1973	1996	1998	1936	1993	1988	1972	1949	1955	1996
MIN	58.9	75.8	82.0	86.4	94.0	183	182	154	84.6	56.6	66.7	67.1
(WY)	1931	1931	1932	1966	1931	1931	1981	1969	1999	1999	1930	1986

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1925 - 1999
ANNUAL TOTAL	357064	88372	
ANNUAL MEAN	978	242	606
HIGHEST ANNUAL MEAN			1360
LOWEST ANNUAL MEAN			226
HIGHEST DAILY MEAN	10300	Jan 9	2950
LOWEST DAILY MEAN	83	Oct 8	50
ANNUAL SEVEN-DAY MINIMUM	88	Dec 20	51
INSTANTANEOUS PEAK FLOW			3700
INSTANTANEOUS PEAK STAGE			6.69
INSTANTANEOUS LOW FLOW			48
ANNUAL RUNOFF (CFSM)	1.27		.32
ANNUAL RUNOFF (INCHES)	17.30		4.28
10 PERCENT EXCEEDS	2680		431
50 PERCENT EXCEEDS	298		131
90 PERCENT EXCEEDS	99		58

- a Also Jul 19-21, 1999.
- b Also Sep 14, 18, 1986.
- c Also Jul 5-6, 11, 13, 15-21, 1999.
- e Estimated.

