

KANAWHA RIVER BASIN

03167000 REED CREEK AT GRAHAMS FORGE, VA

LOCATION.--Lat 36°56'22", long 80°53'13", 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<sup>2</sup>.

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 for periods with ice effect, Jan. 4-7, which is fair. Occasional diurnal fluctuation at low flow caused by mills upstream from station. Maximum discharge, 17,500 ft<sup>3</sup>/s, from rating curve extended above 7,600 ft<sup>3</sup>/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<sup>3</sup>/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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,300 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)
May 14	2130	*1,960	*4.23	No peak greater than base discharge.			

Minimum discharge, 41 ft<sup>3</sup>/s, Sep 17-19, 26.

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	87	76	66	66	140	249	140	383	114	83	64	54
2	82	74	67	67	170	264	143	293	109	76	62	54
3	80	75	63	116	211	241	133	238	106	72	59	55
4	88	79	64	e135	201	282	127	202	99	69	58	52
5	92	77	65	e100	185	272	122	181	98	67	57	79
6	86	77	68	e86	165	314	118	167	96	66	55	165
7	87	72	67	e98	155	430	113	158	93	63	58	96
8	130	75	71	90	153	382	109	761	89	63	53	69
9	103	73	92	123	144	305	110	620	86	61	58	62
10	93	72	91	158	137	273	116	351	84	63	57	56
11	88	73	77	135	129	237	325	260	85	77	55	55
12	83	75	70	123	122	210	677	211	83	118	54	53
13	81	74	103	105	119	196	374	186	81	153	52	52
14	78	72	125	103	111	204	271	1250	79	111	64	51
15	79	73	106	454	106	324	249	1210	78	91	63	52
16	77	72	84	411	102	458	279	623	80	80	60	52
17	77	72	76	205	101	601	259	422	96	77	55	51
18	78	68	70	155	146	648	230	348	89	77	53	49
19	76	67	68	144	190	505	202	627	80	78	52	48
20	77	69	68	139	202	373	185	347	78	69	61	50
21	77	70	66	122	184	315	168	268	80	71	59	60
22	75	69	66	107	167	277	153	232	79	70	56	58
23	75	69	66	206	153	235	141	212	76	66	59	54
24	75	71	79	731	143	213	132	191	74	69	54	50
25	72	64	82	618	142	198	125	176	74	79	93	50
26	76	72	76	336	138	181	124	163	80	78	122	47
27	73	72	70	245	130	167	129	150	79	70	85	60
28	75	71	68	201	150	156	204	139	75	66	66	65
29	74	67	68	173	---	147	466	130	76	68	61	58
30	74	67	68	151	---	139	442	124	78	71	58	93
31	75	---	69	135	---	133	---	119	---	68	56	---
TOTAL	2543	2157	2339	6038	4196	8929	6366	10742	2574	2390	1919	1850
MEAN	82.0	71.9	75.5	195	150	288	212	347	85.8	77.1	61.9	61.7
MAX	130	79	125	731	211	648	677	1250	114	153	122	165
MIN	72	64	63	66	101	133	109	119	74	61	52	47
CFSM	.33	.29	.31	.79	.61	1.17	.86	1.40	.35	.31	.25	.25
IN.	.38	.32	.35	.91	.63	1.34	.96	1.62	.39	.36	.29	.28

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STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 1916, 1927 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	141	162	242	357	462	510	419	324	209	155	139	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 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1909 - 1916 1927 - 1999
ANNUAL TOTAL	112242	52043	
ANNUAL MEAN	308	143	269
HIGHEST ANNUAL MEAN			424
LOWEST ANNUAL MEAN			118
HIGHEST DAILY MEAN	2100	Apr 20	10600
LOWEST DAILY MEAN	e63	Jan 1	22
ANNUAL SEVEN-DAY MINIMUM	66	Nov 29	33
INSTANTANEOUS PEAK FLOW			17500
INSTANTANEOUS PEAK STAGE		4.23	all.40
INSTANTANEOUS LOW FLOW		41	c5.0
ANNUAL RUNOFF (CFSM)	1.24	.58	1.09
ANNUAL RUNOFF (INCHES)	16.90	7.84	14.78
10 PERCENT EXCEEDS	786	275	542
50 PERCENT EXCEEDS	142	86	159
90 PERCENT EXCEEDS	72	58	74

- a Present datum, from floodmarks.
- b Also Sep 18-19, 26, 1999.
- c Observed, result of freezeup.
- e Estimated.

