

Water-Data Report 2008

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.--No estimated daily discharges. Records good. 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).

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	177	300	330	1,110	2,040	679	756	570	351	224	178	327
2	177	279	311	872	2,300	652	742	548	352	201	165	296
3	175	266	306	730	1,280	628	733	531	338	192	156	268
4	204	256	297	656	1,060	1,380	804	523	329	188	150	245
5	266	247	283	612	947	3,790	1,120	505	315	210	146	229
6	290	245	276	580	994	3,370	1,330	495	302	214	147	216
7	232	241	269	549	1,410	2,070	1,140	474	294	395	142	207
8	206	236	265	522	1,040	2,640	969	465	295	265	136	202
9	206	236	265	504	897	2,100	886	508	289	235	122	216
10	302	235	269	527	806	1,560	830	520	278	230	121	344
11	229	231	263	1,190	740	1,330	791	554	316	244	122	287
12	200	229	254	1,080	700	1,190	789	613	281	226	120	364
13	194	228	249	791	778	1,080	742	494	266	204	158	316
14	191	227	247	699	765	1,000	695	466	268	215	228	266
15	188	333	246	636	680	1,050	674	463	295	200	187	237
16	186	362	471	589	652	1,350	648	542	271	188	151	231
17	186	271	443	662	647	1,050	631	503	254	180	164	248
18	187	253	333	783	1,620	954	615	454	238	173	159	231
19	216	246	306	726	1,160	1,190	612	464	230	167	149	215
20	304	243	295	652	930	2,490	624	437	226	166	136	204
21	228	239	363	570	841	1,650	586	448	226	162	130	198
22	214	385	434	568	857	1,280	567	419	255	193	126	195
23	660	499	1,190	584	830	1,130	558	396	256	206	122	189
24	1,280	335	1,630	586	755	1,020	543	388	228	242	121	182
25	859	300	850	551	717	944	531	385	215	194	142	177
26	542	406	738	530	817	891	550	372	205	182	762	175
27	427	652	717	518	883	853	592	363	212	222	2,940	182
28	368	481	783	497	741	822	809	399	240	198	1,400	185
29	331	392	1,650	488	696	809	779	438	230	204	825	179
30	314	355	1,400	613	---	838	610	387	243	282	514	188
31	308	---	1,610	611	---	766	---	363	---	194	378	---
Total	9,847	9,208	17,343	20,586	28,583	42,556	22,256	14,487	8,098	6,596	10,497	6,999
Mean	318	307	559	664	986	1,373	742	467	270	213	339	233
Max	1,280	652	1,650	1,190	2,300	3,790	1,330	613	352	395	2,940	364
Min	175	227	246	488	647	628	531	363	205	162	120	175
Cfsm	1.07	1.04	1.89	2.24	3.33	4.64	2.51	1.58	0.91	0.72	1.14	0.79
In.	1.24	1.16	2.18	2.59	3.59	5.35	2.80	1.82	1.02	0.83	1.32	0.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1921 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	749	838	1,027	1,193	1,253	1,365	1,270	1,036	862	728	757	711
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	270	213	191	169
(WY)	(1955)	(1955)	(1956)	(1956)	(1941)	(1988)	(1986)	(1988)	(2008)	(2008)	(1925)	(1954)

03443000 FRENCH BROAD RIVER AT BLANTYRE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1921 - 2008	
Annual total	231,604		197,056			
Annual mean	635		538		981	
Highest annual mean					1,564	1949
Lowest annual mean					534	1988
Highest daily mean	5,000	Jan 2	3,790	Mar 5	22,700	Oct 5, 1964
Lowest daily mean	174	Sep 12	120	Aug 12	120	Aug 12, 2008
Annual seven-day minimum	182	Sep 27	130	Aug 6	130	Aug 6, 2008
Maximum peak flow			3,900	Mar 5	30,000	Oct 5, 1964
Maximum peak stage			16.18	Mar 5	^a 25.81	Sep 9, 2004
Instantaneous low flow			118	Aug 12	118	Aug 12, 2008
Annual runoff (cfs)	2.14		1.82		3.31	
Annual runoff (inches)	29.11		24.77		45.03	
10 percent exceeds	1,170		1,070		1,700	
50 percent exceeds	417		363		797	
90 percent exceeds	211		182		349	

^aSee Remarks.