01628500 SOUTH FORK SHENANDOAH RIVER NEAR LYNNWOOD, VA

Potomac Basin
South Fork Shenandoah Subbasin

LOCATION.--Lat 38°19′21″, long 78°45′18″ referenced to North American Datum of 1927, Rockingham County, VA, Hydrologic Unit 02070005, on left bank 1.2 mi northeast of Lynnwood and 3.3 mi downstream from confluence of North and South Rivers.

DRAINAGE AREA.--1,079 mi^2.

SURFACE-WATER RECORDS

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

REVISED RECORDS.--WSP 1171: 1933(M). OFR 2006-1308: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,013.17 ft NGVD of 1929.

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

REMARKS.--Records good except those for estimated daily discharges, which are 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 ft^3/s, from rating curve extended above 22,000 ft^3/s on basis of computations of flow over dam at gage heights 23.60 ft and 27.2 ft. 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 Sept. 7, 1996.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 7,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct 7	2245	12,800	12.35
Nov 17	0045	*19,100	*14.79
Mar 2	1900	9,720	10.73
Mar 17	0330	7,160	9.02
Apr 16	0400	9,390	10.52

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	411	1,270	1,430	1,870	757	1,550	1,800	1,180	706	459	332	385
2	413	1,210	1,360	2,260	753	6,550	1,640	1,150	711	415	310	368
3	383	1,110	1,250	1,870	745	6,490	1,440	1,340	624	400	291	296
4	361	1,010	1,170	1,660	e700	3,880	1,310	1,230	805	410	286	282
5	355	946	1,110	1,650	e650	2,900	1,230	1,130	761	387	291	275
6	1,610	895	1,070	2,150	611	2,320	1,130	1,080	701	377	351	270
7	7,240	872	1,030	1,890	706	1,920	1,080	1,020	634	364	352	257
8	8,630	2,550	994	3,260	662	1,650	1,040	967	595	339	325	252
9	4,370	3,600	946	3,830	649	1,440	994	934	588	331	296	249
10	2,810	2,730	919	2,990	634	1,290	952	912	559	319	367	254
11	2,090	2,150	901	2,380	615	1,210	927	896	526	310	411	383
12	1,860	2,310	874	2,020	617	1,130	1,250	925	505	337	318	372
13	1,550	2,220	857	1,780	624	1,100	1,610	954	512	346	285	303
14	1,280	1,860	854	1,590	992	1,050	1,520	924	533	320	273	276
15	1,120	1,680	836	1,440	1,420	1,050	3,630	854	524	299	258	341
16	1,030	5,180	809	1,320	929	2,950	8,130	807	502	300	245	316
17	1,010	13,400	785	1,210	845	5,990	4,860	792	485	352	289	275
18	1,280	6,430	771	1,110	798	3,950	3,400	825	467	353	329	260
19	1,240	4,180	753	1,070	762	3,040	2,680	815	457	322	260	252
20	1,160	3,130	734	1,030	917	2,580	2,210	750	561	294	274	245
21	1,090	2,470	715	992	1,430	2,370	1,840	708	477	286	385	240
22	1,010	2,090	732	999	1,370	2,270	1,590	671	449	272	436	237
23	959	4,690	1,220	1,010	1,170	2,120	1,420	645	426	274	332	233
24	901	3,860	1,730	968	1,070	1,880	1,300	623	413	269	310	226
25	857	3,000	1,520	920	1,100	1,680	1,220	608	410	277	365	224
26	810	2,500	1,870	877	1,390	1,500	1,150	599	438	274	597	219
27	789	2,140	1,780	851	1,510	1,370	1,340	581	477	275	602	217
28	1,220	1,880	1,580	850	1,480	1,290	1,350	579	434	352	398	218
29	2,060	1,660	1,390	820	---	2,430	1,290	571	435	295	342	213
30	1,760	1,520	1,240	789	---	2,710	1,230	549	509	511	314	210
31	1,470	---	1,140	769	---	2,100	---	529	---	386	316	---
Total	53,129	84,543	34,370	48,225	25,906	75,760	56,563	26,148	16,224	10,505	10,540	8,148
Mean	1,714	2,818	1,109	1,556	925	2,444	1,885	843	541	339	340	272
Max	8,630	13,400	1,870	3,830	1,510	6,550	8,130	1,340	805	511	602	385
Min	355	872	715	769	611	1,050	927	529	410	269	245	210
Cfsm	1.59	2.61	1.03	1.44	0.86	2.26	1.75	0.78	0.50	0.31	0.32	0.25
In.	1.83	2.91	1.18	1.66	0.89	2.61	1.95	0.90	0.56	0.36	0.36	0.28

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	728	825	977	1,232	1,421	1,842	1,566	1,184	876	549	597	680
Max	4,172	6,886	3,302	4,904	6,939	5,785	5,454	3,086	3,656	2,013	2,895	5,822
(WY)	(1943)	(1986)	(1949)	(1996)	(1998)	(1936)	(1987)	(1989)	(1972)	(1949)	(1940)	(1996)
Min	122	150	156	154	168	333	317	362	215	155	137	142
(WY)	(1931)	(1931)	(1966)	(1966)	(2002)	(2002)	(1981)	(1977)	(2002)	(2002)	(2002)	(2002)

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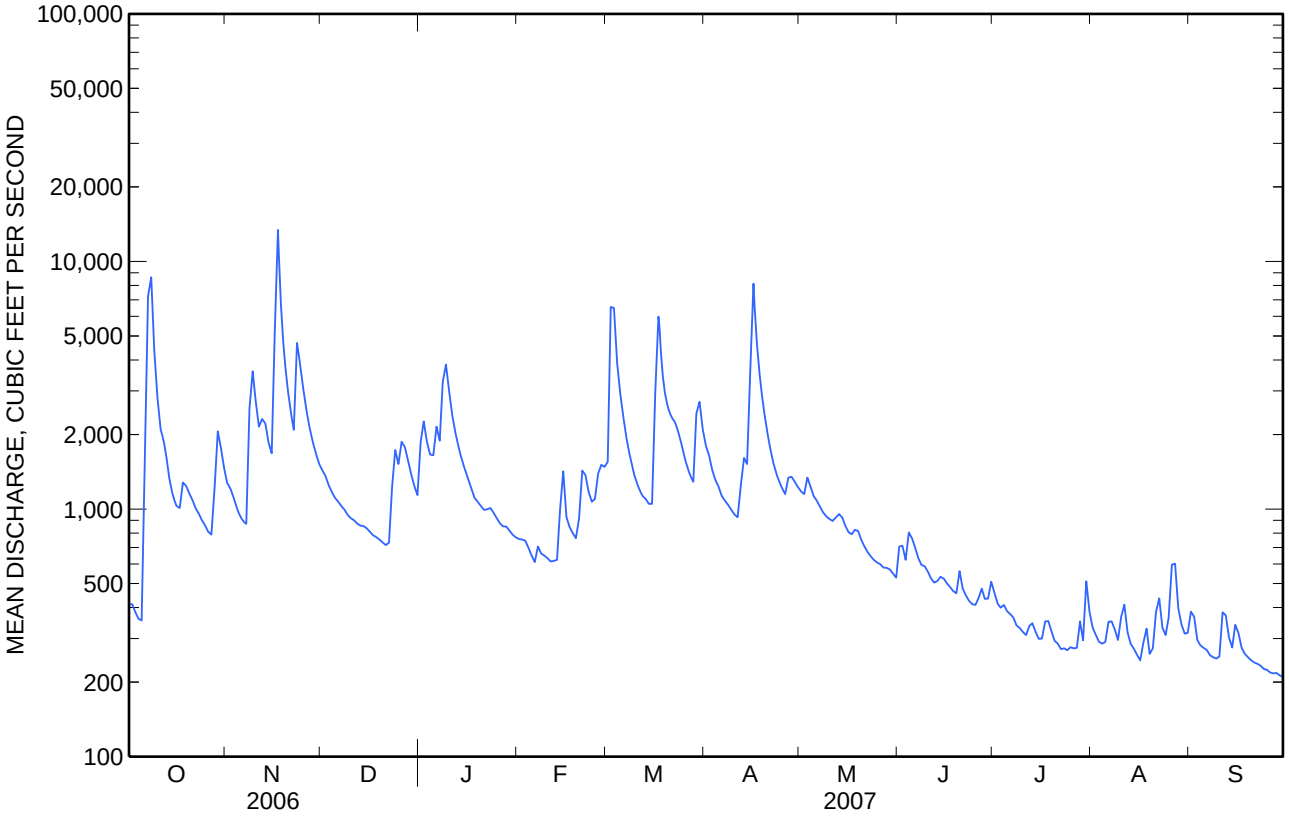
SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1931 - 2007	
Annual total	412,664		450,061			
Annual mean	1,131		1,233		1,037	
Highest annual mean					2,020	1996
Lowest annual mean					306	2002
Highest daily mean	13,400	Nov 17	13,400	Nov 17	[a]63,500	Sep 7, 1996
Lowest daily mean	209	Jun 22	210	Sep 30	84	Jul 7, 2002[b]
Annual seven-day minimum	226	Aug 22	218	Sep 24	90	Aug 21, 2002
Maximum peak flow			19,100	Nov 17	107,000	Sep 7, 1996
Maximum peak stage			14.79	Nov 17	[c]30.84	Sep 7, 1996
Instantaneous low flow			204	Sep 29[d]	[e]32	Sep 20, 1932
Annual runoff (cfsm)	1.05		1.14		0.961	
Annual runoff (inches)	14.23		15.52		13.06	
10 percent exceeds	2,110		2,400		2,120	
50 percent exceeds	778		896		606	
90 percent exceeds	310		288		236	

[a] Estimated.
[b] Also Aug. 25, 2002.
[c] From high-water mark in gage house.
[d] Also Sept. 30, 2007.
[e] Result of regulation.