

02112360 MITCHELL RIVER NEAR STATE ROAD, NC

LOCATION.--Lat 36°18'42", long 80°48'25", Surry County, Hydrologic Unit 03040101, on right bank 280 ft upstream from bridge on Secondary Road 1001, 1.8 mi upstream from Grass Creek, and 3.3 mi east of State Road.

DRAINAGE AREA.--78.8 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1952-58, 1963. April 1964 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 927.12 ft above NGVD of 1929. Prior to Aug. 29, 1964, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for current water year affected by regulation of unknown origin.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known since at least 1900, about 18 ft in August 1940, from information by local resident; estimated discharge, 9,000 ft³/s. A discharge of 16 ft³/s was measured on Sept. 19, 1956.

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 | 174 | 108 | 157 | 129 | 122 | 159 | 191 | 153 | 96 | 153 | 251 | 89 |
| 2 | 157 | 106 | 137 | 126 | 118 | 130 | 257 | 144 | 228 | 158 | 161 | 87 |
| 3 | 153 | 105 | 129 | 125 | 150 | 124 | 228 | 140 | 183 | 122 | 137 | 79 |
| 4 | 153 | 136 | 125 | 124 | 145 | 120 | 191 | 137 | 145 | 157 | 128 | 76 |
| 5 | 131 | 125 | 119 | 124 | 131 | 122 | 181 | 136 | 152 | 209 | 117 | 77 |
| 6 | 126 | 113 | 121 | 121 | 126 | 119 | 173 | 133 | 132 | 217 | 122 | 78 |
| 7 | 121 | 110 | 124 | 117 | 122 | 117 | 175 | 131 | 123 | 816 | 155 | 76 |
| 8 | 116 | 107 | 118 | 116 | 119 | 131 | 191 | 129 | 116 | 494 | 128 | 74 |
| 9 | 113 | 103 | 184 | 112 | 119 | 119 | 170 | 124 | 214 | 218 | 128 | 73 |
| 10 | 111 | 102 | 261 | 111 | 130 | 114 | 163 | 123 | 171 | 166 | 146 | 71 |
| 11 | 107 | 102 | 190 | 110 | 120 | 113 | 159 | 121 | 191 | 155 | 124 | 71 |
| 12 | 105 | 175 | 159 | 110 | 116 | 110 | 168 | 123 | 135 | 150 | 113 | 70 |
| 13 | 193 | 153 | 146 | 115 | 110 | 109 | 229 | 129 | 151 | 157 | 115 | 70 |
| 14 | 187 | 124 | 135 | 869 | 117 | 114 | 321 | 126 | 141 | 137 | 110 | 69 |
| 15 | 133 | 117 | 129 | 240 | 112 | 107 | 203 | 135 | 123 | 130 | 131 | 70 |
| 16 | 121 | 115 | 125 | 180 | 111 | 113 | 181 | 140 | 113 | 132 | 135 | 70 |
| 17 | 113 | 113 | 124 | 156 | 107 | 134 | 172 | 117 | 106 | 141 | 125 | 82 |
| 18 | 110 | 111 | 121 | 144 | 104 | 124 | 168 | 114 | 101 | 123 | 122 | 77 |
| 19 | 113 | 109 | 119 | 135 | 103 | 117 | 162 | 114 | 116 | 136 | 119 | 68 |
| 20 | 111 | 107 | e115 | 134 | 104 | 113 | 158 | 147 | 119 | 145 | 110 | 66 |
| 21 | 109 | 104 | e111 | 133 | 108 | 109 | 160 | 141 | 111 | 238 | 109 | 66 |
| 22 | 109 | 103 | 111 | 129 | 105 | 108 | 190 | 115 | 118 | 163 | 99 | 65 |
| 23 | 114 | 108 | 448 | 124 | 102 | 212 | 216 | 111 | 102 | 129 | 100 | 66 |
| 24 | 125 | 295 | 285 | 124 | 117 | 166 | 177 | 108 | 97 | 117 | 99 | 64 |
| 25 | 117 | 292 | 194 | e122 | 109 | 143 | 168 | 106 | 96 | 108 | 95 | 65 |
| 26 | 111 | 172 | 169 | e122 | 104 | 134 | 157 | 104 | 106 | 105 | 93 | 72 |
| 27 | 115 | 152 | 154 | 118 | 103 | 137 | 160 | 102 | 98 | 100 | 94 | 72 |
| 28 | 118 | 150 | 144 | 111 | 172 | 861 | 150 | 101 | 143 | 102 | 103 | 66 |
| 29 | 122 | 133 | 141 | 116 | --- | 368 | 165 | 99 | 112 | 110 | 101 | 67 |
| 30 | 119 | 129 | 136 | 134 | --- | 246 | 156 | 100 | 122 | 111 | 122 | 65 |
| 31 | 112 | --- | 132 | 133 | --- | 209 | --- | 104 | --- | 796 | 121 | --- |
| TOTAL | 3,919 | 3,979 | 4,863 | 4,764 | 3,306 | 5,102 | 5,540 | 3,807 | 3,961 | 6,195 | 3,813 | 2,161 |
| MEAN | 126 | 133 | 157 | 154 | 118 | 165 | 185 | 123 | 132 | 200 | 123 | 72.0 |
| MAX | 193 | 295 | 448 | 869 | 172 | 861 | 321 | 153 | 228 | 816 | 251 | 89 |
| MIN | 105 | 102 | 111 | 110 | 102 | 107 | 150 | 99 | 96 | 100 | 93 | 64 |
| CFSM | 1.60 | 1.68 | 1.99 | 1.95 | 1.50 | 2.09 | 2.34 | 1.56 | 1.68 | 2.54 | 1.56 | 0.91 |
| IN. | 1.85 | 1.88 | 2.30 | 2.25 | 1.56 | 2.41 | 2.62 | 1.80 | 1.87 | 2.92 | 1.80 | 1.02 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 105 | 106 | 116 | 129 | 142 | 169 | 169 | 143 | 127 | 111 | 105 | 107 |
| MAX | 248 | 211 | 230 | 232 | 258 | 373 | 426 | 264 | 280 | 260 | 247 | 313 |
| (WY) | (1991) | (1980) | (1974) | (1998) | (1966) | (1993) | (1983) | (1973) | (2003) | (2003) | (1970) | (1979) |
| MIN | 32.7 | 32.0 | 47.0 | 48.3 | 54.2 | 72.8 | 69.1 | 52.0 | 31.0 | 35.9 | 24.6 | 38.6 |
| (WY) | (2002) | (2002) | (1989) | (1981) | (2002) | (1981) | (1981) | (2002) | (2002) | (1986) | (2002) | (2001) |

02112360 MITCHELL RIVER NEAR STATE ROAD, NC—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1964 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 48,086 | | 51,410 | | 127 | |
| ANNUAL MEAN | 131 | | 141 | | 182 | |
| HIGHEST ANNUAL MEAN | | | | | 2003 | |
| LOWEST ANNUAL MEAN | | | | | 2002 | |
| HIGHEST DAILY MEAN | 2,420 | Sep 8 | 869 | Jan 14 | 3,260 | Aug 10, 1970 |
| LOWEST DAILY MEAN | 57 | Sep 6 | 64 | Sep 24 | 15 | Sep 12, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 62 | Aug 31 | 66 | Sep 19 | 17 | Sep 7, 2002 |
| MAXIMUM PEAK FLOW | | | 3,170 | Jan 14 | 7,470 | Sep 22, 1979 |
| MAXIMUM PEAK STAGE | | | 7.20 | Jan 14 | 16.42 | Sep 22, 1979 |
| INSTANTANEOUS LOW FLOW | | | 49* | Sep 4 | 12 | Aug 15, 2002 |
| ANNUAL RUNOFF (CFSM) | 1.67 | | 1.79 | | 1.61 | |
| ANNUAL RUNOFF (INCHES) | 22.70 | | 24.27 | | 21.93 | |
| 10 PERCENT EXCEEDS | 173 | | 188 | | 202 | |
| 50 PERCENT EXCEEDS | 110 | | 122 | | 102 | |
| 90 PERCENT EXCEEDS | 78 | | 98 | | 54 | |

* See REMARKS.

e Estimated.

