

Water-Data Report 2008

02150495 SECOND BROAD RIVER NEAR LOGAN, NC

Santee Basin
Upper Broad Subbasin

LOCATION.--Lat 35°24'16", long 81°52'21" referenced to North American Datum of 1983, Rutherford County, NC, Hydrologic Unit 03050105, on right bank 30 ft downstream of bridge on Secondary Road 1538, 2.2 mi southeast of Logan, and 2.7 mi upstream from Catheys Creek.

DRAINAGE AREA.--86.2 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1998 to current year.

REVISED RECORDS.--WDR NC-03-1B: 2000 (maximum discharge).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 840 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for current water year also occurred August 13.

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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	27	35	38	101	267	56	60	47	30	19	17	62
2	26	35	38	76	214	54	57	45	29	17	15	48
3	26	34	38	64	126	52	57	45	29	15	15	36
4	28	34	37	59	100	78	68	44	29	15	13	29
5	48	34	37	56	84	268	117	43	27	15	11	26
6	35	34	36	55	77	138	213	43	25	18	10	24
7	31	33	36	52	79	188	164	41	25	18	9.6	22
8	30	33	36	51	69	251	120	40	24	16	8.8	21
9	29	34	36	50	64	166	98	43	23	16	8.5	21
10	31	35	37	51	58	124	86	41	22	17	8.7	61
11	28	34	37	66	55	103	78	42	22	20	8.4	119
12	28	34	37	60	54	90	74	40	21	16	7.8	72
13	28	35	37	53	62	80	68	37	21	15	12	51
14	28	35	37	50	64	74	64	37	22	18	14	40
15	27	47	37	48	58	78	61	39	22	16	14	35
16	27	41	56	46	56	108	58	45	21	14	19	61
17	28	37	48	57	56	87	57	39	19	13	52	68
18	29	36	41	60	74	79	56	37	19	12	31	49
19	31	36	39	63	65	90	57	40	18	12	19	40
20	31	36	38	61	60	196	58	36	18	12	16	35
21	28	36	45	55	57	140	54	36	18	12	15	33
22	29	50	47	54	57	114	52	35	18	11	14	31
23	34	44	85	53	57	95	52	32	19	11	13	29
24	44	38	94	51	54	83	50	32	17	13	12	28
25	60	37	60	48	52	74	48	31	16	12	14	26
26	47	43	61	47	63	70	49	30	15	13	25	29
27	40	54	59	47	73	66	49	29	16	15	286	46
28	36	43	78	46	61	64	61	36	17	13	92	39
29	35	40	187	46	58	68	56	44	21	14	54	32
30	35	39	149	48	---	65	48	35	24	19	37	29
31	35	---	168	45	---	60	---	33	---	16	31	---
Total	1,019	1,136	1,809	1,719	2,274	3,259	2,190	1,197	647	463	902.8	1,242
Mean	32.9	37.9	58.4	55.5	78.4	105	73.0	38.6	21.6	14.9	29.1	41.4
Max	60	54	187	101	267	268	213	47	30	20	286	119
Min	26	33	36	45	52	52	48	29	15	11	7.8	21
Cfsm	0.38	0.44	0.68	0.64	0.91	1.22	0.85	0.45	0.25	0.17	0.34	0.48
In.	0.44	0.49	0.78	0.74	0.98	1.41	0.95	0.52	0.28	0.20	0.39	0.54

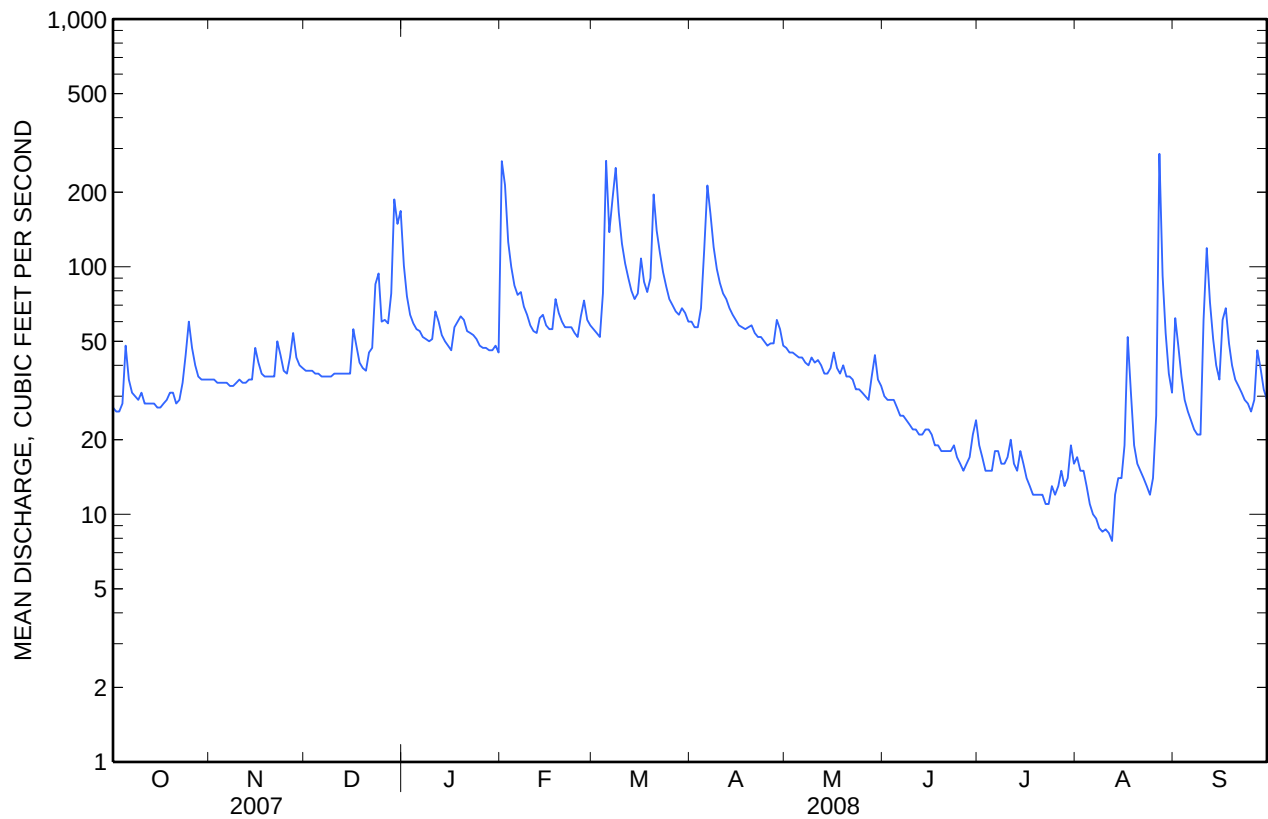
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	64.3	84.7	105	104	107	130	127	87.7	86.1	91.8	81.7	87.3
Max	122	187	190	218	202	216	368	276	275	275	384	349
(WY)	(2004)	(2005)	(2005)	(2007)	(2004)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)
Min	25.5	33.8	46.2	50.8	57.7	73.8	66.2	34.4	21.6	14.9	13.9	27.9
(WY)	(2001)	(2002)	(2002)	(2001)	(2001)	(2006)	(2002)	(2001)	(2008)	(2008)	(2002)	(2002)

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SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1999 - 2008	
Annual total	28,607		17,857.8			
Annual mean	78.4		48.8		96.3	
Highest annual mean					205	2003
Lowest annual mean					46.2	2002
Highest daily mean	1,480	Mar 2	286	Aug 27	3,320	Sep 8, 2004
Lowest daily mean	20	Sep 11	7.8	Aug 12	6.6	Sep 12, 2002
Annual seven-day minimum	21	Sep 7	8.8	Aug 6	8.0	Sep 7, 2002
Maximum peak flow			489	Feb 1	4,450	Sep 8, 2004
Maximum peak stage			4.97	Feb 1	15.91	Sep 8, 2004
Instantaneous low flow			^a 7.0	Aug 12	6.1	Sep 12, 2002
Annual runoff (cfs)	0.909		0.566		1.12	
Annual runoff (inches)	12.35		7.71		15.18	
10 percent exceeds	122		81		165	
50 percent exceeds	49		39		68	
90 percent exceeds	28		15		27	

^aSee Remarks.

02150495 SECOND BROAD RIVER NEAR LOGAN, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--November 2000 to current year.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with North Carolina Department of Environment and Natural Resources. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	1.91	0.00	0.04	0.00	0.01	0.00	0.00	0.05
2	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.30	0.00
3	0.00	0.00	0.00	0.00	0.08	0.00	0.40	0.00	0.00	0.00	0.00	0.00
4	0.22	0.00	0.00	0.00	0.03	1.19	1.06	0.00	0.00	0.06	0.00	0.00
5	0.02	0.00	0.00	0.00	0.00	0.00	0.49	0.31	0.00	0.09	0.00	0.00
6	0.00	0.00	0.00	0.00	0.10	0.00	0.09	0.01	0.00	0.87	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	1.11	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.06	0.00	0.02	0.00	0.02	0.00	0.00
9	0.12	0.00	0.00	0.06	0.00	0.00	0.00	0.22	0.00	0.01	0.09	0.00
10	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.01	0.00	0.01	0.01	1.39
11	0.00	0.00	0.00	0.25	0.00	0.00	0.01	0.75	0.00	0.26	0.00	0.05
12	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03
13	0.00	0.00	0.00	0.00	0.45	0.00	0.00	0.00	0.00	0.07	0.84	0.00
14	0.00	0.02	0.00	0.00	0.00	0.00	0.01	0.00	0.03	0.02	0.77	0.00
15	0.00	0.61	0.60	0.00	0.00	0.78	0.00	0.08	0.00	0.00	0.00	0.02
16	0.00	0.00	0.10	0.00	0.00	0.01	0.00	0.07	0.00	0.00	0.00	1.88
17	0.00	0.00	0.00	0.41	0.57	0.00	0.00	0.00	0.00	0.00	0.24	0.04
18	0.00	0.00	0.00	0.53	0.01	0.00	0.00	0.03	0.00	0.00	0.00	0.00
19	0.04	0.00	0.00	0.09	0.00	0.97	0.17	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00
21	0.00	0.00	0.35	0.00	0.11	0.00	0.00	0.01	0.00	0.00	0.00	0.00
22	0.19	0.70	0.14	0.02	0.11	0.00	0.00	0.00	0.42	0.51	0.00	0.00
23	0.24	0.00	0.97	0.01	0.00	0.00	0.00	0.00	0.12	0.00	0.00	0.00
24	0.61	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.14	0.04	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.51	0.00
26	0.05	0.45	0.60	0.00	0.46	0.00	0.07	0.00	0.29	0.03	2.60	0.75
27	0.00	0.01	0.00	0.00	0.00	0.00	0.02	0.10	0.02	0.00	0.49	0.07
28	0.00	0.00	1.39	0.00	0.00	0.00	0.30	0.75	0.00	0.18	0.06	0.00
29	0.00	0.00	0.11	0.02	0.00	0.44	0.00	0.00	0.01	0.02	0.02	0.00
30	0.00	0.00	1.13	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.20
31	0.00	---	0.01	0.19	---	0.00	---	0.00	---	0.24	0.53	---
Total	1.63	1.83	5.42	1.72	3.83	4.56	2.67	2.38	0.90	2.39	6.46	4.48

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