

## SANTEE RIVER BASIN

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC

LOCATION.--Lat 35°05'06", long 80°52'58", Mecklenburg County, Hydrologic Unit 03050103, on left bank on upstream side of bridge on State Highway 51, 0.5 mi east of intersection of State Highway 51 and U.S. Highway 521 at Pineville.,

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

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

GAGE.--Water-stage recorder. Datum of gage is 531.94 ft above sea level, North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. A daily average of 21.1 ft<sup>3</sup>/s of treated effluent from Little Sugar Creek wastewater treatment plant 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 also occurred Nov. 13, 1998.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32	31	39	e34	36	38	75	34	244	31	30	54
2	33	33	38	e34	36	36	56	34	77	31	30	30
3	32	33	37	e34	35	73	62	30	39	55	31	385
4	31	34	38	e34	35	404	53	30	40	193	31	401
5	28	39	39	e34	35	85	46	32	39	315	30	60
6	27	34	39	e34	34	49	44	32	39	41	30	42
7	52	37	39	43	34	46	44	32	34	35	30	39
8	33	38	39	102	34	41	42	33	42	38	30	38
9	32	70	38	48	34	40	41	33	37	39	32	74
10	32	78	38	37	44	38	41	32	32	34	29	42
11	32	34	38	37	36	37	40	32	31	32	34	37
12	32	32	40	90	53	46	40	31	31	32	40	34
13	33	32	40	66	48	99	109	31	186	37	111	34
14	33	107	57	37	93	39	48	31	249	34	43	34
15	32	44	47	38	39	326	41	31	42	30	31	31
16	33	40	106	37	38	79	42	32	37	28	29	30
17	40	88	201	36	386	49	37	31	35	30	44	32
18	37	41	53	37	58	43	38	32	35	30	50	30
19	33	142	50	171	45	41	37	32	34	45	88	29
20	33	79	53	187	42	349	37	31	33	40	32	108
21	33	45	44	66	39	604	36	117	33	28	30	35
22	32	37	45	44	180	87	35	142	104	28	29	30
23	33	34	42	40	55	57	35	77	112	33	29	29
24	32	36	40	39	42	50	37	41	35	162	30	875
25	35	301	40	38	125	46	237	107	33	122	30	73
26	33	84	38	37	57	43	47	218	96	67	28	35
27	33	46	e38	37	41	40	37	39	50	35	28	33
28	33	41	e36	36	40	39	35	134	89	31	28	31
29	33	40	e36	37	---	999	34	113	76	42	29	30
30	32	40	e36	58	---	324	34	48	34	39	29	29
31	32	---	e36	41	---	87	---	38	---	33	31	---
TOTAL	1031	1770	1500	1643	1774	4334	1540	1710	1998	1770	1126	2764
MEAN	33.3	59.0	48.4	53.0	63.4	140	51.3	55.2	66.6	57.1	36.3	92.1
MAX	52	301	201	187	386	999	237	218	249	315	111	875
MIN	27	31	36	34	34	36	34	30	31	28	28	29
CFSM	.68	1.20	.98	1.08	1.29	2.84	1.04	1.12	1.35	1.16	.74	1.87
IN.	.78	1.34	1.13	1.24	1.34	3.28	1.16	1.29	1.51	1.34	.85	2.09

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2001, BY WATER YEAR (WY)

	1997	1998	1999	2000	2001	1997	1998	1999	2000	2001		
MEAN	69.4	62.4	74.5	137	105	104	115	53.3	72.7	133	55.9	84.3
MAX	115	95.0	130	236	167	140	209	69.4	90.6	336	84.4	127
(WY)	2000	1998	1998	1998	1998	2001	1998	1998	1997	1997	2000	2000
MIN	33.3	44.4	46.9	53.0	63.4	55.5	51.3	40.1	53.6	57.1	36.3	57.7
(WY)	2001	1999	2000	2001	2001	1999	2001	1999	2000	2001	2001	1997

## SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1997 - 2001

ANNUAL TOTAL	28283	22960	
ANNUAL MEAN	77.3	62.9	84.9
HIGHEST ANNUAL MEAN			123
LOWEST ANNUAL MEAN			62.9
HIGHEST DAILY MEAN	1370	Sep 23	999
LOWEST DAILY MEAN	27	Jun 25	27
ANNUAL SEVEN-DAY MINIMUM	29	Jun 20	29
MAXIMUM PEAK FLOW			3200
MAXIMUM PEAK STAGE			13.11
INSTANTANEOUS LOW FLOW			20
ANNUAL RUNOFF (CFSM)	1.57	1.28	1.73
ANNUAL RUNOFF (INCHES)	21.38	17.36	23.46
10 PERCENT EXCEEDS	163	106	163
50 PERCENT EXCEEDS	40	38	40
90 PERCENT EXCEEDS	31	31	30

e Estimated.

\* See REMARKS.

02146530 LITTLE SUGAR CREEK AT HIGHWAY 51 AT PINEVILLE, NC--Continued

