

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 mi².

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.--Records fair except those for estimated daily discharges, which are poor. A daily average of 17.4 ft³/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 ft³/s. Minimum discharge for period of record also occurred Aug. 31, 2001. Minimum discharge for current water year also occurred Oct. 7.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	25	33	30	67	85	126	63	34	189	60	65	123
2	24	33	30	56	65	344	51	43	90	643	51	45
3	24	31	30	92	58	107	41	73	290	135	144	41
4	23	30	32	55	104	80	36	44	256	70	147	50
5	21	74	722	44	73	88	55	34	119	61	1,240	58
6	21	436	141	42	58	1,310	42	839	85	56	194	39
7	21	65	76	49	279	202	1,790	237	1,250	54	79	38
8	23	46	55	42	85	117	223	90	2,250	57	81	39
9	22	38	47	47	63	97	968	66	590	71	530	40
10	22	35	42	44	109	85	2,630	55	173	110	161	38
11	1,060	150	230	42	67	79	1,020	53	124	117	198	39
12	104	709	72	39	55	69	204	51	135	174	71	37
13	513	171	793	35	52	64	133	43	113	551	153	36
14	99	71	212	35	56	61	107	41	91	121	291	35
15	221	50	85	35	82	84	92	181	83	70	746	35
16	966	380	63	34	63	738	83	764	126	60	136	41
17	98	446	54	50	98	134	71	80	469	249	72	32
18	56	102	46	37	137	166	791	71	507	71	60	32
19	47	62	43	36	97	107	449	117	387	64	57	34
20	38	50	179	35	68	3,090	125	57	142	134	56	32
21	44	44	62	36	60	732	88	444	89	53	48	31
22	94	40	45	43	614	182	79	3,520	73	152	86	38
23	39	36	41	46	226	115	61	1,690	72	65	138	362
24	33	35	993	55	92	95	51	278	68	55	48	51
25	31	31	815	43	75	83	84	787	65	50	45	41
26	39	34	142	43	73	72	97	319	60	72	44	e40
27	31	32	87	43	351	70	69	1,110	57	94	43	35
28	109	31	71	38	184	61	43	202	77	47	44	73
29	131	30	62	43	---	58	40	151	60	83	49	35
30	55	31	51	451	---	451	41	122	54	186	47	34
31	35	---	48	180	---	108	---	194	---	195	84	---
TOTAL	4,069	3,356	5,399	1,937	3,429	9,175	9,627	11,790	8,144	3,980	5,208	1,604
MEAN	131	112	174	62.5	122	296	321	380	271	128	168	53.5
MAX	1,060	709	993	451	614	3,090	2,630	3,520	2,250	643	1,240	362
MIN	21	30	30	34	52	58	36	34	54	47	43	31
CFSM	2.01	1.71	2.67	0.96	1.88	4.53	4.91	5.82	4.16	1.97	2.57	0.82
IN.	2.32	1.91	3.08	1.10	1.95	5.23	5.48	6.72	4.64	2.27	2.97	0.91

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2003, BY WATER YEAR (WY)

MEAN	84.0	74.5	80.0	121	125	135	127	96.1	91.1	103	77.9	69.6
MAX	154	182	174	237	232	296	321	380	271	315	171	99.2
(WY)	(1996)	(1996)	(2003)	(1998)	(1995)	(2003)	(2003)	(2003)	(2003)	(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)

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

SUMMARY STATISTICS	FOR 2002 CALENDAR YEAR		FOR 2003 WATER YEAR		WATER YEARS 1995 - 2003	
ANNUAL TOTAL	30,275		67,718		98.6	
ANNUAL MEAN	82.9		186		186	
HIGHEST ANNUAL MEAN					186	2003
LOWEST ANNUAL MEAN					57.3	2001
HIGHEST DAILY MEAN	1,360	Jul 14	3,520	May 22	4,790	Jul 23, 1997
LOWEST DAILY MEAN	20	Sep 11	21	Oct 5	18	Aug 1, 2001
ANNUAL SEVEN-DAY MINIMUM	21	Sep 7	22	Oct 4	21	Sep 7, 2002
MAXIMUM PEAK FLOW			5,050	May 22	9,890*	Jul 23, 1997
MAXIMUM PEAK STAGE			14.89	May 22	18.68	Jul 23, 1997
INSTANTANEOUS LOW FLOW			17*	Oct 6	15*	Aug 10, 1997
ANNUAL RUNOFF (CFSM)	1.27		2.84		1.51	
ANNUAL RUNOFF (INCHES)	17.25		38.58		20.51	
10 PERCENT EXCEEDS	158		450		163	
50 PERCENT EXCEEDS	35		69		44	
90 PERCENT EXCEEDS	24		35		27	

e Estimated.
 * See REMARKS.

