

Water-Data Report 2008

02146381 SUGAR CREEK AT NORTH CAROLINA HIGHWAY 51 NEAR PINEVILLE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°05'27", long 80°53'58" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right bank on upstream side of bridge at North Carolina Highway 51, 0.3 mi upstream from McCullough Branch, and 0.6 mi northwest of city hall, Pineville.

DRAINAGE AREA.--65.3 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1994 to current year. Occasional discharge measurements, water years 1978-94.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 520.95 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. A daily average of 12.6 ft³/s of treated effluent from Irwin Creek wastewater treatment plant was discharged into the stream above the gage. Maximum discharge for period of record from rating curve extended above 9,710 ft³/s.

02146381 SUGAR CREEK AT NORTH CAROLINA HIGHWAY 51 NEAR PINEVILLE, NC—Continued

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	22	18	22	52	469	33	53	38	28	25	130	116
2	23	24	21	36	100	31	38	36	28	23	28	71
3	22	22	21	31	51	31	40	34	26	24	24	59
4	24	20	21	29	43	236	101	32	24	23	21	57
5	44	34	24	29	39	638	278	32	26	238	20	54
6	22	37	22	28	36	74	116	33	24	59	21	51
7	20	36	22	29	39	158	55	30	24	30	23	49
8	22	35	22	28	33	112	44	30	24	212	21	50
9	21	22	21	27	32	55	43	32	25	402	20	58
10	21	19	23	44	31	45	41	30	22	97	21	151
11	21	17	24	60	31	41	38	53	28	97	20	524
12	20	23	21	37	31	38	64	41	79	38	19	89
13	20	21	20	28	52	36	43	30	25	58	49	67
14	20	20	19	28	90	36	36	27	25	89	36	49
15	21	32	22	27	35	301	37	27	24	28	21	44
16	23	28	299	27	31	471	33	63	23	24	56	202
17	23	20	47	232	29	77	33	31	23	25	176	152
18	22	18	32	93	48	56	32	28	23	23	45	54
19	43	18	29	64	33	91	32	35	23	23	26	41
20	30	19	27	83	31	226	32	35	29	21	22	35
21	22	21	60	39	30	61	32	39	26	20	19	35
22	21	26	40	35	92	47	31	27	126	30	18	33
23	23	25	52	45	43	41	32	25	333	203	18	30
24	44	19	59	33	33	38	31	24	42	42	19	31
25	170	19	29	29	33	36	32	25	31	25	20	29
26	194	29	121	28	128	36	30	24	27	24	1,790	243
27	79	30	51	28	66	35	150	25	135	23	4,510	478
28	27	25	75	29	38	36	283	158	31	22	387	72
29	23	21	187	29	35	37	136	106	26	27	145	52
30	21	24	310	36	---	38	45	35	25	24	122	39
31	20	---	176	29	---	41	---	29	---	44	134	---
Total	1,128	722	1,919	1,372	1,782	3,232	1,991	1,214	1,355	2,043	7,981	3,015
Mean	36.4	24.1	61.9	44.3	61.4	104	66.4	39.2	45.2	65.9	257	100
Max	194	37	310	232	469	638	283	158	333	402	4,510	524
Min	20	17	19	27	29	31	30	24	22	20	18	29
Cfsm	0.56	0.37	0.95	0.68	0.94	1.60	1.02	0.60	0.69	1.01	3.94	1.54
In.	0.64	0.41	1.09	0.78	1.02	1.84	1.13	0.69	0.77	1.16	4.55	1.72

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	73.8	80.1	83.0	102	109	125	108	78.2	89.9	92.6	95.3	82.0
Max	154	264	174	237	232	296	321	380	271	315	257	208
(WY)	(1996)	(2007)	(2003)	(1998)	(1995)	(2003)	(2003)	(2003)	(2003)	(1997)	(2008)	(2004)
Min	25.7	24.1	40.6	39.9	49.7	44.2	41.0	34.2	32.7	43.0	24.8	27.2
(WY)	(2001)	(2008)	(2001)	(2004)	(2002)	(2006)	(2002)	(2000)	(2002)	(2001)	(2001)	(2005)

02146381 SUGAR CREEK AT NORTH CAROLINA HIGHWAY 51 NEAR PINEVILLE, NC—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1995 - 2008	
Annual total	24,889		27,754			
Annual mean	68.2		75.8		93.2	
Highest annual mean					186	2003
Lowest annual mean					57.3	2001
Highest daily mean	3,220	Mar 2	4,510	Aug 27	4,790	Jul 23, 1997
Lowest daily mean	17	Nov 11	17	Nov 11	17	Nov 11, 2007
Annual seven-day minimum	21	Oct 9	20	Aug 19	20	Aug 19, 2008
Maximum peak flow			6,160	Aug 27	^a 9,890	Jul 23, 1997
Maximum peak stage			15.14	Aug 27	18.68	Jul 23, 1997
Instantaneous low flow			13	Aug 24	13	Aug 24, 2008
Annual runoff (cfsm)	1.04		1.16		1.43	
Annual runoff (inches)	14.18		15.81		19.39	
10 percent exceeds	111		134		155	
50 percent exceeds	35		32		42	
90 percent exceeds	22		21		26	

^aSee Remarks.