03167000 REED CREEK AT GRAHAMS FORGE, VA

LOCATION.--Lat 36°56'22", long 80°53'12", NAD83, Wythe County, Hydrologic Unit 05050001, on left bank 20 ft downstream from bridge on State Highway 619 at Grahams Forge, 2.2 mi downstream from Glade Creek, and at mile 7.3.

DRAINAGE AREA.--247 mi^2.

PERIOD OF RECORD.--July 1908 to September 1916, January 1927 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1235: 1912-13, 1915-16. WSP 1275: 1911, 1927-28(M), 1930-34(M). WSP 1705: 1913(M), 1916(M), 1957 calendar year runoff. WSP 1725: 1915 calendar year runoff. WDR VA-92-1: 1984-86(P), 1987, 1988-89(P), 1990-91.

GAGE.--Water-stage recorder. Datum of gage is 1,924.65 ft above sea level. Prior to Oct. 1, 1916, nonrecording gage at same site at datum 0.68 ft lower. Feb. 3, 1927, to Oct. 28, 1934, and June 11, 1974, to July 22, 1975, nonrecording gage, at present site and datum.

REMARKS.--Records good except those for periods with ice effect, Dec. 4-6 and Dec. 21 to Jan. 17, and periods of no gage-height record, June 14, Aug. 17-20, and Sept. 27-30, which are fair. Occasional diurnal fluctuation at low flow caused by mills upstream from station. Maximum discharge, 17,500 ft^3/s, from rating curve extended above 7,600 ft^3/s on basis of velocity-area study and slope-area measurement at gage heights 11.4 ft and 10.01 ft, respectively. Minimum discharge observed, about 5 ft^3/s, Dec. 22, 1909, gage height, 0.49 ft, present datum, result of freezeup. 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.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 22	0500	2,370	*5.42	Jul 30	1000	*4,730	5.91

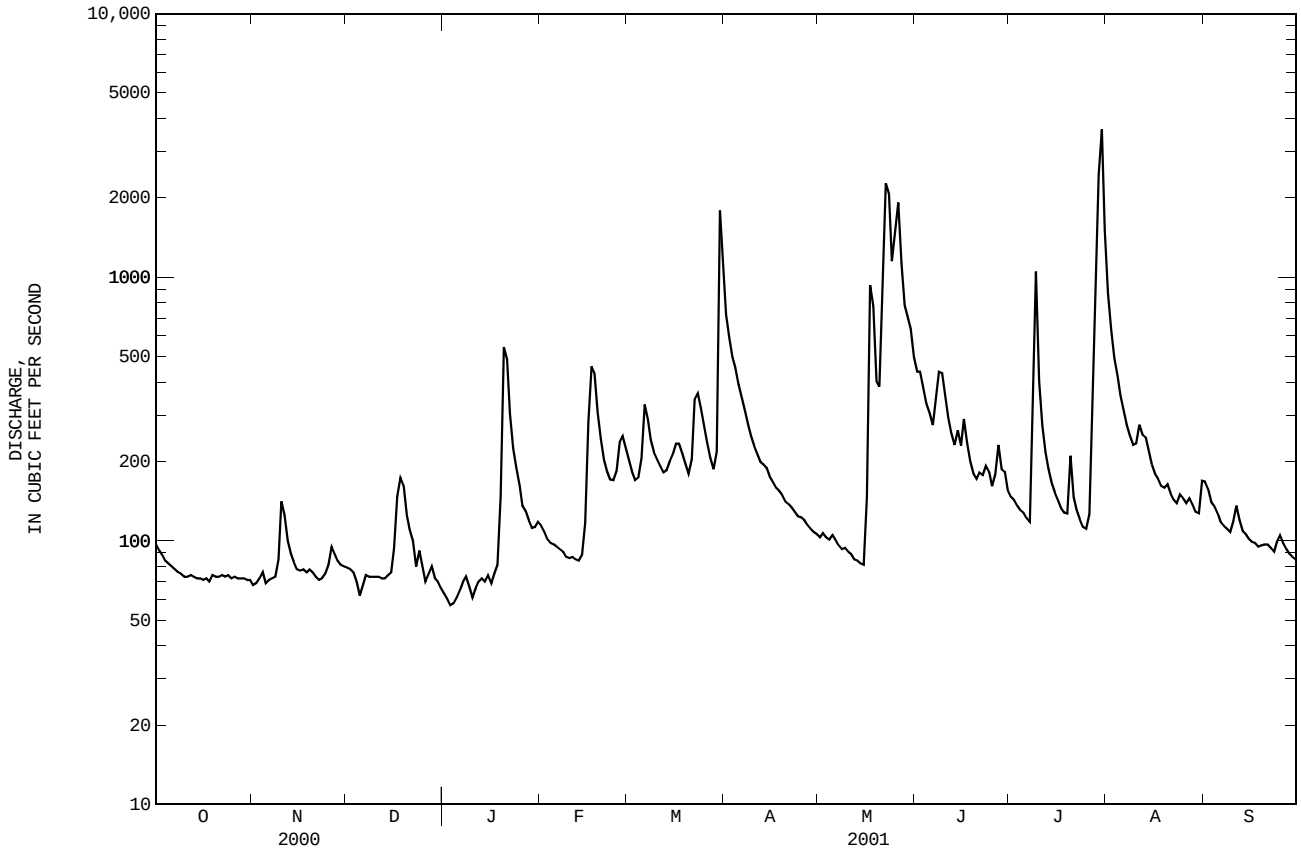
DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	97	68	79	e63	114	202	724	103	438	147	873	168
2	92	69	78	e60	108	182	591	107	438	143	635	157
3	88	72	76	e57	101	170	497	103	379	136	493	140
4	84	76	e70	e58	98	174	453	101	331	131	423	135
5	82	69	e62	e61	97	206	392	105	305	128	357	127
6	80	71	e68	e65	95	329	349	101	275	122	311	118
7	78	72	74	e70	93	288	312	96	349	118	274	114
8	76	73	73	e73	91	241	276	93	437	430	249	111
9	75	85	73	e67	87	217	250	94	432	1050	231	108
10	73	141	73	e61	86	204	229	91	353	404	234	118
11	73	125	73	e66	87	192	214	89	294	274	276	136
12	74	100	72	e70	85	182	199	85	255	217	253	120
13	73	89	72	e72	84	185	195	84	231	188	247	109
14	72	83	74	e70	88	200	189	82	e263	166	220	106
15	72	78	76	e74	117	213	175	81	230	153	195	102
16	71	77	94	e69	283	234	167	146	290	143	180	99
17	72	78	148	e75	458	234	159	932	236	133	e172	98
18	70	76	174	81	434	215	155	778	200	128	e161	95
19	74	78	162	148	307	196	149	404	180	127	e159	96
20	73	76	125	543	243	180	141	385	172	210	e164	97
21	73	73	e110	488	202	204	138	1080	182	146	151	97
22	74	71	e100	304	184	344	134	2270	178	131	143	94
23	73	72	e80	225	171	363	129	2070	193	121	139	91
24	74	75	e92	189	170	316	124	1150	183	113	150	99
25	72	81	e81	163	184	272	123	1500	161	111	145	105
26	73	95	e70	136	237	236	120	1920	179	126	139	98
27	72	89	e75	130	249	206	115	1130	231	341	145	e93
28	72	84	e80	120	225	187	111	783	187	1060	138	e89
29	72	81	e72	112	---	218	108	711	183	2440	129	e87
30	71	80	e70	113	---	1790	106	636	156	3630	127	e85
31	71	---	e66	118	---	1130	---	498	---	1510	169	---
TOTAL	2346	2457	2692	4001	4778	9510	7024	17808	7921	14277	7682	3292
MEAN	75.7	81.9	86.8	129	171	307	234	574	264	461	248	110
MAX	97	141	174	543	458	1790	724	2270	438	3630	873	168
MIN	70	68	62	57	84	170	106	81	156	111	127	85
CFSM	.31	.33	.35	.52	.69	1.24	.95	2.33	1.07	1.86	1.00	.44
IN.	.35	.37	.41	.60	.72	1.43	1.06	2.68	1.19	2.15	1.16	.50

03167000 REED CREEK AT GRAHAMS FORGE, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1916, 1927 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	139	160	238	351	456	505	416	325	209	159	140	116
MAX	626	606	790	911	1411	1406	1374	731	732	867	517	488
(WY)	1938	1930	1973	1936	1957	1955	1987	1958	1992	1916	1916	1989
MIN	45.3	50.7	59.9	61.2	63.5	120	100	91.4	74.6	63.5	60.5	51.4
(WY)	1942	1942	1942	1942	1934	1988	1942	1941	1941	1930	1930	1941

SUMMARY STATISTICS	**FOR 2000 CALENDAR YEAR**		**FOR 2001 WATER YEAR**		**WATER YEARS 1909 - 1916 1927 - 2001**	
ANNUAL TOTAL	57473		83788			
ANNUAL MEAN	157		230		267	
HIGHEST ANNUAL MEAN					424	1972
LOWEST ANNUAL MEAN					118	1941
HIGHEST DAILY MEAN	1500	Apr 18	3630	Jul 30	10600	Apr 5 1977
LOWEST DAILY MEAN	e48	Jan 28	e57	Jan 3	22	Jan 30 1934
ANNUAL SEVEN-DAY MINIMUM	e54	Jan 23	e61	Dec 31	33	Feb 24 1942
MAXIMUM PEAK FLOW			4730	Jul 30	17500	Jul 16 1916
MAXIMUM PEAK STAGE			5.91	Jul 30	a11.40	Jul 16 1916
INSTANTANEOUS LOW FLOW			(b)	(c)	d5.0	Dec 22 1909
ANNUAL RUNOFF (CFSM)	.64		.93		1.08	
ANNUAL RUNOFF (INCHES)	8.66		12.62		14.68	
10 PERCENT EXCEEDS	302		426		537	
50 PERCENT EXCEEDS	100		129		158	
90 PERCENT EXCEEDS	70		72		73	

a Present datum, from floodmarks.
b Not determined.
c Probably occurred Jan. 3, 2001, result of freezeup.
d Observed, result of freezeup.
e Estimated.