

Water-Data Report 2007

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC

French Broad-Holston Basin
Upper French Broad Subbasin

LOCATION.--Lat 35°17'57", long 82°37'26" referenced to North American Datum of 1983, Transylvania County, NC, Hydrologic Unit 06010105, on left bank 40 ft upstream from bridge on Secondary Road 1503, 700 ft east of railroad at Blantyre, 3.5 mi downstream of Little River, and at river mile 183.7.

DRAINAGE AREA.--296 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1920 to current year. Monthly discharge only for some periods, published in WSP 1306.

REVISED RECORDS.--WSP 923: 1921-23, 1929, 1933, 1935-36(M), 1938, 1940.

GAGE.--Water-stage recorder. Datum of gage is 2,060.32 ft above NGVD of 1929 (levels by Tennessee Valley Authority). Prior to July 5, 1930, nonrecording gage at same site and datum. Satellite and telephone telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Considerable diurnal fluctuation at low flow caused by power plant about 8 mi upstream from station. Maximum gage height for period of record, 25.81 ft, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Since at least 1791, maximum stage 27.1 ft, July 16, 1916, from floodmarks (from studies by Tennessee Valley Authority).

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	468	691	1,890	4,070	934	1,100	722	588	374	409	347	430
2	448	661	2,120	5,000	1,000	3,770	889	577	439	481	303	299
3	431	622	1,320	4,060	943	3,010	767	581	416	448	279	250
4	421	591	1,110	2,230	885	2,060	782	636	401	366	276	230
5	411	573	996	2,060	860	1,360	753	681	370	331	300	216
6	401	559	926	2,830	e842	1,210	700	803	352	311	374	202
7	391	638	874	2,540	828	1,110	683	652	341	399	345	194
8	385	1,210	817	3,650	813	1,050	665	599	335	420	291	189
9	398	920	779	3,870	791	992	656	582	342	351	262	184
10	384	767	759	2,970	774	951	650	572	328	334	260	179
11	380	709	739	2,080	755	921	654	618	317	330	237	177
12	583	727	716	1,820	744	887	743	685	385	339	239	174
13	434	669	707	1,680	750	857	666	648	520	307	241	183
14	378	638	694	1,570	866	837	643	586	411	291	224	507
15	364	807	670	1,480	769	820	1,250	553	503	286	209	998
16	358	2,850	652	1,400	729	1,290	1,150	537	476	308	202	420
17	996	2,880	634	1,310	715	1,290	896	531	397	299	198	298
18	1,920	1,490	621	1,250	706	1,000	826	507	355	330	196	260
19	930	1,180	611	1,240	690	929	795	490	409	315	192	238
20	971	1,040	601	1,170	686	892	767	481	388	285	186	224
21	829	937	598	1,160	760	870	732	472	348	273	182	220
22	707	887	1,440	1,540	762	844	710	458	315	259	190	222
23	652	833	2,900	1,280	696	819	688	449	305	251	199	222
24	601	783	1,730	1,170	684	796	674	459	497	246	229	213
25	573	747	1,720	1,120	905	773	667	445	380	247	248	202
26	553	715	2,430	1,070	1,100	756	653	430	369	269	335	198
27	597	692	1,640	1,040	850	742	682	417	397	316	531	193
28	1,520	674	1,330	1,010	786	731	639	405	343	288	315	190
29	1,070	664	1,190	968	---	763	615	396	405	344	259	184
30	833	867	1,100	940	---	747	600	388	457	462	275	179
31	745	---	1,530	922	---	718	---	378	---	490	408	---
Total	20,132	28,021	35,844	60,500	22,623	34,895	22,317	16,604	11,675	10,385	8,332	7,875
Mean	649	934	1,156	1,952	808	1,126	744	536	389	335	269	262
Max	1,920	2,880	2,900	5,000	1,100	3,770	1,250	803	520	490	531	998
Min	358	559	598	922	684	718	600	378	305	246	182	174
Cfsm	2.19	3.16	3.91	6.59	2.73	3.80	2.51	1.81	1.31	1.13	0.91	0.89
In.	2.53	3.52	4.50	7.60	2.84	4.39	2.80	2.09	1.47	1.31	1.05	0.99

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	754	844	1,033	1,199	1,256	1,365	1,276	1,042	869	733	762	717
Max	3,504	2,486	2,142	2,783	2,735	3,169	2,509	2,339	1,872	2,214	2,363	3,779
(WY)	(1965)	(1980)	(1962)	(1937)	(1998)	(1979)	(1936)	(1973)	(1989)	(1949)	(1994)	(2004)
Min	157	235	301	260	561	550	473	434	278	290	191	169
(WY)	(1955)	(1955)	(1956)	(1956)	(1941)	(1988)	(1986)	(1988)	(1988)	(1925)	(1925)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1921 - 2007	
Annual total	264,274		279,203			
Annual mean	724		765		986	
Highest annual mean					1,564	1949
Lowest annual mean					534	1988
Highest daily mean	2,900	Dec 23	5,000	Jan 2	22,700	Oct 5, 1964
Lowest daily mean	248	Jun 22	174	Sep 12	123	Oct 10, 1954
Annual seven-day minimum	261	Jun 16	183	Sep 7	133	Oct 8, 1954
Maximum peak flow			5,110	Jan 2	30,000	Oct 5, 1964
Maximum peak stage			17.89	Jan 2	^a 25.81	Sep 9, 2004
Instantaneous low flow			172	Sep 12	119	Oct 1, 1954
Annual runoff (cfsm)	2.45		2.58		3.33	
Annual runoff (inches)	33.21		35.09		45.26	
10 percent exceeds	1,210		1,320		1,710	
50 percent exceeds	611		648		802	
90 percent exceeds	365		244		354	

^a See Remarks.

