

Water-Data Report 2007

02152100 FIRST BROAD RIVER NEAR CASAR, NC

Santee Basin
Upper Broad Subbasin

LOCATION.--Lat 35°29'35", long 81°40'56" referenced to North American Datum of 1983, Cleveland County, NC, Hydrologic Unit 03050105, on right bank 570 ft upstream from bridge on Secondary Road 1530, 0.5 mi upstream from No Business Creek, and 4.0 mi southwest of Casar.

DRAINAGE AREA.--60.5 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1949-5. March 1959 to current year.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 899.87 ft above NGVD of 1929. Satellite telemetry at station.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 and August 1940 reached a stage of about 25 ft, from information by local resident.

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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	32	44	59	1,250	62	156	69	55	36	32	25	27
2	31	42	53	411	67	1,290	68	54	34	29	24	22
3	31	40	50	194	64	291	65	54	38	29	22	20
4	30	39	49	135	60	168	65	57	43	28	21	19
5	30	39	48	192	59	124	63	58	36	27	20	18
6	30	39	47	248	58	105	63	60	33	25	19	17
7	29	55	47	193	58	94	63	54	32	25	19	17
8	31	217	45	776	58	90	63	52	31	25	17	16
9	34	102	44	324	57	85	63	52	30	28	16	16
10	31	70	44	188	57	82	63	52	28	30	16	15
11	30	59	44	139	56	80	63	52	28	28	15	15
12	33	61	43	117	55	76	67	54	30	26	19	15
13	30	55	43	105	56	75	62	51	32	23	20	15
14	28	52	43	97	61	73	62	47	33	24	16	45
15	28	52	42	90	57	72	107	46	84	24	15	59
16	28	556	42	86	55	181	95	46	45	23	15	23
17	106	215	41	79	54	179	74	51	39	23	14	20
18	102	110	40	77	54	120	70	45	34	24	15	19
19	52	82	40	77	53	100	70	44	32	23	14	19
20	55	69	40	72	52	92	79	43	51	28	14	18
21	47	61	39	72	53	86	68	42	34	27	15	19
22	43	70	473	90	54	82	66	40	30	22	22	20
23	41	69	453	77	52	79	63	40	29	22	24	19
24	38	62	147	72	51	76	63	40	29	22	27	17
25	38	58	315	70	74	74	62	38	29	23	22	17
26	38	55	311	67	76	72	61	38	30	22	19	17
27	42	53	146	67	62	71	66	37	29	22	28	16
28	93	51	100	67	57	70	60	36	31	21	21	15
29	61	51	82	64	---	69	59	35	28	23	20	14
30	50	51	73	63	---	68	56	34	35	27	32	14
31	46	---	87	62	---	68	---	33	---	30	28	---
Total	1,338	2,579	3,130	5,621	1,632	4,348	2,018	1,440	1,053	785	614	603
Mean	43.2	86.0	101	181	58.3	140	67.3	46.5	35.1	25.3	19.8	20.1
Max	106	556	473	1,250	76	1,290	107	60	84	32	32	59
Min	28	39	39	62	51	68	56	33	28	21	14	14
Cfsm	0.71	1.42	1.67	3.00	0.96	2.32	1.11	0.77	0.58	0.42	0.33	0.33
In.	0.82	1.59	1.92	3.46	1.00	2.67	1.24	0.89	0.65	0.48	0.38	0.37

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	71.7	68.8	84.5	103	117	134	123	94.3	79.8	65.6	66.5	59.7
Max	318	191	185	273	286	386	300	254	261	243	262	348
(WY)	(1965)	(1978)	(1962)	(1995)	(1960)	(1975)	(2003)	(1975)	(2003)	(2003)	(1970)	(2004)
Min	17.4	17.2	22.7	30.9	37.8	44.6	36.1	18.3	14.9	11.4	8.09	20.1
(WY)	(2002)	(2002)	(2002)	(2001)	(2001)	(1988)	(2002)	(2001)	(2002)	(2002)	(2002)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1959 - 2007	
Annual total	22,828		25,161			
Annual mean	62.5		68.9		89.0	
Highest annual mean					152	2003
Lowest annual mean					26.8	2002
Highest daily mean	727	Aug 12	1,290	Mar 2	5,870	Sep 8, 2004
Lowest daily mean	15	Aug 5	14	Aug 17	3.9	Aug 15, 2002
Annual seven-day minimum	16	Aug 3	15	Aug 15	4.1	Aug 9, 2002
Maximum peak flow			2,820	Mar 2	12,500	Sep 8, 2004
Maximum peak stage			8.04	Mar 2	19.89	Sep 8, 2004
Instantaneous low flow			13	Aug 21	3.6	Aug 15, 2002
Annual runoff (cfsm)	1.03		1.14		1.47	
Annual runoff (inches)	14.04		15.47		19.98	
10 percent exceeds	92		101		146	
50 percent exceeds	49		48		63	
90 percent exceeds	25		19		31	

