

02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC

LOCATION.--Lat 35°39'35", long 79°24'06", Chatham County, Hydrologic Unit 03030003, on right bank 200 ft upstream from bridge on U.S. Highway 421, 1.5 mi east of Mount Vernon Springs, and 4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi²

PERIOD OF RECORD.--June 1958 to September 1981, January 1994 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Datum of gage is 455 ft above NGVD of 1929, by barometer. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extended above 2,200 ft³/s, on basis of contracted-opening measurement of peak flow. No flow occurs at times most years. Minimum discharge for current water year also occurred Aug. 10, 11, 12.

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 | 48 | 6.9 | 9.1 | 4.5 | 11 | 49 | 16 | 6.3 | 0.65 | 0.18 | 7.3 | 0.29 |
| 2 | 531 | 6.7 | 7.5 | 4.6 | 8.8 | 24 | 19 | 4.6 | 3.2 | 0.15 | 2.3 | 0.21 |
| 3 | 36 | 7.1 | 6.5 | 4.6 | 32 | 17 | 14 | 3.6 | 4.8 | 0.15 | 1.1 | 0.15 |
| 4 | 16 | 13 | 5.9 | 4.9 | 34 | 14 | 9.7 | 3.3 | 3.1 | 0.17 | 0.68 | 0.10 |
| 5 | 9.5 | 11 | 5.3 | 4.6 | 17 | 12 | 8.5 | 2.9 | 1.9 | 0.16 | 0.44 | 0.06 |
| 6 | 6.9 | 7.6 | 4.9 | 4.6 | 13 | 10 | 7.7 | 3.0 | 1.4 | 0.16 | 0.28 | 0.03 |
| 7 | 5.5 | 6.8 | 7.1 | 4.6 | 11 | 9.6 | 8.4 | 3.2 | 1.3 | 1.4 | 0.20 | 0.02 |
| 8 | 4.7 | 6.7 | 6.3 | 4.9 | 11 | 115 | 22 | 3.0 | 8.3 | 8.5 | 0.67 | 0.01 |
| 9 | 4.1 | 4.6 | 5.3 | 5.1 | 9.8 | 39 | 43 | 3.0 | 8.0 | 1.3 | 1.2 | 0.01 |
| 10 | 3.8 | 2.8 | 55 | 4.8 | 9.6 | 22 | 15 | 2.4 | 9.5 | 0.60 | 1.6 | 0.01 |
| 11 | 3.4 | 2.6 | 22 | 4.8 | 8.0 | 17 | 11 | 2.3 | 4.3 | 0.36 | 0.82 | 0.00 |
| 12 | 3.1 | 8.2 | 12 | 5.1 | 7.3 | 15 | 8.8 | 2.2 | 2.4 | 0.30 | 0.50 | 0.00 |
| 13 | 64 | 15 | 9.1 | 14 | 7.0 | 12 | 35 | 2.2 | 1.9 | 0.24 | 0.36 | 0.00 |
| 14 | 17 | 5.6 | 7.1 | 487 | 9.3 | 21 | 52 | 2.7 | 1.9 | 0.27 | 0.49 | 0.00 |
| 15 | 11 | 4.1 | 5.8 | 51 | 14 | 15 | 18 | 2.4 | 1.4 | 0.32 | 0.47 | 0.00 |
| 16 | 8.1 | 3.8 | 5.5 | 25 | 11 | 90 | 11 | 2.2 | 1.1 | 0.34 | 0.40 | 0.00 |
| 17 | 5.8 | 3.9 | 5.5 | 17 | 10 | 186 | 9.2 | 2.0 | 0.75 | 0.32 | 3.9 | 0.00 |
| 18 | 4.9 | 3.9 | 5.4 | 12 | 8.3 | 54 | 8.1 | 1.6 | 0.57 | 0.60 | 1.8 | 0.00 |
| 19 | 4.4 | 3.9 | 5.5 | 10 | 7.3 | 28 | 7.3 | 1.7 | 0.46 | 1.7 | 0.94 | 0.00 |
| 20 | 4.2 | 4.1 | 5.2 | 9.9 | 7.1 | 21 | 6.8 | 2.0 | 0.43 | 1.1 | 0.60 | 0.00 |
| 21 | 4.1 | 4.3 | 4.5 | 10 | 9.3 | 17 | 5.6 | 3.1 | 0.36 | 0.45 | 0.56 | 0.00 |
| 22 | 4.0 | 4.4 | 4.8 | 8.8 | 9.7 | 14 | 5.0 | 2.0 | 0.31 | 2.9 | 0.45 | 0.00 |
| 23 | 3.7 | 29 | 11 | 7.9 | 8.3 | 26 | 5.2 | 1.8 | 0.27 | 6.9 | 0.37 | 0.00 |
| 24 | 3.6 | 24 | 14 | 6.2 | 34 | 19 | 5.0 | 1.4 | 0.23 | 1.4 | 0.45 | 0.00 |
| 25 | 3.9 | 12 | 7.7 | 6.5 | 24 | 14 | 4.4 | 1.2 | 0.20 | 0.75 | 0.48 | 0.00 |
| 26 | 3.7 | 7.2 | 6.2 | 7.3 | 14 | 12 | 4.1 | 1.2 | 0.20 | 0.40 | 0.46 | 0.00 |
| 27 | 3.4 | 6.1 | 5.5 | 6.6 | 11 | 12 | 4.2 | 1.1 | 0.18 | 0.23 | 0.45 | 0.00 |
| 28 | 3.8 | 63 | 4.8 | 6.0 | 156 | 188 | 3.8 | 0.98 | 0.19 | 0.16 | 0.39 | 0.00 |
| 29 | 4.4 | 17 | 4.8 | 6.5 | --- | 47 | 3.7 | 0.88 | 0.28 | 0.47 | 0.28 | 0.00 |
| 30 | 5.9 | 11 | 4.9 | 22 | --- | 22 | 4.4 | 0.76 | 0.23 | 0.39 | 0.22 | 0.00 |
| 31 | 7.6 | --- | 4.6 | 18 | --- | 16 | --- | 0.72 | --- | 13 | 0.28 | --- |
| TOTAL | 839.5 | 306.3 | 268.8 | 788.8 | 512.8 | 1,157.6 | 375.9 | 71.74 | 59.81 | 45.37 | 30.44 | 0.89 |
| MEAN | 27.1 | 10.2 | 8.67 | 25.4 | 18.3 | 37.3 | 12.5 | 2.31 | 1.99 | 1.46 | 0.98 | 0.03 |
| MAX | 531 | 63 | 55 | 487 | 156 | 188 | 52 | 6.3 | 9.5 | 13 | 7.3 | 0.29 |
| MIN | 3.1 | 2.6 | 4.5 | 4.5 | 7.0 | 9.6 | 3.7 | 0.72 | 0.18 | 0.15 | 0.20 | 0.00 |
| CFSM | 1.75 | 0.66 | 0.56 | 1.64 | 1.18 | 2.41 | 0.81 | 0.15 | 0.13 | 0.09 | 0.06 | 0.00 |
| IN. | 2.01 | 0.74 | 0.65 | 1.89 | 1.23 | 2.78 | 0.90 | 0.17 | 0.14 | 0.11 | 0.07 | 0.00 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2005, @ BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 8.20 | 6.82 | 11.4 | 25.2 | 31.2 | 30.1 | 18.3 | 9.11 | 7.06 | 7.98 | 7.62 | 7.55 |
| MAX | 56.6 | 33.0 | 53.4 | 80.4 | 81.0 | 74.8 | 67.1 | 39.1 | 48.0 | 66.6 | 55.3 | 75.2 |
| (WY) | (1972) | (1980) | (1973) | (1978) | (1960) | (1998) | (2003) | (1978) | (1973) | (1975) | (1964) | (1996) |
| MIN | 0.00 | 0.16 | 0.59 | 1.27 | 5.11 | 4.80 | 2.45 | 0.38 | 0.02 | 0.04 | 0.00 | 0.00 |
| (WY) | (1964) | (1974) | (2002) | (1981) | (2001) | (1981) | (1981) | (2002) | (2002) | (2002) | (1977) | (1980) |

CAPE FEAR RIVER BASIN

02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | FOR 2005 WATER YEAR | WATER YEARS 1958 - 2005 [@] |
|--------------------------|------------------------|---------------------|--------------------------------------|
| ANNUAL TOTAL | 4,035.39 | 4,457.95 | |
| ANNUAL MEAN | 11.0 | 12.2 | 14.3 |
| HIGHEST ANNUAL MEAN | | | 29.5 |
| LOWEST ANNUAL MEAN | | | 3.84 |
| HIGHEST DAILY MEAN | 531 | Oct 2 | 1,570 |
| LOWEST DAILY MEAN | 0.01 | Aug 9 | 0.00 |
| ANNUAL SEVEN-DAY MINIMUM | 0.02 | Aug 6 | 0.00 |
| MAXIMUM PEAK FLOW | | 2,370 | 4,010* |
| MAXIMUM PEAK STAGE | | 8.57 | 13.41 |
| INSTANTANEOUS LOW FLOW | | 0.00* | 0.00* |
| ANNUAL RUNOFF (CFSM) | 0.711 | 0.788 | 0.923 |
| ANNUAL RUNOFF (INCHES) | 9.68 | 10.70 | 12.54 |
| 10 PERCENT EXCEEDS | 17 | 21 | 25 |
| 50 PERCENT EXCEEDS | 5.0 | 4.6 | 3.7 |
| 90 PERCENT EXCEEDS | 0.31 | 0.19 | 0.11 |

[@] See PERIOD OF RECORD.

* See REMARKS.

