

Water-Data Report 2008

**02091000 NAHUNTA SWAMP NEAR SHINE, NC**

Neuse Basin  
Contentnea Subbasin

LOCATION.--Lat 35°29'20", long 77°48'22" referenced to North American Datum of 1983, Greene County, NC, Hydrologic Unit 03020203, on right bank at bridge on Secondary Road 1058, 2 mi upstream from Appletree Swamp, 3.5 mi north of Shine, and 8 mi northwest of Snow Hill.

DRAINAGE AREA.--80.4 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--April 1954 to current year. Monthly discharges only for some periods, published in WSP 1723.

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

GAGE.--Water-stage recorder. Datum of gage is 50.74 ft above National Geodetic Vertical Datum of 1929. Prior to April 1, 1955, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.—No estimated daily discharges. Records fair. Maximum discharge for period of record, on basis of slope conveyances measurement of peak flow; gage height from floodmarks. Minimum discharge for period of record also occurred October 8, 1954, August 11-15, 2002. Minimum discharge for current water year also occurred August 10.

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**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            | 4.9   | 15    | 13    | 89    | 58    | 70    | 78    | 73   | 15    | 2.7   | 3.5   | 5.6     |
| 2            | 4.6   | 13    | 12    | 66    | 114   | 63    | 105   | 57   | 13    | 2.4   | 3.3   | 4.3     |
| 3            | 4.8   | 13    | 12    | 54    | 70    | 57    | 74    | 47   | 12    | 2.3   | 3.1   | 3.6     |
| 4            | 5.0   | 12    | 12    | 48    | 55    | 57    | 73    | 42   | 11    | 2.5   | 2.7   | 3.1     |
| 5            | 5.0   | 11    | 12    | 46    | 49    | 437   | 269   | 44   | 10    | 2.4   | 2.5   | 3.0     |
| 6            | 6.0   | 11    | 11    | 45    | 45    | 347   | 700   | 39   | 9.3   | 2.5   | 2.4   | 112     |
| 7            | 8.9   | 10    | 11    | 42    | 42    | 237   | 432   | 34   | 8.6   | 4.7   | 2.5   | 110     |
| 8            | 8.8   | 9.8   | 11    | 39    | 37    | 583   | 200   | 30   | 7.8   | 5.9   | 2.2   | 29      |
| 9            | 7.3   | 10    | 12    | 39    | 34    | 497   | 149   | 34   | 7.3   | 4.0   | 2.0   | 26      |
| 10           | 6.4   | 10    | 12    | 37    | 32    | 212   | 121   | 34   | 6.9   | 7.4   | 2.0   | 124     |
| 11           | 5.8   | 10    | 12    | 38    | 29    | 150   | 101   | 30   | 6.4   | 7.1   | 3.0   | 43      |
| 12           | 5.0   | 9.9   | 12    | 39    | 28    | 119   | 96    | 36   | 6.7   | 6.2   | 2.6   | 23      |
| 13           | 4.6   | 10    | 12    | 35    | 96    | 102   | 197   | 31   | 6.6   | 4.8   | 3.9   | 16      |
| 14           | 4.3   | 11    | 12    | 33    | 149   | 90    | 122   | 25   | 6.2   | 3.9   | 9.0   | 13      |
| 15           | 4.2   | 10    | 12    | 30    | 89    | 81    | 90    | 23   | 6.3   | 3.9   | 6.3   | 11      |
| 16           | 3.9   | 11    | 197   | 29    | 66    | 214   | 73    | 26   | 7.7   | 3.5   | 4.7   | 9.6     |
| 17           | 4.1   | 11    | 82    | 34    | 55    | 164   | 65    | 27   | 6.7   | 3.0   | 4.2   | 17      |
| 18           | 4.1   | 11    | 38    | 52    | 670   | 106   | 60    | 22   | 5.7   | 2.6   | 3.8   | 15      |
| 19           | 3.9   | 11    | 27    | 49    | 380   | 97    | 53    | 27   | 5.0   | 2.3   | 3.4   | 11      |
| 20           | 4.0   | 11    | 23    | 98    | 136   | 92    | 63    | 25   | 4.6   | 2.5   | 2.9   | 9.1     |
| 21           | 3.5   | 11    | 21    | 65    | 94    | 77    | 69    | 40   | 4.4   | 3.3   | 2.7   | 8.3     |
| 22           | 5.3   | 11    | 19    | 53    | 158   | 72    | 67    | 30   | 4.4   | 3.2   | 2.4   | 7.9     |
| 23           | 3.9   | 11    | 19    | 51    | 198   | 67    | 58    | 22   | 4.3   | 16    | 2.1   | 7.5     |
| 24           | 6.2   | 11    | 23    | 48    | 136   | 60    | 51    | 19   | 4.0   | 49    | 2.3   | 7.2     |
| 25           | 59    | 11    | 21    | 41    | 102   | 57    | 44    | 18   | 3.4   | 19    | 2.4   | 8.2     |
| 26           | 46    | 12    | 332   | 38    | 106   | 54    | 39    | 16   | 2.8   | 11    | 2.3   | 558     |
| 27           | 129   | 13    | 292   | 37    | 149   | 51    | 38    | 15   | 2.8   | 7.5   | 3.2   | 332     |
| 28           | 79    | 13    | 99    | 35    | 99    | 51    | 218   | 15   | 2.7   | 6.0   | 13    | 120     |
| 29           | 34    | 13    | 71    | 34    | 77    | 48    | 180   | 29   | 2.4   | 4.9   | 33    | 68      |
| 30           | 22    | 16    | 97    | 37    | ---   | 47    | 103   | 22   | 2.8   | 4.0   | 10    | 49      |
| 31           | 18    | ---   | 150   | 35    | ---   | 64    | ---   | 17   | ---   | 3.6   | 6.9   | ---     |
| <b>Total</b> | 511.5 | 342.7 | 1,689 | 1,416 | 3,353 | 4,423 | 3,988 | 949  | 196.8 | 204.1 | 150.3 | 1,754.4 |
| <b>Mean</b>  | 16.5  | 11.4  | 54.5  | 45.7  | 116   | 143   | 133   | 30.6 | 6.56  | 6.58  | 4.85  | 58.5    |
| <b>Max</b>   | 129   | 16    | 332   | 98    | 670   | 583   | 700   | 73   | 15    | 49    | 33    | 558     |
| <b>Min</b>   | 3.5   | 9.8   | 11    | 29    | 28    | 47    | 38    | 15   | 2.4   | 2.3   | 2.0   | 3.0     |
| <b>Cfsm</b>  | 0.21  | 0.14  | 0.68  | 0.57  | 1.44  | 1.77  | 1.65  | 0.38 | 0.08  | 0.08  | 0.06  | 0.73    |
| <b>In.</b>   | 0.24  | 0.16  | 0.78  | 0.66  | 1.55  | 2.05  | 1.85  | 0.44 | 0.09  | 0.09  | 0.07  | 0.81    |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2008, BY WATER YEAR (WY)

|             | Oct    | Nov    | Dec    | Jan    | Feb    | Mar    | Apr    | May    | Jun    | Jul    | Aug    | Sep    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 52.5   | 61.2   | 72.8   | 115    | 136    | 138    | 101    | 59.6   | 50.8   | 56.9   | 64.8   | 80.9   |
| <b>Max</b>  | 473    | 402    | 184    | 261    | 327    | 311    | 252    | 277    | 243    | 395    | 360    | 1,083  |
| <b>(WY)</b> | (1965) | (2007) | (1958) | (1993) | (1998) | (1983) | (1974) | (1989) | (1995) | (1965) | (1974) | (1999) |
| <b>Min</b>  | 2.26   | 11.2   | 19.5   | 29.4   | 34.6   | 33.7   | 19.1   | 10.8   | 5.35   | 3.10   | 4.22   | 2.58   |
| <b>(WY)</b> | (1955) | (1987) | (2002) | (2001) | (1988) | (1986) | (1986) | (1986) | (1986) | (1987) | (2002) | (1954) |

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## SUMMARY STATISTICS

|                                 | Calendar Year 2007 |        | Water Year 2008  |        | Water Years 1954 - 2008 |              |
|---------------------------------|--------------------|--------|------------------|--------|-------------------------|--------------|
| <b>Annual total</b>             | 18,179.2           |        | 18,977.8         |        |                         |              |
| <b>Annual mean</b>              | 49.8               |        | 51.9             |        | 83.1                    |              |
| <b>Highest annual mean</b>      |                    |        |                  |        | 150                     | 1965         |
| <b>Lowest annual mean</b>       |                    |        |                  |        | 22.9                    | 1986         |
| <b>Highest daily mean</b>       | 491                | Jan 22 | 700              | Apr 6  | 7,000                   | Sep 17, 1999 |
| <b>Lowest daily mean</b>        | 3.5                | Aug 21 | 2.0              | Aug 9  | 1.0                     | Oct 7, 1954  |
| <b>Annual seven-day minimum</b> | 4.0                | Oct 15 | 2.3              | Aug 4  | 1.1                     | Aug 9, 2002  |
| <b>Maximum peak flow</b>        |                    |        | 926              | Feb 18 | <sup>a</sup> 23,000     | Sep 17, 1999 |
| <b>Maximum peak stage</b>       |                    |        | 9.16             | Feb 18 | <sup>a</sup> 21.00      | Sep 17, 1999 |
| <b>Instantaneous low flow</b>   |                    |        | <sup>a</sup> 1.8 | Aug 9  | <sup>a</sup> 1.0        | Oct 7, 1954  |
| <b>Annual runoff (cfs)</b>      | 0.619              |        | 0.645            |        | 1.03                    |              |
| <b>Annual runoff (inches)</b>   | 8.41               |        | 8.78             |        | 14.04                   |              |
| <b>10 percent exceeds</b>       | 131                |        | 119              |        | 173                     |              |
| <b>50 percent exceeds</b>       | 19                 |        | 19               |        | 43                      |              |
| <b>90 percent exceeds</b>       | 5.3                |        | 3.3              |        | 10                      |              |

<sup>a</sup>See Remarks.