

## 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 06010106, 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 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

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

GAGE.--Water-stage recorder. Elevation of gage is 1,360 ft above NGVD of 1929, 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.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	181	213	488	412	1400	684	2170	1400	525	158	511	155
2	212	178	417	735	1470	619	1910	1820	244	572	158	413
3	177	162	581	471	535	279	1390	1050	688	559	496	395
4	249	161	325	451	1220	247	1390	1720	755	528	149	131
5	470	370	189	568	1220	1070	693	2240	1280	329	151	378
6	364	351	277	246	1060	552	1040	1610	619	478	498	150
7	191	333	282	e510	1240	443	986	1200	331	143	533	144
8	404	129	442	661	791	276	1600	1230	810	120	483	142
9	546	147	292	327	399	170	1240	1060	647	555	129	140
10	194	194	579	120	254	203	1300	873	215	649	383	361
11	145	256	833	427	811	801	1220	849	704	608	137	119
12	288	741	510	550	1190	645	1380	596	791	249	135	355
13	181	566	666	196	727	234	265	1380	654	619	369	369
14	586	331	661	412	1100	535	876	939	355	189	144	146
15	797	410	584	357	487	1300	584	1010	479	212	143	152
16	427	437	735	498	190	1280	918	1060	158	519	147	155
17	662	132	848	231	342	3430	861	536	162	502	381	153
18	426	143	1360	255	658	3720	742	331	475	532	145	148
19	302	433	595	1850	563	2650	606	539	474	288	e141	131
20	185	152	757	2890	967	738	1080	748	438	495	e407	129
21	202	122	633	1350	919	1470	828	888	128	158	170	162
22	474	196	203	1080	969	1390	757	657	490	229	e164	212
23	317	133	215	2900	356	1150	818	662	163	567	135	268
24	445	161	781	3640	340	295	1170	701	204	571	367	183
25	340	336	814	3710	1010	1320	570	605	499	600	141	808
26	373	479	890	2890	417	1090	364	487	490	426	156	1040
27	169	274	794	2620	733	1230	222	724	525	547	547	2640
28	217	288	543	1960	868	951	523	874	187	156	584	2560
29	406	463	278	1000	---	905	879	687	512	152	506	1120
30	387	274	269	914	---	1620	442	712	134	e484	176	1060
31	298	---	326	784	---	1670	---	301	---	e499	507	---
TOTAL	10615	8565	17167	35015	22236	32967	28824	29489	14136	12693	9093	14319
MEAN	342.4	285.5	553.8	1130	794.1	1063	960.8	951.3	471.2	409.5	293.3	477.3
MAX	797	741	1360	3710	1470	3720	2170	2240	1280	649	584	2640
MIN	145	122	189	120	190	170	222	301	128	120	129	119
†	-4	+24	-15	+11	-60	+50	-13	+9	-21	-27	-22	+70

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2002, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
MEAN	313.2	465.8	609.1	1266	1530	1764	1559	1101	798.5	662.3	430.4	342.6
MAX	540	609	645	2187	3096	3505	2540	1488	1432	1036	674	477
(WY)	1998	1998	2001	1998	1998	1997	1998	1997	1997	1999	2001	2002
MIN	153	286	554	810	794	1063	961	676	471	409	293	176
(WY)	1999	2002	2002	2000	2002	2002	2002	2001	2002	2002	2002	1999

## SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1997 - 2002	
ANNUAL TOTAL	272627		235119			
ANNUAL MEAN	746.9		644.2		840.7 (UNADJUSTED)	
HIGHEST ANNUAL MEAN					1246 1998	
LOWEST ANNUAL MEAN					644 2002	
HIGHEST DAILY MEAN	4240	Jan 20	3720	Mar 18	10800	Jan 8 1998
LOWEST DAILY MEAN	122	Nov 21	119	Sep 11	74	Nov 19 2000
ANNUAL SEVEN-DAY MINIMUM	182	Sep 27	145	Sep 14	117	Oct 2 1998
MAXIMUM PEAK FLOW			6620		18400 Jan 8 1998	
MAXIMUM PEAK STAGE			9.46		13.42 Jan 8 1998	
INSTANTANEOUS LOW FLOW			24*		24* Jun 23 2002	
10 PERCENT EXCEEDS	1410		1290		1850	
50 PERCENT EXCEEDS	618		495		610	
90 PERCENT EXCEEDS	192		152		158	

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

