



Water-Data Report 2010

## 02092500 TRENT RIVER NEAR TRENTON, NC

Neuse Basin  
Lower Neuse Subbasin

LOCATION.--Lat 35°03'51", long 77°27'41" referenced to North American Datum of 1983, Jones County, NC, Hydrologic Unit 03020204, on left bank 50 ft downstream of bridge on Secondary Road 1129, 800 ft downstream of Little Chinquapin Branch, 1.5 mi southwest of Phillips Crossroads, and 6 mi west of Trenton.

DRAINAGE AREA.--168 mi<sup>2</sup>.

### **SURFACE-WATER RECORDS**

PERIOD OF RECORD.--January 1951 to current year.

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above National Geodetic Vertical Datum of 1929. Prior to March 21, 1951, nonrecording gage on bridge 50 ft upstream at same datum. Satellite telemetry at streamgage.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 4,000 ft<sup>3</sup>/s on basis of one section slope-conveyance measurement of peak flow; maximum gage height, 22.33 ft, from high-water mark in gage house.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 17.3 ft; discharge, 7,600 ft<sup>3</sup>/s, from information provided by North Carolina State Highway Commission.

## 02092500 TRENT RIVER NEAR TRENTON, NC—Continued

**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            | 72    | e11    | 191    | 588    | 538    | 228   | 125   | 12    | 7.4   | 12    | 5.5   | e2.9    |
| 2            | 59    | e11    | 167    | 601    | 545    | 204   | 115   | 11    | 6.7   | 14    | 5.4   | e2.9    |
| 3            | 47    | e13    | 375    | 615    | 538    | 303   | 108   | 10    | 6.4   | 17    | 6.6   | e3.2    |
| 4            | 37    | e14    | 479    | 571    | 522    | 410   | 97    | 9.8   | 6.1   | 13    | 9.1   | e2.8    |
| 5            | 31    | e15    | 727    | 491    | 564    | 528   | 87    | 9.3   | 6.1   | 9.4   | 9.7   | e2.6    |
| 6            | 28    | e17    | 895    | 412    | 1,230  | 609   | 77    | 9.3   | 7.0   | 7.0   | 7.5   | e2.4    |
| 7            | 26    | e18    | 927    | 340    | 1,790  | 555   | 67    | 8.8   | 6.9   | 5.2   | 9.4   | e2.4    |
| 8            | 24    | e19    | 844    | 285    | 2,140  | 452   | 58    | 8.0   | 6.2   | e4.7  | 10    | e2.5    |
| 9            | 21    | e21    | 752    | 245    | 1,690  | 354   | 52    | 7.5   | 5.3   | e4.6  | 8.1   | e2.4    |
| 10           | 19    | 47     | 726    | 215    | 1,060  | 274   | 46    | 6.8   | 4.4   | e4.6  | 5.9   | e2.7    |
| 11           | 16    | 73     | 865    | 191    | 711    | 226   | 41    | 6.4   | 3.9   | 5.8   | 4.4   | e3.1    |
| 12           | 14    | 348    | 950    | 173    | 583    | 222   | 36    | 6.2   | 3.6   | e6.0  | 3.2   | e4.3    |
| 13           | 14    | 586    | 822    | 162    | 494    | 252   | 32    | 5.8   | 3.6   | e6.7  | e3.4  | e5.0    |
| 14           | 14    | 1,000  | 651    | 151    | 441    | 273   | 28    | 5.4   | 3.9   | e22   | e3.0  | e4.4    |
| 15           | 15    | 1,050  | 517    | 142    | 403    | 280   | 25    | 5.4   | 3.4   | e37   | e2.7  | e3.8    |
| 16           | 18    | 788    | 432    | 135    | 379    | 278   | 24    | 5.4   | 4.4   | e40   | e2.6  | e3.2    |
| 17           | 19    | 578    | 369    | 147    | 361    | 250   | 22    | 5.6   | 26    | e33   | e2.8  | e3.0    |
| 18           | 19    | 463    | 318    | 215    | 343    | 212   | 21    | 6.5   | 73    | e25   | e3.1  | e3.4    |
| 19           | 18    | 415    | 308    | 271    | 318    | 181   | 19    | 7.6   | 63    | e37   | e4.6  | e3.9    |
| 20           | 17    | 460    | 349    | 293    | 287    | 155   | 18    | 11    | 53    | e23   | e5.7  | e4.5    |
| 21           | 15    | 521    | 386    | 294    | 255    | 136   | 17    | 18    | 43    | e13   | e6.1  | e4.2    |
| 22           | 13    | 533    | 410    | 356    | 231    | 121   | 18    | 20    | 61    | e19   | e6.5  | 4.3     |
| 23           | 12    | 500    | 398    | 442    | 247    | 111   | 19    | 22    | 77    | 12    | e7.3  | 4.0     |
| 24           | 12    | 457    | 353    | 523    | 268    | 102   | 19    | 21    | 70    | 20    | e7.8  | 3.7     |
| 25           | e10   | 427    | 344    | 690    | 280    | 94    | 18    | 18    | 47    | e16   | e7.7  | 3.7     |
| 26           | e9.0  | 407    | 713    | 867    | 284    | 87    | 17    | 15    | 30    | e13   | e6.4  | 4.1     |
| 27           | e8.4  | 379    | 1,130  | 1,020  | 277    | 81    | 16    | 14    | 21    | 14    | e5.2  | 17      |
| 28           | e8.5  | 336    | 1,460  | 984    | 257    | 76    | 15    | 12    | 15    | 12    | 4.4   | 92      |
| 29           | e8.9  | 281    | 1,280  | 788    | ---    | 80    | 14    | 11    | 12    | 7.9   | 4.7   | 326     |
| 30           | e9.5  | 229    | 826    | 616    | ---    | 113   | 13    | 9.9   | 11    | 5.8   | 4.2   | 1,430   |
| 31           | e10   | ---    | 663    | 549    | ---    | 130   | ---   | 8.6   | ---   | 4.3   | 3.3   | ---     |
| <b>Total</b> | 644.3 | 10,017 | 19,627 | 13,372 | 17,036 | 7,377 | 1,264 | 327.3 | 687.3 | 464.0 | 176.3 | 1,954.4 |
| <b>Mean</b>  | 20.8  | 334    | 633    | 431    | 608    | 238   | 42.1  | 10.6  | 22.9  | 15.0  | 5.69  | 65.1    |
| <b>Max</b>   | 72    | 1,050  | 1,460  | 1,020  | 2,140  | 609   | 125   | 22    | 77    | 40    | 10    | 1,430   |
| <b>Min</b>   | 8.4   | 11     | 167    | 135    | 231    | 76    | 13    | 5.4   | 3.4   | 4.3   | 2.6   | 2.4     |
| <b>Cfsm</b>  | 0.12  | 1.99   | 3.77   | 2.57   | 3.62   | 1.42  | 0.25  | 0.06  | 0.14  | 0.09  | 0.03  | 0.39    |
| <b>In.</b>   | 0.14  | 2.22   | 4.35   | 2.96   | 3.77   | 1.63  | 0.28  | 0.07  | 0.15  | 0.10  | 0.04  | 0.43    |

**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    |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>Mean</b> | 115    | 109    | 174    | 283    | 315    | 323    | 206    | 116    | 119    | 152    | 164    | 181    |
| <b>Max</b>  | 864    | 922    | 633    | 703    | 1,024  | 963    | 684    | 435    | 768    | 1,381  | 1,587  | 2,121  |
| <b>(WY)</b> | (1972) | (2007) | (2010) | (1978) | (1998) | (1983) | (1973) | (1978) | (1961) | (1962) | (1955) | (1999) |
| <b>Min</b>  | 1.23   | 1.80   | 6.65   | 17.2   | 31.8   | 36.5   | 23.1   | 10.2   | 2.77   | 2.05   | 1.81   | 1.64   |
| <b>(WY)</b> | (2008) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1985) | (1985) | (2008) | (1993) | (2007) |

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SUMMARY STATISTICS

|                                 | Calendar Year 2009 |        | Water Year 2010 |       | Water Years 1951 - 2010 |              |
|---------------------------------|--------------------|--------|-----------------|-------|-------------------------|--------------|
| <b>Annual total</b>             | 48,171.3           |        | 72,946.6        |       |                         |              |
| <b>Annual mean</b>              | 132                |        | 200             |       | 189                     |              |
| <b>Highest annual mean</b>      |                    |        |                 |       | 316                     | 1960         |
| <b>Lowest annual mean</b>       |                    |        |                 |       | 55.8                    | 2008         |
| <b>Highest daily mean</b>       | 1,460              | Dec 28 | 2,140           | Feb 8 | 12,000                  | Sep 17, 1999 |
| <b>Lowest daily mean</b>        | 2.2                | Jul 9  | 2.4             | Sep 6 | 0.18                    | Aug 27, 2008 |
| <b>Annual seven-day minimum</b> | 2.4                | Jul 7  | 2.5             | Sep 4 | 0.28                    | Dec 7, 2007  |
| <b>Maximum peak flow</b>        |                    |        | 2,180           | Feb 8 | <sup>a</sup> 15,000     | Sep 17, 1999 |
| <b>Maximum peak stage</b>       |                    |        | 14.25           | Feb 8 | <sup>a</sup> 22.33      | Sep 17, 1999 |
| <b>Instantaneous low flow</b>   |                    |        | Not Determined  |       | 0.10                    | Aug 28, 2008 |
| <b>Annual runoff (cfsm)</b>     | 0.786              |        | 1.19            |       | 1.12                    |              |
| <b>Annual runoff (inches)</b>   | 10.67              |        | 16.15           |       | 15.28                   |              |
| <b>10 percent exceeds</b>       | 398                |        | 587             |       | 467                     |              |
| <b>50 percent exceeds</b>       | 46                 |        | 24              |       | 78                      |              |
| <b>90 percent exceeds</b>       | 8.3                |        | 4.3             |       | 7.2                     |              |

<sup>a</sup> See Remarks.

