02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC

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

DRAINAGE AREA.--65.3 mi^2.

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

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 fair. A daily average of 15.4 ft^3/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 ft^3/s. Maximum discharge and peak stage for current water year also occurred Sept. 28. Minimum discharge for period of record also occurred Aug. 31, 2001. Minimum discharge for current water year also occurred Aug. 28, 29, Sept. 5, 6.

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	32	34	34	34	34	195	247	105	46	46	39	37
2	32	33	35	35	35	162	69	269	35	46	53	30
3	31	33	35	35	150	88	53	193	31	78	36	27
4	32	36	36	35	56	62	47	61	36	70	33	27
5	32	35	63	42	43	53	45	45	31	46	31	26
6	31	37	38	87	444	50	44	43	29	61	32	34
7	33	35	34	39	552	47	42	40	31	36	29	761
8	45	41	34	36	88	44	43	40	59	35	28	2,160
9	65	37	34	41	60	46	41	37	103	35	27	145
10	36	33	199	41	53	48	40	44	56	34	27	74
11	155	33	160	36	50	44	39	37	34	59	29	57
12	46	36	52	35	184	42	96	39	32	35	254	51
13	36	33	45	35	92	42	289	40	170	32	661	45
14	35	31	426	36	66	40	114	38	213	31	366	43
15	34	32	99	35	105	41	59	35	260	29	85	37
16	34	32	54	33	92	59	50	35	114	30	49	35
17	32	34	83	35	53	48	46	74	49	30	39	380
18	32	35	58	52	49	40	53	35	38	674	32	110
19	31	98	44	45	47	56	44	59	35	62	32	49
20	32	58	41	35	44	40	43	36	32	46	46	42
21	32	37	39	34	42	59	41	34	379	39	44	37
22	32	35	42	34	40	41	40	34	120	37	86	35
23	31	35	38	35	40	42	40	33	311	36	32	35
24	31	35	39	33	41	40	38	41	492	33	29	34
25	31	35	36	35	39	40	38	32	277	32	29	31
26	31	34	35	41	43	40	38	31	785	32	28	30
27	34	36	36	39	112	39	49	32	100	393	27	84
28	45	35	36	54	177	38	38	31	63	101	27	1,600
29	161	42	36	52	182	37	36	36	52	221	31	121
30	43	33	37	41	---	46	35	30	45	72	115	68
31	35	---	36	38	---	172	---	79	---	41	153	---
TOTAL	1,342	1,133	2,014	1,238	3,013	1,841	1,897	1,718	4,058	2,552	2,529	6,245
MEAN	43.3	37.8	65.0	39.9	104	59.4	63.2	55.4	135	82.3	81.6	208
MAX	161	98	426	87	552	195	289	269	785	674	661	2,160
MIN	31	31	34	33	34	37	35	30	29	29	27	26
CFSM	0.66	0.58	0.99	0.61	1.59	0.91	0.97	0.85	2.07	1.26	1.25	3.19
IN.	0.76	0.65	1.15	0.71	1.72	1.05	1.08	0.98	2.31	1.45	1.44	3.56

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	79.9	70.8	78.5	113	123	127	120	92.1	95.5	101	78.3	83.5
MAX	154	182	174	237	232	296	321	380	271	315	171	208
(WY)	(1996)	(1996)	(2003)	(1998)	(1995)	(2003)	(2003)	(2003)	(2003)	(1997)	(1995)	(2004)
MIN	25.7	33.5	40.6	39.9	49.7	55.7	41.0	34.2	32.7	43.0	24.8	51.5
(WY)	(2001)	(2002)	(2001)	(2004)	(2002)	(1999)	(2002)	(2000)	(2002)	(2001)	(2001)	(1997)

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC—Continued

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1995 - 2004	
ANNUAL TOTAL	59,383		29,580			
ANNUAL MEAN	163		80.8		96.8	
HIGHEST ANNUAL MEAN					186	2003
LOWEST ANNUAL MEAN					57.3	2001
HIGHEST DAILY MEAN	3,520	May 22	2,160	Sep 8	4,790	Jul 23, 1997
LOWEST DAILY MEAN	31	Sep 21	26	Sep 5	18	Aug 1, 2001
ANNUAL SEVEN-DAY MINIMUM	31	Oct 19	29	Aug 5	21	Sep 7, 2002
MAXIMUM PEAK FLOW			2,780*	Sep 8	9,890*	Jul 23, 1997
MAXIMUM PEAK STAGE			11.65*	Sep 8	18.68	Jul 23, 1997
INSTANTANEOUS LOW FLOW			23*	Aug 11	15*	Aug 10, 1997
ANNUAL RUNOFF (CFSM)	2.49		1.24		1.48	
ANNUAL RUNOFF (INCHES)	33.83		16.85		20.14	
10 PERCENT EXCEEDS	302		151		161	
50 PERCENT EXCEEDS	60		40		44	
90 PERCENT EXCEEDS	34		31		27	

* See REMARKS.