

Water-Data Report 2008

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°04'00", long 80°52'12" referenced to North American Datum of 1983, Mecklenburg County, NC, Hydrologic Unit 03050103, on right bank, 150 ft downstream of McMullen Creek, 735 ft upstream from effluent outfall, and 2.1 mi south of Pineville.

DRAINAGE AREA.--92.4 mi².

SURFACE-WATER 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 October 1, 1977, at present site at datum of 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. (at datum of 516.51 ft), April 1, 1973, from information by wastewater treatment plant operator.

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

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e0.82	4.1	3.3	55	780	30	48	51	14	3.4	8.9	266
2	e0.82	3.2	3.1	37	319	27	35	38	13	2.4	6.0	40
3	e0.70	2.6	3.8	26	59	27	42	30	12	2.0	4.0	21
4	e0.80	2.4	2.9	21	40	240	81	27	9.3	1.6	3.4	15
5	1.3	2.3	3.1	17	32	1,040	234	24	7.7	1.6	2.7	12
6	e1.7	2.3	2.9	16	30	104	103	21	6.7	366	1.9	10
7	e1.3	2.5	2.8	16	30	263	53	18	6.1	82	1.9	13
8	e1.3	e2.4	2.9	15	24	286	41	18	5.3	227	9.7	9.1
9	1.4	e2.5	3.2	15	21	85	35	20	5.0	603	4.6	7.5
10	1.4	e2.8	3.5	19	20	54	32	17	4.7	47	2.3	29
11	e0.80	e3.4	4.3	45	17	44	29	28	9.1	51	3.0	177
12	e0.45	4.4	4.2	30	19	39	63	28	167	20	1.8	28
13	e0.30	2.8	3.8	17	124	35	49	14	19	229	60	18
14	e0.30	e2.6	3.8	14	177	32	31	12	9.9	616	53	12
15	e0.40	11	7.7	13	45	310	27	12	9.6	45	9.2	9.3
16	e0.80	16	436	11	33	796	25	34	7.6	19	35	200
17	e0.80	5.7	45	381	28	93	24	20	5.3	11	94	234
18	e0.40	4.3	23	178	126	59	22	12	4.9	7.7	34	43
19	22	3.3	17	74	47	105	22	19	4.2	6.0	8.7	20
20	16	2.9	14	101	31	252	26	15	50	5.8	4.4	13
21	e2.4	2.8	39	39	28	64	27	36	32	5.1	2.3	9.9
22	e1.6	e3.0	32	30	162	49	21	13	62	20	1.8	8.6
23	e0.93	e2.5	36	45	64	41	20	9.4	116	226	3.2	8.4
24	23	2.8	46	29	41	36	19	8.7	37	452	1.7	6.4
25	211	3.1	18	22	33	32	19	9.7	13	34	2.8	5.4
26	230	8.2	232	19	206	30	20	8.8	7.5	19	641	218
27	74	12	64	18	97	29	238	7.3	4.7	13	5,620	630
28	18	7.5	63	17	44	28	1,030	236	40	11	1,220	97
29	8.8	5.0	291	16	34	27	707	203	11	16	61	35
30	5.5	3.3	487	25	---	25	83	29	6.6	7.5	77	21
31	4.5	---	404	21	---	35	---	18	---	5.2	61	---
Total	633.52	133.7	2,302.3	1,382	2,711	4,317	3,206	1,036.9	700.2	3,155.3	8,040.3	2,216.6
Mean	20.4	4.46	74.3	44.6	93.5	139	107	33.4	23.3	102	259	73.9
Max	230	16	487	381	780	1,040	1,030	236	167	616	5,620	630
Min	0.30	2.3	2.8	11	17	25	19	7.3	4.2	1.6	1.7	5.4
Cfsm	0.22	0.05	0.80	0.48	1.01	1.51	1.16	0.36	0.25	1.10	2.81	0.80
In.	0.26	0.05	0.93	0.56	1.09	1.74	1.29	0.42	0.28	1.27	3.24	0.89

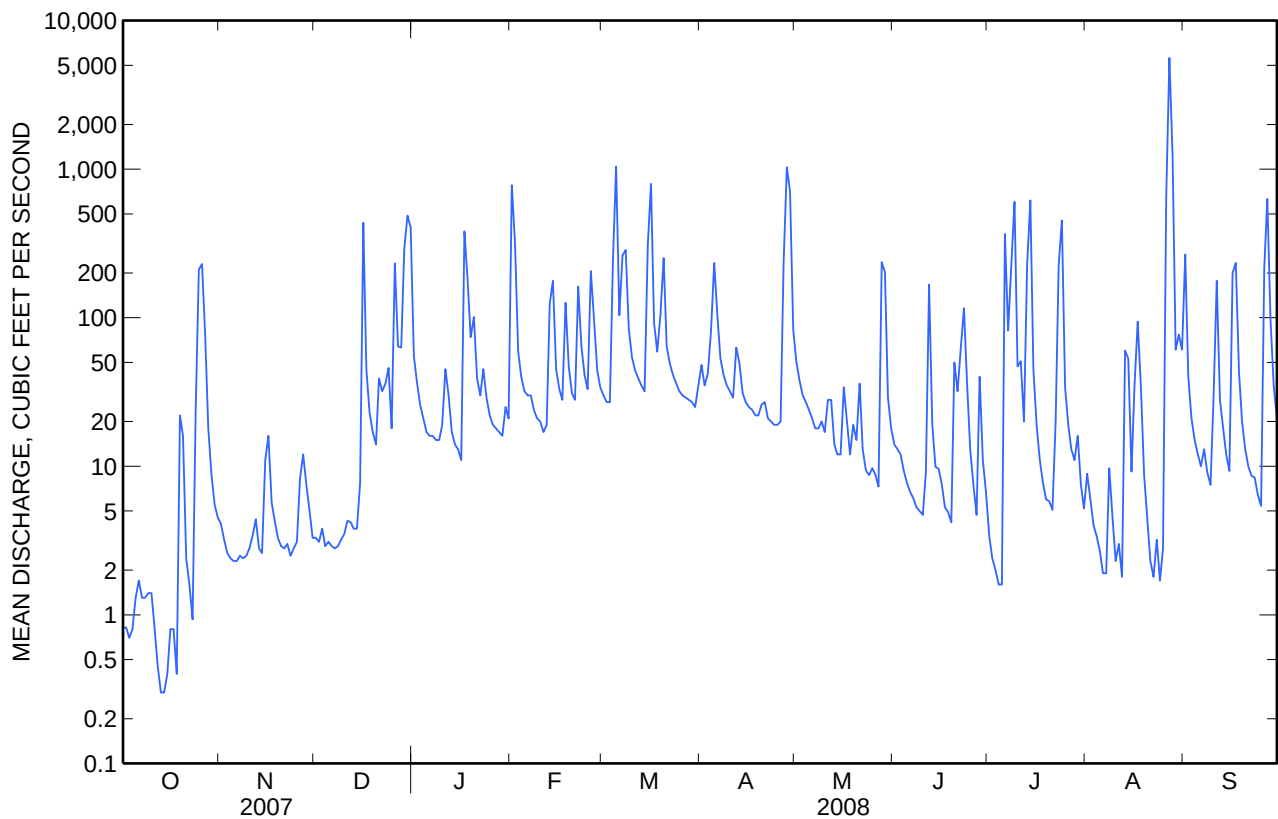
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1974 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	93.4	104	123	200	195	230	126	92.5	85.2	91.6	106	87.6
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	4.46	24.0	18.6	39.0	35.3	21.9	13.8	7.43	7.07	7.28	4.10
(WY)	(1979)	(2008)	(1981)	(1981)	(1978)	(2006)	(1981)	(2004)	(1986)	(1977)	(2007)	(2007)

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

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1974 - 2008	
Annual total	22,756.59		29,834.82			
Annual mean	62.3		81.5		128	
Highest annual mean					236	2003
Lowest annual mean					51.4	2001
Highest daily mean	3,650	Mar 2	5,620	Aug 27	7,740	Aug 27, 1995
Lowest daily mean	0.30	Oct 13	0.30	Oct 13	0.30	Oct 13, 2007
Annual seven-day minimum	0.49	Oct 12	0.49	Oct 12	0.49	Oct 12, 2007
Maximum peak flow			7,870	Aug 27	^a 12,500	Aug 27, 1995
Maximum peak stage			15.41	Aug 27	^a 19.40	Aug 27, 1995
Instantaneous low flow			0.03	Oct 13	0.03	Oct 13, 2007
Annual runoff (cfsm)	0.675		0.882		1.38	
Annual runoff (inches)	9.16		12.01		18.81	
10 percent exceeds	107		208		252	
50 percent exceeds	18		20		31	
90 percent exceeds	1.8		2.5		8.2	

^aSee Remarks.

02146750 MCALPINE CREEK BELOW MCMULLEN CREEK NEAR PINEVILLE, NC—Continued**CLIMATOLOGICAL RECORDS**

PERIOD OF RECORD.--May 1993 to current year. Records for period May 1993 to September 1998 published in USGS OFR 96-150, 98-67, and 99-273.

INSTRUMENTATION.--Tipping-bucket raingage and electronic datalogger. Radio telemetry at station.

REMARKS.--Gage is operated as part of Charlotte/Mecklenburg Rainfall Runoff Network.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	1.28	0.00	0.10	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.01	1.16	0.40	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.26	0.00	0.00	0.32	0.00	0.02
6	0.00	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	1.59	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.50	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.04	0.00	0.03	0.00	1.09	0.00	0.00
9	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.06	0.00	0.00
10	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.17
11	0.00	0.00	0.00	0.19	0.00	0.00	0.00	0.20	0.37	0.03	0.00	0.01
12	0.00	0.00	0.00	0.00	0.08	0.00	0.26	0.00	0.00	0.00	0.00	0.02
13	0.00	0.00	0.00	0.00	0.47	0.00	0.01	0.00	0.00	1.23	0.74	0.00
14	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.08	0.07	0.01	0.00
15	0.00	0.13	1.00	0.00	0.00	1.10	0.00	0.08	0.00	0.00	0.01	0.00
16	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.74
17	0.00	0.00	0.00	1.01	0.15	0.00	0.00	0.00	0.00	0.00	1.31	0.12
18	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.01	0.00	0.00	0.00	0.00
19	0.28	0.00	0.01	0.28	0.00	0.48	0.07	0.00	0.00	0.00	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.04	0.20	0.00	0.00	0.00	0.00
21	0.00	0.00	0.24	0.00	0.48	0.00	0.00	0.01	0.00	0.00	0.00	0.00
22	0.00	0.01	0.00	0.08	0.17	0.00	0.00	0.00	0.02	0.49	0.00	0.00
23	0.00	0.00	0.24	0.02	0.00	0.00	0.00	0.00	0.60	0.06	0.00	0.00
24	0.64	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.61	0.12	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.29	0.00
26	0.81	0.12	0.48	0.00	0.50	0.00	0.00	0.00	0.00	0.04	3.00	1.55
27	0.01	0.00	0.00	0.00	0.00	0.00	0.30	0.00	0.01	0.00	4.39	0.26
28	0.00	0.00	0.65	0.00	0.00	0.00	1.50	1.49	0.01	0.07	0.00	0.03
29	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.07	0.00	0.00
30	0.00	0.00	0.93	0.10	---	0.00	0.00	0.00	0.00	0.00	0.01	0.01
31	0.00	---	0.00	0.02	---	0.08	---	0.00	---	0.04	0.74	---
Total	2.35	0.38	3.91	1.77	3.41	3.36	3.37	2.20	1.09	5.16	10.50	2.93

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

