

02146381 SUGAR CREEK AT NC 51 NEAR PINEVILLE, NC

LOCATION.--Lat 35°05'27", long 80°53'58", North American Datum of 1983, 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<sup>2</sup>.

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

GAGE.--Water-stage recorder. Datum of gage is 520.95 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--No estimated daily discharges. Records good. A daily average of 18.4 ft<sup>3</sup>/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<sup>3</sup>/s. Minimum discharge for period of record also occurred Aug. 31, 2001. Minimum discharge for current water year also occurred Sept. 9, 13.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	26	29	29	31	40	31	267	37	38	39	24	134
2	25	31	28	31	34	315	70	32	41	97	28	47
3	28	32	27	36	33	392	56	35	29	31	57	32
4	25	28	28	48	33	96	47	191	27	40	26	29
5	24	27	30	39	32	56	38	67	27	27	25	26
6	88	28	31	220	37	47	35	36	34	24	24	28
7	37	28	30	86	240	40	34	31	158	23	23	23
8	26	31	29	45	175	36	32	30	35	24	23	22
9	25	29	28	36	58	35	33	29	30	24	23	21
10	25	28	145	33	78	35	39	29	29	24	21	21
11	26	28	346	30	60	32	32	74	27	25	22	20
12	26	26	55	29	41	112	33	34	27	24	21	21
13	25	28	43	42	39	118	41	94	26	29	22	20
14	37	28	37	31	37	59	31	143	25	1360	22	32
15	45	31	31	30	36	39	30	37	24	104	25	303
16	29	29	29	28	36	33	30	32	26	93	110	246
17	30	30	36	27	35	159	29	29	23	48	242	79
18	28	29	152	27	33	85	28	76	24	45	65	33
19	29	30	43	377	33	46	27	38	25	37	35	29
20	27	29	39	480	32	44	28	28	26	32	32	32
21	25	29	35	127	33	173	28	29	23	32	31	25
22	27	30	32	72	31	68	27	30	23	29	31	24
23	29	29	32	828	31	44	26	26	24	31	29	24
24	30	140	39	150	29	39	26	25	22	28	30	25
25	109	42	33	243	29	37	35	25	25	38	78	22
26	37	32	30	78	31	38	28	24	44	78	75	154
27	29	30	31	56	31	67	24	24	46	36	67	118
28	29	32	34	46	34	36	26	25	27	27	34	51
29	29	34	32	43	---	32	25	26	24	25	31	27
30	30	29	31	40	---	54	24	112	21	27	25	26
31	30	---	31	39	---	242	---	175	---	26	638	---
TOTAL	1035	1006	1576	3428	1391	2640	1229	1623	980	2527	1939	1694
MEAN	33.39	33.53	50.84	110.6	49.68	85.16	40.97	52.35	32.67	81.52	62.55	56.47
MAX	109	140	346	828	240	392	267	191	158	1360	638	303
MIN	24	26	27	27	29	31	24	24	21	23	21	20
CFSM	0.51	0.51	0.78	1.69	0.76	1.30	0.63	0.80	0.50	1.25	0.96	0.86
IN.	0.59	0.57	0.90	1.95	0.79	1.50	0.70	0.92	0.56	1.44	1.10	0.97

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2002, BY WATER YEAR (WY)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
MEAN	78.06	69.85	68.19	128.6	125.6	114.7	102.5	60.63	68.55	99.52	66.67	71.67
MAX	154	182	132	237	232	165	196	99.9	118	315	171	99.2
(WY)	1996	1996	1998	1998	1995	2001	1998	1995	1997	1997	1995	1995
MIN	25.7	33.5	40.6	50.4	49.7	55.7	41.0	34.2	32.7	43.0	24.8	51.5
(WY)	2001	2002	2001	2001	2002	1999	2002	2000	2002	2001	2001	1997

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1995 - 2002

ANNUAL TOTAL	21007	21068	
ANNUAL MEAN	57.55	57.72	87.70
HIGHEST ANNUAL MEAN			120
LOWEST ANNUAL MEAN			57.3
HIGHEST DAILY MEAN	1130	Mar 30	4790
LOWEST DAILY MEAN	18	Aug 1	18
ANNUAL SEVEN-DAY MINIMUM	22	Aug 21	21
MAXIMUM PEAK FLOW			2230
MAXIMUM PEAK STAGE			10.53
INSTANTANEOUS LOW FLOW			16*
ANNUAL RUNOFF (CFSM)	0.88	0.88	1.34
ANNUAL RUNOFF (INCHES)	11.97	12.00	18.25
10 PERCENT EXCEEDS	98	106	150
50 PERCENT EXCEEDS	32	31	43
90 PERCENT EXCEEDS	25	24	26

\* See REMARKS.

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

