

Water-Data Report 2007

**02091500 CONTENTNEA CREEK AT HOOKERTON, NC**

Neuse Basin  
Contentnea Subbasin

LOCATION.--Lat 35°25'44", long 77°34'57" referenced to North American Datum of 1983, Greene County, NC, Hydrologic Unit 03020203, on left bank at bridge on North Carolina Highway 123 at Hookerton, and 2.2 mi upstream from Wheat Swamp Creek.

DRAINAGE AREA.--733 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--November 1928 to current year.

REVISED RECORDS.--WSP 1333: 1930-35. WSP 1383: Drainage area. WSP 1503: 1951. WSP 1723: 1932. WDR NC-90-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 14.85 ft above NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Prior to November 26, 1934, nonrecording gage at site 1,400 ft upstream at present datum. November 27, 1934 to September 30, 1987, water-stage recorder at site 0.3 mi upstream at present datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Buckhorn Reservoir since September 1976. Maximum gage height for period of record from high-water mark inside gage house.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1928 reached a stage of 23.3 ft, from floodmark; high water of autumn 1924 was about 0.1 ft lower, from information by local resident.

## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

[e, estimated]

| Day          | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May   | Jun   | Jul   | Aug   | Sep   |
|--------------|--------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|-------|
| 1            | 307    | 1,060  | 2,990  | 3,590  | 1,020  | 710    | 313    | 277   | 86    | 108   | 81    | 149   |
| 2            | 294    | 904    | 2,490  | 3,190  | 1,050  | 760    | 302    | 261   | 82    | 101   | 85    | 110   |
| 3            | 274    | 714    | 1,850  | 2,670  | 1,190  | 791    | 294    | 246   | 155   | 97    | 73    | 83    |
| 4            | 253    | 536    | 1,480  | 1,990  | 1,300  | 808    | 283    | 227   | 249   | 87    | 62    | 66    |
| 5            | 233    | 445    | 1,320  | 1,530  | 1,360  | 824    | 270    | 210   | 346   | 74    | 57    | 55    |
| 6            | 222    | 382    | 1,200  | 1,350  | 1,390  | 857    | 249    | 251   | 371   | 64    | 52    | 48    |
| 7            | 236    | 365    | 1,120  | 1,340  | 1,360  | 908    | 230    | 276   | 305   | 63    | 49    | 43    |
| 8            | 281    | 622    | 1,070  | 1,470  | 1,230  | 960    | 222    | 269   | 247   | 87    | 45    | 39    |
| 9            | 308    | 828    | 1,010  | 1,510  | 1,050  | 934    | 212    | 248   | 203   | 200   | 43    | 36    |
| 10           | 324    | 962    | 936    | 1,630  | 873    | 846    | 197    | 247   | 167   | 150   | 50    | 35    |
| 11           | 321    | 1,000  | 867    | 1,800  | 754    | 696    | 194    | 232   | 140   | 254   | 74    | 34    |
| 12           | 303    | 1,050  | 793    | 1,910  | 670    | 544    | 217    | 238   | 119   | 527   | 121   | 34    |
| 13           | 279    | 1,250  | 729    | 1,890  | 609    | 481    | 347    | 255   | 101   | 350   | 150   | 33    |
| 14           | 258    | 1,400  | 689    | 1,750  | 613    | 446    | 405    | 248   | 92    | 212   | 114   | 31    |
| 15           | 239    | 1,520  | 665    | 1,520  | 799    | 420    | 732    | 250   | 89    | 168   | 85    | 50    |
| 16           | 223    | 1,660  | 647    | 1,270  | 927    | 417    | 1,460  | 229   | 88    | 147   | 68    | 75    |
| 17           | 214    | 2,120  | 630    | 1,070  | 1,090  | 514    | 1,570  | 207   | 88    | 113   | 58    | 151   |
| 18           | 286    | 3,520  | 609    | 934    | 1,220  | 796    | 1,550  | 209   | 84    | 139   | 52    | 163   |
| 19           | 544    | 4,360  | 586    | 869    | 1,270  | 827    | 1,510  | 234   | 74    | 169   | 48    | 119   |
| 20           | 667    | 4,590  | 565    | 863    | 1,170  | 950    | 1,510  | 253   | 75    | 163   | 44    | 89    |
| 21           | 671    | 4,350  | 543    | 880    | 983    | 1,030  | 1,480  | 227   | 85    | 158   | 41    | 80    |
| 22           | 594    | 4,600  | 528    | 1,100  | 771    | 1,020  | 1,260  | 199   | 80    | 150   | 43    | 75    |
| 23           | 515    | 5,000  | 607    | 1,310  | 687    | 915    | 937    | 176   | 73    | 118   | e44   | 79    |
| 24           | 455    | 4,850  | 749    | 1,660  | 598    | 801    | 652    | 157   | 69    | 96    | e45   | 90    |
| 25           | 401    | 4,680  | 1,060  | 1,950  | 554    | 657    | 506    | 143   | 69    | 82    | 45    | 81    |
| 26           | 351    | 4,580  | 1,730  | 2,110  | 557    | 514    | 440    | 131   | 72    | 74    | 46    | 70    |
| 27           | 318    | 4,390  | 2,380  | 2,160  | 598    | 451    | 385    | 117   | 80    | 68    | 48    | 62    |
| 28           | 643    | 4,100  | 3,010  | 2,070  | 662    | 409    | 351    | 110   | 73    | 63    | 190   | 54    |
| 29           | 955    | 3,780  | 3,660  | 1,840  | ---    | 377    | 323    | 104   | 74    | 59    | 268   | 48    |
| 30           | 1,050  | 3,420  | 3,950  | 1,530  | ---    | 351    | 301    | 98    | 94    | 58    | 236   | 43    |
| 31           | 1,090  | ---    | 3,890  | 1,160  | ---    | 332    | ---    | 91    | ---   | 66    | 197   | ---   |
| <b>Total</b> | 13,109 | 73,038 | 44,353 | 51,916 | 26,355 | 21,346 | 18,702 | 6,420 | 3,930 | 4,265 | 2,614 | 2,125 |
| <b>Mean</b>  | 423    | 2,435  | 1,431  | 1,675  | 941    | 689    | 623    | 207   | 131   | 138   | 84.3  | 70.8  |
| <b>Max</b>   | 1,090  | 5,000  | 3,950  | 3,590  | 1,390  | 1,030  | 1,570  | 277   | 371   | 527   | 268   | 163   |
| <b>Min</b>   | 214    | 365    | 528    | 863    | 554    | 332    | 194    | 91    | 69    | 58    | 41    | 31    |
| <b>Cfsm</b>  | 0.58   | 3.32   | 1.95   | 2.28   | 1.28   | 0.94   | 0.85   | 0.28  | 0.18  | 0.19  | 0.12  | 0.10  |
| <b>In.</b>   | 0.67   | 3.71   | 2.25   | 2.63   | 1.34   | 1.08   | 0.95   | 0.33  | 0.20  | 0.22  | 0.13  | 0.11  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2007, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 500    | 495    | 699    | 1,112  | 1,354  | 1,420  | 1,023  | 589    | 466    | 540    | 620    | 646    |
| <b>Max</b>  | 4,798  | 2,435  | 2,349  | 2,626  | 4,316  | 3,491  | 2,752  | 3,363  | 1,770  | 2,203  | 2,422  | 8,825  |
| <b>(WY)</b> | (2000) | (2007) | (1949) | (1993) | (1948) | (1989) | (1989) | (1989) | (1995) | (1929) | (1960) | (1999) |
| <b>Min</b>  | 20.3   | 41.1   | 64.7   | 92.5   | 239    | 343    | 202    | 82.9   | 38.5   | 63.3   | 37.2   | 24.9   |
| <b>(WY)</b> | (1955) | (1955) | (1934) | (1934) | (1934) | (2006) | (1986) | (1986) | (1986) | (1952) | (1954) | (1954) |

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SUMMARY STATISTICS

|                                 | Calendar Year 2006 |        | Water Year 2007 |        | Water Years 1929 - 2007 |              |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 327,866            |        | 268,173         |        |                         |              |
| <b>Annual mean</b>              | 898                |        | 735             |        | 777                     |              |
| <b>Highest annual mean</b>      |                    |        |                 |        | 1,422                   | 1960         |
| <b>Lowest annual mean</b>       |                    |        |                 |        | 242                     | 1951         |
| <b>Highest daily mean</b>       | 5,000              | Nov 23 | 5,000           | Nov 23 | 31,500                  | Sep 19, 1999 |
| <b>Lowest daily mean</b>        | 91                 | Jul 23 | 31              | Sep 14 | 15                      | Oct 28, 1933 |
| <b>Annual seven-day minimum</b> | 127                | Jul 17 | 35              | Sep 8  | 16                      | Oct 8, 1954  |
| <b>Maximum peak flow</b>        |                    |        | 5,080           | Nov 23 | 31,900                  | Sep 18, 1999 |
| <b>Maximum peak stage</b>       |                    |        | 14.80           | Nov 23 | 28.28                   | Sep 18, 1999 |
| <b>Instantaneous low flow</b>   |                    |        | 30              | Sep 14 | 15                      | Oct 28, 1933 |
| <b>Annual runoff (cfsm)</b>     | 1.23               |        | 1.00            |        | 1.06                    |              |
| <b>Annual runoff (inches)</b>   | 16.64              |        | 13.61           |        | 14.40                   |              |
| <b>10 percent exceeds</b>       | 2,420              |        | 1,690           |        | 1,880                   |              |
| <b>50 percent exceeds</b>       | 536                |        | 332             |        | 444                     |              |
| <b>90 percent exceeds</b>       | 185                |        | 63              |        | 87                      |              |

