

JAMES RIVER BASIN

02013000 DUNLAP CREEK NEAR COVINGTON, VA

LOCATION.--Lat 37°48'10", long 80°02'50", Alleghany County, Hydrologic Unit 02080201, on right bank 20 ft downstream from bridge on U.S. Highway 60, 2.2 mi downstream from Ogle Creek, and 3.0 mi west of Covington.

DRAINAGE AREA.--164 mi².

PERIOD OF RECORD.--October 1928 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORDS.--WSP 972: 1929-30, 1932-34, 1942. WSP 1303: 1929-35(M), 1937-38(M), 1941-48(M). WSP 2104: Drainage area. WDR VA-74-1: 1969(M), 1972, 1973(P).

GAGE.--Water-stage recorder. Datum of gage is 1,294.70 ft above sea level. Prior to Dec. 8, 1949, nonrecording gage at same site and datum.

REMARKS.--Records good except for period with ice effect, Jan. 5, which is fair. Occasional diurnal fluctuation caused by dam 7.9 mi upstream from station. U.S. Army Corps of Engineers satellite precipitation and gage-height telemeter at station. Maximum discharge, 27,400 ft³/s, from rating curve extended above 4,500 ft³/s on basis of step-backwater computations and contracted-opening measurement at gage height 15.65 ft. Minimum gage height, 0.69 ft, Jun. 6, Jul. 14, 1969. 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 in March 1913 reached a stage of 18 ft, from information by local residents.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Mar 18	0200	*1780	*5.05	No peak greater than base discharge.			
Minimum discharge, 5.2 ft ³ /s, Jul 24, gage height, 1.09 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	14	19	20	19	65	106	104	158	43	15	15	12
2	14	19	21	19	120	132	108	145	43	16	14	11
3	16	23	21	57	171	175	100	128	43	14	13	11
4	15	24	20	88	150	467	96	114	42	13	13	11
5	15	21	20	e56	121	342	94	103	39	13	12	101
6	17	21	21	50	101	354	88	93	36	12	12	228
7	18	21	21	42	96	472	83	87	33	12	11	123
8	36	21	25	36	112	339	80	143	30	12	11	71
9	32	20	30	47	115	262	79	142	26	11	12	48
10	19	20	30	151	101	212	83	123	25	11	12	37
11	16	23	25	85	87	169	103	108	24	12	11	30
12	15	23	24	63	79	170	150	95	23	13	11	26
13	14	22	30	61	73	165	147	95	22	15	10	22
14	14	22	45	123	64	184	133	608	22	15	11	21
15	14	22	37	502	57	529	126	598	24	14	11	23
16	14	22	30	261	54	628	126	352	19	14	11	19
17	14	21	26	140	53	988	111	239	19	13	11	18
18	14	21	24	108	126	1490	101	181	19	15	10	17
19	14	21	22	137	247	943	94	214	18	14	10	16
20	13	21	21	117	189	484	96	185	18	13	14	16
21	14	21	20	92	143	395	96	150	18	13	14	17
22	14	21	20	75	116	442	96	126	17	13	12	17
23	14	20	20	118	99	364	98	109	16	13	13	16
24	15	20	21	1010	87	295	161	110	15	12	16	15
25	16	20	20	503	80	241	168	101	15	11	37	14
26	16	22	19	243	74	197	154	82	16	12	28	13
27	16	23	18	160	67	166	140	70	16	12	21	39
28	16	21	19	120	72	144	139	61	16	12	17	91
29	18	21	19	94	---	126	158	53	15	19	16	65
30	19	20	19	77	---	111	166	48	14	22	13	329
31	19	---	19	65	---	98	---	45	---	17	12	---
TOTAL	515	636	727	4719	2919	11190	3478	4866	726	423	434	1477
MEAN	16.6	21.2	23.5	152	104	361	116	157	24.2	13.6	14.0	49.2
MAX	36	24	45	1010	247	1490	168	608	43	22	37	329
MIN	13	19	18	19	53	98	79	45	14	11	10	11
CFSM	.10	.13	.14	.93	.64	2.20	.71	.96	.15	.08	.09	.30
IN.	.12	.14	.16	1.07	.66	2.54	.79	1.10	.16	.10	.10	.34

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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	65.8	106	168	248	309	403	283	215	105	48.1	56.2	38.3
MAX	431	659	694	770	821	1053	1071	536	584	358	514	336
(WY)	1990	1986	1974	1996	1998	1993	1987	1989	1972	1972	1984	1989
MIN	13.4	15.7	21.5	24.2	21.5	59.1	54.7	43.7	24.2	13.6	12.5	11.0
(WY)	1942	1932	1956	1981	1934	1988	1986	1930	1999	1999	1932	1970

SUMMARY STATISTICS	FOR 1998 CALENDAR YEAR	FOR 1999 WATER YEAR	WATER YEARS 1929 - 1999
ANNUAL TOTAL	90001	32110	
ANNUAL MEAN	247	88.0	170
HIGHEST ANNUAL MEAN			320
LOWEST ANNUAL MEAN			67.3
HIGHEST DAILY MEAN	3680	Mar 21	1490
LOWEST DAILY MEAN	13	Oct 20	10
ANNUAL SEVEN-DAY MINIMUM	14	Oct 14	11
INSTANTANEOUS PEAK FLOW			1780
INSTANTANEOUS PEAK STAGE			5.05
INSTANTANEOUS LOW FLOW			5.2
ANNUAL RUNOFF (CFSM)	1.50		.54
ANNUAL RUNOFF (INCHES)	20.41		7.28
10 PERCENT EXCEEDS	678		177
50 PERCENT EXCEEDS	55		25
90 PERCENT EXCEEDS	19		13

a Also Aug 18, 19, 1999.
e Estimated.

