

SANTEE RIVER BASIN

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC

LOCATION.--Lat 35°03'59", long 80°52'12", Mecklenburg County, Hydrologic Unit, 03050103, on right bank at McAlpine Creek Wastewater Treatment Plant of Charlotte, 150 ft downstream of McMullen Creek, 735 ft upstream from effluent outfall, and 2.1 mi south of Pineville.

DRAINAGE AREA.--92.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1974 to current year.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 516.38 ft above sea level. Prior to Oct. 1, 1977, present site at 517.38 ft. Radio telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Records for periods of heavy overbank flow may be affected by variable backwater not adequately defined. Maximum stage for period of record from high-water mark in gage house. Maximum discharge for period of record from rating curve extended above 11,600 ft³/s.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1964, about 12.9 ft. (former datum), Apr. 1, 1973, from information by wastewater treatment plant operator.

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	13	7.6	22	e19	24	28	78	16	111	8.7	7.9	e10
2	13	7.0	21	e19	22	27	63	16	183	9.4	6.5	8.6
3	13	7.0	22	e21	21	37	53	15	28	18	5.7	254
4	12	9.3	21	e21	20	656	51	14	18	54	5.4	618
5	11	13	22	e22	21	130	37	14	15	187	5.1	77
6	11	14	21	e20	20	60	34	13	13	23	5.0	23
7	12	12	20	19	19	41	31	12	12	12	4.7	15
8	9.3	9.0	20	43	19	34	30	12	14	11	4.5	11
9	8.9	16	20	44	19	31	28	14	19	14	5.4	21
10	8.8	59	20	24	27	29	26	14	17	10	4.4	21
11	8.9	18	20	21	25	27	24	12	15	9.2	6.2	12
12	8.6	11	19	116	29	35	23	12	11	8.3	7.1	9.4
13	9.1	8.7	19	143	47	119	41	12	84	18	11	7.6
14	8.9	54	24	41	65	41	42	11	257	17	21	6.7
15	8.9	30	27	32	35	473	23	11	30	7.9	6.8	6.7
16	8.5	13	61	28	29	184	24	10	17	6.0	5.2	5.6
17	9.3	35	119	24	431	53	20	10	31	5.4	11	5.0
18	10	23	47	23	87	36	19	10	13	5.5	57	4.9
19	8.8	78	e28	122	43	28	19	10	10	5.8	12	4.9
20	7.4	82	e29	390	37	260	18	35	9.4	9.8	7.0	21
21	7.6	27	e19	82	31	1370	18	16	8.7	6.4	5.0	28
22	7.7	16	e21	44	178	174	17	74	33	5.2	e4.4	11
23	7.8	13	e18	34	84	66	17	114	123	4.9	e5.0	8.0
24	7.5	10	e16	30	40	44	19	19	21	25	e4.4	744
25	8.0	406	e17	27	65	35	300	45	14	98	e4.3	355
26	8.9	300	e17	24	67	30	57	313	21	81	e4.0	27
27	7.7	53	e18	24	36	27	27	37	31	18	e3.8	14
28	7.6	35	e19	23	30	25	21	75	20	11	e3.9	9.1
29	7.3	28	e18	23	---	690	19	72	25	21	e3.8	6.7
30	8.0	25	e17	37	---	1340	17	30	12	29	5.2	5.6
31	8.9	---	e18	34	---	127	---	17	---	12	e3.8	---
TOTAL	287.4	1419.6	800	1574	1571	6257	1196	1085	1216.1	751.5	246.5	2350.8
MEAN	9.27	47.3	25.8	50.8	56.1	202	39.9	35.0	40.5	24.2	7.95	78.4
MAX	13	406	119	390	431	1370	300	313	257	187	57	744
MIN	7.3	7.0	16	19	19	25	17	10	8.7	4.9	3.8	4.9
CFSM	.10	.51	.28	.55	.61	2.18	.43	.38	.44	.26	.09	.85
IN.	.12	.57	.32	.63	.63	2.52	.48	.44	.49	.30	.10	.95

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2001, BY WATER YEAR (WY)

	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985
MEAN	102	105	125	230	218	249	126	91.7	74.3	89.7	104	85.8
MAX	540	414	497	550	506	544	304	397	258	400	597	510
(WY)	1991	1986	1984	1978	1984	1980	1998	1975	1992	1997	1994	1987
MIN	6.82	11.5	24.0	18.6	39.0	35.8	21.9	18.2	7.43	7.07	7.95	5.03
(WY)	1979	1982	1981	1981	1978	1981	1981	1981	1986	1977	2001	1983

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1974 - 2001

ANNUAL TOTAL	29365.9	18754.9	
ANNUAL MEAN	80.2	51.4	
HIGHEST ANNUAL MEAN			133
LOWEST ANNUAL MEAN			235
HIGHEST DAILY MEAN	2430	Sep 23	7740
LOWEST DAILY MEAN	5.8	Sep 17	.46
ANNUAL SEVEN-DAY MINIMUM	7.4	Sep 11	.76
MAXIMUM PEAK FLOW			2320
MAXIMUM PEAK STAGE			9.05
INSTANTANEOUS LOW FLOW			NOT DETERMINED
ANNUAL RUNOFF (CFSM)	.87		.56
ANNUAL RUNOFF (INCHES)	11.82		7.55
10 PERCENT EXCEEDS	166		83
50 PERCENT EXCEEDS	22		19
90 PERCENT EXCEEDS	8.7		6.7

e Estimated.
* See REMARKS.

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