

Water-Data Report 2010

0214657975 IRVINS CREEK AT SECONDARY ROAD 3168 NEAR CHARLOTTE, NC

Santee Basin
Lower Catawba Subbasin

LOCATION.--Lat 35°09'31", long 80°42'48" referenced to North American Datum of 1983, Mecklenburg County, NC, 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.

SURFACE-WATER RECORDS

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

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 612.56 ft above North American Vertical Datum of 1988, from levels. Radio telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record and current water year from rating curve extended above 500 ft³/s by step-backwater and culvert analysis. No flow also occurred Aug. 14-15, 2002, September 12, 13, 25-30, 2007, October 1, 2, 6-20, 2007.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.17	22	2.4	4.7	8.1	4.4	3.8	2.0	18	3.8	3.9	0.47
2	0.18	0.79	120	3.9	34	5.8	3.6	2.0	24	1.8	2.1	0.43
3	0.21	0.42	31	3.6	25	11	3.5	2.4	7.3	1.4	6.3	0.39
4	0.21	0.32	6.0	3.5	11	6.6	3.3	2.2	2.8	1.3	2.7	0.36
5	1.3	0.28	4.4	3.4	327	5.2	3.2	2.0	2.2	1.2	66	0.29
6	0.34	0.24	3.4	3.2	46	4.7	3.0	1.8	2.0	1.0	22	0.27
7	0.24	0.22	3.0	3.6	11	4.5	2.9	1.7	2.3	0.97	10	0.25
8	0.23	0.23	12	3.9	7.8	4.4	3.1	1.7	1.6	0.90	2.8	0.22
9	0.25	0.21	141	3.5	7.4	4.4	3.8	1.6	1.5	0.91	2.0	0.28
10	0.28	23	11	3.4	6.5	4.7	2.8	1.6	15	0.89	1.7	0.20
11	0.32	271	5.4	e3.5	5.5	6.5	2.8	2.0	4.4	0.94	1.5	0.16
12	0.40	71	4.2	e3.6	5.3	48	2.6	1.9	1.8	375	1.3	0.22
13	0.55	8.7	6.2	3.7	6.9	47	2.6	1.6	28	14	1.2	0.16
14	0.40	4.2	5.0	3.6	5.8	9.9	2.6	1.5	5.8	4.6	22	0.15
15	0.67	2.8	4.2	3.6	11	6.2	2.6	1.4	4.5	2.5	16	0.16
16	0.55	2.2	3.6	3.6	7.2	5.1	2.6	1.4	3.0	16	2.2	0.13
17	0.29	2.1	3.3	95	5.6	4.6	2.4	5.6	1.8	4.9	1.6	0.08
18	0.26	1.9	32	12	5.2	4.3	2.3	3.4	1.6	2.9	1.5	0.08
19	0.23	1.8	37	7.6	4.9	4.0	2.3	1.8	1.4	2.6	31	0.08
20	0.19	1.7	8.5	6.2	4.6	3.9	2.3	1.6	1.2	2.6	5.9	0.08
21	0.19	1.6	5.4	42	4.3	4.3	2.5	1.5	1.1	2.8	2.0	0.10
22	0.24	1.7	4.5	23	14	5.6	2.3	1.8	1.0	2.7	1.4	0.07
23	0.37	28	4.1	9.5	7.3	4.3	2.2	1.6	1.0	1.7	1.2	0.04
24	0.80	5.1	3.7	48	8.0	3.8	2.2	1.5	0.98	3.4	1.0	0.04
25	0.57	3.2	258	325	7.3	3.8	4.3	1.5	0.93	2.3	0.97	0.03
26	0.37	2.5	23	13	5.7	3.8	2.4	1.5	0.96	1.5	0.88	0.16
27	8.1	2.4	8.7	6.9	5.3	3.6	2.7	1.3	0.84	174	0.78	2.0
28	6.3	2.2	5.6	5.6	4.7	3.7	3.3	2.6	0.81	20	0.73	0.39
29	0.37	2.1	4.4	5.0	---	16	2.1	4.5	0.83	3.8	0.60	0.96
30	0.32	2.0	3.8	6.5	---	5.6	2.1	1.5	46	2.3	0.54	5.0
31	0.28	---	7.9	7.3	---	4.3	---	33	---	4.1	0.51	---
Total	25.18	465.91	772.7	670.9	602.4	254.0	84.2	93.5	184.65	658.81	214.31	13.25
Mean	0.81	15.5	24.9	21.6	21.5	8.19	2.81	3.02	6.16	21.3	6.91	0.44
Max	8.1	271	258	325	327	48	4.3	33	46	375	66	5.0
Min	0.17	0.21	2.4	3.2	4.3	3.6	2.1	1.3	0.81	0.89	0.51	0.03
Cfsm	0.10	1.86	2.98	2.59	2.57	0.98	0.34	0.36	0.74	2.54	0.83	0.05
In.	0.11	2.07	3.43	2.98	2.68	1.13	0.37	0.42	0.82	2.93	0.95	0.06

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2010, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	3.40	6.69	7.83	6.64	8.39	12.3	8.36	5.93	8.06	6.14	4.84	5.26
Max	10.1	35.9	24.9	21.6	21.5	32.1	42.7	33.0	56.2	21.3	16.9	39.0
(WY)	(2000)	(2007)	(2010)	(2010)	(2010)	(2003)	(2003)	(2003)	(2003)	(2010)	(2008)	(2004)
Min	0.37	0.10	0.79	1.85	2.32	2.82	2.18	1.21	0.44	0.08	0.17	0.11
(WY)	(2002)	(2008)	(2002)	(2008)	(2002)	(2006)	(2006)	(2004)	(2002)	(2002)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2009		Water Year 2010		Water Years 1999 - 2010	
Annual total	3,043.27		4,039.81			
Annual mean	8.34		11.1		7.10	
Highest annual mean					20.1	2003
Lowest annual mean					2.16	2002
Highest daily mean	279	Mar 1	375	Jul 12	544	Sep 28, 2004
Lowest daily mean	0.09	Sep 15	0.03	Sep 25	0.00	Aug 13, 2002
Annual seven-day minimum	0.18	Sep 9	0.06	Sep 19	0.00	Sep 25, 2007
Maximum peak flow			^a 2,110	Jul 12	^a 2,670	Jun 18, 2003
Maximum peak stage			9.47	Jul 12	10.27	Jun 18, 2003
Instantaneous low flow			0.02	Sep 25	^a 0.00	Aug 13, 2002
Annual runoff (cfsm)	0.996		1.32		0.849	
Annual runoff (inches)	13.53		17.95		11.53	
10 percent exceeds	9.7		16		9.3	
50 percent exceeds	1.7		2.8		1.8	
90 percent exceeds	0.28		0.28		0.22	

^a See Remarks.

