

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC

LOCATION.--Lat 35°04'00", 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, crest-stage gage, and concrete control. Datum of gage is 515.51 above North American Vertical Datum of 1988. Prior to Oct. 1, 1977, present site at 516.51 ft above North American Vertical Datum of 1988. 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 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	20	15	15	17	515	211	25	16	17	22	38
2	13	17	15	15	15	821	47	86	6.6	16	18	27
3	12	16	14	16	178	177	32	51	5.3	27	34	15
4	12	16	17	16	44	74	27	21	e5.2	31	17	12
5	11	16	41	23	25	52	24	16	7.6	17	13	10
6	13	17	23	45	419	46	22	14	6.4	83	18	16
7	35	16	17	20	1,070	40	22	13	5.2	19	11	813
8	107	18	16	16	95	34	21	12	24	12	8.5	3,530
9	130	21	15	22	54	30	21	11	48	10	8.1	545
10	35	16	199	27	45	31	19	11	49	9.2	7.6	58
11	300	15	300	18	39	27	19	10	12	40	9.8	37
12	50	17	38	16	269	27	25	11	7.4	473	135	28
13	26	14	34	16	121	25	120	12	89	33	358	22
14	21	13	535	15	84	24	62	10	43	18	1,440	20
15	20	14	98	16	132	26	27	9.1	35	12	342	18
16	17	14	39	15	98	52	22	8.5	84	9.7	49	18
17	15	16	81	14	48	39	20	9.6	57	9.1	27	835
18	15	15	52	27	40	27	19	8.7	15	1,030	20	355
19	15	101	30	28	36	32	18	7.6	11	79	17	44
20	15	74	25	17	33	25	17	6.9	7.4	22	15	27
21	15	25	21	15	31	54	16	6.5	112	15	26	22
22	14	19	20	15	29	29	14	6.7	74	13	50	18
23	13	17	20	15	28	23	13	6.5	228	12	20	16
24	12	17	23	14	27	21	14	8.6	688	9.9	14	15
25	13	16	22	17	27	21	13	6.5	648	8.3	13	14
26	14	16	18	24	31	20	15	5.1	382	8.5	e12	14
27	18	15	17	20	113	20	19	5.1	61	224	e11	83
28	37	16	17	33	241	20	14	5.2	31	772	10	3,200
29	257	19	17	29	349	19	12	4.9	23	702	36	649
30	42	16	17	22	---	23	12	5.9	18	301	216	71
31	24	---	17	19	---	125	---	13	---	34	266	---
TOTAL	1,334	642	1,813	620	3,738	2,499	937	427.4	2,799.1	4,066.7	3,244.0	10,570
MEAN	43.0	21.4	58.5	20.0	129	80.6	31.2	13.8	93.3	131	105	352
MAX	300	101	535	45	1,070	821	211	86	688	1,030	1,440	3,530
MIN	11	13	14	14	15	19	12	4.9	5.2	8.3	7.6	10
CFSM	0.47	0.23	0.63	0.22	1.39	0.87	0.34	0.15	1.01	1.42	1.13	3.81
IN.	0.54	0.26	0.73	0.25	1.50	1.01	0.38	0.17	1.13	1.64	1.31	4.26

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2004, BY WATER YEAR (WY)

MEAN	97.3	100	124	216	208	243	131	98.4	85.6	93.3	103	92.1
MAX	540	414	497	550	506	544	439	428	466	400	597	510
(WY)	(1991)	(1986)	(1984)	(1978)	(1984)	(1980)	(2003)	(2003)	(2003)	(1997)	(1994)	(1987)
MIN	6.82	8.44	24.0	18.6	39.0	35.8	21.9	13.8	7.43	7.07	7.95	5.03
(WY)	(1979)	(2002)	(1981)	(1981)	(1978)	(1981)	(1981)	(2004)	(1986)	(1977)	(2001)	(1983)

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1974 - 2004	
ANNUAL TOTAL	74,143		32,690.2		133	
ANNUAL MEAN	203		89.3		236	
HIGHEST ANNUAL MEAN					51.4	2003
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	3,900	Mar 20	3,530	Sep 8	7,740	Aug 27, 1995
LOWEST DAILY MEAN	11	Oct 5	4.9	May 29	0.46	Sep 30, 1983
ANNUAL SEVEN-DAY MINIMUM	13	Sep 30	5.9	May 24	0.76	Sep 28, 1983
MAXIMUM PEAK FLOW			4,800	Sep 8	12,500*	Aug 27, 1995
MAXIMUM PEAK STAGE			12.30	Sep 8	19.40*	Aug 27, 1995
INSTANTANEOUS LOW FLOW			NOT DETERMINED		0.45	Sep 30, 1983
ANNUAL RUNOFF (CFSM)	2.20		0.967		1.44	
ANNUAL RUNOFF (INCHES)	29.85		13.16		19.52	
10 PERCENT EXCEEDS	615		177		266	
50 PERCENT EXCEEDS	50		20		32	
90 PERCENT EXCEEDS	15		10		8.6	

* See REMARKS.

e Estimated.

