

KANAWHA RIVER BASIN

03170000 LITTLE RIVER AT GRAYSONTOWN, VA

LOCATION.--Lat 37°02'15", long 80°33'25", Pulaski County, Hydrologic Unit 05050001, on left bank at upstream side of bridge on State Highway 693 at Snowville, 0.5 mi southeast of Grayson town, 7 mi south of Radford, and at mile 8.6.

DRAINAGE AREA.--300 mi².

PERIOD OF RECORD.--October 1928 to current year. Published as "at Grayson town" prior to October 1990.

REVISED RECORDS.--WSP 823: 1929-36. WSP 1143: 1945. WSP 1305: 1929(M). WSP 1555: Drainage area (at site used 1928-41). WSP 1625: 1951(M). WSP 1725: 1936(M).

GAGE.--Water-stage recorder. Datum of gage is 1,816.04 ft above sea level. Prior to Nov. 20, 1931, nonrecording gage at bridge 1.0 mi downstream at datum 17.99 ft lower. Nov. 20, 1931, to Nov. 12, 1941, water-stage recorder 1.2 mi downstream at datum 20.58 ft lower.

REMARKS.--Records good except those for period with ice effect, Jan. 3-5, period of doubtful gage-height record, Aug. 10-18, and period of no gage-height record, Aug. 25-27, which are fair. U.S. Army Corps of Engineers satellite gage-height telemeter at station. Maximum discharge, 22,800 ft³/s, from rating curve extended above 16,000 ft³/s on basis of slope-area measurements at gage heights 12.76 ft and 13.40 ft. Minimum discharge, 21 ft³/s, 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.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 6	0100	*3,280	*4.13	No other peak greater than base discharge.			

Minimum discharge, 45 ft³/s, Aug 19-20, gage height, 0.73 ft.

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	117	129	129	129	239	252	252	273	143	108	109	55
2	115	129	129	116	393	230	329	230	161	110	98	52
3	107	129	127	e120	430	240	266	212	186	101	99	50
4	113	133	128	e250	316	380	240	202	155	89	94	48
5	130	144	129	e220	273	355	230	195	136	126	91	729
6	135	137	130	212	249	406	218	192	130	86	86	1870
7	131	131	132	244	238	512	213	191	125	81	83	646
8	489	129	142	238	236	395	207	272	121	80	79	268
9	458	130	269	297	222	337	204	346	115	96	79	180
10	206	132	264	559	210	320	216	223	109	80	e72	397
11	162	145	168	299	204	294	510	196	104	82	e66	236
12	147	192	149	265	203	292	895	186	103	140	e62	153
13	141	157	332	262	220	281	463	179	108	317	e60	128
14	137	140	516	281	202	276	352	563	101	247	e62	116
15	132	138	254	538	188	381	327	940	96	176	e75	113
16	129	136	193	500	193	456	377	453	98	151	e58	127
17	129	133	173	307	196	626	338	330	114	122	e52	145
18	129	130	158	276	530	589	282	279	136	109	e50	110
19	129	129	148	331	627	461	260	560	118	105	47	101
20	128	130	149	264	395	372	254	448	103	101	53	101
21	127	139	149	243	321	418	241	304	117	96	85	112
22	122	143	147	248	268	583	228	260	139	95	88	107
23	120	133	147	261	229	441	220	240	126	120	65	102
24	122	132	160	865	230	367	211	225	109	104	64	95
25	127	132	208	720	253	333	203	201	101	101	e67	90
26	128	136	182	415	232	319	203	187	108	97	e78	86
27	127	139	155	320	222	300	227	182	143	92	e150	117
28	127	134	177	278	233	274	239	169	117	87	91	283
29	128	130	179	251	---	253	254	162	107	177	73	343
30	129	129	191	252	---	232	297	154	121	292	65	603
31	129	---	142	245	---	221	---	150	---	152	60	---
TOTAL	4750	4100	5656	9806	7752	11196	8756	8704	3650	3920	2361	7563
MEAN	153	137	182	316	277	361	292	281	122	126	76.2	252
MAX	489	192	516	865	627	626	895	940	186	317	150	1870
MIN	107	129	127	116	188	221	203	150	96	80	47	48
CFSM	.51	.46	.61	1.05	.92	1.20	.97	.94	.41	.42	.25	.84
IN.	.59	.51	.70	1.22	.96	1.39	1.09	1.08	.45	.49	.29	.94

03170000 LITTLE RIVER AT GRAYSONTOWN, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 1999, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	296	300	334	407	480	547	506	410	334	266	253	251
MAX	1458	916	860	1050	1055	1213	1444	810	942	945	1584	988
(WY)	1930	1986	1949	1937	1998	1993	1987	1958	1972	1949	1940	1989
MIN	86.7	107	115	108	113	220	146	168	122	108	76.2	76.9
(WY)	1954	1932	1966	1966	1934	1940	1942	1941	1999	1930	1999	1932

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR	FOR 1998 WATER YEAR	FOR 1999 WATER YEAR
ANNUAL TOTAL	148157	78214	148157	78214	148157	78214
ANNUAL MEAN	406	214	406	214	406	214
HIGHEST ANNUAL MEAN			631	191	631	191
LOWEST ANNUAL MEAN						
HIGHEST DAILY MEAN	3760	Mar 21	1870	Sep 6	13200	Oct 2 1929
LOWEST DAILY MEAN	100	aJan 1	47	Aug 19	47	Aug 19 1999
ANNUAL SEVEN-DAY MINIMUM	106	Sep 11	57	Aug 14	57	Jul 23 1966
INSTANTANEOUS PEAK FLOW			3280	Sep 6	22800	Jun 21 1972
INSTANTANEOUS PEAK STAGE			4.13	Sep 6	13.40	Jun 21 1972
INSTANTANEOUS LOW FLOW			45	bAug 19	c21	Feb 22 1942
ANNUAL RUNOFF (CFSM)	1.35		.71		1.22	
ANNUAL RUNOFF (INCHES)	18.37		9.70		16.52	
10 PERCENT EXCEEDS	781		394		620	
50 PERCENT EXCEEDS	269		158		270	
90 PERCENT EXCEEDS	127		90		127	

- a Also Sep 16, 1998.
- b Also Aug 20, 1999.
- c Result of freezeup.
- e Estimated.

