

Water-Data Report 2007

**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 Secondary Road 3168 bridge, 4.0 mi southwest of Mint Hill.

DRAINAGE AREA.--8.37 mi<sup>2</sup>.

**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 station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 500 ft<sup>3</sup>/s by step-backwater and culvert analysis. No flow also occurred Aug. 14-15, 2002, September 12, 13, 25-30, 2007.

## 0214657975 IRVINS CREEK AT SECONDARY ROAD 3168 NEAR CHARLOTTE, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.75	1.6	6.2	8.7	23	92	2.5	1.7	0.65	1.9	0.25	0.47
2	0.74	1.5	3.7	5.5	17	389	3.4	1.6	0.64	1.1	0.22	0.32
3	0.72	1.5	3.1	4.1	7.4	14	2.4	1.7	2.7	1.1	0.19	0.33
4	0.74	1.5	2.9	3.7	5.1	7.8	2.4	1.7	0.94	0.95	0.17	0.25
5	0.75	1.6	2.7	26	4.3	5.8	2.1	1.8	0.74	0.88	0.17	0.24
6	0.76	1.6	2.7	27	3.9	5.0	3.0	1.8	0.70	1.1	0.16	0.21
7	0.82	11	2.6	44	3.9	4.5	2.0	1.6	0.63	4.1	0.16	0.15
8	6.8	13	2.5	64	3.7	4.2	2.0	1.6	1.4	1.4	0.15	0.11
9	1.1	3.2	2.5	12	3.4	3.8	2.0	1.6	1.6	1.0	0.12	0.07
10	0.76	2.2	2.5	6.8	3.6	4.0	2.0	1.7	0.67	1.2	0.11	0.04
11	0.74	3.0	2.8	5.3	3.4	3.8	2.8	1.6	0.64	0.80	0.12	0.01
12	2.1	33	2.6	4.7	3.2	3.4	15	1.5	0.67	0.83	0.13	e0.00
13	0.68	3.8	2.4	4.4	44	3.3	3.0	1.6	7.6	0.71	0.11	0.00
14	0.63	2.6	2.5	4.1	42	3.3	2.4	1.3	14	0.66	0.11	0.02
15	0.63	2.3	2.4	4.0	6.9	3.2	119	1.3	2.4	2.5	0.11	0.37
16	0.62	205	2.6	3.8	4.8	8.8	16	1.3	1.1	1.5	0.14	0.28
17	92	11	2.2	3.3	4.0	4.9	5.4	1.2	0.90	0.75	0.11	0.15
18	17	4.8	2.1	4.4	3.5	3.5	3.8	1.1	0.75	0.78	0.12	0.10
19	2.9	3.6	2.2	4.5	3.0	3.2	5.4	1.1	0.70	0.64	0.10	0.07
20	2.1	2.8	2.1	3.6	2.9	3.2	9.3	1.1	0.68	0.58	0.08	0.05
21	1.7	163	2.1	10	2.9	3.0	3.8	1.0	0.67	0.55	0.06	0.04
22	1.5	542	36	27	2.8	2.9	3.1	0.99	0.54	0.51	0.08	0.02
23	1.5	26	11	7.3	2.7	3.0	2.7	0.97	0.53	0.45	0.14	0.01
24	1.4	9.6	4.3	5.5	2.7	2.9	2.5	0.90	2.0	0.44	0.09	0.01
25	1.4	6.2	79	4.6	14	2.8	2.3	0.86	130	0.43	0.07	0.00
26	1.4	4.7	16	4.0	7.0	2.7	2.2	0.85	19	0.42	0.07	0.00
27	7.2	3.9	6.6	3.8	4.0	2.6	2.4	0.80	1.9	48	0.08	0.00
28	42	3.6	4.7	3.6	3.3	2.7	2.4	0.77	1.2	14	0.21	0.00
29	3.3	3.3	3.9	3.2	---	2.7	1.9	0.76	1.0	0.55	0.18	0.00
30	2.1	3.3	3.7	3.2	---	2.5	1.8	0.69	16	0.34	0.17	0.00
31	1.7	---	4.9	3.1	---	2.7	---	0.70	---	0.29	1.3	---
<b>Total</b>	198.54	1,076.2	227.5	319.2	232.4	601.2	231.0	39.19	212.95	90.46	5.28	3.32
<b>Mean</b>	6.40	35.9	7.34	10.3	8.30	19.4	7.70	1.26	7.10	2.92	0.17	0.11
<b>Max</b>	92	542	79	64	44	389	119	1.8	130	48	1.3	0.47
<b>Min</b>	0.62	1.5	2.1	3.1	2.7	2.5	1.8	0.69	0.53	0.29	0.06	0.00
<b>Cfsm</b>	0.77	4.29	0.88	1.23	0.99	2.32	0.92	0.15	0.85	0.35	0.02	0.01
<b>In.</b>	0.88	4.78	1.01	1.42	1.03	2.67	1.03	0.17	0.95	0.40	0.02	0.01

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2007, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	4.38	7.01	6.14	5.47	7.75	12.0	9.88	5.90	9.68	4.42	3.70	6.66
<b>Max</b>	10.1	35.9	15.2	10.3	13.6	32.1	42.7	33.0	56.2	17.7	10.3	39.0
<b>(WY)</b>	(2000)	(2007)	(2003)	(2007)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2003)	(2004)
<b>Min</b>	0.37	0.12	0.79	2.13	2.32	2.82	2.18	1.21	0.44	0.08	0.17	0.11
<b>(WY)</b>	(2002)	(2002)	(2002)	(2001)	(2002)	(2006)	(2006)	(2004)	(2002)	(2002)	(2007)	(2007)

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SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1999 - 2007	
<b>Annual total</b>	2,653.17		3,237.24			
<b>Annual mean</b>	7.27		8.87		7.07	
<b>Highest annual mean</b>					20.1	2003
<b>Lowest annual mean</b>					2.16	2002
<b>Highest daily mean</b>	542	Nov 22	542	Nov 22	544	Sep 28, 2004
<b>Lowest daily mean</b>	0.28	Jul 21	0.00	Sep 12	0.00	Aug 13, 2002
<b>Annual seven-day minimum</b>	0.41	Jul 29	0.00	Sep 24	0.00	Sep 24, 2007
<b>Maximum peak flow</b>			1,700	Mar 2	<sup>a</sup> 2,670	Jun 18, 2003
<b>Maximum peak stage</b>			8.75	Mar 2	10.27	Jun 18, 2003
<b>Instantaneous low flow</b>			<sup>a</sup> 0.00	Sep 11	<sup>a</sup> 0.00	Aug 13, 2002
<b>Annual runoff (cfsm)</b>	0.868		1.06		0.844	
<b>Annual runoff (inches)</b>	11.79		14.39		11.47	
<b>10 percent exceeds</b>	7.8		11		9.4	
<b>50 percent exceeds</b>	2.1		2.2		1.9	
<b>90 percent exceeds</b>	0.68		0.13		0.26	

<sup>a</sup> See Remarks.

