02072500 SMITH RIVER AT BASSETT, VA

LOCATION.--Lat 36°46'12", long 80°00'03", NAD83, Henry County, Hydrologic Unit 03010103, on left bank 25 ft upstream from bridge on State Highway 666 at north edge of North Bassett, 1.0 mi northwest of Bassett, 3.0 mi downstream from Town Creek, 5.6 mi upstream from Reed Creek, 6.2 mi downstream from Philpott Dam, and at mile 38.1.

DRAINAGE AREA.--259 mi^2.

PERIOD OF RECORD.--April 1939 to current year.

REVISED RECORDS.--WSP 2104: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 753.09 ft above sea level (levels by U.S. Army Corps of Engineers).

REMARKS.--No estimated daily discharges. Records good. Since August 1950, flow regulated by Philpott Lake (station 02071900) 6.2 mi upstream. Diversion upstream from station by Henry County Public Service Authority, since 1985, has averaged less than 1.0 ft^3/s. Statistics of monthly mean data and summary statistics for water years 1940 - 1950 (unregulated flow) are available in previous data books, water years 1991 - 1998. U.S. Army Corps of Engineers satellite gage-height telemeter at station. Minimum gage height, 1.06 ft, Sept. 18, 26, 1953. 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.--Flood of Oct. 19, 1937, reached a stage of about 22.9 ft, from information by local residents, discharge, 38,000 ft^3/s, from rating curve extended above 23,000 ft^3/s on basis of backwater studies and records for station at Martinsville.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	133	124	129	149	134	140	233	141	235	71	330	82
2	132	128	127	137	133	139	225	142	99	314	322	81
3	132	128	129	155	126	134	193	145	86	331	322	81
4	131	132	133	134	132	143	177	148	134	356	81	80
5	130	129	129	135	132	145	169	146	134	330	68	133
6	130	122	129	131	132	139	165	154	137	373	308	285
7	136	128	129	130	132	135	154	147	139	139	305	290
8	129	139	129	136	131	136	160	139	132	133	346	75
9	129	136	128	133	132	136	156	145	81	136	319	72
10	130	147	130	129	128	135	153	145	79	127	326	212
11	133	132	129	130	130	135	153	145	278	129	91	214
12	128	130	133	131	135	136	153	146	280	128	68	210
13	127	129	128	130	132	145	157	144	278	128	305	202
14	127	130	131	131	132	139	152	142	279	127	329	203
15	127	129	131	131	133	149	152	148	279	127	328	63
16	128	125	138	130	134	162	149	251	79	123	327	61
17	126	129	188	130	170	146	147	192	74	117	327	199
18	129	128	151	134	150	145	149	165	272	119	89	199
19	128	129	141	159	143	143	147	177	275	119	68	200
20	128	128	132	225	137	143	147	231	238	119	316	211
21	128	128	132	163	135	375	146	227	321	118	331	205
22	129	128	137	149	136	236	147	1040	299	116	325	65
23	128	128	125	141	136	179	145	296	118	116	322	63
24	128	129	131	138	139	163	145	405	79	115	345	231
25	128	141	128	136	145	159	145	295	276	118	95	220
26	128	151	127	134	145	157	145	760	283	124	67	204
27	128	135	131	133	140	152	143	745	280	132	304	202
28	130	132	131	132	141	150	142	741	277	87	333	202
29	128	131	129	133	---	203	141	246	276	86	325	62
30	132	130	128	140	---	401	142	302	76	327	161	62
31	127	---	148	137	---	199	---	291	---	330	77	---
TOTAL	4007	3935	4141	4336	3825	5199	4732	8541	5873	5215	7660	4669
MEAN	129	131	134	140	137	168	158	276	196	168	247	156
MAX	136	151	188	225	170	401	233	1040	321	373	346	290
MIN	126	122	125	129	126	134	141	139	74	71	67	61
(†)	-1690	-771	-348	+308	+494	+4870	+1880	+3280	-338	-1790	-4700	-2170
MEAN‡	75	105	122	150	154	325	220	381	184	110	95	83
CFSM‡	.29	.41	.47	.58	.59	1.25	.85	1.47	.71	.42	.37	.32
IN.‡	.33	.45	.54	.67	.62	1.45	.95	1.70	.79	.49	.42	.36

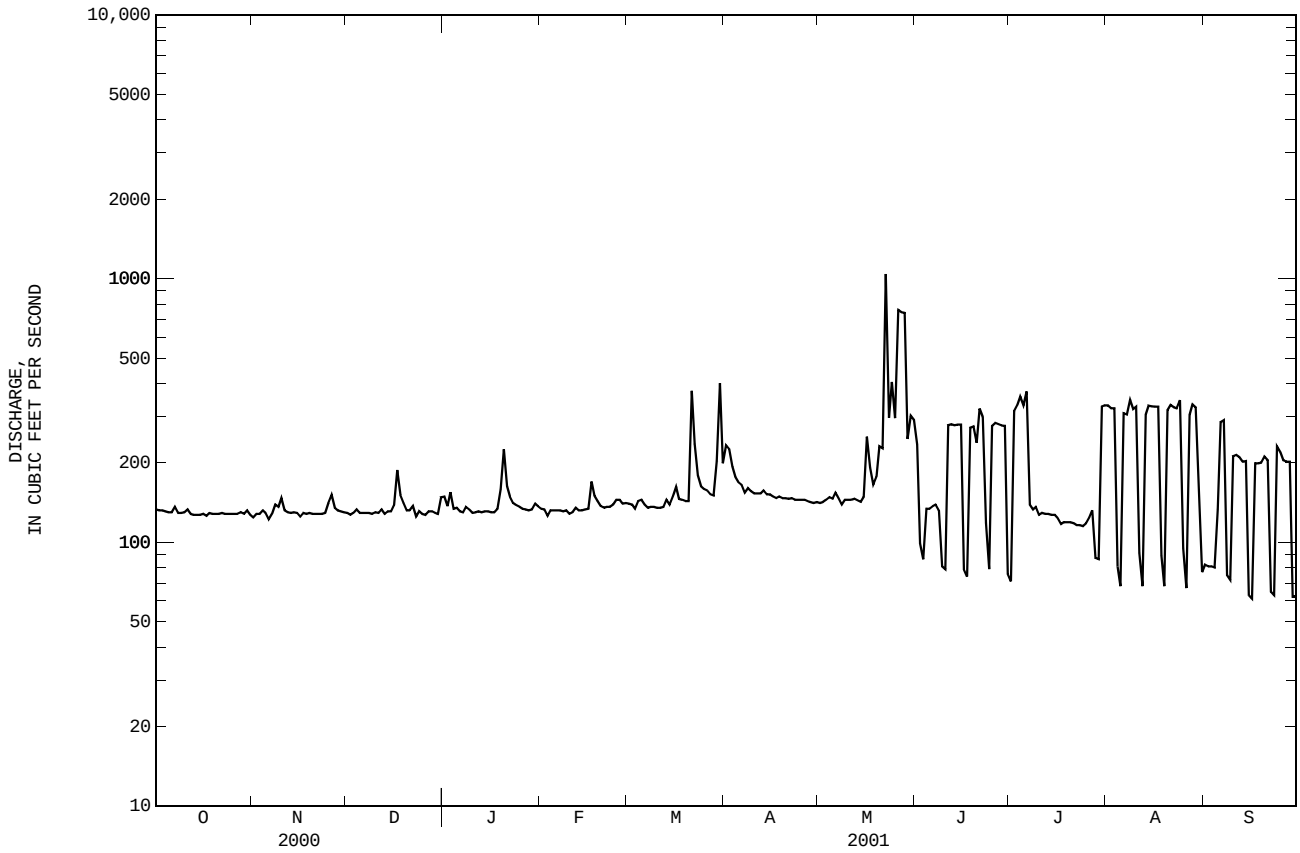
CAL YR 2000 MEAN‡ 174 CFSM‡ .67 IN.‡ 9.15
WTR YR 2001 MEAN‡ 167 CFSM‡ .64 IN.‡ 8.75

† Total change in contents, equivalent in cubic feet per second, per month,in Philpott Lake; provided by U.S. Army Corps of Engineers.
‡ Adjusted for monthly change in contents.

02072500 SMITH RIVER AT BASSETT, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	274	266	294	327	333	406	451	363	328	279	294	302
MAX	944	996	724	655	846	1197	1474	902	1004	759	568	912
(WY)	1990	1986	1997	1991	1998	1993	1987	1978	1992	1972	1994	1979
MIN	121	98.4	110	107	110	114	98.6	86.7	84.4	130	124	156
(WY)	1952	1953	1996	1989	1989	1982	1969	1964	1964	2000	1953	2001

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1951 - 2001	
ANNUAL TOTAL	52961		62133			
ANNUAL MEAN	145		170		326	
HIGHEST ANNUAL MEAN					523	1987
LOWEST ANNUAL MEAN					150	2000
HIGHEST DAILY MEAN	427	Mar 21	1040	May 22	6080	Apr 24 1992
LOWEST DAILY MEAN	73	aJan 8	61	Sep 16	44	Aug 23 1964
ANNUAL SEVEN-DAY MINIMUM	118	May 15	99	Aug 30	67	Oct 6 1980
MAXIMUM PEAK FLOW			3650	May 22	17700	Sep 7 1987
MAXIMUM PEAK STAGE			6.43	May 22	15.20	Sep 7 1987
INSTANTANEOUS LOW FLOW			50	bOct 10	19	Jul 19 1956
ANNUAL RUNOFF (CFSM)	.56		.66		1.26	
ANNUAL RUNOFF (INCHES)	7.61		8.92		17.11	
10 PERCENT EXCEEDS	183		303		717	
50 PERCENT EXCEEDS	136		136		243	
90 PERCENT EXCEEDS	124		118		76	

a Also Jan. 29, 2001.
b Also Sept. 13, 2001.