

Water-Data Report 2008

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNDAL, NC

Santee Basin
Upper Broad Subbasin

LOCATION.--Lat 35°26'32", long 81°36'47" referenced to North American Datum of 1983, Cleveland County, NC, Hydrologic Unit 03050105, near center span on downstream side of bridge on Secondary Road 1512, and 3.4 mi northwest of Lawndale.

DRAINAGE AREA.--129 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 2008 to September 2008.

GAGE.--Water-stage recorder. Datum of gage is 845 ft above National Geodetic Vertical Datum of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for current water year also occurred August 13.

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	---	---	---	---	---	---	e75	61	39	25	28	94
2	---	---	---	---	---	---	e73	59	37	20	26	71
3	---	---	---	---	---	---	e75	58	35	19	25	50
4	---	---	---	---	---	---	e100	57	35	18	22	42
5	---	---	---	---	---	---	e205	55	33	18	20	38
6	---	---	---	---	---	---	e300	53	31	21	19	36
7	---	---	---	---	---	---	e220	51	30	27	16	34
8	---	---	---	---	---	---	e165	51	28	33	15	33
9	---	---	---	---	---	---	e140	53	27	28	13	32
10	---	---	---	---	---	---	128	51	32	27	13	40
11	---	---	---	---	---	---	115	53	33	25	11	85
12	---	---	---	---	---	---	108	56	28	23	11	62
13	---	---	---	---	---	---	100	48	27	21	15	48
14	---	---	---	---	---	---	92	47	29	27	40	41
15	---	---	---	---	---	---	87	48	32	23	41	37
16	---	---	---	---	---	---	81	52	28	19	30	54
17	---	---	---	---	---	---	79	51	25	17	87	92
18	---	---	---	---	---	---	76	47	23	16	72	59
19	---	---	---	---	---	---	76	56	22	14	37	46
20	---	---	---	---	---	---	87	49	22	14	30	41
21	---	---	---	---	---	---	77	46	21	12	25	39
22	---	---	---	---	---	---	73	44	22	13	23	38
23	---	---	---	---	---	---	71	41	22	22	22	36
24	---	---	---	---	---	---	68	41	22	42	22	35
25	---	---	---	---	---	---	65	41	20	30	24	33
26	---	---	---	---	---	---	64	39	19	24	36	35
27	---	---	---	---	---	---	64	38	20	24	331	76
28	---	---	---	---	---	---	73	43	22	22	138	75
29	---	---	---	---	---	---	75	57	28	29	81	56
30	---	---	---	---	---	---	64	47	25	60	56	44
31	---	---	---	---	---	---	---	42	---	34	46	---
Mean	---	---	---	---	---	---	103	49.5	27.2	24.1	44.4	50.1
Max	---	---	---	---	---	---	300	61	39	60	331	94
Min	---	---	---	---	---	---	64	38	19	12	11	32

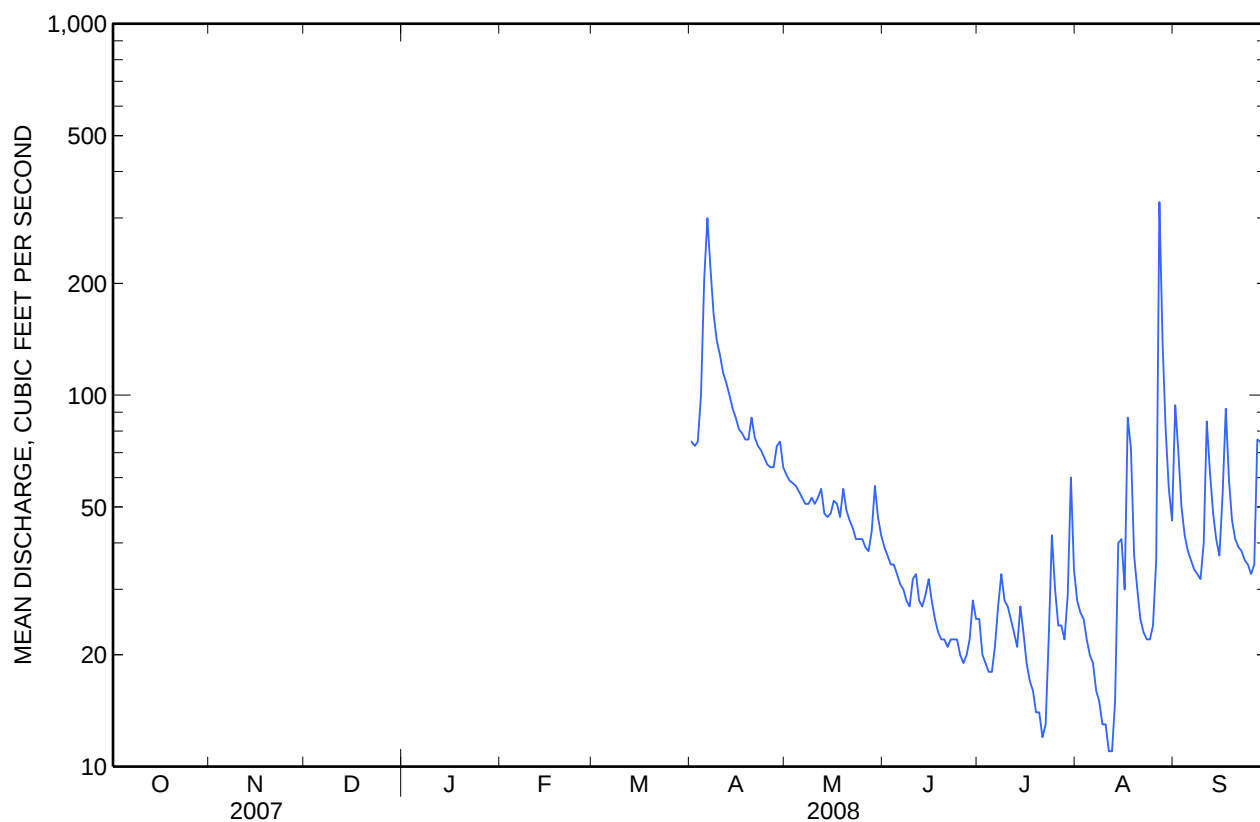
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2008 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	---	---	---	---	---	---	103	49.5	27.2	24.1	44.4	50.1
Max	---	---	---	---	---	---	103	49.5	27.2	24.1	44.4	50.1
(WY)	(---)	(---)	(---)	(---)	(---)	(---)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)
Min	---	---	---	---	---	---	103	49.5	27.2	24.1	44.4	50.1
(WY)	(---)	(---)	(---)	(---)	(---)	(---)	(2008)	(2008)	(2008)	(2008)	(2008)	(2008)

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

SUMMARY STATISTICS

	Water Year 2008	
Highest daily mean	331	Aug 27
Lowest daily mean	11	Aug 11
Annual seven-day minimum	13	Aug 7
Maximum peak flow	673	Aug 27
Maximum peak stage	4.85	Aug 27
Instantaneous low flow	^a 8.2	Aug 12

^aSee Remarks.

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--March to September 2008.

REMARKS.--Station operated in cooperation with the Cleveland County Sanitary District to characterize the total sediment load in the First Broad River basin upstream of the proposed reservoir north of Lawnsdale and downstream of the proposed dam location.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 6

[QC, quality control sample]

Date	Time	Sample medium and type	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Location in X-sect. looking downstrm ft from l bank (00009)	Sampling method, code (82398)	Type of sample related QA data, code (99111)
Mar									
19...	1425	Surface water, regular	93	44	9	2.3	132	30	--
19...	1426	Surface water, regular	93	52	10	2.6	--	10	--
Apr									
25...	1415	Surface water, regular	65	63	5	.88	132	920	30
25...	1416	QC - Surface water, replicate	65	50	2	.35	132	920	--
28...	0846	Surface water, regular	69	71	6	1.1	132	920	--
May									
02...	1339	Surface water, regular	58	38	4	.63	132	920	--
06...	1416	Surface water, regular	54	38	6	.87	132	920	--
09...	1402	Surface water, regular	54	33	12	1.8	132	920	--
13...	1400	Surface water, regular	47	75	5	.64	132	920	--
16...	1357	Surface water, regular	54	78	5	.72	132	920	--
20...	1351	Surface water, regular	47	92	4	.51	132	920	--
23...	1314	QC - Surface water, replicate	41	91	3	.33	132	920	--
23...	1339	Surface water, regular	41	91	3	.33	132	920	30
27...	1427	Surface water, regular	38	86	6	.62	132	920	--
30...	1435	Surface water, regular	46	95	6	.74	132	920	--
Jun									
03...	1503	Surface water, regular	35	81	5	.47	132	920	--
06...	1453	Surface water, regular	31	85	5	.42	132	920	--
10...	1440	Surface water, regular	38	85	20	2.1	132	920	--
13...	1316	Surface water, regular	27	--	4	.29	132	920	--
17...	1250	Surface water, regular	24	--	4	.26	132	920	--
20...	1351	Surface water, regular	22	--	4	.24	132	920	--
24...	1502	Surface water, regular	23	--	4	.25	132	920	--
27...	1344	QC - Surface water, replicate	19	--	5	.26	132	920	--
27...	1347	Surface water, regular	19	--	4	.21	132	920	30

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO
SEPTEMBER 2008

Part 2 of 6

[QC, quality control sample]

Date	Type of repli- cate, code (99105)	Data base number	Medium code
Mar			
19...	--	01	WS
19...	--	01	WS
Apr			
25...	--	01	WS
25...	10.00	04	WSQ
28...	--	01	WS
May			
02...	--	01	WS
06...	--	01	WS
09...	--	01	WS
13...	--	01	WS
16...	--	01	WS
20...	--	01	WS
23...	10.00	04	WSQ
23...	--	01	WS
27...	--	01	WS
30...	--	01	WS
Jun			
03...	--	01	WS
06...	--	01	WS
10...	--	01	WS
13...	--	01	WS
17...	--	01	WS
20...	--	01	WS
24...	--	01	WS
27...	10.00	04	WSQ
27...	--	01	WS

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 6

[QC, quality control sample]

Date	Time	Sample medium and type	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diametr percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Bedload sediment, sieve diametr percent <.063mm (80226)	Bedload sediment, sieve diametr percent <.125mm (80227)	Bedload sediment, sieve diametr percent <.25mm (80228)
Jul									
01...	1335	Surface water, regular	24	--	9	.59	--	--	--
04...	1524	Surface water, regular	17	--	3	.14	--	--	--
08...	1155	Surface water, regular	28	--	10	.76	--	--	--
11...	1133	Surface water, regular	26	--	3	.21	--	--	--
15...	1049	Surface water, regular	22	--	2	.12	--	--	--
18...	1206	Surface water, regular	16	--	2	.09	--	--	--
22...	0821	Surface water, regular	9.5	--	2	.05	--	--	--
23...	0905	Surface water, regular	19	--	18	.93	--	--	--
24...	1140	Surface water, regular	49	--	57	7.5	--	--	--
25...	0816	QC - Surface water, replicate	31	--	10	.83	--	--	--
25...	0819	Surface water, regular	31	--	9	.74	--	--	--
29...	0907	Surface water, regular	25	--	4	.27	--	--	--
Aug									
01...	1624	Surface water, regular	29	--	7	.55	--	--	--
05...	0847	Surface water, regular	20	--	4	.21	--	--	--
08...	0935	Surface water, regular	16	--	3	.13	--	--	--
12...	1021	Surface water, regular	10	--	3	.09	--	--	--
14...	0742	Surface water, regular	45	--	23	2.8	--	--	--
15...	0927	Surface water, regular	43	--	21	2.4	--	--	--
18...	0758	Surface water, regular	78	92	117	25	--	--	--
19...	1337	Surface water, regular	36	--	14	1.3	--	--	--
22...	1259	QC - Surface water, replicate	24	--	3	.19	--	--	--
22...	1302	Surface water, regular	24	--	4	.25	--	--	--
26...	1130	Surface water, regular	34	--	6	.55	--	--	--
26...	1132	QC - Surface water, replicate	34	--	7	.64	--	--	--
26...	1133	Surface water, regular	34	--	7	.65	--	--	--
26...	1152	Surface water, regular	34	--	--	--	1	1	3
26...	1737	Surface water, regular	37	--	8	.80	--	--	--
27...	0816	Surface water, regular	171	61	240	111	--	--	--
27...	1034	Surface water, regular	658	74	483	858	--	--	--
27...	1035	Surface water, regular	658	71	520	924	--	--	--
27...	1130	Surface water, regular	673	--	--	--	.0	1	6
28...	1119	Surface water, regular	131	75	48	17	--	--	--
29...	1502	Surface water, regular	76	91	15	3.1	--	--	--

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 4 of 6

[QC, quality control sample]

Date	Bedload sedi- ment, sieve diametr percent <5 mm (80229)	Bedload sedi- ment, sieve diametr percent <1 mm (80230)	Bedload sedi- ment, sieve diametr percent <2 mm (80231)	Bedload sedi- ment, sieve diametr percent <4 mm (80232)	Bedload sedi- ment, sieve diametr percent <8 mm (80233)	Loca- tion in X-sect. looking dwnstrm ft from l bank (00009)	Sam- pling method, code (82398)	Type of sample related QA data, code (99111)	Type of repli- cate, code (99105)	Data base number	Medium code
Jul											
01...	--	--	--	--	--	132	920	--	--	01	WS
04...	--	--	--	--	--	132	920	--	--	01	WS
08...	--	--	--	--	--	132	920	--	--	01	WS
11...	--	--	--	--	--	132	920	--	--	01	WS
15...	--	--	--	--	--	132	920	--	--	01	WS
18...	--	--	--	--	--	132	920	--	--	01	WS
22...	--	--	--	--	--	132	920	--	--	01	WS
23...	--	--	--	--	--	132	920	--	--	01	WS
24...	--	--	--	--	--	132	920	--	--	01	WS
25...	--	--	--	--	--	132	920	--	10.00	04	WSQ
25...	--	--	--	--	--	132	920	30	--	01	WS
29...	--	--	--	--	--	132	920	--	--	01	WS
Aug											
01...	--	--	--	--	--	132	920	--	--	01	WS
05...	--	--	--	--	--	132	920	--	--	01	WS
08...	--	--	--	--	--	132	920	--	--	01	WS
12...	--	--	--	--	--	132	920	--	--	01	WS
14...	--	--	--	--	--	132	920	--	--	01	WS
15...	--	--	--	--	--	132	920	--	--	01	WS
18...	--	--	--	--	--	132	920	--	--	01	WS
19...	--	--	--	--	--	132	920	--	--	01	WS
22...	--	--	--	--	--	132	920	--	10.00	04	WSQ
22...	--	--	--	--	--	132	920	30	--	01	WS
26...	--	--	--	--	--	132	30	30	--	01	WS
26...	--	--	--	--	--	132	30	--	10.00	04	WSQ
26...	--	--	--	--	--	--	10	--	--	01	WS
26...	26	62	92	100	--	--	1000	--	--	01	WS
26...	--	--	--	--	--	132	920	--	--	01	WS
27...	--	--	--	--	--	132	920	--	--	01	WS
27...	--	--	--	--	--	132	30	--	--	01	WS
27...	--	--	--	--	--	--	10	--	--	01	WS
27...	33	72	94	100	100	--	1000	--	--	01	WS
28...	--	--	--	--	--	132	920	--	--	01	WS
29...	--	--	--	--	--	132	920	--	--	01	WS

02152285 FIRST BROAD RIVER AT SECONDARY ROAD 1512 NEAR LAWNSDALE, NC—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 5 of 6

[QC, quality control sample]

Date	Time	Sample medium and type	Instantaneous discharge, cfs (00061)	Suspnd. sediment, sieve diameter, percent <.063mm (70331)	Suspended sediment concentration mg/L (80154)	Suspended sediment discharge, tons/d (80155)	Location in X-sect. looking downstrm ft from l bank (00009)	Sampling method, code (82398)	Data base number
Sep									
02...	0908	Surface water, regular	73	82	47	9.3	132	920	01
05...	1256	Surface water, regular	38	--	5	.51	132	920	01
09...	1000	Surface water, regular	33	--	4	.36	132	920	01
11...	0940	Surface water, regular	94	--	66	17	132	920	01
12...	1220	Surface water, regular	60	--	17	2.7	132	920	01
16...	1343	Surface water, regular	52	--	14	2.0	132	920	01
19...	1405	Surface water, regular	45	--	3	.36	132	920	01
23...	0924	Surface water, regular	37	--	5	.50	132	920	01
23...	0927	QC - Surface water, replicate	37	--	5	.50	132	920	04
26...	1054	Surface water, regular	34	--	4	.37	132	920	01
27...	1137	Surface water, regular	76	--	35	7.2	132	920	01
30...	1430	Surface water, regular	43	--	3	.35	132	920	01

WATER-QUALITY DATA
WATER YEAR
OCTOBER 2007 TO
SEPTEMBER 2008

Part 6 of 6

[QC, quality control sample]

Date	Medium code
Sep	
02...	WS
05...	WS
09...	WS
11...	WS
12...	WS
16...	WS
19...	WS
23...	WS
23...	WSQ
26...	WS
27...	WS
30...	WS