

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 and crest-stage gage. Datum of gage is 520.95 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. A daily average of 15.2 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 Sept. 12.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	57	28	40	36	43	131	155	117	81	99	60	26
2	48	28	35	35	43	68	114	53	574	101	44	26
3	60	32	32	35	216	55	78	44	101	49	37	25
4	65	189	31	36	107	51	67	43	54	35	76	24
5	37	95	30	37	56	46	62	41	45	34	43	23
6	37	39	47	35	47	43	59	49	42	34	40	25
7	34	33	115	35	45	43	62	41	117	166	36	25
8	33	31	39	32	42	258	62	39	116	110	163	24
9	31	30	58	32	41	85	58	38	63	42	494	25
10	31	29	651	33	42	58	49	55	73	35	94	24
11	31	29	117	38	40	50	51	237	58	38	55	22
12	32	89	61	38	38	48	115	58	36	82	72	23
13	132	99	51	39	39	44	493	131	35	49	69	24
14	44	35	48	474	74	58	425	49	36	59	56	23
15	33	31	43	91	80	44	119	45	34	32	68	24
16	31	31	43	57	43	188	75	50	32	30	37	61
17	29	30	41	47	43	244	61	40	32	29	97	61
18	31	29	38	44	39	93	57	41	30	31	89	26
19	30	28	37	44	38	59	54	39	125	35	42	24
20	31	28	36	46	38	49	50	178	80	31	34	23
21	30	28	37	45	132	46	48	68	41	27	32	26
22	28	28	36	42	92	59	58	43	35	40	31	24
23	30	63	153	39	48	484	117	38	33	63	360	23
24	33	92	76	39	173	129	49	43	33	28	92	23
25	33	127	43	42	78	69	46	39	31	27	48	23
26	29	39	39	44	51	54	e47	37	51	28	34	22
27	29	38	38	39	46	52	e44	37	89	25	30	23
28	28	196	40	37	576	1,400	47	37	397	52	28	24
29	32	48	40	37	---	212	43	35	104	508	29	29
30	30	37	38	124	---	111	92	53	45	544	28	40
31	28	---	37	70	---	197	---	42	---	149	30	---
TOTAL	1,187	1,659	2,170	1,822	2,350	4,528	2,857	1,860	2,623	2,612	2,448	815
MEAN	38.3	55.3	70.0	58.8	83.9	146	95.2	60.0	87.4	84.3	79.0	27.2
MAX	132	196	651	474	576	1,400	493	237	574	544	494	61
MIN	28	28	30	32	38	43	43	35	30	25	28	22
CFSM	0.59	0.85	1.07	0.90	1.29	2.24	1.46	0.92	1.34	1.29	1.21	0.42
IN.	0.68	0.95	1.24	1.04	1.34	2.58	1.63	1.06	1.49	1.49	1.39	0.46

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2005, BY WATER YEAR (WY)

	76.1	69.4	77.7	108	120	129	118	89.2	94.8	99.2	78.4	78.4
MEAN	76.1	69.4	77.7	108	120	129	118	89.2	94.8	99.2	78.4	78.4
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	27.2
(WY)	(2001)	(2002)	(2001)	(2004)	(2002)	(1999)	(2002)	(2000)	(2002)	(2001)	(2001)	(2005)

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SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1995 - 2005	
ANNUAL TOTAL	30,107		26,931		94.7	
ANNUAL MEAN	82.3		73.8		186	
HIGHEST ANNUAL MEAN					57.3	
LOWEST ANNUAL MEAN					2001	
HIGHEST DAILY MEAN	2,160	Sep 8	1,400	Mar 28	4,790	Jul 23, 1997
LOWEST DAILY MEAN	26	Sep 5	22	Sep 11	18	Aug 1, 2001
ANNUAL SEVEN-DAY MINIMUM	29	Nov 16	23	Sep 22	21	Sep 7, 2002
MAXIMUM PEAK FLOW			2,720	Mar 28	9,890*	Jul 23, 1997
MAXIMUM PEAK STAGE			11.53	Mar 28	18.68	Jul 23, 1997
INSTANTANEOUS LOW FLOW			18*	Sep 11	15*	Aug 10, 1997
ANNUAL RUNOFF (CFSM)	1.26		1.13		1.45	
ANNUAL RUNOFF (INCHES)	17.15		15.34		19.70	
10 PERCENT EXCEEDS	146		124		158	
50 PERCENT EXCEEDS	40		43		43	
90 PERCENT EXCEEDS	30		28		27	

* See REMARKS.
e Estimated.

