02013100 JACKSON RIVER BELOW DUNLAP CREEK, AT COVINGTON, VA

LOCATION.--Lat 37°47'19", long 80°00'03", Covington City, Hydrologic Unit 02080201, on left bank in city recreation park and 0.5 mi downstream from Dunlap Creek.

DRAINAGE AREA.--614 mi^2.

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORDS.--WDR VA-76-1: 1975(M).

GAGE.--Water-stage recorder. Datum of gage is 1,206.53 ft above sea level.

REMARKS.--Records good except for period of partial gage-height record, Nov. 19-23, which is fair, and period with ice effect, Jan. 22, 23, 27-29, which is poor. Small diurnal fluctuation at low flow caused by Westvaco plant 0.8 mi upstream and occasionally by dam on Dunlap Creek 12.7 mi upstream. Flow regulated since December 1979 by Lake Moomaw (station 02011795) 19.9 mi upstream; since October 1984 by Back Creek Lake 47.9 mi upstream, amount unknown; and since January 1985 by Little Back Creek Lake 51.0 mi upstream, amount unknown. Statistics of monthly mean data and summary statistics for water years 1975-1979 (unregulated flow) are available in previous data books, water years 1991-1998. Diversion by Westvaco plant averages 47 ft^3/s for industrial use of which approximately 42 ft^3/s is returned upstream from station. Diversion 2.0 mi upstream from station for city of Covington water supply averages less than 4.0 ft^3/s. U.S. Army Corps of Engineers satellite gage-height telemeter at station. Virginia Department of Emergency Services gage-height radio transmitter at station. Maximum discharge, 31,300 ft^3/s, from rating curve extended above 19,000 ft^3/s. Minimum discharge, 41 ft^3/s, Jan. 5, 1981, gage height, 4.38 ft, result of freezeup. Several measurements of water temperature were made during the year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 21, 1972, reached a stage of 24.36 ft, discharge, 34,000 ft^3/s, from floodmarks, and flood of Dec. 27, 1973, reached a stage of 22.09 ft, from floodmarks, discharge, 28,300 ft^3/s, from rating curve extended above 19,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,750 ft^3/s, Mar. 12, gage height, 11.13 ft; minimum discharge, 131 ft^3/s, Jan. 28, gage height, 4.50 ft, minimum daily, 160 ft^3/s, Nov. 24.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

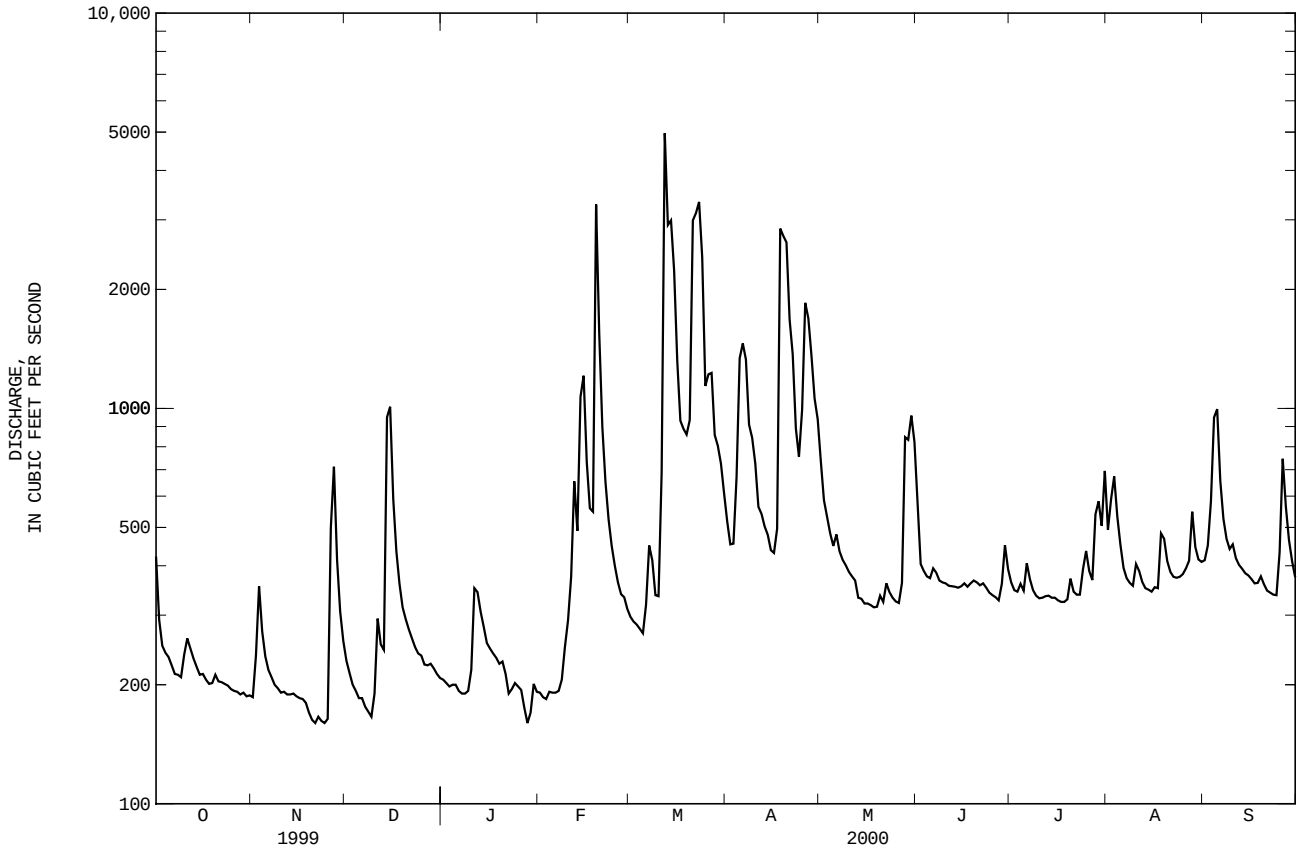
DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	422	186	230	206	191	297	518	735	577	363	493	413
2	292	237	214	202	186	289	453	586	404	347	589	450
3	251	355	200	198	184	284	455	532	388	344	673	582
4	241	273	193	200	192	277	670	483	376	360	533	949
5	235	236	185	200	191	270	1340	449	372	346	452	996
6	224	218	185	193	191	319	1460	480	394	406	395	656
7	213	209	176	190	193	450	1330	435	384	370	372	526
8	212	200	171	190	206	413	910	414	367	347	362	468
9	209	196	166	193	249	337	843	401	363	336	356	441
10	238	191	190	218	291	335	726	386	361	331	404	453
11	262	192	294	351	375	689	564	376	356	332	388	418
12	247	189	253	343	654	4970	541	367	355	335	364	402
13	233	189	245	306	490	2910	503	332	354	336	351	393
14	222	190	950	280	1070	2990	479	330	352	332	348	383
15	212	187	1010	255	1210	2230	438	321	355	332	344	378
16	213	185	590	247	733	1320	431	321	361	327	353	370
17	206	184	435	240	559	931	496	318	354	324	351	361
18	201	180	360	234	548	888	2850	314	361	324	483	362
19	202	e170	314	226	3280	859	2730	315	367	329	468	376
20	212	e163	293	229	1550	934	2630	336	363	371	411	359
21	204	e160	276	213	897	2990	1680	324	357	344	386	346
22	203	e166	262	e190	652	3120	1370	361	361	338	375	342
23	201	e162	249	e195	524	3330	890	343	352	338	373	338
24	199	160	240	202	449	2410	755	332	342	392	375	337
25	195	164	237	198	400	1140	991	325	337	436	381	432
26	193	499	225	194	363	1220	1850	322	333	388	394	746
27	192	712	224	e175	339	1230	1690	362	327	368	412	565
28	189	414	226	e160	333	857	1360	846	360	540	548	465
29	191	306	220	e170	311	804	1060	833	451	582	446	411
30	187	258	213	201	---	725	939	959	392	505	415	374
31	188	---	208	192	---	610	---	823	---	695	409	---
TOTAL	6889	7131	9234	6791	16811	40428	32952	14061	11176	11818	13004	14092
MEAN	222	238	298	219	580	1304	1098	454	373	381	419	470
MAX	422	712	1010	351	3280	4970	2850	959	577	695	673	996
MIN	187	160	166	160	184	270	431	314	327	324	344	337
(†)	-2067	+1966	+8218	+1714	+17040	+756	+151	+101	-101	-4537	-1210	+1462
MEAN‡	156	303	563	274	1167	1329	1103	457	369	235	380	518
CFSM‡	.25	.49	.92	.45	1.90	2.16	1.80	.74	.60	.38	.62	.84
IN.‡	.29	.55	1.06	.51	2.05	2.50	2.00	.86	.67	.44	.71	.94

CAL YR 1999 MEAN‡ 397 CFSM‡ 0.65 IN.‡ 8.78
WTR YR 2000 MEAN‡ 568 CFSM‡ 0.93 IN.‡ 12.60

02013100 JACKSON RIVER BELOW DUNLAP CREEK, AT COVINGTON, VA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2000, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	341	490	521	835	1105	1506	1176	909	602	353	377	353
MAX	1302	2363	1685	2644	2702	3189	3540	2223	1403	526	1285	938
(WY)	1980	1986	1997	1996	1998	1993	1987	1989	1982	1995	1984	1989
MIN	111	114	130	119	283	211	356	397	303	190	117	87.3
(WY)	1981	1982	1981	1981	1981	1981	1986	1991	1980	1981	1981	1981

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1980 - 2000	
ANNUAL TOTAL	136951		184387			
ANNUAL MEAN	375		504		712	
HIGHEST ANNUAL MEAN					954	1984
LOWEST ANNUAL MEAN					348	1981
HIGHEST DAILY MEAN	2250	Mar 18	4970	Mar 12	15100	Jan 19 1996
LOWEST DAILY MEAN	160	aNov 21	160	aNov 21	67	bSep 3 1981
ANNUAL SEVEN-DAY MINIMUM	164	Nov 19	164	Nov 19	71	Sep 25 1981
INSTANTANEOUS PEAK FLOW			7750	Mar 12	31300	Nov 4 1985
INSTANTANEOUS PEAK STAGE			11.13	Mar 12	23.31	Nov 4 1985
INSTANTANEOUS LOW FLOW			131	Jan 28	c41	Jan 5 1981
ANNUAL RUNOFF (CFSM)	.61		.82		1.16	
ANNUAL RUNOFF (INCHES)	8.30		11.17		15.75	
10 PERCENT EXCEEDS	529		932		1560	
50 PERCENT EXCEEDS	323		355		360	
90 PERCENT EXCEEDS	201		191		211	

a Also Nov. 24, 1999
b Also Sept. 27-29, 1981.
c Result of freezeup.
e Estimated.