

Water-Data Report 2007

02151500 BROAD RIVER NEAR BOILING SPRINGS, NC

Santee Basin
Upper Broad Subbasin

LOCATION.--Lat 35°12'39", long 81°41'51" referenced to North American Datum of 1983, Cleveland County, NC, Hydrologic Unit 03050105, on right bank 0.5 mi upstream from Sandy Run Creek, 3 mi downstream of Second Broad River, and 3.5 mi southwest of Boiling Springs.

DRAINAGE AREA.--875 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1925 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area. WDR NC-88-1: 1986(m).

GAGE.--Water-stage recorder. Datum of gage is 638.33 ft above North American Vertical Datum of 1988 (Trimble GPS). Prior to July 20, 1934, at site 500 ft upstream at 640.92 ft. Satellite and telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable diurnal fluctuation and some regulation caused by power plants upstream from station. Maximum discharge and gage height for period of record from former site, present datum.

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	497	895	1,160	7,700	1,210	1,440	1,070	1,080	742	569	509	412
2	522	801	1,480	6,100	1,380	11,600	1,230	965	665	553	462	331
3	737	773	1,200	3,280	1,320	5,080	1,280	932	501	612	422	376
4	641	783	1,260	2,730	1,230	2,790	1,170	961	584	569	358	365
5	569	517	1,150	2,660	1,170	2,080	1,080	1,110	786	446	310	343
6	637	664	1,130	3,570	1,160	1,680	793	866	623	440	357	297
7	731	889	1,140	3,290	1,160	1,500	1,090	888	578	507	322	313
8	445	2,400	1,130	7,270	1,160	1,430	801	1,040	425	395	342	233
9	571	1,760	1,350	4,880	1,160	1,370	828	958	607	458	345	187
10	619	1,300	856	3,390	1,090	1,340	1,150	907	439	497	338	243
11	620	1,160	1,020	2,610	1,080	1,230	1,140	1,050	579	439	254	295
12	749	741	1,140	2,280	1,070	1,120	1,150	1,020	529	450	265	254
13	761	941	1,050	2,090	1,120	1,190	1,050	732	525	438	983	305
14	497	1,110	814	1,760	1,220	1,160	1,040	613	600	474	661	308
15	504	1,050	1,080	1,770	1,100	1,350	1,030	995	730	327	433	841
16	669	2,720	884	1,830	1,090	1,710	1,290	931	848	504	308	504
17	832	2,550	628	1,710	1,090	2,460	1,390	820	696	483	291	400
18	1,790	1,730	570	1,550	1,050	1,730	1,220	809	651	448	309	402
19	1,150	1,190	867	1,620	903	1,360	1,100	833	673	535	221	348
20	1,070	1,070	1,020	1,650	801	1,410	1,360	569	624	450	225	414
21	933	1,190	945	1,480	1,070	1,410	1,290	560	659	371	289	353
22	613	1,280	1,510	1,580	1,140	1,440	843	821	483	321	293	301
23	698	1,250	4,870	1,660	982	1,220	934	861	477	394	356	270
24	756	842	2,380	1,600	1,020	1,290	1,080	779	442	353	347	293
25	824	1,160	3,330	1,340	1,160	1,190	1,090	775	598	373	518	370
26	837	805	4,860	1,250	1,420	1,060	985	710	631	366	464	324
27	833	663	2,950	1,350	1,290	1,240	1,050	519	616	381	365	301
28	1,100	972	2,130	1,380	1,110	1,180	1,020	460	483	342	326	348
29	949	1,020	1,630	1,200	---	1,230	712	653	492	304	334	249
30	726	1,040	1,640	1,220	---	1,140	831	610	635	472	304	181
31	904	---	966	1,420	---	1,070	---	704	---	537	521	---
Total	23,784	35,266	48,140	79,220	31,756	58,500	32,097	25,531	17,921	13,808	11,832	10,161
Mean	767	1,176	1,553	2,555	1,134	1,887	1,070	824	597	445	382	339
Max	1,790	2,720	4,870	7,700	1,420	11,600	1,390	1,110	848	612	983	841
Min	445	517	570	1,200	801	1,060	712	460	425	304	221	181
Cfsm	0.88	1.34	1.77	2.92	1.30	2.16	1.22	0.94	0.68	0.51	0.44	0.39
In.	1.01	1.50	2.05	3.37	1.35	2.49	1.36	1.09	0.76	0.59	0.50	0.43

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,244	1,220	1,448	1,734	1,861	2,064	1,898	1,517	1,297	1,112	1,199	1,085
Max	5,499	3,275	2,875	4,750	4,304	4,868	4,525	3,441	2,812	3,241	6,893	4,806
(WY)	(1965)	(1993)	(1984)	(1937)	(1960)	(1975)	(1936)	(1973)	(1973)	(2005)	(1928)	(2004)
Min	237	407	449	422	641	783	821	505	420	305	175	288
(WY)	(1955)	(1955)	(1956)	(1956)	(2001)	(1988)	(1986)	(2001)	(1988)	(2002)	(2002)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1925 - 2007	
Annual total	371,849		388,016			
Annual mean	1,019		1,063		1,473	
Highest annual mean					2,328	1973
Lowest annual mean					578	2002
Highest daily mean	6,630	Jun 27	11,600	Mar 2	63,900	Aug 16, 1928
Lowest daily mean	332	Jun 19	181	Sep 30	83	Sep 13, 2002
Annual seven-day minimum	418	Aug 5	260	Sep 6	102	Sep 8, 2002
Maximum peak flow			14,000	Mar 2	^a 73,300	Aug 16, 1928
Maximum peak stage			9.76	Mar 2	^a 24.30	Aug 16, 1928
Instantaneous low flow			139	Aug 20	40	Oct 17, 1954
Annual runoff (cfsm)	1.16		1.21		1.68	
Annual runoff (inches)	15.81		16.50		22.88	
10 percent exceeds	1,610		1,690		2,470	
50 percent exceeds	853		866		1,160	
90 percent exceeds	505		342		552	

^a See Remarks.

