

Water-Data Report 2007

**02146530 LITTLE SUGAR CREEK AT NORTH CAROLINA HIGHWAY 51 AT PINEVILLE, NC**

Santee Basin  
Lower Catawba Subbasin

LOCATION.--Lat 35°05'07", long 80°52'56" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on left bank on upstream side of North Carolina Highway 51 bridge, 0.5 mi east of intersection of North Carolina Highway 51 and U.S. Highway 521 at Pineville.

DRAINAGE AREA.--49.2 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--Occasional discharge measurements, water years 1966-97. June 1997 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 531.94 ft above North American Vertical Datum of 1988, from levels. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. A daily average of 21.1 ft<sup>3</sup>/s of treated effluent was discharged into the stream 5.2 mi upstream from the gage. Maximum gage height for period of record from floodmarks. Maximum discharge for period of record from rating curve extended above 10,100 ft<sup>3</sup>/s. Minimum discharge for period of record and current water year affected by regulation.

## 02146530 LITTLE SUGAR CREEK AT NORTH CAROLINA HIGHWAY 51 AT PINEVILLE, NC—Continued

**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	26	35	92	221	221	572	46	42	31	63	33	27
2	26	34	51	73	119	1,970	56	40	31	32	29	35
3	26	33	44	54	64	128	43	40	107	30	29	24
4	26	35	41	51	55	82	43	42	38	29	29	24
5	26	33	41	327	53	68	42	51	31	28	28	23
6	29	33	40	198	51	61	42	47	31	31	29	27
7	28	233	40	203	52	57	42	38	31	190	34	26
8	205	238	39	540	52	55	42	38	30	68	30	24
9	40	50	39	102	49	53	42	54	29	87	29	22
10	30	41	39	70	48	52	43	77	28	67	28	22
11	27	46	39	61	48	51	58	39	57	33	28	22
12	38	506	39	56	48	50	230	38	75	58	27	22
13	28	55	39	53	210	49	48	47	69	32	27	23
14	26	45	40	51	434	49	45	37	160	30	27	97
15	25	44	41	50	71	48	627	37	64	61	27	159
16	25	974	39	49	58	165	116	36	34	73	27	27
17	615	95	38	46	54	63	58	36	32	32	27	24
18	219	58	39	67	51	47	52	35	31	86	27	24
19	49	49	39	58	48	46	83	33	30	33	26	24
20	41	45	38	48	48	46	196	33	30	31	26	24
21	37	451	39	81	49	45	53	33	29	29	27	23
22	38	2,590	356	282	47	44	47	32	28	28	31	23
23	36	183	109	65	45	45	45	32	28	28	50	23
24	33	83	53	55	44	44	44	32	58	28	77	23
25	33	63	520	52	275	43	44	32	499	28	27	23
26	33	55	117	49	94	43	44	32	167	27	25	23
27	114	50	65	48	56	45	119	31	58	81	69	23
28	281	47	55	48	50	44	48	31	36	354	27	23
29	43	45	51	46	---	53	43	31	32	64	25	23
30	36	48	48	47	---	44	40	30	74	107	27	22
31	35	---	78	47	---	42	---	31	---	41	83	---
<b>Total</b>	2,274	6,297	2,348	3,198	2,494	4,204	2,481	1,187	1,978	1,909	1,035	929
<b>Mean</b>	73.4	210	75.7	103	89.1	136	82.7	38.3	65.9	61.6	33.4	31.0
<b>Max</b>	615	2,590	520	540	434	1,970	627	77	499	354	83	159
<b>Min</b>	25	33	38	46	44	42	40	30	28	27	25	22
<b>Cfsm</b>	1.49	4.27	1.54	2.10	1.81	2.76	1.68	0.78	1.34	1.25	0.68	0.63
<b>In.</b>	1.72	4.76	1.78	2.42	1.89	3.18	1.88	0.90	1.50	1.44	0.78	0.70

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	66.1	76.0	82.7	98.7	88.7	109	104	81.1	96.1	112	77.2	83.0
<b>Max</b>	115	210	152	236	167	237	269	332	283	336	151	224
<b>(WY)</b>	(2000)	(2007)	(2003)	(1998)	(1998)	(2003)	(2003)	(2003)	(2003)	(1997)	(2006)	(2004)
<b>Min</b>	33.0	29.9	46.9	38.7	44.2	45.3	35.4	38.3	35.1	57.1	33.4	30.9
<b>(WY)</b>	(2002)	(2002)	(2000)	(2004)	(2002)	(2006)	(2002)	(2007)	(2002)	(2001)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1997 - 2007	
<b>Annual total</b>	31,508		30,334			
<b>Annual mean</b>	86.3		83.1		88.3	
<b>Highest annual mean</b>					164	2003
<b>Lowest annual mean</b>					56.9	2002
<b>Highest daily mean</b>	2,590	Nov 22	2,590	Nov 22	6,780	Jul 23, 1997
<b>Lowest daily mean</b>	25	Jul 18	22	Sep 9	21	Dec 9, 2001
<b>Annual seven-day minimum</b>	26	Jul 12	23	Sep 24	22	Oct 16, 2001
<b>Maximum peak flow</b>			4,940	Mar 2	<sup>a</sup> 11,200	Jul 23, 1997
<b>Maximum peak stage</b>			16.16	Mar 2	<sup>a</sup> 23.04	Jul 23, 1997
<b>Instantaneous low flow</b>			<sup>a</sup> 15	Jul 27	<sup>a</sup> 10	Aug 15, 2002
<b>Annual runoff (cfsm)</b>	1.75		1.69		1.79	
<b>Annual runoff (inches)</b>	23.82		22.94		24.37	
<b>10 percent exceeds</b>	139		123		164	
<b>50 percent exceeds</b>	39		44		40	
<b>90 percent exceeds</b>	29		27		28	

<sup>a</sup> See Remarks.

