

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 and gage height for period of record, at former site from high water mark in gage well; minimum discharge for period of record, at former site, result of freezeup.

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.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	337	165	204	793	211	520	371	385	314	250	263	226
2	289	155	197	554	199	484	400	521	294	2,050	193	176
3	256	149	193	558	195	443	369	416	329	737	215	156
4	228	149	207	481	309	414	349	381	351	538	267	179
5	217	160	526	445	249	396	419	587	286	497	398	179
6	195	310	362	412	228	1,190	379	3,720	265	447	259	149
7	180	205	300	379	237	718	536	2,960	1,020	463	224	141
8	171	185	276	365	207	601	484	1,710	678	381	259	142
9	163	175	258	343	205	540	590	1,190	483	368	e270	137
10	158	181	251	324	231	490	668	961	412	359	e310	129
11	171	546	422	300	212	454	713	833	376	336	e390	124
12	156	476	325	280	204	424	762	722	427	290	247	120
13	143	402	420	278	195	401	848	640	370	369	281	115
14	135	334	471	266	235	386	748	591	334	366	260	112
15	182	299	387	252	437	368	645	569	344	387	245	159
16	602	581	356	245	575	451	580	525	303	319	234	134
17	292	545	327	240	617	386	533	497	298	345	231	114
18	239	428	306	e235	435	391	749	529	325	290	202	108
19	214	380	299	e230	381	526	588	476	350	265	185	103
20	197	343	733	225	355	1,300	530	433	288	254	177	100
21	190	463	467	236	343	e850	567	446	258	237	193	98
22	179	382	416	237	1,900	e680	534	742	246	362	194	529
23	167	333	376	e210	1,490	e600	481	598	232	302	185	713
24	159	309	1,140	e208	853	e530	454	534	222	244	165	268
25	156	288	863	e205	680	e480	438	479	213	225	157	214
26	171	270	633	e202	631	447	437	468	209	212	148	189
27	152	259	543	e200	668	422	408	418	202	204	148	181
28	165	238	481	e200	585	398	385	389	217	196	144	226
29	234	228	436	233	---	383	373	378	218	188	149	171
30	214	218	401	298	---	413	382	358	230	198	170	160
31	183	---	376	237	---	372	---	335	---	199	158	---
TOTAL	6,495	9,156	12,952	9,671	13,067	16,458	15,720	23,791	10,094	11,878	6,921	5,552
MEAN	210	305	418	312	467	531	524	767	336	383	223	185
MAX	602	581	1,140	793	1,900	1,300	848	3,720	1,020	2,050	398	713
MIN	135	149	193	200	195	368	349	335	202	188	144	98

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2003,* BY WATER YEAR (WY)

MEAN	220	261	321	420	476	533	466	340	261	191	199	188
MAX	787	964	872	1,017	1,150	1,058	1,005	981	781	583	1,476	818
(WY)	(1965)	(1980)	(1933)	(1937)	(1939)	(1975)	(1983)	(1976)	(1967)	(1989)	(1940)	(1979)
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 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1932 - 2003*	
ANNUAL TOTAL	85,954		141,755		322	
ANNUAL MEAN	235		388		503	
HIGHEST ANNUAL MEAN					170	
LOWEST ANNUAL MEAN					1988	
HIGHEST DAILY MEAN	3,320	Sep 27	3,720	May 6	12,800	Aug 13, 1940
LOWEST DAILY MEAN	56	Sep 12	98	Sep 21	27	Sep 7, 1954
ANNUAL SEVEN-DAY MINIMUM	59	Sep 7	117	Sep 15	40	Sep 13, 1998
MAXIMUM PEAK FLOW			6,530	May 6	31,600*	Aug 30, 1940
MAXIMUM PEAK STAGE			7.82	May 6	20.75*	Aug 30, 1940
INSTANTANEOUS LOW FLOW			93	Sep 22	15*	Jan 8, 1956
10 PERCENT EXCEEDS	404		632		606	
50 PERCENT EXCEEDS	196		324		230	
90 PERCENT EXCEEDS	70		164		86	

e Estimated.

* Regulated period only (1932-2003). See REMARKS.

