

0214657975 IRVINS CREEK AT SECONDARY ROAD 3168 NEAR CHARLOTTE, NC

LOCATION.--Lat 35°09'31", long 80°42'48", 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 and crest-stage gage. Datum of gage is 612.56 ft above North American Vertical Datum of 1988. Radio telemetry at station.

REMARKS.--Records poor. Maximum discharge for current water year and period of record from rating curve extended above 500 ft³/s by step-backwater and culvert analysis. No flow also occurred Aug. 14-15, 2002.

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 | 4.5 | 1.8 | 3.6 | 2.5 | 3.1 | 12 | 14 | 8.4 | 13 | 4.2 | 2.1 | 0.67 |
| 2 | 3.9 | 1.9 | 3.0 | 2.6 | 2.9 | 6.9 | 13 | 4.7 | 139 | 3.5 | 1.4 | 0.40 |
| 3 | 4.7 | 2.5 | 2.9 | 2.3 | 25 | 5.4 | 9.2 | 4.1 | 13 | 2.1 | 1.2 | 0.41 |
| 4 | 3.8 | 15 | 2.7 | 2.4 | 8.2 | 4.8 | 7.5 | 3.7 | 6.1 | 1.9 | 1.0 | 0.35 |
| 5 | 3.2 | 5.2 | 2.6 | 2.2 | 4.6 | 4.4 | 6.9 | 3.8 | 4.6 | 1.8 | 0.90 | 0.33 |
| 6 | 2.8 | 3.0 | 4.5 | 2.7 | 3.8 | 4.2 | 6.3 | 4.2 | 25 | 1.7 | 0.91 | 0.34 |
| 7 | 2.6 | 2.8 | 4.7 | 2.5 | 4.5 | 3.8 | 6.7 | 3.8 | 13 | 9.0 | 0.94 | 0.40 |
| 8 | 2.4 | 2.5 | e3.3 | 2.6 | 3.6 | 24 | 8.4 | 3.5 | 4.9 | 4.1 | 1.00 | 0.33 |
| 9 | 2.5 | 2.4 | e4.7 | 2.5 | 3.3 | 7.3 | 7.2 | 3.3 | 3.8 | 2.0 | 1.7 | 0.28 |
| 10 | 2.3 | 2.3 | e40 | 2.6 | 3.3 | 5.5 | 5.9 | 9.5 | 4.7 | 1.6 | 1.4 | 0.30 |
| 11 | 2.3 | 2.5 | e8.0 | 2.7 | 3.0 | 4.9 | 5.7 | 8.1 | 4.0 | 1.5 | 1.0 | 0.28 |
| 12 | 2.3 | 6.9 | e5.0 | 2.7 | 2.9 | 4.2 | 48 | 9.8 | 3.1 | 1.5 | 1.3 | 0.29 |
| 13 | 63 | 4.3 | e4.0 | 2.8 | 2.8 | 4.1 | 78 | 9.1 | 3.3 | 1.7 | 1.0 | 0.27 |
| 14 | 6.4 | 2.6 | 3.1 | 55 | 9.9 | 3.8 | 77 | 4.9 | 3.0 | 1.7 | 1.0 | 0.26 |
| 15 | 4.0 | 2.4 | 2.9 | 6.1 | 5.9 | 3.6 | 13 | 3.9 | 2.8 | 1.3 | 1.2 | 0.29 |
| 16 | 2.4 | 2.3 | 2.8 | 4.0 | 3.9 | 29 | 9.4 | 3.4 | 2.2 | 1.2 | 0.85 | 0.66 |
| 17 | 1.9 | 2.3 | 2.7 | 3.4 | 3.6 | 31 | 7.7 | 3.2 | 2.1 | 1.2 | 0.70 | 1.3 |
| 18 | 1.9 | 2.2 | 3.0 | 3.1 | 3.2 | 9.5 | 6.8 | 3.1 | 1.9 | 1.0 | 2.8 | 0.70 |
| 19 | 2.0 | 2.2 | 2.6 | 3.0 | 3.0 | 6.3 | 7.4 | 2.8 | 1.8 | 1.6 | 1.2 | 0.45 |
| 20 | 1.9 | 2.3 | 2.4 | 3.0 | 3.2 | 5.4 | 5.8 | 12 | 1.9 | 1.9 | 0.91 | 0.41 |
| 21 | 2.0 | 2.2 | 2.4 | 3.0 | 10 | 4.4 | 5.4 | 4.6 | 1.8 | 1.1 | 0.72 | 0.38 |
| 22 | 2.0 | 2.2 | 2.4 | 2.8 | 6.2 | 9.8 | 5.3 | 3.3 | 1.8 | 0.97 | 0.68 | 0.36 |
| 23 | 1.9 | 6.5 | 5.5 | 2.8 | 4.0 | 23 | 5.6 | 3.0 | 1.7 | 1.0 | 1.6 | 0.34 |
| 24 | 2.0 | 8.1 | 3.4 | 2.5 | 20 | 8.0 | 5.2 | 2.8 | 1.7 | 0.76 | 1.4 | 0.32 |
| 25 | 1.9 | 6.2 | 2.8 | 2.7 | 6.7 | 5.7 | 4.5 | 2.7 | 1.6 | 0.70 | 0.71 | 0.18 |
| 26 | 1.8 | 3.2 | 2.5 | 2.8 | 4.5 | 4.9 | 4.4 | 2.6 | 4.4 | 0.69 | 0.59 | 0.21 |
| 27 | 1.9 | 4.5 | 2.3 | 2.7 | 4.5 | 5.1 | 4.7 | 2.4 | 3.1 | 0.62 | 0.54 | 0.35 |
| 28 | 2.0 | 15 | 2.2 | 2.4 | 103 | 112 | 4.4 | 2.5 | 14 | 3.0 | 0.62 | 0.38 |
| 29 | 2.0 | 4.2 | 2.2 | 2.8 | --- | 15 | 4.1 | 2.3 | 4.0 | 16 | 0.75 | 0.32 |
| 30 | 2.0 | 3.3 | 2.4 | 6.9 | --- | 9.9 | 6.3 | 3.9 | 2.4 | 4.1 | 1.0 | 1.2 |
| 31 | 1.9 | --- | 2.6 | 4.1 | --- | 24 | --- | 3.2 | --- | 5.8 | 1.1 | --- |
| TOTAL | 142.2 | 124.8 | 139.2 | 146.2 | 262.6 | 401.9 | 393.8 | 142.6 | 289.7 | 81.24 | 34.22 | 12.76 |
| MEAN | 4.59 | 4.16 | 4.49 | 4.72 | 9.38 | 13.0 | 13.1 | 4.60 | 9.66 | 2.62 | 1.10 | 0.43 |
| MAX | 63 | 15 | 40 | 55 | 103 | 112 | 78 | 12 | 139 | 16 | 2.8 | 1.3 |
| MIN | 1.8 | 1.8 | 2.2 | 2.2 | 2.8 | 3.6 | 4.1 | 2.3 | 1.6 | 0.62 | 0.54 | 0.18 |
| CFSM | 0.55 | 0.50 | 0.54 | 0.56 | 1.12 | 1.55 | 1.57 | 0.55 | 1.15 | 0.31 | 0.13 | 0.05 |
| IN. | 0.63 | 0.55 | 0.62 | 0.65 | 1.17 | 1.79 | 1.75 | 0.63 | 1.29 | 0.36 | 0.15 | 0.06 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 3.90 | 2.79 | 4.45 | 4.66 | 8.45 | 12.3 | 11.5 | 7.45 | 10.7 | 4.88 | 3.43 | 7.65 |
| MAX | 10.1 | 7.71 | 15.2 | 7.87 | 13.6 | 32.1 | 42.7 | 33.0 | 56.2 | 17.7 | 10.3 | 39.0 |
| (WY) | (2000) | (2003) | (2003) | (2000) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2004) |
| MIN | 0.37 | 0.12 | 0.79 | 2.13 | 2.32 | 5.24 | 2.35 | 1.21 | 0.44 | 0.08 | 0.21 | 0.43 |
| (WY) | (2002) | (2002) | (2002) | (2001) | (2002) | (2002) | (2002) | (2004) | (2002) | (2002) | (2001) | (2005) |

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| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1999 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 2,797.57 | | 2,171.22 | | 7.08 | |
| ANNUAL MEAN | 7.64 | | 5.95 | | 2.16 | |
| HIGHEST ANNUAL MEAN | | | | | 20.1 | 2003 |
| LOWEST ANNUAL MEAN | | | | | 2.16 | 2002 |
| HIGHEST DAILY MEAN | 544 | Sep 28 | 139 | Jun 2 | 544 | Sep 28, 2004 |
| LOWEST DAILY MEAN | 0.38 | Jul 16 | 0.18 | Sep 25 | 0.00 | Aug 13, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.62 | May 24 | 0.28 | Sep 9 | 0.01 | Aug 9, 2002 |
| MAXIMUM PEAK FLOW | | | 577* | Mar 28 | 2,670* | Jun 18, 2003 |
| MAXIMUM PEAK STAGE | | | 5.77 | Mar 28 | 10.27 | Jun 18, 2003 |
| INSTANTANEOUS LOW FLOW | | | 0.15 | Sep 25 | 0.00* | Aug 13, 2002 |
| ANNUAL RUNOFF (CFSM) | 0.913 | | 0.711 | | 0.846 | |
| ANNUAL RUNOFF (INCHES) | 12.43 | | 9.65 | | 11.50 | |
| 10 PERCENT EXCEEDS | 8.0 | | 9.5 | | 9.5 | |
| 50 PERCENT EXCEEDS | 2.3 | | 2.9 | | 1.8 | |
| 90 PERCENT EXCEEDS | 0.70 | | 0.71 | | 0.23 | |

* See REMARKS.

e Estimated.

