

TENNESSEE RIVER BASIN

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC

LOCATION.--Lat 35°47'02", long 83°06'44", Cocke County Tennessee, Hydrologic Unit 06010105, on left bank, 550 ft upstream of Browns Bridge on Waterville Road, 0.9 mi downstream of North Carolina and Tennessee state lines, 1.0 mi northwest of Waterville, and at mile 25.

DRAINAGE AREA.--538 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above sea level, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Considerable regulation, caused by Walters Hydroelectric Plant, 1.0 mi upstream. Minimum discharge for period of record and current water year affected by regulation. Minimum discharge for current water year also occurred Nov. 20.

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	185	142	472	e414	817	1390	2210	640	659	870	1820	667
2	164	322	446	e395	730	1250	1980	708	1080	1110	828	331
3	154	227	436	e368	691	1190	1810	855	260	804	312	298
4	174	174	428	e360	683	1370	1950	497	476	722	961	795
5	236	188	432	e360	658	1310	1750	536	911	1720	615	565
6	186	209	407	e368	635	1170	1660	574	625	500	427	445
7	217	176	390	e377	594	1100	1540	766	940	677	1420	274
8	255	293	373	440	571	1000	1410	963	1230	478	506	185
9	308	1130	360	436	587	1010	1300	273	1050	1260	738	168
10	294	2410	350	e364	747	956	1170	285	800	974	202	840
11	208	1460	348	e339	672	907	1100	512	1080	526	905	251
12	168	397	347	398	604	888	992	847	599	722	930	763
13	147	1470	343	473	618	1200	1540	437	505	170	1020	248
14	146	734	575	418	887	1120	1560	446	532	733	1050	488
15	140	825	806	434	1090	1270	1380	798	212	228	628	184
16	330	115	757	474	1400	1500	1390	440	750	495	507	146
17	158	89	2340	439	2940	1360	1240	703	438	598	648	140
18	214	77	1550	515	2140	1220	1210	403	594	193	637	163
19	222	74	1300	3060	1630	1110	1150	640	669	539	231	390
20	192	314	1050	4240	1350	1210	1090	479	215	187	480	305
21	184	569	820	2430	1220	1650	1030	460	686	565	572	169
22	184	481	736	1800	1450	1930	981	864	189	174	562	542
23	228	412	643	1300	1530	2180	937	501	538	288	828	359
24	186	378	e628	1130	1280	1970	907	760	161	661	e430	763
25	154	509	e596	1000	1670	1770	903	1260	164	290	e580	1210
26	262	1090	565	842	2440	1590	776	1220	657	1060	e540	942
27	294	750	547	855	1830	1380	665	766	233	968	e850	182
28	312	634	538	796	1580	1250	693	702	660	723	e650	171
29	173	561	506	740	---	1280	775	988	291	1630	294	170
30	210	507	476	895	---	2590	636	591	594	1390	512	178
31	149	---	e443	972	---	2290	---	1030	---	1430	216	---
TOTAL	6434	16717	20008	27432	33044	43411	37735	20944	17798	22685	20899	12332
MEAN	208	557	645	885	1180	1400	1258	676	593	732	674	411
MAX	330	2410	2340	4240	2940	2590	2210	1260	1230	1720	1820	1210
MIN	140	74	343	339	571	888	636	273	161	170	202	140
†	+17	+8	0	+2	+3	+3	+8	+17	+4	-25	-18	+30
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)												
MEAN	306	511	623	1300	1676	1904	1679	1130	864	713	458	316
MAX	540	609	645	2187	3096	3505	2540	1488	1432	1036	674	476
(WY)	1998	1998	2001	1998	1998	1997	1998	1997	1999	1999	2001	1997
MIN	153	334	600	810	1039	1120	1049	676	558	479	342	176
(WY)	1999	1999	1999	2000	2000	2000	1999	2001	2000	1998	1998	1999

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR	FOR 2001 WATER YEAR	WATER YEARS 1997 - 2001
ANNUAL TOTAL	272271	279439	
ANNUAL MEAN	744	766	†770 (UNADJUSTED)
HIGHEST ANNUAL MEAN			1246 1998
LOWEST ANNUAL MEAN			750 2000
HIGHEST DAILY MEAN	5650	Apr 4	4240 10800 Jan 8 1998
LOWEST DAILY MEAN	74	Nov 19	74 Nov 19 2000
ANNUAL SEVEN-DAY MINIMUM	185	Oct 11	185 Oct 11 117 Nov 2 1998
MAXIMUM PEAK FLOW			7690 Jan 20 18400 Jan 8 1998
MAXIMUM PEAK STAGE			9.95 Jan 20 13.42 Jan 8 1998
INSTANTANEOUS LOW FLOW			72* Nov 19 25* Aug 25 1997
10 PERCENT EXCEEDS	1570	1480	2130
50 PERCENT EXCEEDS	565	634	706
90 PERCENT EXCEEDS	182	186	163

e Estimated.

† Change in contents, equivalent in cubic feet per second, in Walters Reservoir, provided by Carolina Power and Light Company.

‡ Adjusted for change in contents.

* See REMARKS.

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC--Continued

