

03460795 PIGEON RIVER BELOW POWER PLANT NEAR WATERVILLE, NC

LOCATION.--Lat 35°47'01", long 83°06'43", Cocks 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 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. Maximum discharge for period of record and current water year from rating curve extended above 11,000 ft<sup>3</sup>/s on basis of slope-conveyance measurement of peak flow. Minimum discharge for period of record and current water year affected by regulation.

EXTREMES FOR CURRENT YEAR.--Peak discharges associated with the remnants of Hurricanes Frances and Ivan.

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Sep 8	0630	30,500	17.22	Sep 17	1215	39,000	18.88

REVISIONS.--The maximum discharges for some water years have been revised, as shown in the following table. They supercede figures published in the reports for 1997, 1998, and 2003.

Date	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Mar. 3, 1997	13,400	12.17
Jan. 8, 1998	17,000	13.42
May 6, 2003	27,100	16.39

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	357	174	1,410	976	412	966	857	422	1,300	1,180	1,720	661
2	527	255	1,550	885	1,630	974	767	466	907	1,280	1,430	804
3	e742	626	1,080	382	1,280	1,300	518	1,290	1,050	e1,070	2,090	1,570
4	460	573	1,320	402	886	1,400	418	1,240	953	e1,310	1,380	1,360
5	344	650	1,140	1,740	1,830	1,690	818	879	709	e1,180	1,600	249
6	192	911	1,220	2,480	3,430	1,700	1,260	724	353	e1,600	790	979
7	721	1,300	934	1,500	3,610	1,710	856	1,120	761	e1,250	1,040	2,070
8	979	620	1,410	960	2,810	1,800	1,050	1,270	726	1,310	599	22,500
9	917	371	854	1,690	2,620	1,350	410	986	685	901	954	8,210
10	389	781	1,220	595	2,380	1,020	690	1,480	907	626	827	4,700
11	184	540	2,520	746	1,910	1,070	497	861	772	177	766	3,540
12	384	493	1,540	1,300	1,840	1,290	988	1,180	786	1,020	1,240	2,680
13	974	583	1,470	1,220	2,070	1,400	2,120	852	489	900	1,010	2,230
14	447	898	1,480	1,170	1,000	762	2,690	1,370	655	1,050	651	2,470
15	562	375	1,480	316	637	1,410	1,510	921	876	626	259	2,640
16	441	234	1,530	1,500	1,670	1,540	1,860	1,010	1,330	514	709	2,440
17	313	695	1,520	593	1,430	1,400	1,050	1,180	1,120	684	847	22,200
18	368	809	1,760	271	1,390	1,740	1,140	1,210	1,480	470	837	10,400
19	398	7,060	1,760	958	1,120	1,100	1,550	1,190	1,260	528	854	6,010
20	666	3,790	1,070	1,530	1,360	1,600	1,090	801	365	677	755	4,380
21	589	2,590	796	670	1,220	1,550	1,310	844	950	736	767	3,520
22	333	2,470	1,030	1,430	826	1,370	1,180	747	1,100	802	251	3,030
23	269	1,730	1,460	843	1,510	1,670	1,070	e920	1,330	620	260	3,050
24	573	1,920	1,270	266	1,340	1,140	1,130	e930	1,360	714	788	2,480
25	725	1,340	1,560	1,200	1,300	1,280	509	944	1,350	552	782	2,460
26	605	1,250	1,310	1,490	1,730	1,330	1,520	1,060	1,630	1,100	791	2,500
27	893	1,230	1,160	1,040	786	419	1,190	1,280	942	2,540	251	2,500
28	1,160	991	1,020	1,020	461	304	1,160	464	1,210	1,250	788	6,160
29	439	1,240	1,560	922	406	1,180	1,150	694	1,080	1,250	262	4,460
30	473	855	1,290	543	---	1,280	976	338	1,100	1,290	736	3,270
31	485	---	1,800	1,120	---	1,070	---	1,460	---	1,870	636	---
TOTAL	16,909	37,354	42,524	31,758	44,894	39,815	33,334	30,133	29,536	31,077	26,670	135,523
MEAN	545	1,245	1,372	1,024	1,548	1,284	1,111	972	985	1,002	860	4,517
MAX	1,160	7,060	2,520	2,480	3,610	1,800	2,690	1,480	1,630	2,540	2,090	22,500
MIN	184	174	796	266	406	304	410	338	353	177	251	249

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

MEAN	376	657	850	1,198	1,575	1,697	1,550	1,301	854	791	537	901
MAX	545	1,245	1,533	2,187	3,096	3,505	2,540	2,835	1,432	1,350	860	4,517
(WY)	(2004)	(2004)	(2003)	(1998)	(1998)	(1997)	(1998)	(2003)	(1997)	(2003)	(2004)	(2004)
MIN	153	286	554	810	794	1,063	961	676	471	409	293	176
(WY)	(1999)	(2002)	(2002)	(2000)	(2002)	(2002)	(2002)	(2001)	(2002)	(2002)	(2002)	(1999)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1997 - 2004	
ANNUAL TOTAL	499,203		499,527		990	
ANNUAL MEAN	1,368		1,365		1,365	
HIGHEST ANNUAL MEAN					644	2002
LOWEST ANNUAL MEAN					22,500	Sep 8, 2004
HIGHEST DAILY MEAN	17,700	May 6	22,500	Sep 8	74	Nov 19, 2000
LOWEST DAILY MEAN	144	Sep 21	174	Nov 1	117	Oct 2, 1998
ANNUAL SEVEN-DAY MINIMUM	167	Sep 15	419	Oct 17	39,000*	Sep 17, 2004
MAXIMUM PEAK FLOW					18.88	Sep 17, 2004
MAXIMUM PEAK STAGE					24*	Jun 23, 2002
INSTANTANEOUS LOW FLOW					1,990	
10 PERCENT EXCEEDS	2,370		2,150		748	
50 PERCENT EXCEEDS	1,160		1,070		178	
90 PERCENT EXCEEDS	387		419			

\* See REMARKS.  
e Estimated.

