

POTOMAC RIVER BASIN

01629500 SOUTH FORK SHENANDOAH RIVER NEAR LURAY, VA

LOCATION.--Lat 38°38'46", long 78°32'06", Page County, Hydrologic Unit 02070005, on right bank between bridges on U.S. Highway 211, 1.2 mi downstream from Big Run, 2.2 mi upstream from Mill Creek, and 4.1 mi west of Luray.

DRAINAGE AREA.--1,377 mi<sup>2</sup>.

PERIOD OF RECORD.--April 1925 to September 1930, October 1938 to September 1951, June 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is 721.76 ft above sea level. April 1925 to September 1930, nonrecording gage at same site and datum.

REMARKS.--Records good except for period with ice effect, Jan. 6, which is fair. Diurnal fluctuation at low and medium flow caused by powerplant 10 mi upstream from station. Virginia Department of Emergency Services and National Weather Service gage-height transmitters at station. Maximum discharge, 112,000 ft<sup>3</sup>/s, from rating curve extended above 86,300 ft<sup>3</sup>/s. Minimum gage height, 1.88 ft, Sep. 2, 1999. 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.--Flood of Mar. 18, 1936, reached a stage of 23.6 ft, from floodmarks, discharge, 81,600 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 8,000 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sep 30	2000	*9,760	*8.26	No other peak greater than base discharge.			

Minimum discharge, 155 ft<sup>3</sup>/s, Sep 2.

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	359	341	350	315	693	600	979	515	460	251	258	283
2	350	355	355	301	685	587	1040	496	437	246	249	291
3	340	367	335	416	806	559	1010	489	416	256	277	253
4	346	377	319	612	882	652	934	487	405	257	243	274
5	354	384	313	678	790	665	902	486	392	233	227	530
6	360	373	324	e430	743	646	861	482	387	227	219	2560
7	364	346	332	418	697	626	809	474	376	205	205	4790
8	404	353	349	427	679	606	770	520	372	212	204	3530
9	453	358	412	409	657	616	746	726	368	234	209	2380
10	505	352	511	491	613	629	748	985	358	235	207	1940
11	430	359	447	1040	582	659	734	840	352	209	207	1420
12	401	367	374	588	553	664	724	736	344	216	204	957
13	383	358	375	522	542	647	711	655	308	228	205	748
14	374	348	389	632	520	658	674	701	304	241	212	653
15	368	360	435	633	500	810	647	957	296	268	225	631
16	357	361	396	759	501	1110	642	1060	298	246	293	1260
17	356	349	372	856	485	1660	645	985	302	228	247	1440
18	365	351	350	732	601	3500	627	904	301	216	231	1240
19	365	341	335	683	967	4270	604	807	312	212	233	909
20	354	345	332	691	1010	3360	590	753	312	205	256	818
21	350	338	333	647	941	2800	584	666	306	226	255	1650
22	345	351	331	596	856	3720	581	644	314	257	343	1590
23	342	358	321	577	756	3160	582	665	316	240	368	1310
24	335	349	320	1650	698	2610	601	679	302	251	296	951
25	345	347	326	3130	673	2200	598	662	285	262	298	757
26	352	340	327	2480	635	1820	566	611	275	270	320	679
27	347	350	322	1700	610	1570	539	569	265	276	369	634
28	352	347	315	1280	596	1400	528	517	266	250	361	623
29	346	350	322	1030	---	1280	519	500	261	251	348	893
30	343	362	328	878	---	1140	516	479	260	265	311	7030
31	332	---	319	769	---	1050	---	465	---	300	283	---
TOTAL	11377	10637	10969	26370	19271	46274	21011	20515	9950	7473	8163	43024
MEAN	367	355	354	851	688	1493	700	662	332	241	263	1434
MAX	505	384	511	3130	1010	4270	1040	1060	460	300	369	7030
MIN	332	338	313	301	485	559	516	465	260	205	204	253
CFSM	.27	.26	.26	.62	.50	1.08	.51	.48	.24	.18	.19	1.04
IN.	.31	.29	.30	.71	.52	1.25	.57	.55	.27	.20	.22	1.16

01629500 SOUTH FORK SHENANDOAH RIVER NEAR LURAY, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1926 - 1930, 1939 - 1951, 1980 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	1029	1144	1329	1647	2056	2292	2158	1674	1222	757	859	1018
MAX	6332	8783	3821	6490	9892	7143	7412	4449	3418	2460	3637	8043
(WY)	1943	1986	1949	1996	1998	1993	1987	1989	1949	1949	1940	1996
MIN	271	254	351	260	574	548	452	499	332	241	258	257
(WY)	1942	1942	1944	1981	1944	1981	1981	1930	1999	1999	1930	1930

SUMMARY STATISTICS FOR 1998 CALENDAR YEAR FOR 1999 WATER YEAR WATER YEARS 1926 - 1930  
1939 - 1951  
1980 - 1999

ANNUAL TOTAL	917941	235034	
ANNUAL MEAN	2515	644	1420
HIGHEST ANNUAL MEAN			2707
LOWEST ANNUAL MEAN			580
HIGHEST DAILY MEAN	31600	Feb 18	7030
LOWEST DAILY MEAN	313	Dec 5	204
ANNUAL SEVEN-DAY MINIMUM	322	Dec 23	206
INSTANTANEOUS PEAK FLOW			9760
INSTANTANEOUS PEAK STAGE			8.26
INSTANTANEOUS LOW FLOW			b155
ANNUAL RUNOFF (CFSM)	1.83	.47	1.03
ANNUAL RUNOFF (INCHES)	24.80	6.35	14.01
10 PERCENT EXCEEDS	6940	1040	2820
50 PERCENT EXCEEDS	831	416	850
90 PERCENT EXCEEDS	348	251	360

- a Also Aug 12, 1999.
- b Result of regulation.
- c Also Sep 16, 1925; data were collected for only part of the 1925 water year.
- e Estimated.

