

Water-Data Report 2008

**02102000 DEEP RIVER AT MONCURE, NC**

Cape Fear Basin  
Deep Subbasin

LOCATION.--Lat 35°37'37", long 79°06'58" referenced to North American Datum of 1983, Lee County, NC, Hydrologic Unit 03030003, on right bank, 1.0 mi upstream from Lockville Dam, 1.2 mi upstream from bridge on U.S. Highway 1, 1.5 mi northwest of Moncure, 2.2 mi downstream of Rocky River, and 4.5 mi upstream from confluence with Haw River.

DRAINAGE AREA.--1,434 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--July 1930 to current year. Records for May 1898 to December 1899 published in 21st Annual Report, Part 4, and in Bulletins 34 and 39 of North Carolina Department of Conservation and Development have been found to be unreliable and should not be used.

REVISED RECORDS.--WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 185.06 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Diurnal fluctuation and some regulation at low flow caused by small power plants upstream from station. Minimum discharge for current water year also occurred October 17-19.

## 02102000 DEEP RIVER AT MONCURE, NC—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008**  
**DAILY MEAN VALUES**

| Day          | Oct    | Nov   | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun   | Jul   | Aug    | Sep    |
|--------------|--------|-------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|
| 1            | 52     | 178   | 97     | 3,990  | 233    | 581    | 1,200  | 2,290  | 334   | 108   | 117    | 694    |
| 2            | 52     | 135   | 102    | 1,480  | 745    | 463    | 1,790  | 1,390  | 237   | 98    | 102    | 473    |
| 3            | 50     | 139   | 103    | 659    | 1,620  | 295    | 1,520  | 999    | 214   | 101   | 107    | 337    |
| 4            | 47     | 122   | 96     | 426    | 876    | 315    | 1,350  | 780    | 171   | 108   | 77     | 179    |
| 5            | 47     | 108   | 92     | 337    | 511    | 7,390  | 4,920  | 606    | 149   | 107   | 64     | 161    |
| 6            | 47     | 94    | 91     | 235    | 400    | 6,650  | 7,340  | 505    | 134   | 151   | 59     | 15,400 |
| 7            | 47     | 75    | 92     | 220    | 285    | 3,280  | 4,620  | 457    | 154   | 673   | 59     | 13,000 |
| 8            | 47     | 63    | 93     | 202    | 276    | 8,770  | 2,870  | 408    | 171   | 682   | 64     | 4,160  |
| 9            | 47     | 55    | 93     | 192    | 266    | 4,690  | 1,960  | 367    | 154   | 397   | 68     | 1,230  |
| 10           | 46     | 52    | 95     | 179    | 230    | 2,180  | 1,430  | 363    | 138   | 335   | 67     | 811    |
| 11           | 46     | 52    | 110    | 164    | 212    | 1,240  | 1,120  | 402    | 138   | 191   | 65     | 1,630  |
| 12           | 44     | 50    | 162    | 149    | 198    | 940    | 936    | 608    | 133   | 151   | 71     | 2,260  |
| 13           | 43     | 46    | 143    | 165    | 945    | 791    | 803    | 956    | 129   | 143   | 73     | 1,220  |
| 14           | 43     | 53    | 132    | 135    | 1,350  | 658    | 687    | 929    | 121   | 122   | 71     | 747    |
| 15           | 42     | 77    | 113    | 113    | 1,090  | 547    | 660    | 540    | 194   | 110   | 69     | 479    |
| 16           | 40     | 87    | 165    | 140    | 762    | 2,740  | 599    | 399    | 206   | 101   | 131    | 327    |
| 17           | 38     | 88    | 167    | 136    | 503    | 3,270  | 492    | 400    | 144   | 97    | 82     | 502    |
| 18           | 38     | 88    | 170    | 182    | 462    | 1,740  | 418    | 409    | 118   | 135   | 77     | 578    |
| 19           | 40     | 93    | 226    | 288    | 897    | 1,120  | 408    | 515    | 97    | 123   | 93     | 854    |
| 20           | 41     | 89    | 198    | 514    | 930    | 910    | 407    | 493    | 97    | 95    | 85     | 678    |
| 21           | 40     | 84    | 164    | 502    | 521    | 1,230  | 515    | 595    | 111   | 82    | 73     | 454    |
| 22           | 40     | 75    | 140    | 405    | 380    | 1,130  | 907    | 618    | 122   | 83    | 59     | 301    |
| 23           | 44     | 77    | 148    | 310    | 369    | 771    | 1,070  | 570    | 133   | 79    | 52     | 202    |
| 24           | 48     | 129   | 151    | 269    | 419    | 628    | 874    | 438    | 117   | 124   | 50     | 201    |
| 25           | 53     | 106   | 147    | 243    | 404    | 571    | 710    | 347    | 97    | 277   | 48     | 172    |
| 26           | 128    | 96    | 147    | 216    | 351    | 457    | 578    | 264    | 92    | 229   | 53     | 306    |
| 27           | 4,450  | 96    | 151    | 204    | 1,070  | 402    | 466    | 212    | 98    | 171   | 356    | 797    |
| 28           | 3,830  | 96    | 156    | 187    | 1,670  | 418    | 1,340  | 233    | 95    | 201   | 8,220  | 1,170  |
| 29           | 1,160  | 94    | 310    | 172    | 919    | 382    | 7,850  | 267    | 87    | 131   | 5,680  | 964    |
| 30           | 494    | 94    | 547    | 168    | ---    | 358    | 5,310  | 334    | 95    | 208   | 2,330  | 614    |
| 31           | 279    | ---   | 5,880  | 165    | ---    | 391    | ---    | 421    | ---   | 165   | 1,180  | ---    |
| <b>Total</b> | 11,463 | 2,691 | 10,481 | 12,747 | 18,894 | 55,308 | 55,150 | 18,115 | 4,280 | 5,778 | 19,702 | 50,901 |
| <b>Mean</b>  | 370    | 89.7  | 338    | 411    | 652    | 1,784  | 1,838  | 584    | 143   | 186   | 636    | 1,697  |
| <b>Max</b>   | 4,450  | 178   | 5,880  | 3,990  | 1,670  | 8,770  | 7,850  | 2,290  | 334   | 682   | 8,220  | 15,400 |
| <b>Min</b>   | 38     | 46    | 91     | 113    | 198    | 295    | 407    | 212    | 87    | 79    | 48     | 161    |
| <b>Cfs/m</b> | 0.26   | 0.06  | 0.24   | 0.29   | 0.45   | 1.24   | 1.28   | 0.41   | 0.10  | 0.13  | 0.44   | 1.18   |
| <b>In.</b>   | 0.30   | 0.07  | 0.27   | 0.33   | 0.49   | 1.43   | 1.43   | 0.47   | 0.11  | 0.15  | 0.51   | 1.32   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2008, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 723    | 851    | 1,308  | 2,304  | 2,752  | 2,814  | 2,048  | 1,078  | 779    | 805    | 808    | 824    |
| <b>Max</b>  | 3,590  | 4,789  | 4,765  | 7,182  | 7,945  | 7,582  | 6,455  | 3,590  | 4,147  | 5,528  | 3,861  | 10,580 |
| <b>(WY)</b> | (1965) | (1986) | (1973) | (1978) | (1960) | (1998) | (1936) | (1989) | (1982) | (1975) | (1931) | (1945) |
| <b>Min</b>  | 28.2   | 14.1   | 34.6   | 130    | 424    | 461    | 393    | 125    | 68.6   | 79.7   | 46.9   | 24.1   |
| <b>(WY)</b> | (1931) | (1942) | (1934) | (1934) | (1931) | (2006) | (1981) | (2002) | (2002) | (1986) | (2002) | (1968) |

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## SUMMARY STATISTICS

|                                 | Calendar Year 2007 |        | Water Year 2008 |        | Water Years 1930 - 2008 |              |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 302,293            |        | 265,510         |        |                         |              |
| <b>Annual mean</b>              | 828                |        | 725             |        | 1,419                   |              |
| <b>Highest annual mean</b>      |                    |        |                 |        | 2,999                   |              |
| <b>Lowest annual mean</b>       |                    |        |                 |        | 391                     |              |
| <b>Highest daily mean</b>       | 15,600             | Apr 16 | 15,400          | Sep 6  | 66,400                  | Sep 18, 1945 |
| <b>Lowest daily mean</b>        | 38                 | Oct 17 | 38              | Oct 17 | 6.0                     | Oct 9, 1954  |
| <b>Annual seven-day minimum</b> | 40                 | Oct 16 | 40              | Oct 16 | 6.6                     | Oct 8, 1954  |
| <b>Maximum peak flow</b>        |                    |        | 29,100          | Sep 6  | 80,300                  | Sep 18, 1945 |
| <b>Maximum peak stage</b>       |                    |        | 10.18           | Sep 6  | 17.20                   | Sep 18, 1945 |
| <b>Instantaneous low flow</b>   |                    |        | <sup>a</sup> 38 | Oct 16 | 5.5                     | Oct 10, 1954 |
| <b>Annual runoff (cfs)</b>      | 0.578              |        | 0.506           |        | 0.990                   |              |
| <b>Annual runoff (inches)</b>   | 7.84               |        | 6.89            |        | 13.45                   |              |
| <b>10 percent exceeds</b>       | 1,860              |        | 1,360           |        | 3,230                   |              |
| <b>50 percent exceeds</b>       | 200                |        | 210             |        | 523                     |              |
| <b>90 percent exceeds</b>       | 54                 |        | 59              |        | 96                      |              |

<sup>a</sup>See Remarks.