02013100 JACKSON RIVER BELOW DUNLAP CREEK, AT COVINGTON, VA

LOCATION.--Lat 37°47'19", long 80°00'02", NAD83, 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 those for period of partial gage-height record, Mar. 5-6, which is fair, and period with ice effect, Dec. 22 to Jan. 6, 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 Jun. 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.

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	343	236	226	e230	352	409	1830	316	687	306	510	367
2	294	221	225	231	332	384	1730	303	658	311	433	339
3	283	218	222	226	317	366	1610	303	587	306	392	329
4	264	221	219	e220	300	435	1530	304	463	308	592	320
5	262	218	220	e220	294	e620	1330	313	448	308	752	314
6	254	220	217	e220	289	e410	1020	327	430	305	486	308
7	253	227	217	228	280	326	787	305	477	305	422	308
8	248	222	217	236	269	315	805	298	574	339	385	310
9	243	233	216	231	263	311	1060	286	557	327	368	308
10	242	274	217	219	263	315	1120	281	503	318	404	334
11	240	265	216	226	259	311	1110	279	374	315	380	323
12	238	247	216	231	252	306	1090	281	338	314	380	311
13	249	241	216	226	248	315	1080	277	343	314	556	307
14	247	238	234	225	250	313	923	276	423	313	460	305
15	243	234	241	225	256	315	578	288	535	311	407	304
16	242	233	274	228	273	451	451	448	488	308	378	302
17	242	229	532	229	333	834	442	510	362	305	361	295
18	243	230	565	232	419	916	432	1040	319	322	351	296
19	243	232	444	500	384	861	449	968	310	316	359	299
20	241	227	374	1160	363	765	457	705	306	313	377	307
21	242	228	318	947	338	1580	462	863	303	310	346	303
22	243	224	e290	623	330	1810	423	2730	309	310	336	301
23	241	224	273	486	351	2840	307	4290	326	301	351	300
24	242	221	e260	424	473	2180	304	3650	311	305	367	324
25	242	227	e250	379	394	1240	300	4010	302	304	349	336
26	242	231	248	333	535	914	297	4420	297	316	341	314
27	243	226	e245	321	588	783	292	3540	291	338	345	307
28	242	226	e240	301	533	740	290	2900	296	426	339	304
29	240	223	e240	285	---	765	285	2190	295	1190	335	301
30	239	227	e240	311	---	2860	284	1140	309	1160	353	299
31	239	---	236	353	---	2200	---	729	---	639	362	---
TOTAL	7769	6923	8348	10506	9538	27190	23078	38570	12221	11863	12577	9375
MEAN	251	231	269	339	341	877	769	1244	407	383	406	312
MAX	343	274	565	1160	588	2860	1830	4420	687	1190	752	367
MIN	238	218	216	219	248	306	284	276	291	301	335	295
(†)	-2773	-2420	+1916	+4285	+3378	+1059	-1059	-252	-2269	-1109	-2823	-5546
MEAN‡	161	150	331	477	461	911	734	1236	332	347	315	128
CFSM‡	.26	.24	.54	.78	.75	1.48	1.20	2.01	.54	.57	.51	.21
IN.‡	.30	.27	.62	.90	.78	1.71	1.33	2.32	.60	.65	.59	.23

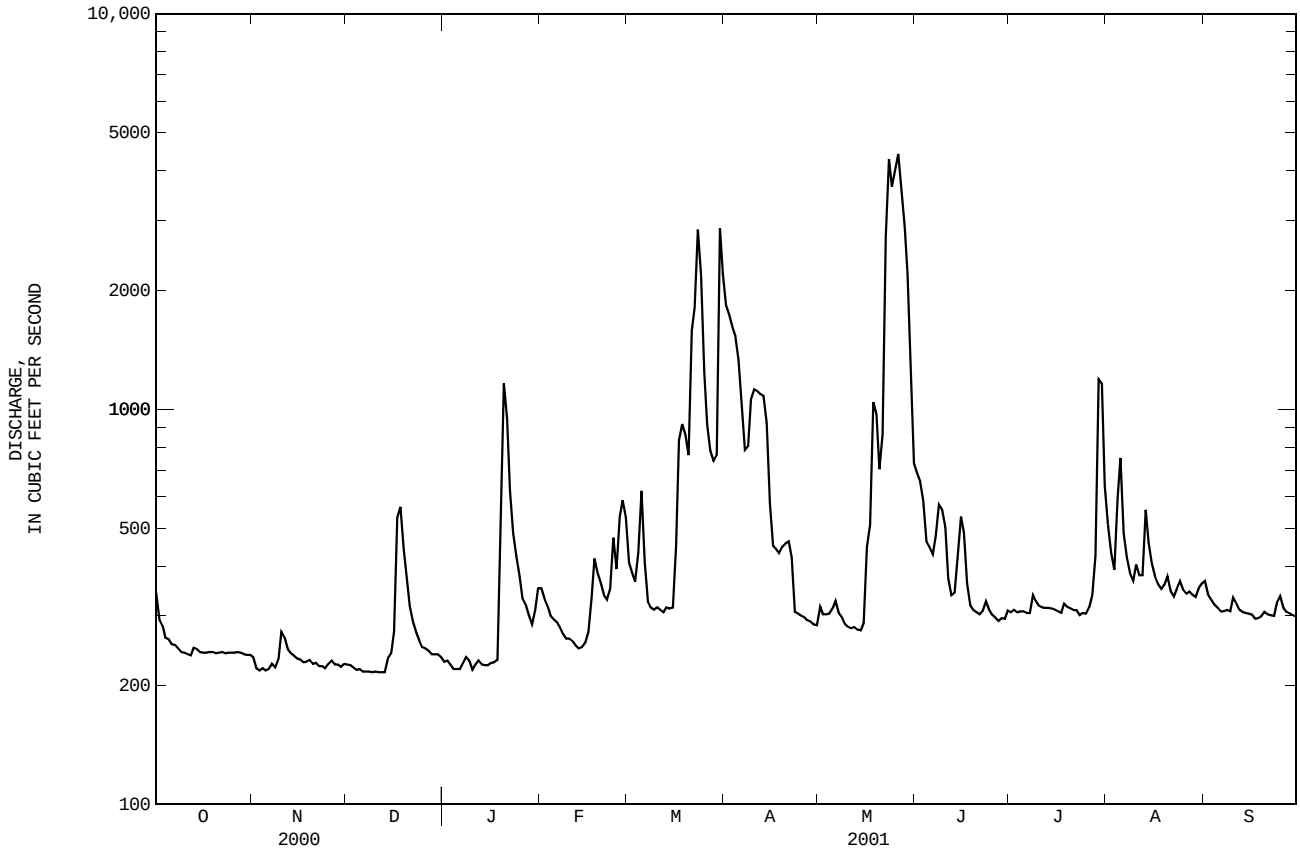
CAL YR 2000 MEAN‡ 536 CFSM‡ .87 IN.‡ 11.89
WTR YR 2001 MEAN‡ 467 CFSM‡ .76 IN.‡ 10.32

† Total change in contents, equivalent in cubic feet per second, per month, in Lake Moomaw; provided by U.S. Army Corps of Engineers.
‡ Adjusted for monthly change in contents.

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

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2001, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	337	478	510	813	1071	1478	1158	924	593	354	378	351
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 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1980 - 2001	
ANNUAL TOTAL	184173		177958			
ANNUAL MEAN	503		488		702	
HIGHEST ANNUAL MEAN					954	1984
LOWEST ANNUAL MEAN					348	1981
HIGHEST DAILY MEAN	4970	Mar 12	4420	May 26	15100	Jan 19 1996
LOWEST DAILY MEAN	160	Jan 28	216	aDec 9	67	bSep 3 1981
ANNUAL SEVEN-DAY MINIMUM	182	Jan 27	216	Dec 7	71	Sep 25 1981
MAXIMUM PEAK FLOW			6050	May 25	31300	Nov 4 1985
MAXIMUM PEAK STAGE			10.00	May 25	23.31	Nov 4 1985
INSTANTANEOUS LOW FLOW			c135	Nov 2	d41	Jan 5 1981
ANNUAL RUNOFF (CFSM)	.82		.79		1.14	
ANNUAL RUNOFF (INCHES)	11.16		10.78		15.53	
10 PERCENT EXCEEDS	901		883		1530	
50 PERCENT EXCEEDS	352		311		357	
90 PERCENT EXCEEDS	218		227		213	

a Also Dec. 11-13, 2000.
b Also Sept. 27-29, 1981.
c Result of regulation.
d Result of freezeup.
e Estimated.