

02087580 SWIFT CREEK NEAR APEX, NC

LOCATION.--Lat 35°43'08", long 78°45'08", Wake County, Hydrologic Unit 03020201, on right bank at downstream side of bridge on Secondary Road 1152, 2.8 mi downstream from Williams Creek, and 6 mi east of Apex.

DRAINAGE AREA.--21.0 mi²

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements, water years 1953-69. March 2002 to current year.

REVISED RECORDS.--WDR NC-03-1A: 2002.

GAGE.--Water-stage recorder. Datum of gage is 306.22 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for period of poor gage-height record, May 16 to Sept. 30, and those for estimated daily discharges, which are poor. No flow occurred several days in Aug. 2002. No flow occurred part of each day July 19 and Sept. 10-14.

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 | 8.7 | 2.1 | 9.8 | 3.8 | 12 | 54 | 25 | 35 | 1.7 | 1.4 | 7.9 | 0.99 |
| 2 | 7.2 | 1.8 | 7.2 | 3.9 | 10 | 24 | 48 | 15 | 24 | 0.63 | 2.6 | 0.82 |
| 3 | 7.2 | 2.1 | 5.0 | 4.3 | 61 | 18 | 43 | 7.1 | 16 | 0.42 | 1.3 | 1.1 |
| 4 | 4.8 | 10 | 4.6 | 4.5 | 49 | 15 | 22 | 4.0 | 10 | 0.77 | 1.7 | 0.79 |
| 5 | 3.6 | 14 | 4.1 | 4.8 | 20 | 14 | 19 | 3.3 | 6.2 | 2.3 | 0.89 | 0.41 |
| 6 | 2.5 | 4.4 | 3.8 | 5.3 | 15 | 12 | 17 | 47 | 3.5 | 3.2 | 0.41 | 0.62 |
| 7 | 1.7 | 2.2 | 6.9 | 4.9 | 13 | 11 | 17 | 19 | 62 | 1.3 | 0.42 | 0.31 |
| 8 | 1.8 | 2.1 | 6.7 | 3.9 | 12 | 166 | 36 | 10 | 108 | 62 | 0.26 | 0.24 |
| 9 | 1.4 | 1.9 | 12 | 3.8 | 12 | 49 | 92 | 5.7 | 17 | 8.8 | 336 | 0.15 |
| 10 | 1.7 | 1.2 | 107 | 3.1 | 14 | 24 | 30 | 3.5 | 30 | 2.5 | 48 | 0.09 |
| 11 | 1.7 | 0.99 | 27 | 3.0 | 10 | 20 | 22 | 2.9 | 18 | 0.97 | 19 | 0.06 |
| 12 | 1.3 | 46 | 13 | 3.1 | 7.3 | 18 | 19 | 69 | 8.9 | 0.68 | 11 | 0.09 |
| 13 | 20 | 112 | 9.5 | 4.0 | 7.1 | 16 | 186 | 91 | 6.2 | 0.50 | 5.8 | 0.06 |
| 14 | 26 | 14 | 7.4 | 312 | 10 | 53 | e84 | 19 | 4.8 | 0.31 | 3.2 | 1.8 |
| 15 | 16 | 6.9 | 5.2 | 45 | 16 | 24 | e32 | 12 | 4.4 | 0.32 | 3.4 | 4.5 |
| 16 | 10 | 5.4 | 3.0 | 19 | 13 | 114 | e16 | 10 | 2.9 | 0.23 | 2.1 | 0.13 |
| 17 | 4.2 | 4.4 | 3.3 | 14 | 14 | 241 | e12 | 6.8 | 2.3 | 0.13 | 5.0 | 0.11 |
| 18 | 2.3 | 3.4 | 3.4 | 9.4 | 9.8 | 63 | e10 | 4.7 | 1.8 | 0.06 | 2.9 | 0.09 |
| 19 | 2.1 | 3.1 | 4.7 | 6.9 | 6.4 | 30 | e9.1 | 3.6 | 1.6 | 0.03 | 1.5 | 0.19 |
| 20 | 2.9 | 2.7 | 8.3 | 8.3 | 6.3 | 23 | e8.6 | 32 | e1.6 | 110 | 21 | 11 |
| 21 | 2.9 | 2.6 | 2.7 | 10 | 13 | 19 | e7.4 | 54 | e2.7 | 11 | 30 | 103 |
| 22 | 2.2 | 2.1 | 2.5 | 9.1 | 13 | 14 | e6.4 | 13 | e2.0 | 11 | 10 | 12 |
| 23 | 1.9 | 58 | 13 | 15 | 9.9 | 71 | 6.1 | 8.7 | e1.5 | 47 | 12 | 3.9 |
| 24 | 1.8 | 37 | 16 | 5.4 | 107 | 32 | 5.5 | 7.7 | 0.92 | 9.5 | 6.9 | 1.2 |
| 25 | 2.1 | 14 | 7.7 | 4.6 | 40 | 18 | 3.3 | 5.6 | 0.36 | 3.7 | 2.5 | 1.2 |
| 26 | 2.2 | 6.5 | 9.5 | 5.9 | 19 | 15 | 3.3 | 3.2 | 0.20 | 1.9 | 1.1 | 0.74 |
| 27 | 2.0 | 4.1 | 9.5 | 7.2 | 15 | 14 | 3.8 | 2.3 | 1.8 | 1.1 | 0.97 | 0.63 |
| 28 | 1.9 | 107 | 5.8 | 4.4 | 189 | 65 | 3.2 | 2.1 | 7.1 | 0.88 | 0.71 | 0.74 |
| 29 | 1.8 | 19 | 5.1 | 3.3 | --- | 42 | 4.2 | 1.9 | 9.8 | 107 | 0.52 | 0.41 |
| 30 | 2.1 | 11 | 5.6 | 70 | --- | 24 | 8.2 | 2.0 | 2.5 | 23 | 0.87 | 0.39 |
| 31 | 2.3 | --- | 5.0 | 22 | --- | 23 | --- | 1.8 | --- | 17 | 1.6 | --- |
| TOTAL | 150.3 | 501.99 | 334.3 | 623.9 | 723.8 | 1,326 | 799.1 | 502.9 | 359.78 | 429.63 | 541.55 | 147.76 |
| MEAN | 4.85 | 16.7 | 10.8 | 20.1 | 25.9 | 42.8 | 26.6 | 16.2 | 12.0 | 13.9 | 17.5 | 4.93 |
| MAX | 26 | 112 | 107 | 312 | 189 | 241 | 186 | 91 | 108 | 110 | 336 | 103 |
| MIN | 1.3 | 0.99 | 2.5 | 3.0 | 6.3 | 11 | 3.2 | 1.8 | 0.20 | 0.03 | 0.26 | 0.06 |
| CFSM | 0.23 | 0.80 | 0.51 | 0.96 | 1.23 | 2.04 | 1.27 | 0.77 | 0.57 | 0.66 | 0.83 | 0.23 |
| IN. | 0.27 | 0.89 | 0.59 | 1.11 | 1.28 | 2.35 | 1.42 | 0.89 | 0.64 | 0.76 | 0.96 | 0.26 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 24.1 | 21.4 | 27.0 | 15.4 | 42.7 | 40.3 | 33.0 | 14.5 | 14.7 | 13.1 | 46.1 | 22.9 |
| MAX | 56.8 | 36.1 | 45.2 | 20.1 | 67.6 | 68.8 | 64.0 | 20.6 | 36.2 | 24.4 | 80.0 | 53.4 |
| (WY) | (2003) | (2003) | (2003) | (2005) | (2003) | (2003) | (2003) | (2004) | (2003) | (2003) | (2004) | (2004) |
| MIN | 4.85 | 11.3 | 10.8 | 11.4 | 25.9 | 22.4 | 14.7 | 1.73 | 1.70 | 5.97 | 17.5 | 4.93 |
| (WY) | (2005) | (2004) | (2005) | (2004) | (2005) | (2002) | (2004) | (2002) | (2002) | (2002) | (2005) | (2005) |

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| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | FOR 2005 WATER YEAR | WATER YEARS 2002 - 2005 |
|--------------------------|------------------------|---------------------|-------------------------|
| ANNUAL TOTAL | 8,879.65 | 6,441.01 | |
| ANNUAL MEAN | 24.3 | 17.6 | 28.8 |
| HIGHEST ANNUAL MEAN | | | 43.3 |
| LOWEST ANNUAL MEAN | | | 17.6 |
| HIGHEST DAILY MEAN | 816 | Aug 14 | 914 Aug 8, 2003 |
| LOWEST DAILY MEAN | 0.54 | Jul 10 | 0.00 Aug 3, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 1.0 | Jul 5 | 0.00 Aug 3, 2002 |
| MAXIMUM PEAK FLOW | | | 2,720 Oct 11, 2002 |
| MAXIMUM PEAK STAGE | | | 11.71 Oct 11, 2002 |
| INSTANTANEOUS LOW FLOW | | | 0.00* Aug 3, 2002 |
| ANNUAL RUNOFF (CFSM) | 1.16 | 0.840 | 1.37 |
| ANNUAL RUNOFF (INCHES) | 15.73 | 11.41 | 18.64 |
| 10 PERCENT EXCEEDS | 49 | 46 | 62 |
| 50 PERCENT EXCEEDS | 11 | 6.2 | 10 |
| 90 PERCENT EXCEEDS | 2.0 | 0.78 | 1.5 |

* See REMARKS.

e Estimated.

