

SANTEE RIVER BASIN

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC

LOCATION.--Lat 35°09'30", long 80°42'49", Mecklenburg County, Hydrologic Unit 03050103, on right bank at downstream side of bridge on Secondary Road 3168, 4.0 mi southwest of Mint Hill.

DRAINAGE AREA.--8.37 mi².

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 612.56 ft above sea level, North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records fair except those above 300 ft³/s, and those for estimated daily discharges, which are poor. Maximum discharge for 2000 water year, current water year, and period of record from rating curve extended above 210 ft³/s by step-backwater analysis. Minimum discharge for period June 1999 to Sept. 1999 also occurred on Sept. 5. Minimum discharge for 2000 water year also occurred on Aug. 28-30. Minimum discharge for period of record and current water year also occurred on Aug. 26, 27, 28, 29, 30, 31.

DISCHARGE, CUBIC FEET PER SECOND, FOR PERIOD JUNE TO SEPTEMBER 1999
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	---	---	---	---	---	---	---	---	1.2	1.1	1.1	.13
2	---	---	---	---	---	---	---	---	1.1	1.0	.75	.18
3	---	---	---	---	---	---	---	---	1.1	.95	.44	.24
4	---	---	---	---	---	---	---	---	.99	.92	.38	.07
5	---	---	---	---	---	---	---	---	.97	.83	.38	5.4
6	---	---	---	---	---	---	---	---	.90	1.7	.37	1.9
7	---	---	---	---	---	---	---	---	.87	21	.34	.49
8	---	---	---	---	---	---	---	---	.80	3.3	.46	.42
9	---	---	---	---	---	---	---	---	1.8	1.4	1.2	.57
10	---	---	---	---	---	---	---	---	2.5	1.5	.44	.94
11	---	---	---	---	---	---	---	---	2.4	1.4	.35	.54
12	---	---	---	---	---	---	---	---	1.3	5.5	.28	.36
13	---	---	---	---	---	---	---	---	1.1	14	.25	.29
14	---	---	---	---	---	---	---	---	1.0	2.9	.33	.26
15	---	---	---	---	---	---	---	---	4.3	2.1	.35	3.6
16	---	---	---	---	---	---	---	---	9.7	1.7	.36	6.3
17	---	---	---	---	---	---	---	---	4.3	3.5	.33	.65
18	---	---	---	---	---	---	---	---	1.6	1.7	.32	.39
19	---	---	---	---	---	---	---	---	1.3	1.2	.26	.38
20	---	---	---	---	---	---	---	---	1.7	1.1	.89	.61
21	---	---	---	---	---	---	---	---	1.6	1.0	1.2	.52
22	---	---	---	---	---	---	---	---	1.4	1.0	.41	1.9
23	---	---	---	---	---	---	---	---	1.3	.90	.35	.49
24	---	---	---	---	---	---	---	---	1.2	.89	.35	.36
25	---	---	---	---	---	---	---	---	1.9	1.1	2.2	.37
26	---	---	---	---	---	---	---	---	2.1	.83	4.4	.35
27	---	---	---	---	---	---	---	---	1.8	.78	.57	2.4
28	---	---	---	---	---	---	---	---	1.3	.57	.43	2.4
29	---	---	---	---	---	---	---	---	1.2	.55	.40	32
30	---	---	---	---	---	---	---	---	1.3	.95	.34	5.8
31	---	---	---	---	---	---	---	---	---	4.4	.24	---
TOTAL	---	---	---	---	---	---	---	---	56.03	81.77	20.47	70.31
MEAN	---	---	---	---	---	---	---	---	1.87	2.64	.66	2.34
MAX	---	---	---	---	---	---	---	---	9.7	21	4.4	32
MIN	---	---	---	---	---	---	---	---	.80	.55	.24	.07
CFSM	---	---	---	---	---	---	---	---	.22	.32	.08	.28
IN.	---	---	---	---	---	---	---	---	.25	.36	.09	.31

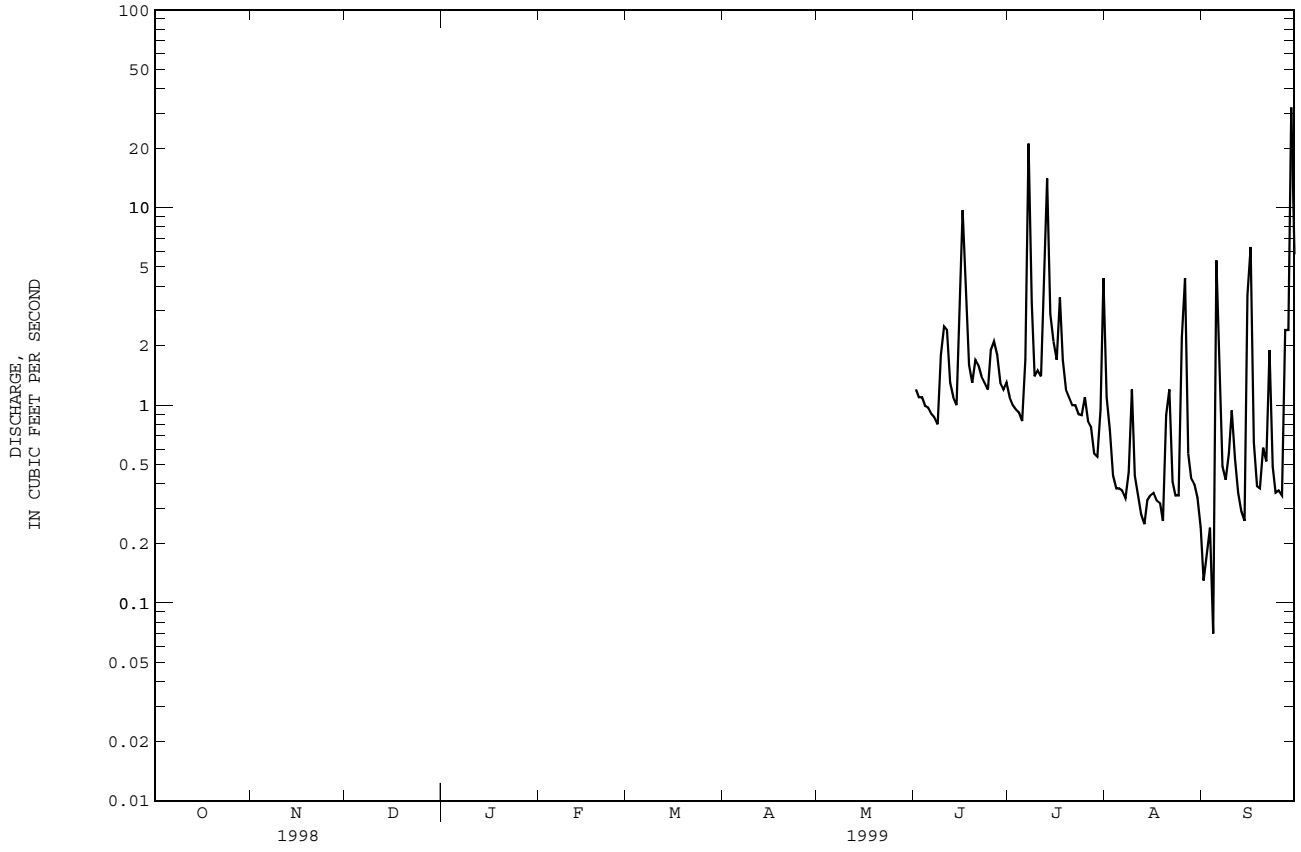
SUMMARY STATISTICS

FOR PERIOD JUNE TO SEPTEMBER 1999

MAXIMUM PEAK FLOW	203	Jul 7
MAXIMUM PEAK STAGE	4.26	Jul 7
INSTANTANEOUS LOW FLOW	.05*	Sep 4

* See REMARKS.

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.5	1.6	.89	1.4	18	2.9	2.6	2.5	.63	.93	9.8	25
2	.98	9.1	.97	1.5	13	2.8	3.0	2.8	.58	2.1	2.2	14
3	.91	2.5	1.2	1.4	13	2.8	3.2	e10	.53	.32	1.2	1.7
4	1.5	1.8	1.2	1.9	11	5.2	2.8	e2.5	3.7	.21	6.2	6.3
5	1.6	1.3	1.1	1.7	7.7	3.7	2.4	e2.0	41	.21	.84	1.2
6	1.2	1.1	1.2	1.3	5.6	3.0	2.3	e1.8	3.6	.20	.47	.57
7	1.2	1.1	1.1	1.3	4.9	2.8	2.2	e1.7	1.4	.26	.36	.43
8	1.3	1.2	1.0	1.2	6.2	2.8	12	e1.6	1.1	.23	.29	.45
9	1.5	1.2	1.1	2.2	8.1	2.7	4.9	e1.5	.94	3.5	.23	.43
10	71	1.2	3.1	41	6.4	2.6	3.0	e3.0	.84	.28	4.4	.46
11	158	2.3	1.6	5.5	4.8	3.0	2.6	e2.3	.74	9.4	.53	.61
12	7.9	1.9	1.3	2.6	59	3.3	2.5	e1.6	.65	19	.30	.38
13	9.9	1.1	1.5	2.3	13	2.4	12	e1.7	.64	2.0	.18	.41
14	3.9	1.0	18	1.9	101	2.4	6.8	e2.5	.52	.75	.24	.42
15	2.1	1.1	3.3	1.5	13	2.4	37	1.1	.52	4.9	.34	.49
16	1.6	1.1	1.8	1.7	7.5	5.5	11	1.1	.53	.53	.11	.39
17	1.6	1.0	1.6	2.3	5.8	5.7	5.8	1.1	.48	.42	.10	.34
18	1.5	1.2	1.4	4.6	12	3.0	5.1	1.1	.44	.43	.12	4.9
19	1.4	1.1	1.8	2.7	7.0	2.8	3.7	1.1	.52	.51	.15	4.1
20	15	1.0	2.5	5.2	5.5	58	3.2	1.0	.49	4.9	.17	.35
21	9.4	1.1	4.9	1.9	4.9	9.2	2.8	1.2	.47	.40	.13	.39
22	3.3	1.1	3.9	2.0	4.5	5.4	2.6	2.3	.39	.35	.12	11
23	2.2	1.1	2.2	13	5.6	4.3	2.4	.96	.37	.31	.11	91
24	1.8	1.1	1.7	7.3	6.3	3.7	5.2	1.1	.30	1.5	.18	3.0
25	1.6	1.1	1.5	16	7.9	3.3	11	1.0	.25	.56	.68	19
26	1.7	10	1.5	8.8	4.0	3.0	4.4	1.0	.24	.39	.15	5.7
27	1.6	2.9	1.5	5.0	5.3	5.1	3.3	.79	.27	.33	.08	1.6
28	1.5	1.2	1.5	3.9	5.4	4.6	9.1	.76	.34	.25	.08	1.1
29	1.5	1.1	1.4	3.8	4.6	3.0	4.2	.86	1.5	.18	.08	.82
30	1.5	.84	1.3	68	---	2.9	2.9	.68	.64	.18	.09	.72
31	1.5	---	1.4	29	---	2.8	---	.63	---	.15	.53	---
TOTAL	313.19	56.44	70.46	243.9	371.0	167.1	176.0	55.28	64.62	55.68	30.46	197.26
MEAN	10.1	1.88	2.27	7.87	12.8	5.39	5.87	1.78	2.15	1.80	.98	6.58
MAX	158	10	18	68	101	58	37	10	41	19	9.8	91
MIN	.91	.84	.89	1.2	4.0	2.4	2.2	.63	.24	.15	.08	.34
CFSM	1.21	.22	.27	.94	1.53	.64	.70	.21	.26	.21	.12	.79
IN.	1.39	.25	.31	1.08	1.65	.74	.78	.25	.29	.25	.14	.88

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2000, BY WATER YEAR (WY)

	1999	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000
MEAN	10.1	1.88	2.27	7.87	12.8	5.39	5.87	1.78	2.01	2.22	.82	4.46
MAX	10.1	1.88	2.27	7.87	12.8	5.39	5.87	1.78	2.15	2.64	.98	6.58
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	2000	1999	2000	2000
MIN	10.1	1.88	2.27	7.87	12.8	5.39	5.87	1.78	1.87	1.80	.66	2.34
(WY)	2000	2000	2000	2000	2000	2000	2000	2000	1999	2000	1999	1999

SUMMARY STATISTICS

FOR 1999 CALENDAR YEAR

FOR 2000 WATER YEAR

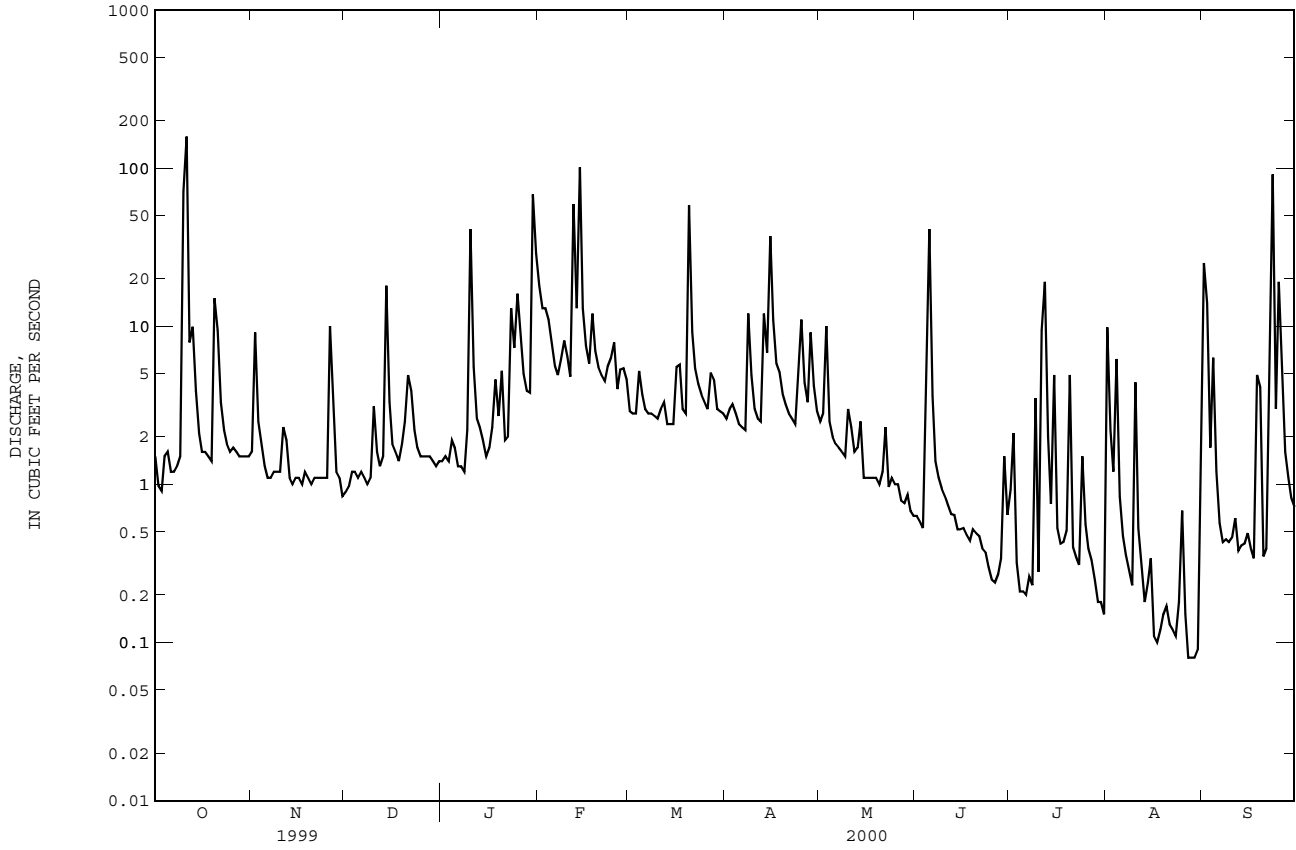
WATER YEARS 1999 - 2000

ANNUAL TOTAL							1801.39					
ANNUAL MEAN							4.92			4.92		
HIGHEST ANNUAL MEAN										4.92		2000
LOWEST ANNUAL MEAN										4.92		2000
HIGHEST DAILY MEAN				158	Oct 11		158	Oct 11		158	Oct 11	1999
LOWEST DAILY MEAN				.07	Sep 4		.08	Aug 27		.07	Sep 4	1999
ANNUAL SEVEN-DAY MINIMUM				.23	Aug 29		.13	Aug 16		.13	Aug 16	2000
MAXIMUM PEAK FLOW							802*	Oct 11		802*	Oct 11	1999
MAXIMUM PEAK STAGE							6.99	Oct 11		6.99	Oct 11	1999
INSTANTANEOUS LOW FLOW							.06*	Aug 27		.05	Sep 4	1999
ANNUAL RUNOFF (CFSM)							.59			.59		
ANNUAL RUNOFF (INCHES)							8.01			7.99		
10 PERCENT EXCEEDS				4.3			9.4			7.7		
50 PERCENT EXCEEDS				1.2			1.6			1.5		
90 PERCENT EXCEEDS				.36			.34			.33		

e Estimated.

* See REMARKS.

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued



SANTEE RIVER BASIN

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.67	.48	.79	.83	1.1	1.7	5.7	1.5	8.9	.36	.21	.29
2	.56	.49	.91	.84	1.1	1.6	4.1	1.5	3.1	.30	.20	.16
3	.48	.49	.85	.84	1.0	2.4	3.7	1.4	1.4	.44	.17	4.3
4	.48	.52	.75	.89	1.0	30	3.3	1.3	1.1	1.3	.16	9.5
5	.41	.63	.74	.94	1.0	6.0	2.9	1.3	.95	2.0	.15	.54
6	.46	.59	.75	.93	1.0	3.4	2.7	1.2	.87	.41	.14	.10
7	.44	.55	.75	.96	1.0	2.5	2.6	1.2	.81	.30	.12	.06
8	.37	.61	.76	1.7	.98	2.2	2.4	1.3	1.0	.37	.10	.05
9	.45	.88	.86	1.3	1.0	2.0	2.3	1.2	.97	.52	.08	.16
10	.49	1.8	.73	1.1	1.3	1.8	2.2	1.2	.80	.33	.06	.36
11	.57	.57	.66	1.1	.98	1.7	2.1	1.1	.70	.25	.15	.07
12	.55	.49	.64	5.5	1.9	2.0	2.1	1.1	.65	.22	.11	.04
13	.51	.51	.57	4.7	1.9	3.4	3.2	.97	6.7	.51	2.0	.04
14	.45	2.1	.75	1.8	3.9	1.9	2.1	.91	3.1	.37	.58	.04
15	.39	.72	.79	1.4	1.7	18	2.0	.90	.97	.21	.17	.03
16	.50	.65	1.7	1.2	1.5	5.5	1.9	.88	.82	.17	.11	.03
17	.44	1.5	3.0	1.1	27	3.4	1.8	.96	.77	.16	.12	.03
18	.49	.72	1.4	1.2	3.7	2.6	1.8	1.0	.61	.16	1.1	.03
19	.55	2.7	1.2	8.0	2.4	2.2	1.8	18	.60	.16	.21	.03
20	.58	2.1	1.4	12	2.0	30	1.7	5.7	.53	.15	.12	.58
21	.45	.85	1.0	3.4	1.8	69	1.7	1.3	.51	.13	.07	.41
22	.59	.64	1.1	2.0	8.2	8.1	1.7	3.7	1.0	.11	.05	.05
23	.67	.68	.94	1.6	3.7	4.5	1.7	2.0	1.3	.16	.04	.04
24	.64	.60	.88	1.5	2.4	3.4	2.0	1.3	.74	1.1	.03	20
25	.66	14	.83	1.3	3.2	2.8	10	2.1	.53	6.2	.03	.90
26	.58	2.9	.77	1.3	2.7	2.5	2.5	8.2	.86	1.8	.03	.17
27	.60	1.4	.93	1.2	2.0	2.2	1.9	1.4	.84	.54	.02	.11
28	.54	1.1	1.1	1.2	1.8	2.0	1.8	4.0	.45	.40	.02	.11
29	.51	1.0	.98	1.1	---	94	1.6	2.9	.42	.33	.02	.08
30	.45	.92	.91	1.7	---	27	1.6	1.4	.54	.39	.02	.09
31	.45	---	.83	1.3	---	7.0	---	1.2	---	.26	.09	---
TOTAL	15.98	43.19	30.27	65.93	83.26	346.8	78.9	74.12	42.54	20.11	6.48	38.40
MEAN	.52	1.44	.98	2.13	2.97	11.2	2.63	2.39	1.42	.65	.21	1.28
MAX	.67	14	3.0	12	27	94	10	18	8.9	6.2	2.0	20
MIN	.37	.48	.57	.83	.98	1.6	1.6	.88	.42	.11	.02	.03
CFSM	.06	.17	.12	.25	.36	1.34	.31	.29	.17	.08	.02	.15
IN.	.07	.19	.13	.29	.37	1.54	.35	.33	.19	.09	.03	.17

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2001, BY WATER YEAR (WY)

	1999	2000	2001	1999	2000	2001	1999	2000	2001	1999	2000	2001
MEAN	5.31	1.66	1.62	5.00	7.97	8.29	4.25	2.60	1.81	1.69	.62	3.40
MAX	10.1	1.88	2.27	7.87	12.8	11.2	5.87	2.82	2.15	2.64	.98	6.58
(WY)	2000	2000	2000	2000	2000	2001	2000	2000	2000	1999	2000	2000
MIN	.52	1.44	.98	2.13	2.97	5.39	2.63	2.39	1.42	.65	.21	1.28
(WY)	2001	2001	2001	2001	2001	2000	2001	2001	2001	2001	2001	2001

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1999 - 2001

ANNUAL TOTAL	1450.74	845.98	
ANNUAL MEAN	3.96	2.32	3.67
HIGHEST ANNUAL MEAN			5.01
LOWEST ANNUAL MEAN			2.32
HIGHEST DAILY MEAN	101	94	158
LOWEST DAILY MEAN	.08	.02	.02
ANNUAL SEVEN-DAY MINIMUM	.13	.02	.02
MAXIMUM PEAK FLOW		417*	802*
MAXIMUM PEAK STAGE		5.47	6.99
INSTANTANEOUS LOW FLOW		.02*	.02*
ANNUAL RUNOFF (CFSM)	.47	.28	.44
ANNUAL RUNOFF (INCHES)	6.45	3.76	5.95
10 PERCENT EXCEEDS	7.8	3.5	5.7
50 PERCENT EXCEEDS	1.1	.95	1.2
90 PERCENT EXCEEDS	.34	.12	.24

* See REMARKS.

0214657975 IRVINS CREEK AT SR3168 NEAR CHARLOTTE, NC--Continued

