

Water-Data Report 2010

**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 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

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

REVISED RECORDS.--WDR NC-81-1: Drainage area. WDR NC-88-1: 1986 (minimum discharge, gage height, daily discharges, June, July, August). WDR-US-2008: 2007 (daily discharges).

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 telemetry at streamgage.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. 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.

## 02151500 BROAD RIVER NEAR BOILING SPRINGS, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	785	1,370	1,280	2,240	2,780	2,020	2,000	1,330	2,150	812	586	401
2	751	1,340	3,190	2,140	2,650	2,020	1,960	1,430	1,910	895	586	669
3	1,150	1,220	8,030	2,000	3,480	2,070	1,810	1,670	1,740	838	645	394
4	722	1,150	3,640	1,880	3,130	1,980	1,900	1,910	1,490	513	565	602
5	873	1,160	2,620	1,720	9,200	1,890	1,700	1,460	1,330	544	694	692
6	1,150	1,050	2,160	1,780	13,000	1,670	1,760	1,530	1,120	807	743	371
7	1,020	938	1,820	1,750	5,020	1,570	1,570	1,320	876	494	835	349
8	609	970	1,770	1,800	4,070	1,610	1,580	1,220	1,230	691	534	518
9	818	1,010	5,290	1,790	3,500	1,780	2,520	1,160	1,260	539	660	341
10	1,430	1,200	e4,520	1,650	3,140	1,740	1,900	1,180	972	723	531	473
11	784	12,900	e2,650	1,650	2,870	1,930	1,670	1,340	1,160	692	479	634
12	592	10,300	2,310	1,320	2,720	2,150	1,730	1,520	1,280	562	578	411
13	1,150	3,810	2,170	1,390	2,740	3,470	1,740	1,410	1,040	665	637	390
14	1,100	2,600	2,130	1,620	2,610	2,970	1,690	1,100	940	537	890	419
15	1,090	1,850	1,900	1,650	2,550	2,520	1,440	1,350	893	738	1,350	449
16	1,130	1,620	1,770	1,620	2,430	2,280	1,240	1,410	1,050	505	901	303
17	1,420	1,430	1,670	3,580	2,310	2,170	1,220	1,410	935	490	914	558
18	991	1,630	1,630	4,220	2,250	1,950	1,610	2,120	1,030	431	1,110	613
19	750	1,610	1,970	2,950	2,180	1,760	1,530	1,720	912	602	927	324
20	1,050	1,490	1,900	2,420	2,110	1,720	1,580	1,440	670	748	1,280	263
21	977	1,330	1,780	2,260	2,030	1,710	1,270	1,280	961	604	1,050	323
22	891	1,250	1,640	2,660	2,110	2,480	1,270	1,480	1,010	663	614	296
23	631	1,400	1,650	2,410	2,350	2,810	1,660	1,150	764	425	842	364
24	1,040	1,490	1,630	2,830	2,310	2,260	1,560	947	676	676	726	299
25	982	1,520	7,890	21,200	2,280	2,140	1,870	1,380	635	613	637	448
26	847	1,310	11,400	9,910	2,150	2,140	1,910	1,430	1,020	573	655	384
27	989	1,060	4,310	4,430	2,090	1,940	1,680	1,270	866	562	658	1,070
28	2,100	1,350	3,550	3,540	2,070	1,990	1,620	1,220	805	774	721	1,160
29	1,680	1,290	2,810	3,170	---	2,570	1,550	1,340	907	632	456	724
30	1,360	1,280	2,500	3,010	---	2,040	1,370	1,120	678	532	418	509
31	1,210	---	2,350	2,980	---	1,920	---	1,320	---	611	730	---
<b>Total</b>	32,072	63,928	95,930	99,570	92,130	65,270	49,910	42,967	32,310	19,491	22,952	14,751
<b>Mean</b>	1,035	2,131	3,095	3,212	3,290	2,105	1,664	1,386	1,077	629	740	492
<b>Max</b>	2,100	12,900	11,400	21,200	13,000	3,470	2,520	2,120	2,150	895	1,350	1,160
<b>Min</b>	592	938	1,280	1,320	2,030	1,570	1,220	947	635	425	418	263
<b>Cfsm</b>	1.18	2.44	3.54	3.67	3.76	2.41	1.90	1.58	1.23	0.72	0.85	0.56
<b>In.</b>	1.36	2.72	4.08	4.23	3.92	2.77	2.12	1.83	1.37	0.83	0.98	0.63

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2010, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	1,220	1,210	1,450	1,729	1,850	2,045	1,877	1,502	1,278	1,089	1,175	1,072
<b>Max</b>	5,499	3,275	3,095	4,750	4,304	4,868	4,525	3,441	2,812	3,241	6,893	4,806
<b>(WY)</b>	(1965)	(1993)	(2010)	(1937)	(1960)	(1975)	(1936)	(1973)	(1973)	(2005)	(1928)	(2004)
<b>Min</b>	237	345	449	422	573	783	821	505	262	234	175	288
<b>(WY)</b>	(1955)	(2008)	(1956)	(1956)	(2009)	(1988)	(1986)	(2001)	(2008)	(2008)	(2002)	(1954)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1925 - 2010	
<b>Annual total</b>	457,802		631,281			
<b>Annual mean</b>	1,254		1,730		1,458	
<b>Highest annual mean</b>					2,328	1973
<b>Lowest annual mean</b>					538	2008
<b>Highest daily mean</b>	12,900	Nov 11	21,200	Jan 25	63,900	Aug 16, 1928
<b>Lowest daily mean</b>	270	Sep 7	263	Sep 20	83	Sep 13, 2002
<b>Annual seven-day minimum</b>	374	Sep 3	331	Sep 19	102	Sep 8, 2002
<b>Maximum peak flow</b>			23,200	Jan 25	<sup>a</sup> 73,300	Aug 16, 1928
<b>Maximum peak stage</b>			13.38	Jan 25	<sup>a</sup> 24.30	Aug 16, 1928
<b>Instantaneous low flow</b>			231	Sep 20	40	Oct 17, 1954
<b>Annual runoff (cfsm)</b>	1.43		1.98		1.67	
<b>Annual runoff (inches)</b>	19.46		26.84		22.64	
<b>10 percent exceeds</b>	2,170		2,790		2,450	
<b>50 percent exceeds</b>	920		1,360		1,140	
<b>90 percent exceeds</b>	414		552		531	

<sup>a</sup> See Remarks.

