

POTOMAC RIVER BASIN

01628500 SOUTH FORK SHENANDOAH RIVER NEAR LYNNWOOD, VA

LOCATION.--Lat 38°19'21", long 78°45'18", Rockingham County, Hydrologic Unit 02070005, on left bank 1.2 mi north- east of Lynnwood and 3.3 mi downstream from confluence of North and South Rivers.

DRAINAGE AREA.--1,084 mi².

PERIOD OF RECORD.--September 1930 to current year.

REVISED RECORDS.--WSP 1171: 1933(M). WSP 2103: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,013.17 ft above sea level.

REMARKS.--Records good except for period with ice effect, Jan. 6, which is fair. Diurnal fluctuation at low flow prior to 1960 caused by mill at Lynnwood and since by irrigation. National Weather Service rain gage and gage-height telemeters and Virginia Department of Emergency Services gage-height radio transmitter at station. Maximum discharge, 107,000 ft³/s, from rating curve extended above 22,000 ft³/s on basis of computations of flow over dam at gage heights 23.60 ft and 27.2 ft. Minimum gage height, 1.63 ft, Sep. 20, 1932. Several measurements of water temperature were made during the year. Water-quality records for some prior periods have been collected at this location.

COOPERATION.--Records were provided by the Virginia Department of Environmental Quality - Water Division.

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 7,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 30	1130	*6.040	*8.21	No peak greater than base discharge.			

Minimum discharge, 121 ft³/s, Jul 7.

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	279	263	241	212	553	502	763	380	354	159	247	139
2	272	262	236	213	617	472	798	373	350	155	222	138
3	270	280	230	318	764	456	718	368	343	147	199	136
4	283	299	231	542	712	480	675	368	324	140	182	136
5	289	281	234	408	659	475	661	363	313	137	171	516
6	290	270	235	e330	612	460	615	362	301	131	164	2100
7	289	263	230	315	581	463	588	360	297	147	152	2990
8	347	265	248	298	579	460	563	543	290	184	147	1970
9	414	262	381	329	549	485	549	911	271	158	157	1270
10	333	262	332	904	518	535	536	815	259	140	155	1170
11	306	263	277	552	490	539	523	689	248	145	149	737
12	296	269	250	427	477	522	529	612	242	159	137	568
13	291	266	269	537	463	507	503	570	241	204	132	476
14	286	265	324	511	444	530	477	720	249	205	204	419
15	282	261	292	571	434	750	469	1060	244	183	207	398
16	283	255	270	757	425	905	488	940	225	163	163	589
17	280	254	252	620	419	1490	467	873	236	152	159	822
18	274	247	243	542	598	2790	443	789	273	145	148	593
19	273	244	235	578	801	2810	428	718	246	151	135	490
20	272	248	234	542	774	2190	424	648	229	158	193	454
21	265	253	229	495	706	1930	421	574	257	162	279	634
22	265	248	230	457	647	2420	424	550	248	188	226	683
23	264	243	225	449	599	1980	423	594	227	224	177	544
24	264	245	233	1210	571	1710	444	605	211	198	177	464
25	265	236	234	2030	548	1470	414	570	194	264	183	417
26	264	238	230	1520	525	1260	394	500	184	224	211	391
27	264	247	218	1100	498	1110	391	452	181	197	200	370
28	262	236	233	895	494	1010	386	427	179	189	190	470
29	261	239	233	768	---	914	391	404	175	271	168	659
30	259	239	229	670	---	848	394	384	155	258	154	4040
31	263	---	226	597	---	771	---	372	---	210	144	---
TOTAL	8805	7703	7764	19697	16057	33244	15299	17894	7546	5548	5532	24783
MEAN	284	257	250	635	573	1072	510	577	252	179	178	826
MAX	414	299	381	2030	801	2810	798	1060	354	271	279	4040
MIN	259	236	218	212	419	456	386	360	155	131	132	136
CFSM	.26	.24	.23	.59	.53	.99	.47	.53	.23	.17	.16	.76
IN.	.30	.26	.27	.68	.55	1.14	.53	.61	.26	.19	.19	.85

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	726	779	952	1266	1464	1891	1572	1205	864	547	616	624
MAX	4172	6886	3302	4904	6939	5785	5454	3086	3656	2013	2895	5822
(WY)	1943	1986	1949	1996	1998	1936	1987	1989	1972	1949	1940	1996
MIN	122	150	156	154	203	360	317	362	245	162	166	173
(WY)	1931	1931	1966	1966	1931	1981	1981	1977	1956	1966	1932	1964

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1931 - 1999

ANNUAL TOTAL	673366	169872	
ANNUAL MEAN	1845	465	1040
HIGHEST ANNUAL MEAN			2020
LOWEST ANNUAL MEAN			397
HIGHEST DAILY MEAN	21100	Feb 18	4040 Sep 30
LOWEST DAILY MEAN	218	Dec 27	100 Oct 13 1930
ANNUAL SEVEN-DAY MINIMUM	228	Dec 21	145 Aug 29
INSTANTANEOUS PEAK FLOW			6040 Sep 30
INSTANTANEOUS PEAK STAGE			8.21 Sep 30
INSTANTANEOUS LOW FLOW			121 Jul 7
ANNUAL RUNOFF (CFSM)	1.70	.43	.96
ANNUAL RUNOFF (INCHES)	23.11	5.83	13.03
10 PERCENT EXCEEDS	4790	780	2130
50 PERCENT EXCEEDS	675	318	600
90 PERCENT EXCEEDS	253	166	238

- a From high-water mark in gage house.
- b Result of regulation.
- e Estimated.

