

TENNESSEE RIVER BASIN

03500240 CARTOOGEC HAYE CREEK NEAR FRANKLIN, NC

LOCATION.--Lat 35°09'31", long 83°23'40", Macon County, Hydrologic Unit 06010202, on downstream side of center pier of bridge on Secondary Road 1152, 0.1 mi downstream of unnamed creek, 1.8 mi south of Franklin, and 1.9 mi upstream from mouth.

DRAINAGE AREA.--57.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1944, 1947, 1953-55, 1958, 1960. June 1961 to current year.

GAGE.--Water-stage recorder. Datum of gage is 2,017.18 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Oct. 8, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in June 1949 reached a stage of 15.6 ft, from studies by Tennessee Valley Authority; discharge, about 7,000 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 38 | 37 | 49 | 52 | 120 | 70 | 273 | 163 | 74 | 77 | 34 | 35 |
| 2 | 36 | 37 | 45 | 51 | 107 | 139 | 214 | 114 | 69 | 73 | 34 | 36 |
| 3 | 35 | 37 | 43 | 51 | 99 | 140 | 181 | 154 | 66 | 53 | 34 | 47 |
| 4 | 34 | 37 | 42 | e50 | 95 | 105 | 156 | 555 | 67 | 49 | 33 | 37 |
| 5 | 34 | 36 | 40 | e49 | 88 | 95 | 142 | 343 | 85 | 46 | 32 | 34 |
| 6 | 40 | 35 | 40 | 72 | 113 | 89 | 131 | 215 | 90 | 43 | 31 | 32 |
| 7 | 37 | 35 | 40 | 65 | 209 | 86 | 122 | 171 | 76 | 42 | 30 | 31 |
| 8 | 34 | 35 | 40 | 53 | 152 | 82 | 119 | 146 | 69 | 41 | 29 | 31 |
| 9 | 34 | 34 | 41 | 52 | 132 | 89 | 132 | 134 | 65 | 40 | 29 | 30 |
| 10 | 34 | 34 | 77 | 55 | 121 | 89 | 150 | 135 | 62 | 49 | 29 | 29 |
| 11 | 35 | 35 | 125 | 59 | 112 | 81 | 122 | 121 | 59 | 45 | 28 | 29 |
| 12 | 41 | 34 | 74 | 54 | 105 | 120 | 117 | 112 | 57 | 71 | 28 | 28 |
| 13 | 43 | 34 | 79 | 52 | 99 | 182 | 117 | 138 | 56 | 79 | 27 | 28 |
| 14 | 144 | 34 | 88 | 49 | 95 | 145 | 116 | 130 | 60 | 83 | 28 | 38 |
| 15 | 69 | 34 | 79 | 49 | 91 | 126 | 113 | 108 | 59 | 57 | 28 | 97 |
| 16 | 50 | 34 | 69 | 47 | 89 | 137 | 106 | 101 | 55 | 51 | 56 | 55 |
| 17 | 46 | 34 | 86 | 47 | 85 | 137 | 104 | 97 | 53 | 46 | 39 | 40 |
| 18 | 43 | 34 | 128 | 48 | 82 | 135 | 103 | 148 | 52 | 43 | 53 | 40 |
| 19 | 42 | 33 | 90 | 308 | 80 | 126 | 101 | 106 | 51 | 42 | 40 | 41 |
| 20 | 41 | 33 | 76 | 327 | 93 | 126 | 97 | 97 | 49 | 40 | 35 | 39 |
| 21 | 40 | 33 | 67 | 248 | 87 | 151 | 95 | 92 | 51 | 39 | 32 | 140 |
| 22 | 39 | 34 | 62 | 181 | 81 | 128 | 91 | 89 | 47 | 38 | 31 | 209 |
| 23 | 39 | 37 | 79 | 521 | 78 | 120 | 86 | 86 | 50 | 39 | 31 | 130 |
| 24 | 38 | 69 | 121 | 461 | 76 | 113 | 84 | 83 | 49 | 43 | 31 | 73 |
| 25 | 51 | 111 | 85 | 589 | 74 | 107 | 113 | 80 | 51 | e45 | 63 | 89 |
| 26 | 40 | 61 | 75 | 340 | e72 | 123 | 89 | 79 | 66 | e52 | 46 | 491 |
| 27 | 38 | 49 | 68 | 235 | e71 | 125 | 87 | 84 | 53 | 42 | 85 | 924 |
| 28 | 38 | 45 | 64 | 184 | 70 | 109 | 87 | 86 | 49 | 40 | 55 | 342 |
| 29 | 38 | 43 | 60 | 155 | --- | 104 | 85 | 77 | 48 | 38 | 52 | 176 |
| 30 | 37 | 57 | 56 | 136 | --- | 240 | 79 | 74 | 48 | 36 | 39 | 126 |
| 31 | 37 | --- | 55 | 123 | --- | 290 | --- | 72 | --- | 35 | 36 | --- |
| TOTAL | 1345 | 1235 | 2143 | 4763 | 2776 | 3909 | 3612 | 4190 | 1786 | 1517 | 1178 | 3477 |
| MEAN | 43.39 | 41.17 | 69.13 | 153.6 | 99.14 | 126.1 | 120.4 | 135.2 | 59.53 | 48.94 | 38.00 | 115.9 |
| MAX | 144 | 111 | 128 | 589 | 209 | 290 | 273 | 555 | 90 | 83 | 85 | 924 |
| MIN | 34 | 33 | 40 | 47 | 70 | 70 | 79 | 72 | 47 | 35 | 27 | 28 |
| CFSM | 0.76 | 0.72 | 1.21 | 2.69 | 1.74 | 2.21 | 2.11 | 2.37 | 1.04 | 0.86 | 0.67 | 2.03 |
| IN. | 0.88 | 0.80 | 1.40 | 3.10 | 1.81 | 2.55 | 2.35 | 2.73 | 1.16 | 0.99 | 0.77 | 2.27 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1961 - 2002, BY WATER YEAR (WY)

| | MEAN | MAX | (WY) | MIN | (WY) |
|------|-------|-------|-------|-------|-------|
| MEAN | 82.78 | 105.7 | 145.7 | 191.5 | 220.0 |
| MAX | 295 | 266 | 317 | 336 | 460 |
| (WY) | 1965 | 1993 | 1962 | 1996 | 1990 |
| MIN | 24.7 | 41.2 | 52.2 | 55.2 | 99.1 |
| (WY) | 2001 | 2002 | 1966 | 1981 | 2002 |

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1961 - 2002

| | | | |
|--------------------------|-------|--------|-------|
| ANNUAL TOTAL | 27106 | 31931 | |
| ANNUAL MEAN | 74.26 | 87.48 | 140.9 |
| HIGHEST ANNUAL MEAN | | | 204 |
| LOWEST ANNUAL MEAN | | | 69.9 |
| HIGHEST DAILY MEAN | 781 | Jan 19 | 924 |
| LOWEST DAILY MEAN | 32 | Sep 16 | 27 |
| ANNUAL SEVEN-DAY MINIMUM | 33 | Sep 12 | 28 |
| MAXIMUM PEAK FLOW | | | 1160 |
| MAXIMUM PEAK STAGE | | | 6.65 |
| INSTANTANEOUS LOW FLOW | | | 25 |
| ANNUAL RUNOFF (CFSM) | 1.30 | | 1.53 |
| ANNUAL RUNOFF (INCHES) | 17.66 | | 20.80 |
| 10 PERCENT EXCEEDS | 133 | | 144 |
| 50 PERCENT EXCEEDS | 54 | | 65 |
| 90 PERCENT EXCEEDS | 35 | | 34 |

e Estimated.
* See REMARKS.

03500240 CARTOOGECHAYE CREEK NEAR FRANKLIN, NC--Continued

