

Water-Data Report 2010

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 mi².

SURFACE-WATER RECORDS

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

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 streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. A daily average of 19.9 ft³/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 ft³/s. Minimum discharge for all years affected by regulation. Minimum discharge for current water year also occurred August 18.

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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	27	460	42	44	90	39	60	36	1,530	76	115	32
2	26	50	452	39	324	54	55	35	596	37	28	32
3	26	36	248	38	188	113	53	54	183	31	30	31
4	25	32	55	37	74	42	51	43	59	28	27	30
5	127	30	48	36	1,720	34	50	35	51	27	47	30
6	39	28	42	36	383	32	48	34	55	27	133	29
7	30	27	37	36	102	31	46	33	82	27	294	31
8	26	27	102	36	71	30	53	32	38	26	33	30
9	27	27	800	35	62	31	87	31	37	25	27	29
10	27	354	93	35	56	34	42	32	53	26	26	28
11	26	1,690	54	34	46	54	40	44	62	25	24	30
12	42	429	46	34	43	171	41	39	35	1,070	24	33
13	41	100	91	34	88	548	40	34	179	159	23	29
14	53	53	53	34	51	175	39	33	132	46	23	31
15	56	39	42	33	108	77	39	33	75	35	68	30
16	e35	34	39	34	55	63	39	33	70	45	36	29
17	34	33	37	717	43	58	35	195	39	58	24	29
18	29	34	202	88	38	54	35	96	34	51	23	28
19	26	38	336	55	36	52	34	40	32	38	1,060	28
20	26	31	67	47	36	50	35	36	31	29	160	28
21	26	30	46	233	34	66	54	37	31	27	54	27
22	26	31	42	165	259	143	41	49	30	26	43	28
23	26	271	39	58	70	61	38	35	29	25	38	29
24	38	49	37	225	72	52	37	39	29	102	38	28
25	31	36	1,280	2,680	73	52	144	39	29	45	36	27
26	25	32	176	129	45	50	43	34	27	27	43	108
27	106	36	72	73	43	47	60	32	36	397	42	302
28	303	29	54	57	41	47	97	39	30	342	34	149
29	48	28	47	51	---	651	37	218	27	39	33	166
30	32	30	43	72	---	90	36	40	524	29	33	174
31	36	---	95	113	---	67	---	338	---	60	33	---
Total	1,445	4,124	4,817	5,338	4,251	3,068	1,509	1,848	4,165	3,005	2,652	1,635
Mean	46.6	137	155	172	152	99.0	50.3	59.6	139	96.9	85.5	54.5
Max	303	1,690	1,280	2,680	1,720	651	144	338	1,530	1,070	1,060	302
Min	25	27	37	33	34	30	34	31	27	25	23	27
Cfsm	0.95	2.79	3.16	3.50	3.09	2.01	1.02	1.21	2.82	1.97	1.74	1.11
In.	1.09	3.12	3.64	4.04	3.21	2.32	1.14	1.40	3.15	2.27	2.01	1.24

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	61.2	75.0	86.5	98.9	88.9	111	94.5	82.1	97.4	109	90.0	78.5
Max	115	210	155	236	167	237	269	332	283	336	252	224
(WY)	(2000)	(2007)	(2010)	(1998)	(1998)	(2003)	(2003)	(2003)	(2003)	(1997)	(2008)	(2004)
Min	33.0	28.3	46.9	38.7	44.2	45.3	35.4	38.3	35.1	57.1	33.4	30.9
(WY)	(2002)	(2008)	(2000)	(2004)	(2002)	(2006)	(2002)	(2007)	(2002)	(2001)	(2007)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1997 - 2010	
Annual total	35,875		37,857			
Annual mean	98.3		104		88.5	
Highest annual mean					164	2003
Lowest annual mean					56.9	2002
Highest daily mean	1,690	Nov 11	2,680	Jan 25	6,780	Jul 23, 1997
Lowest daily mean	22	Jul 7	23	Aug 13	20	Jun 5, 2008
Annual seven-day minimum	25	Sep 2	26	Aug 8	21	May 31, 2008
Maximum peak flow			6,590	Jan 25	^a 11,200	Jul 23, 1997
Maximum peak stage			18.13	Jan 25	^a 23.04	Jul 23, 1997
Instantaneous low flow			^a 18	Oct 26	^a 10	Aug 15, 2002
Annual runoff (cfsm)	2.00		2.11		1.80	
Annual runoff (inches)	27.12		28.62		24.43	
10 percent exceeds	199		181		163	
50 percent exceeds	39		39		39	
90 percent exceeds	28		27		27	

^a See Remarks.

