

03456991 PIGEON RIVER NEAR CANTON, NC

LOCATION.--Lat 35°31'19", long 82°50'52", Haywood County, Hydrologic Unit 06010106, on right bank 600 ft upstream from State Highway 215 bridge, 1.3 mi upstream from U.S. Highways 19 and 23 at Canton, and at mile 64.9.

DRAINAGE AREA.--130 mi².

PERIOD OF RECORD.--May 1907 to June 1909, October 1928 to current year. Monthly discharge only for some periods published in WSP 1306. Published as Pigeon River at Canton, NC (03457000) May 1907 to June 1909, October 1928 to September 1983.

REVISED RECORDS.--WSP 823: Drainage area. WSP 853: 1929-37(M). WSP 1306: 1903(M). WDR NC-91-1: 1984-89(M).

GAGE.--Water-stage recorder. Datum of gage is 2,581.66 ft above NGVD of 1929 (Tennessee Valley Authority bench mark). Prior to June 1909, nonrecording gage at bridge 1.2 mi downstream at different datum. Dec. 6, 1928, to Jan. 3, 1929, nonrecording gage at site 0.8 mi downstream at different datum. Prior to Oct. 1, 1983, water-stage recorder at site 0.8 mi downstream at different datum. Satellite and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Occasional diurnal fluctuation and considerable regulation at low flow, since 1932, caused by Lake Logan (station 03455773) on West Fork Pigeon River 11.2 mi upstream. Prior to regulation, maximum discharge: 21,500 ft³/s, Aug. 16, 1928; gage height: 16.40 ft; minimum discharge: 39 ft³/s, Sept. 3, 1930. Maximum discharge for current water year and period of record from rating curve extended above 20,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record, at former site, result of freezeup. Minimum discharge for current water year also occurred Oct. 26 and July 24.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of about 1810 is believed to have been approximately equal to that of Aug. 30, 1940, and flood of June 15, 1876, reached a stage of 18.3 ft; discharge, 25,700 ft³/s, at former site, from studies by Tennessee Valley Authority.

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

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Sep 8	0445	41,000	20.70	Sep 17	0515	48,000	22.80

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	155	156	383	300	214	280	238	275	225	251	475	188
2	147	151	359	292	224	326	219	401	190	215	413	507
3	141	145	343	286	439	373	214	368	179	249	406	303
4	140	142	354	281	324	322	217	305	187	261	318	222
5	131	303	377	341	299	308	204	285	176	201	285	194
6	132	489	336	343	1,840	490	201	274	166	202	284	196
7	131	330	313	287	1,070	405	197	256	163	e172	233	7,050
8	132	259	302	286	683	363	194	323	170	e154	215	19,800
9	200	230	292	283	568	340	192	336	e175	e180	201	3,050
10	257	213	1,150	268	505	326	183	311	e165	e250	191	1,620
11	237	202	794	252	456	307	183	259	e170	e240	181	1,120
12	222	195	573	256	478	295	219	252	e150	e220	210	866
13	186	191	502	248	444	281	1,050	461	e153	211	201	700
14	173	173	603	241	412	274	579	489	e151	178	178	598
15	174	171	520	236	417	283	449	341	337	159	168	525
16	160	166	471	227	397	324	410	325	265	147	187	1,120
17	153	161	508	224	380	294	353	358	193	144	159	17,100
18	149	164	450	290	360	289	329	343	169	191	157	e3,420
19	142	5,070	426	260	347	291	306	318	157	146	145	2,000
20	139	1,130	397	224	342	267	288	315	148	136	153	1,410
21	139	754	378	224	359	291	277	278	155	130	158	1,080
22	132	604	369	217	325	257	260	269	175	136	143	875
23	129	517	359	207	313	247	250	259	170	136	141	742
24	127	516	480	211	307	247	242	245	155	133	168	640
25	125	457	385	e234	301	239	228	223	167	580	162	556
26	209	412	360	301	295	235	411	213	e360	318	141	507
27	384	392	345	280	294	230	362	215	201	528	138	694
28	219	540	332	240	285	222	290	198	212	297	132	5,260
29	187	457	322	233	282	217	273	193	188	320	202	1,570
30	170	408	350	232	---	226	265	227	180	931	175	1,210
31	160	---	312	215	---	250	---	311	---	627	178	---
TOTAL	5,282	15,098	13,445	8,019	12,960	9,099	9,083	9,226	5,652	8,043	6,498	75,123
MEAN	170	503	434	259	447	294	303	298	188	259	210	2,504
MAX	384	5,070	1,150	343	1,840	490	1,050	489	360	931	475	19,800
MIN	125	142	292	207	214	217	183	193	148	130	132	188

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2004,* BY WATER YEAR (WY)

MEAN	219	265	322	418	475	530	464	339	260	192	199	220
MAX	787	964	872	1,017	1,150	1,058	1,005	981	781	583	1,476	2,504
(WY)	(1965)	(1980)	(1933)	(1937)	(1939)	(1975)	(1983)	(1976)	(1967)	(1989)	(1940)	(2004)
MIN	48.2	59.2	64.5	85.3	150	155	167	132	96.5	88.6	65.9	47.8
(WY)	(1955)	(1955)	(1940)	(1956)	(1941)	(1988)	(1986)	(1941)	(1941)	(2002)	(1954)	(1998)

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SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1932 - 2004*	
ANNUAL TOTAL	146,977		177,528		324	
ANNUAL MEAN	403		485		170	
HIGHEST ANNUAL MEAN					503	1949
LOWEST ANNUAL MEAN					170	1988
HIGHEST DAILY MEAN	5,070	Nov 19	19,800	Sep 8	19,800	Sep 8, 2004
LOWEST DAILY MEAN	98	Sep 21	125	Oct 25	27	Sep 7, 1954
ANNUAL SEVEN-DAY MINIMUM	117	Sep 15	133	Oct 19	40	Sep 13, 1998
MAXIMUM PEAK FLOW			48,000*	Sep 17	48,000*	Sep 17, 2004
MAXIMUM PEAK STAGE			22.80*	Sep 17	22.80*	Sep 17, 2004
INSTANTANEOUS LOW FLOW			123*	Oct 25	15*	Jan 8, 1956
10 PERCENT EXCEEDS	642		575		605	
50 PERCENT EXCEEDS	335		265		230	
90 PERCENT EXCEEDS	150		153		86	

* Regulated period only (1932-2004). See REMARKS.
 e Estimated.

