

Water-Data Report 2010

02149000 COVE CREEK NEAR LAKE LURE, NC

Santee Basin
Upper Broad Subbasin

LOCATION.--Lat 35°25'24", long 82°06'42" referenced to North American Datum of 1983, Rutherford County, NC, Hydrologic Unit 03050105, on left bank 40 ft upstream from bridge on U.S. Highways 64 and 74, 1.0 mi upstream from mouth, and 5.0 mi east of Lake Lure.

DRAINAGE AREA.--79 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1950 to current year. Occasional low-flow measurements, water years 1949-50. Monthly discharge only for some periods, published in WSP 1723.

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

GAGE.--Water-stage recorder. Datum of gage is 815.4 ft above National Geodetic Vertical Datum of 1929. Prior to December 20, 1954, nonrecording gage at same site and datum. Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred August 15, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1916 reached a stage of about 23 ft, from records of North Carolina State Highway Commission.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2009 TO SEPTEMBER 2010
DAILY MEAN VALUES

[e, estimated]

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 79 | 145 | 92 | 177 | 203 | 169 | 177 | 121 | 120 | 70 | 67 | 57 |
| 2 | 74 | 127 | 474 | 164 | 274 | 174 | 170 | 124 | 135 | 68 | 64 | 56 |
| 3 | 71 | 111 | 539 | 154 | 296 | 173 | 165 | 184 | 128 | 66 | 63 | 54 |
| 4 | 66 | 99 | 246 | 148 | 277 | 166 | 160 | 152 | 109 | 65 | 59 | 52 |
| 5 | 94 | 92 | 188 | 142 | 761 | 160 | 156 | 131 | 106 | 63 | 65 | 51 |
| 6 | 79 | 87 | 156 | 138 | 746 | 156 | 153 | 123 | 102 | 61 | 111 | 51 |
| 7 | 72 | 83 | 139 | 135 | 454 | 154 | 149 | 117 | 96 | 60 | 67 | 50 |
| 8 | 65 | 81 | 136 | 132 | 359 | 154 | 166 | 113 | 93 | 58 | 60 | 51 |
| 9 | 63 | 78 | 604 | 126 | 326 | 153 | 199 | 108 | 93 | 60 | 57 | 54 |
| 10 | 66 | 110 | 313 | e123 | 300 | 153 | 157 | 107 | 95 | 60 | 56 | 50 |
| 11 | 63 | 1,240 | 211 | e121 | 267 | 162 | 151 | 116 | 92 | 57 | 58 | 53 |
| 12 | 66 | 468 | 176 | 120 | 250 | 205 | 147 | 115 | 91 | 59 | 57 | 65 |
| 13 | 68 | 245 | 190 | 116 | 242 | 303 | 144 | 109 | 90 | 70 | 55 | 53 |
| 14 | 93 | 180 | 172 | 115 | 225 | 231 | 142 | 107 | 86 | 71 | 284 | 51 |
| 15 | 109 | 149 | 158 | 114 | 221 | 199 | 140 | 114 | 89 | 59 | 119 | 50 |
| 16 | 90 | 131 | 144 | 114 | 210 | 181 | 140 | 116 | 105 | 58 | 90 | 49 |
| 17 | 96 | 119 | 135 | 573 | 201 | 172 | 138 | 133 | 102 | 58 | 76 | 48 |
| 18 | 85 | 125 | 151 | 295 | 195 | 167 | 133 | 141 | 84 | 60 | 75 | 48 |
| 19 | 77 | 156 | 165 | 214 | 190 | 161 | 130 | 118 | 81 | 58 | 144 | 48 |
| 20 | 73 | 130 | 151 | 185 | 188 | 154 | 131 | 108 | 80 | 57 | 114 | 47 |
| 21 | 69 | 118 | 146 | 194 | 187 | 166 | 136 | 109 | 77 | 63 | 106 | 46 |
| 22 | 66 | 116 | 146 | 192 | 215 | 571 | 128 | 113 | 89 | 55 | 130 | 46 |
| 23 | 66 | 153 | 149 | 173 | 216 | 277 | 125 | 106 | 92 | 54 | 85 | 46 |
| 24 | 182 | 133 | 155 | 684 | 208 | 221 | 129 | 102 | 78 | 51 | 73 | 45 |
| 25 | 116 | 124 | 1,380 | 1,740 | 195 | 199 | 244 | 137 | 76 | 49 | 113 | 45 |
| 26 | 93 | 115 | 658 | 500 | 185 | 190 | 158 | 118 | 81 | 51 | 78 | 68 |
| 27 | 104 | 106 | 363 | 333 | 181 | 173 | 141 | 112 | 74 | 99 | 70 | 90 |
| 28 | 206 | 101 | 271 | 271 | 175 | 207 | 132 | 107 | 74 | 85 | 66 | 149 |
| 29 | 141 | 98 | 223 | 243 | --- | 238 | 125 | 104 | 73 | 84 | 63 | 65 |
| 30 | 115 | 96 | 197 | 258 | --- | 203 | 123 | 100 | 71 | 61 | 61 | 63 |
| 31 | 114 | --- | 189 | 214 | --- | 189 | --- | 127 | --- | 58 | 59 | --- |
| Total | 2,821 | 5,116 | 8,417 | 8,208 | 7,747 | 6,181 | 4,489 | 3,692 | 2,762 | 1,948 | 2,645 | 1,701 |
| Mean | 91.0 | 171 | 272 | 265 | 277 | 199 | 150 | 119 | 92.1 | 62.8 | 85.3 | 56.7 |
| Max | 206 | 1,240 | 1,380 | 1,740 | 761 | 571 | 244 | 184 | 135 | 99 | 284 | 149 |
| Min | 63 | 78 | 92 | 114 | 175 | 153 | 123 | 100 | 71 | 49 | 55 | 45 |
| Cfsm | 1.15 | 2.16 | 3.44 | 3.35 | 3.50 | 2.52 | 1.89 | 1.51 | 1.17 | 0.80 | 1.08 | 0.72 |
| In. | 1.33 | 2.41 | 3.96 | 3.87 | 3.65 | 2.91 | 2.11 | 1.74 | 1.30 | 0.92 | 1.25 | 0.80 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2010, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 107 | 114 | 128 | 141 | 161 | 187 | 174 | 142 | 125 | 98.6 | 106 | 99.4 |
| Max | 381 | 334 | 278 | 314 | 335 | 479 | 391 | 384 | 309 | 308 | 396 | 486 |
| (WY) | (1965) | (1993) | (1984) | (1993) | (1998) | (1979) | (1980) | (1975) | (1992) | (2003) | (2003) | (2004) |
| Min | 24.5 | 33.1 | 38.2 | 39.5 | 52.2 | 68.6 | 59.0 | 39.4 | 24.9 | 23.7 | 21.3 | 24.5 |
| (WY) | (1955) | (1955) | (1989) | (1956) | (2009) | (1988) | (2002) | (2002) | (2008) | (2008) | (2002) | (1954) |

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SUMMARY STATISTICS

| | Calendar Year 2009 | | Water Year 2010 | | Water Years 1951 - 2010 | |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual total | 43,144 | | 55,727 | | | |
| Annual mean | 118 | | 153 | | 132 | |
| Highest annual mean | | | | | 231 | |
| Lowest annual mean | | | | | 43.7 | |
| Highest daily mean | 1,380 | Dec 25 | 1,740 | Jan 25 | 4,340 | Sep 8, 2004 |
| Lowest daily mean | 34 | Aug 16 | 45 | Sep 24 | 8.1 | Aug 14, 2002 |
| Annual seven-day minimum | 36 | Sep 2 | 46 | Sep 19 | 9.2 | Aug 9, 2002 |
| Maximum peak flow | | | 4,300 | Jan 25 | 7,050 | Jun 5, 1957 |
| Maximum peak stage | | | 13.88 | Jan 25 | 18.53 | Jun 5, 1957 |
| Instantaneous low flow | | | 43 | Sep 25 | ^a 7.7 | Aug 14, 2002 |
| Annual runoff (cfs) | 1.50 | | 1.93 | | 1.67 | |
| Annual runoff (inches) | 20.32 | | 26.24 | | 22.73 | |
| 10 percent exceeds | 193 | | 243 | | 222 | |
| 50 percent exceeds | 79 | | 118 | | 102 | |
| 90 percent exceeds | 41 | | 58 | | 45 | |

^a See Remarks.