

## 02084909 SEVENMILE CREEK NEAR EFLAND, NC

LOCATION.--Lat 36°03'56", long 79°08'39", Orange County, Hydrologic Unit 03020201, at upstream side of culvert on I-85, 1 mi upstream from mouth, and 1.5 mi southeast of Efland.

DRAINAGE AREA.--14.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1981 to July 1982, June 1987 to September 2004 (discontinued).

REVISED RECORDS.--WRD NC-96-1: 1988-95(M).

GAGE.--Water-stage recorder. Elevation of gage is 560 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. Maximum discharge for period of record from rating curve extended above 1,000 ft<sup>3</sup>/s, on the basis of computation of peak flow through culvert; maximum gage height 15.47 ft, from floodmark. No flow occurs periodically most years.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB   | MAR   | APR   | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|-------|-------|--------|-------|-------|-------|-------|--------|--------|--------|--------|--------|
| 1     | 3.3   | 1.7   | 1.2    | 2.4   | 14    | 16    | 47    | 4.4    | 0.76   | 1.6    | 42     | 22     |
| 2     | 3.3   | 1.5   | 1.2    | 2.0   | 11    | 14    | 22    | 24     | 0.60   | 0.86   | 32     | 8.9    |
| 3     | 3.3   | 1.0   | 0.98   | 2.1   | 88    | 19    | 14    | 58     | 0.56   | 3.2    | 84     | 2.8    |
| 4     | 3.3   | 1.2   | 1.1    | 2.0   | 49    | 12    | 9.9   | 37     | 5.0    | 58     | 27     | 0.75   |
| 5     | 3.3   | 1.5   | 5.2    | 2.6   | 26    | 7.3   | 6.9   | 29     | 6.6    | 15     | 13     | 0.28   |
| 6     | 3.3   | 2.7   | 5.0    | 4.8   | 22    | 8.7   | 4.5   | 25     | 1.5    | 4.2    | 8.4    | 14     |
| 7     | 3.1   | 2.7   | 3.4    | 2.5   | 75    | 11    | 4.1   | 19     | 0.83   | 1.4    | 3.2    | 39     |
| 8     | 3.1   | 2.6   | 2.4    | 1.9   | 29    | 7.9   | 3.4   | 15     | 0.72   | 0.63   | 1.4    | 177    |
| 9     | 3.6   | 2.3   | 1.8    | 2.9   | 18    | 6.4   | 2.8   | 12     | 0.62   | 0.45   | 0.98   | 37     |
| 10    | 3.9   | 2.0   | 39     | 4.0   | 13    | 5.9   | 2.1   | 10     | 0.58   | 0.40   | 0.74   | 6.9    |
| 11    | 4.5   | 1.7   | 124    | 3.3   | 11    | 4.5   | 2.2   | 7.7    | 0.80   | 1.7    | 0.53   | 2.1    |
| 12    | 4.5   | 1.6   | 24     | 3.2   | 14    | 3.7   | 11    | 6.0    | 4.7    | 3.5    | 0.74   | 0.87   |
| 13    | 4.1   | 2.6   | 13     | 3.7   | 20    | 3.3   | 28    | 5.5    | 2.2    | 0.43   | 1.7    | 0.48   |
| 14    | 5.5   | 2.6   | 105    | 3.4   | 12    | 2.8   | 33    | 5.8    | 0.91   | 0.34   | 63     | 0.35   |
| 15    | 26    | 2.4   | 50     | 3.4   | 9.9   | 4.8   | 18    | 5.6    | 0.69   | 0.29   | 30     | 1.2    |
| 16    | 6.0   | 2.2   | 19     | 3.0   | 17    | 12    | 9.8   | 4.0    | 0.70   | 0.28   | 16     | 0.57   |
| 17    | 2.4   | 1.9   | 23     | 1.9   | 16    | 30    | 6.5   | 3.2    | 0.61   | 0.27   | 23     | 43     |
| 18    | 2.4   | 1.6   | 23     | 4.8   | 11    | 16    | 4.7   | 1.9    | 0.62   | 0.42   | 82     | 58     |
| 19    | 2.6   | 9.3   | 11     | 7.1   | 12    | 16    | 3.2   | 1.9    | 0.56   | 0.31   | 19     | 13     |
| 20    | 2.6   | 8.2   | 6.3    | 4.9   | 9.1   | 9.6   | 2.7   | 2.3    | 0.55   | 26     | 7.9    | 2.7    |
| 21    | 3.2   | 0.99  | 3.8    | 3.9   | 9.1   | 7.6   | 2.2   | 2.0    | 0.47   | 2.8    | 4.4    | 0.93   |
| 22    | 3.3   | 0.47  | 2.9    | 4.1   | 6.0   | 5.9   | 2.4   | 1.6    | 0.41   | 0.60   | 9.0    | 0.42   |
| 23    | 3.3   | 0.68  | 2.3    | 4.1   | 4.7   | 4.2   | 1.3   | 1.3    | 0.66   | 0.53   | 4.5    | 0.27   |
| 24    | 3.0   | 0.82  | 3.4    | 4.5   | 5.2   | 3.4   | 1.1   | 1.2    | 5.3    | 0.49   | 2.2    | 0.41   |
| 25    | 2.7   | 1.1   | 4.0    | 5.3   | 5.3   | 3.0   | 1.5   | 0.88   | 1.9    | 1.1    | 1.7    | 0.60   |
| 26    | 3.2   | 1.0   | 3.7    | 5.4   | 6.5   | 2.8   | 2.7   | 0.76   | 9.3    | 0.56   | 1.3    | 0.61   |
| 27    | 3.6   | 0.98  | 3.3    | 5.1   | 9.8   | 2.7   | 5.1   | 0.74   | 8.1    | 2.0    | 1.2    | 0.99   |
| 28    | 4.6   | 1.4   | 3.1    | 4.9   | 14    | 3.0   | 4.1   | 0.69   | 2.0    | 22     | 1.2    | 11     |
| 29    | 25    | 7.1   | 2.8    | 5.6   | 25    | 2.9   | 3.2   | 0.66   | 34     | 62     | 1.2    | 6.0    |
| 30    | 6.4   | 2.0   | 3.4    | 12    | ---   | 3.1   | 2.9   | 0.74   | 7.8    | 62     | 230    | 2.0    |
| 31    | 2.6   | ---   | 2.8    | 22    | ---   | 5.3   | ---   | 0.79   | ---    | 21     | 70     | ---    |
| TOTAL | 155.0 | 69.84 | 495.08 | 142.8 | 562.6 | 254.8 | 262.3 | 288.66 | 100.05 | 294.36 | 783.29 | 454.13 |
| MEAN  | 5.00  | 2.33  | 16.0   | 4.61  | 19.4  | 8.22  | 8.74  | 9.31   | 3.33   | 9.50   | 25.3   | 15.1   |
| MAX   | 26    | 9.3   | 124    | 22    | 88    | 30    | 47    | 58     | 34     | 62     | 230    | 177    |
| MIN   | 2.4   | 0.47  | 0.98   | 1.9   | 4.7   | 2.7   | 1.1   | 0.66   | 0.41   | 0.27   | 0.53   | 0.27   |
| CFSM  | 0.35  | 0.17  | 1.13   | 0.33  | 1.38  | 0.58  | 0.62  | 0.66   | 0.24   | 0.67   | 1.79   | 1.07   |
| IN.   | 0.41  | 0.18  | 1.31   | 0.38  | 1.48  | 0.67  | 0.69  | 0.76   | 0.26   | 0.78   | 2.07   | 1.20   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004,<sup>@</sup> BY WATER YEAR (WY)

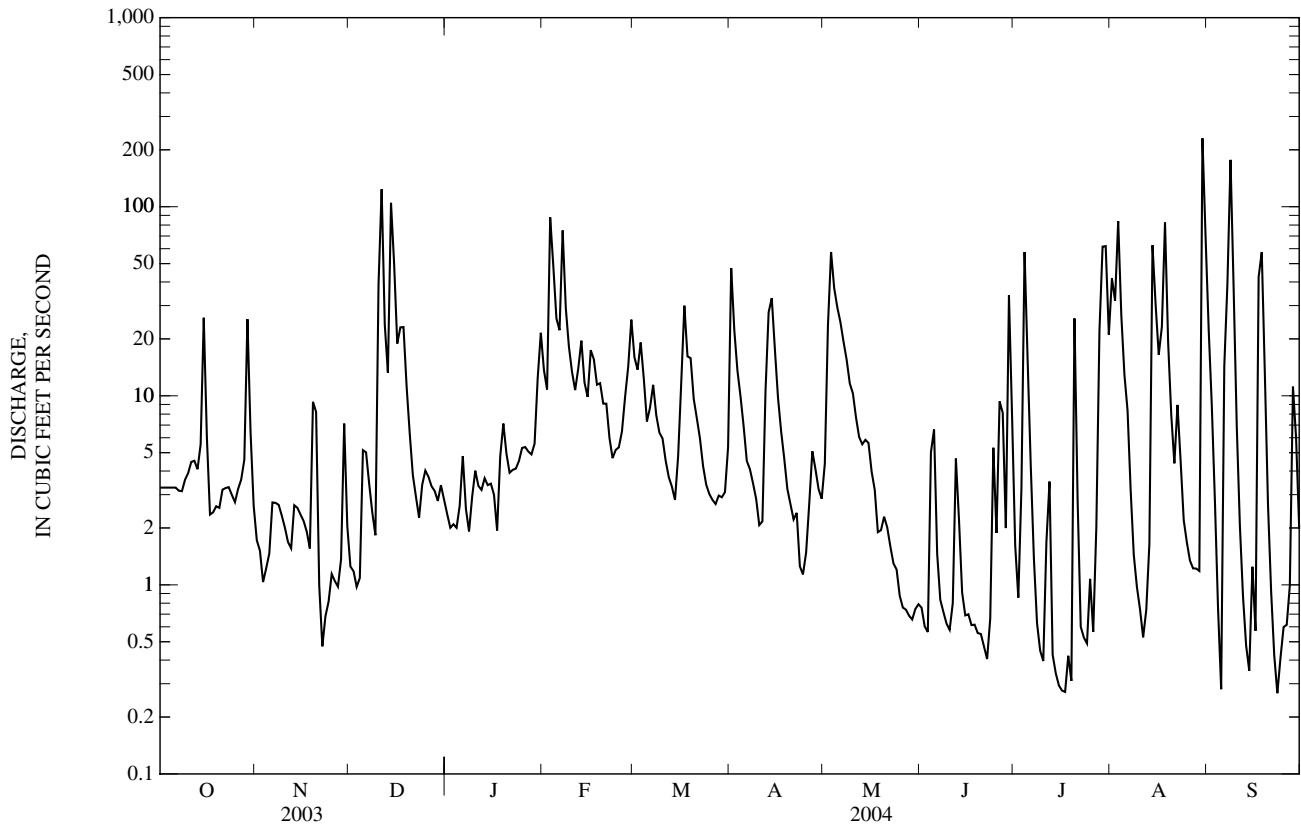
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 7.48   | 7.86   | 10.8   | 21.7   | 24.4   | 30.6   | 20.9   | 11.2   | 8.57   | 4.80   | 4.83   | 9.78   |
| MAX  | 28.1   | 28.9   | 34.3   | 58.2   | 62.9   | 76.6   | 71.3   | 43.3   | 30.6   | 15.0   | 25.3   | 54.4   |
| (WY) | (2003) | (1996) | (2003) | (1991) | (1998) | (1998) | (2003) | (2003) | (1995) | (2003) | (2004) | (1996) |
| MIN  | 0.06   | 0.06   | 1.65   | 4.61   | 4.20   | 2.88   | 0.99   | 0.79   | 0.04   | 0.01   | 0.02   | 0.03   |
| (WY) | (1999) | (1999) | (2002) | (2004) | (2002) | (2002) | (1995) | (2002) | (2002) | (2002) | (2002) | (1990) |

02084909 SEVENMILE CREEK NEAR EFLAND, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1988 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 9,768.12               |        | 3,862.91            |        | 13.5                                 |              |
| ANNUAL MEAN              | 26.8                   |        | 10.6                |        | 2.14                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 31.5                                 | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2.14                                 | 2002         |
| HIGHEST DAILY MEAN       | 620                    | Mar 20 | 230                 | Aug 30 | 1,080                                | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 0.47                   | Nov 22 | 0.27                | Jul 17 | 0.00                                 | Aug 3, 1988  |
| ANNUAL SEVEN-DAY MINIMUM | 0.86                   | Nov 21 | 0.33                | Jul 13 | 0.00                                 | Aug 13, 1988 |
| MAXIMUM PEAK FLOW        |                        |        | 568                 | Aug 30 | 3440*                                | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 8.67                | Aug 30 | 15.47*                               | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.12                | Sep 5  | 0.00*                                | Aug 6, 1987  |
| ANNUAL RUNOFF (CFSM)     | 1.90                   |        | 0.749               |        | 0.958                                |              |
| ANNUAL RUNOFF (INCHES)   | 25.77                  |        | 10.19               |        | 13.02                                |              |
| 10 PERCENT EXCEEDS       | 65                     |        | 25                  |        | 26                                   |              |
| 50 PERCENT EXCEEDS       | 8.9                    |        | 3.4                 |        | 4.4                                  |              |
| 90 PERCENT EXCEEDS       | 2.0                    |        | 0.66                |        | 0.24                                 |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.





## 02085000 ENO RIVER AT HILLSBOROUGH, NC

LOCATION.--Lat 36°04'16", long 79°05'44", Orange County, Hydrologic Unit 03020201, on left bank 900 ft downstream of bridge on State Highway 86 at Hillsborough, and 2 mi downstream of Sevenmile Creek.

DRAINAGE AREA.--66.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1927 to September 1971, October 1985 to current year.

REVISED RECORD.--WDR NC-96-1: 1945(M).

GAGE.--Water-stage recorder. Datum of gage is 487.44 ft above NGVD of 1929. Telephone and satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Diversions upstream from station of 1.1 ft<sup>3</sup>/s by Orange-Alamance Water System, Inc. and 2.0 ft<sup>3</sup>/s by town of Hillsborough for municipal supply, part of which is returned downstream of station as treated effluent. Maximum gage height for period of record, 21.13 ft, from high-water mark in gage shelter. No flow for part of Sept. 13, 2002. Minimum discharge for current water year also occurred July 15, 22.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 25   | 26   | 25    | 34    | 47    | 69    | 164   | 22    | 8.6   | 8.7   | 38      | 120   |
| 2     | 25   | 25   | 19    | 33    | 41    | 60    | 120   | 39    | 7.1   | 6.5   | 38      | 58    |
| 3     | 22   | 24   | 17    | 33    | 227   | 75    | 76    | 139   | 5.6   | 4.9   | 161     | 33    |
| 4     | 20   | 22   | 15    | 33    | 189   | 61    | 58    | 85    | 19    | 43    | 39      | 24    |
| 5     | 19   | 22   | 29    | 36    | 107   | 50    | 45    | 47    | 22    | 12    | 16      | 17    |
| 6     | 19   | 25   | 28    | 46    | 93    | 52    | 37    | 33    | 12    | 5.9   | 13      | 57    |
| 7     | 19   | 27   | 23    | 35    | 225   | 56    | 34    | 25    | 8.7   | 4.5   | 7.8     | 163   |
| 8     | 19   | 24   | 19    | 30    | 129   | 43    | 34    | 20    | 7.8   | 3.2   | 5.6     | 628   |
| 9     | 24   | 21   | 17    | 32    | 86    | 36    | 33    | 17    | 8.4   | 2.7   | 3.9     | 300   |
| 10    | 29   | 17   | 89    | 35    | 71    | 34    | 29    | 15    | 7.6   | 2.5   | 4.3     | 119   |
| 11    | 31   | 17   | 514   | 29    | 61    | 33    | 29    | 14    | 8.2   | 2.5   | 5.1     | 68    |
| 12    | 29   | 15   | 162   | 29    | 67    | 30    | 56    | 12    | 11    | 4.4   | 8.7     | 45    |
| 13    | 22   | 19   | 93    | 31    | 83    | 29    | 129   | 11    | 9.3   | 2.9   | 7.2     | 32    |
| 14    | 23   | 15   | 339   | 30    | 65    | 26    | 139   | 11    | 7.0   | 2.3   | 223     | 27    |
| 15    | 53   | 13   | 252   | 31    | 58    | 29    | 102   | 10    | 5.9   | 2.2   | 84      | 38    |
| 16    | 32   | 15   | 137   | 27    | 77    | 49    | 68    | 9.4   | 6.3   | 4.7   | 33      | 33    |
| 17    | 22   | 14   | 134   | 25    | 71    | 89    | 53    | 9.0   | 5.9   | 6.3   | 50      | 123   |
| 18    | 20   | 16   | 148   | 35    | 63    | 64    | 44    | 9.4   | 5.7   | 11    | 247     | 371   |
| 19    | 19   | 51   | 103   | 40    | 62    | 58    | 37    | 8.0   | 5.2   | 7.5   | 46      | 162   |
| 20    | 15   | 78   | 77    | 32    | 55    | 43    | 34    | 11    | 4.4   | 35    | 22      | 80    |
| 21    | 15   | 35   | 60    | 28    | 50    | 40    | 31    | 13    | 3.4   | 7.3   | 14      | 49    |
| 22    | 14   | 23   | 53    | 27    | 45    | 35    | 26    | 10    | 3.1   | 2.8   | 12      | 37    |
| 23    | 13   | 18   | 50    | 27    | 39    | 30    | 24    | 9.6   | 6.4   | 3.0   | 9.7     | 29    |
| 24    | 12   | 16   | 55    | 25    | 38    | 26    | 22    | 8.6   | 13    | 5.3   | 7.4     | 23    |
| 25    | 12   | 16   | 56    | 27    | 37    | 25    | 22    | 7.2   | 9.5   | 7.4   | 6.0     | 19    |
| 26    | 13   | 15   | 47    | 41    | 34    | 25    | 20    | 7.4   | 20    | 6.3   | 4.6     | 17    |
| 27    | 17   | 13   | 42    | 34    | 48    | 25    | 30    | 6.6   | 23    | 14    | 4.3     | 17    |
| 28    | 25   | 17   | 40    | 34    | 54    | 26    | 24    | 8.6   | 11    | 29    | 4.7     | 60    |
| 29    | 117  | 70   | 37    | 32    | 85    | 23    | 19    | 8.4   | 39    | 123   | 3.6     | 69    |
| 30    | 66   | 39   | 37    | 40    | ---   | 22    | 18    | 9.9   | 14    | 142   | 670     | 37    |
| 31    | 36   | ---  | 36    | 64    | ---   | 29    | ---   | 11    | ---   | 26    | 377     | ---   |
| TOTAL | 827  | 748  | 2,753 | 1,035 | 2,307 | 1,292 | 1,557 | 647.1 | 318.1 | 538.8 | 2,165.9 | 2,855 |
| MEAN  | 26.7 | 24.9 | 88.8  | 33.4  | 79.6  | 41.7  | 51.9  | 20.9  | 10.6  | 17.4  | 69.9    | 95.2  |
| MAX   | 117  | 78   | 514   | 64    | 227   | 89    | 164   | 139   | 39    | 142   | 670     | 628   |
| MIN   | 12   | 13   | 15    | 25    | 34    | 22    | 18    | 6.6   | 3.1   | 2.2   | 3.6     | 17    |
| CFSM  | 0.40 | 0.38 | 1.35  | 0.51  | 1.21  | 0.63  | 0.79  | 0.32  | 0.16  | 0.26  | 1.06    | 1.44  |
| IN.   | 0.47 | 0.42 | 1.55  | 0.58  | 1.30  | 0.73  | 0.88  | 0.36  | 0.18  | 0.30  | 1.22    | 1.61  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004,<sup>@</sup> BY WATER YEAR (WY)

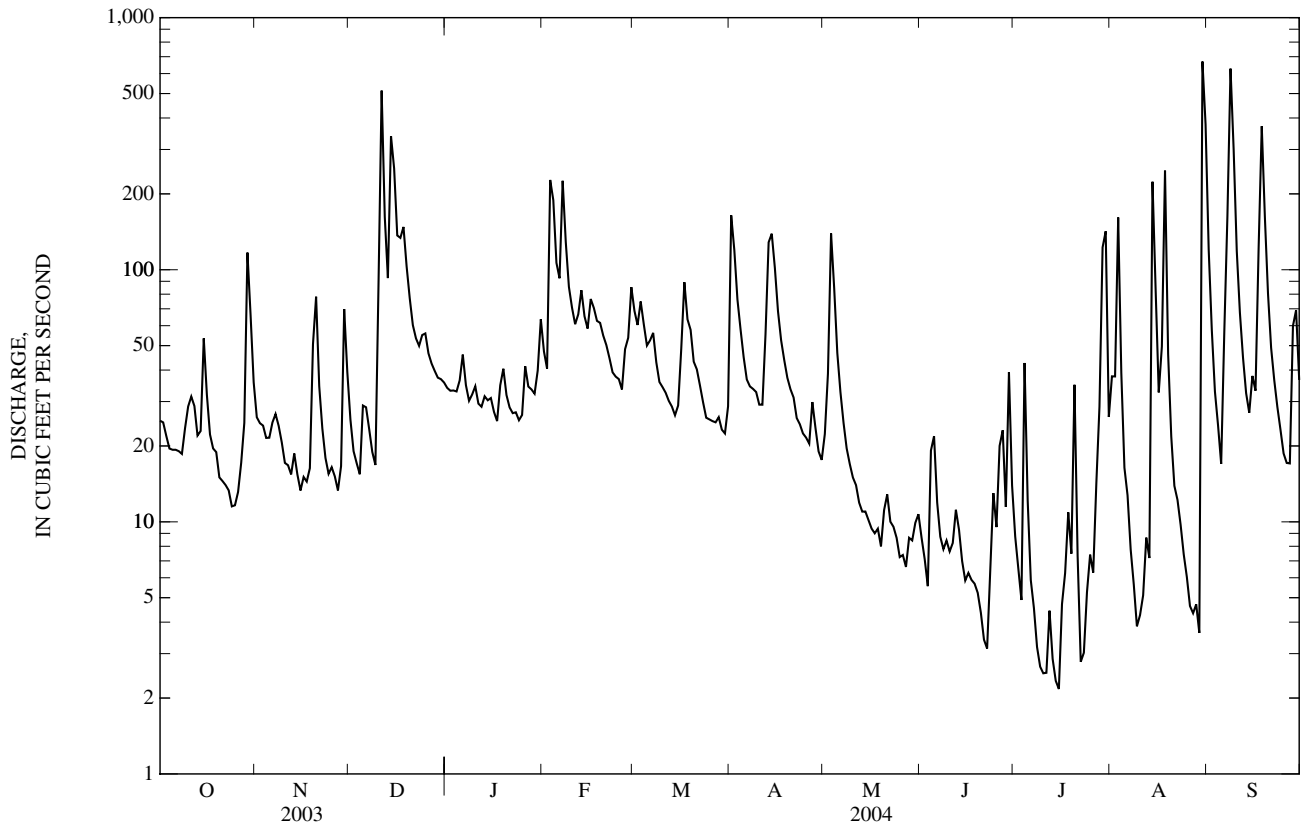
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 29.3   | 43.5   | 56.6   | 89.1   | 111    | 120    | 95.7   | 51.3   | 38.7   | 37.5   | 33.1   | 38.7   |
| MAX  | 181    | 213    | 183    | 326    | 311    | 354    | 304    | 175    | 210    | 359    | 256    | 342    |
| (WY) | (1930) | (1986) | (2003) | (1936) | (1998) | (1998) | (2003) | (2003) | (1995) | (1938) | (1939) | (1945) |
| MIN  | 0.63   | 0.82   | 3.64   | 5.16   | 17.2   | 22.4   | 12.4   | 4.17   | 1.75   | 1.28   | 0.85   | 0.28   |
| (WY) | (1987) | (1942) | (1942) | (1942) | (2002) | (2002) | (2002) | (2002) | (1986) | (1986) | (1987) | (1954) |

02085000 ENO RIVER AT HILLSBOROUGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1928 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 49,054                 |        | 17,043.9            |        | 61.8                                 |              |
| ANNUAL MEAN              | 134                    |        | 46.6                |        | 9.67                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 154                                  | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 9.67                                 | 2002         |
| HIGHEST DAILY MEAN       | 2,590                  | Mar 20 | 670                 | Aug 30 | 4,600                                | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 12                     | Oct 24 | 2.2                 | Jul 15 | 0.02                                 | Jul 10, 1986 |
| ANNUAL SEVEN-DAY MINIMUM | 13                     | Oct 20 | 2.8                 | Jul 9  | 0.10                                 | Oct 6, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 1,560               | Aug 30 | 10,800                               | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 10.70               | Aug 30 | 21.13*                               | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 2.0*                | Jul 14 | 0.00*                                | Sep 13, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.04                   |        | 0.706               |        | 0.937                                |              |
| ANNUAL RUNOFF (INCHES)   | 27.65                  |        | 9.61                |        | 12.73                                |              |
| 10 PERCENT EXCEEDS       | 341                    |        | 93                  |        | 118                                  |              |
| 50 PERCENT EXCEEDS       | 54                     |        | 27                  |        | 26                                   |              |
| 90 PERCENT EXCEEDS       | 19                     |        | 6.5                 |        | 4.0                                  |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.





## 02085000 ENO RIVER AT HILLSBOROUGH, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Nickel,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01067) | Selen-<br>ium,<br>water,<br>unfltrd<br>ug/L<br>(01147) | Silver,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01077) | Zinc,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01092) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) |
|--------------|--|--|--|--|--|
| OCT<br>31... | .43  | <.4  | <.16   | E1   | 8  |
| DEC<br>09... | --   | --   | --   | --   | 7  |
| FEB<br>24... | --   | --   | --   | --   | 6  |
| APR<br>08... | .36  | <.4  | <.16   | E1   | 5  |
| JUN<br>29... | .69  | E.2  | <.16   | 5  | 42   |
| AUG<br>19... | --   | --   | --   | --   | 16   |

Remark codes used in this table:

< -- Less than

E -- Estimated value

## 02085070 ENO RIVER NEAR DURHAM, NC

LOCATION.--Lat 36°04'20", long 78°54'28", Durham County, Hydrologic Unit 03020201, on right bank 275 ft downstream of bridge on U.S. Highway 501, 0.2 mi downstream of Crooked Creek, and 5 mi north of Durham.

DRAINAGE AREA.--141 mi<sup>2</sup>

PERIOD OF RECORD.--Occasional low-flow measurements, water year 1955. August 1963 to current year.

REVISED RECORDS.--WDR NC-72-1: 1968-71(M), 1971(P).

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above NGVD of 1929, from topographic map. Prior to Nov. 19, 1966, at site 275 ft upstream, at datum 272.35 ft. Nov. 20, 1966, to Sept. 30, 1967, water-stage recorder at present site, at datum 270.94 ft. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Some regulation during periods of low flow caused by mill 600 ft upstream. Maximum gage height for period of record, 23.58 ft, from floodmark. Minimum discharge for period of record also occurred on Aug. 15, 1977.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 49    | 58    | 77    | 63    | 92    | 129   | 323   | 51    | 29    | 32    | 44      | 229   |
| 2     | 42    | 50    | 65    | 62    | 79    | 116   | 263   | 236   | 19    | 21    | 61      | 99    |
| 3     | e40   | 46    | 58    | 61    | 482   | 131   | 146   | 307   | 15    | 21    | 177     | 66    |
| 4     | 38    | 43    | 58    | 61    | 503   | 121   | 112   | 184   | 19    | 36    | 98      | 50    |
| 5     | 34    | 42    | 88    | 64    | 236   | 107   | 94    | 111   | 40    | 46    | 47      | 41    |
| 6     | 34    | 44    | 86    | 71    | 255   | 105   | 82    | 84    | 43    | 20    | 51      | 61    |
| 7     | 34    | 46    | 75    | 68    | 669   | 112   | 76    | 71    | 29    | 8.8   | 31      | 190   |
| 8     | 34    | 49    | 67    | 60    | 333   | 101   | 74    | 61    | 22    | 5.2   | 15      | 912   |
| 9     | 39    | 46    | 61    | 60    | 188   | 88    | 72    | 53    | 23    | 3.7   | 10      | 722   |
| 10    | 44    | 43    | 213   | 61    | 149   | 83    | 68    | 49    | 18    | 3.1   | 6.5     | 218   |
| 11    | 57    | 41    | 1,000 | 60    | 130   | 81    | 66    | 46    | 17    | 2.2   | 4.2     | 109   |
| 12    | 51    | 41    | 362   | 57    | 150   | 78    | 88    | 43    | 15    | e4.0  | 27      | 76    |
| 13    | 45    | 41    | 173   | 58    | 180   | 75    | 192   | 39    | 22    | 2.4   | 105     | 61    |
| 14    | 44    | 41    | 722   | 59    | 145   | 72    | 239   | 37    | 18    | 2.1   | 556     | 52    |
| 15    | 77    | 41    | 590   | 57    | 128   | 81    | 183   | 35    | 15    | 2.5   | 327     | 55    |
| 16    | 71    | 39    | 285   | 57    | 155   | 124   | 124   | 32    | 17    | 1.8   | 106     | 63    |
| 17    | 50    | 42    | 229   | 54    | 154   | 186   | 98    | 30    | 13    | 1.6   | 62      | 106   |
| 18    | 40    | 43    | 273   | 63    | 139   | 148   | 88    | 29    | 11    | 16    | 278     | 502   |
| 19    | 38    | 95    | 184   | 72    | 138   | 125   | 78    | 27    | 19    | 13    | 98      | 305   |
| 20    | 36    | 179   | 136   | 65    | 127   | 107   | 71    | 25    | 15    | 19    | 55      | 121   |
| 21    | 32    | 104   | 110   | 57    | 116   | 95    | 67    | 26    | 7.6   | 36    | 40      | 79    |
| 22    | 31    | 78    | 96    | 55    | 105   | 89    | 63    | 34    | 6.2   | 22    | 41      | 62    |
| 23    | 29    | 67    | 91    | 54    | 96    | 80    | 58    | 52    | 10    | 24    | 30      | 53    |
| 24    | 29    | 60    | 93    | 53    | 90    | 75    | 55    | 41    | 14    | e8.0  | 23      | 45    |
| 25    | 26    | 56    | 96    | 53    | 87    | 72    | 53    | 26    | 29    | 4.8   | 15      | 41    |
| 26    | 28    | 54    | 82    | 61    | 84    | 70    | 52    | 21    | 39    | 4.8   | 11      | 36    |
| 27    | 37    | 52    | 75    | 67    | 97    | 69    | 55    | 17    | 46    | 23    | 9.2     | 36    |
| 28    | 51    | 57    | 71    | 63    | 113   | 69    | 59    | 16    | 41    | 57    | 7.6     | 54    |
| 29    | 175   | 85    | 69    | 65    | 138   | 68    | 51    | 14    | 69    | 106   | 6.9     | 101   |
| 30    | 135   | 97    | 67    | 75    | ---   | 65    | 47    | 30    | 59    | 257   | 970     | 69    |
| 31    | 77    | ---   | 65    | 104   | ---   | 71    | ---   | 29    | ---   | 70    | 827     | ---   |
| TOTAL | 1,547 | 1,780 | 5,717 | 1,940 | 5,358 | 2,993 | 3,097 | 1,856 | 739.8 | 874.0 | 4,139.4 | 4,614 |
| MEAN  | 49.9  | 59.3  | 184   | 62.6  | 185   | 96.5  | 103   | 59.9  | 24.7  | 28.2  | 134     | 154   |
| MAX   | 175   | 179   | 1,000 | 104   | 669   | 186   | 323   | 307   | 69    | 257   | 970     | 912   |
| MIN   | 26    | 39    | 58    | 53    | 79    | 65    | 47    | 14    | 6.2   | 1.6   | 4.2     | 36    |
| CFSM  | 0.35  | 0.42  | 1.31  | 0.44  | 1.31  | 0.68  | 0.73  | 0.42  | 0.17  | 0.20  | 0.95    | 1.09  |
| IN.   | 0.41  | 0.47  | 1.51  | 0.51  | 1.41  | 0.79  | 0.82  | 0.49  | 0.20  | 0.23  | 1.09    | 1.22  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1963 - 2004, BY WATER YEAR (WY)

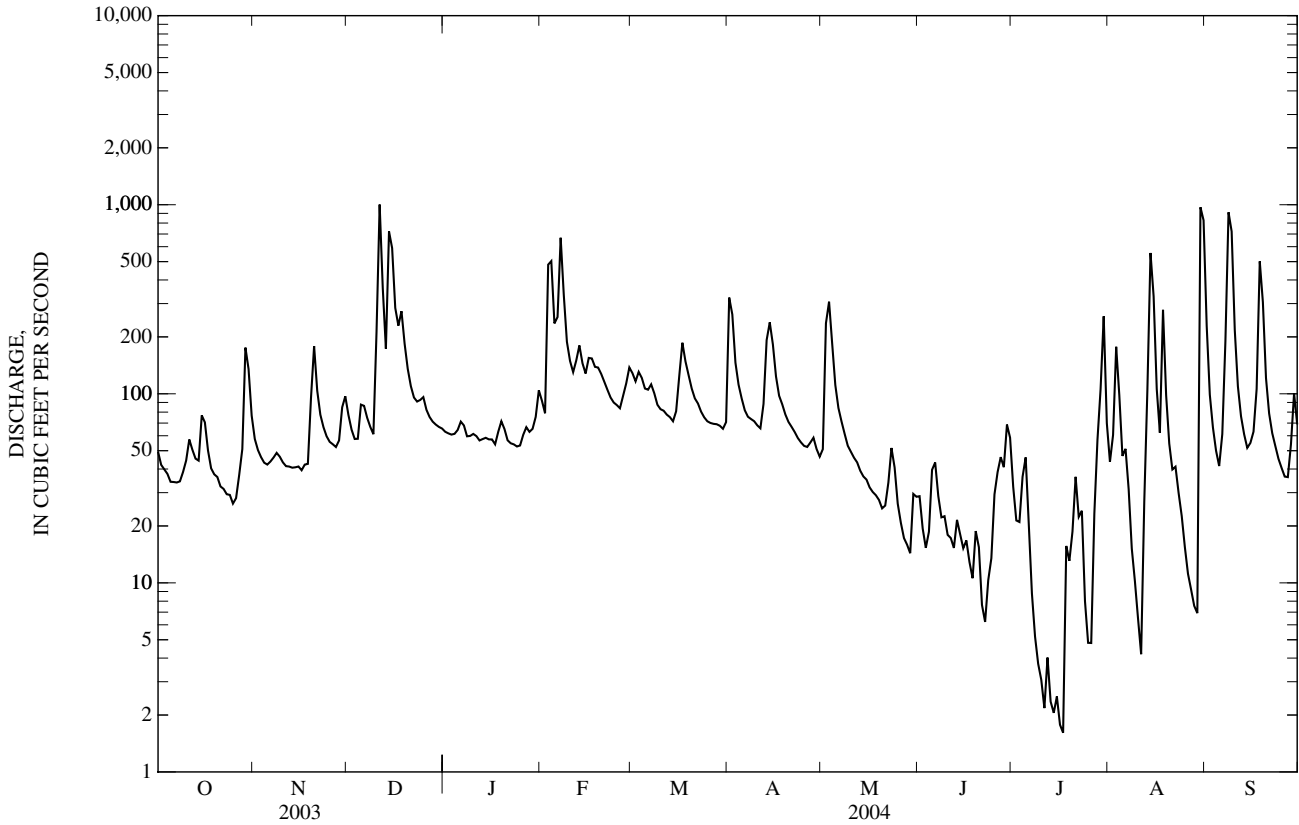
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 60.6   | 75.2   | 112    | 197    | 244    | 280    | 189    | 122    | 87.6   | 71.8   | 55.7   | 73.8   |
| MAX  | 456    | 462    | 406    | 517    | 638    | 767    | 603    | 429    | 411    | 452    | 282    | 606    |
| (WY) | (1972) | (1986) | (1973) | (1998) | (1998) | (1998) | (2003) | (1978) | (1982) | (1975) | (1985) | (1999) |
| MIN  | 4.77   | 7.27   | 11.3   | 21.4   | 47.1   | 61.5   | 34.9   | 10.2   | 5.28   | 6.01   | 3.34   | 0.84   |
| (WY) | (1964) | (2002) | (2002) | (1981) | (2002) | (2002) | (1995) | (2002) | (2002) | (2002) | (1977) | (1968) |

02085070 ENO RIVER NEAR DURHAM, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1963 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 93,348                 |        | 34,655.2            |        | 130                     |              |
| ANNUAL MEAN              | 256                    |        | 94.7                |        | 293                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 26.7                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2002                    |              |
| HIGHEST DAILY MEAN       | 4,120                  | Mar 20 | 1,000               | Dec 11 | 9,900                   | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 26                     | Oct 25 | 1.6                 | Jul 17 | 0.08                    | Aug 14, 1977 |
| ANNUAL SEVEN-DAY MINIMUM | 30                     | Oct 20 | 2.4                 | Jul 11 | 0.20                    | Aug 8, 1977  |
| MAXIMUM PEAK FLOW        |                        |        | 2,280               | Aug 30 | 14,700                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 7.94                | Aug 30 | 23.58*                  | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.5                 | Jul 17 | 0.06*                   | Aug 14, 1977 |
| ANNUAL RUNOFF (CFSM)     | 1.81                   |        | 0.672               |        | 0.924                   |              |
| ANNUAL RUNOFF (INCHES)   | 24.63                  |        | 9.14                |        | 12.55                   |              |
| 10 PERCENT EXCEEDS       | 699                    |        | 184                 |        | 265                     |              |
| 50 PERCENT EXCEEDS       | 104                    |        | 60                  |        | 52                      |              |
| 90 PERCENT EXCEEDS       | 44                     |        | 16                  |        | 7.0                     |              |

\* See REMARKS.

e Estimated.



## 0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY, NC

LOCATION.--Lat 36°08'30", long 78°55'09", Durham County, Hydrologic Unit 03020201, on right bank, 5 feet downstream from bridge on Secondary Road 1461, and 1.8 mi northwest of Orange Factory.

DRAINAGE AREA.--78.2 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1987 to current year. Prior to October 1987, equivalent records published as "Little River near Orange Factory, NC" (02085220), September 1961 to September 1987.

GAGE.--Water-stage recorder. Datum of gage is 380 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record from extension of rating curve above 2,300 ft<sup>3</sup>/s, based on contracted-opening measurement of peak flow; maximum gage height, 13.26 ft, from high-water mark in gage shelter. No flow occurs periodically.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 36    | 42    | 58    | 63    | 89    | 68    | 315   | 28    | 14    | 8.0   | 12      | 96    |
| 2     | 35    | 35    | 49    | 61    | 78    | 64    | 169   | 36    | 9.7   | 7.0   | 57      | 51    |
| 3     | 33    | 32    | 45    | 61    | 431   | 82    | 94    | 106   | 7.9   | 6.1   | 129     | 32    |
| 4     | 32    | 30    | 43    | 61    | 305   | 73    | 72    | 71    | 7.7   | 6.0   | 42      | 24    |
| 5     | 31    | 29    | 65    | 63    | 151   | 64    | 58    | 46    | 19    | 5.8   | 18      | 20    |
| 6     | 30    | 29    | 76    | 74    | 161   | 61    | 50    | 35    | 17    | 5.3   | 18      | 18    |
| 7     | 29    | 31    | 64    | 69    | 377   | 61    | 49    | 29    | 12    | 4.9   | 12      | 28    |
| 8     | 29    | 31    | 55    | 62    | 175   | 54    | 45    | 27    | 10    | 4.3   | 9.4     | 224   |
| 9     | 34    | 29    | 51    | 61    | 117   | 50    | 43    | 25    | 9.6   | 4.0   | 7.5     | 315   |
| 10    | 38    | 27    | 151   | 63    | 100   | 48    | 40    | 24    | 9.2   | 3.7   | 6.0     | 91    |
| 11    | 40    | 26    | 797   | 59    | 86    | 46    | 40    | 22    | 8.7   | 3.2   | 5.3     | 49    |
| 12    | 39    | 26    | 187   | 59    | 89    | 45    | 54    | 21    | 8.4   | 2.9   | 8.0     | 35    |
| 13    | 34    | 25    | 118   | 63    | 116   | 43    | 174   | 19    | 7.7   | 2.7   | 13      | 27    |
| 14    | 32    | 22    | 569   | 63    | 92    | 42    | 172   | 18    | 7.3   | 2.6   | 399     | 23    |
| 15    | 50    | 22    | 344   | 61    | 81    | 44    | 131   | 18    | 7.1   | 2.5   | 195     | 25    |
| 16    | 46    | 23    | 168   | 56    | 90    | 59    | 82    | 17    | 7.9   | 2.4   | 75      | 30    |
| 17    | 35    | 24    | 166   | 54    | 97    | 93    | 63    | 20    | 8.4   | 2.4   | 38      | 43    |
| 18    | 30    | 24    | 195   | 61    | 86    | 77    | 56    | 18    | 8.3   | 3.0   | 24      | 183   |
| 19    | 28    | 49    | 129   | 71    | 91    | 64    | 50    | 16    | 7.4   | 3.0   | 19      | 117   |
| 20    | 27    | 130   | 107   | 64    | 85    | 55    | 45    | 15    | 6.8   | 17    | 15      | 55    |
| 21    | 25    | 79    | 94    | 57    | 74    | 51    | 42    | 15    | 6.5   | 3.9   | e18     | 37    |
| 22    | 24    | 60    | 87    | 55    | 66    | 47    | 39    | 14    | 6.6   | 3.2   | e12     | 28    |
| 23    | 23    | 51    | 84    | 54    | 61    | 43    | 35    | 14    | 6.2   | 4.1   | e11     | 25    |
| 24    | 22    | 47    | 86    | 52    | 57    | 41    | 34    | 13    | 9.9   | 3.8   | e6.4    | 21    |
| 25    | 22    | 44    | 87    | 53    | 54    | 41    | 33    | 11    | 13    | 3.5   | 8.6     | 19    |
| 26    | 22    | 43    | 81    | 63    | 50    | 41    | 32    | 11    | 14    | 3.3   | 7.8     | 18    |
| 27    | 26    | 42    | 74    | 60    | 56    | 42    | 35    | 10    | 14    | 3.6   | 7.2     | 18    |
| 28    | 31    | 45    | 70    | 62    | 70    | 41    | 34    | 9.4   | 13    | 8.1   | 6.6     | 25    |
| 29    | 161   | 90    | 68    | 60    | 81    | 39    | 29    | 8.8   | 12    | 138   | 6.3     | 33    |
| 30    | 105   | 79    | 68    | 72    | ---   | 38    | 27    | 13    | 9.5   | 79    | 836     | 28    |
| 31    | 54    | ---   | 66    | 110   | ---   | 41    | ---   | 16    | ---   | 25    | 433     | ---   |
| TOTAL | 1,203 | 1,266 | 4,302 | 1,947 | 3,466 | 1,658 | 2,142 | 746.2 | 298.8 | 372.3 | 2,455.1 | 1,738 |
| MEAN  | 38.8  | 42.2  | 139   | 62.8  | 120   | 53.5  | 71.4  | 24.1  | 9.96  | 12.0  | 79.2    | 57.9  |
| MAX   | 161   | 130   | 797   | 110   | 431   | 93    | 315   | 106   | 19    | 138   | 836     | 315   |
| MIN   | 22    | 22    | 43    | 52    | 50    | 38    | 27    | 8.8   | 6.2   | 2.4   | 5.3     | 18    |
| CFM   | 0.50  | 0.54  | 1.77  | 0.80  | 1.53  | 0.68  | 0.91  | 0.31  | 0.13  | 0.15  | 1.01    | 0.74  |
| IN.   | 0.57  | 0.60  | 2.05  | 0.93  | 1.65  | 0.79  | 1.02  | 0.35  | 0.14  | 0.18  | 1.17    | 0.83  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004, BY WATER YEAR (WY)

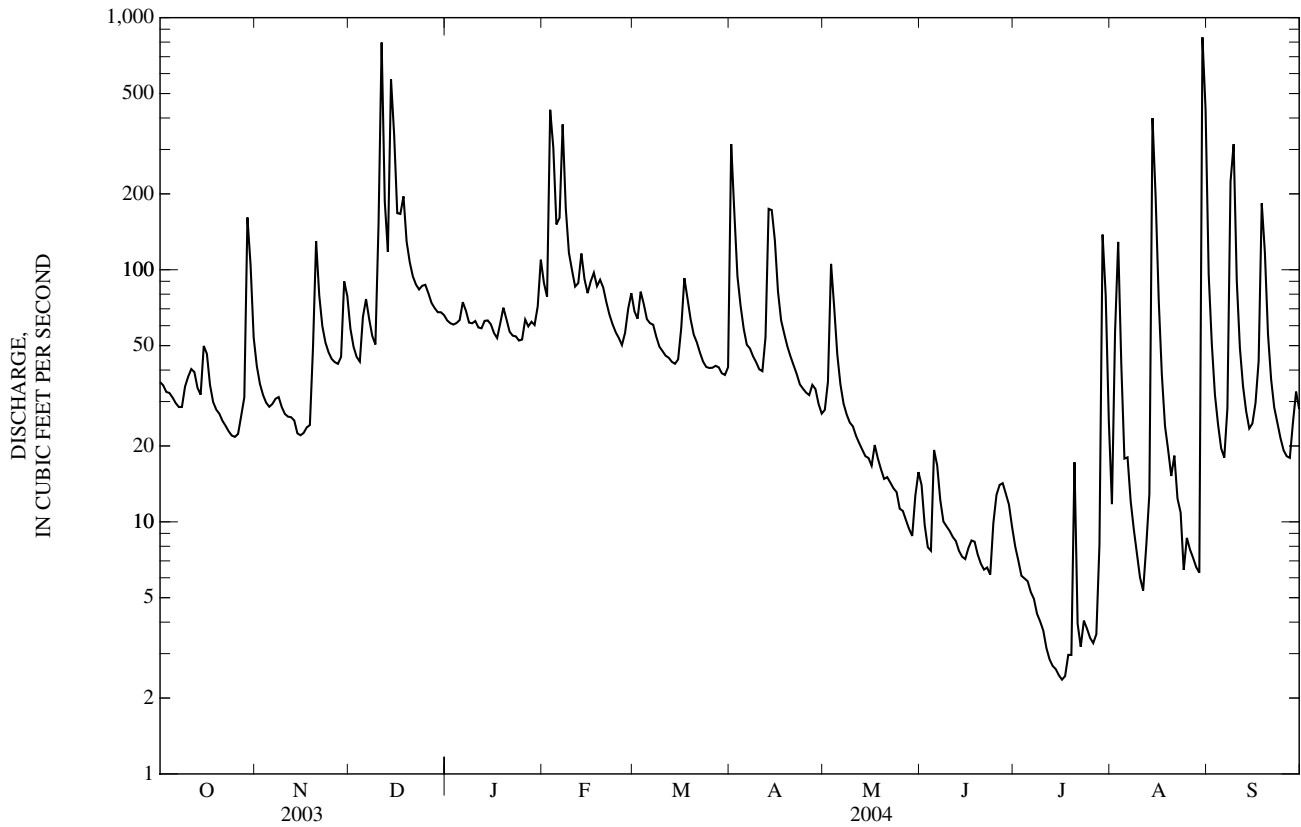
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 41.2   | 42.1   | 68.1   | 120    | 131    | 181    | 118    | 58.9   | 42.8   | 34.0   | 30.2   | 55.1   |
| MAX  | 222    | 122    | 215    | 257    | 379    | 456    | 346    | 203    | 194    | 141    | 125    | 329    |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1993) | (2003) | (2003) | (1995) | (2003) | (2003) | (1996) |
| MIN  | 0.14   | 1.33   | 5.06   | 24.2   | 22.4   | 30.9   | 17.1   | 7.48   | 2.08   | 0.31   | 0.37   | 1.27   |
| (WY) | (1994) | (1999) | (2002) | (2001) | (2002) | (1988) | (1995) | (2002) | (2002) | (2002) | (1999) | (1990) |

0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1987 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 60,584                 |        | 21,594.4            |        | 76.6                    |              |
| ANNUAL MEAN              | 166                    |        | 59.0                |        | 195                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 14.8                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 6,500                   | 2002         |
| HIGHEST DAILY MEAN       | 3,270                  | Mar 20 | 836                 | Aug 30 | 0.00                    | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 18                     | Aug 30 | 2.4                 | Jul 16 | 0.00                    | Aug 19, 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 23                     | Oct 21 | 2.6                 | Jul 12 | 0.00                    | Aug 19, 1988 |
| MAXIMUM PEAK FLOW        |                        |        | 1,960               | Aug 30 | 11600*                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 5.54                | Aug 30 | 13.26*                  | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 2.2                 | Jul 16 | 0.00*                   | Aug 19, 1998 |
| ANNUAL RUNOFF (CFSM)     | 2.12                   |        | 0.754               |        | 0.980                   |              |
| ANNUAL RUNOFF (INCHES)   | 28.82                  |        | 10.27               |        | 13.32                   |              |
| 10 PERCENT EXCEEDS       | 350                    |        | 108                 |        | 154                     |              |
| 50 PERCENT EXCEEDS       | 74                     |        | 40                  |        | 26                      |              |
| 90 PERCENT EXCEEDS       | 30                     |        | 7.3                 |        | 1.9                     |              |

\* See REMARKS.

e Estimated.





0208521324 LITTLE RIVER AT SECONDARY ROAD 1461 NEAR ORANGE FACTORY,NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

COOPERATION.--For the period February 1988 through June 1989 the inorganic-chemical data and trace-metal data were analyzed by the city of Durham's Brown Water Treatment Laboratory. Samples for October 1994 and April 1995 were collected by the North Carolina Department of Environment, Health, and Natural Resources. A GC/FID scan for trace organic compounds was performed on these samples by the U.S. Geological Survey National Water Quality Lab. Results may be obtained from the District office in Raleigh, NC.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time   | Instantaneous discharge, cfs (00061)           | Color, water, fltrd, Pt-Co units (00080)       | Barometric pressure, mm Hg (00025)                 | Dissolved oxygen, mg/L (00300)                   | Dissolved oxygen, percent of saturation (00301)    | pH, water, unfltrd field, std units (00400)       | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                   | Hardness, water, mg/L as CaCO3 (00900)            | Calcium, water, fltrd, mg/L (00915)                  | Magnesium, water, fltrd, mg/L (00925)            | Potassium, water, fltrd, mg/L (00935)       |
|-----------|--|--|--|--|--|--|---|---|---|---|--|--|---|
| AUG 30... | 1315   | 1,350  | 150  | 754  | 7.8  | 90   | 6.4   | 51  | 22.3  | 18  | 4.61   | 1.66   | 2.80  |
| Date      | Sodium, water, fltrd, mg/L (00930)                 | Chloride, water, fltrd, mg/L (00940)           | Fluoride, water, fltrd, mg/L (00950)           | Silica, water, fltrd, mg/L (00955)                 | Sulfate, water, fltrd, mg/L (00945)              | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608)                | Nitrite + nitrate, water, fltrd, mg/L as N (00631)  | Nitrite, water, fltrd, mg/L as N (00613)          | Orthophosphate, water, fltrd, mg/L as P (00671)      | Phosphorus, water, unfltrd mg/L (00665)          | Organic carbon, water, unfltrd mg/L (00680) |
| AUG 30... | 3.00   | 3.70   | <.2  | 7.87   | 3.2  | 52   | 1.7   | .029  | .215  | .005  | .051   | .29  | 27.9  |
| Date      | Aluminum, water, unfltrd recoverable, ug/L (01105) | Arsenic, water, unfltrd ug/L (01002)           | Cadmium, water, unfltrd ug/L (01027)           | Chromium, water, unfltrd recoverable, ug/L (01034) | Cobalt, water, unfltrd recoverable, ug/L (01037) | Copper, water, unfltrd recoverable, ug/L (01042)   | Iron, water, unfltrd recoverable, ug/L (01045)    | Lead, water, unfltrd recoverable, ug/L (01051)          | Manganese, water, unfltrd recoverable, ug/L (01055) | Mercury, water, unfltrd recoverable, ug/L (71900) | Molybdenum, water, unfltrd recoverable, ug/L (01062) | Nickel, water, unfltrd recoverable, ug/L (01067) | Selenium, water, unfltrd ug/L (01147)       |
| AUG 30... | 2,240  | E1   | .06  | 2.9  | 4.76   | 5.3  | 4,450   | 4.17  | 862   | .03   | <.2  | 1.78   | .5  |
| Date      | Silver, water, unfltrd recoverable, ug/L (01077)   | Zinc, water, unfltrd recoverable, ug/L (01092) | Suspended sediment concentration, mg/L (80154) | Suspended sediment discharge, tons/day (80155)     |  |  |   |   |   |   |  |  |   |
| AUG 30... | <.16   | 15   | 387  | 1410   |  |  |   |   |   |   |  |  |   |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value

## 0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC

LOCATION.--Lat 36°08'59", long 78°53'48", Durham County, Hydrologic Unit 03020201, on right bank at bridge on Secondary Road 1617 and 1.6 mi southwest of Bahama.

DRAINAGE AREA.--8.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 370 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. Maximum gage height for period of record from floodmarks. Maximum gage height for period of record occurred Sept. 6, 1996, discharge not determined. No flow occurred on many days during the period.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN  | JUL   | AUG    | SEP   |
|-------|------|------|-------|-------|-------|-------|-------|-------|------|-------|--------|-------|
| 1     | 2.3  | 3.3  | 2.8   | 5.0   | 7.3   | 5.2   | 22    | 1.5   | 0.39 | 0.21  | 1.5    | 8.0   |
| 2     | 2.3  | 3.0  | 2.5   | 4.9   | 6.8   | 6.1   | 10    | 4.0   | 0.25 | 0.18  | 28     | 4.6   |
| 3     | 2.1  | 2.7  | 2.2   | 5.1   | 39    | 6.7   | 6.3   | 9.4   | 0.21 | 0.14  | 28     | 3.1   |
| 4     | 2.1  | 2.6  | 2.4   | 5.1   | 21    | 5.7   | 4.7   | 4.8   | 0.28 | 0.13  | 3.8    | 2.6   |
| 5     | 1.9  | 2.6  | 7.9   | 5.6   | 12    | 5.3   | 3.8   | 3.0   | 0.38 | 0.11  | 1.7    | 2.2   |
| 6     | 1.9  | 2.9  | 5.3   | 7.5   | 21    | 5.7   | 3.3   | 2.2   | 0.30 | 0.12  | 3.0    | 2.1   |
| 7     | 1.8  | 3.2  | 3.9   | 5.5   | 34    | 4.8   | 3.0   | 1.9   | 0.27 | 0.12  | 1.1    | 4.1   |
| 8     | 1.8  | 2.9  | 3.2   | 5.0   | 14    | 4.1   | 3.0   | 1.6   | 0.25 | 0.09  | 0.71   | 9.9   |
| 9     | 2.8  | 2.4  | 3.0   | 5.4   | 9.7   | 3.9   | 2.7   | 1.4   | 0.33 | 0.08  | 0.69   | 5.2   |
| 10    | 2.8  | 2.2  | 31    | 5.3   | 8.5   | 4.0   | 2.5   | 1.2   | 0.25 | 0.07  | 0.69   | 3.0   |
| 11    | 3.4  | 2.1  | 53    | 4.7   | 7.5   | 3.7   | 2.4   | 1.0   | 0.29 | 0.08  | 0.59   | 2.1   |
| 12    | 2.9  | 2.2  | 14    | 5.1   | 9.7   | 3.6   | 5.2   | 0.97  | 0.25 | 0.09  | 2.3    | 1.8   |
| 13    | 2.3  | 2.2  | 9.6   | 5.5   | 10    | 3.8   | 8.7   | 0.91  | 0.21 | 0.09  | 4.8    | 1.6   |
| 14    | 2.2  | 1.9  | 56    | 5.1   | 8.1   | 3.2   | 11    | 0.84  | 0.18 | 0.08  | 39     | 1.5   |
| 15    | 5.7  | 1.8  | 23    | 5.0   | 7.2   | 3.7   | 7.6   | 0.76  | 0.19 | 0.06  | 15     | 1.7   |
| 16    | 2.9  | 1.8  | 14    | 4.5   | 8.4   | 6.5   | 5.9   | 0.72  | 0.26 | 0.05  | 7.7    | 1.7   |
| 17    | 2.2  | 2.0  | 17    | 4.3   | 8.0   | 8.1   | 4.3   | 0.69  | 0.48 | 0.05  | 3.8    | 4.6   |
| 18    | 2.1  | 2.0  | 15    | 6.2   | 7.5   | 5.9   | 3.4   | 0.63  | 0.28 | 0.14  | 2.4    | 13    |
| 19    | 1.9  | 11   | 11    | 6.0   | 7.5   | 5.4   | 2.7   | 0.61  | 0.19 | 0.10  | 1.8    | 5.8   |
| 20    | 1.8  | 11   | 9.0   | 4.9   | 6.8   | 4.4   | 2.5   | 0.64  | 0.14 | 1.9   | 1.3    | 3.0   |
| 21    | 1.8  | 5.3  | 7.7   | 4.6   | 6.2   | 4.5   | 2.3   | 0.51  | 0.12 | 0.42  | 3.6    | 2.2   |
| 22    | 1.7  | 3.6  | 7.3   | 4.6   | 5.5   | 3.7   | 2.0   | 0.51  | 0.13 | 0.24  | 3.3    | 1.8   |
| 23    | 1.5  | 3.1  | 6.8   | 4.4   | 5.2   | 3.3   | 1.7   | 0.46  | 0.18 | 0.86  | 1.2    | 1.6   |
| 24    | 1.5  | 2.9  | 7.6   | 4.3   | 5.0   | 3.5   | 1.6   | 0.55  | 0.29 | 0.39  | 1.00   | 1.4   |
| 25    | 1.5  | 2.6  | 7.1   | 4.3   | 4.9   | 3.1   | 1.5   | 0.40  | 0.28 | 0.26  | 0.83   | 1.3   |
| 26    | 1.7  | 2.4  | 6.3   | 5.1   | 4.5   | 3.4   | 1.5   | 0.31  | 1.1  | 0.21  | 0.74   | 1.3   |
| 27    | 2.7  | 2.3  | 6.0   | 4.8   | 6.1   | 3.1   | 1.8   | 0.30  | 0.58 | 0.19  | 0.73   | 1.3   |
| 28    | 4.1  | 3.5  | 5.7   | 4.8   | 6.8   | 3.1   | 1.4   | 0.27  | 0.35 | 0.24  | 0.60   | 3.1   |
| 29    | 19   | 5.0  | 5.6   | 5.2   | 5.7   | 2.9   | 1.2   | 0.24  | 0.36 | 4.8   | 0.50   | 2.6   |
| 30    | 7.3  | 3.1  | 5.6   | 9.0   | ---   | 2.9   | 1.1   | 0.75  | 0.24 | 6.7   | 144    | 1.8   |
| 31    | 4.5  | ---  | 5.1   | 11    | ---   | 3.5   | ---   | 0.66  | ---  | 1.6   | 23     | ---   |
| TOTAL | 96.5 | 99.6 | 356.6 | 167.8 | 303.9 | 136.8 | 131.1 | 43.73 | 9.01 | 19.80 | 327.38 | 100.0 |
| MEAN  | 3.11 | 3.32 | 11.5  | 5.41  | 10.5  | 4.41  | 4.37  | 1.41  | 0.30 | 0.64  | 10.6   | 3.33  |
| MAX   | 19   | 11   | 56    | 11    | 39    | 8.1   | 22    | 9.4   | 1.1  | 6.7   | 144    | 13    |
| MIN   | 1.5  | 1.8  | 2.2   | 4.3   | 4.5   | 2.9   | 1.1   | 0.24  | 0.12 | 0.05  | 0.50   | 1.3   |
| CFSM  | 0.39 | 0.41 | 1.44  | 0.68  | 1.31  | 0.55  | 0.55  | 0.18  | 0.04 | 0.08  | 1.32   | 0.42  |
| IN.   | 0.45 | 0.46 | 1.66  | 0.78  | 1.41  | 0.64  | 0.61  | 0.20  | 0.04 | 0.09  | 1.52   | 0.47  |

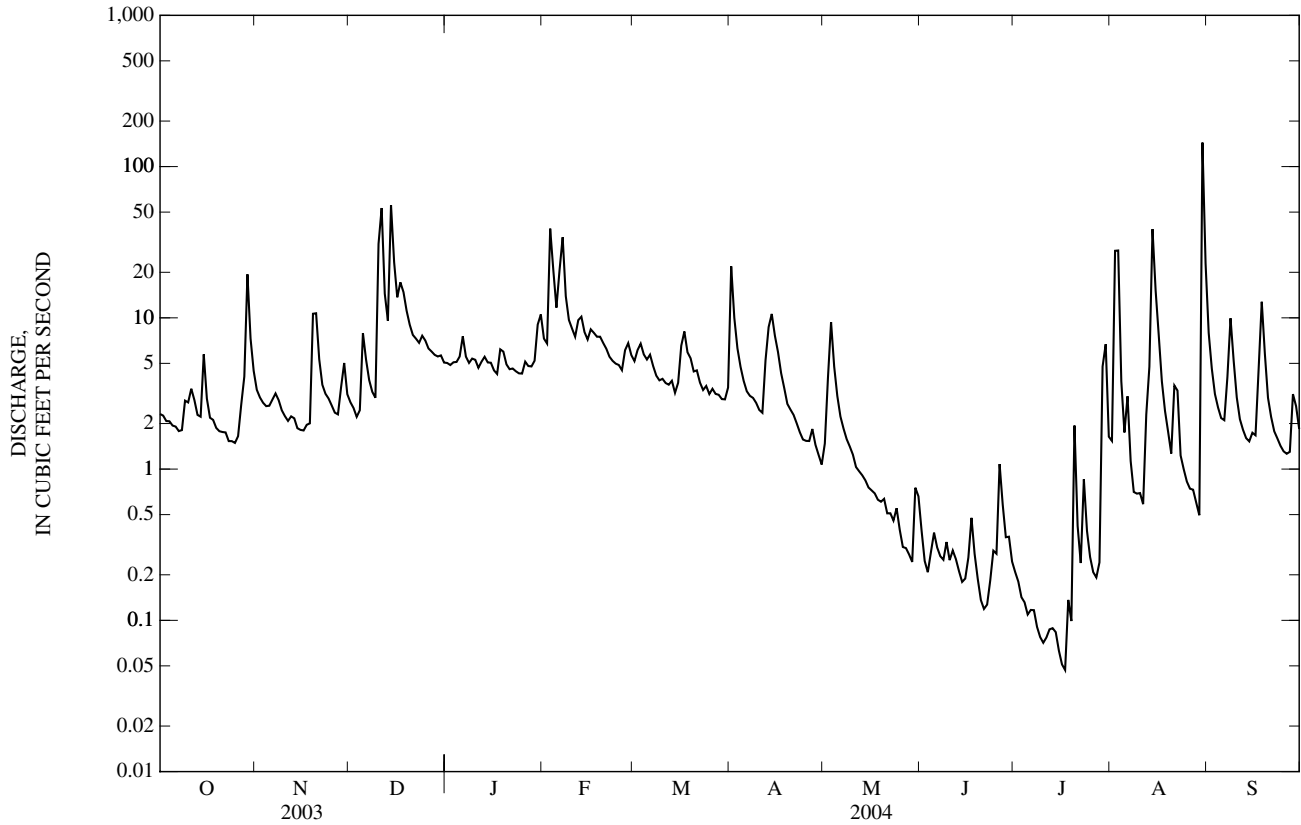
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1995 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 5.54   | 3.89   | 6.30   | 10.4   | 12.9   | 16.7   | 10.9   | 4.72   | 5.77   | 2.96   | 3.06   | 13.4   |
| MAX  | 32.9   | 11.7   | 20.7   | 27.3   | 36.2   | 49.9   | 30.0   | 15.1   | 29.7   | 7.95   | 10.6   | 74.0   |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (2003) | (1995) | (2003) | (2004) | (1996) |
| MIN  | 0.03   | 0.06   | 0.26   | 1.51   | 1.55   | 2.74   | 1.14   | 0.19   | 0.29   | 0.10   | 0.01   | 0.18   |
| (WY) | (1999) | (1999) | (2002) | (2001) | (2002) | (2002) | (2002) | (2002) | (1999) | (2002) | (1999) | (1995) |

0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1995 - 2004 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 4,866.05               |        | 1,792.22            |        | 8.01                    |             |
| ANNUAL MEAN              | 13.3                   |        | 4.90                |        | 17.3                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1.67                    | 2003        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1.00                    | 2002        |
| HIGHEST DAILY MEAN       | 400                    | Mar 20 | 144                 | Aug 30 | 1,000                   | Sep 6, 1996 |
| LOWEST DAILY MEAN        | 0.95                   | Aug 30 | 0.05                | Jul 16 | 0.00                    | Aug 3, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 1.2                    | Aug 24 | 0.07                | Jul 11 | 0.00                    | Aug 3, 1999 |
| MAXIMUM PEAK FLOW        |                        |        | 594                 | Aug 30 | NOT DETERMINED*         |             |
| MAXIMUM PEAK STAGE       |                        |        | 7.92                | Aug 30 | 12.56                   | Sep 6, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.04                | Jul 16 | 0.00*                   | Aug 3, 1999 |
| ANNUAL RUNOFF (CFSM)     | 1.67                   |        | 0.612               |        | 1.00                    |             |
| ANNUAL RUNOFF (INCHES)   | 22.63                  |        | 8.33                |        | 13.60                   |             |
| 10 PERCENT EXCEEDS       | 27                     |        | 9.0                 |        | 14                      |             |
| 50 PERCENT EXCEEDS       | 5.6                    |        | 2.9                 |        | 2.4                     |             |
| 90 PERCENT EXCEEDS       | 1.9                    |        | 0.25                |        | 0.10                    |             |

\* See REMARKS.



0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988-91, 1994 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic chemical data and trace metal data were analyzed by the city of Durham's Brown Water Treatment Plant Laboratory.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time  | Instantaneous discharge, cfs (00061)    | Barometric pressure, mm Hg (00025)              | Dissolved oxygen, mg/L (00300)         | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                  | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608)           | Nitrate water, fltrd, mg/L as N (00618)         | Nitrite + nitrate water fltrd, mg/L as N (00631) |  |
|-----------|-------|---|---|--|---|---|---|--|--|--|--|---|--|--|
| Date      |       | Nitrite water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd, mg/L (00665)        | Total nitrogen, water, fltrd, mg/L (00602)  | Total nitrogen, water, unfltrd, mg/L (00600)            | Aluminum, water, unfltrd recoverable, ug/L (01105) | Arsenic water unfltrd, ug/L (01002)              | Cadmium water, unfltrd, ug/L (01027)               | Chromium, water, unfltrd recoverable, ug/L (01034) | Cobalt water, unfltrd recoverable, ug/L (01037) | Copper, water, unfltrd recoverable, ug/L (01042) | Iron, water, unfltrd recoverable, ug/L (01045) |
| OCT 03... | 1400  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| DEC 11... | 1330  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| FEB 20... | 1330  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| APR 08... | 1430  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| MAY 03... | 1245  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| JUN 04... | 1315  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| JUL 23... | 1330  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| AUG 30... | 1130  |   |   |  |   |   |   |  |  |  |  |   |  |  |
| OCT 03... |       | <.008                                   | <.02  | <.04                                   | <.04  | .73   | .81   | --   | --   | --   | --   | --  | --   | --   |
| DEC 11... | E.006 | <.02                                    | E.02  | E.04                                   | .82   | .67   | --  | --   | --   | --   | --   | --  | --   | --   |
| FEB 20... | E.006 | <.02                                    | <.04  | E.04                                   | .83   | .80   | --  | --   | --   | --   | --   | --  | --   | --   |
| APR 08... | <.008 | E.01                                    | E.02  | E.04                                   | .52   | .57   | 88  | <2   | <.04   | <.8  | .268   | .6  | 1,050  |  |
| MAY 03... | .013  | <.02                                    | E.02  | .06                                    | 1.1   | 1.1   | 209   | <2   | <.04   | <.8  | .555   | 1.2   | 1,500  |  |
| JUN 04... | <.008 | <.02                                    | <.04  | .05                                    | .78   | .90   | --  | --   | --   | --   | --   | --  | --   |  |
| JUL 23... | E.004 | <.02                                    | <.04  | .07                                    | .64   | 1.0   | --  | --   | --   | --   | --   | --  | --   |  |
| AUG 30... | .008  | .05                                     | .08   | .42                                    | 1.0   | 2.0   | --  | --   | --   | --   | --   | --  | --   |  |







0208524090 MOUNTAIN CREEK AT SECONDARY ROAD 1617 NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Para-<br>thion,<br>water,<br>unfltrd<br>ug/L<br>(39540) | PCBs,<br>water,<br>unfltrd<br>ug/L<br>(39516) | Peb-<br>ulate,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82669) | Pendi-<br>meth-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82683) | Phorate<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82664) | Phorate<br>water<br>unfltrd<br>ug/L<br>(39023) | Pic-<br>loram,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49291) | Prome-<br>ton,<br>water,<br>fltrd,<br>ug/L<br>(04037) | Propy-<br>zamide,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82676) | Propa-<br>chlor,<br>water,<br>fltrd,<br>ug/L<br>(04024) | Pro-<br>panil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82679) | Propar-<br>gite,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82685) | Propham<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(49236) |
|-----------|---|---|---|---|---|--|---|---|--|---|---|---|---|
| OCT 03... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| DEC 11... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| FEB 20... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| APR 08... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| MAY 03... | <.01  | <.1   | <.004   | <.022   | <.011   | <.02   | <.02  | .01   | <.004  | <.025   | <.011   | <.02  | <.010   |
| JUN 04... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| JUL 23... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |
| AUG 30... | --  | --  | --  | --  | --  | --   | --  | --  | --   | --  | --  | --  | --  |

| Date      | Propi-<br>cona-<br>zole,<br>water,<br>fltrd,<br>ug/L<br>(50471) | Pro-<br>poxur,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(38538) | Siduron<br>water,<br>fltrd,<br>ug/L<br>(38548) | Simaz-<br>ine,<br>water,<br>fltrd,<br>ug/L<br>(04035) | Sulfo-<br>met-<br>ruron,<br>water,<br>fltrd,<br>ug/L<br>(50337) | Tebu-<br>thiuron<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82670) | Terba-<br>cil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82665) | Terba-<br>cil,<br>water,<br>fltrd,<br>ug/L<br>(04032) | Terbu-<br>fos,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82675) | Thio-<br>bencarb<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82681) | Toxa-<br>phene,<br>water,<br>unfltrd<br>ug/L<br>(39400) | Tri-<br>allate,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82678) | Tribu-<br>phos,<br>water,<br>unfltrd<br>ug/L<br>(39040) |
|-----------|---|---|--|---|---|--|---|---|---|--|---|--|---|
| OCT 03... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| DEC 11... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| FEB 20... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| APR 08... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| MAY 03... | <.02  | <.008   | <.02   | .020  | <.009   | <.02   | <.034   | <.010   | <.02  | <.010  | <.1   | <.002  | <.02  |
| JUN 04... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| JUL 23... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |
| AUG 30... | --  | --  | --   | --  | --  | --   | --  | --  | --  | --   | --  | --   | --  |

| Date      | Tri-<br>clop-<br>pyr,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49235) | Tri-<br>flur-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82661) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) | Sus-<br>pended<br>sedi-<br>ment<br>dis-<br>charge,<br>tons/d<br>(80155) |
|-----------|--|---|--|---|
| OCT 03... | --   | --  | 4  | .02   |
| DEC 11... | --   | --  | 28   | 2.6   |
| FEB 20... | --   | --  | 10   | .19   |
| APR 08... | --   | --  | 7  | .06   |
| MAY 03... | <.02   | <.009   | 26   | .67   |
| JUN 04... | --   | --  | 17   | .02   |
| JUL 23... | --   | --  | 25   | .06   |
| AUG 30... | --   | --  | 383  | 157   |



0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°06'54", long 78°52'09", Durham County, Hydrologic Unit 03020201, at dam 7.5 mi below State Highway 501, and 4.0 mi south of Bahama.

DRAINAGE AREA.--97.7 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098) | Trans-parency Secchi disc, meters (00078) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|-------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|--|---|---|------------------------------------|---|------------------------------------|--|
| OCT   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 29... | 1030 | 62                                       | 1.0                             | 1.40                                      | 750                                  | 4.5                             | 48   | 6.8   | 70  | 17.8                               | 23                                      | 5.58                               | 2.21                                   |
| 29... | 1035 | --                                       | 13.0                            | --  | 750                                  | 4.5                             | 49   | 6.8   | 70  | 17.8                               | --                                      | --                                 | --                                     |
| 29... | 1040 | --                                       | 23.0                            | --  | 750                                  | .2                              | 2  | 7.5   | 212   | 10.1                               | --                                      | --                                 | --                                     |
| APR   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 07... | 1215 | 25                                       | 1.0                             | 1.00                                      | 745                                  | 9.9                             | 99   | 7.5   | 82  | 13.9                               | 28                                      | 6.55                               | 2.72                                   |
| 07... | 1220 | --                                       | 11.0                            | --  | 745                                  | 6.8                             | 59   | 6.6   | 79  | 8.2                                | --                                      | --                                 | --                                     |
| 07... | 1225 | --                                       | 21.7                            | --  | 745                                  | 5.6                             | 48   | 6.5   | 80  | 7.4                                | --                                      | --                                 | --                                     |
| JUN   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 29... | 1115 | 25                                       | 1.0                             | 1.10                                      | 757                                  | 6.2                             | 77   | 7.2   | 90  | 25.8                               | 27                                      | 6.64                               | 2.60                                   |
| 29... | 1120 | --                                       | 11.0                            | --  | 757                                  | .1                              | 2  | 6.8   | 96  | 22.5                               | --                                      | --                                 | --                                     |
| 29... | 1125 | --                                       | 20.8                            | --  | 757                                  | .3                              | 2  | 6.9   | 125   | 8.6                                | --                                      | --                                 | --                                     |
| AUG   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 18... | 1045 | 25                                       | 1.0                             | 1.00                                      | 753                                  | 3.8                             | 47   | 6.9   | 88  | 25.7                               | 27                                      | 6.90                               | 2.47                                   |
| 18... | 1050 | --                                       | 11.0                            | --  | 753                                  | 1.0                             | 13   | 6.8   | 83  | 24.0                               | --                                      | --                                 | --                                     |
| 18... | 1055 | --                                       | 22.0                            | --  | 753                                  | .2                              | 2  | 7.4   | 392   | 10.2                               | --                                      | --                                 | --                                     |

| Date  | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicar-bonate, wat unfltrd, titr., mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|-------|--|------------------------------------|--|--|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--|---|---|--|---|
| OCT   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 29... | 2.27                                   | 3.48                               | 22   | 26   | 3.98                                  | <.2                                   | 10.1                               | 3.1                                | 58   | .46   | .048                                    | .286   | E.001                                   |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .54   | .145                                    | .238   | .002                                    |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 5.8   | 3.72                                    | E.015  | .010                                    |
| APR   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 07... | 1.67                                   | 5.89                               | 23   | 28   | 7.45                                  | <.2                                   | 7.03                               | 3.7                                | 66   | .37   | .023                                    | .220   | .003                                    |
| 07... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .35   | .024                                    | .371   | <.002                                   |
| 07... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .48   | .107                                    | .369   | <.002                                   |
| JUN   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 29... | 1.62                                   | 5.87                               | 27   | 33   | 7.42                                  | <.2                                   | 7.15                               | 4.5                                | 63   | .42   | E.009                                   | E.009  | <.002                                   |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .42   | .111                                    | <.016  | <.002                                   |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.2   | .734                                    | .028   | .002                                    |
| AUG   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 18... | 1.69                                   | 5.01                               | 28   | 34   | 6.62                                  | <.2                                   | 8.01                               | 3.7                                | 53   | .48   | .038                                    | .079   | .053                                    |
| 18... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 2.6   | 2.05                                    | <.016  | .005                                    |
| 18... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .59   | .129                                    | .090   | .033                                    |

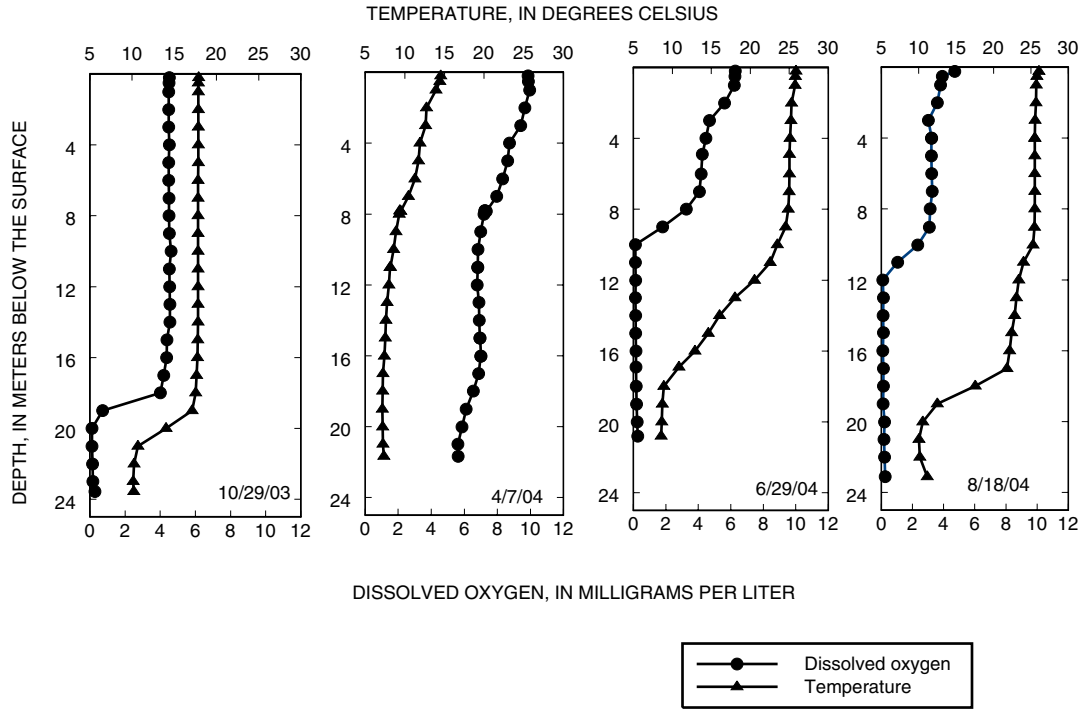
0208524845 LITTLE RIVER RESERVOIR AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 29... | <.006  | .030                                    | 7.3   | 1.6   | <.1   | 67  | <2                                 | <.04                                | <.8   | .207   | 1.2   | 340   | .22   |
| 29... | <.006  | .031                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 380   | --  |
| 29... | .007   | .45                                     | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 32,800  | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 07... | <.006  | .021                                    | 6.1   | 2.9   | <.1   | 42  | <2                                 | <.04                                | <.8   | .098   | .9  | 230   | .06   |
| 07... | <.006  | .024                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 390   | --  |
| 07... | <.006  | .039                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 930   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 29... | <.006  | .024                                    | 5.9   | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 29... | <.006  | .018                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 29... | .012   | .055                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 2,300   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 18... | <.006  | .025                                    | 6.2   | E5.7  | E.7   | --  | --                                 | --                                  | --  | --   | --  | 180   | --  |
| 18... | E.003  | .035                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 360   | --  |
| 18... | E.003  | .028                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 8,120   | --  |

| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 29... | 348  | <.02  | E.1   | E.46  | E.2                                   | <.16  |
| 29... | 1,110  | --  | --  | --  | --                                    | --  |
| 29... | 15,300   | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 07... | 27.8   | .29   | <.2   | .25   | <.4                                   | <.16  |
| 07... | 123  | --  | --  | --  | --                                    | --  |
| 07... | 593  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 29... | 176  | --  | --  | --  | --                                    | --  |
| 29... | 908  | --  | --  | --  | --                                    | --  |
| 29... | 6,220  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 18... | 480  | --  | --  | --  | --                                    | --  |
| 18... | 871  | --  | --  | --  | --                                    | --  |
| 18... | 14,600   | --  | --  | --  | --                                    | --  |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value



0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC

LOCATION.--Lat 36°06'57", long 78°51'29", Durham County, Hydrologic Unit 03020201, 0.2 mi above mouth and 0.8 mi northeast of Fairntosh.

DRAINAGE AREA.--0.86 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1994 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrate water, fltrd, mg/L as N (00618) | Nitrite + nitrate water fltrd, mg/L as N (00631) |
|-----------|------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|-----------------------------------|--|---|---|---|--|
| OCT 03... | 1200 | .34                                  | 758                                | 9.8                            | 93  | 7.1   | 114   | 12.6                              | .29  | .35   | <.04                                    | --                                      | E.03   |
| DEC 11... | 1200 | 1.9                                  | 749                                | 10.7                           | 96  | 6.5   | 140   | 9.9                               | .97  | .68   | <.04                                    | --                                      | .57  |
| FEB 20... | 1130 | .93                                  | 759                                | 13.8                           | 114   | 6.7   | 177   | 7.1                               | .34  | .26   | <.04                                    | --                                      | .19  |
| APR 08... | 1215 | .26                                  | 742                                | 11.6                           | 119   | 7.4   | 198   | 15.3                              | .25  | .28   | <.04                                    | --                                      | E.04   |
| MAY 03... | 1145 | 4.9                                  | 755                                | 9.0                            | 91  | 6.9   | 113   | 15.4                              | .72  | .99   | E.03                                    | --                                      | .34  |
| JUN 04... | 1400 | 3.8                                  | 756                                | 7.3                            | 81  | 7.2   | 187   | 20.2                              | 2.3  | 2.6   | .40                                     | .56                                     | .58  |
| JUL 23... | 1100 | .46                                  | 751                                | 6.7                            | 80  | 7.0   | 188   | 23.5                              | .87  | 1.1   | E.04                                    | --                                      | .59  |
| AUG 30... | 1030 | 12                                   | 754                                | 7.1                            | 84  | 6.6   | 136   | 23.0                              | 1.4  | 1.8   | .47                                     | .73                                     | .74  |

| Date      | Nitrite water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd mg/L (00605) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Aluminum, water, unfltrd recoverable, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recoverable, ug/L (01034) | Cobalt water, unfltrd recoverable, ug/L (01037) |
|-----------|---|--|---|---|--|---|--|---|--|------------------------------------|-------------------------------------|--|---|
| OCT 03... | <.008                                   | --   | --  | E.01  | <.04                                   | E.02                                    | --   | --  | --   | --                                 | --                                  | --   | --  |
| DEC 11... | <.008                                   | --   | --  | E.02  | .06                                    | .10                                     | 1.5  | 1.2   | --   | --                                 | --                                  | --   | --  |
| FEB 20... | E.005                                   | --   | --  | <.02  | <.04                                   | E.03                                    | .53  | .45   | --   | --                                 | --                                  | --   | --  |
| APR 08... | <.008                                   | --   | --  | <.02  | <.04                                   | E.03                                    | --   | --  | 70   | <2                                 | <.04                                | <.8  | .400  |
| MAY 03... | E.004                                   | --   | --  | .07   | .08                                    | .16                                     | 1.1  | 1.3   | 760  | E1                                 | <.04                                | E.7  | .683  |
| JUN 04... | .024                                    | 1.9  | 2.2   | .05   | .06                                    | .16                                     | 2.9  | 3.1   | --   | --                                 | --                                  | --   | --  |
| JUL 23... | E.004                                   | --   | --  | .05   | .07                                    | .14                                     | 1.5  | 1.7   | --   | --                                 | --                                  | --   | --  |
| AUG 30... | .010                                    | .88  | 1.3   | .43   | .46                                    | .57                                     | 2.1  | 2.5   | --   | --                                 | --                                  | --   | --  |







0208524950 LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | p,p'-Methoxychlor, water, unfltrd ug/L (39480) | Parathion, water, fltrd, ug/L (39542) | Parathion, water, unfltrd ug/L (39540) | PCBs, water, unfltrd ug/L (39516) | Pebulate, water, fltrd 0.7u GF ug/L (82669) | Pendimethalin, water, fltrd 0.7u GF ug/L (82683) | Phorate water fltrd 0.7u GF ug/L (82664) | Phorate water unfltrd ug/L (39023) | Picloram, water, fltrd 0.7u GF ug/L (49291) | Prometon, water, fltrd, ug/L (04037) | Propyzamide, water, fltrd 0.7u GF ug/L (82676) | Propachlor, water, fltrd, ug/L (04024) | Propanil, water, fltrd 0.7u GF ug/L (82679) |
|-----------|--|---------------------------------------|--|-----------------------------------|---|--|--|------------------------------------|---|--------------------------------------|--|--|---|
| OCT 03... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| DEC 11... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| FEB 20... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| APR 08... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| MAY 03... | <.006  | <.010                                 | <.01                                   | <.1                               | <.004                                       | .024   | <.011                                    | <.02                               | <.02  | .01                                  | .249   | <.025                                  | <.011                                       |
| JUN 04... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| JUL 23... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| AUG 30... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |

| Date      | Propargite, water, fltrd 0.7u GF ug/L (82685) | Propham water fltrd 0.7u GF ug/L (49236) | Propiconazole, water, fltrd, ug/L (50471) | Propoxur, water, fltrd 0.7u GF ug/L (38538) | Siduron water, fltrd, ug/L (38548) | Simazine, water, fltrd, ug/L (04035) | Sulfometuron, water, fltrd, ug/L (50337) | Tebu-thiuron water fltrd 0.7u GF ug/L (82670) | Terbacil, water, fltrd 0.7u GF ug/L (82665) | Terbacil, water, fltrd, ug/L (04032) | Terbufos, water, fltrd 0.7u GF ug/L (82675) | Thio-bencarb water fltrd 0.7u GF ug/L (82681) | Toxaphene, water, unfltrd ug/L (39400) |
|-----------|---|--|---|---|------------------------------------|--------------------------------------|--|---|---|--------------------------------------|---|---|--|
| OCT 03... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| DEC 11... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| FEB 20... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| APR 08... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| MAY 03... | <.02  | <.010                                    | <.02                                      | <.008                                       | <.02                               | .648                                 | E.239                                    | <.02  | <.034                                       | <.010                                | <.02  | <.010   | <.1                                    |
| JUN 04... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| JUL 23... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |
| AUG 30... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                     |

| Date      | Tri-allate, water, fltrd 0.7u GF ug/L (82678) | Tribu-phos, water, unfltrd ug/L (39040) | Tri-clopyr, water, fltrd 0.7u GF ug/L (49235) | Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661) | Sus-pended sedi-ment concen-tration mg/L (80154) | Sus-pended sedi-ment dis-charge, tons/d (80155) |
|-----------|---|---|---|--|--|---|
| OCT 03... | --  | --                                      | --  | --   | 7  | .01   |
| DEC 11... | --  | --                                      | --  | --   | 23   | .12   |
| FEB 20... | --  | --                                      | --  | --   | 5  | .01   |
| APR 08... | --  | --                                      | --  | --   | 7  | .00   |
| MAY 03... | <.002   | <.02                                    | .37   | <.009  | 41   | .55   |
| JUN 04... | --  | --                                      | --  | --   | 117  | 1.2   |
| JUL 23... | --  | --                                      | --  | --   | 27   | .03   |
| AUG 30... | --  | --                                      | --  | --   | 109  | 3.6   |

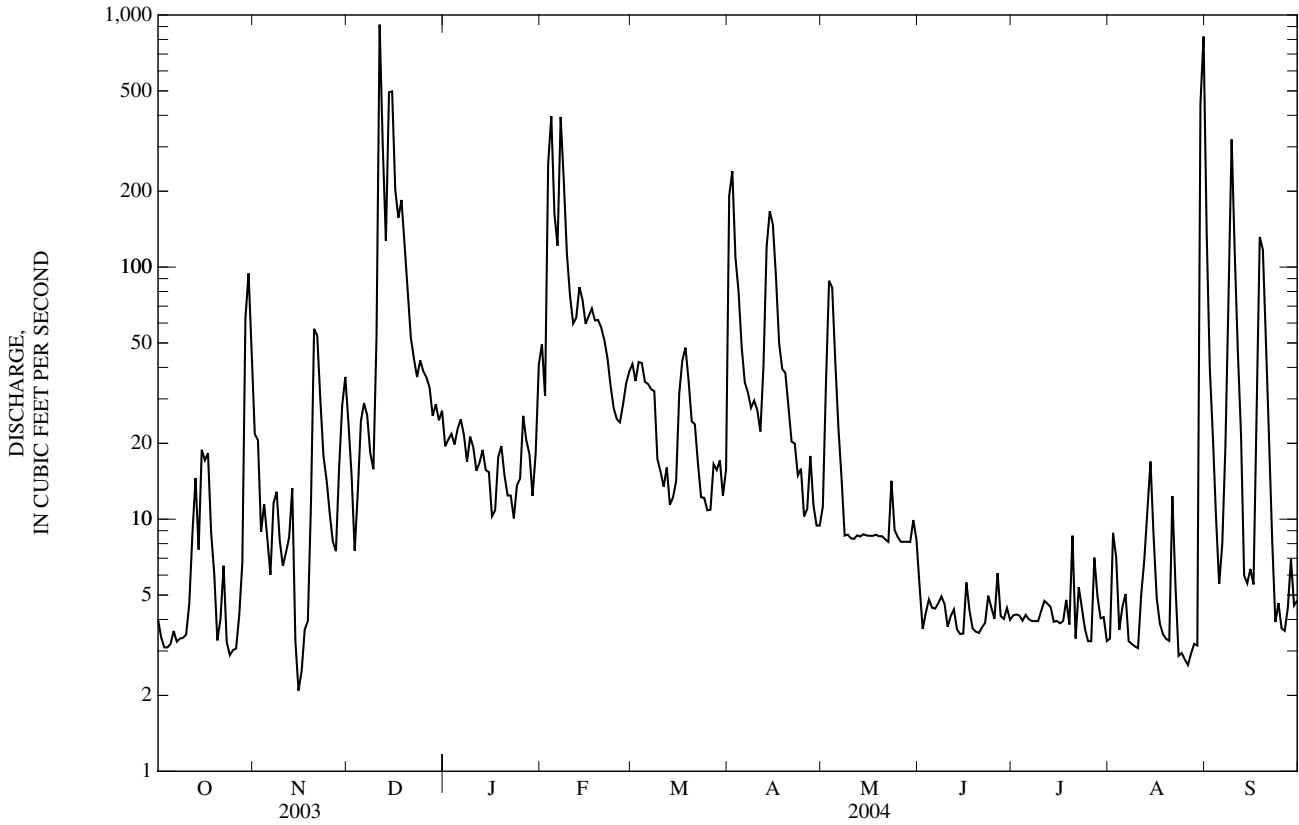




0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1996 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 67,915.9               |        | 13,743.5            |        | 80.6                    |              |
| ANNUAL MEAN              | 186                    |        | 37.6                |        | 3.39                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 224                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 3.39                    | 2002         |
| HIGHEST DAILY MEAN       | 4,370                  | Mar 20 | 916                 | Dec 11 | 10,300                  | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 2.1                    | Nov 15 | 2.1                 | Nov 15 | 0.41                    | Nov 22, 1998 |
| ANNUAL SEVEN-DAY MINIMUM | 3.3                    | Oct 2  | 2.9                 | Aug 23 | 0.51                    | Sep 7, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 1,790               | Aug 30 | 16,600*                 | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 7.97                | Aug 30 | 17.27                   | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.97                | Sep 5  | NOT DETERMINED*         |              |
| 10 PERCENT EXCEEDS       | 405                    |        | 78                  |        | 132                     |              |
| 50 PERCENT EXCEEDS       | 40                     |        | 12                  |        | 7.2                     |              |
| 90 PERCENT EXCEEDS       | 7.6                    |        | 3.5                 |        | 1.7                     |              |

\* See REMARKS.  
e Estimated.



0208524975 LITTLE RIVER BELOW LITTLE RIVER TRIBUTARY AT FAIRNTOSH, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--June 1995 to current year.

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrate water, fltrd, mg/L as N (00618) | Nitrite + nitrate water fltrd, mg/L as N (00631) |
|-----------|------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|-----------------------------------|--|---|---|---|--|
| OCT 03... | 1245 | 3.9                                  | 758                                | 7.8                            | 84  | 6.9   | 79  | 19.1                              | .42  | .46   | .05                                     | --                                      | .21  |
| DEC 11... | 1230 | 1,170                                | 749                                | 11.6                           | 106   | 7.1   | 76  | 10.4                              | .61  | .52   | E.02                                    | .29                                     | .31  |
| FEB 20... | 1215 | 57                                   | 759                                | 14.8                           | 122   | 7.2   | 80  | 6.8                               | .38  | .46   | <.04                                    | --                                      | .35  |
| APR 08... | 1315 | 28                                   | 742                                | 10.7                           | 109   | 7.5   | 89  | 14.9                              | .26  | .39   | <.04                                    | --                                      | .24  |
| MAY 03... | 1215 | 72                                   | 755                                | 7.7                            | 78  | 7.2   | 102   | 15.7                              | .41  | .55   | <.04                                    | --                                      | .22  |
| JUN 04... | 1145 | 4.5                                  | 755                                | 6.0                            | 71  | 6.8   | 101   | 22.9                              | .37  | .52   | .09                                     | --                                      | .14  |
| JUL 23... | 1015 | 4.2                                  | 751                                | 5.6                            | 71  | 6.9   | 117   | 26.3                              | .52  | .69   | .07                                     | --                                      | .25  |
| AUG 30... | 1415 | 110                                  | 754                                | 7.5                            | 88  | 6.6   | 81  | 23.0                              | 1.0  | 1.4   | .27                                     | --                                      | .35  |

| Date      | Nitrite water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd mg/L (00605) | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Suspended sediment concentration mg/L (80154) | Suspended sediment discharge, tons/d (80155) |
|-----------|---|--|---|--|--|---|--|---|---|--|
| OCT 03... | E.004                                   | .37  | .41   | E.01   | E.02                                   | E.02                                    | .64  | .68   | 3   | .03  |
| DEC 11... | .014                                    | --   | --  | <.02   | <.04                                   | E.03                                    | .91  | .82   | 5   | 16   |
| FEB 20... | E.005                                   | --   | --  | <.02   | <.04                                   | E.03                                    | .73  | .82   | 5   | .77  |
| APR 08... | <.008                                   | --   | --  | <.02   | <.04                                   | E.02                                    | .51  | .64   | 4   | .30  |
| MAY 03... | <.008                                   | --   | --  | <.02   | <.04                                   | .05                                     | .63  | .77   | 49  | 9.5  |
| JUN 04... | E.005                                   | .28  | .43   | <.02   | <.04                                   | E.04                                    | .51  | .66   | 8   | .10  |
| JUL 23... | E.004                                   | .45  | .62   | .03  | .05                                    | .08                                     | .77  | .94   | 16  | .18  |
| AUG 30... | E.005                                   | .77  | 1.2   | .32  | .34                                    | .45                                     | 1.4  | 1.8   | 266   | 79   |

## 02085500 FLAT RIVER AT BAHAMA, NC

LOCATION.--Lat 36°10'58", long 78°52'44", Durham County, Hydrologic Unit 03020201, on right bank 0.5 mi upstream from Lake Michie, 1.2 mi upstream from bridge on Secondary Road 1616, 1.2 mi north of Bahama, and 1.5 mi upstream from Dial Creek.

DRAINAGE AREA.--149 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1925 to current year.

REVISED RECORDS.--WSP 1333: 1926, 1928(M), 1938, 1946. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 346.85 ft above NGVD of 1929. Prior to Oct. 22, 1925, nonrecording gage at present site at 346.27 ft. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair except those above 150 ft<sup>3</sup>/s, which are poor. Prior to December 1962, some diurnal fluctuation and infrequent regulation at low flow caused by small mill 5 mi upstream. Maximum discharge for period of record from rating curve extended above 18,000 ft<sup>3</sup>/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 17.26 ft, from high-water mark inside gage shelter. Minimum discharge for period of record also occurred June 26, July 22, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 60    | 77    | 88    | 90    | 120   | 70    | 866   | 61    | 41    | 10    | 34      | 216   |
| 2     | 57    | 66    | 74    | 86    | 104   | 68    | 370   | 68    | 33    | 7.7   | 193     | 106   |
| 3     | 55    | 61    | 66    | 85    | 597   | 72    | 183   | 304   | 30    | 7.0   | 565     | 70    |
| 4     | 53    | 57    | 63    | 85    | 547   | 73    | 137   | 161   | 29    | 7.2   | 122     | 50    |
| 5     | 51    | 55    | 90    | 87    | 244   | 68    | 115   | 109   | 168   | 8.0   | 37      | 39    |
| 6     | 50    | 56    | 133   | 97    | 204   | 66    | 103   | 85    | 65    | 6.9   | 52      | 35    |
| 7     | 49    | 57    | 100   | 92    | 679   | 65    | 96    | 72    | 34    | 5.9   | 37      | 76    |
| 8     | 48    | 66    | 82    | 82    | 311   | 59    | 91    | 63    | 23    | 5.2   | 22      | 282   |
| 9     | 54    | 59    | 73    | 80    | 187   | 56    | 87    | 59    | 22    | 4.1   | 14      | 539   |
| 10    | 63    | 56    | 137   | 83    | 152   | 54    | 81    | 55    | 16    | 3.4   | 9.9     | 134   |
| 11    | 66    | 53    | 1,630 | 80    | 129   | 52    | 79    | 51    | 14    | 2.8   | 7.9     | 61    |
| 12    | 76    | 53    | 361   | 78    | 118   | 51    | 96    | 48    | 20    | 2.6   | 9.3     | 41    |
| 13    | 62    | 51    | 200   | 83    | 157   | 49    | 396   | 46    | 27    | 2.6   | 16      | 33    |
| 14    | 56    | 48    | 1,020 | 85    | 127   | 47    | 362   | 44    | 17    | 3.3   | 743     | 29    |
| 15    | 76    | 47    | 696   | 81    | 109   | 47    | 304   | 42    | 14    | 2.5   | 472     | 28    |
| 16    | 86    | 47    | 319   | 77    | 113   | 56    | 171   | 41    | 14    | 1.9   | 139     | 37    |
| 17    | 61    | 47    | 301   | 73    | 127   | 106   | 130   | 75    | 15    | 1.7   | 61      | 37    |
| 18    | 53    | 49    | 401   | 78    | 113   | 98    | 114   | 65    | 15    | 2.3   | 39      | 353   |
| 19    | 49    | 69    | 225   | 97    | 124   | 72    | 104   | 47    | 12    | 2.1   | 29      | 215   |
| 20    | 48    | 256   | 168   | 89    | 118   | 63    | 95    | 43    | 9.2   | 3.3   | 24      | 77    |
| 21    | 46    | 129   | 139   | 78    | 102   | 58    | 88    | 40    | 7.3   | 1.9   | 19      | 44    |
| 22    | 46    | 90    | 125   | 74    | 87    | 54    | 82    | 38    | 6.4   | 3.6   | 17      | 35    |
| 23    | 43    | 75    | 118   | 74    | 75    | 50    | 76    | 36    | 6.7   | 5.3   | 15      | 30    |
| 24    | 42    | 67    | 118   | 72    | 73    | 48    | 71    | 37    | 8.3   | 5.5   | 13      | 26    |
| 25    | 41    | 64    | 125   | 72    | 69    | 46    | 68    | 34    | 7.9   | 8.7   | 12      | 23    |
| 26    | 42    | 64    | 113   | 77    | 65    | 46    | 68    | 30    | 9.4   | 8.2   | 10      | 22    |
| 27    | 45    | 61    | 104   | 81    | 66    | 45    | 77    | 41    | 10    | 5.3   | 8.7     | 22    |
| 28    | 52    | 61    | 101   | 77    | 82    | 45    | 79    | 58    | 12    | 5.7   | 7.9     | 24    |
| 29    | 250   | 167   | 96    | 76    | 80    | 44    | 65    | 40    | 15    | 18    | 7.4     | 32    |
| 30    | 185   | 124   | 96    | 90    | ---   | 43    | 61    | 36    | 12    | 166   | 1,820   | 33    |
| 31    | 97    | ---   | 94    | 150   | ---   | 48    | ---   | 40    | ---   | 44    | 1,670   | ---   |
| TOTAL | 2,062 | 2,232 | 7,456 | 2,609 | 5,079 | 1,819 | 4,715 | 1,969 | 713.2 | 362.7 | 6,226.1 | 2,749 |
| MEAN  | 66.5  | 74.4  | 241   | 84.2  | 175   | 58.7  | 157   | 63.5  | 23.8  | 11.7  | 201     | 91.6  |
| MAX   | 250   | 256   | 1,630 | 150   | 679   | 106   | 866   | 304   | 168   | 166   | 1,820   | 539   |
| MIN   | 41    | 47    | 63    | 72    | 65    | 43    | 61    | 30    | 6.4   | 1.7   | 7.4     | 22    |
| CFSM  | 0.45  | 0.50  | 1.61  | 0.56  | 1.18  | 0.39  | 1.05  | 0.43  | 0.16  | 0.08  | 1.35    | 0.61  |
| IN.   | 0.51  | 0.56  | 1.86  | 0.65  | 1.27  | 0.45  | 1.18  | 0.49  | 0.18  | 0.09  | 1.55    | 0.69  |

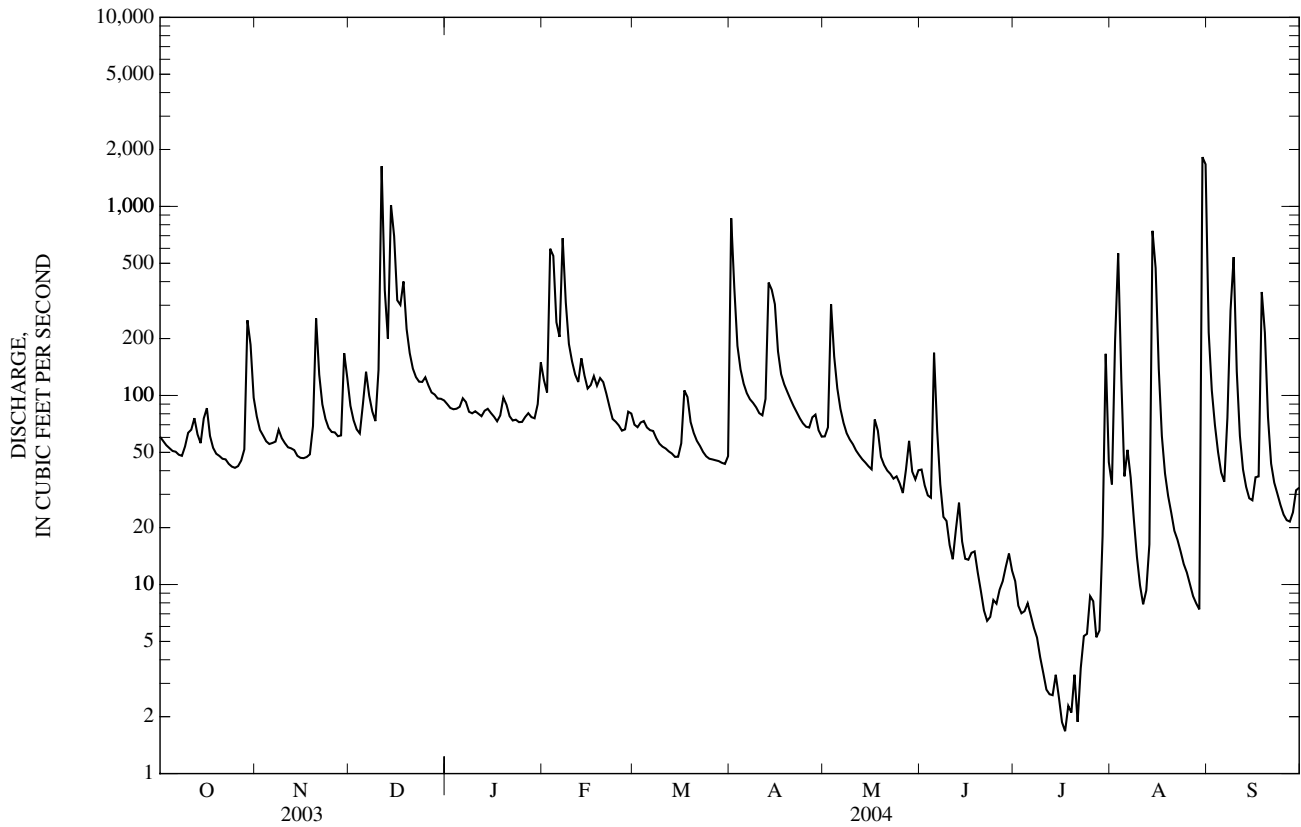
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 68.0   | 94.5   | 132    | 219    | 270    | 288    | 225    | 114    | 80.4   | 85.9   | 75.2   | 86.8   |
| MAX  | 561    | 489    | 421    | 761    | 758    | 948    | 656    | 573    | 551    | 798    | 431    | 984    |
| (WY) | (1972) | (1986) | (1973) | (1936) | (1998) | (1998) | (2003) | (1978) | (1938) | (1975) | (1939) | (1996) |
| MIN  | 1.24   | 0.71   | 1.81   | 4.29   | 39.4   | 58.7   | 31.1   | 19.3   | 3.85   | 1.68   | 2.93   | 0.71   |
| (WY) | (1942) | (1934) | (1934) | (1934) | (2002) | (2004) | (1942) | (2002) | (2002) | (2002) | (1977) | (1968) |

02085500 FLAT RIVER AT BAHAMA, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1925 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 108,832                |        | 37,992.0            |        | 144                     |              |
| ANNUAL MEAN              | 298                    |        | 104                 |        | 347                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2003                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 25.2                    |              |
| HIGHEST DAILY MEAN       | 5,680                  | Mar 20 | 1,820               | Aug 30 | 21,800                  | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 24                     | Aug 30 | 1.7                 | Jul 17 | 0.17                    | Jun 25, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 29                     | Aug 24 | 2.2                 | Jul 15 | 0.24                    | Jun 19, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 5,880               | Aug 30 | 33800*                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 7.67                | Aug 30 | 17.26*                  | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.5                 | Jul 17 | 0.15*                   | Jun 25, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.00                   |        | 0.697               |        | 0.969                   |              |
| ANNUAL RUNOFF (INCHES)   | 27.17                  |        | 9.49                |        | 13.17                   |              |
| 10 PERCENT EXCEEDS       | 675                    |        | 184                 |        | 282                     |              |
| 50 PERCENT EXCEEDS       | 105                    |        | 62                  |        | 50                      |              |
| 90 PERCENT EXCEEDS       | 47                     |        | 9.1                 |        | 6.9                     |              |

\* See REMARKS.



02085500 FLAT RIVER AT BAHAMA, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment and to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic-chemical data and trace-metal data were analyzed by the city of Durham's Brown Water Treatment Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Color, water, fltrd, Pt-Co units (00080) | Barometric pressure, mm Hg (00025)   | Dissolved oxygen, mg/L (00300)     | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400)      | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                 | Hardness, water, mg/L as CaCO3 (00900)  | Calcium water, fltrd, mg/L (00915)      | Magnesium, water, fltrd, mg/L (00925)            | Potassium, water, fltrd, mg/L (00935)   |  |
|-----------|------|--------------------------------------|--|--------------------------------------|------------------------------------|---|--|---|---|---|---|--|---|--|
| Date      |      | Sodium, water, fltrd, mg/L (00930)   | Chloride, water, fltrd, mg/L (00940)     | Fluoride, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945)              | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, fltrd, mg/L as N (00623)        | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrate water, fltrd, mg/L as N (00618) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) |
| OCT 03... | 1430 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| DEC 11... | 1345 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| FEB 20... | 1415 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| APR 08... | 1515 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| MAY 03... | 1330 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| 03...     | 1335 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| JUN 04... | 1230 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| JUL 23... | 1400 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| AUG 30... | 1215 |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| OCT 03... |      |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| DEC 11... |      |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| FEB 20... |      |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| APR 08... |      |                                      |  |                                      |                                    |   |  |   |   |   |   |  |   |  |
| MAY 03... | 4.70 | 5.34                                 | <.2                                      | 11.5                                 | 2.9                                | 57  | --   | 2.1   | .072  | .38                                     | .384                                    | .009   | --                                      |  |
| 03...     | --   | --                                   | --                                       | --                                   | --                                 | --  | --   | .50   | .07   | .35                                     | .36                                     | .009   | --                                      | .44  |
| JUN 04... | --   | --                                   | --                                       | --                                   | --                                 | --  | --   | .29   | .39   | .07                                     | --                                      | .21  | <.008                                   | .22  |
| JUL 23... | --   | --                                   | --                                       | --                                   | --                                 | --  | --   | .31   | .40   | E.04                                    | --                                      | .10  | <.008                                   | --   |
| AUG 30... | --   | --                                   | --                                       | --                                   | --                                 | --  | --   | .32   | .64   | <.04                                    | --                                      | .15  | <.008                                   | --   |

## 02085500 FLAT RIVER AT BAHAMA, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Organic nitrogen, water, unfltrd mg/L (00605) | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Organic carbon, water, unfltrd mg/L (00680) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) |
|-----------|---|--|--|---|--|---|---|---|------------------------------------|-------------------------------------|---|--|---|
| OCT 03... | --  | E.01   | <.04                                   | E.02                                    | .48  | .50   | --  | --  | --                                 | --                                  | --  | --   | --  |
| DEC 11... | --  | E.01   | .06                                    | .18                                     | 1.9  | 1.7   | --  | --  | --                                 | --                                  | --  | --   | --  |
| FEB 20... | --  | <.02   | <.04                                   | .04                                     | .54  | .60   | --  | --  | --                                 | --                                  | --  | --   | --  |
| APR 08... | --  | <.02   | <.04                                   | E.03                                    | .35  | .42   | --  | --  | --                                 | --                                  | --  | --   | --  |
| MAY 03... | 2.0   | E.004  | --                                     | .168                                    | --   | 2.5   | 13.6  | 1,260   | <2                                 | .04                                 | 1.3   | 1.54   | 3.8   |
| MAY 03... | 1.1   | <.02   | <.04                                   | .18                                     | .86  | 1.5   | --  | --  | --                                 | --                                  | --  | --   | --  |
| JUN 04... | .32   | E.01   | <.04                                   | .04                                     | .50  | .59   | --  | --  | --                                 | --                                  | --  | --   | --  |
| JUL 23... | --  | <.02   | <.04                                   | E.03                                    | .41  | .50   | --  | --  | --                                 | --                                  | --  | --   | --  |
| AUG 30... | --  | <.02   | <.04                                   | .12                                     | .47  | .79   | --  | --  | --                                 | --                                  | --  | --   | --  |

| Date      | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration mg/L (80154) | Suspended sediment discharge, tons/d (80155) |
|-----------|---|---|--|---|---|---|---------------------------------------|---|---|---|--|
| OCT 03... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 4   | .58  |
| DEC 11... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 123   | 442  |
| FEB 20... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 8   | 2.5  |
| APR 08... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 8   | 2.0  |
| MAY 03... | 3,070   | 3.18  | 278  | E.01  | <.2   | 1.11  | E.2                                   | <.16  | 12  | 136   | 162  |
| MAY 03... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | --  | --   |
| JUN 04... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 17  | 1.4  |
| JUL 23... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 10  | .12  |
| AUG 30... | --  | --  | --   | --  | --  | --  | --                                    | --  | --  | 124   | 14   |

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°09'03", long 78°49'48", Durham County, Hydrologic Unit 03020201, at dam 3.0 mi southeast of Bahama.

DRAINAGE AREA.--167 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098) | Trans-parency Secchi disc, meters (00078) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|-------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|--|---|---|------------------------------------|---|------------------------------------|--|
| OCT   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 29... | 0930 | 75                                       | 1.0                             | .80                                       | 752                                  | 5.0                             | 53   | 6.8   | 68  | 16.8                               | 21                                      | 5.06                               | 2.14                                   |
| 29... | 0935 | --                                       | 6.0                             | --  | 752                                  | 5.1                             | 53   | 6.8   | 68  | 16.7                               | --                                      | --                                 | --                                     |
| 29... | 0940 | --                                       | 11.0                            | --  | 752                                  | .2                              | 2  | 6.8   | 82  | 14.4                               | --                                      | --                                 | --                                     |
| APR   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 07... | 0930 | 38                                       | 1.0                             | .70                                       | 745                                  | 7.9                             | 77   | 7.2   | 78  | 13.0                               | 25                                      | 5.72                               | 2.52                                   |
| 07... | 0935 | --                                       | 6.0                             | --  | 745                                  | 7.2                             | 67   | 7.2   | 76  | 10.8                               | --                                      | --                                 | --                                     |
| 07... | 0940 | --                                       | 13.3                            | --  | 745                                  | 6.9                             | 58   | 6.5   | 76  | 7.2                                | --                                      | --                                 | --                                     |
| JUN   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 29... | 0900 | 20                                       | 1.0                             | 1.30                                      | 757                                  | 6.5                             | 82   | 7.5   | 81  | 27.4                               | 24                                      | 5.73                               | 2.44                                   |
| 29... | 0905 | --                                       | 6.0                             | --  | 757                                  | .1                              | 2  | 6.6   | 88  | 20.8                               | --                                      | --                                 | --                                     |
| 29... | 0910 | --                                       | 11.0                            | --  | 757                                  | .5                              | 5  | 6.4   | 79  | 8.6                                | --                                      | --                                 | --                                     |
| AUG   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 18... | 0930 | 25                                       | 1.0                             | .70                                       | 759                                  | 1.8                             | 21   | 6.7   | 100   | 23.9                               | 21                                      | 4.90                               | 2.11                                   |
| 18... | 0935 | --                                       | 6.0                             | --  | 759                                  | 1.8                             | 20   | 6.7   | 69  | 19.8                               | --                                      | --                                 | --                                     |
| 18... | 0940 | --                                       | 12.0                            | --  | 759                                  | .3                              | 2  | 6.7   | 86  | 9.5                                | --                                      | --                                 | --                                     |

| Date  | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd, field, mg/L as CaCO3 (00419) | Bicar-bonate, wat unfltrd, field, mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|-------|--|------------------------------------|--|--|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--|---|---|--|---|
| OCT   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 29... | 2.65                                   | 3.95                               | 21   | 26   | 4.33                                  | <.2                                   | 10.6                               | 3.5                                | 57   | .61   | .173                                    | .090   | .010                                    |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .59   | .186                                    | .097   | .010                                    |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .85   | .419                                    | .020   | .003                                    |
| APR   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 07... | 1.59                                   | 6.40                               | 21   | 26   | 7.15                                  | <.2                                   | 9.85                               | 3.7                                | 55   | .45   | E.009                                   | .206   | .002                                    |
| 07... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .43   | .042                                    | .322   | E.001                                   |
| 07... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .32   | <.010                                   | .459   | <.002                                   |
| JUN   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 29... | 1.57                                   | 6.03                               | 21   | 26   | 6.29                                  | <.2                                   | 10.2                               | 3.7                                | 57   | .43   | <.010                                   | <.016  | <.002                                   |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .38   | E.009                                   | <.016  | <.002                                   |
| 29... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .37   | .038                                    | .394   | .007                                    |
| AUG   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 18... | 1.85                                   | 4.60                               | 23   | 28   | 5.23                                  | <.2                                   | 10.0                               | 3.5                                | 54   | .60   | .046                                    | E.012  | E.001                                   |
| 18... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .77   | .160                                    | .062   | .005                                    |
| 18... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .60   | .250                                    | .204   | .007                                    |



02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

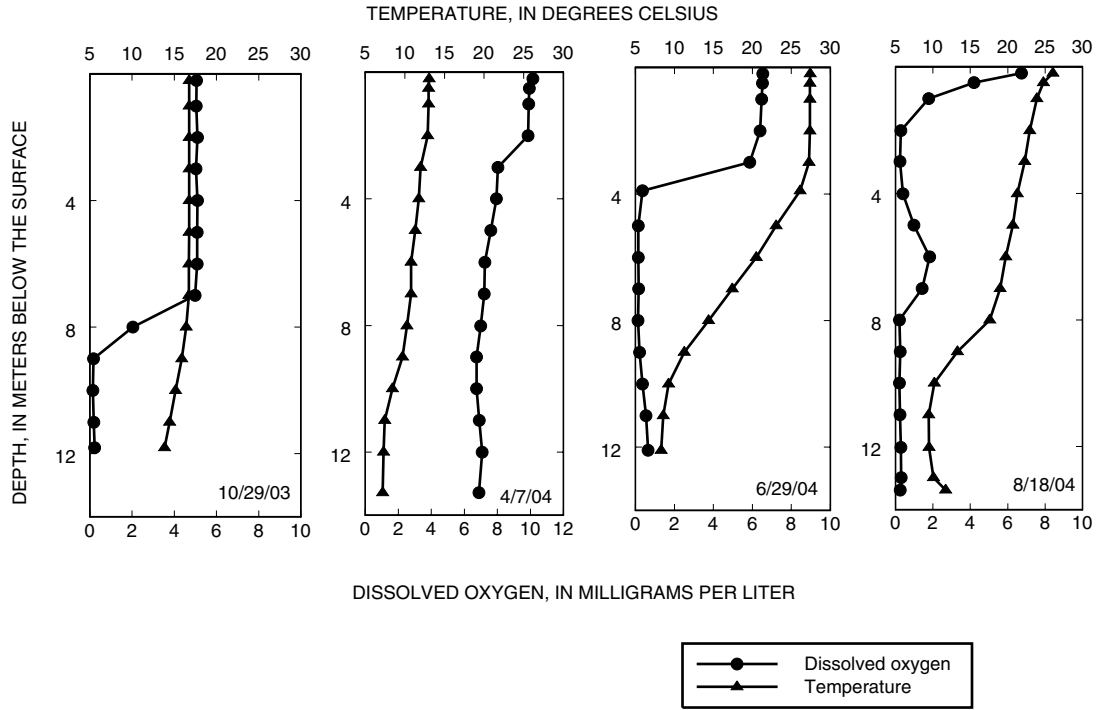
| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 29... | <.006  | .037                                    | 7.8   | 1.1   | <.1   | 134   | <2                                 | <.04                                | <.8   | .289   | 1.8   | 730   | .44   |
| 29... | <.006  | .036                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 770   | --  |
| 29... | E.003  | .049                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 660   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 07... | <.006  | .028                                    | 6.4   | 8.0   | <.1   | 72  | <2                                 | <.04                                | <.8   | .394   | 1.0   | 480   | .43   |
| 07... | <.006  | .034                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 670   | --  |
| 07... | <.006  | .027                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 630   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 29... | <.006  | .023                                    | 6.7   | 6.0   | E.9   | --  | --                                 | --                                  | --  | --   | --  | 80  | --  |
| 29... | <.006  | .024                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 960   | --  |
| 29... | E.003  | .025                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 880   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 18... | <.006  | .028                                    | 8.3   | E7.3  | <.1   | --  | --                                 | --                                  | --  | --   | --  | 250   | --  |
| 18... | E.004  | .055                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 1,450   | --  |
| 18... | .007   | .046                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 1,950   | --  |

| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 29... | 169  | E.02  | E.1   | E.58  | <.4                                   | <.16  |
| 29... | 173  | --  | --  | --  | --                                    | --  |
| 29... | 1,650  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 07... | 47.0   | <.02  | <.2   | .37   | <.4                                   | <.16  |
| 07... | 82.7   | --  | --  | --  | --                                    | --  |
| 07... | 96.8   | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 29... | 25.5   | --  | --  | --  | --                                    | --  |
| 29... | 574  | --  | --  | --  | --                                    | --  |
| 29... | 461  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 18... | 79.1   | --  | --  | --  | --                                    | --  |
| 18... | 593  | --  | --  | --  | --                                    | --  |
| 18... | 857  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

02086490 LAKE MICHIE AT DAM NEAR BAHAMA, NC—Continued



## 02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC

LOCATION.--Lat 36°08'55", long 78°49'44", Durham County, Hydrologic Unit 03020201, on right bank 900 ft downstream from Durham municipal dam, 3 mi southeast of Bahama, and 5 mi upstream from confluence with Eno River.

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

PERIOD OF RECORD.--September 1927 to September 1959, August 1961 to September 1966, October 1982 to September 1990, October 1992 to September 1993, October 2000 to current year.

GAGE.--Water-stage recorder. Datum of gage is 256.6 ft above NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Flow regulated by Lake Michie (station 02086490). An average of 28.2 ft<sup>3</sup>/s was diverted above station from Lake Michie and Little River Lake. About 13.2 ft<sup>3</sup>/s of treated effluent was returned to tributaries downstream. No flow also occurred on Sept. 4-14, 1938 (result of construction work upstream), Sept. 26-30, 1965, and Oct. 1-3, 5, 1988. No flow occurs many times most years.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 6, 1996, reached a stage of 23.48 ft, present datum, from floodmarks; discharge, 20,900 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG      | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|----------|-------|
| 1     | 40    | 79    | 98    | 71    | 140   | 99    | 626   | 41    | 41    | 0.02 | 0.03     | 351   |
| 2     | 37    | 58    | 68    | 67    | 103   | 97    | 582   | 69    | 42    | 0.02 | 0.03     | 162   |
| 3     | 34    | 48    | 54    | 65    | 448   | 102   | 256   | 279   | 13    | 0.02 | 227      | 97    |
| 4     | 34    | 41    | 50    | 64    | 810   | 102   | 172   | 248   | 0.29  | 0.02 | 195      | 65    |
| 5     | 34    | 38    | 70    | 69    | e253  | 96    | 118   | 133   | 0.14  | 0.02 | 70       | 50    |
| 6     | 34    | 38    | 129   | 79    | e202  | 93    | 92    | 82    | 0.11  | 0.01 | 52       | 44    |
| 7     | 34    | 38    | 114   | 75    | e371  | 90    | 80    | 60    | 0.12  | 0.01 | 48       | 79    |
| 8     | 34    | 41    | 83    | 64    | e754  | 83    | 73    | 49    | 0.23  | 0.01 | 35       | 217   |
| 9     | 34    | 46    | 66    | 63    | e130  | 70    | 68    | 41    | 0.18  | 0.01 | 35       | 692   |
| 10    | 35    | 41    | 92    | 62    | 194   | 68    | 61    | 39    | 0.10  | 0.01 | 36       | 232   |
| 11    | 35    | 37    | 1,750 | 59    | 166   | 62    | 58    | 38    | 0.08  | 0.01 | 37       | 109   |
| 12    | 39    | 35    | 554   | e56   | 156   | 60    | 75    | 38    | 0.06  | 0.01 | 39       | 68    |
| 13    | 44    | 35    | 266   | e60   | 183   | 57    | 361   | 38    | 0.04  | 0.01 | 40       | 50    |
| 14    | 41    | 33    | 956   | e61   | 172   | 54    | 412   | 39    | 0.03  | 0.01 | 362      | 42    |
| 15    | 49    | 31    | 1,010 | e71   | 148   | 57    | 387   | 40    | 0.04  | 0.01 | 798      | 41    |
| 16    | 64    | 31    | 431   | e69   | 147   | 72    | 238   | 41    | 0.06  | 0.01 | 247      | 40    |
| 17    | 53    | 31    | 334   | e66   | 157   | 111   | 159   | 41    | 0.07  | 0.01 | 121      | 73    |
| 18    | 42    | 31    | 480   | e61   | 150   | 144   | 119   | 42    | 0.16  | 0.02 | 71       | 419   |
| 19    | 36    | 36    | 290   | 72    | e160  | 114   | 97    | 42    | 0.71  | 0.01 | 48       | 340   |
| 20    | 35    | 252   | 208   | 75    | e150  | 91    | 83    | 42    | 0.19  | 0.03 | 42       | 149   |
| 21    | 35    | 190   | 160   | 54    | e135  | 80    | 73    | 42    | 0.03  | 0.01 | 41       | 80    |
| 22    | 35    | 103   | 133   | 51    | e125  | 66    | 61    | 43    | 0.03  | 0.02 | 42       | 55    |
| 23    | 35    | 71    | 119   | 52    | e120  | 59    | 56    | 43    | 0.03  | 0.02 | 42       | 45    |
| 24    | 35    | 57    | 118   | 48    | 100   | 54    | 52    | 43    | 0.03  | 0.02 | 42       | 42    |
| 25    | 35    | 48    | 122   | 55    | 95    | 51    | 48    | 43    | 0.05  | 0.01 | 42       | 41    |
| 26    | 35    | 45    | 112   | 61    | 88    | 61    | 48    | 42    | 0.05  | 0.01 | 42       | e40   |
| 27    | 35    | 43    | 95    | 60    | 91    | 65    | 49    | 42    | 0.03  | 0.02 | 42       | e38   |
| 28    | 34    | 45    | 86    | 57    | 101   | 65    | 53    | 42    | 0.03  | 0.02 | 42       | e38   |
| 29    | 81    | 105   | 77    | 55    | 111   | 59    | 50    | 42    | 0.03  | 0.02 | 42       | e40   |
| 30    | 239   | 155   | 80    | 64    | ---   | 42    | 47    | 42    | 0.02  | 0.02 | 978      | 40    |
| 31    | 128   | ---   | 75    | 132   | ---   | 43    | ---   | 41    | ---   | 0.01 | 2,730    | ---   |
| TOTAL | 1,515 | 1,882 | 8,280 | 2,018 | 5,960 | 2,367 | 4,654 | 1,907 | 98.94 | 0.46 | 6,588.06 | 3,779 |
| MEAN  | 48.9  | 62.7  | 267   | 65.1  | 206   | 76.4  | 155   | 61.5  | 3.30  | 0.01 | 213      | 126   |
| MAX   | 239   | 252   | 1,750 | 132   | 810   | 144   | 626   | 279   | 42    | 0.03 | 2,730    | 692   |
| MIN   | 34    | 31    | 50    | 48    | 88    | 42    | 47    | 38    | 0.02  | 0.01 | 0.03     | 38    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1927 - 2004,<sup>@</sup> BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 64.2   | 97.8   | 142    | 211    | 287    | 316    | 273    | 122    | 80.7   | 89.9   | 89.4   | 76.2   |
| MAX  | 530    | 496    | 444    | 759    | 614    | 1,041  | 856    | 476    | 491    | 795    | 481    | 714    |
| (WY) | (1930) | (1986) | (2003) | (1937) | (1948) | (1993) | (2003) | (2003) | (1938) | (1938) | (1939) | (1945) |
| MIN  | 0.05   | 0.03   | 0.05   | 0.07   | 0.06   | 21.5   | 8.91   | 0.06   | 0.06   | 0.01   | 0.02   | 0.02   |
| (WY) | (1988) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2004) | (2002) | (2002) |

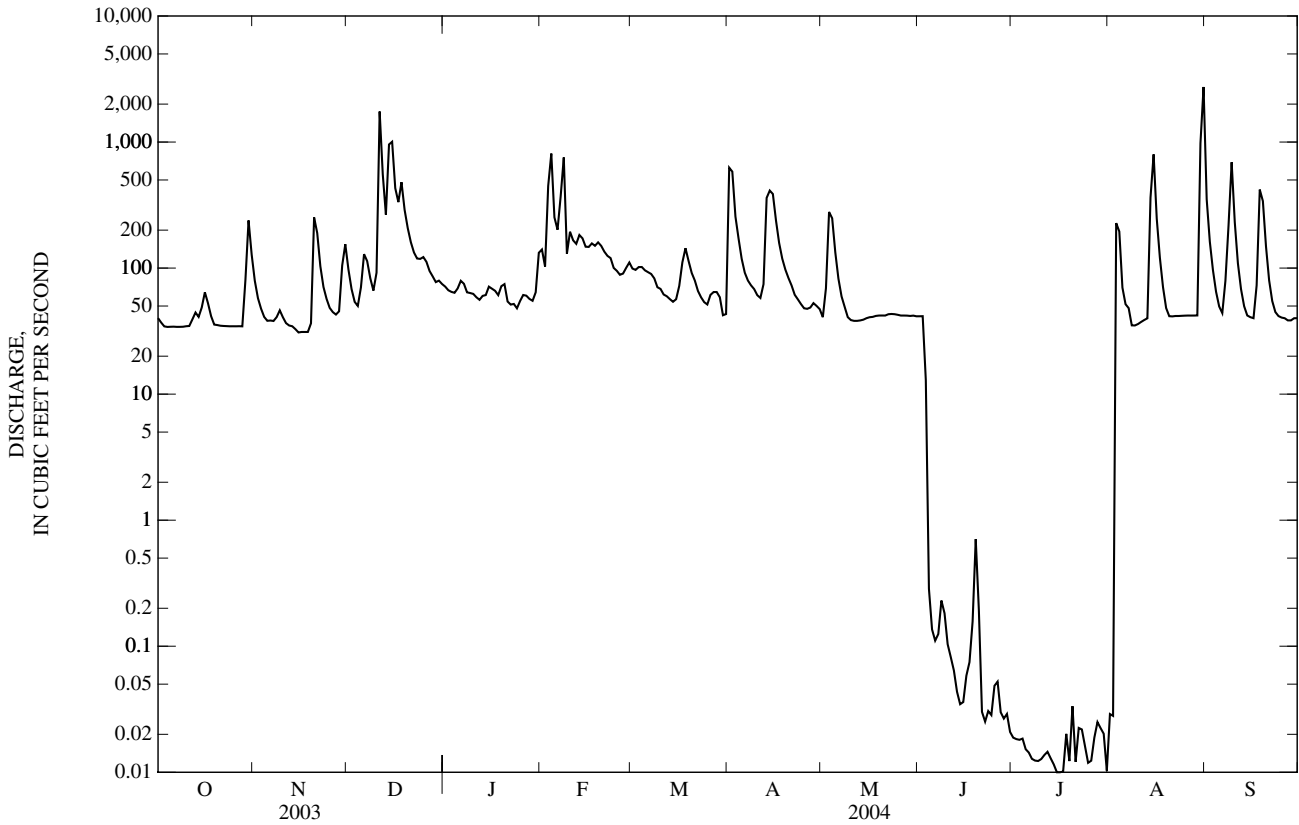
02086500 FLAT RIVER AT DAM NEAR BAHAMA, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1927 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 126,924                |        | 39,049.46           |        | 153                                  |              |
| ANNUAL MEAN              | 348                    |        | 107                 |        | 406                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2003                                 |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2002                                 |              |
| HIGHEST DAILY MEAN       | 5,320                  | Mar 20 | 2,730               | Aug 31 | 10,500                               | Oct 2, 1929  |
| LOWEST DAILY MEAN        | 31                     | Nov 15 | 0.01                | Jul 6  | 0.00                                 | Sep 4, 1938  |
| ANNUAL SEVEN-DAY MINIMUM | 32                     | Nov 12 | 0.01                | Jul 6  | 0.00                                 | Sep 4, 1938  |
| MAXIMUM PEAK FLOW        |                        |        | 5,840               | Aug 31 | 19,700                               | Jul 26, 1938 |
| MAXIMUM PEAK STAGE       |                        |        | 12.03               | Aug 31 | 19.50                                | Jul 26, 1938 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.00*               | Jul 14 | 0.00*                                | Sep 4, 1938  |
| ANNUAL RUNOFF (CFSM)     | 2.07                   |        | 0.635               |        | 0.912                                |              |
| ANNUAL RUNOFF (INCHES)   | 28.10                  |        | 8.65                |        | 12.38                                |              |
| 10 PERCENT EXCEEDS       | 851                    |        | 220                 |        | 310                                  |              |
| 50 PERCENT EXCEEDS       | 114                    |        | 54                  |        | 58                                   |              |
| 90 PERCENT EXCEEDS       | 37                     |        | 0.03                |        | 0.40                                 |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



## 0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC

LOCATION.--Lat 36°07'55", long 78°49'59", Durham County, Hydrologic Unit 03020201, on left bank at culvert on Secondary Road 1680, 1.5 mi southeast of Willardville.

DRAINAGE AREA.--1.14 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1988 to September 1990, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above NGVD of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good. No flow at times during most years. Maximum discharge for period of record, from rating curve extended above 70 ft<sup>3</sup>/s, on basis of computation of flow through culvert with road overflow. Maximum gage height for period of record from floodmarks.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|------|------|-------|-------|-------|-------|-------|-------|------|------|-------|-------|
| 1     | 0.01 | 0.08 | 0.10  | 0.37  | 0.67  | 0.62  | 2.0   | 0.40  | 0.15 | 0.06 | 0.04  | 0.25  |
| 2     | 0.01 | 0.06 | 0.08  | 0.39  | 0.63  | 0.66  | 1.1   | 3.4   | 0.12 | 0.05 | 0.07  | 0.13  |
| 3     | 0.02 | 0.08 | 0.06  | 0.39  | 4.1   | 0.71  | 0.75  | 6.6   | 0.10 | 0.05 | 0.17  | 0.06  |
| 4     | 0.03 | 0.12 | 0.10  | 0.39  | 2.2   | 0.66  | 0.63  | 1.6   | 0.19 | 0.04 | 0.03  | 0.03  |
| 5     | 0.05 | 0.14 | 0.46  | 0.41  | 1.2   | 0.62  | 0.53  | 0.80  | 0.16 | 0.03 | 0.05  | 0.02  |
| 6     | 0.08 | 0.23 | 0.29  | 0.39  | 2.7   | 0.63  | 0.48  | 0.55  | 0.14 | 0.02 | 0.06  | 0.08  |
| 7     | 0.12 | 0.09 | 0.19  | 0.35  | 5.7   | 0.57  | 0.47  | 0.43  | 0.13 | 0.00 | 0.01  | 0.17  |
| 8     | 0.20 | 0.11 | 0.15  | 0.35  | 1.7   | 0.55  | 0.46  | 0.36  | 0.30 | 0.00 | 0.01  | 0.51  |
| 9     | 0.20 | 0.09 | 0.13  | 0.39  | 1.1   | 0.52  | 0.42  | 0.32  | 0.23 | 0.00 | 0.01  | 0.26  |
| 10    | 0.17 | 0.09 | 2.2   | 0.37  | 0.92  | 0.52  | 0.39  | 0.29  | 0.17 | 0.00 | 0.01  | 0.10  |
| 11    | 0.15 | 0.09 | 4.1   | 0.36  | 0.77  | 0.52  | 0.39  | 0.26  | 0.19 | 0.00 | 0.01  | 0.06  |
| 12    | 0.06 | 0.12 | 1.0   | 0.37  | 1.0   | 0.52  | 0.73  | 0.25  | 0.20 | 0.00 | 0.09  | 0.07  |
| 13    | 0.08 | 0.15 | 0.66  | 0.39  | 1.2   | 0.48  | 1.2   | 0.24  | 0.14 | 0.00 | 0.14  | 0.08  |
| 14    | 0.17 | 0.16 | 7.2   | 0.36  | 0.91  | 0.48  | 1.3   | 0.22  | 0.14 | 0.00 | 0.82  | 0.12  |
| 15    | 0.13 | 0.19 | 2.1   | 0.38  | 0.82  | 0.58  | 0.92  | 0.21  | 0.12 | 0.00 | 0.48  | 0.16  |
| 16    | 0.06 | 0.19 | 1.0   | 0.34  | 0.89  | 0.92  | 0.70  | 0.19  | 0.16 | 0.00 | 0.26  | 0.13  |
| 17    | 0.06 | 0.22 | 1.3   | 0.33  | 0.93  | 1.1   | 0.60  | 0.18  | 0.14 | 0.00 | 0.11  | 2.3   |
| 18    | 0.08 | 0.19 | 1.1   | 0.50  | 0.95  | 0.85  | 0.53  | 0.17  | 0.11 | 0.00 | 0.07  | 4.2   |
| 19    | 0.07 | 0.74 | 0.80  | 0.46  | 1.2   | 0.76  | 0.46  | 0.16  | 0.08 | 0.00 | 0.04  | 0.74  |
| 20    | 0.09 | 0.79 | 0.64  | 0.41  | 0.96  | 0.67  | 0.43  | 0.15  | 0.07 | 0.12 | 0.03  | 0.25  |
| 21    | 0.11 | 0.26 | 0.53  | 0.39  | 0.84  | 0.65  | 0.41  | 0.14  | 0.06 | 0.00 | 0.27  | 0.15  |
| 22    | 0.13 | 0.17 | 0.51  | 0.39  | 0.70  | 0.56  | 0.38  | 0.13  | 0.08 | 0.04 | 0.30  | 0.10  |
| 23    | 0.13 | 0.14 | 0.48  | 0.38  | 0.65  | 0.52  | 0.34  | 0.66  | 0.11 | 0.03 | 0.10  | 0.07  |
| 24    | 0.13 | 0.13 | 0.54  | 0.39  | 0.64  | 0.52  | 0.33  | 0.38  | 0.10 | 0.02 | 0.05  | 0.05  |
| 25    | 0.15 | 0.10 | 0.48  | 0.35  | 0.58  | 0.52  | 0.31  | 0.21  | 0.07 | 0.01 | 0.04  | 0.04  |
| 26    | 0.20 | 0.09 | 0.44  | 0.35  | 0.56  | 0.51  | 0.32  | 0.18  | 0.21 | 0.01 | 0.03  | 0.04  |
| 27    | 0.20 | 0.09 | 0.43  | 0.35  | 0.70  | 0.50  | 0.34  | 0.17  | 0.11 | 0.04 | 0.03  | 0.07  |
| 28    | 0.17 | 0.15 | 0.39  | 0.37  | 0.76  | 0.49  | 0.27  | 0.14  | 0.11 | 0.07 | 0.02  | 0.20  |
| 29    | 0.51 | 0.16 | 0.39  | 0.43  | 0.67  | 0.48  | 0.26  | 0.12  | 0.10 | 0.05 | 0.03  | 0.08  |
| 30    | 0.16 | 0.13 | 0.41  | 0.66  | ---   | 0.49  | 0.26  | 0.31  | 0.07 | 0.03 | 6.4   | 0.06  |
| 31    | 0.09 | ---  | 0.39  | 0.86  | ---   | 0.57  | ---   | 0.21  | ---  | 0.01 | 1.2   | ---   |
| TOTAL | 3.82 | 5.35 | 28.65 | 12.62 | 36.65 | 18.75 | 17.71 | 19.43 | 4.06 | 0.68 | 10.98 | 10.58 |
| MEAN  | 0.12 | 0.18 | 0.92  | 0.41  | 1.26  | 0.60  | 0.59  | 0.63  | 0.14 | 0.02 | 0.35  | 0.35  |
| MAX   | 0.51 | 0.79 | 7.2   | 0.86  | 5.7   | 1.1   | 2.0   | 6.6   | 0.30 | 0.12 | 6.4   | 4.2   |
| MIN   | 0.01 | 0.06 | 0.06  | 0.33  | 0.56  | 0.48  | 0.26  | 0.12  | 0.06 | 0.00 | 0.01  | 0.02  |
| CFSM  | 0.11 | 0.16 | 0.81  | 0.36  | 1.11  | 0.53  | 0.52  | 0.55  | 0.12 | 0.02 | 0.31  | 0.31  |
| IN.   | 0.12 | 0.17 | 0.93  | 0.41  | 1.20  | 0.61  | 0.58  | 0.63  | 0.13 | 0.02 | 0.36  | 0.35  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1987 - 2004,<sup>@</sup> BY WATER YEAR (WY)

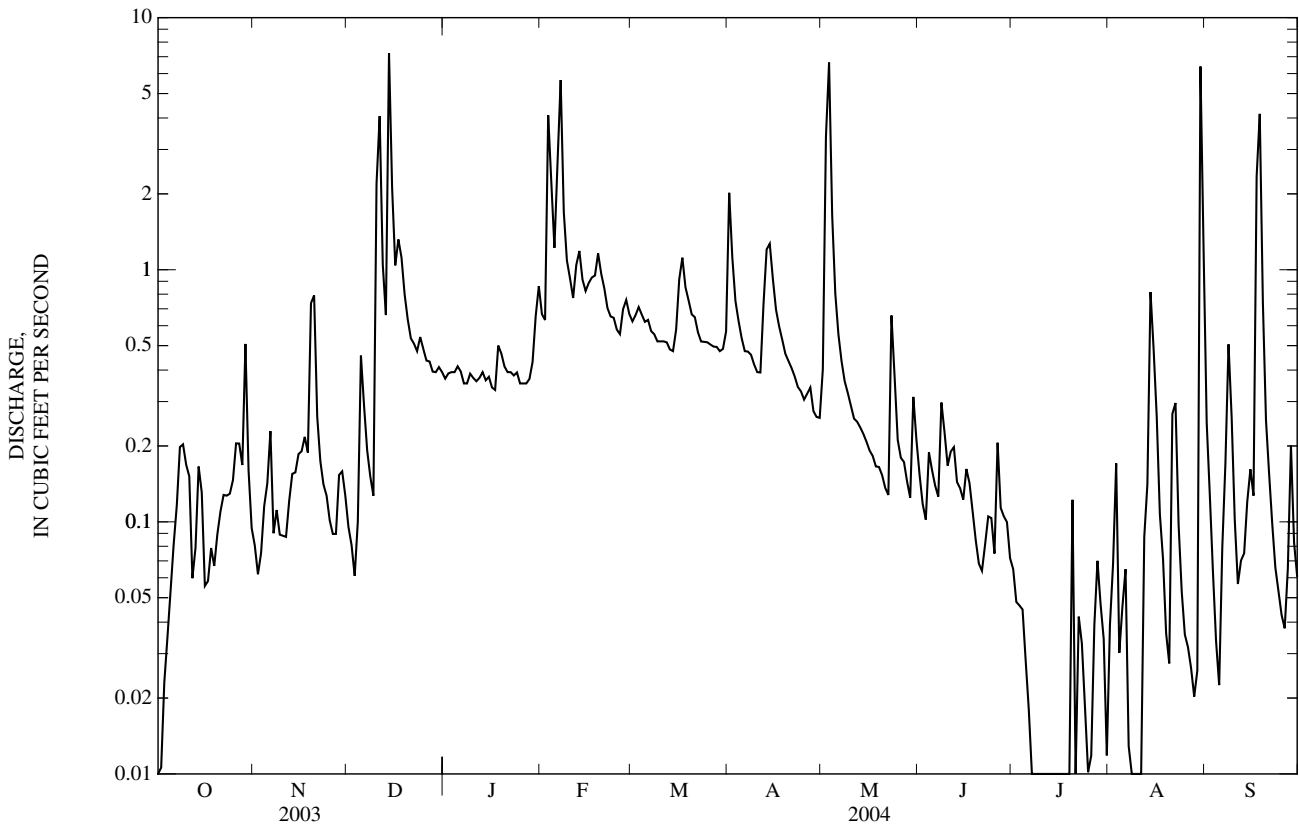
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.62   | 0.44   | 0.87   | 1.61   | 2.10   | 2.40   | 1.54   | 0.69   | 0.50   | 0.25   | 0.15   | 1.27   |
| MAX  | 4.01   | 1.27   | 3.26   | 3.17   | 5.41   | 8.30   | 5.04   | 2.20   | 4.07   | 1.26   | 0.50   | 8.60   |
| (WY) | (2003) | (1996) | (1990) | (1998) | (1998) | (1998) | (2003) | (1989) | (1995) | (1989) | (1989) | (1996) |
| MIN  | 0.01   | 0.06   | 0.01   | 0.16   | 0.27   | 0.36   | 0.06   | 0.01   | 0.05   | 0.00   | 0.00   | 0.00   |
| (WY) | (2002) | (2001) | (1989) | (2001) | (2002) | (2002) | (1995) | (2002) | (1988) | (1988) | (1988) | (1990) |

0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1987 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 530.08                 |        | 169.28              |        | 1.06                                 |              |
| ANNUAL MEAN              | 1.45                   |        | 0.46                |        | 0.16                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2.00                                 | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 0.16                                 | 2002         |
| HIGHEST DAILY MEAN       | 50                     | Apr 9  | 7.2                 | Dec 14 | 225                                  | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 0.01                   | Sep 1  | 0.00                | Jul 7  | 0.00                                 | Jun 22, 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 0.01                   | Sep 26 | 0.00                | Jul 7  | 0.00                                 | Jul 2, 1988  |
| MAXIMUM PEAK FLOW        |                        |        | 35                  | Aug 30 | 1410*                                | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 3.40                | Aug 30 | 7.77*                                | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.00*               | Oct 1  | 0.00*                                | Jun 15, 1988 |
| ANNUAL RUNOFF (CFSM)     | 1.27                   |        | 0.406               |        | 0.930                                |              |
| ANNUAL RUNOFF (INCHES)   | 17.30                  |        | 5.52                |        | 12.63                                |              |
| 10 PERCENT EXCEEDS       | 2.9                    |        | 0.91                |        | 1.9                                  |              |
| 50 PERCENT EXCEEDS       | 0.39                   |        | 0.22                |        | 0.21                                 |              |
| 90 PERCENT EXCEEDS       | 0.06                   |        | 0.03                |        | 0.00                                 |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.



0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1988-91, 1994 to current year

REMARKS.--Station operated to define the impacts of various land-use development on surface-water quality in the Upper Neuse River basin.

COOPERATION.--For the period February 1988 through June 1989 the inorganic chemical data and trace metal data were analyzed by the city of Durham's Brown Water Treatment Plant Laboratory.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrate, water, fltrd, mg/L as N (00618) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) |
|-----------|------|--------------------------------------|------------------------------------|--------------------------------|---|---|--|-----------------------------------|--|--|--|--|--|
| OCT 03... | 1100 | .03                                  | 758                                | 8.6                            | 79  | 6.0   | 88   | 11.4                              | E.10   | .14  | <.04                                     | --                                       | E.04   |
| DEC 11... | 1115 | 3.1                                  | 749                                | 12.1                           | 106   | 6.2   | 56   | 8.8                               | .94  | .76  | <.04                                     | .50                                      | .51  |
| FEB 20... | 1100 | 1.0                                  | 759                                | 14.8                           | 118   | 6.0   | 63   | 5.6                               | .11  | .13  | <.04                                     | --                                       | E.05   |
| APR 08... | 1100 | .47                                  | 742                                | 10.1                           | 98  | 7.1   | 71   | 13.0                              | .12  | .12  | <.04                                     | --                                       | E.03   |
| MAY 03... | 1045 | 7.2                                  | 755                                | 9.8                            | 97  | 6.6   | 49   | 14.7                              | .81  | .67  | <.04                                     | --                                       | E.06   |
| JUN 04... | 1500 | .35                                  | 756                                | 7.8                            | 85  | 7.3   | 94   | 19.0                              | .22  | .36  | .04                                      | --                                       | .26  |
| JUL 23... | 1300 | .03                                  | 751                                | 6.6                            | 79  | 7.2   | 93   | 23.4                              | .18  | .27  | <.04                                     | --                                       | .17  |
| AUG 30... | 0930 | 1.4                                  | 754                                | 7.4                            | 85  | 7.2   | 68   | 21.9                              | .21  | .64  | <.04                                     | --                                       | .09  |

| Date      | Nitrite water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd, mg/L (00605) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd, mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd, mg/L (00600) | Aluminum, water, unfltrd recoverable, ug/L (01105) | Arsenic, water, unfltrd, ug/L (01002) | Cadmium, water, unfltrd, ug/L (01027) | Chromium, water, unfltrd recoverable, ug/L (01034) | Cobalt, water, unfltrd recoverable, ug/L (01037) |
|-----------|---|--|--|---|--|--|--|--|--|---------------------------------------|---------------------------------------|--|--|
| OCT 03... | <.008                                   | --   | --   | <.02  | <.04                                   | <.04                                     | --   | --   | --   | --                                    | --                                    | --   | --   |
| DEC 11... | .008                                    | --   | --   | E.01  | .04                                    | .11                                      | 1.4  | 1.3  | --   | --                                    | --                                    | --   | --   |
| FEB 20... | <.008                                   | --   | --   | <.02  | <.04                                   | E.03                                     | --   | --   | --   | --                                    | --                                    | --   | --   |
| APR 08... | <.008                                   | --   | --   | <.02  | <.04                                   | E.02                                     | --   | --   | 121  | <2                                    | <.04                                  | <.8  | .298   |
| MAY 03... | E.006                                   | --   | --   | <.02  | E.02                                   | .06                                      | --   | --   | 763  | <2                                    | <.04                                  | E.6  | .777   |
| JUN 04... | E.007                                   | .18  | .32  | <.02  | <.04                                   | .04                                      | .47  | .62  | --   | --                                    | --                                    | --   | --   |
| JUL 23... | <.008                                   | --   | --   | <.02  | <.04                                   | E.03                                     | .35  | .44  | --   | --                                    | --                                    | --   | --   |
| AUG 30... | <.008                                   | --   | --   | <.02  | <.04                                   | .11                                      | .30  | .73  | --   | --                                    | --                                    | --   | --   |









0208650112 FLAT RIVER TRIBUTARY NEAR WILLARDVILLE, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | p,p'-Methoxychlor, water, unfltrd ug/L (39480) | Parathion, water, fltrd, ug/L (39542) | Parathion, water, unfltrd ug/L (39540) | PCBs, water, unfltrd ug/L (39516) | Pebulate, water, fltrd 0.7u GF ug/L (82669) | Pendimethalin, water, fltrd 0.7u GF ug/L (82683) | Phorate water fltrd 0.7u GF ug/L (82664) | Phorate water unfltrd ug/L (39023) | Picloram, water, fltrd 0.7u GF ug/L (49291) | Prometon, water, fltrd, ug/L (04037) | Propyzamide, water, fltrd 0.7u GF ug/L (82676) | Propachlor, water, fltrd, ug/L (04024) | Propanil, water, fltrd 0.7u GF ug/L (82679) |
|-----------|--|---------------------------------------|--|-----------------------------------|---|--|--|------------------------------------|---|--------------------------------------|--|--|---|
| OCT 03... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| DEC 11... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| FEB 20... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| APR 08... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| MAY 03... | <.006  | <.010                                 | <.01                                   | <.1                               | <.004                                       | <.022  | <.011                                    | <.02                               | <.02  | <.01                                 | <.004  | <.025                                  | <.011                                       |
| JUN 04... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| JUL 23... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |
| AUG 30... | --   | --                                    | --                                     | --                                | --  | --   | --                                       | --                                 | --  | --                                   | --   | --                                     | --  |

| Date      | Propargite, water, fltrd 0.7u GF ug/L (82685) | Propham water fltrd 0.7u GF ug/L (49236) | Propiconazole, water, fltrd, ug/L (50471) | Propoxur, water, fltrd 0.7u GF ug/L (38538) | Siduron water, fltrd, ug/L (38548) | Simazine, water, fltrd, ug/L (04035) | Sulfometuron, water, fltrd, ug/L (50337) | Tebu-thiuron water fltrd 0.7u GF ug/L (82670) | Terbacil, water, fltrd 0.7u GF ug/L (82665) | Terbacil, water, fltrd, ug/L (04032) | Terbufos, water, fltrd 0.7u GF ug/L (82675) | Thio-bencarb water fltrd 0.7u GF ug/L (82681) | Toxa-phene, water, unfltrd ug/L (39400) |
|-----------|---|--|---|---|------------------------------------|--------------------------------------|--|---|---|--------------------------------------|---|---|---|
| OCT 03... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| DEC 11... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| FEB 20... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| APR 08... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| MAY 03... | <.02  | <.010                                    | <.02                                      | <.008                                       | <.02                               | <.005                                | <.009                                    | <.02  | <.034                                       | <.010                                | <.02  | <.010   | <.1                                     |
| JUN 04... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| JUL 23... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |
| AUG 30... | --  | --                                       | --  | --  | --                                 | --                                   | --                                       | --  | --  | --                                   | --  | --  | --                                      |

| Date      | Tri-allate, water, fltrd 0.7u GF ug/L (82678) | Tribu-phos, water, unfltrd ug/L (39040) | Tri-clopyr, water, fltrd 0.7u GF ug/L (49235) | Tri-flur-alin, water, fltrd 0.7u GF ug/L (82661) | Sus-pended sedi-ment concen-tration mg/L (80154) | Sus-pended sedi-ment dis-charge, tons/d (80155) |
|-----------|---|---|---|--|--|---|
| OCT 03... | --  | --                                      | --  | --   | 2  | .00   |
| DEC 11... | --  | --                                      | --  | --   | 21   | .17   |
| FEB 20... | --  | --                                      | --  | --   | 6  | .02   |
| APR 08... | --  | --                                      | --  | --   | 7  | .01   |
| MAY 03... | <.002   | <.02                                    | <.02  | <.009  | 136  | 2.6   |
| JUN 04... | --  | --                                      | --  | --   | 30   | .03   |
| JUL 23... | --  | --                                      | --  | --   | 22   | .00   |
| AUG 30... | --  | --                                      | --  | --   | 152  | .55   |

## 02087182 FALLS LAKE ABOVE DAM NEAR FALLS, NC

LOCATION.--Lat 35°56'28", long 78°35'00", Wake County, Hydrologic Unit 03020201, on intake tower 50 ft upstream from Falls Lake dam, and 0.3 mi northwest of Falls and 235 mi upstream from mouth.

DRAINAGE AREA.--771 mi<sup>2</sup>.

## ELEVATION RECORDS

PERIOD OF RECORD.--February 1979 to current year.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Lake used for flood control, water supply, low-flow augmentation, and recreation. Temporary filling began May 1981 for water supply for city of Raleigh during drought conditions. Gates were closed on Jan. 13, 1983 and normal pool elevation of 250.1 ft was recorded Dec. 7, 1983. Total capacity of reservoir is 4,998,074,000 ft<sup>3</sup> at elevation of 250.1 ft.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 264.34 ft, Oct. 1, 2, 1999; minimum, 242.78 ft, Nov. 26, 1993.

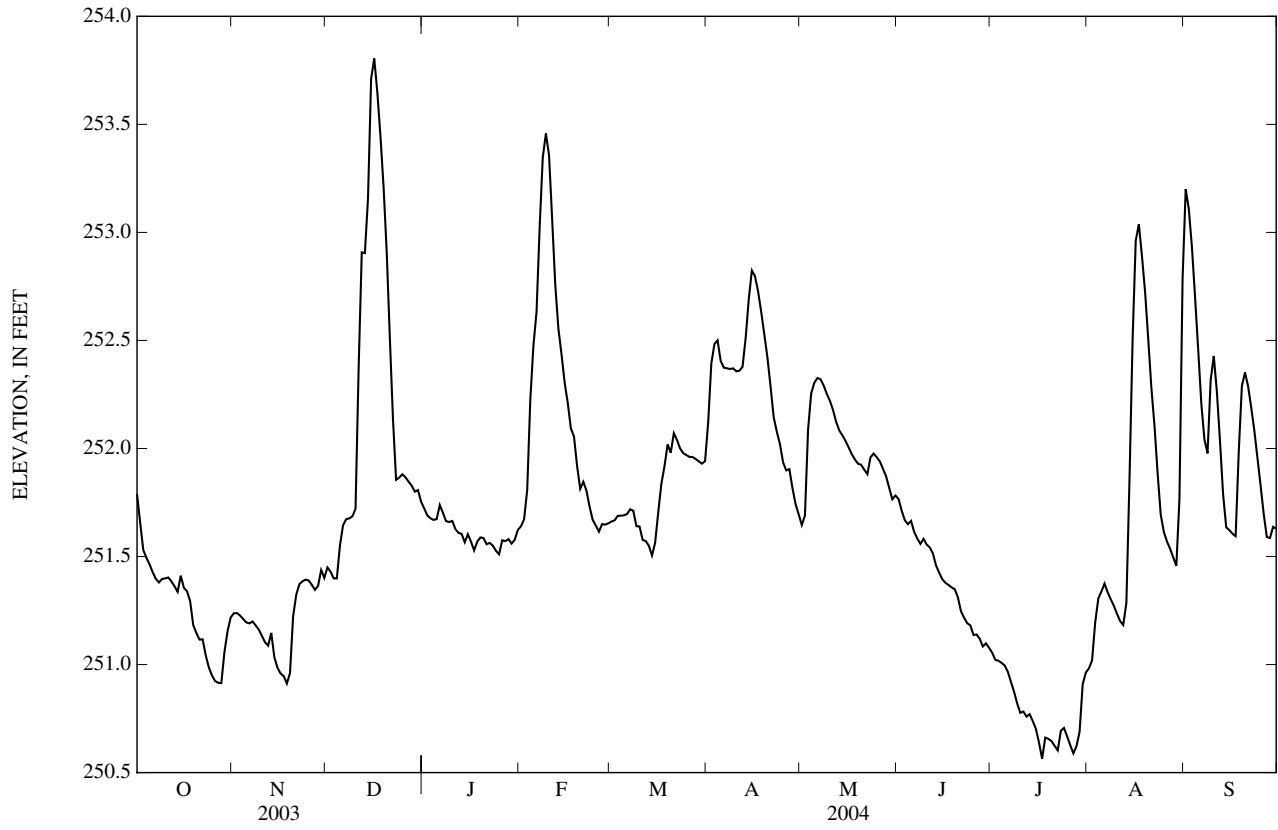
EXTREMES FOR CURRENT YEAR.--Maximum, 253.85 ft, Dec. 16; minimum, 250.50 ft, July 17.

COOPERATION.--Extremes for period of record provided by U.S. Army Corps of Engineers.

ELEVATION, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1    | 251.79 | 251.24 | 251.45 | 251.72 | 251.64 | 251.66 | 252.12 | 251.65 | 251.77 | 251.05 | 250.98 | 253.20 |
| 2    | 251.66 | 251.24 | 251.43 | 251.69 | 251.67 | 251.67 | 252.39 | 251.69 | 251.71 | 251.02 | 251.02 | 253.11 |
| 3    | 251.53 | 251.23 | 251.40 | 251.68 | 251.81 | 251.69 | 252.48 | 252.09 | 251.67 | 251.02 | 251.19 | 252.93 |
| 4    | 251.49 | 251.21 | 251.40 | 251.67 | 252.23 | 251.69 | 252.50 | 252.25 | 251.65 | 251.01 | 251.31 | 252.70 |
| 5    | 251.46 | 251.20 | 251.55 | 251.67 | 252.48 | 251.69 | 252.41 | 252.30 | 251.66 | 251.00 | 251.34 | 252.46 |
| 6    | 251.43 | 251.19 | 251.64 | 251.74 | 252.63 | 251.70 | 252.37 | 252.33 | 251.61 | 250.97 | 251.37 | 252.21 |
| 7    | 251.40 | 251.20 | 251.67 | 251.70 | 253.03 | 251.72 | 252.37 | 252.32 | 251.58 | 250.92 | 251.33 | 252.04 |
| 8    | 251.38 | 251.18 | 251.68 | 251.66 | 253.35 | 251.71 | 252.37 | 252.29 | 251.56 | 250.87 | 251.30 | 251.98 |
| 9    | 251.40 | 251.16 | 251.69 | 251.66 | 253.46 | 251.64 | 252.37 | 252.25 | 251.58 | 250.82 | 251.27 | 252.32 |
| 10   | 251.40 | 251.13 | 251.72 | 251.66 | 253.36 | 251.64 | 252.36 | 252.22 | 251.56 | 250.78 | 251.23 | 252.43 |
| 11   | 251.40 | 251.10 | 252.37 | 251.63 | 253.06 | 251.58 | 252.36 | 252.18 | 251.54 | 250.78 | 251.20 | 252.26 |
| 12   | 251.39 | 251.09 | 252.91 | 251.61 | 252.76 | 251.57 | 252.38 | 252.12 | 251.51 | 250.76 | 251.18 | 252.03 |
| 13   | 251.36 | 251.15 | 252.90 | 251.60 | 252.56 | 251.55 | 252.51 | 252.08 | 251.46 | 250.77 | 251.29 | 251.79 |
| 14   | 251.34 | 251.03 | 253.16 | 251.57 | 252.44 | 251.50 | 252.69 | 252.06 | 251.43 | 250.74 | 251.86 | 251.63 |
| 15   | 251.41 | 250.98 | 253.71 | 251.60 | 252.31 | 251.56 | 252.82 | 252.04 | 251.40 | 250.70 | 252.51 | 251.62 |
| 16   | 251.35 | 250.96 | 253.80 | 251.57 | 252.21 | 251.71 | 252.80 | 252.01 | 251.38 | 250.64 | 252.96 | 251.61 |
| 17   | 251.34 | 250.95 | 253.65 | 251.53 | 252.09 | 251.84 | 252.73 | 251.97 | 251.37 | 250.56 | 253.04 | 251.59 |
| 18   | 251.29 | 250.91 | 253.44 | 251.57 | 252.06 | 251.92 | 252.63 | 251.95 | 251.36 | 250.66 | 252.89 | 251.99 |
| 19   | 251.18 | 250.96 | 253.21 | 251.59 | 251.92 | 252.02 | 252.53 | 251.93 | 251.35 | 250.66 | 252.72 | 252.29 |
| 20   | 251.15 | 251.22 | 252.91 | 251.59 | 251.81 | 251.98 | 252.42 | 251.92 | 251.31 | 250.65 | 252.51 | 252.35 |
| 21   | 251.12 | 251.32 | 252.51 | 251.56 | 251.85 | 252.07 | 252.28 | 251.90 | 251.25 | 250.62 | 252.28 | 252.29 |
| 22   | 251.12 | 251.37 | 252.14 | 251.56 | 251.80 | 252.04 | 252.14 | 251.88 | 251.22 | 250.60 | 252.11 | 252.19 |
| 23   | 251.04 | 251.39 | 251.86 | 251.55 | 251.73 | 252.00 | 252.08 | 251.96 | 251.19 | 250.69 | 251.89 | 252.08 |
| 24   | 250.99 | 251.39 | 251.87 | 251.53 | 251.67 | 251.98 | 252.02 | 251.98 | 251.18 | 250.71 | 251.69 | 251.96 |
| 25   | 250.95 | 251.39 | 251.88 | 251.51 | 251.64 | 251.97 | 251.94 | 251.96 | 251.14 | 250.67 | 251.61 | 251.83 |
| 26   | 250.92 | 251.37 | 251.87 | 251.57 | 251.62 | 251.96 | 251.90 | 251.94 | 251.14 | 250.63 | 251.57 | 251.70 |
| 27   | 250.92 | 251.35 | 251.85 | 251.57 | 251.65 | 251.96 | 251.90 | 251.91 | 251.12 | 250.59 | 251.54 | 251.59 |
| 28   | 250.91 | 251.36 | 251.83 | 251.58 | 251.65 | 251.95 | 251.82 | 251.87 | 251.08 | 250.62 | 251.50 | 251.59 |
| 29   | 251.06 | 251.44 | 251.80 | 251.56 | 251.65 | 251.94 | 251.74 | 251.82 | 251.10 | 250.69 | 251.46 | 251.64 |
| 30   | 251.15 | 251.40 | 251.81 | 251.58 | ---    | 251.93 | 251.69 | 251.76 | 251.08 | 250.91 | 251.77 | 251.63 |
| 31   | 251.22 | ---    | 251.75 | 251.62 | ---    | 251.94 | ---    | 251.78 | ---    | 250.96 | 252.79 | ---    |
| MEAN | 251.28 | 251.20 | 252.22 | 251.61 | 252.21 | 251.80 | 252.30 | 252.01 | 251.40 | 250.78 | 251.76 | 252.10 |
| MAX  | 251.79 | 251.44 | 253.80 | 251.74 | 253.46 | 252.07 | 252.82 | 252.33 | 251.77 | 251.05 | 253.04 | 253.20 |
| MIN  | 250.91 | 250.91 | 251.40 | 251.51 | 251.62 | 251.50 | 251.69 | 251.65 | 251.08 | 250.56 | 250.98 | 251.59 |

02087182 FALLS LAKE ABOVE DAM NEAR FALLS, NC—Continued



02087182 FALLS LAKE ABOVE DAM NEAR FALLS, NC—Continued

PRECIPITATION RECORDS

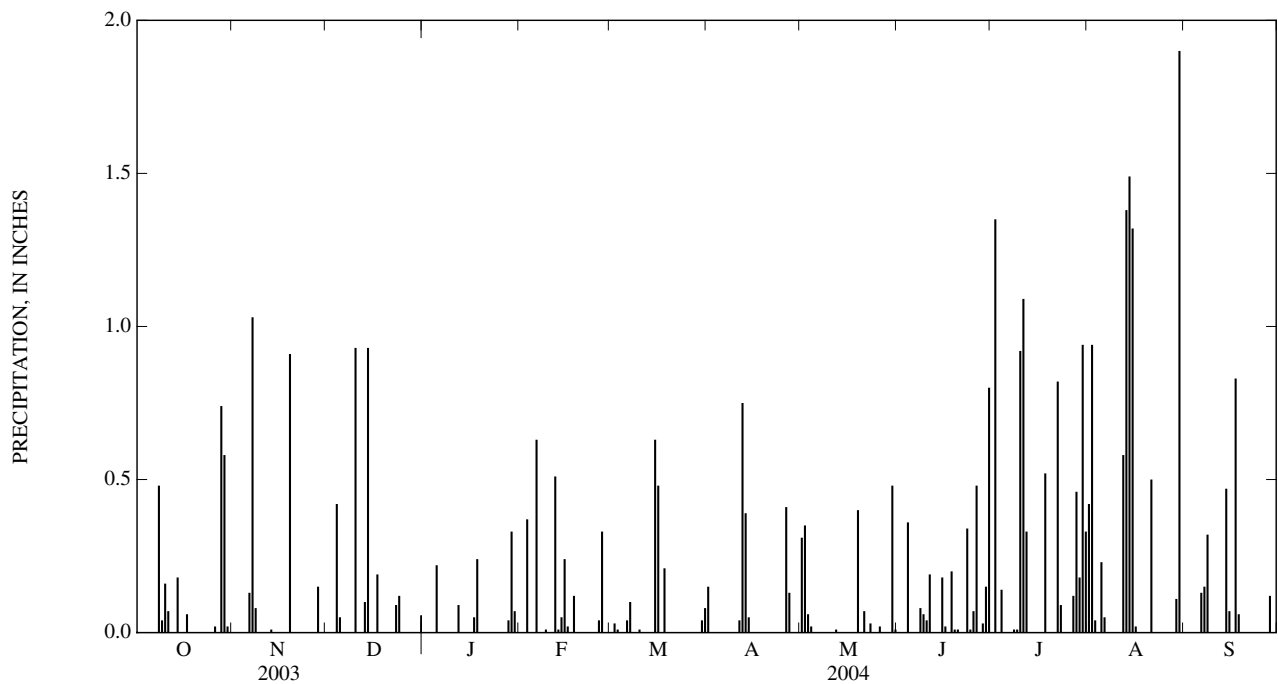
PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with the U.S. Army Corps of Engineers. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.31 | 0.00 | 0.00 | 0.42 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.35 | 0.00 | 1.35 | 0.94 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.01 | 0.00 | 0.06 | 0.00 | 0.00 | 0.04 | 0.00 |
| 4     | 0.00 | 0.00 | 0.42 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.36 | 0.14 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.05 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 |
| 6     | 0.00 | 0.13 | 0.00 | 0.00 | 0.63 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.13 |
| 7     | 0.00 | 1.03 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 |
| 8     | 0.48 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.01 | 0.00 | 0.32 |
| 9     | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.06 | 0.01 | 0.00 | 0.00 |
| 10    | 0.16 | 0.00 | 0.93 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.04 | 0.92 | 0.00 | 0.00 |
| 11    | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.19 | 1.09 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.09 | 0.51 | 0.00 | 0.75 | 0.01 | 0.00 | 0.33 | 0.58 | 0.00 |
| 13    | 0.00 | 0.01 | 0.10 | 0.00 | 0.01 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 1.38 | 0.00 |
| 14    | 0.18 | 0.00 | 0.93 | 0.00 | 0.05 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 1.49 | 0.47 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.24 | 0.63 | 0.00 | 0.00 | 0.18 | 0.00 | 1.32 | 0.07 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.48 | 0.00 | 0.00 | 0.02 | 0.00 | 0.02 | 0.00 |
| 17    | 0.06 | 0.00 | 0.19 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.83 |
| 18    | 0.00 | 0.00 | 0.00 | 0.24 | 0.12 | 0.21 | 0.00 | 0.00 | 0.20 | 0.52 | 0.00 | 0.06 |
| 19    | 0.00 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 0.01 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.50 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.82 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.34 | 0.09 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| 26    | 0.02 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.41 | 0.02 | 0.48 | 0.00 | 0.00 | 0.00 |
| 27    | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 0.00 | 0.13 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 |
| 28    | 0.74 | 0.15 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.46 | 0.00 | 0.12 |
| 29    | 0.58 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.18 | 0.11 | 0.00 |
| 30    | 0.02 | 0.00 | 0.00 | 0.07 | ---  | 0.04 | 0.00 | 0.48 | 0.80 | 0.94 | 1.90 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.08 | ---  | 0.01 | ---  | 0.33 | 0.00 | ---  |
| TOTAL | 2.35 | 2.31 | 2.83 | 1.04 | 2.33 | 1.63 | 1.92 | 1.76 | 3.03 | 7.31 | 8.98 | 2.15 |



## 02087183 NEUSE RIVER NEAR FALLS, NC

LOCATION.--Lat 35°56'24", long 78°34'51", Wake County, Hydrologic Unit 03020201, on right bank 300 ft downstream of Falls Lake Dam, and 0.3 mi northwest of Falls.

DRAINAGE AREA.--771 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1970 to current year.

REVISED RECORDS.--WDR NC-91-1: Drainage area. WRD NC 96-1: 1991-95 (M).

GAGE.--Water-stage recorder. Datum of gage is 194.69 ft above NGVD of 1929. Prior to Oct. 1, 1990, water-stage recorder at site 0.4 mi downstream at 182.62 ft. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Falls Lake (station 02087182). June 5, 1980, to May 6, 1981, flows affected by incidental storage in Falls Lake, under construction; May 6, 1981, to Jan. 13, 1983, gates closed and Falls Lake partially filled to provide storage for City of Raleigh water supply; Jan. 13, 1983, gates closed and normal pool elevation, 250.1 ft, reached Dec. 7, 1983. The City of Raleigh diverted an average of 85.2 ft<sup>3</sup>/s, 1.2 mi upstream from station for municipal water supply, most of which was returned downstream as treated effluent. Prior to regulation, maximum discharge: 13,600 ft<sup>3</sup>/s, July 17, 1975; gage height: 25.21 ft; minimum discharge: 4.6 ft<sup>3</sup>/s, Sept. 24, 1980; gage height: 2.13 ft, at site then in use. Maximum gage-height and discharge for period of record may have been higher during period of estimated record, Aug. 27-Sept. 30, 1996. Minimum discharge for period of record not determined due to intermittent gate closure at dam. Minimum discharge for current water year not determined due to regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in September 1945 reached an elevation of 216.1 ft; discharge, 23,300 ft<sup>3</sup>/s at bridge 0.4 mi upstream, from information provided by the U.S. Army Corps of Engineers.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB    | MAR   | APR    | MAY   | JUN   | JUL   | AUG    | SEP    |
|-------|-------|-------|--------|-------|--------|-------|--------|-------|-------|-------|--------|--------|
| 1     | 769   | 176   | 173    | 390   | 247    | 382   | 193    | 295   | 138   | 110   | 114    | 1,080  |
| 2     | 435   | 176   | 173    | 333   | 247    | 383   | 335    | 250   | 138   | 111   | 114    | 1,300  |
| 3     | 284   | 177   | 173    | 293   | 247    | 384   | 478    | 226   | 138   | 110   | 115    | 1,480  |
| 4     | 183   | 178   | 173    | 293   | 248    | 383   | 979    | 226   | 138   | 111   | 115    | 1,490  |
| 5     | 184   | 179   | 173    | 294   | 249    | 384   | 343    | 226   | 138   | 110   | 114    | 1,500  |
| 6     | 184   | 179   | 173    | 295   | 250    | 384   | 225    | 226   | 138   | 111   | 114    | 1,520  |
| 7     | 184   | 179   | 173    | 293   | 251    | 385   | 226    | 226   | 138   | 111   | 115    | 1,520  |
| 8     | 186   | 179   | 173    | 292   | 251    | 384   | 226    | 227   | 122   | 125   | e112   | 1,100  |
| 9     | 186   | 179   | 173    | 292   | 796    | 382   | 226    | 227   | 112   | 167   | e109   | 706    |
| 10    | 186   | 179   | 173    | 294   | 1,910  | 384   | 227    | 227   | 112   | 167   | 107    | 1,020  |
| 11    | 186   | 179   | 175    | 292   | 2,680  | 314   | 227    | 227   | 112   | 167   | 107    | 1,550  |
| 12    | 186   | 179   | 791    | 292   | 2,680  | 243   | 227    | 228   | 112   | 137   | 108    | 1,550  |
| 13    | 186   | 179   | 1,310  | 293   | 2,090  | 244   | 228    | 193   | 112   | 111   | 108    | 1,260  |
| 14    | 187   | 177   | 1,320  | 266   | 1,440  | 243   | 228    | 107   | 113   | 111   | 110    | 663    |
| 15    | 187   | 177   | 1,320  | 247   | 1,440  | 244   | 552    | 107   | 113   | 111   | 110    | 203    |
| 16    | 187   | 177   | 2,060  | 247   | 1,430  | 246   | 808    | 107   | 113   | 112   | 110    | 157    |
| 17    | 188   | 177   | 2,910  | 247   | 1,430  | 246   | 841    | 107   | 113   | 112   | 857    | 154    |
| 18    | 672   | 177   | 2,880  | 247   | 1,430  | 246   | 840    | 107   | 112   | 112   | 1,350  | 155    |
| 19    | 358   | 177   | 2,870  | 248   | 1,280  | 246   | 838    | 107   | 112   | 112   | 1,370  | 155    |
| 20    | 173   | 176   | 2,860  | 247   | 834    | 246   | 837    | 107   | 112   | 112   | 1,390  | 432    |
| 21    | 173   | 176   | 2,840  | 247   | 709    | 247   | 837    | 107   | 112   | 112   | 1,380  | 691    |
| 22    | 174   | 176   | 2,590  | 247   | 706    | 246   | 694    | 107   | 125   | 112   | 1,380  | 688    |
| 23    | 174   | 176   | 1,360  | 247   | 704    | 245   | 383    | 107   | 151   | 112   | 1,370  | 685    |
| 24    | 175   | 176   | 392    | 247   | 545    | 244   | 381    | 107   | 171   | 112   | 784    | 685    |
| 25    | 176   | 174   | 391    | 247   | 383    | 245   | 381    | 107   | 170   | 112   | 313    | 684    |
| 26    | 176   | 174   | 391    | 247   | 383    | 245   | 382    | 107   | 170   | 112   | 188    | 684    |
| 27    | 176   | 174   | 390    | 247   | 383    | 246   | 381    | 116   | 171   | 112   | 166    | 390    |
| 28    | 176   | 175   | 390    | 247   | 382    | 246   | 379    | 138   | 170   | 112   | 166    | 181    |
| 29    | 176   | 174   | 390    | 247   | 381    | 222   | 344    | 138   | 134   | 112   | 167    | 181    |
| 30    | 176   | 173   | 392    | 247   | ---    | 193   | 294    | 138   | 110   | 113   | 168    | 181    |
| 31    | 176   | ---   | 390    | 248   | ---    | 193   | ---    | 138   | ---   | 114   | 341    | ---    |
| TOTAL | 7,219 | 5,304 | 30,142 | 8,413 | 26,006 | 8,925 | 13,540 | 5,063 | 3,920 | 3,665 | 13,172 | 24,045 |
| MEAN  | 233   | 177   | 972    | 271   | 897    | 288   | 451    | 163   | 131   | 118   | 425    | 802    |
| MAX   | 769   | 179   | 2,910  | 390   | 2,680  | 385   | 979    | 295   | 171   | 167   | 1,390  | 1,550  |
| MIN   | 173   | 173   | 173    | 247   | 247    | 193   | 193    | 107   | 110   | 110   | 107    | 154    |
| †     | -109  | 38    | 61     | -20   | 30     | 42    | -75    | 32    | -146  | -20   | 461    | -341   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, \*BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 411    | 379    | 561    | 776    | 1,201  | 1,544  | 1,232  | 534    | 330    | 314    | 311    | 435    |
| MAX  | 3,217  | 1,535  | 1,883  | 2,014  | 3,462  | 3,992  | 3,687  | 1,821  | 1,427  | 1,501  | 1,099  | 3,953  |
| (WY) | (2000) | (1996) | (2003) | (1984) | (1998) | (1989) | (2003) | (1989) | (2003) | (1995) | (1989) | (1996) |
| MIN  | 72.6   | 65.2   | 63.3   | 66.3   | 67.0   | 68.4   | 118    | 110    | 126    | 61.7   | 61.0   | 67.8   |
| (WY) | (1984) | (1984) | (1992) | (2002) | (2002) | (2002) | (1995) | (1995) | (1987) | (1983) | (1983) | (1985) |

02087183 NEUSE RIVER NEAR FALLS, NC—Continued

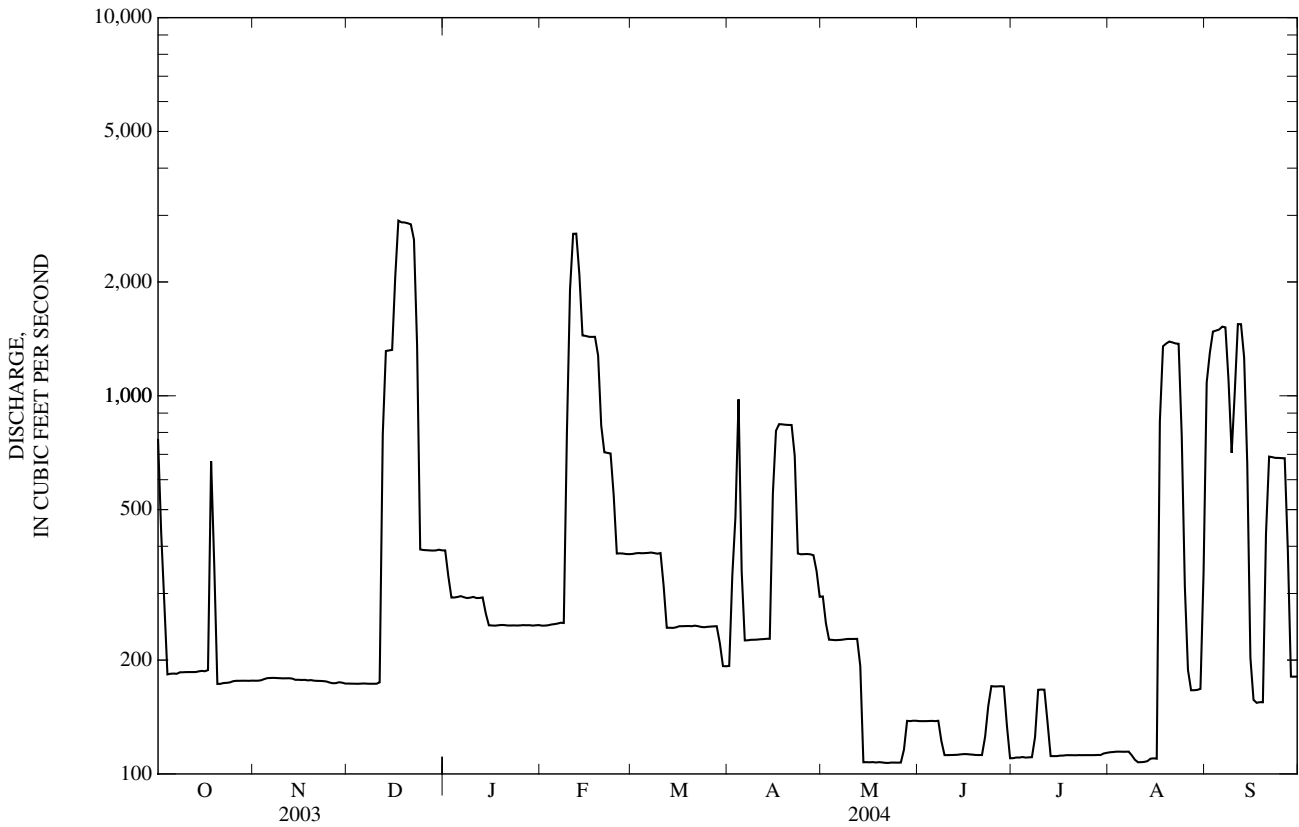
| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004* |  |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--|
| ANNUAL TOTAL             | 413,943                |        | 149,414             |        | 666 (UNADJUSTED)         |  |
| ANNUAL MEAN              | 1,134                  |        | 408                 |        | 1,312 2003               |  |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 123 2002                 |  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 7,420 Sep 16, 1996       |  |
| HIGHEST DAILY MEAN       | 5,870                  | Apr 18 | 2,910               | Dec 17 | 123 2002                 |  |
| LOWEST DAILY MEAN        | 164                    | Jul 1  | 107                 | May 14 | 55 Jan 10, 1995          |  |
| ANNUAL SEVEN-DAY MINIMUM | 173                    | Nov 30 | 107                 | May 14 | 56 Jan 10, 1995          |  |
| MAXIMUM PEAK FLOW        |                        |        | 3,080               | Dec 17 | 7650* Sep 16, 1996       |  |
| MAXIMUM PEAK STAGE       |                        |        | 3.59                | Dec 17 | 8.05* Sep 16, 1996       |  |
| INSTANTANEOUS LOW FLOW   |                        |        | 105*                | May 18 | NOT DETERMINED           |  |
| 10 PERCENT EXCEEDS       | 3,340                  |        | 1,150               |        | 2,220                    |  |
| 50 PERCENT EXCEEDS       | 433                    |        | 226                 |        | 180                      |  |
| 90 PERCENT EXCEEDS       | 176                    |        | 112                 |        | 89                       |  |

† Change in contents, equivalent in cubic feet per second, in Falls Reservoir, provided by U.S. Army Corps of Engineers.

\* Regulated period only (1983-2004). See REMARKS.

‡ Adjusted for change in contents.

e Estimated.





## 0208726005 CRABTREE CREEK AT EBENEZER CHURCH ROAD NEAR RALEIGH, NC

LOCATION.--Lat 35°50'43", long 78°43'28", Wake County, Hydrologic Unit 03020201, on upstream side of bridge on Secondary Road 1649, 0.1 mi upstream from Sycamore Creek, and 6.6 mi northwest of Raleigh.

DRAINAGE AREA.--76 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1987 to September 1992, May 1997 to current year. December 1987 to September 1992, published as "Crabtree Creek at Secondary Road 1649 near Raleigh, NC".

GAGE.--Water-stage recorder. Datum of gage is 225.00 ft above NGVD of 1929, from levels. Satellite telemetry at station.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Flow regulated by flood-control dams upstream. Minimum discharge for period of record due to regulation.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY     | JUN  | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|---------|------|-------|-------|-------|
| 1     | 21    | 67    | 39    | 33    | 69    | 100   | 106   | 29      | 14   | 31    | 217   | 397   |
| 2     | 18    | 51    | 34    | 32    | 61    | 85    | 132   | 118     | 11   | 27    | 193   | 246   |
| 3     | 15    | 41    | 29    | 30    | 193   | 76    | 102   | 367     | 10   | 90    | 214   | 137   |
| 4     | 13    | 34    | 29    | 31    | 206   | 67    | 80    | 277     | 32   | 91    | 121   | 84    |
| 5     | 12    | 30    | 121   | 34    | 149   | 60    | 62    | 161     | 49   | 50    | 80    | 58    |
| 6     | 12    | 31    | 115   | 47    | 139   | 66    | 49    | 100     | 33   | 38    | 228   | 48    |
| 7     | 11    | 48    | 93    | 41    | 427   | 72    | 42    | 70      | 28   | 29    | 130   | 87    |
| 8     | 13    | 45    | 73    | 37    | 255   | 64    | 38    | 52      | 23   | 23    | 71    | 253   |
| 9     | 24    | 40    | 62    | 39    | 167   | 54    | 34    | 41      | 20   | 18    | 43    | 342   |
| 10    | 23    | 34    | 143   | 44    | 121   | 53    | 30    | 34      | 42   | e42   | 27    | 186   |
| 11    | 26    | 29    | 457   | 40    | 94    | 48    | 28    | 27      | 91   | e32   | 19    | 112   |
| 12    | 25    | 27    | 259   | 39    | 144   | 44    | 58    | 24      | 35   | e56   | 48    | 76    |
| 13    | 22    | 27    | 165   | 38    | 196   | 38    | 136   | 32      | 25   | e165  | 257   | 56    |
| 14    | 22    | 22    | 544   | 35    | 154   | 35    | 133   | 24      | 21   | e80   | 1,340 | 47    |
| 15    | 47    | 17    | 434   | 35    | 137   | 147   | 104   | 19      | 22   | 49    | 1,140 | 76    |
| 16    | 35    | 17    | 258   | 32    | 178   | 533   | 78    | 16      | 25   | 36    | 944   | 60    |
| 17    | 29    | 18    | 215   | 30    | 167   | 505   | 62    | 15      | 20   | 26    | 471   | 221   |
| 18    | 31    | 18    | e180  | 54    | 145   | 316   | 50    | 14      | 17   | 138   | 224   | 557   |
| 19    | 25    | 116   | e134  | 60    | 123   | 268   | 42    | 14      | 14   | 133   | 117   | 336   |
| 20    | 22    | 175   | e95   | 51    | 104   | 187   | 33    | 23      | 12   | 99    | 70    | 178   |
| 21    | 19    | 110   | e75   | 45    | 89    | 135   | 29    | 16      | 11   | 66    | 51    | 109   |
| 22    | 17    | 78    | e66   | 42    | 72    | 99    | 25    | 13      | 10   | 57    | 164   | 75    |
| 23    | 15    | 59    | 60    | 39    | 63    | 76    | 23    | 13      | 23   | 310   | 102   | 56    |
| 24    | 13    | 48    | 60    | 36    | 56    | 62    | 20    | 15      | 37   | 185   | 61    | 44    |
| 25    | 11    | 39    | 58    | 34    | e50   | 54    | 18    | 14      | 27   | 110   | 40    | 36    |
| 26    | 12    | 32    | 50    | 40    | 45    | 48    | 20    | 13      | 39   | 72    | 27    | 31    |
| 27    | 14    | 28    | 46    | 38    | 74    | 43    | 35    | 12      | 45   | 55    | 19    | 28    |
| 28    | 22    | 31    | 42    | 42    | 113   | 39    | 29    | 12      | 35   | 62    | 14    | 60    |
| 29    | 221   | 58    | 40    | 53    | 120   | 36    | 26    | 9.0     | 45   | 167   | 12    | 90    |
| 30    | 146   | 44    | 40    | 69    | ---   | 32    | 24    | 13      | 40   | 657   | 624   | 71    |
| 31    | 96    | ---   | 36    | 77    | ---   | 31    | ---   | 14      | ---  | 397   | 563   | ---   |
| TOTAL | 1,032 | 1,414 | 4,052 | 1,297 | 3,911 | 3,473 | 1,648 | 1,601.0 | 856  | 3,391 | 7,631 | 4,157 |
| MEAN  | 33.3  | 47.1  | 131   | 41.8  | 135   | 112   | 54.9  | 51.6    | 28.5 | 109   | 246   | 139   |
| MAX   | 221   | 175   | 544   | 77    | 427   | 533   | 136   | 367     | 91   | 657   | 1,340 | 557   |
| MIN   | 11    | 17    | 29    | 30    | 45    | 31    | 18    | 9.0     | 10   | 18    | 12    | 28    |
| CFSM  | 0.44  | 0.62  | 1.72  | 0.55  | 1.77  | 1.47  | 0.72  | 0.68    | 0.38 | 1.44  | 3.24  | 1.82  |
| IN.   | 0.51  | 0.69  | 1.98  | 0.63  | 1.91  | 1.70  | 0.81  | 0.78    | 0.42 | 1.66  | 3.74  | 2.03  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004,<sup>@</sup> BY WATER YEAR (WY)

|      | 71.3   | 58.2   | 72.2   | 124    | 138    | 166    | 96.7   | 51.6   | 50.8   | 56.3   | 72.8   | 101    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 71.3   | 58.2   | 72.2   | 124    | 138    | 166    | 96.7   | 51.6   | 50.8   | 56.3   | 72.8   | 101    |
| MAX  | 276    | 165    | 255    | 370    | 364    | 393    | 260    | 144    | 136    | 113    | 246    | 743    |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (1989) | (2001) | (1997) | (2004) | (1999) |
| MIN  | 13.6   | 23.8   | 14.4   | 23.1   | 16.2   | 25.0   | 32.5   | 9.30   | 9.34   | 9.15   | 6.74   | 5.35   |
| (WY) | (1992) | (1992) | (1991) | (2001) | (1991) | (1988) | (1992) | (2002) | (1999) | (1988) | (1990) | (1990) |

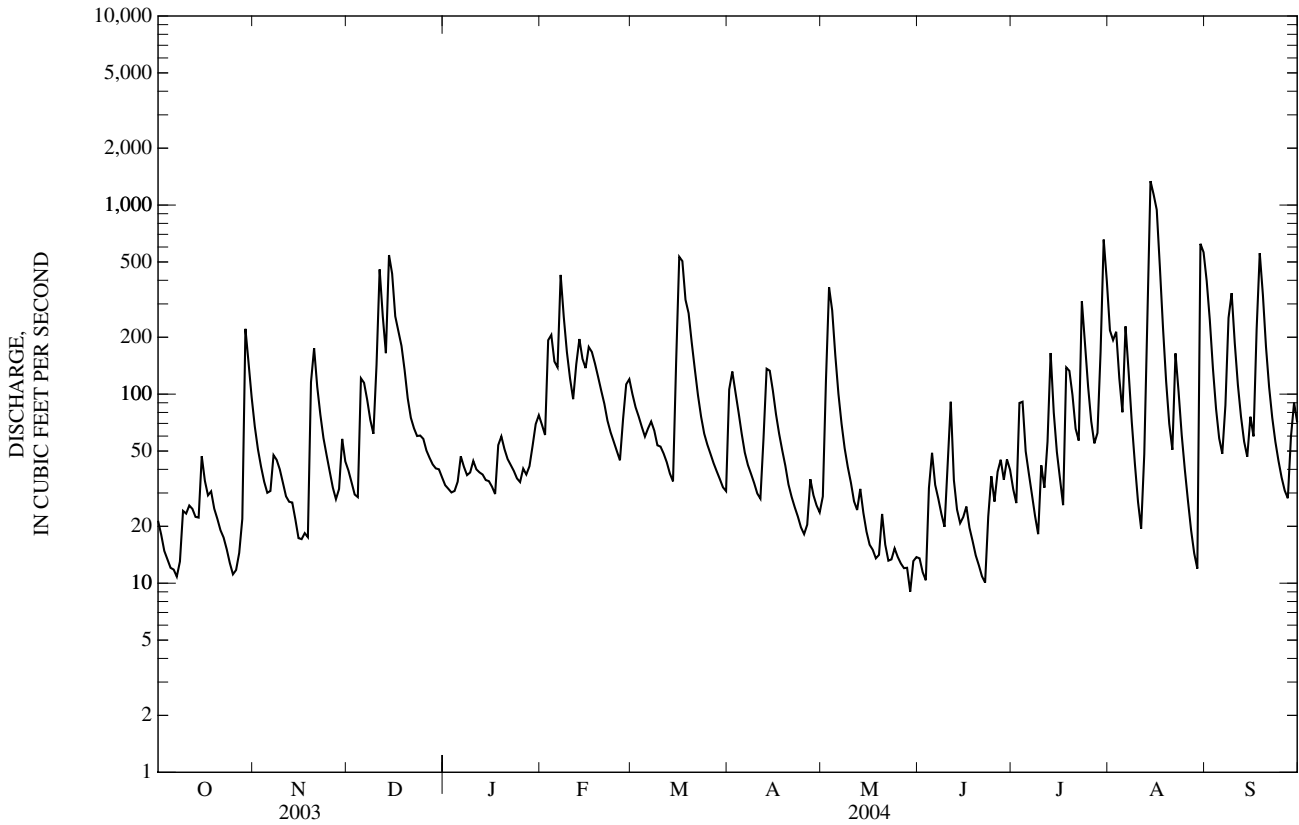
0208726005 CRABTREE CREEK AT EBENEZER CHURCH ROAD NEAR RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1988 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 47,278                 |        | 34,463.0            |        |                                      |              |
| ANNUAL MEAN              | 130                    |        | 94.2                |        | 92.7                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 170                                  | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 46.6                                 | 1992         |
| HIGHEST DAILY MEAN       | 1,640                  | Apr 10 | 1,340               | Aug 14 | 3,250                                | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 11                     | Oct 7  | 9.0                 | May 29 | 2.1                                  | Dec 18, 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 13                     | Oct 2  | 12                  | May 28 | 2.6                                  | Dec 12, 1990 |
| MAXIMUM PEAK FLOW        |                        |        | 1,700               | Aug 14 | 4,720                                | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 11.39               | Aug 14 | 19.78                                | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 5.4                 | May 29 | 1.5*                                 | Oct 12, 1997 |
| ANNUAL RUNOFF (CFSM)     | 1.70                   |        | 1.24                |        | 1.22                                 |              |
| ANNUAL RUNOFF (INCHES)   | 23.14                  |        | 16.87               |        | 16.57                                |              |
| 10 PERCENT EXCEEDS       | 287                    |        | 208                 |        | 208                                  |              |
| 50 PERCENT EXCEEDS       | 65                     |        | 48                  |        | 36                                   |              |
| 90 PERCENT EXCEEDS       | 23                     |        | 17                  |        | 9.0                                  |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



## 02087275 CRABTREE CREEK AT US HIGHWAY 70 AT RALEIGH, NC

LOCATION.--Lat 35°50'17", long 78°40'27", Wake County, Hydrologic Unit 030200201, on left bank at upstream side of bridge on U.S. Highway 70, 0.6 mi upstream from Mine Creek, 4.4 mi northwest of Raleigh.

DRAINAGE AREA.--97.6 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1997 to current year. Unpublished records of gage height for water years 1988 to 1997 are available in the files of U.S. Geological Survey.

GAGE.--Water-stage recorder. Datum of gage is 203.72 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred June 16, 2002.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 27.69 ft, discharge, about 11,700 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 30    | 85    | 46    | 35    | 76    | 114   | 130   | 46    | 18    | 43    | 249    | 417   |
| 2     | 26    | 65    | 39    | 33    | 67    | 98    | 153   | 167   | 14    | 41    | e322   | 268   |
| 3     | 22    | 53    | 34    | 32    | 231   | 88    | 121   | 409   | 11    | 120   | 268    | 161   |
| 4     | 19    | 44    | 36    | 33    | 218   | 78    | 96    | 298   | 49    | 122   | 151    | 105   |
| 5     | 18    | 39    | 141   | 41    | 156   | 70    | 76    | 178   | 74    | 65    | 113    | 75    |
| 6     | 18    | 48    | 126   | 56    | 151   | 78    | 61    | 126   | 47    | 47    | 266    | 59    |
| 7     | 20    | 67    | 101   | 45    | 440   | 87    | 52    | 93    | 39    | 34    | 166    | 117   |
| 8     | 28    | 63    | 78    | 39    | 265   | 80    | 48    | 71    | 32    | 25    | 104    | 301   |
| 9     | 45    | 52    | 63    | 46    | 173   | 66    | 43    | 56    | 27    | e22   | 72     | 375   |
| 10    | 38    | 43    | 179   | 50    | 130   | 65    | 39    | 47    | 77    | e44   | 50     | 214   |
| 11    | 39    | 37    | 505   | 44    | 103   | 58    | 37    | 38    | 152   | e34   | 40     | 158   |
| 12    | 36    | 35    | 270   | 42    | 171   | 53    | 95    | 33    | 58    | 63    | 128    | 124   |
| 13    | 33    | 32    | 170   | 40    | 210   | 45    | 168   | 45    | 34    | 144   | 468    | 82    |
| 14    | 36    | 27    | 597   | 38    | 164   | 42    | 155   | 34    | 27    | 77    | 1,790  | 73    |
| 15    | 71    | 21    | 441   | 36    | 155   | 202   | 124   | 26    | 43    | 55    | 1,410  | 110   |
| 16    | 48    | 21    | 263   | 34    | 198   | 591   | 96    | 22    | 40    | 38    | 1,130  | 83    |
| 17    | 41    | 23    | 226   | 31    | 180   | 510   | 77    | 21    | 28    | 26    | 604    | 360   |
| 18    | 46    | 23    | 207   | 72    | 155   | 338   | 64    | 18    | 21    | 144   | 311    | 686   |
| 19    | 34    | 150   | 152   | 70    | 133   | 283   | 55    | 25    | 17    | 137   | 178    | 371   |
| 20    | 30    | 208   | 116   | 57    | 115   | 198   | 44    | 41    | 15    | 106   | 120    | 204   |
| 21    | 25    | 131   | 91    | 49    | 100   | 146   | 39    | 24    | 12    | 72    | 113    | e130  |
| 22    | 22    | 95    | 76    | 45    | 83    | 112   | 34    | 18    | 10    | 78    | 267    | e90   |
| 23    | 19    | 70    | 66    | 42    | 72    | 89    | 31    | 18    | 35    | 352   | 167    | e68   |
| 24    | 17    | 55    | 69    | 37    | 64    | 74    | 27    | 20    | 53    | 197   | 109    | e52   |
| 25    | 15    | 45    | 65    | 37    | 57    | 66    | 24    | 18    | 36    | 122   | 77     | e45   |
| 26    | 15    | 36    | 55    | 45    | 53    | 60    | 44    | 16    | 62    | 84    | 56     | e40   |
| 27    | 17    | 31    | 50    | 43    | 100   | 55    | 63    | 15    | 65    | 67    | 42     | e37   |
| 28    | 45    | 41    | 46    | 52    | 133   | 50    | 41    | 15    | 52    | 77    | 33     | e80   |
| 29    | 293   | 71    | 43    | 65    | 135   | 48    | 34    | 11    | 66    | e190  | 31     | e105  |
| 30    | 167   | 52    | 42    | 81    | ---   | 46    | 30    | 25    | 54    | 648   | 809    | e81   |
| 31    | 116   | ---   | 39    | 87    | ---   | 50    | ---   | 19    | ---   | 424   | 619    | ---   |
| TOTAL | 1,429 | 1,763 | 4,432 | 1,457 | 4,288 | 3,940 | 2,101 | 1,993 | 1,268 | 3,698 | 10,263 | 5,071 |
| MEAN  | 46.1  | 58.8  | 143   | 47.0  | 148   | 127   | 70.0  | 64.3  | 42.3  | 119   | 331    | 169   |
| MAX   | 293   | 208   | 597   | 87    | 440   | 591   | 168   | 409   | 152   | 648   | 1,790  | 686   |
| MIN   | 15    | 21    | 34    | 31    | 53    | 42    | 24    | 11    | 10    | 22    | 31     | 37    |
| CFSM  | 0.47  | 0.60  | 1.46  | 0.48  | 1.51  | 1.30  | 0.72  | 0.66  | 0.43  | 1.22  | 3.39   | 1.73  |
| IN.   | 0.54  | 0.67  | 1.69  | 0.56  | 1.63  | 1.50  | 0.80  | 0.76  | 0.48  | 1.41  | 3.91   | 1.93  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

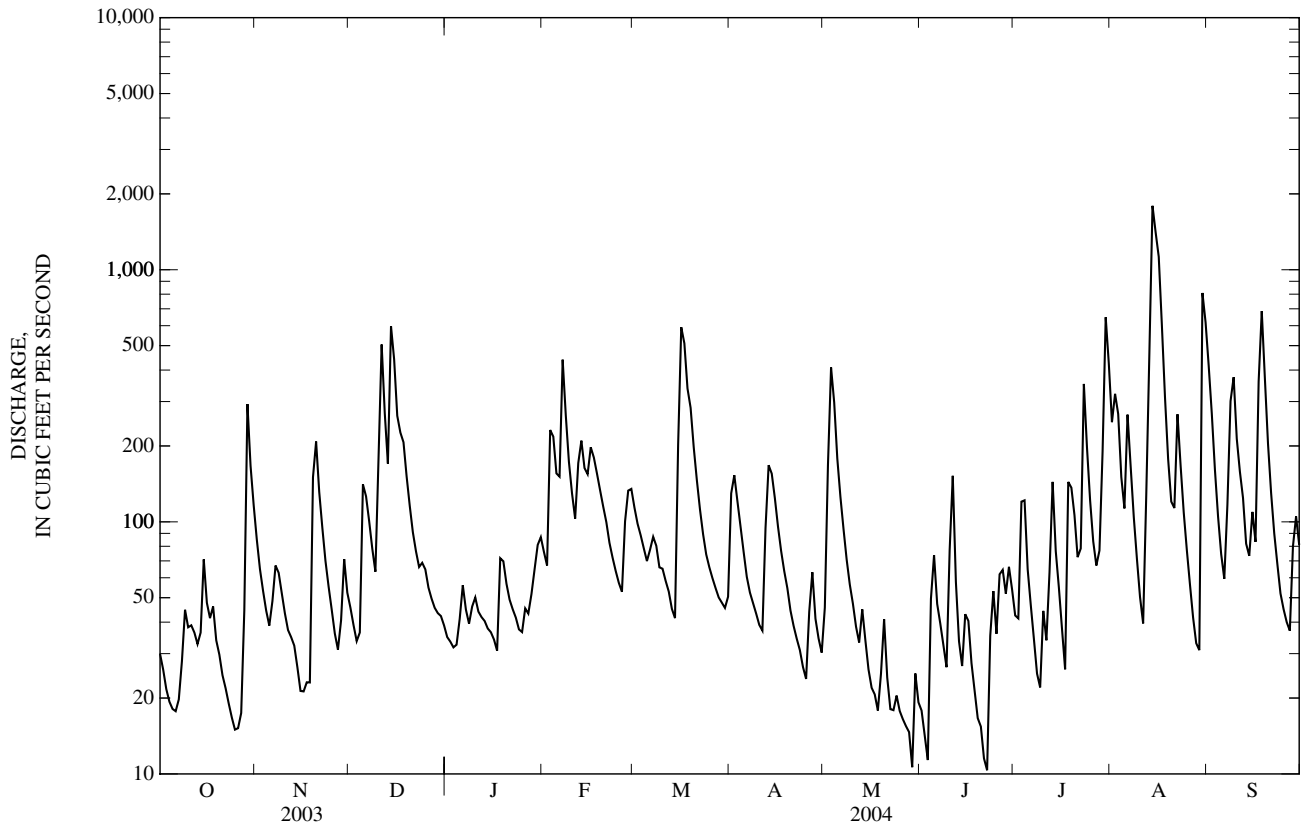
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 101    | 70.1   | 111    | 178    | 195    | 218    | 136    | 52.6   | 65.0   | 82.8   | 117    | 197    |
| MAX  | 352    | 201    | 308    | 422    | 412    | 429    | 310    | 92.8   | 170    | 166    | 331    | 939    |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (2003) | (2001) | (1997) | (2004) | (1999) |
| MIN  | 22.2   | 31.5   | 27.1   | 33.7   | 74.0   | 75.4   | 70.0   | 15.6   | 13.1   | 26.0   | 23.7   | 23.3   |
| (WY) | (2001) | (2002) | (2002) | (2001) | (2002) | (2000) | (2004) | (2002) | (1999) | (1999) | (1997) | (1997) |

02087275 CRABTREE CREEK AT US HIGHWAY 70 AT RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1997 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 59,001                 |        | 41,703              |        | 129                     |              |
| ANNUAL MEAN              | 162                    |        | 114                 |        | 213                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 68.8                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 5,030                   |              |
| HIGHEST DAILY MEAN       | 2,040                  | Apr 10 | 1,790               | Aug 14 | 5,030                   | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 15                     | Oct 25 | 10                  | Jun 22 | 4.9                     | Jun 13, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 19                     | Oct 21 | 16                  | May 23 | 5.6                     | Jun 12, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 2,760               | Aug 14 | 7,080                   | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 14.03               | Aug 14 | 21.50                   | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 4.8                 | May 29 | 1.6*                    | Jun 14, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.66                   |        | 1.17                |        | 1.32                    |              |
| ANNUAL RUNOFF (INCHES)   | 22.49                  |        | 15.89               |        | 17.92                   |              |
| 10 PERCENT EXCEEDS       | 355                    |        | 253                 |        | 287                     |              |
| 50 PERCENT EXCEEDS       | 88                     |        | 62                  |        | 55                      |              |
| 90 PERCENT EXCEEDS       | 32                     |        | 24                  |        | 15                      |              |

\* See REMARKS.

e Estimated.



## 0208731190 CRABTREE CREEK AT ANDERSON DRIVE AT RALEIGH, NC

LOCATION.--Lat 35°49'16", long 78°38'03", Wake County, Hydrologic Unit 03020201, on the downstream side of Anderson Drive bridge and 2.3 mi north of Raleigh.

DRAINAGE AREA.--111 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1990 to May 1991, October 1991 to April 1993, June 1997 to current year.

GAGE.--Water-stage recorder. Datum of gage is 187.29 ft above NGVD of 1929. Satellite and telephone telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 21.04 ft, Sep. 16, 1999; minimum not determined.

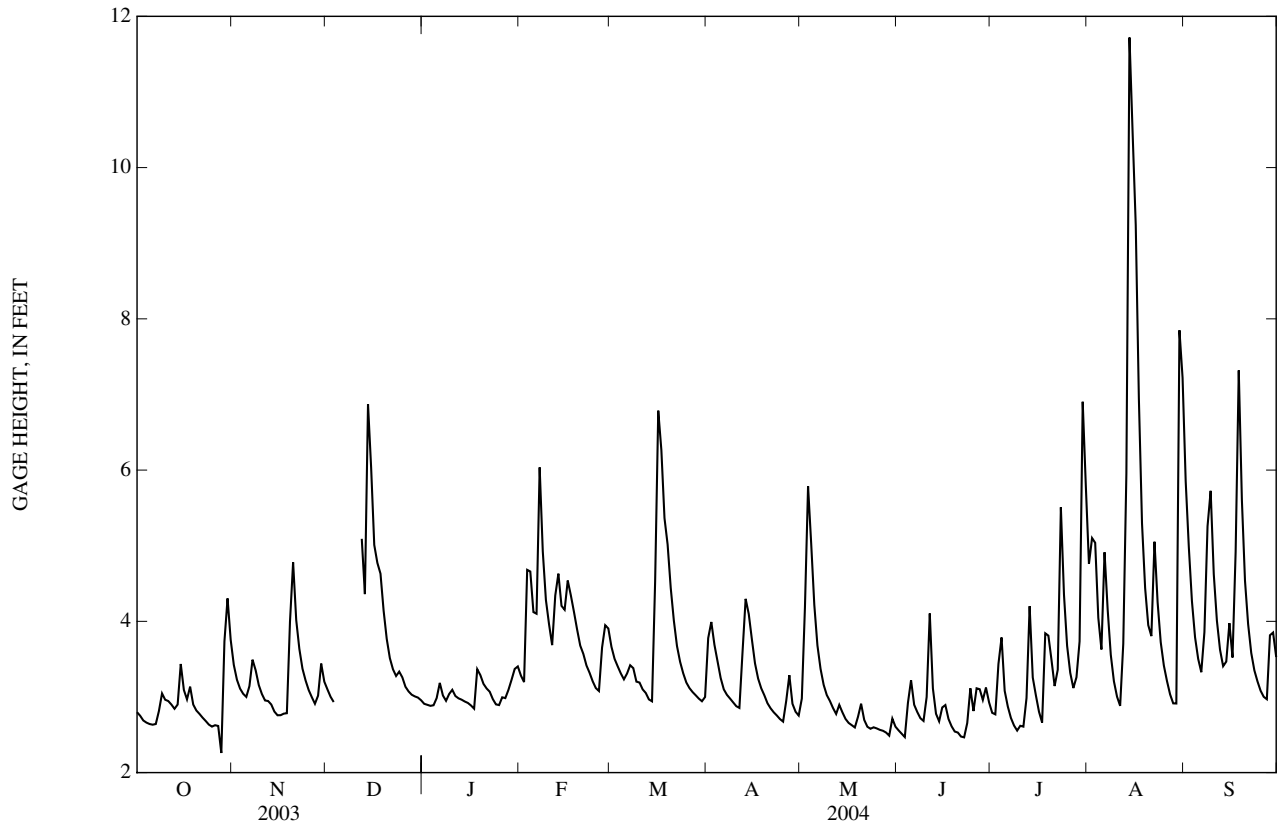
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of September 1996 reached a stage of 23.1 ft from flood marks.

EXTREMES FOR CURRENT YEAR.--Maximum, 14.67 ft, Aug. 14; minimum, 1.75 ft, Oct. 29.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG   | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| 1    | 2.80 | 3.42 | 3.10 | 2.91 | 3.28 | 3.66 | 3.78 | 2.98 | 2.56 | 2.79 | 4.76  | 5.85 |
| 2    | 2.75 | 3.23 | 3.00 | 2.90 | 3.20 | 3.50 | 3.99 | 4.19 | 2.51 | 2.77 | 5.10  | 4.98 |
| 3    | 2.69 | 3.11 | 2.93 | 2.88 | 4.68 | 3.41 | 3.69 | 5.79 | 2.47 | 3.44 | 5.04  | 4.27 |
| 4    | 2.66 | 3.04 | ---  | 2.89 | 4.66 | 3.31 | 3.47 | 5.03 | 2.92 | 3.79 | 4.05  | 3.79 |
| 5    | 2.64 | 3.00 | ---  | 2.99 | 4.12 | 3.23 | 3.25 | 4.22 | 3.22 | 3.08 | 3.63  | 3.50 |
| 6    | 2.63 | 3.14 | ---  | 3.19 | 4.10 | 3.31 | 3.10 | 3.68 | 2.90 | 2.87 | 4.91  | 3.33 |
| 7    | 2.64 | 3.49 | ---  | 3.02 | 6.04 | 3.42 | 3.03 | 3.37 | 2.80 | 2.72 | 4.16  | 3.86 |
| 8    | 2.81 | 3.35 | ---  | 2.95 | 4.92 | 3.38 | 2.98 | 3.16 | 2.72 | 2.62 | 3.56  | 5.26 |
| 9    | 3.05 | 3.16 | ---  | 3.04 | 4.28 | 3.20 | 2.93 | 3.03 | 2.68 | 2.56 | 3.21  | 5.73 |
| 10   | 2.96 | 3.04 | ---  | 3.09 | 3.96 | 3.19 | 2.88 | 2.95 | 3.00 | 2.62 | 3.00  | 4.62 |
| 11   | 2.95 | 2.95 | ---  | 3.01 | 3.69 | 3.10 | 2.86 | 2.85 | 4.10 | 2.61 | 2.88  | 4.01 |
| 12   | 2.90 | 2.95 | 5.09 | 2.98 | 4.34 | 3.05 | 3.59 | 2.78 | 3.11 | 2.99 | 3.70  | 3.63 |
| 13   | 2.84 | 2.90 | 4.36 | 2.96 | 4.63 | 2.97 | 4.30 | 2.90 | 2.78 | 4.20 | 5.96  | 3.41 |
| 14   | 2.90 | 2.81 | 6.87 | 2.94 | 4.21 | 2.94 | 4.10 | 2.80 | 2.68 | 3.26 | 11.72 | 3.47 |
| 15   | 3.44 | 2.76 | 6.03 | 2.92 | 4.15 | 4.53 | 3.76 | 2.71 | 2.86 | 3.02 | 10.46 | 3.98 |
| 16   | 3.09 | 2.76 | 5.01 | 2.89 | 4.54 | 6.79 | 3.44 | 2.66 | 2.89 | 2.80 | 9.24  | 3.52 |
| 17   | 2.97 | 2.78 | 4.77 | 2.85 | 4.34 | 6.26 | 3.24 | 2.63 | 2.71 | 2.66 | 6.95  | 4.92 |
| 18   | 3.14 | 2.79 | 4.63 | 3.37 | 4.12 | 5.36 | 3.11 | 2.60 | 2.61 | 3.84 | 5.30  | 7.32 |
| 19   | 2.90 | 4.00 | 4.14 | 3.29 | 3.89 | 5.02 | 3.02 | 2.74 | 2.54 | 3.81 | 4.44  | 5.61 |
| 20   | 2.82 | 4.78 | 3.77 | 3.17 | 3.68 | 4.44 | 2.92 | 2.91 | 2.53 | 3.49 | 3.95  | 4.54 |
| 21   | 2.78 | 4.02 | 3.51 | 3.11 | 3.57 | 4.01 | 2.85 | 2.70 | 2.48 | 3.14 | 3.80  | 3.96 |
| 22   | 2.73 | 3.64 | 3.37 | 3.07 | 3.42 | 3.67 | 2.80 | 2.61 | 2.47 | 3.36 | 5.05  | 3.58 |
| 23   | 2.68 | 3.37 | 3.28 | 2.97 | 3.32 | 3.47 | 2.75 | 2.58 | 2.66 | 5.51 | 4.25  | 3.35 |
| 24   | 2.64 | 3.22 | 3.34 | 2.90 | 3.21 | 3.31 | 2.71 | 2.60 | 3.11 | 4.35 | 3.72  | 3.21 |
| 25   | 2.61 | 3.09 | 3.26 | 2.89 | 3.12 | 3.19 | 2.67 | 2.58 | 2.81 | 3.68 | 3.42  | 3.08 |
| 26   | 2.63 | 3.00 | 3.13 | 3.00 | 3.08 | 3.12 | 2.95 | 2.57 | 3.11 | 3.32 | 3.21  | 3.00 |
| 27   | 2.62 | 2.91 | 3.07 | 2.98 | 3.65 | 3.06 | 3.29 | 2.55 | 3.10 | 3.12 | 3.03  | 2.97 |
| 28   | 2.26 | 3.02 | 3.03 | 3.09 | 3.95 | 3.02 | 2.91 | 2.53 | 2.96 | 3.26 | 2.92  | 3.82 |
| 29   | 3.74 | 3.44 | 3.01 | 3.23 | 3.91 | 2.98 | 2.80 | 2.49 | 3.12 | 3.74 | 2.91  | 3.85 |
| 30   | 4.30 | 3.20 | 2.99 | 3.37 | ---  | 2.94 | 2.75 | 2.71 | 2.93 | 6.90 | 7.85  | 3.53 |
| 31   | 3.76 | ---  | 2.96 | 3.40 | ---  | 3.00 | ---  | 2.61 | ---  | 5.79 | 7.22  | ---  |
| MEAN | 2.91 | 3.21 | ---  | 3.04 | 4.00 | 3.67 | 3.20 | 3.05 | 2.84 | 3.49 | 4.95  | 4.13 |
| MAX  | 4.30 | 4.78 | ---  | 3.40 | 6.04 | 6.79 | 4.30 | 5.79 | 4.10 | 6.90 | 11.72 | 7.32 |
| MIN  | 2.26 | 2.76 | ---  | 2.85 | 3.08 | 2.94 | 2.67 | 2.49 | 2.47 | 2.56 | 2.88  | 2.97 |

0208731190 CRABTREE CREEK AT ANDERSON DRIVE AT RALEIGH, NC—Continued



## 02087322 CRABTREE CREEK AT OLD WAKE FOREST ROAD AT RALEIGH, NC

LOCATION.--Lat 35°48'57", long 78°37'34", Wake County, Hydrologic Unit 030200201, on right bank on upstream side of bridge at Old Wake Forest Road, 2.8 mi northeast of Raleigh.

DRAINAGE AREA.--119 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1988 to September 1989, discharge records, October 1989 to October 1991, discharge measurements and unpublished, fragmentary gage-height and discharge records, June 1997 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 186.51 ft above NGVD of 1929. Satellite and telephone telemetry at station.

EXTREMES FOR PERIOD OF RECORD.-- Maximum, 19.93 ft, Sept. 16, 1999; minimum, 1.18 ft, June 13, 14, July 8, 2002.

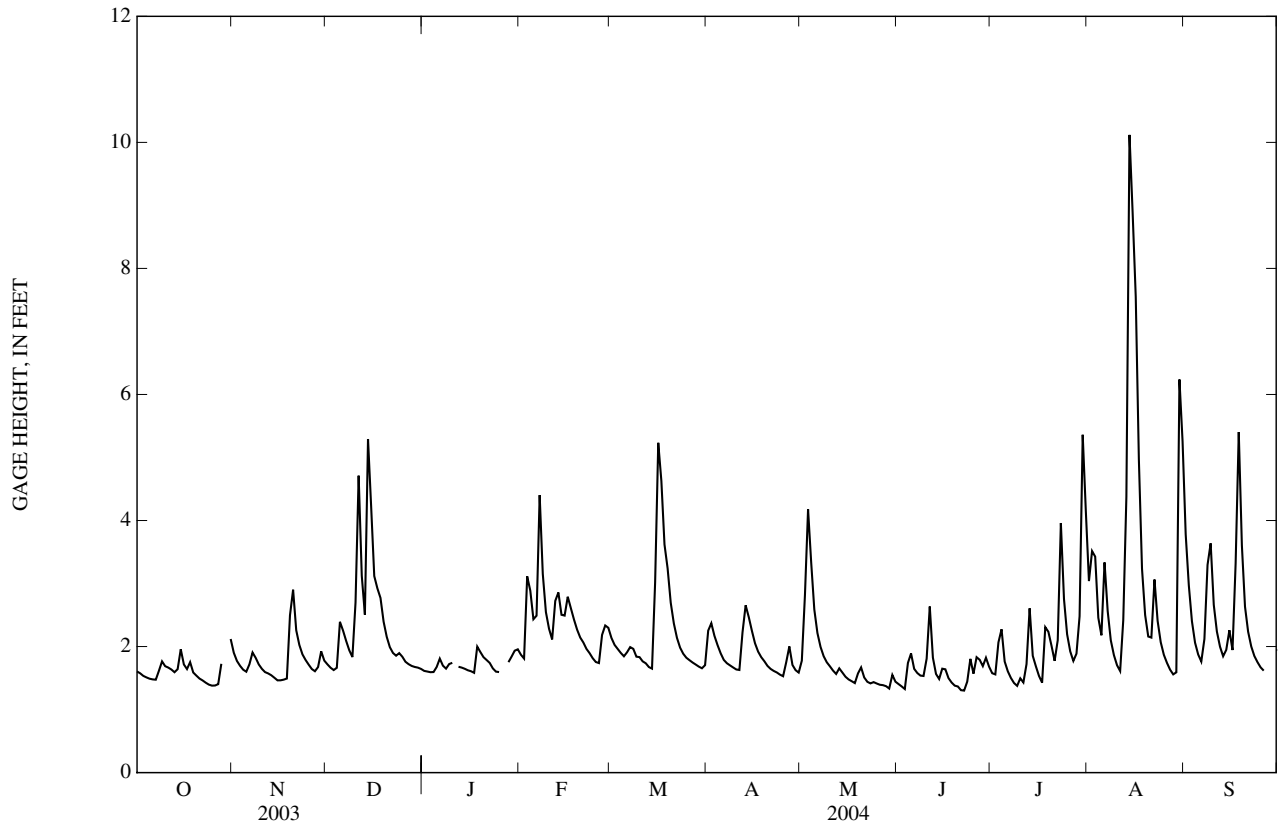
EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Sept. 1996 reached a stage of 21.6 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum, 12.25 ft, Aug. 13; minimum, 1.25 ft, June 4, 22.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG   | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|-------|------|
| 1    | 1.60 | 1.90 | 1.72 | 1.61 | 1.87 | 2.14 | 2.25 | 1.78 | 1.40 | 1.58 | 3.04  | 3.78 |
| 2    | 1.58 | 1.77 | 1.66 | 1.60 | 1.81 | 2.03 | 2.37 | 2.82 | 1.37 | 1.56 | 3.52  | 2.97 |
| 3    | 1.53 | 1.69 | 1.63 | 1.59 | 3.11 | 1.96 | 2.17 | 4.18 | 1.33 | 2.07 | 3.43  | 2.40 |
| 4    | 1.51 | 1.63 | 1.66 | 1.60 | 2.89 | 1.90 | 2.02 | 3.33 | 1.74 | 2.27 | 2.46  | 2.06 |
| 5    | 1.49 | 1.60 | 2.39 | 1.68 | 2.43 | 1.85 | 1.89 | 2.59 | 1.89 | 1.76 | 2.18  | 1.87 |
| 6    | 1.48 | 1.72 | 2.25 | 1.81 | 2.49 | 1.91 | 1.79 | 2.21 | 1.65 | 1.61 | 3.34  | 1.76 |
| 7    | 1.47 | 1.91 | 2.09 | 1.70 | 4.40 | 1.99 | 1.74 | 1.99 | 1.58 | 1.50 | 2.57  | 2.12 |
| 8    | 1.62 | 1.82 | 1.94 | 1.65 | 3.15 | 1.96 | 1.70 | 1.85 | 1.54 | 1.42 | 2.10  | 3.30 |
| 9    | 1.77 | 1.72 | 1.83 | 1.72 | 2.55 | 1.84 | 1.67 | 1.75 | 1.53 | 1.38 | 1.86  | 3.64 |
| 10   | 1.69 | 1.65 | 2.70 | 1.74 | 2.28 | 1.83 | 1.64 | 1.69 | 1.81 | 1.50 | 1.70  | 2.66 |
| 11   | 1.67 | 1.59 | 4.71 | ---  | 2.11 | 1.77 | 1.63 | 1.62 | 2.64 | 1.43 | 1.61  | 2.24 |
| 12   | 1.64 | 1.57 | 3.12 | 1.68 | 2.72 | 1.73 | 2.23 | 1.57 | 1.82 | 1.72 | 2.42  | 2.00 |
| 13   | 1.59 | 1.54 | 2.51 | 1.67 | 2.86 | 1.67 | 2.65 | 1.65 | 1.56 | 2.61 | 4.38  | 1.85 |
| 14   | 1.64 | 1.50 | 5.29 | 1.65 | 2.50 | 1.65 | 2.47 | 1.59 | 1.49 | 1.85 | 10.12 | 1.95 |
| 15   | 1.96 | 1.46 | 4.23 | 1.62 | 2.49 | 3.02 | 2.25 | 1.52 | 1.65 | 1.69 | 8.89  | 2.26 |
| 16   | 1.72 | 1.46 | 3.12 | 1.61 | 2.79 | 5.23 | 2.05 | 1.48 | 1.64 | 1.53 | 7.55  | 1.94 |
| 17   | 1.64 | 1.48 | 2.92 | 1.58 | 2.61 | 4.63 | 1.92 | 1.45 | 1.50 | 1.43 | 4.97  | 3.32 |
| 18   | 1.75 | 1.49 | 2.77 | 2.00 | 2.43 | 3.62 | 1.83 | 1.42 | 1.43 | 2.31 | 3.23  | 5.40 |
| 19   | 1.59 | 2.50 | 2.39 | 1.91 | 2.27 | 3.24 | 1.77 | 1.57 | 1.38 | 2.23 | 2.50  | 3.61 |
| 20   | 1.54 | 2.90 | 2.15 | 1.83 | 2.14 | 2.70 | 1.69 | 1.67 | 1.37 | 2.02 | 2.16  | 2.63 |
| 21   | 1.49 | 2.26 | 1.99 | 1.79 | 2.06 | 2.37 | 1.65 | 1.51 | 1.31 | 1.77 | 2.14  | 2.24 |
| 22   | 1.46 | 2.03 | 1.90 | 1.74 | 1.96 | 2.14 | 1.61 | 1.44 | 1.30 | 2.10 | 3.06  | 2.00 |
| 23   | 1.43 | 1.88 | 1.85 | 1.65 | 1.90 | 1.98 | 1.59 | 1.42 | 1.44 | 3.96 | 2.41  | 1.85 |
| 24   | 1.40 | 1.79 | 1.90 | 1.60 | 1.81 | 1.89 | 1.55 | 1.44 | 1.80 | 2.75 | 2.07  | 1.75 |
| 25   | 1.38 | 1.71 | 1.84 | 1.60 | 1.75 | 1.82 | 1.53 | 1.41 | 1.57 | 2.20 | 1.87  | 1.67 |
| 26   | 1.38 | 1.64 | 1.76 | ---  | 1.74 | 1.78 | 1.75 | 1.39 | 1.83 | 1.92 | 1.74  | 1.62 |
| 27   | 1.40 | 1.61 | 1.72 | ---  | 2.18 | 1.75 | 2.00 | 1.39 | 1.79 | 1.77 | 1.63  | ---  |
| 28   | 1.73 | 1.67 | 1.69 | 1.75 | 2.33 | 1.71 | 1.71 | 1.37 | 1.69 | 1.89 | 1.56  | ---  |
| 29   | ---  | 1.92 | 1.68 | 1.84 | 2.30 | 1.68 | 1.63 | 1.33 | 1.82 | 2.48 | 1.59  | ---  |
| 30   | ---  | 1.78 | 1.67 | 1.93 | ---  | 1.66 | 1.59 | 1.55 | 1.68 | 5.36 | 6.24  | 1.95 |
| 31   | 2.12 | ---  | 1.64 | 1.96 | ---  | 1.70 | ---  | 1.44 | ---  | 4.15 | 5.26  | ---  |
| MEAN | ---  | 1.77 | 2.35 | ---  | 2.41 | 2.23 | 1.88 | 1.79 | 1.62 | 2.12 | 3.34  | ---  |
| MAX  | ---  | 2.90 | 5.29 | ---  | 4.40 | 5.23 | 2.65 | 4.18 | 2.64 | 5.36 | 10.12 | ---  |
| MIN  | ---  | 1.46 | 1.63 | ---  | 1.74 | 1.65 | 1.53 | 1.33 | 1.30 | 1.38 | 1.56  | ---  |

02087322 CRABTREE CREEK AT OLD WAKE FOREST ROAD AT RALEIGH, NC—Continued





## 02087324 CRABTREE CREEK AT US HIGHWAY 1 AT RALEIGH, NC

LOCATION.--Lat 35°48'40", long 78°36'39", Wake County, Hydrologic Unit 03020201, on downstream side of bridge on U.S. Highway 1, 2.7 mi northeast of Raleigh, and 7.2 mi upstream from mouth.

DRAINAGE AREA.--121 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1990 to current year.

GAGE.--Water-stage recorder. Datum of gage is 182.27 ft above NGVD of 1929. Prior to Aug. 8, 1999, at site 40 ft upstream at datum 183.27 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Maximum gage height for period of record from high-water mark in gage well. Minimum discharge for period of record also occurred Oct. 8, 9, 1994. Minimum discharge for current water year also occurred June 4, 22.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 29, 1973, reached a stage of about 17.98 ft, discharge, about 13,500 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 54    | 113   | 60    | 57    | 91    | 135   | 154   | 76    | 29    | 48    | 294    | 445   |
| 2     | 50    | 88    | 53    | 55    | 83    | 117   | 174   | 258   | 26    | 49    | 381    | 295   |
| 3     | 45    | 73    | 47    | 54    | 301   | 106   | 138   | 516   | 23    | 118   | 350    | 183   |
| 4     | 42    | 62    | 54    | 54    | 266   | 97    | 112   | 352   | 81    | 160   | 186    | 119   |
| 5     | 40    | 56    | 184   | 65    | 187   | 87    | 92    | 211   | 96    | 74    | 138    | 86    |
| 6     | 38    | 72    | 155   | 83    | 192   | 96    | 78    | 142   | 58    | 52    | 324    | 70    |
| 7     | e41   | 103   | 123   | 67    | 541   | 111   | 71    | 104   | 49    | 40    | 204    | 126   |
| 8     | e54   | 87    | 96    | 61    | 314   | 107   | 66    | 81    | e41   | 33    | 127    | 356   |
| 9     | 80    | 68    | 77    | 71    | 209   | 87    | 61    | 68    | e34   | 29    | 89     | 435   |
| 10    | 71    | 57    | 233   | 73    | 162   | 87    | 57    | 59    | e120  | 49    | 65     | 235   |
| 11    | 66    | 50    | 617   | 66    | 133   | 78    | 55    | 51    | 233   | 37    | 54     | 147   |
| 12    | 62    | 47    | 325   | 63    | 239   | 74    | 153   | 45    | 85    | 69    | 185    | 103   |
| 13    | 57    | 43    | 211   | 62    | 262   | 67    | 226   | 55    | 47    | 228   | 614    | 79    |
| 14    | 64    | 39    | 719   | 59    | 201   | 64    | 187   | 48    | 38    | 91    | 2,110  | 101   |
| 15    | 121   | 33    | 514   | 56    | 197   | 295   | 148   | 41    | 59    | 67    | 1,720  | 160   |
| 16    | 78    | 31    | 313   | 55    | 250   | 703   | 113   | 37    | 57    | 46    | 1,320  | 94    |
| 17    | 66    | 32    | 277   | 51    | 217   | 586   | 91    | 34    | 39    | 35    | 712    | 386   |
| 18    | 89    | 34    | 252   | 108   | 186   | 402   | 79    | 31    | 31    | 162   | 363    | 805   |
| 19    | 61    | 209   | 186   | 92    | 158   | 332   | 71    | 57    | 27    | 153   | 214    | 424   |
| 20    | 54    | 288   | 144   | 81    | 137   | 235   | 62    | 61    | 26    | 117   | 147    | 226   |
| 21    | 49    | 165   | 115   | 76    | 123   | 176   | 55    | 40    | 22    | 78    | 133    | 149   |
| 22    | 45    | 119   | 100   | 72    | 107   | 137   | 51    | 33    | 21    | 142   | 295    | 107   |
| 23    | 41    | 91    | 94    | 64    | 96    | 110   | 47    | 30    | 31    | 457   | 191    | 82    |
| 24    | 37    | 76    | 100   | 57    | 85    | 95    | 43    | 32    | 79    | e230  | 129    | 68    |
| 25    | 35    | 65    | 90    | 57    | 76    | 85    | 41    | 30    | 47    | 142   | 94     | 58    |
| 26    | 37    | 54    | 79    | 65    | 75    | 80    | 76    | 28    | 84    | 98    | 74     | 52    |
| 27    | 40    | 47    | 73    | 65    | 150   | 75    | 111   | 28    | 73    | 74    | 61     | 49    |
| 28    | 102   | 55    | 69    | 78    | 170   | 71    | 63    | 26    | 62    | 92    | 53     | 133   |
| 29    | 502   | 96    | 67    | 89    | 164   | 67    | 53    | 23    | 79    | 208   | 58     | 133   |
| 30    | 240   | 70    | 65    | 102   | ---   | 63    | 48    | 52    | 60    | 737   | e950   | 99    |
| 31    | 157   | ---   | 62    | 104   | ---   | 67    | ---   | 33    | ---   | 495   | 755    | ---   |
| TOTAL | 2,518 | 2,423 | 5,554 | 2,162 | 5,372 | 4,892 | 2,776 | 2,682 | 1,757 | 4,410 | 12,390 | 5,805 |
| MEAN  | 81.2  | 80.8  | 179   | 69.7  | 185   | 158   | 92.5  | 86.5  | 58.6  | 142   | 400    | 194   |
| MAX   | 502   | 288   | 719   | 108   | 541   | 703   | 226   | 516   | 233   | 737   | 2,110  | 805   |
| MIN   | 35    | 31    | 47    | 51    | 75    | 63    | 41    | 23    | 21    | 29    | 53     | 49    |
| CFSM  | 0.67  | 0.67  | 1.48  | 0.58  | 1.53  | 1.30  | 0.76  | 0.72  | 0.48  | 1.18  | 3.30   | 1.60  |
| IN.   | 0.77  | 0.74  | 1.71  | 0.66  | 1.65  | 1.50  | 0.85  | 0.82  | 0.54  | 1.36  | 3.81   | 1.78  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1990 - 2004, BY WATER YEAR (WY)

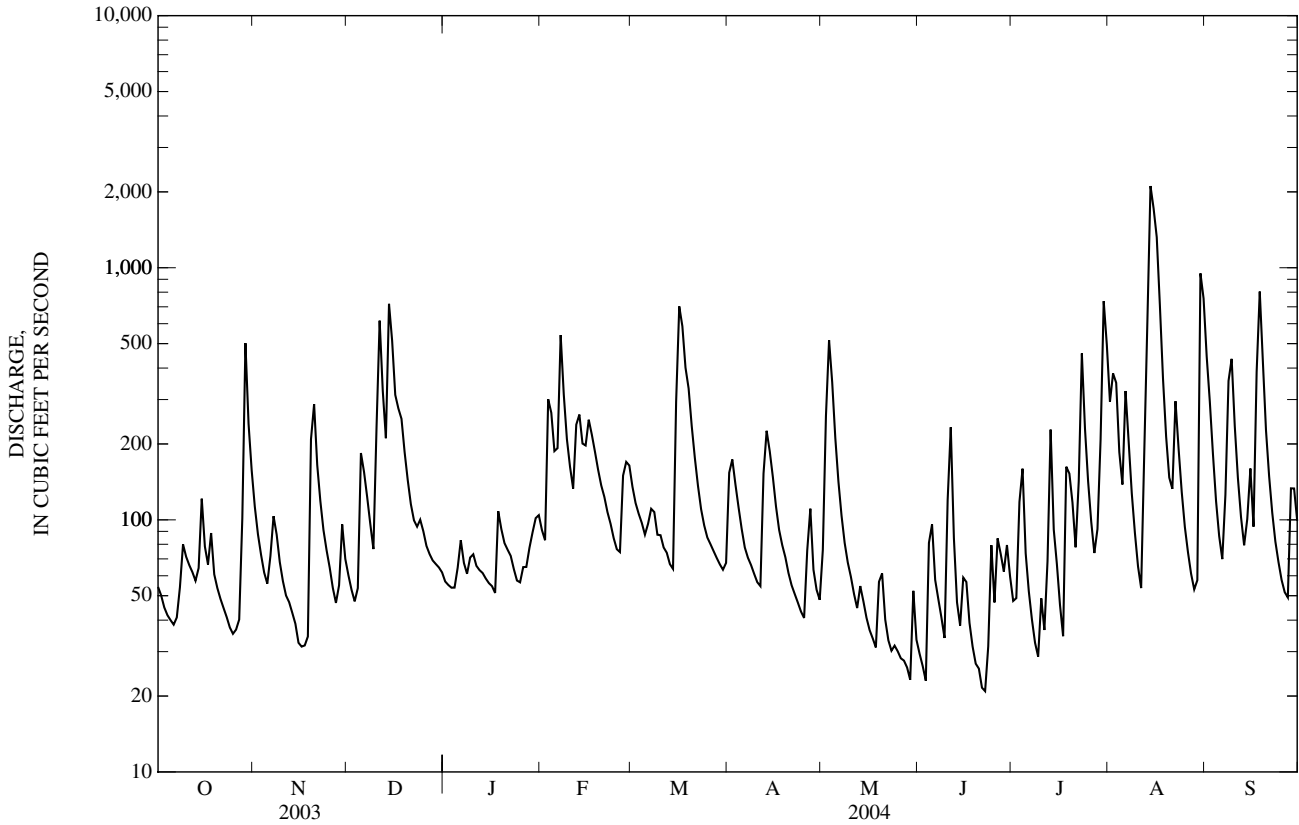
|      | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000   | 2001   | 2002 | 2003 | 2004 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|
| MEAN | 135    | 102    | 119    | 224    | 204    | 239    | 154    | 77.8   | 110    | 96.1   | 115    | 215    |      |      |      |
| MAX  | 427    | 255    | 335    | 495    | 483    | 494    | 382    | 128    | 257    | 198    | 400    | 1,162  |      |      |      |
| (WY) | (2003) | (1993) | (2003) | (1998) | (1998) | (1998) | (2003) | (2003) | (1990) | (1997) | (2004) | (1999) |      |      |      |
| MIN  | 30.8   | 23.2   | 44.2   | 45.0   | 59.5   | 103    | 57.4   | 21.3   | 21.3   | 30.7   | 31.7   | 14.2   |      |      |      |
| (WY) | (1992) | (1992) | (2002) | (2001) | (1991) | (2000) | (1995) | (2002) | (1999) | (1993) | (1993) | (1990) |      |      |      |

02087324 CRABTREE CREEK AT US HIGHWAY 1 AT RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1990 - 2004 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 75,058                 |        | 52,741              |        | 150                     |             |
| ANNUAL MEAN              | 206                    |        | 144                 |        | 96.7                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 261                     | 2003        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 96.7                    | 2002        |
| HIGHEST DAILY MEAN       | 2,330                  | Apr 10 | 2,110               | Aug 14 | 7,730                   | Sep 6, 1996 |
| LOWEST DAILY MEAN        | 31                     | Nov 16 | 21                  | Jun 22 | 1.9                     | Oct 8, 1994 |
| ANNUAL SEVEN-DAY MINIMUM | 37                     | Nov 12 | 28                  | May 23 | 2.3                     | Oct 2, 1994 |
| MAXIMUM PEAK FLOW        |                        |        | 2,730               | Aug 13 | 12,700                  | Sep 6, 1996 |
| MAXIMUM PEAK STAGE       |                        |        | 10.90               | Aug 13 | 18.23*                  | Sep 6, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 18*                 | May 30 | 1.9*                    | Oct 7, 1994 |
| ANNUAL RUNOFF (CFSM)     | 1.70                   |        | 1.19                |        | 1.24                    |             |
| ANNUAL RUNOFF (INCHES)   | 23.08                  |        | 16.21               |        | 16.84                   |             |
| 10 PERCENT EXCEEDS       | 452                    |        | 295                 |        | 326                     |             |
| 50 PERCENT EXCEEDS       | 115                    |        | 80                  |        | 71                      |             |
| 90 PERCENT EXCEEDS       | 49                     |        | 39                  |        | 21                      |             |

\* See REMARKS.

e Estimated.



## 0208732534 PIGEON HOUSE CREEK AT CAMERON VILLAGE AT RALEIGH, NC

LOCATION.--Lat 35°47'15", long 78°39'17", Wake County, Hydrologic Unit 03020201, on right bank, downstream of Cameron Village in Wells Park, on the upstream side of Forest Drive.

DRAINAGE AREA.--0.27 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1996 to current year. Fragmentary records, July 1987 to September 1996, are available in the U.S.G.S. District Office, Raleigh, NC.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 320 ft above NGVD of 1929 from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow occurred many days June to Oct. 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 0.04 | 0.03 | 0.03 | 0.05 | 0.04  | e0.09 | e0.20 | e0.40 | e0.06 | e0.10 | e0.20 | e0.09 |
| 2     | 0.04 | 0.03 | 0.03 | 0.04 | 0.05  | e0.08 | e0.10 | e1.8  | e0.05 | e0.20 | e1.6  | e0.08 |
| 3     | 0.05 | 0.04 | 0.03 | 0.04 | 1.5   | e0.08 | e0.08 | e0.50 | e0.10 | e0.10 | e0.20 | e0.08 |
| 4     | 0.04 | 0.04 | 0.56 | 0.04 | 0.06  | e0.09 | e0.09 | e0.10 | e0.60 | e0.08 | e0.10 | e0.08 |
| 5     | 0.04 | 0.04 | 0.34 | 0.39 | e0.06 | e0.10 | e0.08 | e0.08 | e0.10 | e0.07 | e1.1  | e0.07 |
| 6     | 0.04 | 0.41 | 0.04 | 0.04 | e1.2  | e0.20 | e0.08 | e0.08 | e0.07 | e0.04 | e0.20 | e0.10 |
| 7     | 0.08 | 0.05 | 0.04 | 0.04 | e0.40 | e0.20 | e0.08 | e0.07 | e0.08 | e0.05 | e0.10 | e0.40 |
| 8     | 1.1  | 0.29 | 0.04 | 0.04 | e0.07 | e0.10 | e0.07 | e0.07 | e0.07 | e0.04 | e0.06 | e1.3  |
| 9     | 0.26 | 0.03 | 0.04 | 0.19 | e0.06 | e0.20 | e0.09 | e0.06 | e0.09 | e0.04 | e0.04 | e0.10 |
| 10    | 0.63 | 0.03 | 2.7  | 0.04 | e0.06 | e0.10 | e0.07 | e0.07 | e0.08 | e0.05 | e0.05 | e0.08 |
| 11    | 0.25 | 0.04 | 0.15 | 0.04 | e0.05 | e0.08 | e0.10 | e0.07 | e0.10 | e0.10 | e0.10 | e0.07 |
| 12    | 0.17 | 0.04 | 0.05 | 0.05 | e1.0  | e0.06 | e1.0  | e0.06 | e0.09 | e1.2  | e1.1  | e0.07 |
| 13    | 0.12 | 0.04 | 0.09 | 0.03 | e0.10 | e0.07 | e0.30 | e0.06 | e0.07 | e0.10 | e3.3  | e0.10 |
| 14    | 0.56 | 0.03 | 2.7  | 0.03 | e0.20 | e0.10 | e0.10 | e0.07 | e0.10 | e0.06 | e2.2  | e0.60 |
| 15    | 0.11 | 0.03 | 0.08 | 0.03 | e0.50 | e1.0  | e0.08 | e0.06 | e0.30 | e0.05 | e2.3  | e0.80 |
| 16    | 0.03 | 0.04 | 0.05 | 0.03 | e0.30 | e1.1  | e0.08 | e0.06 | e0.10 | e0.06 | e0.20 | e0.10 |
| 17    | 0.18 | 0.04 | 0.59 | 0.04 | e0.20 | e0.20 | e0.07 | e0.07 | e0.07 | e0.10 | e0.10 | e2.9  |
| 18    | 0.08 | 0.04 | 0.05 | 0.53 | e0.14 | e0.50 | e0.07 | e0.10 | e0.08 | e0.40 | e0.08 | e0.50 |
| 19    | 0.03 | 2.0  | 0.06 | 0.03 | e0.10 | e0.20 | e0.06 | e0.70 | e0.09 | e0.10 | e0.07 | e0.10 |
| 20    | 0.03 | 0.06 | 0.06 | 0.03 | e0.09 | e0.10 | e0.06 | e0.10 | e0.08 | e0.07 | e0.10 | e0.08 |
| 21    | 0.03 | 0.04 | 0.06 | 0.02 | e0.09 | e0.09 | e0.07 | e0.08 | e0.09 | e0.10 | e1.8  | e0.07 |
| 22    | 0.03 | 0.04 | 0.07 | 0.03 | e0.08 | e0.08 | e0.06 | e0.07 | e0.10 | e1.4  | e0.40 | e0.07 |
| 23    | 0.03 | 0.04 | 0.37 | 0.03 | e0.08 | e0.07 | e0.06 | e0.06 | e0.07 | e2.1  | e0.10 | e0.06 |
| 24    | 0.03 | 0.04 | 0.22 | 0.03 | e0.09 | e0.07 | e0.07 | e0.06 | e0.10 | e0.20 | e0.07 | e0.06 |
| 25    | 0.03 | 0.04 | 0.05 | 0.03 | e0.10 | e0.06 | e0.10 | e0.05 | e0.40 | e0.16 | e0.07 | e0.05 |
| 26    | 0.05 | 0.04 | 0.05 | 0.03 | e0.20 | e0.06 | e0.60 | e0.06 | e0.70 | e0.13 | e0.08 | e0.07 |
| 27    | 0.03 | 0.04 | 0.04 | 0.10 | e0.60 | e0.06 | e0.20 | e0.06 | e0.10 | e0.08 | e0.09 | e0.10 |
| 28    | 1.6  | 0.29 | 0.04 | 0.28 | e0.20 | e0.07 | e0.10 | e0.05 | e0.80 | e0.10 | e0.10 | e1.0  |
| 29    | 2.0  | 0.04 | 0.04 | 0.28 | e0.10 | e0.06 | e0.08 | e0.10 | e0.50 | e1.0  | e0.20 | e0.10 |
| 30    | 0.06 | 0.03 | 0.04 | 0.13 | ---   | e0.08 | e0.10 | e0.30 | e0.10 | e0.10 | e4.3  | e0.08 |
| 31    | 0.03 | ---  | 0.04 | 0.04 | ---   | e0.07 | ---   | e0.10 | ---   | e0.60 | e0.10 | ---   |
| TOTAL | 7.80 | 3.99 | 8.75 | 2.75 | 7.72  | 5.42  | 4.30  | 5.57  | 5.34  | 8.98  | 20.51 | 9.36  |
| MEAN  | 0.25 | 0.13 | 0.28 | 0.09 | 0.27  | 0.17  | 0.14  | 0.18  | 0.18  | 0.29  | 0.66  | 0.31  |
| MAX   | 2.0  | 2.0  | 2.7  | 0.53 | 1.5   | 1.1   | 1.0   | 1.8   | 0.80  | 2.1   | 4.3   | 2.9   |
| MIN   | 0.03 | 0.03 | 0.03 | 0.02 | 0.04  | 0.06  | 0.06  | 0.05  | 0.05  | 0.04  | 0.04  | 0.05  |
| CFSM  | 0.93 | 0.49 | 1.05 | 0.33 | 0.99  | 0.65  | 0.53  | 0.67  | 0.66  | 1.07  | 2.45  | 1.16  |
| IN.   | 1.07 | 0.55 | 1.21 | 0.38 | 1.06  | 0.75  | 0.59  | 0.77  | 0.74  | 1.24  | 2.83  | 1.29  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

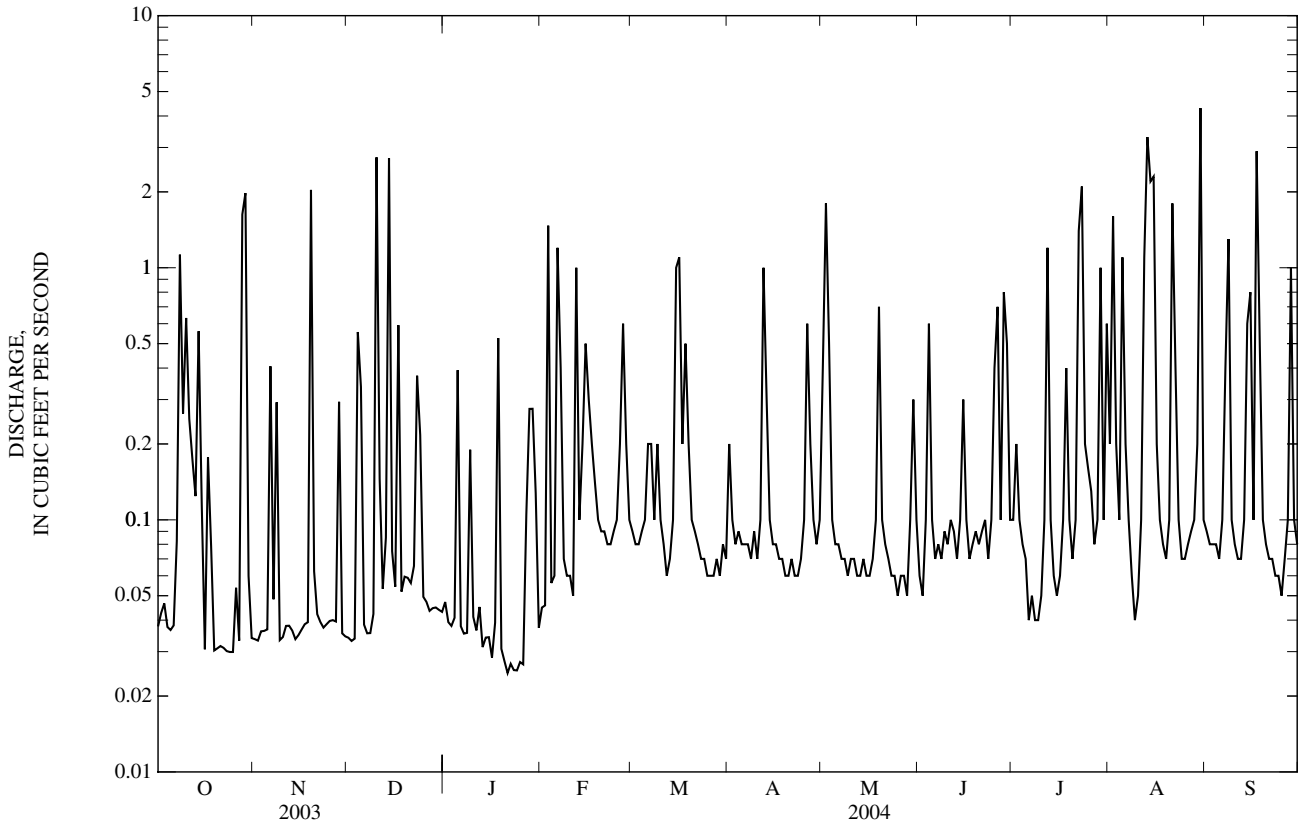
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.33   | 0.28   | 0.36   | 0.54   | 0.44   | 0.56   | 0.34   | 0.26   | 0.39   | 0.52   | 0.54   | 0.62   |
| MAX  | 0.81   | 0.46   | 0.74   | 1.32   | 1.02   | 1.31   | 0.63   | 0.60   | 0.74   | 0.91   | 0.85   | 2.78   |
| (WY) | (2003) | (1998) | (2003) | (1998) | (1998) | (1998) | (1997) | (1997) | (2001) | (2003) | (2003) | (1999) |
| MIN  | 0.03   | 0.04   | 0.12   | 0.05   | 0.11   | 0.17   | 0.05   | 0.05   | 0.18   | 0.21   | 0.17   | 0.08   |
| (WY) | (2001) | (2002) | (2001) | (2001) | (2002) | (2004) | (2002) | (2002) | (1999) | (1999) | (2001) | (2002) |

0208732534 PIGEON HOUSE CREEK AT CAMERON VILLAGE AT RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1997 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 169.60                 |        | 90.49               |        | 0.43                    |              |
| ANNUAL MEAN              | 0.46                   |        | 0.25                |        | 0.69                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 0.20                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 0.00                    |              |
| HIGHEST DAILY MEAN       | 17                     | Jul 29 | 4.3                 | Aug 30 | 17                      | Jul 29, 2003 |
| LOWEST DAILY MEAN        | 0.03                   | Jul 26 | 0.02                | Jan 21 | 0.00                    | Jun 24, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.03                   | Oct 19 | 0.03                | Jan 19 | 0.00                    | Aug 5, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | NOT DETERMINED      |        | 622                     | Aug 21, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | NOT DETERMINED      |        | 8.23                    | Aug 21, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | NOT DETERMINED      |        | 0.00*                   | Jun 24, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.72                   |        | 0.916               |        | 1.61                    |              |
| ANNUAL RUNOFF (INCHES)   | 23.37                  |        | 12.47               |        | 21.86                   |              |
| 10 PERCENT EXCEEDS       | 1.1                    |        | 0.60                |        | 0.96                    |              |
| 50 PERCENT EXCEEDS       | 0.07                   |        | 0.08                |        | 0.10                    |              |
| 90 PERCENT EXCEEDS       | 0.04                   |        | 0.04                |        | 0.02                    |              |

\* See REMARKS.

e Estimated.



0208732534 PIGEON HOUSE CREEK AT CAMERON VILLAGE AT RALEIGH, NC—Continued

PRECIPITATION RECORDS

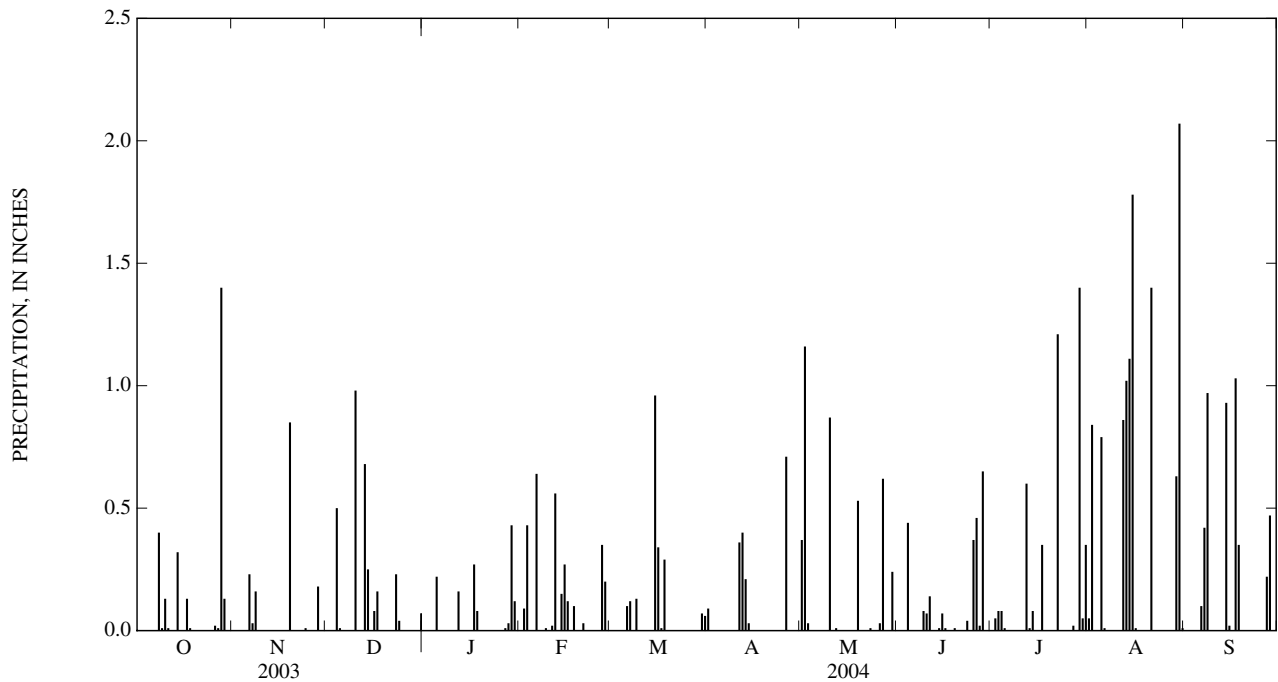
PERIOD OF RECORD.--July 1987 to current year. Records from July 1987 to January 2000 are unpublished and available in the USGS District Office in Raleigh, NC.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG   | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.37 | 0.00 | 0.00 | 0.05  | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 1.16 | 0.00 | 0.05 | 0.84  | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 0.00 | 0.00 | 0.03 | 0.00 | 0.08 | 0.00  | 0.00 |
| 4     | 0.00 | 0.00 | 0.50 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.08 | 0.00  | 0.00 |
| 5     | 0.00 | 0.00 | 0.01 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.79  | 0.00 |
| 6     | 0.00 | 0.23 | 0.00 | 0.00 | 0.64 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01  | 0.10 |
| 7     | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.42 |
| 8     | 0.40 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.97 |
| 9     | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.13 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00  | 0.00 |
| 10    | 0.13 | 0.00 | 0.98 | 0.00 | 0.00 | 0.00 | 0.00 | 0.87 | 0.07 | 0.00 | 0.00  | 0.00 |
| 11    | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.36 | 0.00 | 0.14 | 0.00 | 0.00  | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.16 | 0.56 | 0.00 | 0.40 | 0.01 | 0.00 | 0.60 | 0.86  | 0.00 |
| 13    | 0.00 | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.01 | 1.02  | 0.00 |
| 14    | 0.32 | 0.00 | 0.25 | 0.00 | 0.15 | 0.00 | 0.03 | 0.00 | 0.01 | 0.08 | 1.11  | 0.93 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 | 0.96 | 0.00 | 0.00 | 0.07 | 0.00 | 1.78  | 0.02 |
| 16    | 0.00 | 0.00 | 0.08 | 0.00 | 0.12 | 0.34 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01  | 0.00 |
| 17    | 0.13 | 0.00 | 0.16 | 0.27 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00  | 1.03 |
| 18    | 0.01 | 0.00 | 0.00 | 0.08 | 0.10 | 0.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.35 |
| 19    | 0.00 | 0.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 0.01 | 0.00 | 0.00  | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.40  | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.21 | 0.00  | 0.00 |
| 23    | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.04 | 0.00 | 0.00  | 0.00 |
| 24    | 0.00 | 0.01 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.00 | 0.00  | 0.00 |
| 26    | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.71 | 0.03 | 0.46 | 0.00 | 0.00  | 0.00 |
| 27    | 0.01 | 0.00 | 0.00 | 0.01 | 0.35 | 0.00 | 0.00 | 0.62 | 0.02 | 0.02 | 0.00  | 0.22 |
| 28    | 1.40 | 0.18 | 0.00 | 0.03 | 0.20 | 0.00 | 0.00 | 0.00 | 0.65 | 0.00 | 0.00  | 0.47 |
| 29    | 0.13 | 0.00 | 0.00 | 0.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.40 | 0.63  | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.12 | ---  | 0.07 | 0.00 | 0.24 | 0.00 | 0.05 | 2.07  | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.06 | ---  | 0.00 | ---  | 0.35 | 0.01  | ---  |
| TOTAL | 2.57 | 1.46 | 2.93 | 1.32 | 2.97 | 2.08 | 1.80 | 3.87 | 2.37 | 4.29 | 10.58 | 4.51 |



0208732885 MARSH CREEK NEAR NEW HOPE, NC

LOCATION.--Lat 35°49'01", long 78°35'35", Wake County, Hydrologic Unit 03020201, at right upstream wingwall, on bridge at Stoneybrook Road, 0.2 mi downstream of U.S. Highway 401, and 2.9 mi southwest of New Hope.

DRAINAGE AREA.--6.84 mi<sup>2</sup>

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--January 1984 to current year.

REVISED RECORDS.--WDR NC-95-1: 1995(M).

GAGE.--Water-stage recorder. Datum of gage is 196.63 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extension above 1,300 ft<sup>3</sup>/s, on basis of indirect measurement of peak flow. No flow also occurred Aug. 5, 1999.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 2.2  | 4.0  | 4.4  | 2.9  | 3.9  | 5.1  | 16   | 11   | 2.0  | 2.3  | 13   | 4.2  |
| 2    | 2.0  | 3.3  | 3.5  | 2.9  | 3.7  | 4.3  | 6.2  | 45   | 1.6  | 4.2  | 19   | 2.9  |
| 3    | 1.8  | 3.0  | 3.9  | 2.9  | 35   | 4.6  | 4.5  | 36   | 1.2  | 8.6  | 9.6  | 2.3  |
| 4    | 1.8  | 3.0  | 8.4  | 2.9  | 8.2  | 8.0  | 3.6  | 7.0  | 23   | 5.0  | 4.6  | 1.9  |
| 5    | 1.8  | 3.2  | 20   | 6.1  | 5.4  | 3.7  | 3.1  | 4.4  | 6.6  | 5.4  | 5.9  | 1.3  |
| 6    | 1.8  | 13   | 6.6  | 6.6  | 19   | 6.5  | 3.0  | 3.4  | 2.9  | 2.4  | 12   | 1.6  |
| 7    | 1.9  | 10   | 4.4  | 3.8  | 45   | 6.4  | 3.1  | 2.9  | 3.1  | 1.4  | 5.3  | 4.4  |
| 8    | 6.2  | 11   | 3.5  | 3.2  | 7.3  | 8.4  | 3.1  | 2.5  | 52   | 3.0  | 3.2  | 14   |
| 9    | 9.7  | 5.4  | 3.4  | 6.9  | 5.7  | 5.3  | 3.1  | 2.3  | 21   | 4.8  | 2.3  | 7.4  |
| 10   | 6.9  | 6.6  | 48   | 7.4  | 4.8  | 4.9  | 3.2  | 2.1  | 11   | 28   | 2.0  | 1.9  |
| 11   | 4.3  | 3.3  | 31   | 3.7  | 4.8  | 3.6  | 3.4  | 2.0  | 13   | 19   | 1.5  | 1.4  |
| 12   | 3.0  | 2.8  | 7.6  | 3.8  | 30   | 3.1  | 34   | 2.2  | 9.2  | 11   | 21   | 1.1  |
| 13   | 2.4  | 3.8  | 5.1  | 3.4  | 9.7  | 2.9  | 34   | 2.1  | 3.6  | 14   | 90   | 1.1  |
| 14   | 7.3  | 4.6  | 74   | 3.0  | 8.8  | 2.9  | 11   | 2.0  | 3.1  | 5.6  | 114  | 13   |
| 15   | 14   | 4.4  | 12   | 2.8  | 16   | 54   | 6.6  | 1.9  | 6.7  | 3.5  | 112  | 21   |
| 16   | 3.7  | 4.9  | 6.3  | 2.7  | 16   | 44   | 4.5  | 1.8  | 4.9  | 2.2  | 31   | 4.0  |
| 17   | 3.7  | 5.8  | 16   | 2.8  | 9.6  | 16   | 3.5  | 1.8  | 3.3  | 1.8  | 7.3  | 47   |
| 18   | 8.8  | 5.9  | 7.4  | 17   | 7.0  | 16   | 2.8  | 1.6  | 2.6  | 15   | 4.1  | 29   |
| 19   | 3.5  | 40   | 5.2  | 5.7  | 5.4  | 9.8  | 3.1  | 11   | 3.1  | 5.4  | 3.5  | 6.0  |
| 20   | 2.9  | 17   | 4.1  | 3.9  | 4.3  | 6.2  | 2.7  | 4.8  | 3.1  | 3.9  | 3.4  | 3.0  |
| 21   | 2.5  | 6.1  | 3.8  | 3.1  | 3.8  | 4.7  | 2.5  | 2.4  | 2.9  | 2.3  | 9.4  | 2.3  |
| 22   | 2.3  | 4.9  | 3.6  | 3.2  | 4.0  | 4.6  | 2.6  | 1.9  | 3.4  | 20   | 17   | 1.6  |
| 23   | 1.9  | 3.7  | 6.3  | 3.4  | 3.5  | 4.0  | 2.4  | 1.7  | 5.8  | 34   | 7.1  | 1.6  |
| 24   | 1.8  | 3.3  | 11   | 3.4  | 3.3  | 3.8  | 2.3  | 1.5  | 4.6  | 6.4  | 5.3  | 1.4  |
| 25   | 1.9  | 3.3  | 5.0  | 3.8  | 3.1  | 3.8  | 2.3  | 1.4  | 5.7  | 4.3  | 2.0  | 1.3  |
| 26   | 2.3  | 3.1  | 3.9  | 4.4  | 4.8  | 3.7  | 8.5  | 1.3  | 14   | 3.7  | 1.6  | 1.4  |
| 27   | 2.3  | 2.9  | 3.5  | 6.6  | 25   | 3.8  | 15   | 1.6  | 4.7  | 3.0  | 1.8  | 1.4  |
| 28   | 26   | 5.2  | 3.1  | 12   | 12   | 3.4  | 4.7  | 1.2  | 5.7  | 4.8  | 1.9  | 5.5  |
| 29   | 72   | 5.6  | 3.1  | 11   | 7.6  | 3.9  | 3.5  | 1.1  | 8.1  | 26   | 7.5  | 3.1  |
| 30   | 7.6  | 3.7  | 3.0  | 8.9  | ---  | 4.2  | 2.8  | 10   | 3.1  | 16   | 177  | 2.1  |
| 31   | 5.0  | ---  | 2.9  | 5.5  | ---  | 7.1  | ---  | 2.2  | ---  | 18   | 13   | ---  |
| MEAN | 6.95 | 6.56 | 10.5 | 5.15 | 10.9 | 8.47 | 6.70 | 5.62 | 7.83 | 9.19 | 22.8 | 6.34 |
| MAX  | 72   | 40   | 74   | 17   | 45   | 54   | 34   | 45   | 52   | 34   | 177  | 47   |
| MIN  | 1.8  | 2.8  | 2.9  | 2.7  | 3.1  | 2.9  | 2.3  | 1.1  | 1.2  | 1.4  | 1.5  | 1.1  |
| IN.  | 1.17 | 1.07 | 1.76 | 0.87 | 1.72 | 1.43 | 1.09 | 0.95 | 1.28 | 1.55 | 3.85 | 1.03 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 7.98   | 7.58   | 7.32   | 11.9   | 11.4   | 13.6   | 9.79   | 8.05   | 8.42   | 9.07   | 11.1   | 11.5   |
| MAX  | 28.2   | 15.7   | 16.2   | 30.3   | 22.0   | 31.9   | 21.5   | 25.9   | 20.3   | 25.0   | 38.0   | 67.4   |
| (WY) | (2003) | (1996) | (2003) | (1998) | (1998) | (1998) | (2003) | (1984) | (1989) | (1997) | (1986) | (1999) |
| MIN  | 1.39   | 1.72   | 2.02   | 3.62   | 2.77   | 3.71   | 2.08   | 2.05   | 1.29   | 2.44   | 2.07   | 1.15   |
| (WY) | (2001) | (1992) | (1995) | (2001) | (1991) | (1985) | (1986) | (2002) | (1993) | (1987) | (1993) | (1985) |

SUMMARY STATISTICS

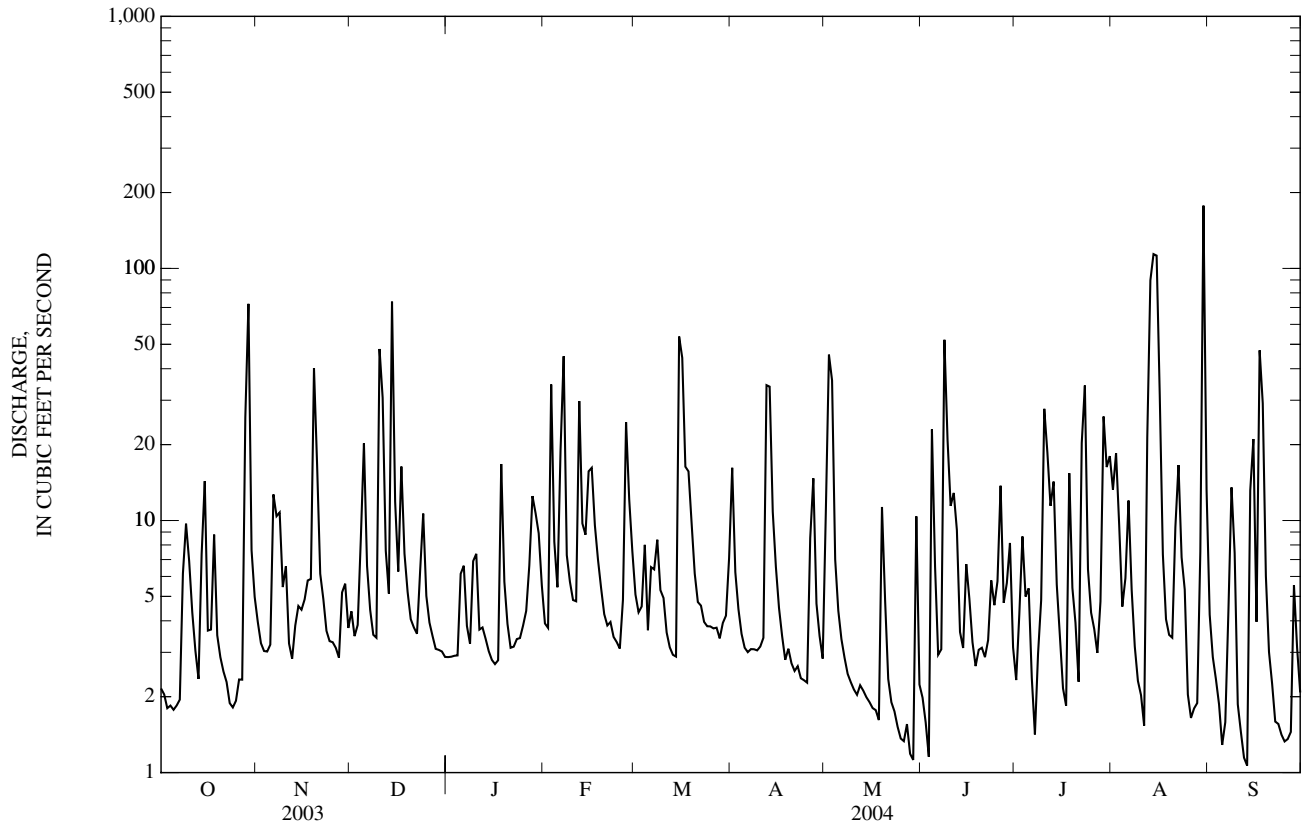
FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1984 - 2004

|                          |       |       |       |
|--------------------------|-------|-------|-------|
| ANNUAL MEAN              | 13.5  | 8.93  | 9.71  |
| HIGHEST ANNUAL MEAN      |       |       | 16.3  |
| LOWEST ANNUAL MEAN       |       |       | 5.18  |
| HIGHEST DAILY MEAN       | 275   | Aug 8 | 890   |
| LOWEST DAILY MEAN        | 1.8   | Oct 3 | 0.00  |
| ANNUAL SEVEN-DAY MINIMUM | 1.9   | Oct 1 | 0.05  |
| MAXIMUM PEAK FLOW        |       |       | 700   |
| MAXIMUM PEAK STAGE       |       |       | 8.43  |
| INSTANTANEOUS LOW FLOW   |       |       | 0.73  |
| ANNUAL RUNOFF (INCHES)   | 26.73 |       | 17.78 |
| 10 PERCENT EXCEEDS       | 30    |       | 18    |
| 50 PERCENT EXCEEDS       | 5.4   |       | 4.1   |
| 90 PERCENT EXCEEDS       | 2.9   |       | 1.9   |
|                          |       |       | 1.3   |

\* See REMARKS.



0208732885 MARSH CREEK NEAR NEW HOPE, NC—Continued

PRECIPITATION RECORDS

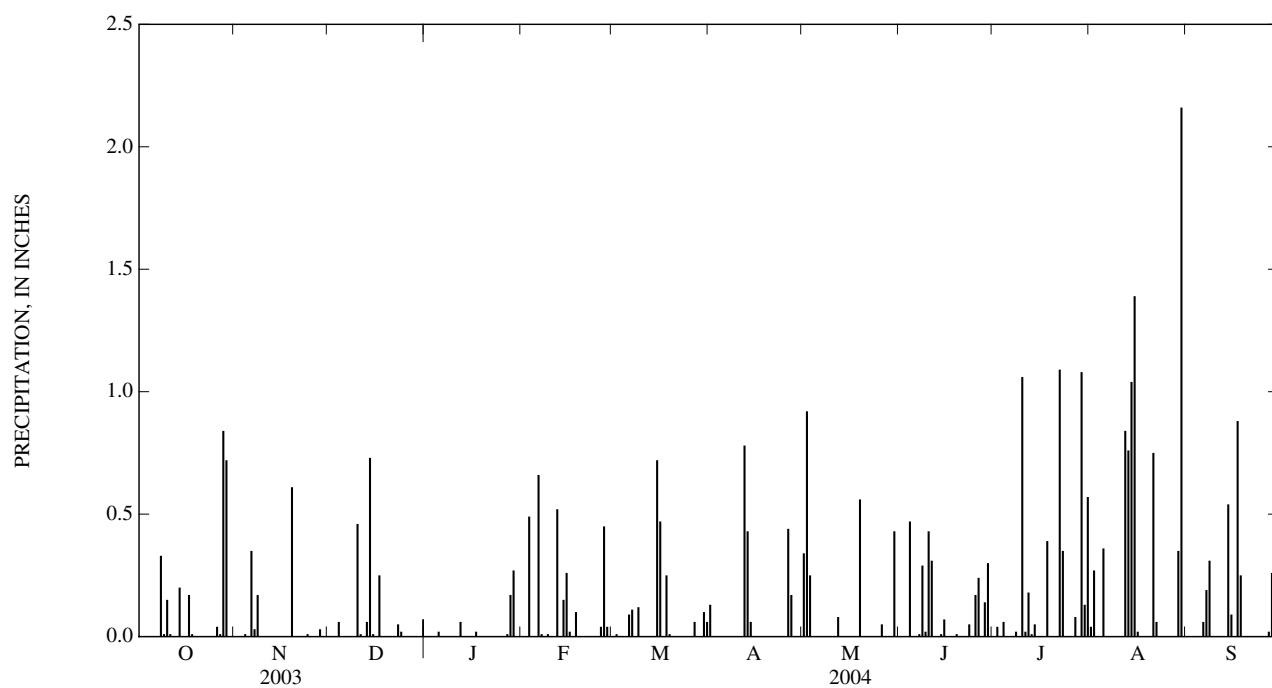
PERIOD OF RECORD.--September 1985 to current year. Records from September 1985 to September 1999 are unpublished and available in the USGS District Office in Raleigh, NC.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 0.34 | 0.00 | 0.00 | 0.04 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.92 | 0.00 | 0.04 | 0.27 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.49 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 |
| 4     | 0.00 | 0.01 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.47 | 0.06 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 0.00 |
| 6     | 0.00 | 0.35 | 0.00 | 0.00 | 0.66 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 |
| 7     | 0.00 | 0.03 | 0.00 | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.19 |
| 8     | 0.33 | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.02 | 0.00 | 0.31 |
| 9     | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.12 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 10    | 0.15 | 0.00 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 1.06 | 0.00 | 0.00 |
| 11    | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.02 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.06 | 0.52 | 0.00 | 0.78 | 0.08 | 0.00 | 0.18 | 0.84 | 0.00 |
| 13    | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 | 0.43 | 0.00 | 0.00 | 0.01 | 0.76 | 0.00 |
| 14    | 0.20 | 0.00 | 0.73 | 0.00 | 0.15 | 0.00 | 0.06 | 0.00 | 0.01 | 0.05 | 1.04 | 0.54 |
| 15    | 0.00 | 0.00 | 0.01 | 0.00 | 0.26 | 0.72 | 0.00 | 0.00 | 0.07 | 0.00 | 1.39 | 0.09 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.47 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 |
| 17    | 0.17 | 0.00 | 0.25 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 |
| 18    | 0.01 | 0.00 | 0.00 | 0.00 | 0.10 | 0.25 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.25 |
| 19    | 0.00 | 0.61 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.56 | 0.01 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.75 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.09 | 0.06 | 0.00 |
| 23    | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.35 | 0.00 | 0.00 |
| 24    | 0.00 | 0.01 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 |
| 26    | 0.04 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.44 | 0.05 | 0.24 | 0.00 | 0.00 | 0.00 |
| 27    | 0.01 | 0.00 | 0.00 | 0.01 | 0.45 | 0.06 | 0.17 | 0.00 | 0.00 | 0.08 | 0.00 | 0.02 |
| 28    | 0.84 | 0.03 | 0.00 | 0.17 | 0.04 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.26 |
| 29    | 0.72 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 1.08 | 0.35 | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.10 | 0.00 | 0.43 | 0.00 | 0.13 | 2.16 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.06 | ---  | 0.00 | ---  | 0.57 | 0.00 | ---  |
| TOTAL | 2.49 | 1.21 | 1.65 | 0.55 | 2.75 | 2.00 | 2.01 | 2.63 | 2.52 | 5.13 | 8.04 | 2.60 |





## 0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC

LOCATION.--Lat 35°46'48", long 78°39'59", Wake County, Hydrologic Unit 03020201, on right bank, 0.1 mi below Pullen Drive at Pullen Park and 1.5 mi north of Raleigh.

DRAINAGE AREA.--1.17 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1996 to current year. Fragmentary records, June 1992 to September 1996, are unpublished and available in the files of the USGS District Office, Raleigh, NC.

GAGE.--Water-stage recorder. Elevation of gage is 315 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow also occurred May 6, July 3, 1999, due to diversion by City of Raleigh.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1     | e1.4  | 0.54  | 0.44  | 0.51  | 0.61  | 0.95  | 1.7   | 2.9   | 0.38  | 0.53  | 1.2    | 0.94  |
| 2     | e1.3  | 0.60  | 0.46  | 0.54  | 0.61  | 0.89  | 0.77  | 15    | 0.32  | 1.5   | 12     | e0.80 |
| 3     | e1.4  | 0.62  | 0.49  | 0.60  | 9.4   | 0.87  | 0.69  | 5.0   | 0.30  | 0.89  | 1.3    | e0.75 |
| 4     | e1.2  | 0.70  | 1.7   | 0.62  | 1.3   | 0.82  | 0.71  | 1.2   | 3.7   | 0.81  | 0.64   | e0.70 |
| 5     | e1.1  | 0.31  | 1.2   | 1.9   | 1.1   | 0.83  | 0.68  | 0.95  | 0.65  | 0.75  | 7.9    | e0.60 |
| 6     | e1.3  | 0.98  | 0.43  | 0.79  | 8.5   | 1.4   | 0.68  | 0.92  | 0.42  | 0.32  | 1.4    | e0.70 |
| 7     | e1.2  | 0.51  | 0.39  | 0.65  | 4.3   | 1.2   | 0.67  | 0.84  | 0.43  | 0.34  | 0.45   | e2.7  |
| 8     | e2.4  | 1.3   | 0.43  | 0.54  | 0.98  | 0.88  | 0.65  | 0.79  | 0.40  | 0.31  | 0.33   | 11    |
| 9     | 0.92  | 0.38  | 0.49  | 1.2   | 0.90  | 1.5   | 0.77  | 0.74  | 0.62  | 0.27  | 0.30   | 1.1   |
| 10    | 1.3   | 0.54  | 13    | 0.73  | 0.82  | 0.84  | 0.75  | 0.78  | 0.47  | 0.31  | 0.34   | 0.68  |
| 11    | 0.78  | 0.38  | 1.6   | 0.62  | 0.74  | 0.69  | 0.71  | 0.77  | 0.87  | 0.42  | 0.36   | 0.58  |
| 12    | 0.64  | 0.36  | 0.81  | 0.85  | 6.8   | 0.67  | 7.0   | 0.74  | 0.60  | 8.4   | 7.5    | 0.54  |
| 13    | 0.67  | 0.46  | 0.73  | 0.67  | 1.1   | 0.63  | 2.1   | 0.71  | 0.33  | 0.94  | 29     | 0.53  |
| 14    | 2.3   | 0.62  | 12    | 0.68  | 1.7   | 0.91  | 0.90  | 0.46  | 0.41  | 0.41  | 22     | 3.9   |
| 15    | 1.2   | 0.57  | 1.1   | 0.67  | 3.7   | 7.0   | 0.64  | 0.19  | 1.8   | 0.41  | 22     | e6.8  |
| 16    | 0.63  | 0.61  | 0.80  | 0.72  | 2.5   | 9.6   | 0.56  | 0.24  | 0.78  | 0.52  | 2.0    | e1.1  |
| 17    | 1.1   | 0.65  | 3.1   | 0.85  | 1.8   | 1.7   | 0.54  | 0.25  | 0.47  | 0.59  | 0.79   | e22   |
| 18    | 0.92  | 0.74  | 0.88  | 2.9   | 1.2   | 3.4   | 0.53  | 0.24  | 0.42  | 2.8   | 0.63   | 4.7   |
| 19    | 0.56  | 8.5   | 0.81  | 0.65  | 1.0   | 1.3   | 0.53  | 4.6   | e0.51 | 0.77  | 0.56   | 0.92  |
| 20    | 0.62  | 0.76  | 0.77  | 0.58  | 0.94  | 1.0   | 0.51  | 0.89  | e0.54 | 0.73  | 0.52   | 0.70  |
| 21    | 0.63  | 0.51  | 0.63  | 0.54  | 0.98  | 0.96  | 0.54  | 0.57  | e0.46 | 0.63  | 13     | 0.61  |
| 22    | 0.67  | 0.55  | 0.62  | 0.59  | 0.84  | 0.85  | 0.48  | 0.53  | 0.47  | e10   | 3.4    | 0.57  |
| 23    | 0.77  | 0.52  | 1.2   | 0.51  | 0.82  | 0.80  | 0.48  | 0.40  | 0.60  | e19   | 0.66   | 0.57  |
| 24    | 0.52  | 0.53  | 1.2   | 0.49  | 0.82  | 0.79  | 0.47  | 0.40  | 0.38  | e1.9  | 0.56   | 0.55  |
| 25    | 0.46  | 0.49  | 0.64  | 0.58  | 0.84  | 0.80  | 0.45  | 0.35  | 2.7   | e1.5  | 0.50   | 0.51  |
| 26    | 0.58  | 0.43  | 0.67  | 0.72  | 1.3   | 0.80  | 4.2   | 0.39  | 5.4   | e1.1  | 0.50   | 0.50  |
| 27    | 0.60  | 0.44  | 0.60  | 1.2   | 4.3   | 0.82  | 1.8   | 0.38  | 0.64  | e0.50 | 0.59   | 0.75  |
| 28    | 6.6   | 1.1   | 0.57  | 1.7   | 2.0   | 0.85  | 0.58  | 0.33  | 5.8   | 0.72  | 0.49   | 6.9   |
| 29    | 10    | 0.51  | 0.61  | 1.9   | 1.0   | 0.79  | 0.50  | 0.31  | 4.1   | 6.8   | 1.5    | 0.75  |
| 30    | 0.67  | 0.46  | 0.57  | 1.4   | ---   | 0.96  | 0.60  | 1.8   | 0.63  | 1.0   | 34     | 0.58  |
| 31    | 0.58  | ---   | 0.54  | 0.71  | ---   | 0.80  | ---   | 0.55  | ---   | 4.4   | 1.4    | ---   |
| TOTAL | 45.02 | 25.67 | 49.48 | 27.61 | 62.90 | 46.30 | 32.19 | 44.22 | 35.60 | 69.57 | 167.82 | 74.03 |
| MEAN  | 1.45  | 0.86  | 1.60  | 0.89  | 2.17  | 1.49  | 1.07  | 1.43  | 1.19  | 2.24  | 5.41   | 2.47  |
| MAX   | 10    | 8.5   | 13    | 2.9   | 9.4   | 9.6   | 7.0   | 15    | 5.8   | 19    | 34     | 22    |
| MIN   | 0.46  | 0.31  | 0.39  | 0.49  | 0.61  | 0.63  | 0.45  | 0.19  | 0.30  | 0.27  | 0.30   | 0.50  |
| CFSM  | 1.24  | 0.73  | 1.36  | 0.76  | 1.85  | 1.28  | 0.92  | 1.22  | 1.01  | 1.92  | 4.63   | 2.11  |
| IN.   | 1.43  | 0.82  | 1.57  | 0.88  | 2.00  | 1.47  | 1.02  | 1.41  | 1.13  | 2.21  | 5.34   | 2.35  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

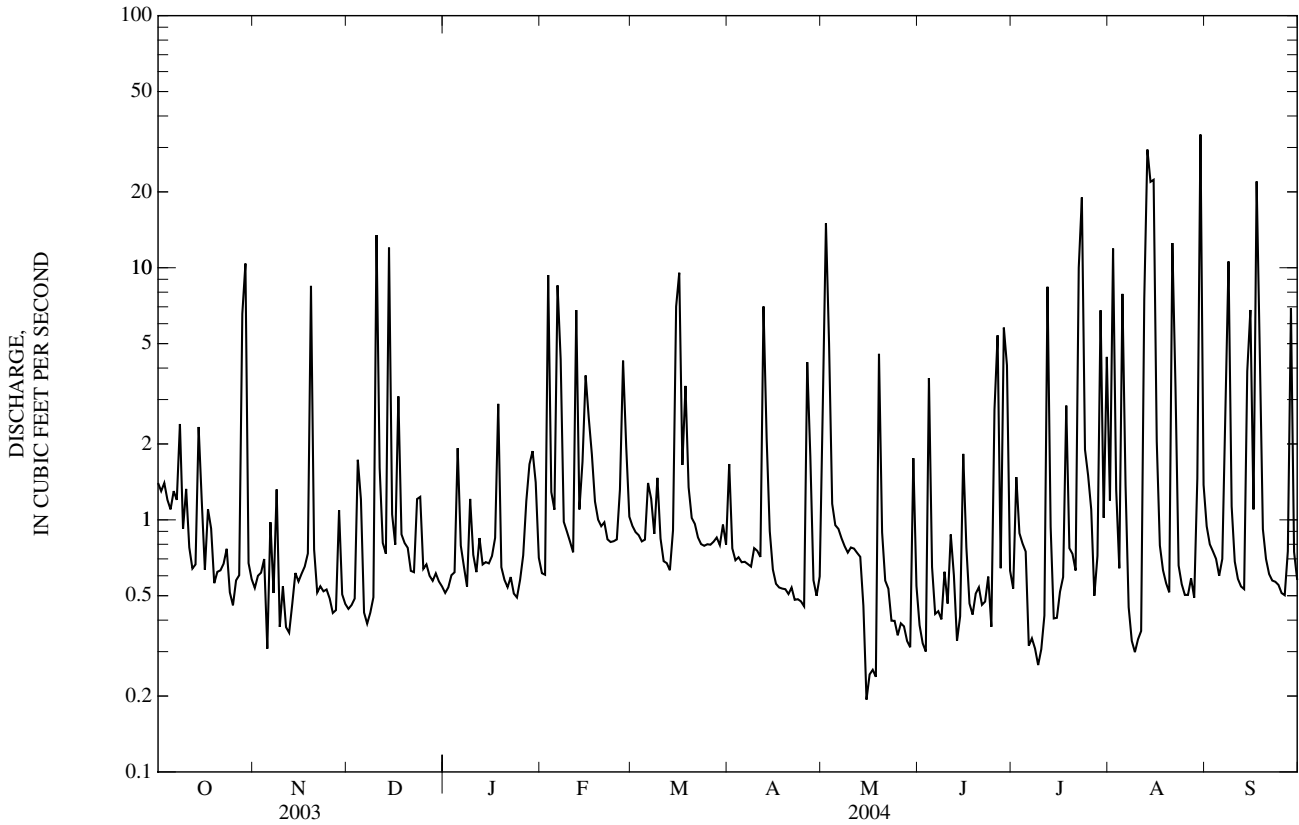
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 2.07   | 1.43   | 1.70   | 2.71   | 2.41   | 2.87   | 1.80   | 1.14   | 2.12   | 2.91   | 3.46   | 4.16   |
| MAX  | 4.95   | 2.70   | 3.29   | 6.08   | 5.45   | 6.58   | 2.85   | 1.71   | 5.96   | 5.89   | 8.11   | 17.8   |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (1997) | (2001) | (2003) | (2003) | (1999) |
| MIN  | 0.64   | 0.49   | 0.98   | 0.77   | 1.17   | 1.49   | 0.66   | 0.49   | 0.71   | 1.16   | 0.71   | 0.82   |
| (WY) | (2001) | (2002) | (2001) | (2001) | (1999) | (2004) | (2002) | (2000) | (1999) | (1999) | (1997) | (2002) |

0208735012 ROCKY BRANCH BELOW PULLEN DRIVE AT RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |       | FOR 2004 WATER YEAR |        | WATER YEARS 1997 - 2004 |              |
|--------------------------|------------------------|-------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 1,118.10               |       | 680.41              |        | 2.40                    |              |
| ANNUAL MEAN              | 3.06                   |       | 1.86                |        | 3.66                    |              |
| HIGHEST ANNUAL MEAN      |                        |       |                     |        | 1.52                    | 2002         |
| LOWEST ANNUAL MEAN       |                        |       |                     |        | 119                     | Jul 24, 1997 |
| HIGHEST DAILY MEAN       | 101                    | Aug 8 | 34                  | Aug 30 | 0.01                    | Apr 30, 2000 |
| LOWEST DAILY MEAN        | 0.20                   | Jan 6 | 0.19                | May 15 | 0.00                    | Oct 6, 1998  |
| ANNUAL SEVEN-DAY MINIMUM | 0.20                   | Jan 6 | 0.37                | May 23 | 0.01                    | Apr 30, 2000 |
| MAXIMUM PEAK FLOW        |                        |       | 739                 | Aug 13 | 2,590                   | Jul 24, 1997 |
| MAXIMUM PEAK STAGE       |                        |       | 6.86                | Aug 13 | 9.23                    | Jul 24, 1997 |
| INSTANTANEOUS LOW FLOW   |                        |       | NOT DETERMINED      |        | 0.00*                   | Oct 6, 1998  |
| ANNUAL RUNOFF (CFSM)     | 2.62                   |       | 1.59                |        | 2.05                    |              |
| ANNUAL RUNOFF (INCHES)   | 35.55                  |       | 21.63               |        | 27.85                   |              |
| 10 PERCENT EXCEEDS       | 6.5                    |       | 4.2                 |        | 4.7                     |              |
| 50 PERCENT EXCEEDS       | 0.95                   |       | 0.73                |        | 0.66                    |              |
| 90 PERCENT EXCEEDS       | 0.21                   |       | 0.42                |        | 0.24                    |              |

\* See REMARKS.

e Estimated.



## 02087359 WALNUT CREEK AT SUNNYBROOK DRIVE AT RALEIGH, NC

LOCATION.--Lat 35°45'30", long 78°34'59", Wake County, Hydrologic Unit 03020201, at bridge on Secondary Road 2544, 0.9 mi upstream from Big Branch, and 3.5 mi southeast of Raleigh.

DRAINAGE AREA.--29.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1996 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 190.8 ft above NGVD of 1929. Satellite and telephone telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from computation of peak flow through culvert; maximum gage height, 17.03 ft, from high-water mark in gage shelter. Minimum discharge for period of record also occurred Aug. 5, 6, 7, 8, 1999, Oct. 6, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV  | DEC     | JAN  | FEB   | MAR   | APR  | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|------|---------|------|-------|-------|------|-------|-------|-------|---------|-------|
| 1     | 10    | 20   | 13      | 13   | 21    | 32    | 29   | 22    | 8.0   | 16    | 149     | 53    |
| 2     | 9.9   | 15   | 11      | 13   | 18    | 26    | 27   | 74    | 5.9   | 23    | 109     | 30    |
| 3     | e9.2  | 14   | 9.7     | 13   | 99    | 24    | 21   | 247   | 4.6   | 18    | 126     | 21    |
| 4     | 8.8   | 14   | 11      | 13   | 56    | e20   | 18   | 64    | 36    | 13    | 33      | 17    |
| 5     | 10    | 15   | 48      | 18   | 32    | e15   | 16   | 31    | 27    | 16    | 23      | 14    |
| 6     | 11    | 16   | 25      | 27   | 36    | e20   | 14   | 21    | 14    | 7.2   | 156     | 21    |
| 7     | 14    | 32   | 18      | 18   | 176   | 24    | 14   | 17    | 17    | 4.9   | 46      | 44    |
| 8     | 26    | 35   | 14      | 15   | 50    | 39    | 15   | 14    | 15    | 3.7   | 21      | 100   |
| 9     | 31    | 25   | 13      | 20   | 30    | 26    | 15   | 13    | 13    | 3.0   | 13      | 95    |
| 10    | 25    | 19   | 56      | 21   | 25    | 34    | 15   | 12    | 13    | 2.6   | 9.7     | 35    |
| 11    | 24    | 17   | 196     | 16   | 21    | 24    | 16   | 11    | 9.6   | 2.7   | 7.7     | 22    |
| 12    | 18    | 16   | 53      | 16   | 92    | 21    | 68   | 11    | 20    | 9.0   | 52      | 16    |
| 13    | 15    | 16   | 27      | 16   | 60    | 19    | 86   | 14    | 7.2   | 51    | 147     | 13    |
| 14    | 16    | 14   | 187     | 14   | 40    | 17    | 47   | 16    | 16    | 19    | 390     | 20    |
| 15    | 40    | 12   | 74      | 14   | 46    | 68    | 30   | 13    | 9.0   | 17    | 504     | 86    |
| 16    | 20    | 12   | 36      | 13   | 80    | 126   | 21   | 12    | 13    | 6.7   | 427     | 30    |
| 17    | 14    | 13   | 52      | 12   | 49    | 133   | 18   | 10    | 9.9   | 3.6   | 92      | 73    |
| 18    | 22    | 13   | 37      | 41   | 39    | 68    | 16   | 10    | 13    | 30    | 49      | 270   |
| 19    | 14    | 88   | 27      | 27   | 30    | 66    | 16   | 19    | 6.5   | 13    | 33      | 83    |
| 20    | 12    | 78   | 22      | 19   | 25    | 37    | 14   | 34    | 4.8   | 9.0   | 23      | 35    |
| 21    | 13    | 32   | 18      | 16   | 27    | 30    | 14   | 16    | 3.4   | 6.1   | 21      | 23    |
| 22    | 16    | 21   | 17      | 15   | 23    | 24    | 13   | 11    | 3.5   | 12    | 260     | 18    |
| 23    | 15    | 16   | 18      | 15   | e21   | 21    | 12   | 10    | 3.6   | 136   | 58      | 15    |
| 24    | 16    | 14   | 38      | 13   | e20   | 20    | 11   | 8.1   | 7.4   | 38    | 29      | 13    |
| 25    | 25    | 13   | 22      | 13   | 19    | 19    | 10   | 7.5   | 29    | 17    | 19      | 11    |
| 26    | 38    | 11   | 18      | 17   | 21    | 18    | 34   | 6.6   | 75    | 11    | 15      | 11    |
| 27    | 47    | 10   | 16      | 19   | 72    | 18    | 59   | 6.4   | 36    | 7.6   | 13      | 12    |
| 28    | 73    | 12   | 14      | 29   | 63    | 19    | 26   | 6.0   | 80    | 5.8   | 11      | 58    |
| 29    | 242   | 21   | 15      | 34   | 48    | 17    | 17   | 5.5   | 80    | 47    | 16      | 42    |
| 30    | 61    | 15   | 14      | 33   | ---   | 17    | 14   | 32    | 27    | 112   | 397     | 22    |
| 31    | 30    | ---  | 13      | 28   | ---   | 21    | ---  | 13    | ---   | 69    | 280     | ---   |
| TOTAL | 925.9 | 649  | 1,132.7 | 591  | 1,339 | 1,063 | 726  | 787.1 | 607.4 | 729.9 | 3,529.4 | 1,303 |
| MEAN  | 29.9  | 21.6 | 36.5    | 19.1 | 46.2  | 34.3  | 24.2 | 25.4  | 20.2  | 23.5  | 114     | 43.4  |
| MAX   | 242   | 88   | 196     | 41   | 176   | 133   | 86   | 247   | 80    | 136   | 504     | 270   |
| MIN   | 8.8   | 10   | 9.7     | 12   | 18    | 15    | 10   | 5.5   | 3.4   | 2.6   | 7.7     | 11    |

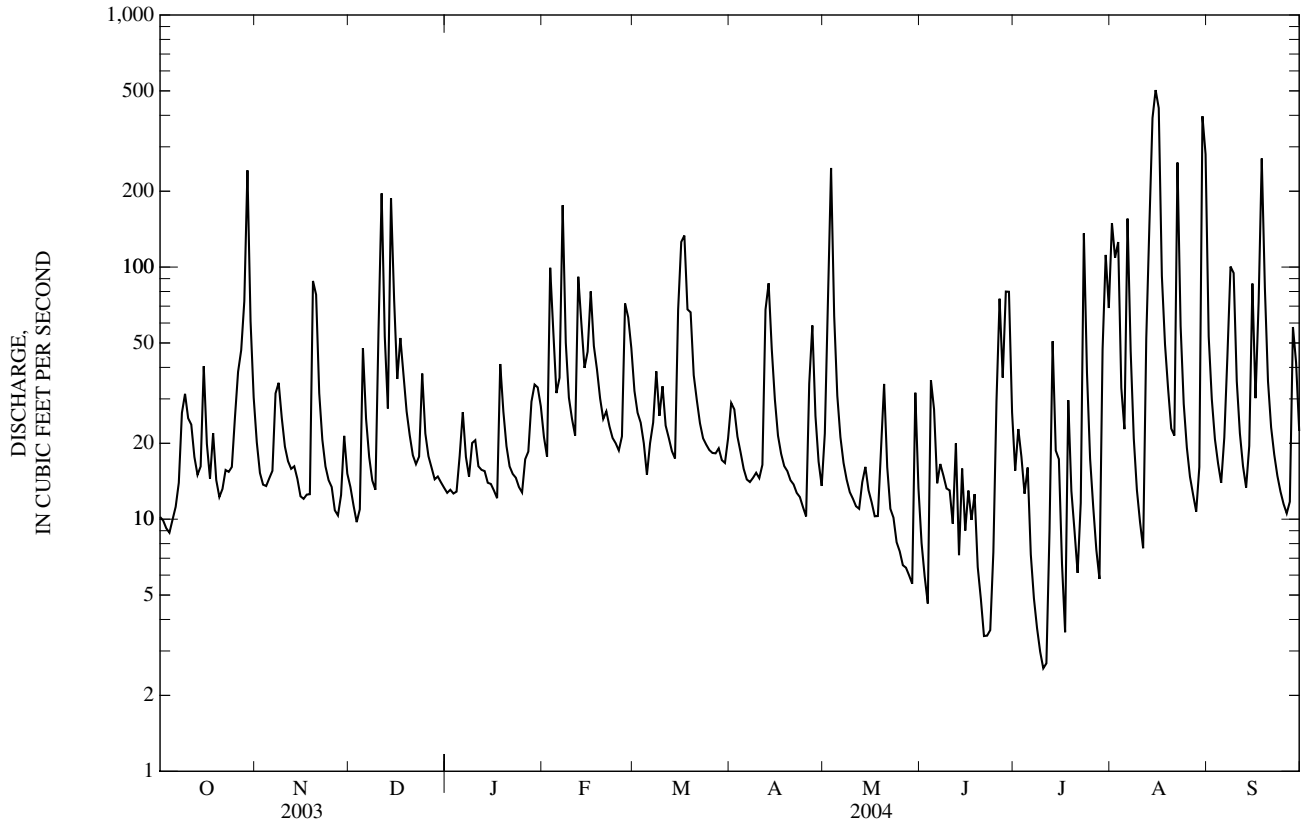
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 32.1   | 22.3   | 30.8   | 49.1   | 46.6   | 56.7   | 41.9   | 19.5   | 32.2   | 33.2   | 41.8   | 76.1   |
| MAX  | 79.3   | 44.5   | 58.5   | 106    | 98.0   | 123    | 84.5   | 34.3   | 81.9   | 54.3   | 114    | 263    |
| (WY) | (2003) | (2003) | (2003) | (1998) | (1998) | (1998) | (2003) | (2003) | (2001) | (2003) | (2004) | (1999) |
| MIN  | 9.04   | 5.69   | 15.2   | 13.9   | 21.9   | 26.0   | 20.9   | 3.03   | 11.9   | 11.3   | 8.00   | 10.6   |
| (WY) | (2001) | (2002) | (2001) | (2001) | (1999) | (2002) | (1999) | (2002) | (2002) | (1999) | (1997) | (2001) |

02087359 WALNUT CREEK AT SUNNYBROOK DRIVE AT RALEIGH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1996 - 2004 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 19,446.9               |        | 13,383.4            |        | 39.1                    |             |
| ANNUAL MEAN              | 53.3                   |        | 36.6                |        | 61.2                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 23.4                    | 2003        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 23.4                    | 2002        |
| HIGHEST DAILY MEAN       | 879                    | Aug 9  | 504                 | Aug 15 | 3,600                   | Sep 6, 1996 |
| LOWEST DAILY MEAN        | 6.1                    | Jul 28 | 2.6                 | Jul 10 | 0.50                    | Aug 8, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 8.1                    | Jul 22 | 4.7                 | Jul 6  | 0.50                    | Aug 8, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 758                 | Aug 30 | 6760*                   | Sep 6, 1996 |
| MAXIMUM PEAK STAGE       |                        |        | 8.52                | Aug 30 | 17.03*                  | Sep 6, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 2.2                 | Jul 11 | 2.0*                    | Aug 4, 1999 |
| 10 PERCENT EXCEEDS       | 108                    |        | 74                  |        | 72                      |             |
| 50 PERCENT EXCEEDS       | 25                     |        | 19                  |        | 17                      |             |
| 90 PERCENT EXCEEDS       | 13                     |        | 9.8                 |        | 6.2                     |             |

\* See REMARKS.  
e Estimated.



02087359 WALNUT CREEK AT SUNNYBROOK DRIVE AT RALEIGH, NC—Continued

PRECIPITATION RECORDS

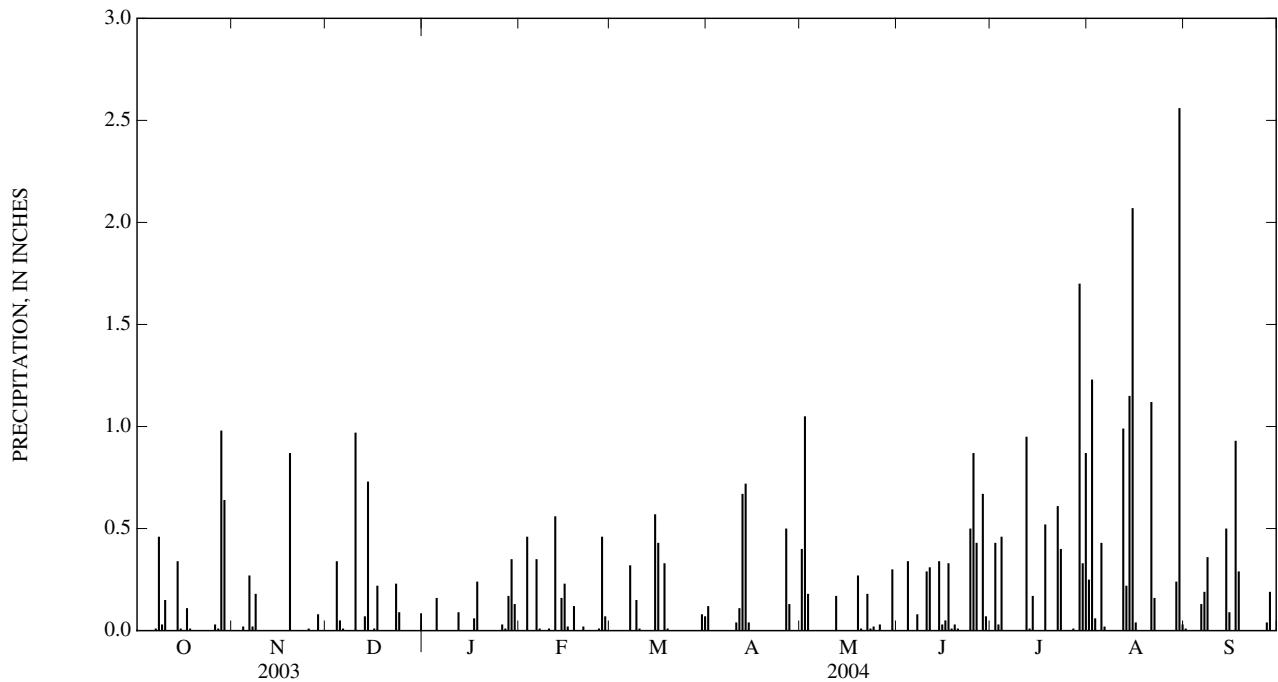
PERIOD OF RECORD.--July 1996 to current year. Records from July 1996 to September 1998 are unpublished and available in the USGS District Office, Raleigh, NC.

GAGE.--Tipping bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG   | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|-------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.40 | 0.00 | 0.00 | 0.25  | 0.01 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.05 | 0.00 | 0.43 | 1.23  | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 0.00 | 0.00 | 0.18 | 0.00 | 0.03 | 0.06  | 0.00 |
| 4     | 0.00 | 0.02 | 0.34 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.34 | 0.46 | 0.00  | 0.00 |
| 5     | 0.00 | 0.00 | 0.05 | 0.16 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.43  | 0.00 |
| 6     | 0.00 | 0.27 | 0.01 | 0.00 | 0.35 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.02  | 0.13 |
| 7     | 0.01 | 0.02 | 0.00 | 0.00 | 0.01 | 0.32 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00  | 0.19 |
| 8     | 0.46 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.36 |
| 9     | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  | 0.00 |
| 10    | 0.15 | 0.00 | 0.97 | 0.00 | 0.01 | 0.01 | 0.04 | 0.00 | 0.29 | 0.00 | 0.00  | 0.00 |
| 11    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.31 | 0.00 | 0.00  | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.09 | 0.56 | 0.00 | 0.67 | 0.17 | 0.00 | 0.95 | 0.99  | 0.00 |
| 13    | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.72 | 0.00 | 0.00 | 0.01 | 0.22  | 0.00 |
| 14    | 0.34 | 0.00 | 0.73 | 0.00 | 0.16 | 0.00 | 0.04 | 0.00 | 0.34 | 0.17 | 1.15  | 0.50 |
| 15    | 0.01 | 0.00 | 0.00 | 0.00 | 0.23 | 0.57 | 0.00 | 0.00 | 0.03 | 0.00 | 2.07  | 0.09 |
| 16    | 0.00 | 0.00 | 0.01 | 0.00 | 0.02 | 0.43 | 0.00 | 0.00 | 0.05 | 0.00 | 0.04  | 0.00 |
| 17    | 0.11 | 0.00 | 0.22 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00  | 0.93 |
| 18    | 0.01 | 0.00 | 0.00 | 0.24 | 0.12 | 0.33 | 0.00 | 0.00 | 0.01 | 0.52 | 0.00  | 0.29 |
| 19    | 0.00 | 0.87 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.27 | 0.03 | 0.00 | 0.00  | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00  | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.12  | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.61 | 0.16  | 0.00 |
| 23    | 0.00 | 0.00 | 0.23 | 0.00 | ---  | 0.00 | 0.00 | 0.01 | 0.00 | 0.40 | 0.00  | 0.00 |
| 24    | 0.00 | 0.00 | 0.09 | 0.00 | ---  | 0.00 | 0.00 | 0.02 | 0.50 | 0.00 | 0.00  | 0.00 |
| 25    | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.87 | 0.00 | 0.00  | 0.00 |
| 26    | 0.03 | 0.00 | 0.00 | 0.03 | 0.01 | 0.00 | 0.50 | 0.03 | 0.43 | 0.00 | 0.00  | 0.00 |
| 27    | 0.01 | 0.00 | 0.00 | 0.01 | 0.46 | 0.00 | 0.13 | 0.00 | 0.00 | 0.01 | 0.00  | 0.04 |
| 28    | 0.98 | 0.08 | 0.00 | 0.17 | 0.07 | 0.00 | 0.00 | 0.00 | 0.67 | 0.00 | 0.00  | 0.19 |
| 29    | 0.64 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 1.70 | 0.24  | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.13 | ---  | 0.08 | 0.00 | 0.30 | 0.00 | 0.33 | 2.56  | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.07 | ---  | 0.00 | ---  | 0.87 | 0.03  | ---  |
| TOTAL | 2.78 | 1.45 | 2.72 | 1.24 | ---  | ---  | 2.33 | 2.62 | 4.36 | 6.49 | 10.57 | 2.73 |



## 02087500 NEUSE RIVER NEAR CLAYTON, NC

LOCATION.--Lat 35°38'50", long 78°24'19", Johnston County, Hydrologic Unit 03020201, on left bank at downstream side of bridge on State Highway 42, 2.3 mi upstream from Mill Creek, and 3 mi east of Clayton.

DRAINAGE AREA.--1,150 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1927 to current year.

REVISED RECORDS.--WSP 1032: 1930, 1935(M). WSP 1333: 1935. WSP 1503: 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 128.41 ft above NGVD of 1929. Prior to Mar. 18, 1942, at site 1,100 ft upstream at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Flow regulated by Falls Lake (station 02087182), since Dec. 7, 1983. The City of Raleigh diverted an average of 85.2 ft<sup>3</sup>/s upstream from station, most of which was returned upstream from station as treated effluent. Prior to regulation, maximum discharge: 22,900 ft<sup>3</sup>/s, Sept. 19, 1945; gage height: 22.12 ft; minimum discharge: 44 ft<sup>3</sup>/s, Sept. 15, 1932; gage height: 0.28 ft, at site then in use. Minimum discharge for the current water year also occurred July 8.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 23, 1919, reached a stage of 21.15 ft, from floodmark at former site; discharge 21,200 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 1,300  | 510    | 429    | 634    | 562    | 863    | 617    | 565    | 338    | 402    | 1,020  | 1,800  |
| 2     | 855    | 456    | 411    | 626    | 533    | 801    | 724    | 809    | 305    | 353    | 658    | 1,980  |
| 3     | e643   | 430    | 402    | 558    | 801    | 769    | 846    | 2,050  | 288    | 505    | 1,280  | 1,820  |
| 4     | 460    | 410    | 401    | 526    | 1,130  | 743    | 947    | 1,350  | 354    | 497    | 654    | 1,850  |
| 5     | 376    | 402    | 602    | 535    | 771    | 723    | 1,240  | 865    | 660    | 412    | 451    | 1,750  |
| 6     | 373    | 426    | 604    | 612    | 696    | 715    | 622    | 684    | 409    | 320    | 631    | 1,730  |
| 7     | 367    | 547    | 539    | 572    | 1,600  | 763    | 525    | 597    | 355    | 285    | 624    | 1,810  |
| 8     | 380    | 503    | 483    | 537    | 1,180  | 802    | 515    | 545    | 400    | 262    | 428    | 2,020  |
| 9     | 503    | 483    | 446    | 543    | 827    | 761    | 501    | 511    | 620    | 300    | 350    | 2,120  |
| 10    | 477    | 434    | 504    | 596    | 1,580  | 743    | 507    | 480    | 391    | 323    | 312    | 1,400  |
| 11    | 468    | 412    | 2,120  | 555    | 2,460  | 701    | 531    | 471    | 505    | 614    | 281    | 1,710  |
| 12    | 445    | 410    | 1,180  | 544    | 3,030  | 588    | 637    | 456    | 502    | e410   | 280    | 1,860  |
| 13    | 422    | 396    | 1,700  | 548    | 3,320  | 519    | 1,200  | 460    | 363    | 636    | 906    | 1,800  |
| 14    | 407    | 376    | 2,800  | 539    | 2,280  | 503    | 1,210  | 433    | 320    | 462    | 2,820  | 1,320  |
| 15    | 539    | 370    | 2,990  | 499    | 1,990  | 741    | 834    | 310    | 316    | 373    | 4,200  | 1,110  |
| 16    | 495    | 369    | 2,210  | 473    | 2,180  | 1,630  | 1,180  | 309    | 345    | 292    | 5,310  | 616    |
| 17    | 432    | 375    | 3,010  | 462    | 2,020  | 1,740  | 1,270  | 300    | 323    | 247    | 2,000  | 544    |
| 18    | 455    | 376    | 3,440  | 556    | 1,980  | 1,210  | 1,250  | 294    | 303    | 345    | 2,060  | 2,230  |
| 19    | 916    | 462    | 3,260  | 622    | 1,880  | 1,230  | 1,220  | 303    | 297    | 476    | 1,860  | 1,460  |
| 20    | 550    | 1,320  | 3,140  | 537    | 1,570  | 918    | 1,200  | 408    | 278    | 381    | 1,750  | 816    |
| 21    | 396    | 749    | 3,060  | 506    | 1,160  | 778    | 1,180  | 343    | 255    | 328    | 1,660  | 1,020  |
| 22    | 384    | 568    | 3,000  | 498    | 1,100  | 684    | 1,160  | 304    | 243    | 290    | 2,440  | 1,060  |
| 23    | 379    | 492    | 2,640  | 490    | 1,060  | 625    | 885    | 312    | 244    | 1,070  | 1,990  | 1,000  |
| 24    | 368    | 460    | 1,220  | 476    | 1,040  | 607    | 675    | 286    | 355    | e765   | 1,670  | 969    |
| 25    | 363    | 438    | 787    | 475    | 772    | 588    | 654    | 273    | 392    | 463    | 853    | 949    |
| 26    | 371    | 423    | 706    | 504    | 671    | 578    | 663    | 266    | 493    | 372    | 535    | 929    |
| 27    | 384    | 407    | 684    | 502    | 818    | 571    | 1,010  | 266    | 589    | 322    | 415    | 914    |
| 28    | 402    | 409    | 665    | 520    | 1,110  | 572    | 804    | 266    | 422    | 306    | 384    | 592    |
| 29    | 1,670  | 459    | 655    | 576    | 989    | 565    | 695    | 273    | 657    | 360    | 389    | 610    |
| 30    | 1,180  | 455    | 654    | 615    | ---    | 526    | 611    | 309    | 496    | 1,240  | 2,610  | 510    |
| 31    | 639    | ---    | 638    | 615    | ---    | 510    | ---    | 462    | ---    | 1,010  | 4,180  | ---    |
| TOTAL | 17,399 | 14,327 | 45,380 | 16,851 | 41,110 | 24,067 | 25,913 | 15,560 | 11,818 | 14,421 | 45,001 | 40,299 |
| MEAN  | 561    | 478    | 1,464  | 544    | 1,418  | 776    | 864    | 502    | 394    | 465    | 1,452  | 1,343  |
| MAX   | 1,670  | 1,320  | 3,440  | 634    | 3,320  | 1,740  | 1,270  | 2,050  | 660    | 1,240  | 5,310  | 2,230  |
| MIN   | 363    | 369    | 401    | 462    | 533    | 503    | 501    | 266    | 243    | 247    | 280    | 510    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004,\* BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 722    | 689    | 925    | 1,354  | 1,834  | 2,265  | 1,799  | 908    | 658    | 614    | 677    | 915    |
| MAX  | 3,822  | 2,201  | 2,623  | 2,821  | 4,961  | 5,688  | 4,813  | 2,864  | 2,170  | 1,841  | 1,539  | 6,620  |
| (WY) | (2000) | (1996) | (2003) | (1984) | (1998) | (1998) | (2003) | (1989) | (2003) | (1995) | (1989) | (1996) |
| MIN  | 212    | 215    | 237    | 375    | 452    | 422    | 290    | 292    | 267    | 234    | 204    | 136    |
| (WY) | (1984) | (1992) | (1995) | (2001) | (2002) | (2002) | (1986) | (2002) | (1999) | (1983) | (1983) | (1985) |

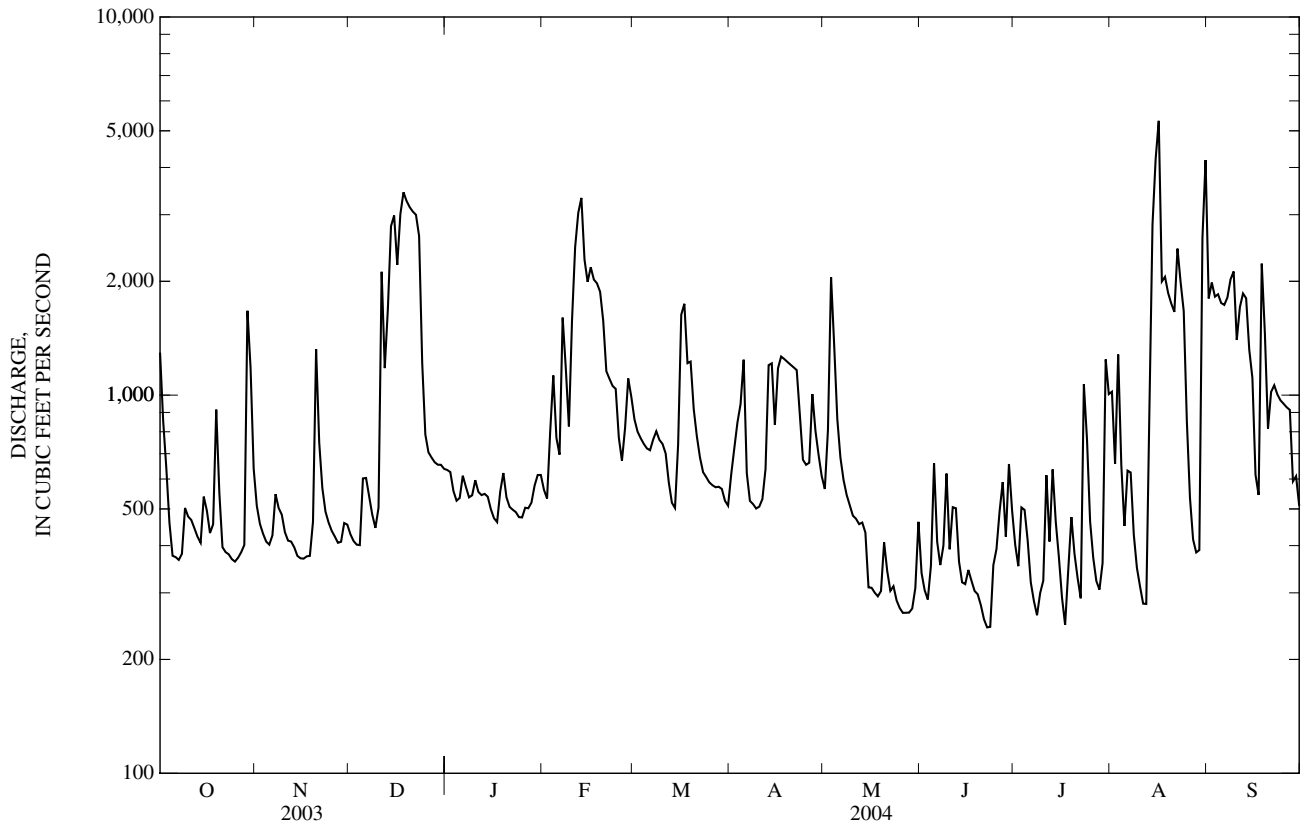
NEUSE RIVER BASIN

02087500 NEUSE RIVER NEAR CLAYTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004* |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--------------|
| ANNUAL TOTAL             | 652,277                |        | 312,146             |        | 1,109                    |              |
| ANNUAL MEAN              | 1,787                  |        | 853                 |        | 425                      |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2,052                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 425                      | 2002         |
| HIGHEST DAILY MEAN       | 7,590                  | Mar 21 | 5,310               | Aug 16 | 19,700                   | Sep 17, 1999 |
| LOWEST DAILY MEAN        | 363                    | Oct 25 | 243                 | Jun 22 | 105                      | Sep 16, 1985 |
| ANNUAL SEVEN-DAY MINIMUM | 378                    | Oct 21 | 277                 | May 24 | 117                      | Sep 12, 1985 |
| MAXIMUM PEAK FLOW        |                        |        | 6,130               | Aug 16 | 20,500                   | Sep 17, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 9.88                | Aug 16 | 20.67                    | Sep 17, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 224*                | Jul 7  | 78                       | Sep 18, 1985 |
| 10 PERCENT EXCEEDS       | 4,170                  |        | 1,850               |        | 3,180                    |              |
| 50 PERCENT EXCEEDS       | 1,170                  |        | 572                 |        | 474                      |              |
| 90 PERCENT EXCEEDS       | 423                    |        | 323                 |        | 256                      |              |

\* Regulated period only (1983-2004). See REMARKS.

e Estimated.



0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC

LOCATION.--Lat 35°31'13", long 78°20'57", Johnston County, Hydrologic Unit 03020201, at water supply intake, 0.8 mi above U.S. Highway 70 and 0.9 mi northwest of Smithfield.

DRAINAGE AREA.--1,200 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 2003 to current year.

REMARKS.--Station operated as part of NAWQA program from October 2002 to current year.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time  | Medium code | Barometric pressure, mm Hg (00025)              | Dissolved oxygen, mg/L (00300)                  | Dissolved oxygen, percent of saturation (00301)        | pH, water, unfltrd field, std units (00400)         | Specif. conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                       | Organic carbon, water, fltrd, mg/L (00681)               | E coli, modif. m-TEC, water, col/100 mL (90902) | 1,4-Dichlorobenzene, water, fltrd, ug/L (34572) | 1-Methylnaphthalene, water, fltrd, ug/L (62054)       | 1-Naphthol, water, fltrd, 0.7u GF ug/L (49295)  |   |  |
|-----------|-------|-------------|---|---|--|---|--|---|--|---|---|---|---|---|--|
| Date      |       |             | 2,4-D methyl ester, water, fltrd, ug/L (50470)  | 2,4-DB water, fltrd, 0.7u GF ug/L (38746)       | 2,6-Diethyl-aniline water, fltrd, 0.7u GF ug/L (82660) | 2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055) | 2-[(2-Et-6-Me-Ph)-amino]propan-1-ol, ug/L (61615)      | 2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850) | 2Chloro -2,6-' diethyl acet-anilide wat flt ug/L (61618) | CIAT, water, fltrd, ug/L (04040)                | CEAT, water, fltrd, ug/L (04038)                | 2-Ethyl -6-methyl-aniline, water, fltrd, ug/L (61620) | OIET, water, fltrd, ug/L (50355)                | 2-Methylnaphthalene, water, fltrd, ug/L (62056)   |  |
| Date      |       |             | 3,4-Dichloro-aniline water, fltrd, ug/L (61625) | 3-beta-Copros-tanol, water, fltrd, ug/L (62057) | 3-Hydroxy carbo-furan, wat flt 0.7u GF ug/L (49308)    | 3-Keto-carbo-furan, water, fltrd, ug/L (50295)      | 3-Methyl-1H-indole, water, fltrd, ug/L (62058)         | 3-tert-Butyl-4-hydroxy-anisole wat flt ug/L (62059)     | 4Chloro 2methyl phenol, water, fltrd, ug/L (61633)       | 4-Cumyl-phenol, water, fltrd, ug/L (62060)      | 4-Octyl-phenol, water, fltrd, ug/L (62061)      | 4-Nonyl-phenol, water, fltrd, ug/L (62085)            | 4-tert-Octyl-phenol, water, fltrd, ug/L (62062) | 5-Methyl-1H-benzo-tri-azole, wat flt ug/L (62063) | 9,10-Anthra-quinone water, fltrd, ug/L (62066) |
| OCT 06... | 1230  | 9           | 760   | 7.7   | 83   | 7.4   | 166  | 18.7  | 4.7  | 650   | <.5   | <.5   | <.09  |   |  |
| NOV 04... | 1230  | 9           | 760   | 8.1   | 86   | 7.2   | 148  | 18.0  | 5.8  | 75  | E.1   | <.5   | <.09  |   |  |
| DEC 23... | 1245  | 9           | 760   | 12.8  | 105  | 7.0   | 96   | 6.8   | 5.6  | 50  | <.5   | <.5   | <.09  |   |  |
| DEC 30... | 1130  | 9           | 760   | 10.4  | 88   | 7.2   | 114  | 8.0   | 5.1  | 75  | <.5   | <.5   | <.09  |   |  |
| JUN 22... | 1330  | 9           | --  | 6.4   | --   | 6.8   | 249  | 26.2  | --   | --  | <.5   | <.5   | <.09  |   |  |
| JUL 27... | 0930  | 9           | 760   | 6.5   | 83   | 6.9   | 190  | 27.7  | --   | --  | --  | --  | <.09  |   |  |
| AUG 31... | 1400  | 9           | 758   | 5.7   | 69   | 6.5   | 68   | 24.4  | --   | --  | <.5   | <.5   | <.09  |   |  |
| OCT 06... | <.009 | .02         | <.02  | <.006   | <.5  | <.1   | --   | <.005   | E.013  | <.04  | <.004   | E.038   | <.5   |   |  |
| NOV 04... | <.009 | <.02        | <.02  | <.006   | <.5  | <.1   | --   | <.005   | <.006  | <.04  | <.004   | E.020   | <.5   |   |  |
| DEC 23... | --    | --          | --  | <.006   | <.5  | <.1   | --   | <.005   | E.008  | --  | <.004   | --  | <.5   |   |  |
| DEC 30... | <.009 | <.02        | <.02  | <.006   | <.5  | <.1   | --   | <.005   | E.007  | E.01  | <.004   | E.013   | <.5   |   |  |
| JUN 22... | <.009 | <.02        | <.02  | <.006   | <.5  | --  | <.02   | <.005   | E.008  | <.01  | <.004   | E.023   | <.5   |   |  |
| JUL 27... | E.031 | <.05        | <.02  | <.006   | --   | --  | <.02   | <.005   | <.006  | <.01  | <.004   | E.020   | --  |   |  |
| AUG 31... | <.009 | .08         | <.02  | <.006   | <.5  | --  | <.02   | <.005   | <.006  | <.01  | <.004   | <.016   | <.5   |   |  |
| OCT 06... | .060  | <2          | <.006   | <2  | <.1  | <.5   | <.006  | <.1   | <.1  | <.5   | <.1   | <2  | <.5   |   |  |
| NOV 04... | .016  | M           | <.006   | <2  | <.1  | <.5   | <.006  | <.1   | <.1  | E1  | <.1   | <2  | <.5   |   |  |
| DEC 23... | .011  | <2          | --  | --  | <.1  | <.5   | <.006  | <.1   | <.1  | E1  | <.1   | <2  | <.5   |   |  |
| DEC 30... | .023  | <2          | <.006   | <2  | <.1  | <.5   | <.006  | <.1   | <.1  | <.5   | <.1   | <2  | <.5   |   |  |
| JUN 22... | .070  | <2          | <.006   | <.014   | <.1  | <.5   | <.006  | <.1   | <.1  | <.5   | <.1   | <2  | <.5   |   |  |
| JUL 27... | .059  | --          | <.006   | M   | --   | --  | <.006  | --  | --   | --  | --  | --  | --  |   |  |
| AUG 31... | <.004 | <.5         | <.006   | <.014   | <.1  | <.5   | <.006  | <.1   | <.1  | <.5   | <.1   | <2  | <.5   |   |  |



## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Aceto-chlor<br>ESA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(61029) | Aceto-chlor<br>OA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(61030) | Aceto-chlor<br>SAA,<br>water,<br>fltrd,<br>ug/L<br>(62847)    | Aceto-chlor,<br>water,<br>fltrd,<br>ug/L<br>(49260)              | AHTN,<br>water,<br>fltrd,<br>ug/L<br>(62065)                       | Acifluor-<br>fen,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49315) | Ala-chlor<br>ESA SA,<br>water,<br>fltrd,<br>ug/L<br>(62849)     | Ala-chlor<br>ESA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(50009) | Ala-chlor<br>OA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(61031)      | Ala-chlor<br>SAA,<br>water,<br>fltrd,<br>ug/L<br>(62848)    | Ala-chlor,<br>water,<br>fltrd,<br>ug/L<br>(46342)              | Aldi-carb<br>sulfone<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49313) | Aldi-carb<br>sulf-<br>oxide,<br>wat flt<br>0.7u GF<br>ug/L<br>(49314) |
|-----------|--|---|---|--|--|--|---|--|--|---|--|---|---|
| OCT 06... | --   | --  | --  | <.006  | E.1  | <.007  | --  | --   | --   | --  | <.005  | <.02  | <.008   |
| NOV 04... | --   | --  | --  | <.006  | E.1  | <.007  | --  | --   | --   | --  | <.005  | <.02  | <.008   |
| DEC 23... | --   | --  | --  | <.006  | M  | --   | --  | --   | --   | --  | <.005  | --  | --  |
| DEC 30... | --   | --  | --  | <.006  | E.1  | <.007  | --  | --   | --   | --  | <.005  | <.02  | <.008   |
| JUN 22... | <.02   | <.02  | <.02  | <.006  | E.1  | <.007  | <.02  | <.02   | <.02   | <.02  | <.005  | <.02  | <.008   |
| JUL 27... | <.02   | <.02  | <.02  | <.006  | --   | <.007  | <.02  | <.02   | <.02   | <.02  | <.005  | <.02  | <.008   |
| AUG 31... | <.02   | <.02  | <.02  | <.006  | E.1  | <.007  | <.02  | <.02   | <.02   | <.02  | <.005  | <.02  | <.008   |
| Date      | Aldi-carb,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49312)          | Anthra-cene,<br>water,<br>fltrd,<br>ug/L<br>(34221)                 | Atra-zine,<br>water,<br>fltrd,<br>ug/L<br>(39632)             | Azin-phos-methyl<br>oxon,<br>water,<br>fltrd,<br>ug/L<br>(61635) | Azin-phos-methyl,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82686) | Bendio-carb,<br>water,<br>fltrd,<br>ug/L<br>(50299)                | Ben-flur-alin,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82673) | Benomyl<br>water,<br>fltrd,<br>ug/L<br>(50300)                     | Bensul-furon,<br>water,<br>fltrd,<br>ug/L<br>(61693)                   | Ben-tazon,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(38711) | Benzo-[a]-<br>pyrene,<br>water,<br>fltrd,<br>ug/L<br>(34248)   | beta-Sitosterol,<br>water,<br>fltrd,<br>ug/L<br>(62068)               | beta-Stigma-<br>stanol,<br>water,<br>fltrd,<br>ug/L<br>(62086)        |
| OCT 06... | <.04   | <.5   | .064  | <.02   | <.050  | <.03   | <.010   | <.004  | <.02   | <.01  | <.5  | <.2   | <.2   |
| NOV 04... | <.04   | <.5   | .036  | <.03   | <.050  | <.03   | <.010   | <.004  | <.02   | <.01  | <.5  | <.2   | M   |
| DEC 23... | --   | <.5   | .032  | <.02   | <.050  | --   | <.010   | --   | --   | --  | <.5  | <.2   | <.2   |
| DEC 30... | <.04   | <.5   | .022  | <.02   | <.050  | <.03   | <.010   | <.004  | <.02   | <.01  | <.5  | <.2   | <.2   |
| JUN 22... | <.04   | <.5   | .011  | <.02   | <.050  | <.03   | <.010   | <.004  | <.02   | <.01  | <.5  | <.2   | <.2   |
| JUL 27... | <.04   | --  | .011  | <.07   | <.050  | <.03   | <.010   | E.035  | <.02   | E.01  | --   | --  | --  |
| AUG 31... | <.04   | <.5   | E.007   | <.07   | <.050  | <.03   | <.010   | <.021  | <.02   | E.01  | <.5  | <.5   | <.5   |
| Date      | Bisphe-nol A,<br>water,<br>fltrd,<br>ug/L<br>(62069)                 | Broma-cil,<br>water,<br>fltrd,<br>ug/L<br>(04029)                   | Brom-oxynil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49311) | Camphor<br>water,<br>fltrd,<br>ug/L<br>(62070)                   | Car-baryl,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49310)        | Car-baryl,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82680)        | Carba-zole,<br>water,<br>fltrd,<br>ug/L<br>(62071)              | Carbo-furan,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49309)      | Chlor-amben<br>methyl<br>ester,<br>water,<br>fltrd,<br>ug/L<br>(61188) | Chlori-muron,<br>water,<br>fltrd,<br>ug/L<br>(50306)        | Chloro-di-amino-s-tri-<br>azine,<br>wat flt<br>ug/L<br>(04039) | Chloro-thalo-nil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49306)    | Chlor-pyrifos<br>oxon,<br>water,<br>fltrd,<br>ug/L<br>(61636)         |
| OCT 06... | <1   | <.03  | <.02  | <.5  | M  | E.035  | <.5   | <.006  | <.02   | <.010   | <.01   | <.04  | <.06  |
| NOV 04... | <1   | <.03  | <.02  | <.5  | <.03   | <.041  | <.5   | <.006  | <.02   | <.010   | <.01   | <.04  | <.06  |
| DEC 23... | <1   | --  | --  | <.5  | --   | E.020  | <.5   | --   | --   | --  | --   | --  | <.06  |
| DEC 30... | <1   | <.03  | <.02  | <.5  | <.03   | E.018  | <.5   | <.006  | <.02   | <.010   | <.01   | <.04  | <.06  |
| JUN 22... | <1   | <.03  | <.02  | M  | E.01   | E.020  | <.5   | <.006  | <.02   | <.010   | <.04   | <.04  | <.06  |
| JUL 27... | --   | <.03  | <.02  | --   | E.01   | E.018  | --  | <.006  | <.02   | <.010   | E.05   | <.04  | <.06  |
| AUG 31... | <1   | <.03  | <.02  | <.5  | E.04   | E.051  | <.5   | <.006  | <.02   | <.010   | <.04   | <.04  | <.06  |

## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Chlorpyrifos water, fltrd, ug/L (38933) | Cholestrol, water, fltrd, ug/L (62072)      | cis-Permethrin water, fltrd, 0.7u GF ug/L (82687) | Clopyralid, water, fltrd, 0.7u GF ug/L (49305)  | Cotinine, water, fltrd, ug/L (62005)               | Cycloate, water, fltrd, ug/L (04031)               | Cyfluthrin, water, fltrd, ug/L (61585)       | Cypermethrin water, fltrd, ug/L (61586)     | Dacthal monoacid, water, fltrd, 0.7u GF ug/L (49304) | DCPA, water, fltrd, 0.7u GF ug/L (82682)    | Desulfinyl fipronil, water, fltrd, ug/L (62170) | Diazinon oxon, water, fltrd, ug/L (61638) | Diazinon, water, fltrd, ug/L (39572)       |
|-----------|---|---|---|---|--|--|--|---|--|---|---|---|--|
| OCT 06... | <.005                                   | <2  | <.006   | <.01  | <1.00  | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | E.006   | <.01                                      | .006                                       |
| NOV 04... | <.005                                   | E1  | <.006   | <.01  | <1.00  | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | <.012   | <.01                                      | <.005                                      |
| DEC 23... | <.005                                   | <2  | <.006   | --  | <1.00  | --   | <.008  | <.009                                       | --   | <.003                                       | <.012   | <.01                                      | <.005                                      |
| DEC 30... | <.005                                   | M   | <.006   | <.01  | <1.00  | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | <.012   | <.01                                      | <.005                                      |
| JUN 22... | <.005                                   | <2  | <.006   | <.01  | <1.00  | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | E.010   | <.01                                      | .011                                       |
| JUL 27... | <.005                                   | --  | <.006   | <.01  | --   | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | E.009   | <.01                                      | <.005                                      |
| AUG 31... | <.005                                   | <5  | <.006   | <.01  | <1.00  | <.01   | <.008  | <.009                                       | <.01   | <.003                                       | <.012   | <.01                                      | <.005                                      |
| Date      | Dicamba water, fltrd, 0.7u GF (38442)   | Di-chlorprop, water, fltrd, 0.7u GF (49302) | Dicrotophos, water, fltrd, ug/L (38454)           | Diel-drin, water, fltrd, ug/L (39381)           | Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083) | Di-ethoxy-octyl-phenol, water, fltrd, ug/L (61705) | Dimethenamid ESA, water, fltrd, ug/L (61951) | Dimethenamid OA, water, fltrd, ug/L (62482) | Dimethenamid water, fltrd, ug/L (61588)              | Dimethoate, water, fltrd, 0.7u GF (82662)   | Dinoseb water, fltrd, 0.7u GF (49301)           | Diphenamid, water, fltrd, ug/L (04033)    | Diuron, water, fltrd, 0.7u GF (49300)      |
| OCT 06... | <.01                                    | <.01  | <.08  | <.009   | <5   | <1   | --   | --  | --   | <.006                                       | <.01  | <.03                                      | <.01                                       |
| NOV 04... | <.01                                    | <.01  | <.08  | <.009   | E2   | M  | --   | --  | --   | <.006                                       | <.01  | <.03                                      | E.01                                       |
| DEC 23... | --                                      | --  | <.08  | <.009   | <5   | <1   | --   | --  | --   | <.006                                       | --  | --  | --   |
| DEC 30... | <.01                                    | <.01  | <.08  | <.009   | <5   | <1   | --   | --  | --   | <.006                                       | <.01  | <.03                                      | <.01                                       |
| JUN 22... | <.01                                    | <.01  | <.08  | <.009   | <5   | <1   | <.02   | <.02  | <.02   | <.006                                       | <.01  | <.03                                      | .02  |
| JUL 27... | <.01                                    | <.01  | <.08  | <.009   | --   | --   | <.02   | <.02  | <.02   | <.006                                       | <.01  | <.03                                      | E.03                                       |
| AUG 31... | <.01                                    | <.01  | <.08  | <.009   | <5   | <1   | <.02   | <.02  | <.02   | <.006                                       | <.01  | <.03                                      | <.01                                       |
| Date      | D-Limonene, water, fltrd, ug/L (62073)  | Ethion monoxon, water, fltrd, ug/L (61644)  | Ethion, water, fltrd, ug/L (82346)                | Ethoxy-octyl-phenol, water, fltrd, ug/L (61706) | Fenamiphos sulfone, water, fltrd, ug/L (61645)     | Fenamiphos sulf-oxide, water, fltrd, ug/L (61646)  | Fenamiphos, water, fltrd, ug/L (61591)       | Fenuron water, fltrd, 0.7u GF ug/L (49297)  | Desulfinyl-fipronil amide, wat flt ug/L (62169)      | Fipronil sulfide water, fltrd, ug/L (62167) | Fipronil sulfone water, fltrd, ug/L (62168)     | Fipronil, water, fltrd, ug/L (62166)      | Flufenacet ESA, water, fltrd, ug/L (61952) |
| OCT 06... | <.5                                     | <.03  | <.004   | <1  | <.008  | <.03   | <.03   | <.03  | <.029  | E.007                                       | E.008   | E.016                                     | --   |
| NOV 04... | <.5                                     | <.03  | <.004   | M   | <.008  | <.03   | <.03   | <.03  | <.029  | E.006                                       | <.024   | E.011                                     | --   |
| DEC 23... | <.5                                     | <.03  | <.004   | M   | <.008  | <.03   | <.03   | --  | <.029  | <.013                                       | <.024   | <.016                                     | --   |
| DEC 30... | <.5                                     | <.03  | <.004   | <1  | <.008  | <.03   | <.03   | <.03  | <.029  | <.013                                       | <.024   | E.010                                     | --   |
| JUN 22... | <.5                                     | <.03  | <.004   | <1  | <.008  | <.03   | <.03   | <.03  | <.029  | E.008                                       | E.008   | E.037                                     | <.02                                       |
| JUL 27... | --                                      | <.0020                                      | <.004   | --  | <.049  | <.04   | <.03   | <.03  | E.006  | E.010                                       | <.024   | .024                                      | <.02                                       |
| AUG 31... | <.5                                     | <.0020                                      | <.004   | <1  | <.049  | <.04   | <.03   | <.03  | <.029  | <.013                                       | <.024   | E.013                                     | <.02                                       |

## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Flufenacet<br>OA,<br>water,<br>fltrd,<br>ug/L<br>(62483) | Flufenacet,<br>water,<br>fltrd,<br>ug/L<br>(62481)       | Flumet-<br>sulam,<br>water,<br>fltrd,<br>ug/L<br>(61694)          | Fluo-<br>meturon<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(38811) | Fluor-<br>anthene<br>water,<br>fltrd,<br>ug/L<br>(34377)          | Fonofos<br>oxon,<br>water,<br>fltrd,<br>ug/L<br>(61649)         | Fonofos<br>water,<br>fltrd,<br>ug/L<br>(04095)                             | HHCB,<br>water,<br>fltrd,<br>ug/L<br>(62075)                      | Hexa-<br>zinone,<br>water,<br>fltrd,<br>ug/L<br>(04025)                   | Imaza-<br>quin,<br>water,<br>fltrd,<br>ug/L<br>(50356)                   | Imaze-<br>thapyr,<br>water,<br>fltrd,<br>ug/L<br>(50407) | Imida-<br>clopidr<br>water,<br>fltrd,<br>ug/L<br>(61695) | Indole,<br>water,<br>fltrd,<br>ug/L<br>(62076)           |
|--------------|--|--|---|--|---|---|--|---|---|--|--|--|--|
| OCT<br>06... | --   | --   | <.01  | <.03   | <.5   | <.002   | <.003  | M   | .013  | <.02   | <.02   | <.007  | <.5  |
| NOV<br>04... | --   | --   | <.01  | <.03   | <.5   | <.002   | <.003  | E.1   | <.013   | <.02   | <.02   | <.007  | <.5  |
| DEC<br>23... | --   | --   | --  | --   | <.5   | <.002   | <.003  | M   | <.013   | --   | --   | --   | <.5  |
| 30...        | --   | --   | <.01  | <.03   | <.5   | <.002   | <.003  | E.1   | <.013   | <.02   | <.02   | <.007  | <.5  |
| JUN<br>22... | <.02   | <.02   | <.01  | <.03   | <.5   | <.002   | <.003  | E.1   | <.013   | <.02   | <.02   | <.007  | <.5  |
| JUL<br>27... | <.02   | <.02   | <.01  | <.03   | --  | <.003   | <.003  | --  | <.013   | <.02   | <.02   | E.024  | --   |
| AUG<br>31... | <.02   | <.02   | <.01  | <.03   | <.5   | <.003   | <.003  | <.5   | <.013   | <.02   | <.02   | <.021  | <.5  |
| Date         | Ipro-<br>dione,<br>water,<br>fltrd,<br>ug/L<br>(61593)   | Isobor-<br>neol,<br>water,<br>fltrd,<br>ug/L<br>(62077)  | Isofen-<br>phos,<br>water,<br>fltrd,<br>ug/L<br>(61594)           | Iso-<br>phorone<br>water,<br>fltrd,<br>ug/L<br>(34409)           | Iso-<br>propyl-<br>benzene<br>water,<br>fltrd,<br>ug/L<br>(62078) | Iso-<br>quin-<br>oline,<br>water,<br>fltrd,<br>ug/L<br>(62079)  | Linuron<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(38478)                    | Mala-<br>oxon,<br>water,<br>fltrd,<br>ug/L<br>(61652)             | Mala-<br>thion,<br>water,<br>fltrd,<br>ug/L<br>(39532)                    | MCPA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(38482)                   | MCPB,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(38487)   | Menthol<br>water,<br>fltrd,<br>ug/L<br>(62080)           | Meta-<br>laxyl,<br>water,<br>fltrd,<br>ug/L<br>(50359)   |
| OCT<br>06... | <1   | <.5  | <.003   | <.5  | <.5   | <.5   | <.01   | <.008   | <.027   | <.02   | <.01   | <.5  | <.02   |
| NOV<br>04... | <1   | <.5  | <.003   | M  | <.5   | <.5   | <.01   | <.008   | <.027   | <.02   | <.01   | <.5  | <.02   |
| DEC<br>23... | <1   | <.5  | <.003   | <.5  | <.5   | <.5   | --   | <.008   | <.027   | --   | --   | <.5  | --   |
| 30...        | <1   | <.5  | <.003   | <.5  | <.5   | <.5   | <.03   | <.008   | <.027   | <.02   | <.01   | <.5  | <.02   |
| JUN<br>22... | <1   | <.5  | <.003   | <.5  | <.5   | <.5   | <.01   | <.008   | <.027   | <.02   | <.01   | <.5  | <.02   |
| JUL<br>27... | <.387  | --   | <.003   | --   | --  | --  | <.01   | <.030   | <.027   | <.02   | <.01   | --   | E.01   |
| AUG<br>31... | <.387  | <.5  | <.003   | <.5  | <.5   | <.5   | <.01   | <.030   | <.027   | <.02   | <.01   | <.5  | E.01   |
| Date         | Meta-<br>laxyl,<br>water,<br>fltrd,<br>ug/L<br>(61596)   | Methi-<br>althion<br>water,<br>fltrd,<br>ug/L<br>(61598) | Methio-<br>carb,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(38501) | Meth-<br>omyl,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(49296)  | Methyl<br>acetate<br>water<br>unfltrd<br>ug/L<br>(77032)          | Methyl<br>para-<br>oxon,<br>water,<br>fltrd,<br>ug/L<br>(61664) | Methyl<br>para-<br>thion,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82667) | Methyl<br>salicy-<br>late,<br>water,<br>fltrd,<br>ug/L<br>(62081) | Metola-<br>chlor<br>ESA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(61043) | Metola-<br>chlor<br>OA,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(61044) | Metola-<br>chlor,<br>water,<br>fltrd,<br>ug/L<br>(39415) | Metri-<br>buzin,<br>water,<br>fltrd,<br>ug/L<br>(82630)  | Metsul-<br>furon,<br>water,<br>fltrd,<br>ug/L<br>(61697) |
| OCT<br>06... | <.005  | <.006  | <.008   | <.004  | <.4   | <.03  | <.015  | <.5   | --  | --   | .016   | <.006  | <.03   |
| NOV<br>04... | <.005  | <.006  | <.008   | <.004  | <.4   | <.03  | <.015  | <.5   | --  | --   | .015   | <.006  | <.03   |
| DEC<br>23... | <.005  | <.006  | --  | --   | <.4   | <.03  | <.015  | <.5   | --  | --   | E.008  | <.006  | --   |
| 30...        | <.005  | <.006  | <.008   | <.004  | <.4   | <.03  | <.015  | <.5   | --  | --   | E.010  | <.006  | <.03   |
| JUN<br>22... | <.180  | <.006  | <.008   | <.004  | --  | <.03  | <.015  | <.5   | .02   | <.02   | .014   | <.006  | <.03   |
| JUL<br>27... | <.130  | <.006  | <.008   | <.004  | --  | <.03  | <.015  | --  | <.02  | .02  | .016   | <.006  | <.03   |
| AUG<br>31... | <.005  | <.006  | <.008   | <.004  | --  | <.03  | <.015  | <.5   | .03   | .03  | .021   | <.006  | E.08   |

## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Myclobutanil water, fltrd, ug/L (61599)  | N-(4-Chlorophenyl)-N'-methylurea, ug/L (61692) | Naphthalene, water, fltrd, ug/L (34443)         | Neburon water, fltrd, 0.7u GF ug/L (49294) | Nicosulfuron, water, fltrd, ug/L (50364)         | Norflurazon, water, fltrd, 0.7u GF ug/L (49293) | Oryzalin, water, fltrd, 0.7u GF ug/L (49292)       | Oxamyl, water, fltrd, 0.7u GF ug/L (38866)        | p-Cresol, water, fltrd, ug/L (62084)          | Pendimethalin, water, fltrd, 0.7u GF ug/L (82683) | Pentachlorophenol, water, fltrd, ug/L (34459) | Phorate oxon, water, fltrd, ug/L (61666)        | Phorate water fltrd, 0.7u GF ug/L (82664)      |
|-----------|--|--|---|--|--|---|--|---|---|---|---|---|--|
| OCT 06... | <.008                                    | <.02   | <.5   | <.01                                       | <.01   | <.02  | <.02   | <.01  | <1  | <.022   | <2  | <.10  | <.011  |
| NOV 04... | <.008                                    | <.02   | <.5   | <.01                                       | <.01   | <.02  | <.02   | <.01  | M   | <.022   | <2  | <.10  | <.011  |
| DEC 23... | <.008                                    | --   | <.5   | --   | --   | --  | --   | --  | <1  | <.022   | <2  | <.10  | <.011  |
| DEC 30... | <.008                                    | <.02   | <.5   | <.01                                       | <.01   | <.02  | <.02   | <.01  | M   | <.022   | <2  | <.10  | <.011  |
| JUN 22... | <.008                                    | <.02   | <.5   | <.01                                       | <.01   | <.02  | <.02   | <.01  | <1  | <.022   | <2  | <.10  | <.011  |
| JUL 27... | .015                                     | <.02   | --  | <.01                                       | <.01   | <.02  | <.02   | <.01  | --  | <.022   | --  | <.10  | <.011  |
| AUG 31... | <.015                                    | <.02   | <.5   | <.01                                       | <.01   | <.02  | <.02   | <.01  | <1  | <.022   | <2  | <.10  | <.011  |
| Date      | Phosmet oxon, water, fltrd, ug/L (61668) | Phosmet water, fltrd, ug/L (61601)             | Picloram, water, fltrd, 0.7u GF ug/L (49291)    | Prometon, water, fltrd, ug/L (04037)       | Prometryn, water, fltrd, ug/L (04036)            | Propyzamide, water, fltrd, 0.7u GF ug/L (82676) | Propachlor ESA, water, fltrd, 0.7u GF ug/L (62766) | Propachlor OA, water, fltrd, 0.7u GF ug/L (62767) | Propham water, fltrd, 0.7u GF ug/L (49236)    | Propiconazole, water, fltrd, ug/L (50471)         | Propoxur, water, fltrd, 0.7u GF ug/L (38538)  | Pyrene, water, fltrd, ug/L (34470)              | Siduron water, fltrd, ug/L (38548)             |
| OCT 06... | <.06                                     | <.008  | <.02  | .02  | <.005  | <.004   | --   | --  | <.010   | <.02  | E.003   | <.5   | <.02   |
| NOV 04... | --                                       | <.008  | <.02  | .02  | <.005  | <.004   | --   | --  | <.010   | <.02  | <.008   | <.5   | <.02   |
| DEC 23... | <.06                                     | <.008  | --  | .02  | <.005  | <.004   | --   | --  | --  | --  | --  | <.5   | --   |
| DEC 30... | <.06                                     | <.008  | <.02  | .01  | <.005  | <.004   | --   | --  | <.010   | <.02  | <.008   | <.5   | <.02   |
| JUN 22... | <.06                                     | <.008  | <.02  | .04  | <.005  | <.004   | <.05   | <.02  | <.010   | <.02  | E.005   | <.5   | <.02   |
| JUL 27... | <.05                                     | <.008  | <.02  | .03  | <.005  | <.004   | <.05   | <.02  | <.010   | <.02  | E.003   | --  | <.02   |
| AUG 31... | <.05                                     | <.008  | <.02  | .03  | <.005  | <.004   | <.05   | <.02  | <.010   | <.02  | <.008   | <.5   | <.02   |
| Date      | Simazine, water, fltrd, ug/L (04035)     | Sulfometuron, water, fltrd, ug/L (50337)       | Tebu-thiuron water, fltrd, 0.7u GF ug/L (82670) | Terbacil, water, fltrd, ug/L (04032)       | Terbufos oxon sulfone water, fltrd, ug/L (61674) | Terbufos, water, fltrd, 0.7u GF ug/L (82675)    | Terbutylazine, water, fltrd, ug/L (04022)          | tert-Amyl alcohol water unfltrd ug/L (77073)      | tert-Butyl alcohol water unfltrd ug/L (77035) | Tetrachloroethene, water, fltrd, ug/L (34476)     | Tri-bromo-methane water, fltrd, ug/L (34288)  | Tri-butyl phosphate, water, fltrd, ug/L (62089) | Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235) |
| OCT 06... | .020                                     | <.009  | .02   | <.010                                      | <.07   | <.02  | M  | <.4   | <1.00   | <.5   | <.5   | <.5   | <.02   |
| NOV 04... | .012                                     | <.009  | <.02  | <.010                                      | <.07   | <.02  | <.01   | <.4   | <1.00   | <.5   | <.5   | E.1   | <.02   |
| DEC 23... | .114                                     | --   | <.02  | --   | <.07   | <.02  | M  | <.4   | <1.00   | E.1   | <.5   | <.5   | --   |
| DEC 30... | .151                                     | <.009  | <.02  | <.010                                      | <.07   | <.02  | M  | <.4   | <1.00   | <.5   | <.5   | E.1   | <.02   |
| JUN 22... | .084                                     | <.009  | M   | <.010                                      | <.07   | <.02  | <.01   | --  | --  | <.5   | <.5   | E.1   | <.02   |
| JUL 27... | .068                                     | E.009  | <.02  | <.010                                      | <.07   | <.02  | <.01   | --  | --  | --  | --  | --  | <.02   |
| AUG 31... | .010                                     | <.009  | <.02  | <.010                                      | <.07   | <.02  | <.01   | --  | --  | <.5   | <.5   | <.5   | .07  |

## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Triclosan, water, fltrd, ug/L (62090)               | Triethyl citrate water, fltrd, ug/L (62091)             | Tri-fluralin, water, fltrd, 0.7u GF ug/L (82661)        | Tris(2-butoxyethyl) phosphate, wat flt ug/L (62093) | Tris(2-chloroethyl) phosphate, wat flt ug/L (62087) | Tris(di chloro-i-Pr) phosphate, wat flt ug/L (62088) | 1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562) | 1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506) | 1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516) | CFC-113 water unfltrd ug/L (77652)               | 1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511) | 1,1-Di-chloro-ethane, water unfltrd ug/L (34496)  | 1,1-Di-chloro-ethene, water, unfltrd ug/L (34501) |
|-----------|---|---|---|---|---|--|--|--|--|--|--|---|---|
| OCT 06... | <1  | <.5   | <.009   | <.5   | <.5   | <.5  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| NOV 04... | <1  | E.1   | <.009   | E.1   | E.1   | E.1  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| DEC 23... | <1  | <.5   | <.009   | <.5   | E.1   | <.5  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| DEC 30... | M   | E.1   | <.009   | E.1   | E.1   | E.1  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| JUN 22... | M   | E.1   | <.009   | E.1   | E.1   | E.1  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| JUL 27... | --  | --  | <.009   | --  | --  | --   | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| AUG 31... | <1  | <.5   | <.009   | <.5   | <.5   | <.5  | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  |
| Date      | 1,1-Di-chloro-propene water unfltrd ug/L (77168)    | 1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999) | 1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000) | 1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613) | 1,2,3-Tri-chloro-propane water unfltrd ug/L (77443) | 1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)  | 1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)      | 1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)  | Dibromo-chloro-propane water unfltrd ug/L (82625)        | 1,2-Di-bromo-ethane, water, unfltrd ug/L (77651) | 1,2-Di-chloro-benzene water unfltrd ug/L (34536)     | 1,2-Di-chloro-ethane, water, unfltrd ug/L (32103) | 1,2-Di-chloro-propane water unfltrd ug/L (34541)  |
| OCT 06... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| NOV 04... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| DEC 23... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| DEC 30... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| JUN 22... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| JUL 27... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| AUG 31... | <.03  | <.1   | <.1   | <.3   | <.18  | <.1  | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  |
| Date      | 1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226) | 1,3-Di-chloro-benzene water unfltrd ug/L (34566)        | 1,3-Di-chloro-propane water unfltrd ug/L (77173)        | 1,4-Di-chloro-benzene water unfltrd ug/L (34571)    | 2,2-Di-chloro-propane water unfltrd ug/L (77170)    | 2-Chloro-toluene water unfltrd ug/L (77275)          | 2-Ethyl-toluene water unfltrd ug/L (77220)               | 3-Chloro-propene water unfltrd ug/L (78109)          | 4-Chloro-toluene water unfltrd ug/L (77277)              | 4-Iso-propyl-toluene water unfltrd ug/L (77356)  | Acetone water unfltrd ug/L (81552)                   | Acrylo-nitrile water unfltrd ug/L (34215)         | Benzene water unfltrd ug/L (34030)                |
| OCT 06... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | E.03  |
| NOV 04... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | E.03  |
| DEC 23... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | E.01  |
| DEC 30... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | <.02  |
| JUN 22... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | <.02  |
| JUL 27... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | <.02  |
| AUG 31... | <.04  | <.03  | <.1   | <.03  | <.05  | <.04   | <.06   | <.50   | <.05   | <.08   | <.6  | <.1   | <.02  |

## 0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Bromo-benzene water unfltrd ug/L (81555)             | Bromo-chloro-methane water unfltrd ug/L (77297)  | Bromo-di-chloro-methane water unfltrd ug/L (32101)    | Bromo-ethene, water, unfltrd ug/L (50002)       | Bromo-methane water unfltrd ug/L (34413)        | Carbon di-sulfide water unfltrd ug/L (77041)       | Chloro-benzene water unfltrd ug/L (34301)  | Chloro-ethane, water, unfltrd ug/L (34311)          | Chloro-methane water unfltrd ug/L (34418)       | cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093) | cis-1,3-Di-chloro-propene water unfltrd ug/L (34704) | Di-bromo-chloro-methane water unfltrd ug/L (32105) | Di-bromo-methane water unfltrd ug/L (30217)       |
|-----------|--|--|---|---|---|--|--|---|---|---|--|--|---|
| OCT 06... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| NOV 04... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| DEC 23... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| DEC 30... | <.03   | <.12   | E.04  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| JUN 22... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| JUL 27... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| AUG 31... | <.03   | <.12   | <.03  | <.1   | <.3   | <.04   | <.03                                       | <.1   | <.2   | <.02  | <.05   | <.1  | <.05  |
| Date      | Di-chloro-di-fluoro-methane wat unfltrd ug/L (34668) | Di-chloro-methane water unfltrd ug/L (34423)     | Di-ethyl ether, water, unfltrd ug/L (81576)           | Diiso-propyl ether, water, unfltrd ug/L (81577) | Ethyl methacrylate, water, unfltrd ug/L (73570) | Ethyl methyl ketone, water, unfltrd ug/L (81595)   | Ethyl-benzene water unfltrd ug/L (34371)   | Hexa-chloro-buta-diene, water, unfltrd ug/L (39702) | Hexa-chloro-ethane, water, unfltrd ug/L (34396) | Iodo-methane water unfltrd ug/L (77424)               | Iso-butyl methyl ketone, water, unfltrd ug/L (78133) | Iso-propyl-benzene water unfltrd ug/L (77223)      | Methyl acrylo-nitrile water unfltrd ug/L (81593)  |
| OCT 06... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| NOV 04... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| DEC 23... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| DEC 30... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| JUN 22... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| JUL 27... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| AUG 31... | <.18   | <.1  | <.1   | <.10  | <.2   | <.40   | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   |
| Date      | Methyl acrylate, water, unfltrd ug/L (49991)         | Methyl methacrylate, water, unfltrd ug/L (81597) | Methyl tert-pentyl ether, water, unfltrd ug/L (50005) | meta+ para-Xylene, water, unfltrd ug/L (85795)  | Naphthalene, water, unfltrd ug/L (34696)        | Methyl n-butyl ketone, water, unfltrd ug/L (77103) | n-Butyl benzene water unfltrd ug/L (77342) | n-propyl-benzene water unfltrd ug/L (77224)         | o-Xylene, water, unfltrd ug/L (77135)           | sec-Butyl-benzene water unfltrd ug/L (77350)          | Styrene water unfltrd ug/L (77128)                   | t-Butyl ethyl ether, water, unfltrd ug/L (50004)   | Methyl t-butyl ether, water, unfltrd ug/L (78032) |
| OCT 06... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |
| NOV 04... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |
| DEC 23... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | E.1   |
| DEC 30... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |
| JUN 22... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |
| JUL 27... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |
| AUG 31... | <.20   | <.3  | <.08  | <.06  | <.5   | <.7  | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   |

0208755215 NEUSE RIVER ABOVE U.S. HIGHWAY 70 AT SMITHFIELD, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | tert-Butylbenzene water unfltrd ug/L (77353) | Tetra-chloro-ethene, water, unfltrd ug/L (34475) | Tetra-chloro-methane water unfltrd ug/L (32102) | Tetra-hydro-furan, water, unfltrd ug/L (81607) | Toluene water unfltrd ug/L (34010) | trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546) | trans-1,3-Di-chloro-propene water unfltrd ug/L (34699) | trans-1,4-Di-chloro-2-butene, wat unfltrd ug/L (73547) | Tri-bromo-methane water unfltrd ug/L (32104) | Tri-chloro-ethene, water, unfltrd ug/L (39180) | Tri-chloro-fluoro-methane water unfltrd ug/L (34488) | Tri-chloro-methane water unfltrd ug/L (32106) | Vinyl chlor-ide, water, unfltrd ug/L (39175) |
|-----------|--|--|---|--|------------------------------------|---|--|--|--|--|--|---|--|
| OCT 06... | <.06   | <.06   | <.06  | <2   | E.04                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | E.02  | <.1  |
| NOV 04... | <.06   | <.06   | <.06  | <2   | <.05                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | E.03  | <.1  |
| DEC 23... | <.06   | <.06   | <.06  | <2   | E.02                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | E.03  | <.1  |
| DEC 30... | <.06   | E.03   | <.06  | <2   | <.05                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | .16   | <.1  |
| JUN 22... | <.06   | <.06   | <.06  | <2   | E.02                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | E.02  | <.1  |
| JUL 27... | <.06   | <.06   | <.06  | <2   | <.05                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | <.02  | <.1  |
| AUG 31... | <.06   | <.06   | <.06  | <2   | E.02                               | <.03  | <.09   | <.7  | <.10   | <.04   | <.16   | E.02  | <.1  |

| Date      | Di-chloro-vos, water fltrd, ug/L (38775) |
|-----------|--|
| OCT 06... | <.01                                     |
| NOV 04... | <.01                                     |
| DEC 23... | <.01                                     |
| DEC 30... | <.01                                     |
| JUN 22... | <.01                                     |
| JUL 27... | <.01                                     |
| AUG 31... | <.01                                     |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

M-- Presence verified, not quantified

Medium codes used in this table:

9 -- Surface water

## 02087570 NEUSE RIVER AT SMITHFIELD, NC

LOCATION.--Lat 35°30'45", long 78°20'58", Johnston County, Hydrologic Unit 03020201, on left bank 10 ft downstream from bridge on U.S. Highway 70, at Smithfield, 2.1 mi upstream from Swift Creek, and 178 mi upstream from mouth.

DRAINAGE AREA.--1,206 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1959 to September 1990, October 1998 to current year (gage heights only).

GAGE.--Water-stage recorder. Datum of gage is 99.26 ft above NGVD of 1929. Prior to Dec. 21, 1971, nonrecording gage on upstream side of bridge near center of span at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good.

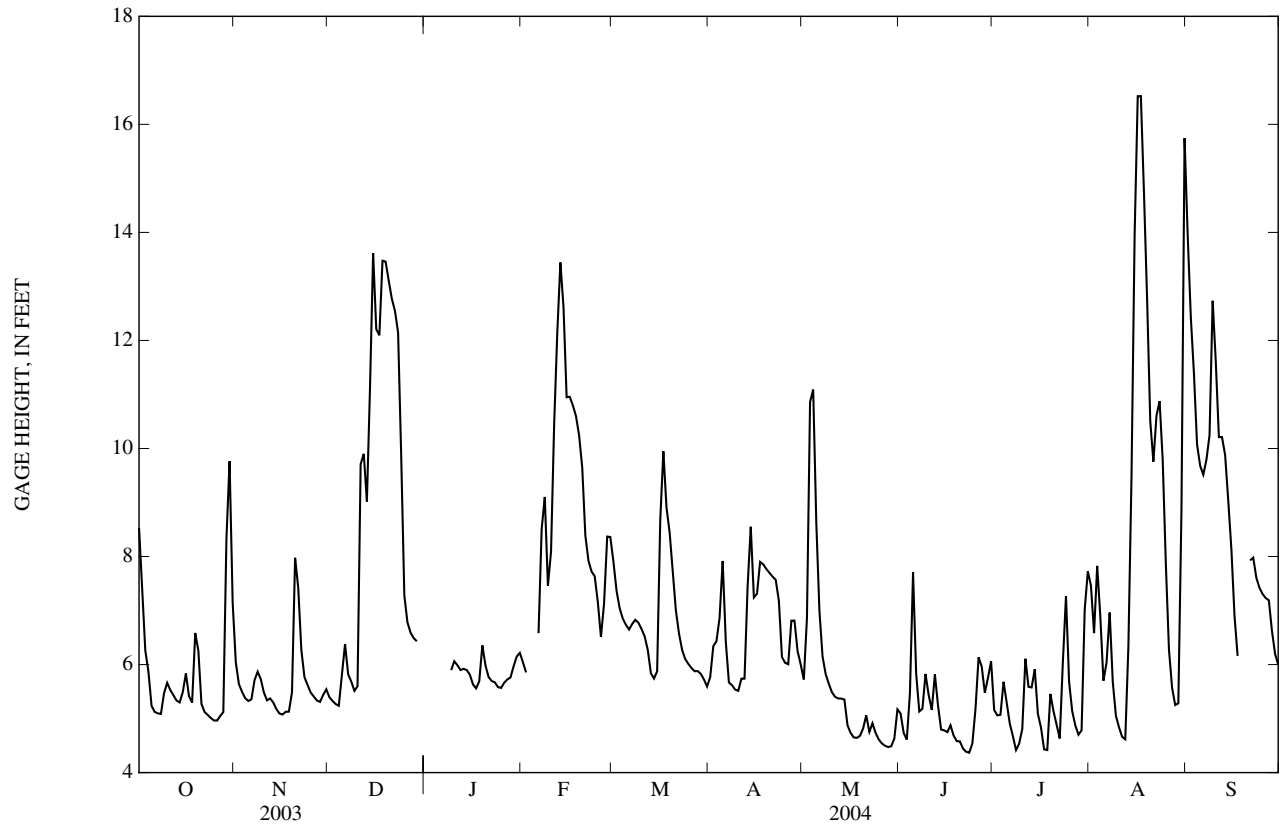
EXTREMES FOR PERIOD OF RECORD.--Maximum gage height, 26.72 ft, Sept. 18, 1999; minimum gage height not determined.

EXTREMES FOR CURRENT YEAR.--Maximum gage height, 17.38 ft, Aug. 17; minimum gage height, 4.30 ft, July 8.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC   | JAN  | FEB   | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP   |
|-------|--------|--------|-------|------|-------|--------|--------|--------|--------|--------|--------|-------|
| 1     | 8.53   | 6.04   | 5.39  | ---  | 6.04  | 7.90   | 5.77   | 5.72   | 5.10   | 5.16   | 7.46   | 13.95 |
| 2     | 7.40   | 5.64   | 5.33  | ---  | 5.85  | 7.36   | 6.34   | 6.86   | 4.73   | 5.06   | 6.58   | 12.43 |
| 3     | 6.26   | 5.50   | 5.27  | ---  | ---   | 7.04   | 6.43   | 10.86  | 4.61   | 5.07   | 7.83   | 11.39 |
| 4     | 5.87   | 5.38   | 5.24  | ---  | ---   | 6.85   | 6.86   | 11.09  | 5.47   | 5.68   | 6.90   | 10.08 |
| 5     | 5.23   | 5.33   | 5.82  | ---  | ---   | 6.74   | 7.92   | 8.62   | 7.71   | 5.30   | 5.70   | 9.68  |
| 6     | 5.12   | 5.36   | 6.38  | ---  | 6.58  | 6.65   | 6.42   | 6.99   | 5.83   | 4.91   | 6.03   | 9.52  |
| 7     | 5.10   | 5.71   | 5.82  | ---  | 8.51  | 6.75   | 5.67   | 6.15   | 5.13   | 4.67   | 6.96   | 9.79  |
| 8     | 5.09   | 5.87   | 5.68  | ---  | 9.10  | 6.83   | 5.62   | 5.82   | 5.18   | 4.42   | 5.68   | 10.25 |
| 9     | 5.47   | 5.73   | 5.51  | 5.90 | 7.46  | 6.77   | 5.54   | 5.64   | 5.83   | 4.54   | 5.05   | 12.73 |
| 10    | 5.66   | 5.48   | 5.60  | 6.06 | 8.09  | 6.66   | 5.51   | 5.49   | 5.44   | 4.81   | 4.84   | 11.61 |
| 11    | 5.53   | 5.34   | 9.71  | 5.99 | 10.44 | 6.52   | 5.74   | 5.40   | 5.16   | 6.11   | 4.66   | 10.21 |
| 12    | 5.43   | 5.37   | 9.90  | 5.90 | 12.13 | 6.27   | 5.74   | 5.37   | 5.82   | 5.59   | 4.62   | 10.21 |
| 13    | 5.34   | 5.30   | 9.02  | 5.92 | 13.44 | 5.84   | 7.46   | 5.37   | 5.24   | 5.58   | 6.33   | 9.88  |
| 14    | 5.30   | 5.18   | 11.13 | 5.90 | 12.62 | 5.74   | 8.55   | 5.35   | 4.80   | 5.91   | 9.48   | 9.03  |
| 15    | 5.49   | 5.09   | 13.62 | 5.81 | 10.95 | 5.88   | 7.24   | 4.88   | 4.78   | 5.09   | 13.95  | 8.13  |
| 16    | 5.83   | 5.08   | 12.21 | 5.63 | 10.96 | 8.67   | 7.31   | 4.73   | 4.75   | 4.83   | 16.52  | 6.90  |
| 17    | 5.42   | 5.13   | 12.10 | 5.56 | 10.80 | 9.95   | 7.90   | 4.65   | 4.88   | 4.43   | 16.52  | 6.16  |
| 18    | 5.30   | 5.13   | 13.48 | 5.69 | 10.60 | 8.91   | 7.85   | 4.64   | 4.69   | 4.42   | 14.71  | ---   |
| 19    | 6.59   | 5.49   | 13.46 | 6.35 | 10.24 | 8.45   | 7.77   | 4.68   | 4.58   | 5.46   | 12.75  | ---   |
| 20    | 6.26   | 7.98   | 13.10 | 5.98 | 9.65  | 7.73   | 7.70   | 4.82   | 4.58   | 5.14   | 10.51  | ---   |
| 21    | 5.27   | 7.42   | 12.77 | 5.77 | 8.39  | 7.01   | 7.63   | 5.06   | 4.45   | 4.88   | 9.76   | 7.93  |
| 22    | 5.12   | 6.27   | 12.55 | 5.70 | 7.92  | 6.58   | 7.57   | 4.75   | 4.39   | 4.63   | 10.61  | 7.98  |
| 23    | 5.07   | 5.77   | 12.15 | 5.67 | 7.72  | 6.27   | 7.18   | 4.91   | 4.37   | 6.05   | 10.88  | 7.60  |
| 24    | 5.01   | 5.62   | 9.85  | 5.58 | 7.63  | 6.10   | 6.14   | 4.73   | 4.54   | 7.27   | 9.77   | 7.42  |
| 25    | 4.96   | 5.48   | 7.28  | 5.57 | 7.16  | 6.01   | 6.03   | 4.61   | 5.18   | 5.68   | 7.85   | 7.31  |
| 26    | 4.96   | 5.41   | 6.78  | 5.66 | 6.51  | 5.94   | 6.01   | 4.54   | 6.14   | 5.14   | 6.27   | 7.23  |
| 27    | 5.05   | 5.33   | 6.59  | 5.72 | 7.13  | 5.88   | 6.81   | 4.50   | 5.96   | 4.87   | 5.57   | 7.19  |
| 28    | 5.12   | 5.31   | 6.49  | 5.76 | 8.37  | 5.88   | 6.81   | 4.47   | 5.48   | 4.70   | 5.25   | 6.62  |
| 29    | 8.33   | 5.44   | 6.43  | 5.97 | 8.36  | 5.83   | 6.25   | 4.49   | 5.75   | 4.78   | 5.28   | 6.20  |
| 30    | 9.76   | 5.54   | ---   | 6.15 | ---   | 5.72   | 6.00   | 4.63   | 6.06   | 7.01   | 8.84   | 6.00  |
| 31    | 7.14   | ---    | ---   | 6.22 | ---   | 5.59   | ---    | 5.17   | ---    | 7.73   | 15.75  | ---   |
| TOTAL | 182.01 | 168.72 | ---   | ---  | ---   | 210.32 | 201.77 | 174.99 | 156.63 | 164.92 | 268.91 | ---   |
| MEAN  | 5.87   | 5.62   | ---   | ---  | ---   | 6.78   | 6.73   | 5.64   | 5.22   | 5.32   | 8.67   | ---   |
| MAX   | 9.76   | 7.98   | ---   | ---  | ---   | 9.95   | 8.55   | 11.09  | 7.71   | 7.73   | 16.52  | ---   |
| MIN   | 4.96   | 5.08   | ---   | ---  | ---   | 5.59   | 5.51   | 4.47   | 4.37   | 4.42   | 4.62   | ---   |





353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY

LOCATION.--Lat 35°31'12", long 78°20'58", Johnston County, Hydrologic Unit 03020201, town of Smithfield Water Treatment Plant.

DRAINAGE AREA.--Not applicable.

PERIOD OF RECORD.--June to September 2004.

REMARKS.--Station operated as part of NAWQA program from June to September 2004.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time   | Medium code                                      | Barometric pressure, mm Hg (00025)                  | Dissolved oxygen, mg/L (00300)                          | Dissolved oxygen, percent of saturation (00301)         | pH, water, unfltrd field, std units (00400)     | Specif. conductance, wat unfltrd 25 degC (00095) | Temperature, water, deg C (00010)                   | 1,4-Dichlorobenzene water, fltrd, ug/L (34572)      | 1-Methylnaphthalene, water, fltrd, ug/L (62054)    | 1-Naphthol, water, fltrd 0.7u GF ug/L (49295)  | 2,4-D methyl ester, water, fltrd, ug/L (50470)  | 2,4-D water, fltrd, ug/L (39732)               |
|-----------|--|--|---|---|---|---|--|---|---|--|--|---|--|
| JUN 25... | 1030   | \$   | 760   | 6.3   | 82  | 7.6   | 296  | 28.5  | E.2   | <.5  | <.09   | <.009   | <.02   |
| JUL 30... | 0930   | \$   | 761   | 7.0   | 90  | 8.3   | 282  | 28.5  | <.5   | <.5  | <.09   | E.026   | <.03   |
| SEP 03... | 1200   | \$   | 762   | 6.0   | 74  | 8.3   | 200  | 25.9  | <.5   | <.5  | <.09   | <.009   | .03  |
| Date      | 2,4-DB water, fltrd 0.7u GF (38746)            | 2,6-Diethyl-aniline water, fltrd 0.7u GF (82660) | 2,6-Dimethylnaphthalene, water, fltrd, ug/L (62055) | 2-[(2-Ethyl-6methyl phenyl) amino]2 oxoESA ug/L (62850) | 2Chloro-2,6-' diethyl acet-anilide wat flt ug/L (61618) | CIAT, water, fltrd, ug/L (04040)                | CEAT, water, fltrd, ug/L (04038)                 | 2-Ethyl-6-methyl-aniline water, fltrd, ug/L (61620) | OIET, water, fltrd, ug/L (50355)                    | 2-Methylnaphthalene, water, fltrd, ug/L (62056)    | 3,4-Dichloro-aniline water fltrd, ug/L (61625) | 3-beta-Copros-tanol, water, fltrd, ug/L (62057) | 3-Hydroxy carbo-furan, wat flt 0.7u GF (49308) |
| JUN 25... | <.02   | <.006  | <.5   | <.02  | <.005   | <.006   | E.01   | <.004   | E.010   | <.5  | <.004  | <.2   | <.006  |
| JUL 30... | <.02   | <.006  | <.5   | <.02  | <.005   | E.008   | <.01   | <.004   | E.013   | <.5  | <.004  | <.2   | <.006  |
| SEP 03... | <.02   | <.006  | <.5   | <.02  | <.005   | <.006   | <.01   | <.004   | E.012   | <.5  | <.004  | <.2   | <.006  |
| Date      | 3-Keto-carbo-furan, water, fltrd, ug/L (50295) | 3-Methyl-1H-indole, water, fltrd, ug/L (62058)   | 3-tert-Butyl-4-hydroxy-anisole wat flt ug/L (62059) | 4Chloro 2methyl phenol, water, fltrd, ug/L (61633)      | 4-Cumyl-phenol, water, fltrd, ug/L (62060)              | 4-Octyl-phenol, water, fltrd, ug/L (62061)      | 4-Nonyl-phenol, water, fltrd, ug/L (62085)       | 4-tert-Octyl-phenol, water, fltrd, ug/L (62062)     | 5-Methyl-1H-benzotri-azole, wat flt ug/L (62063)    | 9,10-Anthra-quinone water, fltrd, ug/L (62066)     | Aceto-chlor ESA, water, fltrd 0.7u GF (61029)  | Aceto-chlor OA, water, fltrd 0.7u GF (61030)    | Aceto-chlor SAA, water, fltrd, ug/L (62847)    |
| JUN 25... | <.014  | <.1  | <.5   | <.006   | <.1   | <.1   | E2   | <.1   | <.2   | <.5  | <.02   | <.02  | <.02   |
| JUL 30... | <.014  | <.1  | <.5   | <.006   | <.1   | <.1   | <.5  | <.1   | <.2   | <.5  | <.02   | <.02  | <.02   |
| SEP 03... | <.014  | <.1  | <.5   | <.006   | <.1   | <.1   | E1   | <.1   | <.2   | <.5  | <.02   | <.02  | <.02   |
| Date      | Aceto-chlor, water, fltrd, ug/L (49260)        | AHTN, water, fltrd, ug/L (62065)                 | Acifluor-fen, water, fltrd 0.7u GF ug/L (49315)     | Ala-chlor ESA SA, water, fltrd, ug/L (62849)            | Ala-chlor ESA, water, fltrd 0.7u GF ug/L (50009)        | Ala-chlor OA, water, fltrd 0.7u GF ug/L (61031) | Ala-chlor SAA, water, fltrd, ug/L (62848)        | Ala-chlor, water, fltrd, ug/L (46342)               | Aldi-carb sulfone water, fltrd 0.7u GF ug/L (49313) | Aldi-carb sulf-oxide, wat flt 0.7u GF ug/L (49314) | Aldi-carb, water, fltrd 0.7u GF ug/L (49312)   | Anthra-cene, water, fltrd, ug/L (34221)         | Atra-zine, water, fltrd, ug/L (39632)          |
| JUN 25... | <.006  | E.1  | <.007   | <.02  | <.02  | <.02  | <.02   | <.005   | <.02  | <.008  | <.04   | <.5   | E.004  |
| JUL 30... | <.006  | M  | <.007   | <.02  | <.02  | <.02  | <.02   | <.005   | <.02  | <.008  | <.04   | <.5   | .011   |
| SEP 03... | <.006  | <.5  | <.007   | <.02  | <.02  | <.02  | <.02   | <.005   | <.02  | <.008  | <.04   | <.5   | E.006  |

## 353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Azin-phos-methyl oxon, water, fltrd, ug/L (61635) | Azin-phos-methyl, water, fltrd 0.7u GF ug/L (82686) | Bendio-carb, water, fltrd, ug/L (50299)            | Ben-flur-alin, water, fltrd 0.7u GF ug/L (82673) | Benomyl water, fltrd, ug/L (50300)             | Bensul-furon, water, fltrd, ug/L (61693)             | Ben-tazon, water, fltrd 0.7u GF ug/L (38711)   | Benzo-[a]-pyrene, water, fltrd, ug/L (34248)      | beta-Sitos-terol, water, fltrd, ug/L (62068)        | beta-Stigma-stanol, water, fltrd, ug/L (62086)  | Bisphe-nol A, water, fltrd, ug/L (62069)  | Broma-cil, water, fltrd, ug/L (04029)            | Brom-oxynil, water, fltrd 0.7u GF ug/L (49311)   |
|-----------|---|---|--|--|--|--|--|---|---|---|---|--|--|
| JUN 25... | <.02  | <.050   | <.03   | <.010  | <.004  | <.02   | <.01   | <.5   | <2  | <2  | <1  | <.03   | <.02   |
| JUL 30... | <.07  | <.050   | <.03   | <.010  | <.004  | <.02   | <.01   | <.5   | <20   | <20   | <1  | <.03   | <.02   |
| SEP 03... | <.07  | <.050   | <.03   | <.010  | <.004  | <.02   | <.01   | <.5   | <2  | <2  | <1  | <.03   | <.02   |
| Date      | Camphor water, fltrd, ug/L (62070)                | Car-baryl, water, fltrd 0.7u GF ug/L (49310)        | Car-baryl, water, fltrd 0.7u GF ug/L (82680)       | Carba-zole, water, fltrd, ug/L (62071)           | Carbo-furan, water, fltrd 0.7u GF ug/L (49309) | Chlor-amben methyl ester, water, fltrd, ug/L (61188) | Chlori-muron, water, fltrd, ug/L (50306)       | Chloro-di-amino-s-tri-azine, wat flt ug/L (04039) | Chloro-thalo-nil, water, fltrd 0.7u GF ug/L (49306) | Chlor-pyri-fos oxon, water, fltrd, ug/L (61636) | Chlor-pyri-fos water, fltrd, ug/L (38933) | Choles-terol, water, fltrd, ug/L (62072)         | cis-Per-methrin water fltrd 0.7u GF ug/L (82687) |
| JUN 25... | <.5   | <.03  | <.041  | <.5  | <.006  | <.02   | <.010  | <.04  | <.04  | <.06  | <.005                                     | <2   | <.006  |
| JUL 30... | <.5   | <.03  | <.041  | <.5  | <.006  | <.02   | <.010  | E.05  | <.04  | <.06  | <.005                                     | <20  | <.006  |
| SEP 03... | <.5   | E.01  | E.012  | <.5  | <.006  | <.02   | <.010  | <.04  | <.04  | <.06  | <.005                                     | <2   | <.006  |
| Date      | Clopyr-alid, water, fltrd 0.7u GF ug/L (49305)    | Cot-inine, water, fltrd, ug/L (62005)               | Cyclo-ate, water, fltrd, ug/L (04031)              | Cyflu-thrin, water, fltrd, ug/L (61585)          | Cyper-methrin water, fltrd, ug/L (61586)       | Dacthal mono-acid, water, fltrd 0.7u GF ug/L (49304) | DCPA, water fltrd 0.7u GF ug/L (82682)         | Desulf-inyl fipro-nil, water, fltrd, ug/L (62170) | Diaz-inon oxon, water, fltrd, ug/L (61638)          | Diazi-non, water, fltrd, ug/L (39572)           | Dicamba water fltrd 0.7u GF ug/L (38442)  | Di-chlor-prop, water, fltrd 0.7u GF ug/L (49302) | Dicro-tophos, water fltrd, ug/L (38454)          |
| JUN 25... | <.01  | <1.00   | <.01   | <.008  | <.009  | <.01   | <.003  | <.012   | <.01  | <.005   | <.01                                      | <.01   | <.08   |
| JUL 30... | <.01  | <1.00   | <.01   | <.008  | <.009  | <.01   | <.003  | E.008   | <.01  | <.005   | <.01                                      | <.01   | <.08   |
| SEP 03... | <.01  | <1.00   | <.01   | <.008  | <.009  | <.01   | <.003  | <.012   | <.01  | <.005   | <.01                                      | <.01   | <.08   |
| Date      | Diel-drin, water, fltrd, ug/L (39381)             | Di-ethoxy-nonyl-phenol, water, fltrd, ug/L (62083)  | Di-ethoxy-octyl-phenol, water, fltrd, ug/L (61705) | Dimeth-enamid ESA, water, fltrd, ug/L (61951)    | Dimeth-enamid OA, water, fltrd, ug/L (62482)   | Dimeth-enamid water, fltrd, ug/L (61588)             | Dimeth-oate, water, fltrd 0.7u GF ug/L (82662) | Dinoseb water, fltrd 0.7u GF ug/L (49301)         | Diphen-amid, water, fltrd, ug/L (04033)             | Diuron, water, fltrd 0.7u GF ug/L (49300)       | D-Limo-nene, water, fltrd, ug/L (62073)   | Ethion monoxon water, fltrd, ug/L (61644)        | Ethion, water, fltrd, ug/L (82346)               |
| JUN 25... | <.009   | <5  | <1   | <.02   | <.02   | <.02   | <.006  | <.01  | <.03  | <.01  | <.5                                       | <.03   | <.004  |
| JUL 30... | <.009   | <5  | <1   | <.02   | <.02   | <.02   | <.006  | <.01  | <.03  | <.01  | <.5                                       | <.0020   | <.004  |
| SEP 03... | <.009   | <5  | <1   | <.02   | <.02   | <.02   | <.006  | <.01  | <.03  | .02   | <.5                                       | <.0020   | <.004  |

## 353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Ethoxy-octyl-phenol, water, fltrd ug/L (61706) | Fenamiphos sulfone water, fltrd, ug/L (61645)  | Fenamiphos sulfide, water, fltrd, ug/L (61646)      | Fenamiphos, water, fltrd, ug/L (61591)        | Fenuron water, fltrd 0.7u GF ug/L (49297)          | Desulf-inyl-fipronil amide, wat flt ug/L (62169)  | Fipronil sulfide water, fltrd, ug/L (62167)   | Fipronil sulfone water, fltrd, ug/L (62168) | Fipronil, water, fltrd, ug/L (62166)     | Flufenacet ESA, water, fltrd, ug/L (61952) | Flufenacet OA, water, fltrd, ug/L (62483)       | Flufenacet, water, fltrd, ug/L (62481)      | Flumetsulam, water, fltrd, ug/L (61694)       |
|-----------|--|--|---|---|--|---|---|---|--|--|---|---|---|
| JUN 25... | <1   | <.008  | <.03  | <.03  | <.03   | <.029   | <.013   | <.024                                       | <.016                                    | <.02                                       | <.02  | <.02  | <.01  |
| JUL 30... | <1   | <.049  | <.04  | <.03  | <.03   | <.029   | <.013   | <.024                                       | <.016                                    | <.02                                       | <.02  | <.02  | <.01  |
| SEP 03... | <1   | <.049  | <.04  | <.03  | <.03   | <.029   | <.013   | <.024                                       | <.016                                    | <.02                                       | <.02  | <.02  | <.01  |
| Date      | Fluometuron water fltrd 0.7u GF ug/L (38811)   | Fluoranthene water, fltrd, ug/L (34377)        | Fonofos oxon, water, fltrd, ug/L (61649)            | Fonofos water, fltrd, ug/L (04095)            | HHCB, water, fltrd, ug/L (62075)                   | Hexazinone, water, fltrd, ug/L (04025)            | Imazaquin, water, fltrd, ug/L (50356)         | Imazethapyr, water, fltrd, ug/L (50407)     | Imidacloprid water, fltrd, ug/L (61695)  | Indole, water, fltrd, ug/L (62076)         | Iprodione, water, fltrd, ug/L (61593)           | Isoborneol, water, fltrd, ug/L (62077)      | Isofenphos, water, fltrd, ug/L (61594)        |
| JUN 25... | <.03   | <.5  | <.002   | <.003   | E.1  | <.013   | <.02  | <.02  | <.007                                    | <.5  | <1  | <.5   | <.003   |
| JUL 30... | <.03   | <.5  | <.003   | <.003   | <.5  | <.013   | <.02  | <.02  | <.007                                    | <.5  | <.387   | <.5   | <.003   |
| SEP 03... | <.03   | <.5  | <.003   | <.003   | <.5  | <.013   | <.02  | <.02  | <.007                                    | <.5  | <.387   | <.5   | <.003   |
| Date      | Iso-phorone water, fltrd, ug/L (34409)         | Iso-propylbenzene water, fltrd, ug/L (62078)   | Iso-quinoline, water, fltrd, ug/L (62079)           | Linuron water fltrd 0.7u GF ug/L (38478)      | Malaoxon, water, fltrd, ug/L (61652)               | Malathion, water, fltrd, ug/L (39532)             | MCPA, water, fltrd 0.7u GF ug/L (38482)       | MCPB, water, fltrd 0.7u GF ug/L (38487)     | Menthol water, fltrd, ug/L (62080)       | Metaxyl, water, fltrd, ug/L (50359)        | Metaxyl, water, fltrd, ug/L (61596)             | Methialthion water, fltrd, ug/L (61598)     | Methiocarb, water, fltrd 0.7u GF ug/L (38501) |
| JUN 25... | <.5  | <.5  | <.5   | <.01  | <.008  | <.027   | <.02  | <.01  | <.5                                      | <.02                                       | <.005   | <.006                                       | <.008   |
| JUL 30... | <.5  | <.5  | <.5   | <.01  | <.030  | <.027   | <.02  | <.01  | <.5                                      | E.01                                       | <.005   | <.006                                       | <.008   |
| SEP 03... | <.5  | <.5  | <.5   | <.01  | <.030  | <.027   | <.02  | <.01  | <.5                                      | E.01                                       | <.005   | <.006                                       | <.008   |
| Date      | Methyl, water, fltrd 0.7u GF ug/L (49296)      | Methyl paraxon, water, fltrd, ug/L (61664)     | Methyl parathion, water, fltrd 0.7u GF ug/L (82667) | Methyl salicylate, water, fltrd, ug/L (62081) | Metolachlor ESA, water, fltrd 0.7u GF ug/L (61043) | Metolachlor OA, water, fltrd 0.7u GF ug/L (61044) | Metolachlor, water, fltrd, ug/L (39415)       | Metribuzin, water, fltrd, ug/L (82630)      | Metsulfuron, water, fltrd, ug/L (61697)  | Myclobutanil water, fltrd, ug/L (61599)    | N-(4-Chlorophenyl)-N'-methyl-urea, ug/L (61692) | Naphthalene, water, fltrd, ug/L (34443)     | Neburon water, fltrd 0.7u GF ug/L (49294)     |
| JUN 25... | <.004  | <.03   | <.015   | <.5   | .02  | <.02  | E.006   | <.006                                       | <.03                                     | <.008                                      | <.02  | <.5   | <.01  |
| JUL 30... | <.004  | <.03   | <.015   | <.5   | <.02   | <.02  | .013  | <.006                                       | <.03                                     | .014                                       | <.02  | <.5   | <.01  |
| SEP 03... | <.004  | <.03   | <.015   | <.5   | <.02   | <.02  | <.013   | <.006                                       | <.03                                     | <.008                                      | <.02  | <.5   | <.01  |
| Date      | Nicosulfuron, water, fltrd, ug/L (50364)       | Norflurazon, water, fltrd 0.7u GF ug/L (49293) | Oryzalin, water, fltrd 0.7u GF ug/L (49292)         | Oxamyl, water, fltrd 0.7u GF ug/L (38866)     | p-Cresol, water, fltrd, ug/L (62084)               | Pendimethalin, water, fltrd 0.7u GF ug/L (82683)  | Pentachlorophenol, water, fltrd, ug/L (34459) | Phorate oxon, water, fltrd, ug/L (61666)    | Phorate water fltrd 0.7u GF ug/L (82664) | Phosmet oxon, water, fltrd, ug/L (61668)   | Phosmet, water, fltrd, ug/L (61601)             | Picloram, water, fltrd 0.7u GF ug/L (49291) | Prometon, water, fltrd, ug/L (04037)          |
| JUN 25... | <.01   | <.02   | <.02  | <.01  | <1   | <.022   | <2  | <.10  | <.011                                    | <.06                                       | <.008   | <.02  | .02   |
| JUL 30... | <.01   | <.02   | <.02  | <.01  | <1   | <.022   | <2  | <.10  | <.011                                    | <.05                                       | <.008   | <.02  | .03   |
| SEP 03... | <.01   | <.02   | <.02  | <.01  | <1   | <.022   | <2  | <.10  | <.011                                    | <.05                                       | <.008   | <.02  | E.01  |

## 353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Prometryn, water, fltrd, ug/L (04036)                    | Propy-zamide, water, fltrd, 0.7u GF ug/L (82676)     | Propa-chlor ESA, water, fltrd, 0.7u GF ug/L (62766)      | Propa-chlor OA, water, fltrd, 0.7u GF ug/L (62767) | Propham water fltrd, 0.7u GF ug/L (49236)            | Propi-cona-zole, water, fltrd, ug/L (50471)       | Pro-poxur, water, fltrd, 0.7u GF ug/L (38538)     | Pyrene, water, fltrd, ug/L (34470)                  | Siduron water, fltrd, ug/L (38548)                      | Sima-zine, water, fltrd, ug/L (04035)                   | Sulfo-met-ruron, water, fltrd, ug/L (50337)           | Tebu-thiuron water fltrd, 0.7u GF ug/L (82670)        | Terba-cil, water, fltrd, ug/L (04032)                 |
|-----------|--|--|--|--|--|---|---|---|---|---|---|---|---|
| JUN 25... | <.005  | <.004  | <.05   | <.02   | <.010  | <.02  | <.008   | <.5   | <.02  | .039  | <.009   | <.02  | <.010   |
| JUL 30... | <.005  | <.004  | <.05   | <.02   | <.010  | <.02  | <.008   | <.5   | <.02  | .042  | <.009   | <.02  | <.010   |
| SEP 03... | <.005  | <.004  | <.05   | <.02   | <.010  | <.02  | <.008   | <.5   | <.02  | .019  | <.009   | <.02  | <.010   |
| Date      | Ter-bu-fos oxon sulfone water, fltrd, ug/L (61674)       | Terbu-fos, water, fltrd, 0.7u GF ug/L (82675)        | Ter-buthyl-azine, water, fltrd, ug/L (04022)             | Tetra-chloro-ethene, water, fltrd, ug/L (34476)    | Tri-bromo-methane water, fltrd, ug/L (34288)         | Tri-butyl phosph-ate, water, fltrd, ug/L (62089)  | Tri-clopyr, water, fltrd, 0.7u GF ug/L (49235)    | Triclo-san, water, fltrd, ug/L (62090)              | Tri-ethyl citrate water, fltrd, ug/L (62091)            | Tri-flur-alin, water, fltrd, 0.7u GF ug/L (82661)       | Tris(2-butoxy-ethyl) phos-phate, wat flt ug/L (62093) | Tris(2-chloro-ethyl) phos-phate, wat flt ug/L (62087) | Tris(di chloro-i-Pr) phos-phate, wat flt ug/L (62088) |
| JUN 25... | <.07   | <.02   | <.01   | M  | E.3  | <.5   | <.02  | <1  | <.5   | <.009   | <.5   | E.1   | E.1   |
| JUL 30... | <.07   | <.02   | <.01   | M  | E.3  | <.5   | <.03  | <1  | <.5   | <.009   | <.5   | E.1   | E.1   |
| SEP 03... | <.07   | <.02   | <.01   | <.5  | <.5  | <.5   | <.02  | <1  | <.5   | <.009   | <.5   | <.5   | <.5   |
| Date      | 1,1,1,2-Tetra-chloro-ethane, water, unfltrd ug/L (77562) | 1,1,1-Tri-chloro-ethane, water, unfltrd ug/L (34506) | 1,1,2,2-Tetra-chloro-ethane, water, unfltrd ug/L (34516) | CFC-113 water unfltrd ug/L (77652)                 | 1,1,2-Tri-chloro-ethane, water, unfltrd ug/L (34511) | 1,1-Di-chloro-ethane, water, unfltrd ug/L (34496) | 1,1-Di-chloro-ethene, water, unfltrd ug/L (34501) | 1,1-Di-chloro-propene water unfltrd ug/L (77168)    | 1,2,3,4 Tetra-methyl-benzene water unfltrd ug/L (49999) | 1,2,3,5 Tetra-methyl-benzene water unfltrd ug/L (50000) | 1,2,3-Tri-chloro-benzene water unfltrd ug/L (77613)   | 1,2,3-Tri-chloro-propane water unfltrd ug/L (77443)   | 1,2,3-Tri-methyl-benzene water unfltrd ug/L (77221)   |
| JUN 25... | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  | <.03  | <.1   | <.1   | <.3   | <.18  | <.1   |
| JUL 30... | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  | <.03  | <.1   | <.1   | <.3   | <.18  | <.1   |
| SEP 03... | <.03   | <.03   | <.16   | <.04   | <.06   | <.04  | <.02  | <.03  | <.1   | <.1   | <.3   | <.18  | <.1   |
| Date      | 1,2,4-Tri-chloro-benzene water unfltrd ug/L (34551)      | 1,2,4-Tri-methyl-benzene water unfltrd ug/L (77222)  | Dibromo-chloro-propane water unfltrd ug/L (82625)        | 1,2-Di-bromo-ethane, water, unfltrd ug/L (77651)   | 1,2-Di-chloro-benzene water unfltrd ug/L (34536)     | 1,2-Di-chloro-ethane, water, unfltrd ug/L (32103) | 1,2-Di-chloro-propane water unfltrd ug/L (34541)  | 1,3,5-Tri-methyl-benzene water unfltrd ug/L (77226) | 1,3-Di-chloro-benzene water unfltrd ug/L (34566)        | 1,3-Di-chloro-propane water unfltrd ug/L (77173)        | 1,4-Di-chloro-benzene water unfltrd ug/L (34571)      | 2,2-Di-chloro-propane water unfltrd ug/L (77170)      | 2-Chloro-toluene water unfltrd ug/L (77275)           |
| JUN 25... | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  | <.04  | <.03  | <.1   | <.03  | <.05  | <.04  |
| JUL 30... | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  | <.04  | <.03  | <.1   | <.03  | <.05  | <.04  |
| SEP 03... | <.1  | <.06   | <.5  | <.04   | <.05   | <.1   | <.03  | <.04  | <.03  | <.1   | <.03  | <.05  | <.04  |

## 353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | 2-Ethyl-toluene water unfltrd ug/L (77220) | 3-Chloro-propene water unfltrd ug/L (78109)         | 4-Chloro-toluene water unfltrd ug/L (77277)     | 4-Iso-propyl-toluene water unfltrd ug/L (77356)       | Acetone water unfltrd ug/L (81552)                   | Acrylo-nitrile water unfltrd ug/L (34215)          | Benzene water unfltrd ug/L (34030)                | Bromo-benzene water unfltrd ug/L (81555)         | Bromo-chloro-methane water unfltrd ug/L (77297)   | Bromo-di-chloro-methane water unfltrd ug/L (32101)    | Bromo-ethene, water, unfltrd ug/L (50002)       | Bromo-methane water unfltrd ug/L (34413)         | Carbon di-sulfide water unfltrd ug/L (77041)            |
|-----------|--|---|---|---|--|--|---|--|---|---|---|--|---|
| JUN 25... | <.06                                       | <.50  | <.05  | <.08  | <6   | <1   | <.02  | <.03   | <.12  | 20.6  | <.1   | <.3  | <.04  |
| JUL 30... | <.06                                       | <.50  | <.05  | <.08  | <6   | <1   | <.02  | <.03   | <.12  | 18.9  | <.1   | <.3  | <.04  |
| SEP 03... | <.06                                       | <.50  | <.05  | <.08  | <6   | <1   | <.02  | <.03   | <.12  | 15.5  | <.1   | <.3  | <.04  |
| Date      | Chloro-benzene water unfltrd ug/L (34301)  | Chloro-ethane, water, unfltrd ug/L (34311)          | Chloro-methane water unfltrd ug/L (34418)       | cis-1,2-Di-chloro-ethene, water, unfltrd ug/L (77093) | cis-1,3-Di-chloro-propene water unfltrd ug/L (34704) | Di-bromo-chloro-methane water unfltrd ug/L (32105) | Di-bromo-methane water unfltrd ug/L (30217)       | Di-chloro-di-fluoro-methane wat unf ug/L (34668) | Di-chloro-methane water unfltrd ug/L (34423)      | Di-ethyl ether, water, unfltrd ug/L (81576)           | Diiso-propyl ether, water, unfltrd ug/L (81577) | Ethyl methac-rylate, water, unfltrd ug/L (73570) | Ethyl methyl ketone, water, unfltrd ug/L (81595)        |
| JUN 25... | <.03                                       | <.1   | <.2   | <.02  | <.05   | 7.3  | <.05  | <.18   | <.1   | <.1   | <.10  | <.2  | <4.0  |
| JUL 30... | <.03                                       | <.1   | <.2   | <.02  | <.05   | 6.6  | <.05  | <.18   | <.1   | <.1   | <.10  | <.2  | <4.0  |
| SEP 03... | <.03                                       | <.1   | <.2   | <.02  | <.05   | 3.1  | <.05  | <.18   | <.1   | <.1   | <.10  | <.2  | <4.0  |
| Date      | Ethyl-benzene water unfltrd ug/L (34371)   | Hexa-chloro-buta-diene, water, unfltrd ug/L (39702) | Hexa-chloro-ethane, water, unfltrd ug/L (34396) | Iodo-methane water unfltrd ug/L (77424)               | Iso-butyl methyl ketone, water, unfltrd ug/L (78133) | Iso-propyl-benzene water unfltrd ug/L (77223)      | Methyl acrylo-nitrile water unfltrd ug/L (81593)  | Methyl acryl-ate, water, unfltrd ug/L (49991)    | Methyl methac-rylate, water, unfltrd ug/L (81597) | Methyl tert-pentyl ether, water, unfltrd ug/L (50005) | meta-+ para-Xylene, water, unfltrd ug/L (85795) | Naphth-alene, water, unfltrd ug/L (34696)        | Methyl n-butyl ketone, water, unfltrd ug/L (77103)      |
| JUN 25... | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   | <2.0   | <.3   | <.08  | E.05  | <.5  | <.7   |
| JUL 30... | E.02                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   | <2.0   | <.3   | <.08  | E.09  | <.5  | <.7   |
| SEP 03... | <.03                                       | <.1   | <.1   | <.35  | <.4  | <.04   | <.8   | <2.0   | <.3   | <.08  | E.04  | <.5  | <.7   |
| Date      | n-Butyl benzene water unfltrd ug/L (77342) | n-propyl-benzene water unfltrd ug/L (77224)         | o-Xylene, water, unfltrd ug/L (77135)           | sec-Butyl-benzene water unfltrd ug/L (77350)          | Styrene water unfltrd ug/L (77128)                   | t-Butyl ethyl ether, water, unfltrd ug/L (50004)   | Methyl t-butyl ether, water, unfltrd ug/L (78032) | tert-Butyl-benzene water unfltrd ug/L (77353)    | Tetra-chloro-ethene, water, unfltrd ug/L (34475)  | Tetra-chloro-methane water unfltrd ug/L (32102)       | Tetra-hydro-furan, water, unfltrd ug/L (81607)  | Toluene water unfltrd ug/L (34010)               | trans-1,2-Di-chloro-ethene, water, unfltrd ug/L (34546) |
| JUN 25... | <.1  | <.04  | <.04  | <.06  | <.04   | <.05   | <.2   | <.06   | <.06  | .30   | <2  | <.05   | <.03  |
| JUL 30... | <.1  | <.04  | E.05  | <.06  | <.04   | <.05   | <.2   | <.06   | E.03  | .15   | <2  | <.05   | <.03  |
| SEP 03... | <.1  | <.04  | E.03  | <.06  | <.04   | <.05   | <.2   | <.06   | <.06  | <.06  | <2  | <.05   | <.03  |

## 353112078205802 TOWN OF SMITHFIELD FINISHED WATER SUPPLY—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | trans-<br>1,3-Di-<br>chloro-<br>propene<br>water<br>unfltrd<br>ug/L<br>(34699) | trans-<br>1,4-Di-<br>chloro-<br>2-<br>butene,<br>wat unf<br>ug/L<br>(73547) | Tri-<br>bromo-<br>methane<br>water<br>unfltrd<br>ug/L<br>(32104) | Tri-<br>chloro-<br>ethene,<br>water,<br>unfltrd<br>ug/L<br>(39180) | Tri-<br>chloro-<br>fluoro-<br>methane<br>water<br>unfltrd<br>ug/L<br>(34488) | Tri-<br>chloro-<br>methane<br>water<br>unfltrd<br>ug/L<br>(32106) | Vinyl<br>chlor-<br>ide,<br>water,<br>unfltrd<br>ug/L<br>(39175) | Di-<br>chlor-<br>vos,<br>water<br>fltrd,<br>ug/L<br>(38775) |
|--------------|--|---|--|--|--|---|---|---|
| JUN<br>25... | <.09   | <.7   | .41  | <.04   | <.16   | 29.6  | <.1   | <.01  |
| JUL<br>30... | <.09   | <.7   | .42  | <.04   | <.16   | 28.5  | <.1   | <.01  |
| SEP<br>03... | <.09   | <.7   | <.10   | <.04   | <.16   | 26.5  | <.1   | <.01  |

## Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

M-- Presence verified, not quantified

## Medium codes used in this table:

&amp; -- Treated water supply.

## 02087580 SWIFT CREEK NEAR APEX, NC

LOCATION.--Lat 35°43'08", long 78°45'08", Wake County, Hydrologic Unit 03020201, on right bank at downstream side of bridge on Secondary Road 1152, 2.8 mi downstream from Williams Creek, and 6 mi east of Apex.

DRAINAGE AREA.--21.0 mi<sup>2</sup>

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional discharge measurements, water years 1953-69. March 2002 to current year.

REVISED RECORDS.--WDR NC-02-1A.

GAGE.--Water-stage recorder. Datum of gage is 306.22 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. No flow occurred several days in Aug. 2002.

REVISIONS.--Revised figures of discharge for the water year 2002, superseding those published in the report for 2002 are given below.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN    | JUL    | AUG      | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|----------|---------|
| 1     | 1.5   | 6.6   | 4.5   | 5.9   | 12    | 23    | 33    | 35    | 3.4    | 6.1    | 23       | 24      |
| 2     | 1.5   | 4.5   | 4.5   | 5.5   | 10    | 19    | 19    | 92    | 2.4    | 3.4    | 60       | 15      |
| 3     | 1.4   | 3.4   | 2.7   | 5.5   | 107   | 16    | 14    | 155   | 1.8    | 2.5    | 48       | 11      |
| 4     | 1.2   | 3.5   | 4.7   | 6.8   | 37    | 15    | 13    | 41    | 16     | 2.7    | 11       | 12      |
| 5     | 1.2   | 3.1   | 34    | 12    | 19    | 14    | 9.5   | 24    | 13     | 1.5    | 14       | 11      |
| 6     | 1.2   | 6.8   | 14    | 22    | 25    | 17    | 8.4   | 21    | 6.6    | 1.2    | 179      | 98      |
| 7     | 1.2   | 17    | 8.4   | 10    | 115   | 17    | 7.1   | 19    | 14     | 1.3    | 15       | 95      |
| 8     | 3.8   | 17    | 5.4   | 6.8   | 26    | 23    | 7.6   | 18    | 14     | 1.2    | 5.6      | 203     |
| 9     | 10    | 14    | 4.3   | 11    | 16    | 15    | 8.8   | 16    | 12     | 0.75   | 2.0      | 84      |
| 10    | 11    | 7.8   | 78    | 15    | 15    | 25    | 6.7   | 15    | 9.5    | 0.54   | 1.1      | 25      |
| 11    | 13    | 4.2   | 138   | 8.4   | 13    | 13    | 7.4   | 12    | 5.3    | 0.77   | 0.79     | 16      |
| 12    | 6.5   | 4.0   | 22    | 7.9   | 91    | 12    | e12   | 24    | 4.1    | 8.9    | 54       | 13      |
| 13    | 4.2   | 6.7   | 13    | 9.0   | 48    | 11    | e47   | 22    | 3.2    | 20     | 148      | 11      |
| 14    | 5.8   | 4.1   | 177   | 7.9   | 28    | 9.3   | 37    | 11    | 4.4    | 4.9    | 816      | 16      |
| 15    | 25    | 2.0   | 44    | 8.9   | 39    | 79    | 20    | 8.4   | 3.5    | 12     | 260      | 48      |
| 16    | 7.6   | 1.8   | 20    | 6.9   | 67    | 174   | 13    | 5.7   | 4.5    | 2.6    | 114      | 19      |
| 17    | 3.8   | 1.9   | 43    | 5.1   | 38    | 88    | 11    | 4.8   | 2.9    | 1.3    | 26       | 341     |
| 18    | 12    | 2.1   | 28    | 28    | 30    | 51    | 10    | 3.4   | 2.0    | 16     | 14       | 328     |
| 19    | 5.0   | 101   | 16    | 18    | 24    | 58    | 10    | 11    | 1.4    | 6.4    | 15       | 52      |
| 20    | 3.0   | 51    | 13    | 11    | 20    | 26    | 9.0   | 30    | 1.1    | 2.1    | 9.1      | 21      |
| 21    | 2.2   | 13    | 9.3   | 7.4   | 20    | 22    | 9.8   | 15    | 0.96   | 1.2    | 14       | 14      |
| 22    | 2.6   | 7.9   | 9.0   | 7.1   | 16    | 16    | 8.6   | 7.1   | 0.89   | 6.5    | 140      | 8.9     |
| 23    | 2.1   | 6.5   | 9.1   | 7.3   | 14    | 12    | 7.2   | 5.9   | 0.76   | 74     | 21       | 6.3     |
| 24    | 1.3   | 5.4   | 14    | 6.1   | 14    | 12    | 6.9   | 8.6   | 1.7    | 13     | 11       | 5.3     |
| 25    | 1.1   | 7.0   | 12    | 7.4   | 14    | 12    | 5.5   | 4.3   | 11     | 4.3    | 6.9      | 4.2     |
| 26    | 1.1   | 4.0   | 8.5   | 13    | 14    | 12    | 16    | 2.9   | 26     | 2.2    | 4.7      | 3.2     |
| 27    | 1.5   | 3.5   | 7.3   | 10    | 53    | 12    | 34    | 2.5   | 13     | 2.0    | 3.2      | 7.3     |
| 28    | 15    | 6.5   | 7.0   | 16    | 50    | 12    | 17    | 2.1   | 44     | 6.5    | 2.3      | 69      |
| 29    | 151   | 15    | 7.0   | 21    | 36    | 11    | 16    | 1.8   | 30     | 9.1    | 2.6      | 29      |
| 30    | 24    | 6.6   | 8.5   | 25    | ---   | 12    | 16    | 14    | 11     | 25     | 380      | 12      |
| 31    | 10    | ---   | 7.2   | 21    | ---   | 13    | ---   | 7.0   | ---    | 11     | 79       | ---     |
| TOTAL | 331.8 | 337.9 | 773.4 | 352.9 | 1,011 | 851.3 | 440.5 | 639.5 | 264.41 | 250.96 | 2,480.29 | 1,602.2 |
| MEAN  | 10.7  | 11.3  | 24.9  | 11.4  | 34.9  | 27.5  | 14.7  | 20.6  | 8.81   | 8.10   | 80.0     | 53.4    |
| MAX   | 151   | 101   | 177   | 28    | 115   | 174   | 47    | 155   | 44     | 74     | 816      | 341     |
| MIN   | 1.1   | 1.8   | 2.7   | 5.1   | 10    | 9.3   | 5.5   | 1.8   | 0.76   | 0.54   | 0.79     | 3.2     |
| CFSM  | 0.51  | 0.54  | 1.19  | 0.54  | 1.66  | 1.31  | 0.70  | 0.98  | 0.42   | 0.39   | 3.81     | 2.54    |
| IN.   | 0.59  | 0.60  | 1.37  | 0.63  | 1.79  | 1.51  | 0.78  | 1.13  | 0.47   | 0.44   | 4.39     | 2.84    |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 33.7   | 23.7   | 35.1   | 13.0   | 50.9   | 39.5   | 35.2   | 13.9   | 15.6   | 12.8   | 55.7   | 28.9   |
| MAX  | 56.8   | 36.1   | 45.2   | 14.6   | 67.6   | 68.8   | 64.0   | 20.6   | 36.2   | 24.4   | 80.0   | 53.4   |
| (WY) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2004) | (2003) | (2003) | (2004) | (2004) |
| MIN  | 10.7   | 11.3   | 24.9   | 11.4   | 34.9   | 22.4   | 14.7   | 1.73   | 1.70   | 5.97   | 21.7   | 10.4   |
| (WY) | (2004) | (2004) | (2004) | (2004) | (2004) | (2002) | (2004) | (2002) | (2002) | (2002) | (2002) | (2002) |

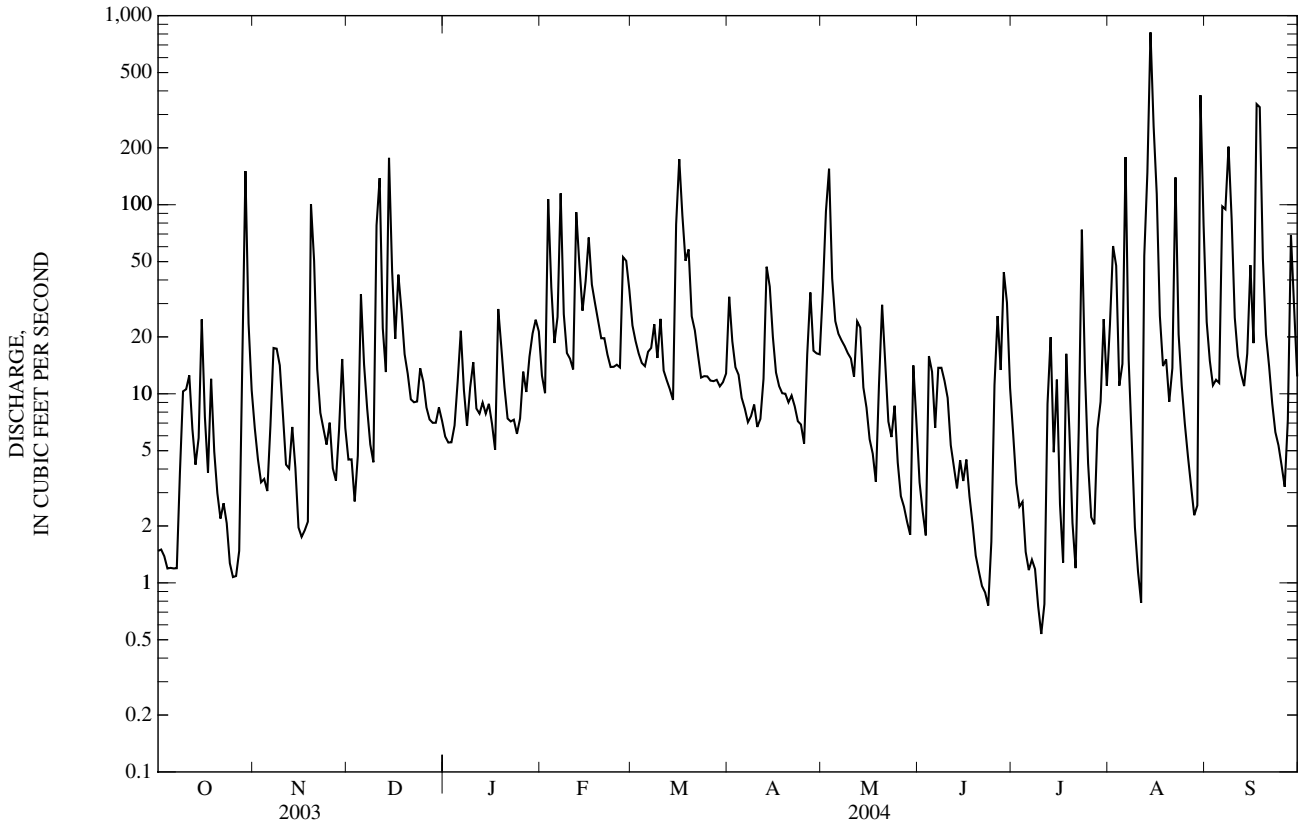


02087580 SWIFT CREEK NEAR APEX, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 2002 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 12,997.67              |        | 9,336.16            |        | 34.4                    |              |
| ANNUAL MEAN              | 35.6                   |        | 25.5                |        | 25.5                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 43.3                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 25.5                    | 2004         |
| HIGHEST DAILY MEAN       | 914                    | Aug 8  | 816                 | Aug 14 | 914                     | Aug 8, 2003  |
| LOWEST DAILY MEAN        | 0.51                   | Aug 30 | 0.54                | Jul 10 | 0.00                    | Aug 3, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 1.0                    | Jul 22 | 1.0                 | Jul 5  | 0.00                    | Aug 3, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 1,590               | Sep 17 | 2,720                   | Oct 11, 2002 |
| MAXIMUM PEAK STAGE       |                        |        | 10.28               | Sep 17 | 11.71                   | Oct 11, 2002 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.41                | Jul 10 | 0.00*                   | Aug 3, 2002  |
| ANNUAL RUNOFF (CFSM)     | 1.70                   |        | 1.21                |        | 1.64                    |              |
| ANNUAL RUNOFF (INCHES)   | 23.02                  |        | 16.54               |        | 22.24                   |              |
| 10 PERCENT EXCEEDS       | 82                     |        | 51                  |        | 79                      |              |
| 50 PERCENT EXCEEDS       | 11                     |        | 11                  |        | 12                      |              |
| 90 PERCENT EXCEEDS       | 1.9                    |        | 2.1                 |        | 2.1                     |              |

\* See REMARKS.

e Estimated.



02087580 SWIFT CREEK NEAR APEX, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 2002 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 2002 to August 2004.

WATER TEMPERATURE: March 2002 to August 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from March 2002 to August 2004.

REMARKS.--Station operated as part of NAWQA program from March 2002 to current year. Station was operated from October 1989 to June 1995 as part of a six county regional surface-water quality assessment.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                        | MAXIMUM RECORDED      | MINIMUM RECORDED           |
|------------------------------------|-----------------------|----------------------------|
| SPECIFIC CONDUCTANCE, microsiemens | 510, January 28, 2004 | 26, August 8, 2003         |
| WATER TEMPERATURE, °C              | 31.9, August 27, 2003 | -0.2, January 25, 26, 2004 |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                        | MAXIMUM RECORDED | MINIMUM RECORDED     |
|------------------------------------|------------------|----------------------|
| SPECIFIC CONDUCTANCE, microsiemens | 510, January 28  | 51, July 13          |
| WATER TEMPERATURE, °C              | 29.8, July 8     | -0.2, January 25, 26 |

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Medium code | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Alkalinity, wat fltr inc tit field, mg/L as CaCO3 (39086) | Bicarbonate, wat fltr incrm. titr., field, mg/L (00453) | Chloride, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00945) |
|-----------|------|-------------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|-----------------------------------|---|---|--------------------------------------|------------------------------------|
| OCT 17... | 1000 | 9           | 3.8                                  | 751                                | 8.1                            | 80  | 7.1   | 77  | 14.1                              | 27  | 32  | 5.04                                 | 2.9                                |
| DEC 30... | 0900 | 9           | 8.1                                  | 754                                | 10.1                           | 85  | 6.9   | 78  | 7.6                               | 23  | 28  | 7.00                                 | 5.4                                |
| FEB 20... | 0830 | 9           | 13                                   | 752                                | 11.9                           | 96  | 6.8   | 145   | 5.6                               | 22  | 27  | 25.0                                 | 7.1                                |
| MAR 18... | 0945 | 9           | 32                                   | 757                                | 11.8                           | 108   | 6.9   | 141   | 11.2                              | 19  | 23  | 23.3                                 | 7.4                                |
| APR 15... | 1400 | 9           | 20                                   | 755                                | 9.7                            | 99  | 7.0   | 135   | 15.9                              | 23  | 29  | 19.6                                 | 5.5                                |
| MAY 12... | 1400 | 9           | 8.6                                  | 760                                | 6.3                            | 75  | 6.1   | 131   | 23.8                              | 30  | 37  | 15.8                                 | 4.3                                |
| JUN 22... | 1000 | 9           | .93                                  | 753                                | 4.7                            | 54  | 6.5   | 114   | 22.0                              | 40  | 49  | 8.60                                 | 2.4                                |
| JUL 20... | 1100 | 9           | 2.1                                  | 754                                | 5.6                            | 68  | 6.8   | 102   | 24.9                              | 24  | 29  | 11.4                                 | 4.0                                |
| AUG 09... | 1100 | D           | 1.9                                  | 752                                | 5.6                            | 65  | 6.4   | 101   | 21.8                              | --  | --  | --                                   | --                                 |
| 19...     | 1400 | 9           | 15                                   | 755                                | 6.6                            | 82  | 6.8   | 82  | 25.8                              | 17  | 20  | 6.43                                 | 5.2                                |
| SEP 23... | 1400 | 9           | 5.4                                  | 758                                | 6.8                            | 76  | 6.7   | 92  | 20.5                              | 24  | 30  | 6.68                                 | 4.5                                |





## 02087580 SWIFT CREEK NEAR APEX, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Naprop-<br>amide,<br>water,<br>fltrd<br>0.7u GF<br>(82684) | p,p'-<br>DDE,<br>water,<br>fltrd,<br>ug/L<br>(34653) | Para-<br>thion,<br>water,<br>fltrd,<br>ug/L<br>(39542) | Peb-<br>ulate,<br>water,<br>fltrd<br>0.7u GF<br>(82669) | Pendi-<br>meth-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>(82683) | Phorate<br>water<br>fltrd<br>0.7u GF<br>(82664) | Prome-<br>ton,<br>water,<br>fltrd,<br>ug/L<br>(04037) | Propy-<br>zamide,<br>water,<br>fltrd<br>0.7u GF<br>(82676) | Propa-<br>chlor,<br>water,<br>fltrd,<br>ug/L<br>(04024) | Pro-<br>panil,<br>water,<br>fltrd<br>0.7u GF<br>(82679) | Propar-<br>gite,<br>water,<br>fltrd<br>0.7u GF<br>(82685) | Sima-<br>zine,<br>water,<br>fltrd,<br>ug/L<br>(04035) | Tebu-<br>thiuron<br>water<br>fltrd<br>0.7u GF<br>(82670) |
|--------------|--|--|--|---|---|---|---|--|---|---|---|---|--|
| OCT<br>17... | <.007  | <.003  | <.010  | <.004   | <.022   | <.011   | .02   | <.004  | <.010   | <.011   | <.02  | .011  | E.01   |
| DEC<br>30... | <.007  | <.003  | <.010  | <.004   | <.022   | <.011   | .01   | <.020  | <.025   | <.011   | <.02  | .008  | E.01   |
| FEB<br>20... | <.007  | <.003  | <.010  | <.004   | E.009   | <.011   | .01   | .118   | <.025   | <.011   | <.02  | .480  | E.01   |
| MAR<br>18... | <.007  | <.003  | <.010  | <.004   | .035  | <.011   | .02   | .075   | <.025   | <.011   | <.02  | .589  | <.02   |
| APR<br>15... | <.007  | <.003  | <.010  | <.004   | E.017   | <.011   | .03   | .042   | <.025   | <.011   | <.02  | .425  | <.02   |
| MAY<br>12... | <.007  | <.003  | <.010  | <.004   | <.022   | <.011   | .04   | .050   | <.025   | <.011   | <.02  | .172  | <.02   |
| JUN<br>22... | <.007  | <.003  | <.010  | <.004   | <.022   | <.011   | .03   | E.012  | <.025   | <.011   | <.02  | .039  | .03  |
| JUL<br>20... | --   | --   | --   | --  | --  | --  | --  | --   | --  | --  | --  | --  | --   |
| AUG<br>09... | --   | --   | --   | --  | --  | --  | --  | --   | --  | --  | --  | --  | --   |
| SEP<br>19... | <.007  | <.003  | <.010  | <.004   | <.022   | <.011   | .06   | <.004  | <.025   | <.011   | <.02  | .059  | <.02   |
| SEP<br>23... | --   | --   | --   | --  | --  | --  | --  | --   | --  | --  | --  | --  | --   |

| Date         | Terba-<br>cil,<br>water,<br>fltrd<br>0.7u GF<br>(82665) | Terbu-<br>fos,<br>water,<br>fltrd<br>0.7u GF<br>(82675) | Thio-<br>bencarb<br>water<br>fltrd<br>0.7u GF<br>(82681) | Tri-<br>allate,<br>water,<br>fltrd<br>0.7u GF<br>(82678) | Tri-<br>flur-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>(82661) | Suspnd.<br>sedi-<br>ment,<br>sieve<br>diametr<br>percent<br><.063mm<br>(70331) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) | Sus-<br>pended<br>sedi-<br>ment<br>dis-<br>charge,<br>tons/d<br>(80155) |
|--------------|---|---|--|--|---|--|--|---|
| OCT<br>17... | <.034   | <.02  | <.005  | <.002  | <.009   | 92   | 4  | .04   |
| DEC<br>30... | <.034   | <.02  | <.010  | <.002  | <.009   | 96   | 7  | .15   |
| FEB<br>20... | <.034   | <.02  | <.010  | <.002  | <.009   | 80   | 24   | .84   |
| MAR<br>18... | <.034   | <.02  | <.010  | <.002  | E.006   | 94   | 21   | 1.8   |
| APR<br>15... | <.034   | <.02  | <.010  | <.002  | E.005   | 81   | 14   | .76   |
| MAY<br>12... | <.034   | <.02  | <.010  | <.002  | <.009   | 94   | 12   | .28   |
| JUN<br>22... | <.034   | <.02  | <.010  | <.002  | <.009   | 89   | 13   | .03   |
| JUL<br>20... | --  | --  | --   | --   | --  | 93   | 9  | .05   |
| AUG<br>09... | --  | --  | --   | --   | --  | --   | --   | --  |
| SEP<br>19... | <.034   | <.02  | <.010  | <.002  | <.009   | 97   | 20   | .81   |
| SEP<br>23... | --  | --  | --   | --   | --  | 83   | 12   | .17   |

Remark codes used in this table:

< -- Less than  
E -- Estimated value

Medium codes used in this table:

9 -- Surface water  
D -- Plant tissue





02087580 SWIFT CREEK NEAR APEX, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 17.3 | 14.7 | 16.0 | 15.9 | 13.4 | 14.8 | 8.9  | 6.7  | 7.9  | 6.6  | 4.1  | 5.4  |
| 2     | 16.9 | 14.9 | 15.8 | 16.0 | 13.9 | 15.1 | 8.2  | 6.2  | 6.9  | 8.1  | 5.4  | 6.7  |
| 3     | 15.5 | 12.9 | 14.3 | 16.4 | 14.0 | 15.3 | 6.2  | 5.1  | 5.6  | 9.4  | 6.3  | 7.8  |
| 4     | 16.6 | 13.6 | 14.8 | 17.8 | 15.4 | 16.6 | 5.7  | 5.1  | 5.3  | 11.8 | 9.3  | 10.5 |
| 5     | 17.4 | 14.4 | 15.8 | 19.5 | 16.7 | 18.0 | 7.3  | 5.7  | 6.8  | 13.9 | 11.2 | 12.5 |
| 6     | 17.0 | 14.5 | 15.7 | 20.3 | 18.5 | 19.3 | 7.9  | 6.2  | 7.1  | 13.3 | 7.9  | 10.7 |
| 7     | 18.1 | 15.7 | 16.7 | 20.4 | 19.4 | 19.8 | 6.3  | 4.7  | 5.5  | 7.9  | 4.6  | 5.9  |
| 8     | 17.7 | 16.8 | 17.2 | 19.4 | 15.4 | 17.4 | 5.2  | 3.5  | 4.5  | 4.7  | 3.0  | 4.0  |
| 9     | 19.3 | 17.6 | 18.5 | 15.4 | 12.2 | 13.6 | 6.1  | 3.4  | 4.7  | 4.6  | 3.0  | 3.8  |
| 10    | 19.1 | 18.4 | 18.7 | 12.6 | 10.9 | 11.8 | 10.0 | 5.5  | 7.1  | 4.0  | 2.3  | 3.6  |
| 11    | 18.7 | 18.3 | 18.5 | 12.7 | 10.2 | 11.6 | 9.2  | 8.0  | 8.6  | 2.3  | 0.5  | 1.5  |
| 12    | 19.7 | 17.9 | 18.8 | 15.5 | 12.4 | 13.8 | 8.0  | 6.6  | 7.3  | 4.2  | 1.2  | 2.6  |
| 13    | 19.8 | 17.8 | 18.9 | 15.5 | 11.2 | 13.9 | 6.9  | 5.8  | 6.4  | 5.5  | 2.5  | 3.9  |
| 14    | 19.2 | 18.7 | 19.0 | 11.2 | 9.0  | 9.8  | 6.9  | 5.7  | 6.4  | 5.1  | 3.1  | 4.1  |
| 15    | 19.0 | 16.9 | 18.1 | 10.7 | 8.9  | 9.8  | 7.1  | 5.7  | 6.3  | 6.0  | 4.1  | 4.8  |
| 16    | 16.9 | 14.6 | 15.9 | 13.0 | 10.5 | 11.7 | 7.4  | 5.2  | 6.3  | 4.6  | 3.0  | 3.9  |
| 17    | 16.3 | 13.7 | 15.2 | 15.4 | 12.9 | 14.1 | 8.6  | 6.7  | 7.8  | 4.9  | 2.3  | 3.5  |
| 18    | 16.9 | 15.6 | 16.2 | 16.5 | 14.8 | 15.7 | 7.0  | 5.7  | 6.4  | 7.0  | 4.9  | 6.0  |
| 19    | 15.6 | 13.4 | 14.7 | 16.9 | 15.5 | 16.2 | 6.5  | 5.3  | 6.1  | 6.7  | 4.4  | 5.8  |
| 20    | 15.8 | 13.5 | 14.7 | 15.5 | 13.1 | 14.4 | 5.3  | 3.8  | 4.8  | 4.4  | 2.5  | 3.3  |
| 21    | 17.1 | 14.4 | 15.7 | 14.2 | 11.7 | 12.9 | 4.2  | 2.5  | 3.4  | 3.5  | 1.2  | 2.4  |
| 22    | 16.8 | 15.0 | 16.1 | 13.6 | 11.1 | 12.4 | 5.0  | 2.7  | 3.8  | 4.4  | 1.3  | 2.9  |
| 23    | 15.0 | 13.0 | 13.8 | 13.3 | 10.7 | 12.2 | 7.4  | 3.6  | 5.3  | 3.7  | 2.1  | 3.0  |
| 24    | 13.2 | 11.3 | 12.3 | 14.3 | 10.9 | 12.6 | 10.0 | 7.4  | 8.7  | 5.5  | 2.4  | 3.8  |
| 25    | 14.3 | 11.8 | 13.0 | 13.4 | 9.6  | 11.0 | 8.3  | 5.2  | 6.7  | 4.7  | -0.2 | 1.9  |
| 26    | 16.0 | 14.1 | 15.0 | 10.7 | 8.4  | 9.5  | 5.4  | 3.7  | 4.6  | 0.6  | -0.2 | 0.3  |
| 27    | 17.6 | 15.5 | 16.5 | 12.2 | 9.5  | 10.8 | 5.3  | 2.9  | 4.1  | 1.9  | 0.6  | 1.2  |
| 28    | 16.9 | 14.4 | 15.4 | 14.6 | 12.0 | 13.2 | 5.5  | 3.1  | 4.3  | 2.4  | 0.4  | 1.3  |
| 29    | 16.6 | 14.7 | 15.6 | 12.0 | 8.3  | 10   | 6.7  | 3.8  | 5.2  | 3.7  | 0.9  | 2.2  |
| 30    | 16.1 | 14.1 | 15.1 | 8.6  | 6.9  | 7.9  | 8.5  | 6.6  | 7.5  | 4.8  | 2.6  | 3.6  |
| 31    | 16.0 | 13.4 | 14.7 | ---  | ---  | ---  | 6.9  | 4.8  | 5.9  | 3.9  | 1.7  | 2.8  |
| MONTH | 19.8 | 11.3 | 16.0 | 20.4 | 6.9  | 13.5 | 10.0 | 2.5  | 6.0  | 13.9 | -0.2 | 4.4  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 3.5  | 1.1  | 2.2  | 10.3 | 6.4  | 8.4  | 14.9 | 12.0 | 13.5 | ---  | ---  | ---  |
| 2     | 4.4  | 1.1  | 2.6  | 11.5 | 9.3  | 10.4 | 14.1 | 12.2 | 13.0 | ---  | ---  | ---  |
| 3     | 5.3  | 3.6  | 4.5  | 15.0 | 10.8 | 12.6 | 15.2 | 10.6 | 12.8 | ---  | ---  | ---  |
| 4     | 5.9  | 3.8  | 4.8  | 17.0 | 12.4 | 14.5 | 16.3 | 11.6 | 13.5 | ---  | ---  | ---  |
| 5     | 5.4  | 3.7  | 4.7  | 17.6 | 14.2 | 15.8 | 15.3 | 10.0 | 12.6 | 20.1 | 16.3 | 18.1 |
| 6     | 8.6  | 5.3  | 6.9  | 16.6 | 15.2 | 16.0 | 15.9 | 9.4  | 12.6 | 22.1 | 17.6 | 19.8 |
| 7     | 8.8  | 6.7  | 7.7  | 16.6 | 13.7 | 15.0 | 17.8 | 11.1 | 14.3 | 23.8 | 19.2 | 21.4 |
| 8     | 7.0  | 5.1  | 6.0  | 13.9 | 11.0 | 12.6 | 19.0 | 13.6 | 16.3 | 24.2 | 21.0 | 22.5 |
| 9     | 5.7  | 4.1  | 5.1  | 12.2 | 9.2  | 10.6 | 20.3 | 14.7 | 17.2 | 24.7 | 21.6 | 23.0 |
| 10    | 7.6  | 5.3  | 6.3  | 12.1 | 9.4  | 10.5 | 18.6 | 14.3 | 16.6 | 24.8 | 21.4 | 23.1 |
| 11    | 8.2  | 6.2  | 7.1  | 12.6 | 7.8  | 10.2 | 18.2 | 16.2 | 17.2 | 24.7 | 21.2 | 22.9 |
| 12    | 7.0  | 5.8  | 6.4  | 13.6 | 8.8  | 11.1 | 16.6 | 13.9 | 14.7 | 24.1 | 21.1 | 22.8 |
| 13    | 8.1  | 5.4  | 6.7  | 13.0 | 8.8  | 10.8 | 16.6 | 14.7 | 15.4 | 25.8 | 23.0 | 24.2 |
| 14    | 7.7  | 6.7  | 7.2  | 13.5 | 8.7  | 11.0 | 15.9 | 13.3 | 14.5 | 25.4 | 21.9 | 23.6 |
| 15    | 7.9  | 5.8  | 7.3  | 14.2 | 11.7 | 12.9 | 17.0 | 12.0 | 14.3 | 25.6 | 21.4 | 23.4 |
| 16    | 6.7  | 4.9  | 5.7  | 14.4 | 13.2 | 13.7 | 18.4 | 12.5 | 15.4 | 25.0 | 21.4 | 23.3 |
| 17    | 5.4  | 4.5  | 4.7  | 13.2 | 11.6 | 12.6 | 20.0 | 14.0 | 16.9 | 25.6 | 21.0 | 23.1 |
| 18    | 6.6  | 3.8  | 5.1  | 11.6 | 10.4 | 11.2 | 21.5 | 16.4 | 18.9 | 25.9 | 21.1 | 23.3 |
| 19    | 7.9  | 4.2  | 6.0  | 14.4 | 11.0 | 12.5 | 22.1 | 17.7 | 19.9 | 25.4 | 21.9 | 23.4 |
| 20    | 9.3  | 5.6  | 7.4  | 14.7 | 10.5 | 12.7 | 22.9 | 18.4 | 20.7 | 26.6 | 23.7 | 25.1 |
| 21    | 11.4 | 8.3  | 9.6  | 15.9 | 11.9 | 13.9 | 22.4 | 19.0 | 20.8 | 28.1 | 24.3 | 26.0 |
| 22    | 10.4 | 7.4  | 8.8  | 13.4 | 9.7  | 11.2 | 22.2 | 18.6 | 20.6 | 28.4 | 24.3 | 26.2 |
| 23    | 9.2  | 6.7  | 8.0  | 12.6 | 7.5  | 10   | 23.2 | 19.1 | 21.2 | 27.9 | 24.2 | 25.7 |
| 24    | 10.2 | 7.8  | 8.9  | 13.5 | 7.8  | 10.6 | 22.8 | 20.0 | 21.5 | 27.4 | 23.6 | 25.3 |
| 25    | 9.8  | 7.1  | 8.4  | 16.4 | 10.1 | 13.0 | 22.6 | 19.6 | 21.1 | 28.4 | 23.8 | 25.8 |
| 26    | 7.7  | 4.5  | 5.7  | 18.4 | 12.2 | 15.2 | 21.6 | 19.6 | 20.7 | 27.5 | 24.2 | 25.8 |
| 27    | 5.0  | 3.1  | 4.0  | 19.3 | 14.2 | 16.7 | 21.3 | 19.3 | 20.3 | 27.4 | 23.7 | 25.4 |
| 28    | 8.0  | 4.4  | 6.1  | 18.4 | 15.4 | 17.1 | 19.7 | 16.4 | 18.2 | 26.6 | 23.5 | 24.9 |
| 29    | 9.0  | 5.2  | 7.0  | 18.1 | 13.2 | 15.5 | 20.4 | 16.4 | 18.3 | 26.2 | 22.0 | 24.1 |
| 30    | ---  | ---  | ---  | 14.7 | 12.6 | 13.4 | 20.8 | 17.6 | 19.3 | 24.0 | 21.8 | 23.3 |
| 31    | ---  | ---  | ---  | 15.3 | 12.4 | 13.6 | ---  | ---  | ---  | 25.2 | 23.0 | 24.0 |
| MONTH | 11.4 | 1.1  | 6.2  | 19.3 | 6.4  | 12.8 | 23.2 | 9.4  | 17.1 | ---  | ---  | ---  |



## NEUSE RIVER BASIN

02087580 SWIFT CREEK NEAR APEX, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 25.9 | 22.0 | 23.8 | 26.4 | 23.3 | 24.7 | 28.6 | 26.3 | 27.3 | --- | --- | ---  |
| 2     | 25.9 | 20.6 | 23.1 | 27.8 | 24.0 | 25.6 | 29.1 | 27.4 | 28.1 | --- | --- | ---  |
| 3     | 26.0 | 21.2 | 23.5 | 27.2 | 24.2 | 25.6 | 29.3 | 27.8 | 28.5 | --- | --- | ---  |
| 4     | 24.1 | 22.3 | 22.8 | 28.3 | 24.6 | 26.2 | 28.9 | 26.3 | 27.6 | --- | --- | ---  |
| 5     | 24.8 | 22.0 | 23.3 | 29.6 | 24.8 | 26.9 | 27.7 | 25.8 | 26.8 | --- | --- | ---  |
| 6     | 23.5 | 21.4 | 22.3 | 29.1 | 24.8 | 26.9 | 27.9 | 25.4 | 27.3 | --- | --- | ---  |
| 7     | 24.4 | 21.3 | 22.7 | 29.6 | 24.9 | 27.1 | 25.4 | 22.9 | 24.2 | --- | --- | ---  |
| 8     | 26.3 | 23.8 | 24.8 | 29.8 | 24.8 | 27.1 | 24.0 | 21.1 | 22.7 | --- | --- | ---  |
| 9     | 25.7 | 23.1 | 24.5 | 29.5 | 25.1 | 27.2 | 24.8 | 21.1 | 22.9 | --- | --- | ---  |
| 10    | 27.7 | 23.4 | 25.4 | 28.5 | 24.9 | 26.7 | 25.3 | 21.5 | 23.3 | --- | --- | ---  |
| 11    | 28.6 | 24.3 | 26.3 | 28.6 | 24.9 | 26.6 | 26.0 | 21.9 | 23.9 | --- | --- | ---  |
| 12    | 26.6 | 23.4 | 24.8 | 28.6 | 24.8 | 26.5 | 25.0 | 22.6 | 23.4 | --- | --- | ---  |
| 13    | 23.5 | 21.4 | 22.7 | 28.8 | 26.3 | 27.4 | 25.9 | 24.1 | 25.1 | --- | --- | ---  |
| 14    | 25.2 | 22.1 | 23.4 | 29.7 | 25.7 | 27.6 | 25.2 | 23.9 | 24.3 | --- | --- | ---  |
| 15    | 25.4 | 22.9 | 24.1 | 28.4 | 25.7 | 27.0 | 23.9 | 21.9 | 23.0 | --- | --- | ---  |
| 16    | 25.8 | 23.3 | 24.4 | 27.2 | 23.3 | 25.3 | 24.1 | 22.6 | 23.2 | --- | --- | ---  |
| 17    | 27.1 | 23.8 | 25.1 | 26.7 | 22.7 | 24.6 | 25.2 | 23.0 | 24.1 | --- | --- | ---  |
| 18    | 29.3 | 24.5 | 26.6 | 25.8 | 23.6 | 24.8 | 25.8 | 23.8 | 24.7 | --- | --- | ---  |
| 19    | 28.5 | 24.9 | 26.6 | 26.6 | 24.2 | 25.4 | 26.6 | 23.7 | 25.0 | --- | --- | ---  |
| 20    | 27.3 | 24.1 | 25.6 | 27.2 | 23.7 | 25.4 | 26.8 | 24.0 | 25.5 | --- | --- | ---  |
| 21    | 24.5 | 21.6 | 23.0 | 27.6 | 23.8 | 25.6 | 26.8 | 24.9 | 25.7 | --- | --- | ---  |
| 22    | 26.1 | 21.8 | 23.8 | 27.1 | 23.7 | 25.4 | 26.8 | 25.1 | 26.1 | --- | --- | ---  |
| 23    | 27.3 | 23.6 | 25.3 | 29.1 | 25.7 | 27.9 | 26.1 | 24.5 | 25.4 | --- | --- | ---  |
| 24    | 25.6 | 23.9 | 24.6 | 28.2 | 26.5 | 27.3 | 25.7 | 23.1 | 24.5 | --- | --- | ---  |
| 25    | 26.8 | 23.3 | 24.8 | 26.5 | 24.7 | 25.1 | 25.1 | 22.6 | 23.9 | --- | --- | ---  |
| 26    | 25.8 | 24.1 | 25.0 | 27.4 | 24.3 | 25.6 | 25.1 | 22.8 | 23.9 | --- | --- | ---  |
| 27    | 25.3 | 24.0 | 24.6 | 28.2 | 24.9 | 26.2 | 26.6 | 23.6 | 24.8 | --- | --- | ---  |
| 28    | 25.0 | 23.1 | 23.9 | 27.3 | 25.1 | 26.0 | 26.7 | 23.4 | 24.8 | --- | --- | ---  |
| 29    | 27.1 | 24.2 | 25.6 | 27.0 | 24.7 | 25.4 | 24.6 | 23.6 | 24.2 | --- | --- | ---  |
| 30    | 25.8 | 23.9 | 24.9 | 27.9 | 25.2 | 26.4 | 26.0 | 23.8 | 25.2 | --- | --- | ---  |
| 31    | ---  | ---  | ---  | 28.1 | 25.3 | 26.6 | 26.2 | 24.6 | 25.5 | --- | --- | ---  |
| MONTH | 29.3 | 20.6 | 24.4 | 29.8 | 22.7 | 26.2 | 29.3 | 21.1 | 25.0 | --- | --- | ---  |

## 0208758850 SWIFT CREEK NEAR MCCULLARS CROSSROADS, NC

LOCATION.--Lat 35°41'37", long 78°41'32", Wake County, Hydrologic Unit 03020201, 0.1 mi downstream of Secondary Road 1375, 0.1 mi downstream of Lake Wheeler, and 2.0 mi north of McCullars Crossroads.

DRAINAGE AREA.--35.8 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is 251.46 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good. Some regulation by Lake Wheeler (station 02087588). Minimum flow for current year also occurred June 25. Maximum gage height for period of record from floodmarks. No flow also occurred part of each day, June 27, 28, 29, 1993.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC     | JAN  | FEB   | MAR   | APR  | MAY    | JUN    | JUL    | AUG     | SEP     |
|-------|-------|-------|---------|------|-------|-------|------|--------|--------|--------|---------|---------|
| 1     | 5.6   | 25    | 9.6     | 15   | 36    | 67    | 38   | 23     | 13     | 18     | 21      | 102     |
| 2     | 4.3   | 18    | 4.3     | 15   | 30    | 49    | 43   | 65     | 6.0    | 13     | 29      | 42      |
| 3     | 2.7   | 15    | 2.5     | 15   | 81    | 41    | 34   | 251    | 1.4    | 9.1    | 59      | 23      |
| 4     | 4.3   | 13    | 5.0     | 16   | 109   | 34    | 29   | 124    | 8.1    | 6.6    | 30      | 18      |
| 5     | 1.9   | 13    | 30      | 19   | 64    | 31    | 23   | 64     | 20     | 5.4    | 19      | 16      |
| 6     | 2.3   | 15    | 33      | 26   | 44    | 32    | 19   | 38     | 14     | 1.8    | 144     | 45      |
| 7     | 2.3   | 28    | 22      | 23   | 166   | 33    | 19   | 28     | 12     | 1.6    | 61      | 149     |
| 8     | 6.2   | 33    | 16      | 18   | 102   | 40    | 19   | 21     | 17     | 0.65   | 23      | 179     |
| 9     | 14    | 29    | 12      | 18   | 58    | 34    | 19   | 19     | 14     | 0.29   | 13      | 254     |
| 10    | 16    | 22    | 29      | 22   | 41    | 38    | 19   | 17     | 13     | 0.26   | 7.9     | 75      |
| 11    | 18    | 17    | 252     | 21   | 34    | 37    | 19   | 14     | 9.2    | 0.33   | 3.0     | 35      |
| 12    | 17    | 17    | 111     | 19   | 70    | 28    | 30   | 12     | 3.9    | 0.42   | 9.8     | 22      |
| 13    | 14    | 16    | 53      | 17   | 118   | 23    | 82   | 20     | 1.6    | 5.2    | 77      | 18      |
| 14    | 14    | 7.0   | 179     | 16   | 72    | 20    | 89   | 16     | 1.7    | 7.2    | 658     | 18      |
| 15    | 22    | 4.9   | 166     | 17   | 65    | 46    | 63   | 13     | 1.8    | 8.3    | 554     | 46      |
| 16    | 18    | 6.0   | 78      | 15   | 102   | 194   | 41   | 8.1    | 2.0    | 3.8    | 396     | 37      |
| 17    | 14    | 7.3   | 64      | 14   | 88    | 191   | 30   | 4.0    | 2.0    | 1.4    | 92      | 68      |
| 18    | 14    | 8.2   | 69      | 26   | 69    | 111   | 25   | 2.6    | 1.8    | 6.4    | 40      | 622     |
| 19    | 13    | 44    | 48      | 38   | 54    | 117   | 23   | 3.1    | 0.86   | 9.2    | 25      | 175     |
| 20    | 11    | 130   | 35      | 30   | 44    | 85    | 21   | 12     | 0.31   | 5.3    | 19      | 56      |
| 21    | 11    | 63    | 25      | 22   | 38    | 62    | 20   | 15     | 0.10   | 2.2    | 16      | 29      |
| 22    | 7.6   | 32    | 21      | 19   | 32    | 43    | 19   | 11     | 0.16   | 1.7    | 115     | 19      |
| 23    | 4.4   | 21    | 20      | 17   | 28    | 32    | 18   | 8.3    | 0.10   | 29     | 63      | 15      |
| 24    | 2.4   | 16    | 27      | 16   | 26    | 28    | 17   | 9.2    | 0.04   | 26     | 28      | 12      |
| 25    | 2.3   | 12    | 26      | 16   | 24    | 26    | 17   | 5.2    | 0.13   | 15     | 17      | 9.9     |
| 26    | 3.6   | 9.4   | 21      | 23   | 24    | 26    | 17   | 3.4    | 8.1    | 10     | 13      | 8.1     |
| 27    | 6.6   | 7.7   | 18      | 24   | 55    | 27    | 36   | 1.5    | 16     | 5.7    | 11      | 7.4     |
| 28    | 8.9   | 14    | 17      | 23   | 92    | 24    | 35   | 1.4    | 28     | 2.8    | 7.7     | 40      |
| 29    | 151   | 16    | 16      | 24   | 91    | 23    | 27   | 0.18   | 64     | 3.8    | 5.0     | 55      |
| 30    | 104   | 11    | 18      | 34   | ---   | 22    | 25   | 16     | 30     | 15     | 325     | 30      |
| 31    | 44    | ---   | 16      | 41   | ---   | 25    | ---  | 21     | ---    | 18     | 449     | ---     |
| TOTAL | 560.4 | 670.5 | 1,443.4 | 659  | 1,857 | 1,589 | 916  | 846.98 | 290.30 | 233.45 | 3,330.4 | 2,225.4 |
| MEAN  | 18.1  | 22.4  | 46.6    | 21.3 | 64.0  | 51.3  | 30.5 | 27.3   | 9.68   | 7.53   | 107     | 74.2    |
| MAX   | 151   | 130   | 252     | 41   | 166   | 194   | 89   | 251    | 64     | 29     | 658     | 622     |
| MIN   | 1.9   | 4.9   | 2.5     | 14   | 24    | 20    | 17   | 0.18   | 0.04   | 0.26   | 3.0     | 7.4     |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 26.4   | 25.9   | 26.8   | 60.2   | 58.2   | 71.3   | 42.5   | 22.8   | 28.7   | 24.1   | 30.0   | 48.3   |
| MAX  | 106    | 69.4   | 74.2   | 183    | 159    | 183    | 110    | 75.7   | 91.5   | 130    | 112    | 323    |
| (WY) | (1996) | (1996) | (2003) | (1998) | (1998) | (1998) | (2003) | (1989) | (2001) | (2001) | (2003) | (1999) |
| MIN  | 4.38   | 0.99   | 7.46   | 12.1   | 14.4   | 15.1   | 10.7   | 4.95   | 0.06   | 1.16   | 0.61   | 0.11   |
| (WY) | (1992) | (2002) | (2002) | (2001) | (1991) | (1988) | (1995) | (2000) | (2002) | (1988) | (1997) | (1990) |

## SUMMARY STATISTICS

## FOR 2003 CALENDAR YEAR

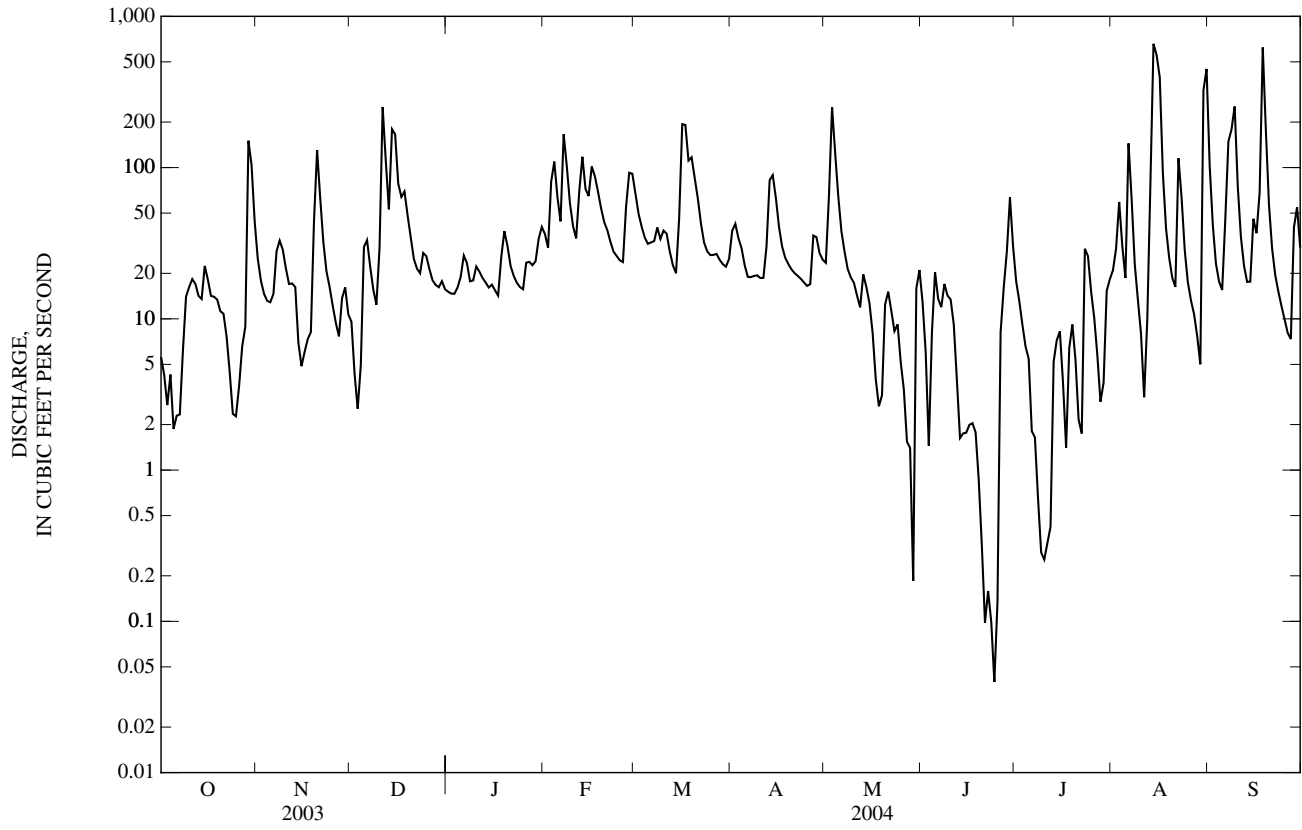
## FOR 2004 WATER YEAR

## WATER YEARS 1988 - 2004

|                          |           |           |        |
|--------------------------|-----------|-----------|--------|
| ANNUAL TOTAL             | 22,449.72 | 14,621.83 |        |
| ANNUAL MEAN              | 61.5      | 40.0      | 39.8   |
| HIGHEST ANNUAL MEAN      |           |           | 70.8   |
| LOWEST ANNUAL MEAN       |           |           | 18.4   |
| HIGHEST DAILY MEAN       | 1,090     | Aug 9     | 2,700  |
| LOWEST DAILY MEAN        | 0.43      | Jul 28    | 0.01   |
| ANNUAL SEVEN-DAY MINIMUM | 2.1       | Jul 22    | 0.02   |
| MAXIMUM PEAK FLOW        |           | 971       | 6,790  |
| MAXIMUM PEAK STAGE       |           | 9.66      | 14.15* |
| INSTANTANEOUS LOW FLOW   |           | 0.03*     | 0.00*  |
| 10 PERCENT EXCEEDS       | 129       | 86        | 81     |
| 50 PERCENT EXCEEDS       | 27        | 19        | 15     |
| 90 PERCENT EXCEEDS       | 8.3       | 2.9       | 0.49   |

\* See REMARKS.

0208758850 SWIFT CREEK NEAR MCCULLARS CROSSROADS, NC—Continued



## 0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC

LOCATION.--Lat 35°43'55", long 78°40'34", Wake County, Hydrologic Unit 03020201, 0.4 mi east of Secondary Road 1371 and approximately 1 mi northeast of Yates Mill Pond.

DRAINAGE AREA.--0.21 mi<sup>2</sup>.

PERIOD OF RECORD.--May 2002 to September 2004 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 320 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow, part of many days, occurs most years.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR  | MAY   | JUN  | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|------|-------|------|------|-------|-------|
| 1     | 0.25  | 0.26  | 0.33  | 0.38  | 0.34  | 0.45  | 0.54 | 0.18  | 0.01 | 0.07 | 0.08  | 0.43  |
| 2     | 0.22  | 0.26  | 0.31  | 0.38  | 0.36  | 0.44  | 0.47 | 0.56  | 0.01 | 0.05 | 0.23  | 0.37  |
| 3     | e0.26 | 0.27  | 0.34  | 0.37  | 0.64  | 0.43  | 0.43 | 0.56  | 0.01 | 0.05 | 0.09  | 0.34  |
| 4     | e0.30 | 0.30  | 0.44  | 0.34  | 0.42  | 0.40  | 0.40 | 0.25  | 0.12 | 0.05 | 0.04  | 0.34  |
| 5     | e0.21 | 0.34  | 0.45  | 0.33  | 0.39  | 0.38  | 0.41 | 0.19  | 0.04 | 0.05 | 0.71  | 0.32  |
| 6     | 0.25  | 0.43  | 0.36  | 0.25  | 0.52  | 0.35  | 0.40 | 0.13  | 0.02 | 0.03 | 0.45  | 0.40  |
| 7     | 0.27  | 0.36  | 0.36  | 0.25  | 1.3   | 0.35  | 0.38 | 0.11  | 0.03 | 0.02 | 0.12  | 0.47  |
| 8     | 0.36  | 0.44  | 0.35  | 0.27  | 0.43  | 0.35  | 0.36 | 0.09  | 0.02 | 0.01 | 0.08  | 1.3   |
| 9     | 0.36  | 0.38  | 0.36  | 0.32  | 0.41  | 0.40  | 0.32 | 0.09  | 0.09 | 0.01 | 0.05  | 0.61  |
| 10    | 0.32  | 0.37  | 1.1   | 0.31  | 0.41  | 0.36  | 0.30 | 0.08  | 0.03 | 0.01 | 0.05  | 0.44  |
| 11    | 0.25  | 0.38  | 0.60  | 0.30  | 0.39  | 0.34  | 0.31 | e0.08 | 0.01 | 0.02 | 0.05  | 0.42  |
| 12    | 0.22  | 0.37  | 0.40  | 0.37  | 0.83  | 0.34  | 0.54 | e0.07 | 0.02 | 0.04 | 0.14  | 0.40  |
| 13    | 0.21  | 0.36  | 0.38  | 0.35  | 0.47  | 0.36  | 0.42 | e0.06 | 0.02 | 0.04 | 0.12  | 0.40  |
| 14    | 0.31  | 0.39  | 1.7   | 0.33  | 0.47  | 0.38  | 0.32 | 0.05  | 0.04 | 0.03 | 0.77  | 0.57  |
| 15    | 0.15  | 0.40  | 0.46  | 0.31  | 0.55  | 0.49  | 0.27 | 0.04  | 0.02 | 0.02 | 3.4   | 0.57  |
| 16    | 0.11  | 0.37  | 0.39  | 0.30  | 0.58  | 0.78  | 0.24 | 0.04  | 0.02 | 0.01 | 0.90  | 0.50  |
| 17    | 0.12  | 0.37  | 0.52  | 0.30  | 0.49  | 0.84  | 0.22 | 0.03  | 0.02 | 0.01 | 0.41  | 1.2   |
| 18    | 0.14  | 0.36  | 0.39  | 0.41  | 0.46  | 0.81  | 0.20 | 0.03  | 0.01 | 0.05 | 0.33  | 1.0   |
| 19    | 0.11  | 0.71  | 0.38  | 0.31  | 0.44  | 0.75  | 0.18 | 0.07  | 0.01 | 0.02 | 0.27  | 0.58  |
| 20    | 0.11  | 0.38  | 0.37  | 0.28  | 0.43  | 0.61  | 0.16 | 0.05  | 0.01 | 0.01 | 0.24  | 0.52  |
| 21    | 0.11  | 0.31  | 0.37  | 0.29  | 0.44  | 0.59  | 0.14 | 0.03  | 0.01 | 0.01 | 0.42  | 0.50  |
| 22    | 0.10  | 0.31  | 0.38  | 0.32  | 0.40  | 0.57  | 0.14 | 0.02  | 0.01 | 0.08 | 0.86  | 0.47  |
| 23    | 0.10  | 0.32  | 0.41  | 0.29  | 0.39  | 0.58  | 0.13 | 0.02  | 0.01 | 0.09 | 0.35  | 0.47  |
| 24    | 0.11  | 0.33  | 0.41  | 0.29  | 0.39  | 0.58  | 0.13 | 0.02  | 0.08 | 0.02 | 0.31  | 0.47  |
| 25    | 0.11  | 0.32  | 0.35  | 0.30  | 0.37  | 0.57  | 0.13 | 0.02  | 0.10 | 0.03 | 0.28  | 0.49  |
| 26    | 0.12  | 0.34  | 0.35  | 0.32  | 0.41  | 0.57  | 0.18 | 0.01  | 0.14 | 0.02 | 0.28  | 0.47  |
| 27    | 0.14  | 0.33  | 0.36  | 0.34  | 0.56  | 0.57  | 0.24 | 0.01  | 0.05 | 0.02 | 0.26  | 0.53  |
| 28    | 0.35  | 0.36  | 0.37  | 0.37  | 0.75  | 0.54  | 0.17 | 0.01  | 0.24 | 0.01 | 0.26  | 0.74  |
| 29    | 0.99  | 0.30  | 0.38  | 0.43  | 0.49  | 0.52  | 0.15 | 0.01  | 0.09 | 0.05 | 0.29  | 0.53  |
| 30    | 0.31  | 0.33  | 0.36  | 0.44  | ---   | 0.55  | 0.14 | 0.12  | 0.06 | 0.04 | 2.9   | 0.54  |
| 31    | 0.28  | ---   | 0.36  | 0.37  | ---   | 0.56  | ---  | 0.03  | ---  | 0.19 | 0.66  | ---   |
| TOTAL | 7.25  | 10.75 | 14.09 | 10.22 | 14.53 | 15.81 | 8.42 | 3.06  | 1.35 | 1.16 | 15.40 | 16.39 |
| MEAN  | 0.23  | 0.36  | 0.45  | 0.33  | 0.50  | 0.51  | 0.28 | 0.10  | 0.04 | 0.04 | 0.50  | 0.55  |
| MAX   | 0.99  | 0.71  | 1.7   | 0.44  | 1.3   | 0.84  | 0.54 | 0.56  | 0.24 | 0.19 | 3.4   | 1.3   |
| MIN   | 0.10  | 0.26  | 0.31  | 0.25  | 0.34  | 0.34  | 0.13 | 0.01  | 0.01 | 0.01 | 0.04  | 0.32  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2002 - 2004, BY WATER YEAR (WY)

|      | 2002   | 2003   | 2004   | 2003   | 2004   | 2003   | 2004   | 2003   | 2004   | 2003   | 2004   |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.28   | 0.39   | 0.52   | 0.28   | 0.49   | 0.42   | 0.31   | 0.12   | 0.17   | 0.14   | 0.37   | 0.30   |
| MAX  | 0.33   | 0.41   | 0.58   | 0.33   | 0.50   | 0.51   | 0.33   | 0.22   | 0.46   | 0.37   | 0.58   | 0.55   |
| (WY) | (2003) | (2003) | (2003) | (2004) | (2004) | (2004) | (2003) | (2003) | (2003) | (2003) | (2003) | (2004) |
| MIN  | 0.23   | 0.36   | 0.45   | 0.23   | 0.47   | 0.33   | 0.28   | 0.03   | 0.02   | 0.02   | 0.04   | 0.04   |
| (WY) | (2004) | (2004) | (2004) | (2003) | (2003) | (2003) | (2004) | (2002) | (2002) | (2002) | (2002) | (2002) |

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

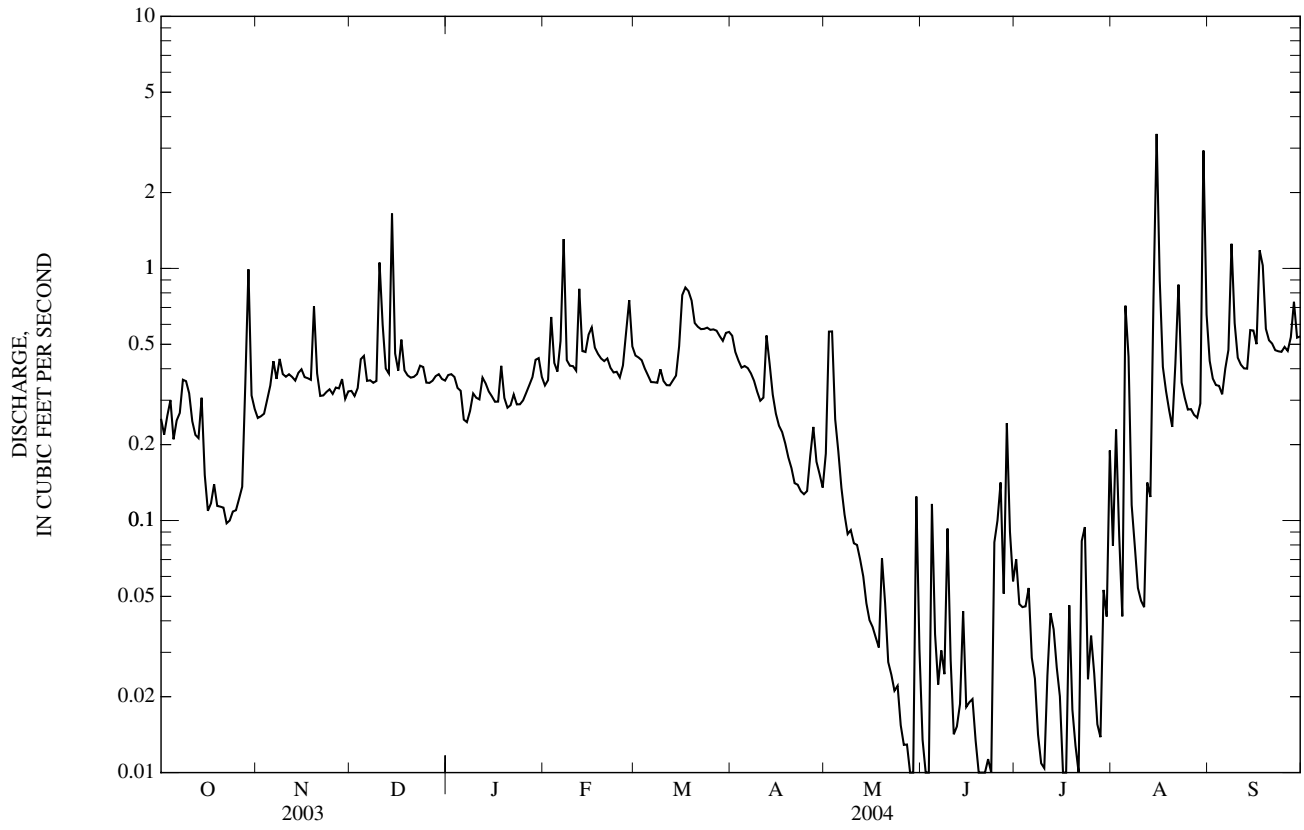
FOR 2004 WATER YEAR

WATER YEARS 2002 - 2004

|                          |        |        |       |
|--------------------------|--------|--------|-------|
| ANNUAL TOTAL             | 132.07 | 118.43 |       |
| ANNUAL MEAN              | 0.36   | 0.32   | 0.35  |
| HIGHEST ANNUAL MEAN      |        |        | 0.38  |
| LOWEST ANNUAL MEAN       |        |        | 0.32  |
| HIGHEST DAILY MEAN       | 4.6    | Aug 8  | 3.4   |
| LOWEST DAILY MEAN        | 0.06   | Jul 31 | 0.01  |
| ANNUAL SEVEN-DAY MINIMUM | 0.08   | Jul 22 | 0.01  |
| MAXIMUM PEAK FLOW        |        |        | 18    |
| MAXIMUM PEAK STAGE       |        |        | 1.80  |
| INSTANTANEOUS LOW FLOW   |        |        | 0.00* |
| 10 PERCENT EXCEEDS       | 0.60   |        | 0.57  |
| 50 PERCENT EXCEEDS       | 0.26   |        | 0.32  |
| 90 PERCENT EXCEEDS       | 0.14   |        | 0.02  |

\* See REMARKS.

e Estimated.



0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--April 2002 to May 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 2002 to May 2004.

pH: April 2002 to May 2004.

WATER TEMPERATURE: April 2002 to May 2004.

DISSOLVED OXYGEN: April 2002 to May 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: April 2002 to May 2004.

INSTRUMENTATION.-- Water-quality monitor with satellite telemetry from April 2002 to May 2004.

REMARKS.--Station operated in cooperation with North Carolina Department of Environment and Natural Resources, Water Resources Division as part of the Piedmont/Mountains ground-water project. Dissolved oxygen, percent saturation, computed using a barometric pressure of 760 mm Hg..

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                             | MAXIMUM RECORDED              | MINIMUM RECORDED                         |
|---|-------------------------------|--|
| SPECIFIC CONDUCTANCE, microsiemens      | 456, July 10, 2002            | 5, August 8, 2003                        |
| pH, standard units                      | 6.8, June 2, 6, July 29, 2003 | 4.8, June 29, 2002                       |
| WATER TEMPERATURE, °C                   | 25.8, August 14, 2003         | 1.8, December 5, 2002                    |
| DISSOLVED OXYGEN, mg/L                  | 19.5, June 20, 2002           | <1.0, on several days during the period  |
| DISSOLVED OXYGEN, PERCENT SATURATION, % | 218, June 20, 2002            | <10.0, on several days during the period |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                             | MAXIMUM RECORDED             | MINIMUM RECORDED                     |
|---|------------------------------|--------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens      | 145, May 15                  | 47, February 7                       |
| pH, standard units                      | 6.6, October 29, February 12 | 5.7, on several days during the year |
| WATER TEMPERATURE, °C                   | 22.0, May 23                 | 2.0, January 25                      |
| DISSOLVED OXYGEN, mg/L                  | 12.4, December 14            | 4.6, November 6                      |
| DISSOLVED OXYGEN, PERCENT SATURATION, % | 98, December 14              | 50, November 6                       |

## 0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 93  | 89  | 91   | 89  | 86  | 88   | 87  | 84  | 85   | 85  | 82  | 84   |
| 2     | 92  | 89  | 91   | 90  | 88  | 89   | 85  | 84  | 84   | 86  | 81  | 83   |
| 3     | 92  | 89  | 90   | 91  | 89  | 90   | 84  | 82  | 83   | 84  | 80  | 83   |
| 4     | --- | --- | ---  | 90  | 90  | 90   | 85  | 77  | 83   | 84  | 81  | 83   |
| 5     | --- | --- | ---  | 92  | 90  | 91   | 84  | 76  | 81   | 84  | 76  | 82   |
| 6     | 97  | 92  | 94   | 94  | 87  | 92   | 85  | 83  | 84   | 85  | 80  | 83   |
| 7     | 93  | 90  | 91   | 94  | 89  | 93   | 85  | 84  | 84   | 85  | 82  | 84   |
| 8     | 92  | 84  | 89   | 94  | 92  | 92   | 84  | 83  | 84   | 84  | 82  | 83   |
| 9     | 98  | 84  | 86   | 93  | 92  | 92   | 85  | 83  | 84   | 84  | 78  | 80   |
| 10    | --- | --- | ---  | 92  | 90  | 91   | 101 | 64  | 82   | 82  | 79  | 81   |
| 11    | 90  | 87  | 89   | 91  | 90  | 90   | 84  | 80  | 82   | 84  | 81  | 82   |
| 12    | 93  | 89  | 90   | 91  | 89  | 90   | 85  | 82  | 84   | 82  | 74  | 79   |
| 13    | 93  | 90  | 92   | 91  | 90  | 90   | 86  | 84  | 85   | 82  | 78  | 81   |
| 14    | 100 | 88  | 91   | 90  | 88  | 89   | 102 | 59  | 74   | 83  | 81  | 82   |
| 15    | 92  | 85  | 89   | 89  | 87  | 88   | 82  | 78  | 80   | 83  | 81  | 82   |
| 16    | 93  | 91  | 92   | 89  | 87  | 88   | 85  | 81  | 83   | 83  | 83  | 83   |
| 17    | 94  | 90  | 92   | 89  | 88  | 89   | 91  | 73  | 84   | 83  | 81  | 81   |
| 18    | 92  | 86  | 89   | 90  | 88  | 89   | 87  | 84  | 86   | 81  | 72  | 78   |
| 19    | 92  | 89  | 90   | 109 | 90  | 93   | 86  | 83  | 85   | 81  | 79  | 81   |
| 20    | 92  | 88  | 90   | 92  | 88  | 89   | 86  | 83  | 85   | 82  | 81  | 81   |
| 21    | 93  | 90  | 91   | 92  | 89  | 90   | 87  | 84  | 85   | 82  | 80  | 81   |
| 22    | 93  | 91  | 92   | 90  | 88  | 89   | 87  | 84  | 86   | 82  | 81  | 81   |
| 23    | 91  | 89  | 90   | 90  | 87  | 89   | 87  | 76  | 85   | 82  | 80  | 81   |
| 24    | 89  | 83  | 85   | 90  | 88  | 89   | 85  | 78  | 83   | 82  | 80  | 81   |
| 25    | 84  | 82  | 83   | 89  | 87  | 88   | 86  | 84  | 85   | 81  | 73  | 78   |
| 26    | 85  | 82  | 83   | 88  | 86  | 87   | 86  | 83  | 85   | 79  | 74  | 78   |
| 27    | 85  | 83  | 84   | 86  | 84  | 86   | 85  | 83  | 84   | 80  | 77  | 79   |
| 28    | 89  | 75  | 83   | 88  | 85  | 86   | 86  | 83  | 84   | 79  | 76  | 78   |
| 29    | 96  | 61  | 78   | 86  | 85  | 86   | 86  | 82  | 84   | 82  | 66  | 75   |
| 30    | 85  | 80  | 82   | 86  | 85  | 85   | 86  | 83  | 85   | 78  | 69  | 75   |
| 31    | 87  | 83  | 86   | --- | --- | ---  | 86  | 83  | 85   | 80  | 75  | 78   |
| MONTH | --- | --- | ---  | 109 | 84  | 89   | 102 | 59  | 84   | 86  | 66  | 81   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 82  | 80  | 81   | 79  | 75  | 77   | 87  | 78  | 83   | 103 | 79  | 92   |
| 2     | 82  | 79  | 81   | 81  | 79  | 79   | 86  | 84  | 85   | 89  | 53  | 82   |
| 3     | 84  | 60  | 78   | 83  | 80  | 82   | 87  | 85  | 86   | 89  | 69  | 83   |
| 4     | 80  | 78  | 79   | 83  | 81  | 82   | 88  | 85  | 87   | 95  | 89  | 91   |
| 5     | 82  | 80  | 80   | 84  | 82  | 83   | 91  | 87  | 88   | 99  | 91  | 94   |
| 6     | 82  | 49  | 80   | 84  | 80  | 82   | 90  | 88  | 89   | 106 | 90  | 96   |
| 7     | 87  | 47  | 74   | 84  | 72  | 82   | 97  | 85  | 89   | 109 | 91  | 97   |
| 8     | 81  | 77  | 80   | 83  | 74  | 81   | 94  | 86  | 89   | 107 | 91  | 98   |
| 9     | 83  | 80  | 82   | 83  | 72  | 81   | 96  | 85  | 89   | 110 | 91  | 98   |
| 10    | 84  | 82  | 83   | 83  | 77  | 81   | 99  | 84  | 88   | 110 | 91  | 99   |
| 11    | 85  | 83  | 84   | 83  | 82  | 82   | 89  | 86  | 87   | --- | --- | ---  |
| 12    | 104 | 53  | 75   | 83  | 82  | 83   | 89  | 68  | 78   | --- | --- | ---  |
| 13    | 81  | 75  | 78   | 85  | 82  | 83   | 85  | 75  | 82   | --- | --- | ---  |
| 14    | 82  | 75  | 80   | 84  | 83  | 84   | 88  | 85  | 86   | 123 | 96  | 106  |
| 15    | 99  | 61  | 80   | 84  | 63  | 78   | 90  | 87  | 88   | 145 | 97  | 110  |
| 16    | 98  | 72  | 77   | 83  | 51  | 74   | 91  | 87  | 89   | 131 | 99  | 110  |
| 17    | 81  | 78  | 80   | 80  | 60  | 75   | 94  | 85  | 89   | 131 | 98  | 110  |
| 18    | 84  | 81  | 82   | 87  | 66  | 77   | 99  | 86  | 90   | 130 | 96  | 111  |
| 19    | 84  | 83  | 84   | 83  | 77  | 80   | 102 | 89  | 93   | 122 | 76  | 103  |
| 20    | 85  | 83  | 84   | 84  | 82  | 83   | 109 | 88  | 95   | 105 | 82  | 94   |
| 21    | 85  | 75  | 82   | 86  | 84  | 84   | 122 | 88  | 96   | 118 | 94  | 102  |
| 22    | 84  | 83  | 83   | 86  | 85  | 85   | 104 | 86  | 93   | 114 | 97  | 103  |
| 23    | 84  | 82  | 83   | 86  | 84  | 85   | 116 | 86  | 98   | 113 | 96  | 103  |
| 24    | 84  | 79  | 81   | 88  | 85  | 86   | 109 | 87  | 97   | --- | --- | ---  |
| 25    | 81  | 80  | 80   | 87  | 85  | 87   | 111 | 87  | 97   | --- | --- | ---  |
| 26    | 80  | 76  | 79   | 87  | 84  | 86   | 124 | 84  | 94   | --- | --- | ---  |
| 27    | 76  | 57  | 70   | 87  | 85  | 86   | 97  | 79  | 88   | --- | --- | ---  |
| 28    | 82  | 54  | 70   | 87  | 84  | 85   | 102 | 91  | 95   | --- | --- | ---  |
| 29    | 76  | 67  | 73   | 87  | 84  | 86   | 109 | 88  | 95   | --- | --- | ---  |
| 30    | --- | --- | ---  | 98  | 85  | 88   | 109 | 88  | 97   | --- | --- | ---  |
| 31    | --- | --- | ---  | 95  | 86  | 89   | --- | --- | ---  | --- | --- | ---  |
| MONTH | 104 | 47  | 79   | 98  | 51  | 82   | 124 | 68  | 90   | --- | --- | ---  |

0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.4 | 6.3 | 6.3  | 6.1 | 6.0 | 6.1  | 5.9 | 5.8 | 5.9  | 5.8 | 5.7 | 5.7  |
| 2     | 6.3 | 6.2 | 6.3  | 6.1 | 6.1 | 6.1  | 5.9 | 5.8 | 5.8  | 5.8 | 5.7 | 5.8  |
| 3     | 6.3 | 6.2 | 6.2  | 6.1 | 6.1 | 6.1  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.9  |
| 4     | --- | --- | ---  | 6.1 | 6.1 | 6.1  | 6.0 | 5.8 | 5.9  | 5.9 | 5.9 | 5.9  |
| 5     | --- | --- | ---  | 6.1 | 6.0 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.9  |
| 6     | 6.2 | 6.0 | 6.1  | 6.2 | 6.0 | 6.1  | 5.9 | 5.8 | 5.9  | 5.9 | 5.8 | 5.9  |
| 7     | 6.1 | 6.0 | 6.1  | 6.1 | 6.0 | 6.1  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 8     | 6.4 | 6.0 | 6.2  | 6.2 | 6.1 | 6.1  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 9     | 6.4 | 6.3 | 6.3  | 6.2 | 6.1 | 6.1  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 10    | --- | --- | ---  | 6.2 | 6.0 | 6.1  | 6.5 | 5.8 | 6.0  | 5.9 | 5.8 | 5.8  |
| 11    | 6.3 | 6.3 | 6.3  | 6.1 | 5.9 | 6.0  | 6.2 | 5.9 | 6.0  | 5.8 | 5.8 | 5.8  |
| 12    | 6.3 | 6.2 | 6.2  | 6.1 | 5.9 | 6.0  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  |
| 13    | 6.2 | 6.1 | 6.2  | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 5.8 | 5.8 | 5.8  |
| 14    | 6.5 | 6.2 | 6.2  | 6.0 | 5.9 | 5.9  | 6.5 | 5.9 | 6.1  | 5.8 | 5.8 | 5.8  |
| 15    | 6.4 | 6.2 | 6.2  | 5.9 | 5.9 | 5.9  | 6.0 | 5.8 | 6.0  | 5.8 | 5.8 | 5.8  |
| 16    | 6.2 | 6.2 | 6.2  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 5.8 | 5.8 | 5.8  |
| 17    | 6.2 | 6.2 | 6.2  | 5.9 | 5.9 | 5.9  | 6.1 | 5.8 | 5.9  | 5.8 | 5.8 | 5.8  |
| 18    | 6.3 | 6.2 | 6.2  | 5.9 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.9  |
| 19    | 6.2 | 6.1 | 6.1  | 6.2 | 5.9 | 6.0  | 6.0 | 5.8 | 5.9  | 5.9 | 5.8 | 5.8  |
| 20    | 6.1 | 6.1 | 6.1  | 6.1 | 5.9 | 6.0  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  |
| 21    | 6.1 | 6.1 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.9  | 5.9 | 5.8 | 5.8  |
| 22    | 6.1 | 6.1 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.9  | 5.9 | 5.8 | 5.8  |
| 23    | 6.2 | 6.1 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 24    | 6.1 | 6.0 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 25    | 6.1 | 6.0 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 26    | 6.2 | 6.1 | 6.1  | 5.9 | 5.9 | 5.9  | 5.9 | 5.7 | 5.8  | 5.9 | 5.8 | 5.8  |
| 27    | 6.2 | 6.1 | 6.2  | 5.9 | 5.9 | 5.9  | 5.9 | 5.7 | 5.8  | 5.9 | 5.8 | 5.9  |
| 28    | 6.4 | 6.1 | 6.2  | 5.9 | 5.9 | 5.9  | 5.9 | 5.7 | 5.8  | 5.9 | 5.8 | 5.9  |
| 29    | 6.6 | 6.1 | 6.3  | 5.9 | 5.8 | 5.9  | 5.9 | 5.7 | 5.8  | 5.9 | 5.8 | 5.9  |
| 30    | 6.1 | 6.1 | 6.1  | 5.9 | 5.8 | 5.8  | 5.8 | 5.7 | 5.8  | 5.9 | 5.8 | 5.9  |
| 31    | 6.1 | 6.1 | 6.1  | --- | --- | ---  | 5.8 | 5.7 | 5.7  | 5.9 | 5.8 | 5.9  |
| MONTH | --- | --- | ---  | 6.2 | 5.8 | 6.0  | 6.5 | 5.7 | 5.9  | 5.9 | 5.7 | 5.8  |
|       | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 5.9 | 5.8 | 5.8  | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  |
| 2     | 5.9 | 5.8 | 5.8  | 6.0 | 5.9 | 6.0  | 6.0 | 5.9 | 5.9  | 6.4 | 5.8 | 6.0  |
| 3     | 6.2 | 5.8 | 6.0  | 6.2 | 5.9 | 6.0  | 6.1 | 5.9 | 5.9  | 6.3 | 6.0 | 6.1  |
| 4     | 6.0 | 5.9 | 5.9  | 6.2 | 5.9 | 6.0  | 6.1 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  |
| 5     | 5.9 | 5.9 | 5.9  | 6.2 | 6.0 | 6.0  | 6.0 | 5.8 | 5.9  | 5.9 | 5.9 | 5.9  |
| 6     | 6.2 | 5.9 | 5.9  | 6.1 | 6.0 | 6.0  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.9  |
| 7     | 6.4 | 5.9 | 6.0  | 6.2 | 5.9 | 6.0  | 6.0 | 5.8 | 5.9  | 5.9 | 5.8 | 5.9  |
| 8     | 6.0 | 5.9 | 5.9  | 6.2 | 5.9 | 6.0  | 6.0 | 5.8 | 5.9  | 5.9 | 5.8 | 5.9  |
| 9     | 6.0 | 5.9 | 5.9  | 6.2 | 5.9 | 6.0  | 6.0 | 5.8 | 5.9  | 6.0 | 5.8 | 5.9  |
| 10    | 6.0 | 5.9 | 5.9  | 6.2 | 5.9 | 6.0  | 5.9 | 5.8 | 5.8  | 6.0 | 5.8 | 5.9  |
| 11    | 6.0 | 5.9 | 6.0  | 6.1 | 5.9 | 5.9  | 5.9 | 5.8 | 5.9  | --- | --- | ---  |
| 12    | 6.6 | 5.9 | 6.1  | 6.1 | 5.9 | 5.9  | 6.0 | 5.8 | 5.9  | --- | --- | ---  |
| 13    | 6.0 | 5.9 | 5.9  | 6.2 | 5.9 | 6.0  | 6.0 | 5.9 | 5.9  | --- | --- | ---  |
| 14    | 6.0 | 5.9 | 5.9  | 6.1 | 5.9 | 6.0  | 5.9 | 5.9 | 5.9  | 6.0 | 5.8 | 5.9  |
| 15    | 6.4 | 5.9 | 6.0  | 6.0 | 5.9 | 6.0  | 5.9 | 5.8 | 5.9  | 5.9 | 5.7 | 5.8  |
| 16    | 6.4 | 5.9 | 6.0  | 6.5 | 6.0 | 6.1  | 5.9 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 17    | 6.0 | 5.9 | 5.9  | 6.3 | 5.9 | 6.0  | 6.0 | 5.8 | 5.8  | 5.9 | 5.8 | 5.9  |
| 18    | 6.0 | 5.9 | 5.9  | 6.4 | 5.9 | 6.0  | 6.0 | 5.8 | 5.8  | 5.9 | 5.8 | 5.8  |
| 19    | 6.0 | 5.9 | 5.9  | 6.3 | 5.9 | 6.0  | 6.0 | 5.8 | 5.9  | 6.0 | 5.8 | 5.9  |
| 20    | 6.0 | 5.9 | 6.0  | 6.1 | 5.9 | 5.9  | 6.0 | 5.8 | 5.9  | 6.0 | 5.9 | 5.9  |
| 21    | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 6.0 | 5.7 | 5.8  | 6.0 | 5.8 | 5.9  |
| 22    | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 6.0 | 5.8 | 5.9  | 6.0 | 5.8 | 5.9  |
| 23    | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | 6.0 | 5.9 | 5.9  |
| 24    | 6.0 | 5.8 | 5.9  | 6.1 | 5.9 | 5.9  | 5.9 | 5.7 | 5.8  | --- | --- | ---  |
| 25    | 6.0 | 5.9 | 6.0  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | --- | --- | ---  |
| 26    | 6.0 | 5.9 | 5.9  | 6.1 | 5.9 | 6.0  | 5.9 | 5.8 | 5.8  | --- | --- | ---  |
| 27    | 6.0 | 6.0 | 6.0  | 6.0 | 5.9 | 5.9  | 6.0 | 5.8 | 5.9  | --- | --- | ---  |
| 28    | 6.5 | 6.0 | 6.1  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | --- | --- | ---  |
| 29    | 6.0 | 5.9 | 5.9  | 6.0 | 5.9 | 5.9  | 5.9 | 5.8 | 5.8  | --- | --- | ---  |
| 30    | --- | --- | ---  | 6.2 | 5.9 | 6.0  | 5.9 | 5.8 | 5.8  | --- | --- | ---  |
| 31    | --- | --- | ---  | 6.2 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 6.6 | 5.8 | 5.9  | 6.5 | 5.9 | 6.0  | 6.1 | 5.7 | 5.9  | --- | --- | ---  |



## 0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 16.9 | 14.7 | 15.8 | 16.2 | 13.5 | 14.8 | 12.4 | 9.7  | 11.0 | 11.0 | 7.7  | 9.2  |
| 2     | 16.2 | 14.8 | 15.5 | 16.5 | 13.9 | 15.2 | 10.9 | 9.0  | 10.0 | 11.6 | 9.1  | 10.2 |
| 3     | 15.3 | 13.3 | 14.4 | 16.7 | 13.9 | 15.3 | 9.6  | 8.5  | 9.1  | 12.8 | 9.3  | 11.1 |
| 4     | ---  | ---  | ---  | 17.3 | 15.4 | 16.4 | 9.2  | 8.2  | 8.9  | 14.3 | 12.3 | 13.2 |
| 5     | ---  | ---  | ---  | 18.9 | 16.3 | 17.5 | 9.7  | 8.2  | 9.2  | 15.7 | 13.5 | 14.5 |
| 6     | 17.1 | 14.9 | 16.0 | 19.3 | 17.5 | 18.3 | 10.6 | 8.9  | 9.7  | 14.0 | 8.7  | 11.2 |
| 7     | 17.9 | 16.0 | 16.9 | 18.5 | 17.5 | 18.0 | 9.8  | 7.8  | 8.8  | 8.7  | 6.7  | 7.6  |
| 8     | 17.3 | 16.9 | 17.1 | 17.5 | 13.9 | 15.7 | 9.8  | 7.2  | 8.5  | 8.3  | 6.2  | 7.3  |
| 9     | 18.5 | 17.2 | 17.7 | 13.9 | 12.0 | 12.7 | 10.7 | 7.5  | 9.1  | 7.9  | 6.3  | 7.2  |
| 10    | 18.2 | 17.0 | 17.5 | 13.5 | 11.2 | 12.3 | 12.2 | 9.3  | 10.6 | 6.8  | 5.0  | 6.1  |
| 11    | 17.5 | 17.1 | 17.3 | 14.5 | 11.6 | 13.1 | 11.6 | 9.7  | 10.9 | 6.4  | 4.2  | 5.3  |
| 12    | 18.5 | 17.0 | 17.6 | 16.8 | 14.0 | 15.3 | 10.4 | 8.4  | 9.4  | 8.7  | 5.4  | 7.0  |
| 13    | 18.5 | 16.6 | 17.6 | 16.1 | 11.8 | 14.5 | 9.4  | 8.2  | 8.7  | 9.9  | 6.6  | 8.2  |
| 14    | 18.6 | 17.3 | 17.7 | 12.2 | 10.5 | 11.4 | 8.4  | 5.2  | 6.7  | 9.2  | 7.0  | 8.1  |
| 15    | 18.0 | 15.1 | 16.4 | 13.1 | 11.3 | 12.3 | 9.8  | 7.4  | 8.4  | 9.8  | 7.7  | 8.6  |
| 16    | 16.1 | 13.6 | 14.9 | 15.0 | 12.7 | 13.8 | 10.5 | 7.4  | 9.0  | 8.6  | 6.5  | 7.4  |
| 17    | 16.6 | 13.7 | 15.1 | 16.3 | 14.6 | 15.4 | 11.3 | 8.5  | 10.2 | 8.7  | 5.8  | 7.4  |
| 18    | 15.9 | 14.4 | 15.4 | 16.7 | 15.3 | 16.0 | 9.8  | 7.9  | 8.8  | 10.3 | 7.2  | 8.9  |
| 19    | 15.8 | 13.1 | 14.4 | 17.2 | 15.0 | 16.3 | 9.3  | 8.1  | 8.8  | 9.4  | 6.6  | 8.2  |
| 20    | 16.2 | 13.7 | 14.9 | 15.0 | 12.6 | 13.9 | 8.8  | 7.0  | 8.0  | 7.4  | 5.2  | 6.2  |
| 21    | 17.3 | 15.0 | 16.0 | 14.9 | 11.7 | 13.2 | 8.3  | 6.0  | 7.2  | 7.6  | 4.9  | 6.2  |
| 22    | 16.8 | 14.5 | 15.9 | 15.1 | 12.1 | 13.5 | 9.5  | 6.8  | 8.1  | 8.8  | 5.2  | 6.9  |
| 23    | 14.6 | 13.0 | 13.9 | 15.0 | 11.9 | 13.4 | 11.4 | 7.4  | 9.5  | 8.0  | 5.8  | 6.8  |
| 24    | 14.0 | 12.3 | 13.2 | 15.6 | 12.3 | 14.0 | 13.2 | 10.3 | 11.9 | 9.7  | 6.2  | 7.8  |
| 25    | 15.4 | 13.3 | 14.3 | 13.9 | 10.9 | 11.9 | 10.3 | 7.8  | 9.1  | 7.5  | 2.0  | 4.7  |
| 26    | 16.6 | 15.3 | 15.9 | 13.1 | 10.5 | 11.7 | 9.3  | 6.8  | 8.0  | 5.1  | 2.6  | 4.3  |
| 27    | 17.7 | 16.1 | 16.9 | 14.4 | 11.5 | 13.0 | 9.8  | 6.6  | 8.1  | 6.8  | 5.1  | 5.8  |
| 28    | 16.6 | 13.9 | 15.0 | 16.2 | 12.6 | 14.8 | 9.9  | 7.0  | 8.4  | 7.3  | 4.8  | 5.7  |
| 29    | 15.5 | 12.9 | 14.2 | 12.6 | 10.1 | 11.0 | 11.1 | 7.7  | 9.4  | 7.1  | 5.0  | 5.7  |
| 30    | 15.5 | 12.8 | 14.1 | 11.8 | 9.2  | 10.4 | 12.4 | 9.2  | 11.1 | 8.4  | 5.7  | 6.8  |
| 31    | 15.8 | 13.1 | 14.4 | ---  | ---  | ---  | 10.5 | 7.8  | 9.1  | 6.9  | 4.4  | 5.7  |
| MONTH | ---  | ---  | ---  | 19.3 | 9.2  | 14.2 | 13.2 | 5.2  | 9.2  | 15.7 | 2.0  | 7.7  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 7.2  | 4.5  | 5.6  | 12.7 | 7.4  | 10.1 | 14.5 | 11.3 | 12.7 | 17.5 | 15.8 | 16.5 |
| 2     | 8.1  | 4.8  | 6.4  | 13.2 | 10.6 | 11.9 | 13.9 | 11.1 | 12.2 | 19.8 | 16.6 | 17.6 |
| 3     | 8.2  | 5.0  | 7.0  | 15.7 | 11.8 | 13.4 | 14.8 | 10.0 | 12.3 | 18.4 | 13.8 | 15.8 |
| 4     | 8.9  | 5.7  | 7.2  | 16.9 | 12.2 | 14.2 | 15.1 | 11.1 | 12.6 | 15.5 | 12.6 | 14.1 |
| 5     | 8.2  | 6.0  | 7.2  | 17.3 | 13.6 | 15.3 | 13.9 | 9.2  | 11.3 | 16.6 | 12.7 | 14.6 |
| 6     | 12.2 | 8.0  | 10.0 | 16.0 | 13.9 | 15.3 | 14.5 | 8.6  | 11.5 | 18.0 | 14.0 | 16.0 |
| 7     | 10.8 | 7.7  | 9.7  | 15.6 | 11.9 | 13.8 | 16.3 | 10.1 | 13.1 | 19.0 | 15.3 | 17.1 |
| 8     | 8.9  | 6.3  | 7.4  | 13.4 | 10.0 | 11.5 | 16.9 | 12.2 | 14.4 | 19.5 | 16.3 | 17.7 |
| 9     | 8.0  | 5.6  | 7.0  | 12.7 | 8.8  | 10.4 | 17.1 | 12.9 | 14.8 | 19.9 | 16.7 | 18.1 |
| 10    | 10.0 | 7.6  | 8.8  | 12.3 | 9.0  | 10.2 | 16.4 | 12.2 | 14.2 | 19.9 | 16.5 | 18.1 |
| 11    | 10.2 | 8.2  | 9.1  | 13.2 | 7.8  | 10.3 | 16.2 | 13.8 | 14.8 | ---  | ---  | ---  |
| 12    | 8.8  | 5.2  | 7.1  | 14.2 | 9.0  | 11.3 | 13.8 | 11.7 | 12.5 | ---  | ---  | ---  |
| 13    | 10.2 | 6.3  | 8.1  | 13.2 | 8.8  | 10.7 | 16.0 | 12.6 | 13.9 | ---  | ---  | ---  |
| 14    | 9.6  | 7.9  | 8.7  | 13.9 | 9.0  | 11.2 | 13.8 | 11.7 | 12.5 | 20.0 | 16.9 | 18.3 |
| 15    | 9.4  | 4.7  | 8.2  | 14.1 | 11.6 | 12.8 | 15.2 | 10.7 | 12.9 | 20.3 | 17.1 | 18.4 |
| 16    | 7.8  | 4.4  | 5.9  | 15.0 | 11.4 | 13.2 | 16.1 | 10.6 | 13.4 | 20.5 | 17.0 | 18.5 |
| 17    | 6.0  | 5.2  | 5.6  | 11.8 | 9.9  | 11.0 | 17.6 | 12.0 | 14.7 | 20.0 | 17.0 | 18.4 |
| 18    | 8.9  | 5.3  | 6.9  | 11.4 | 9.2  | 10.4 | 18.4 | 13.7 | 16.0 | 20.1 | 17.0 | 18.5 |
| 19    | 10.6 | 6.0  | 8.1  | 14.5 | 10.1 | 11.8 | 18.8 | 14.6 | 16.6 | 20.8 | 17.7 | 19.1 |
| 20    | 11.6 | 7.1  | 9.3  | 14.7 | 9.3  | 11.9 | 18.9 | 15.2 | 17.0 | 20.7 | 17.8 | 19.0 |
| 21    | 13.0 | 9.6  | 11.1 | 15.3 | 10.1 | 13.1 | 18.9 | 15.3 | 17.0 | 21.2 | 18.1 | 19.4 |
| 22    | 11.6 | 8.0  | 9.6  | 12.5 | 8.6  | 10.2 | 18.7 | 15.2 | 17.0 | 21.8 | 18.4 | 19.8 |
| 23    | 10.7 | 7.7  | 9.2  | 12.6 | 7.3  | 9.7  | 19.6 | 16.0 | 17.6 | 22.0 | 18.7 | 19.9 |
| 24    | 11.7 | 9.2  | 10.3 | 13.7 | 7.8  | 10.6 | 19.2 | 16.3 | 17.7 | ---  | ---  | ---  |
| 25    | 10.8 | 7.9  | 9.2  | 15.9 | 9.9  | 12.6 | 18.8 | 16.0 | 17.4 | ---  | ---  | ---  |
| 26    | 8.3  | 5.4  | 6.9  | 17.1 | 11.1 | 13.9 | 18.8 | 16.2 | 17.3 | ---  | ---  | ---  |
| 27    | 5.6  | 4.0  | 4.7  | 17.8 | 12.5 | 14.9 | 17.2 | 14.3 | 15.9 | ---  | ---  | ---  |
| 28    | 9.3  | 5.4  | 6.9  | 16.4 | 12.8 | 14.8 | 15.6 | 12.2 | 14.1 | ---  | ---  | ---  |
| 29    | 11.2 | 5.6  | 8.2  | 16.1 | 11.3 | 13.3 | 16.6 | 12.6 | 14.7 | ---  | ---  | ---  |
| 30    | ---  | ---  | ---  | 13.2 | 11.0 | 11.9 | 17.3 | 13.9 | 15.7 | ---  | ---  | ---  |
| 31    | ---  | ---  | ---  | 14.9 | 11.7 | 12.9 | ---  | ---  | ---  | ---  | ---  | ---  |
| MONTH | 13.0 | 4.0  | 7.9  | 17.8 | 7.3  | 12.2 | 19.6 | 8.6  | 14.6 | ---  | ---  | ---  |

## 0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN |
|-------|------|-----|------|------|-----|------|------|-----|------|------|-----|------|
|       |      |     |      |      |     |      |      |     |      |      |     |      |
| 1     | 7.4  | 6.7 | 7.1  | 6.7  | 5.8 | 6.3  | 7.8  | 6.8 | 7.3  | 9.9  | 8.7 | 9.4  |
| 2     | 7.4  | 6.8 | 7.2  | 6.6  | 5.9 | 6.3  | 8.1  | 7.3 | 7.7  | 9.5  | 8.3 | 8.9  |
| 3     | 7.8  | 7.1 | 7.5  | 6.5  | 5.6 | 6.1  | 8.5  | 8.0 | 8.2  | 9.1  | 7.8 | 8.5  |
| 4     | ---  | --- | ---  | 6.0  | 5.5 | 5.8  | 9.2  | 8.0 | 8.3  | 8.3  | 7.4 | 7.9  |
| 5     | ---  | --- | ---  | 5.7  | 4.9 | 5.3  | 9.1  | 7.9 | 8.3  | 7.9  | 7.2 | 7.5  |
| 6     | 7.4  | 6.6 | 7.0  | 5.2  | 4.6 | 5.0  | 8.1  | 7.7 | 7.9  | 8.8  | 7.5 | 8.2  |
| 7     | 7.1  | 6.4 | 6.8  | 5.1  | 4.8 | 4.9  | 8.7  | 8.0 | 8.3  | 9.6  | 8.6 | 9.1  |
| 8     | 7.0  | 6.5 | 6.8  | 6.1  | 5.0 | 5.7  | 9.0  | 8.1 | 8.6  | 9.6  | 8.7 | 9.2  |
| 9     | 6.9  | 6.4 | 6.7  | 6.9  | 6.1 | 6.6  | 9.0  | 7.8 | 8.4  | 9.9  | 8.7 | 9.2  |
| 10    | 7.0  | 5.6 | 6.1  | 7.2  | 6.3 | 6.7  | 8.6  | 7.7 | 8.1  | 10.0 | 9.0 | 9.5  |
| 11    | 6.1  | 5.8 | 5.9  | 6.9  | 6.0 | 6.5  | 8.4  | 7.9 | 8.1  | 10.1 | 9.3 | 9.7  |
| 12    | 5.9  | 5.6 | 5.8  | 6.1  | 5.2 | 5.7  | 9.0  | 8.3 | 8.7  | 9.7  | 8.8 | 9.3  |
| 13    | 6.0  | 5.5 | 5.8  | 6.5  | 5.3 | 5.8  | 9.6  | 8.9 | 9.3  | 9.4  | 8.2 | 8.8  |
| 14    | 5.9  | 5.6 | 5.8  | 7.3  | 6.5 | 7.0  | 12.4 | 9.4 | 10.8 | 9.4  | 8.3 | 8.8  |
| 15    | 6.0  | 5.6 | 5.8  | 7.0  | 6.5 | 6.8  | 9.9  | 8.9 | 9.5  | 9.2  | 8.2 | 8.6  |
| 16    | 6.3  | 5.8 | 6.0  | 7.0  | 6.1 | 6.5  | 9.8  | 8.4 | 9.2  | 9.5  | 8.4 | 8.8  |
| 17    | 6.4  | 5.8 | 6.1  | 6.5  | 5.9 | 6.2  | 9.1  | 8.0 | 8.6  | 9.5  | 8.2 | 8.8  |
| 18    | 6.4  | 6.0 | 6.2  | 6.5  | 5.8 | 6.1  | 9.4  | 8.6 | 9.0  | 9.1  | 7.7 | 8.3  |
| 19    | 6.7  | 6.2 | 6.4  | 6.4  | 5.7 | 6.0  | 9.6  | 8.9 | 9.2  | 9.2  | 7.9 | 8.5  |
| 20    | 6.7  | 6.1 | 6.4  | 7.0  | 6.3 | 6.7  | 10.2 | 9.6 | 9.8  | 9.7  | 8.6 | 9.1  |
| 21    | 6.5  | 5.9 | 6.2  | 7.3  | 6.4 | 6.9  | 10.8 | 9.7 | 10.2 | 9.7  | 8.5 | 9.1  |
| 22    | 6.5  | 6.0 | 6.3  | 7.1  | 6.3 | 6.7  | 10.3 | 9.2 | 9.8  | 9.5  | 8.2 | 8.8  |
| 23    | 7.0  | 6.4 | 6.8  | 7.2  | 6.2 | 6.7  | 9.9  | 8.3 | 9.2  | 9.6  | 8.3 | 8.9  |
| 24    | 7.3  | 6.6 | 7.0  | 6.9  | 5.9 | 6.5  | 8.7  | 8.1 | 8.3  | 9.4  | 8.2 | 8.8  |
| 25    | 6.9  | 6.2 | 6.6  | 7.5  | 6.3 | 7.1  | 9.7  | 8.7 | 9.2  | 10.6 | 8.5 | 9.7  |
| 26    | 6.3  | 5.9 | 6.1  | 7.7  | 7.0 | 7.4  | 10.2 | 9.2 | 9.7  | 10.3 | 9.3 | 9.9  |
| 27    | 6.0  | 5.5 | 5.8  | 7.4  | 6.5 | 6.9  | 10.3 | 9.0 | 9.7  | 10.0 | 9.0 | 9.4  |
| 28    | 7.5  | 5.6 | 6.3  | 6.6  | 5.7 | 6.2  | 10.1 | 9.0 | 9.6  | 10.0 | 9.1 | 9.5  |
| 29    | 8.2  | 6.2 | 7.0  | 7.7  | 6.6 | 7.3  | 9.8  | 8.5 | 9.2  | 10.5 | 9.2 | 9.7  |
| 30    | 7.0  | 6.0 | 6.5  | 7.9  | 7.0 | 7.5  | 9.2  | 8.2 | 8.5  | 10.0 | 9.2 | 9.5  |
| 31    | 6.8  | 6.0 | 6.4  | ---  | --- | ---  | 9.9  | 8.8 | 9.3  | 10.6 | 9.4 | 9.8  |
| MONTH | ---  | --- | ---  | 7.9  | 4.6 | 6.4  | 12.4 | 6.8 | 8.9  | 10.6 | 7.2 | 9.0  |
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN |
|       |      |     |      |      |     |      |      |     |      |      |     |      |
| 1     | 10.6 | 9.5 | 9.9  | 8.9  | 7.2 | 8.2  | 9.0  | 7.9 | 8.4  | 7.3  | 6.7 | 7.0  |
| 2     | 10.5 | 9.1 | 9.7  | 8.0  | 6.9 | 7.4  | 9.3  | 8.1 | 8.5  | 7.2  | 6.8 | 7.0  |
| 3     | 10.7 | 9.0 | 9.5  | 8.0  | 6.5 | 7.2  | 9.5  | 7.9 | 8.7  | 7.5  | 6.9 | 7.3  |
| 4     | 10.1 | 9.0 | 9.5  | 7.8  | 6.2 | 6.9  | 9.2  | 8.1 | 8.5  | 7.8  | 7.0 | 7.4  |
| 5     | 10.2 | 9.0 | 9.6  | 7.6  | 6.0 | 6.7  | 9.8  | 8.0 | 9.0  | 7.7  | 6.8 | 7.3  |
| 6     | 9.4  | 8.0 | 8.8  | 7.1  | 6.0 | 6.4  | 9.5  | 7.7 | 8.7  | 7.4  | 6.3 | 7.0  |
| 7     | 9.3  | 8.2 | 8.9  | 7.9  | 6.4 | 7.0  | 9.3  | 7.3 | 8.3  | 7.3  | 6.3 | 6.8  |
| 8     | 9.7  | 9.1 | 9.4  | 8.4  | 7.2 | 7.7  | 8.8  | 7.0 | 7.9  | 7.0  | 6.2 | 6.6  |
| 9     | 10.0 | 9.0 | 9.5  | 8.9  | 7.6 | 8.2  | 8.8  | 6.8 | 7.7  | 7.2  | 6.1 | 6.6  |
| 10    | 9.5  | 8.6 | 9.0  | 9.0  | 7.9 | 8.3  | 8.8  | 6.9 | 7.7  | 7.2  | 6.1 | 6.6  |
| 11    | 9.4  | 8.5 | 8.9  | 9.3  | 7.3 | 8.3  | 8.5  | 7.0 | 7.5  | ---  | --- | ---  |
| 12    | 10.9 | 8.8 | 9.7  | 8.9  | 7.2 | 8.0  | 8.4  | 7.2 | 8.0  | ---  | --- | ---  |
| 13    | 9.7  | 8.7 | 9.3  | 9.4  | 7.6 | 8.3  | 7.9  | 7.1 | 7.5  | ---  | --- | ---  |
| 14    | 9.3  | 8.8 | 9.0  | 9.4  | 7.2 | 8.3  | 8.2  | 7.2 | 7.7  | 7.3  | 6.2 | 6.7  |
| 15    | 10.6 | 8.8 | 9.3  | 8.3  | 7.1 | 7.6  | 8.4  | 7.2 | 7.8  | 6.9  | 5.7 | 6.5  |
| 16    | 10.8 | 9.6 | 10.1 | 8.5  | 6.9 | 7.6  | 8.4  | 7.0 | 7.7  | 7.1  | 5.8 | 6.4  |
| 17    | 10.4 | 9.7 | 10.0 | 8.6  | 8.0 | 8.2  | 8.2  | 6.7 | 7.5  | 7.2  | 5.8 | 6.4  |
| 18    | 10.3 | 9.2 | 9.7  | 8.9  | 8.2 | 8.5  | 8.1  | 6.2 | 7.1  | 7.0  | 5.7 | 6.5  |
| 19    | 9.9  | 8.6 | 9.3  | 8.7  | 7.6 | 8.2  | 7.9  | 6.1 | 6.8  | 7.3  | 6.0 | 6.6  |
| 20    | 9.6  | 8.3 | 9.0  | 9.1  | 7.3 | 8.2  | 7.9  | 5.8 | 6.7  | 7.0  | 6.3 | 6.6  |
| 21    | 8.8  | 8.2 | 8.4  | 8.4  | 7.3 | 7.8  | 7.3  | 5.5 | 6.5  | 6.8  | 6.0 | 6.5  |
| 22    | 9.6  | 8.4 | 8.9  | 9.6  | 8.3 | 8.8  | 7.4  | 6.0 | 6.5  | 6.8  | 5.9 | 6.4  |
| 23    | 9.7  | 8.5 | 9.0  | 10.1 | 8.4 | 9.2  | 7.1  | 5.5 | 6.2  | 6.6  | 6.0 | 6.3  |
| 24    | 8.7  | 7.2 | 8.2  | 10.0 | 8.0 | 9.0  | 7.4  | 5.9 | 6.3  | ---  | --- | ---  |
| 25    | 9.1  | 7.4 | 8.2  | 9.3  | 7.4 | 8.4  | 7.4  | 5.8 | 6.5  | ---  | --- | ---  |
| 26    | 10.0 | 8.1 | 9.0  | 8.8  | 7.2 | 8.0  | 7.0  | 5.7 | 6.3  | ---  | --- | ---  |
| 27    | 11.4 | 9.4 | 10.5 | 8.5  | 6.9 | 7.7  | 7.0  | 6.3 | 6.6  | ---  | --- | ---  |
| 28    | 10.0 | 9.1 | 9.5  | 8.6  | 7.1 | 7.7  | 7.7  | 6.7 | 7.1  | ---  | --- | ---  |
| 29    | 9.9  | 7.9 | 8.9  | 9.1  | 7.4 | 8.2  | 7.7  | 6.4 | 7.1  | ---  | --- | ---  |
| 30    | ---  | --- | ---  | 9.4  | 7.8 | 8.5  | 7.6  | 6.6 | 7.1  | ---  | --- | ---  |
| 31    | ---  | --- | ---  | 8.8  | 7.5 | 8.2  | ---  | --- | ---  | ---  | --- | ---  |
| MONTH | 11.4 | 7.2 | 9.3  | 10.1 | 6.0 | 8.0  | 9.8  | 5.5 | 7.5  | ---  | --- | ---  |

## 0208762750 UNNAMED TRIB TO SWIFT CREEK NEAR YATES MILL POND, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 75  | 69  | 72   | 66  | 59  | 62   | 70  | 63  | 67   | 87  | 78  | 81   |
| 2     | 75  | 69  | 72   | 66  | 60  | 62   | 72  | 65  | 68   | 87  | 75  | 80   |
| 3     | 77  | 70  | 73   | 65  | 57  | 62   | 75  | 69  | 71   | 84  | 73  | 77   |
| 4     | --- | --- | ---  | 61  | 57  | 59   | 78  | 69  | 72   | 81  | 71  | 75   |
| 5     | --- | --- | ---  | 58  | 52  | 56   | 78  | 69  | 72   | 80  | 70  | 74   |
| 6     | 75  | 68  | 71   | 56  | 50  | 53   | 73  | 68  | 70   | 81  | 71  | 75   |
| 7     | 74  | 67  | 71   | 54  | 51  | 52   | 75  | 69  | 72   | 81  | 73  | 76   |
| 8     | 73  | 68  | 71   | 60  | 52  | 57   | 77  | 70  | 73   | 81  | 73  | 76   |
| 9     | 72  | 68  | 70   | 65  | 59  | 62   | 77  | 69  | 73   | 81  | 73  | 76   |
| 10    | 74  | 58  | 64   | 66  | 60  | 63   | 80  | 70  | 73   | 82  | 74  | 76   |
| 11    | 64  | 60  | 62   | 65  | 58  | 62   | 76  | 72  | 73   | 80  | 74  | 76   |
| 12    | 63  | 59  | 61   | 61  | 53  | 57   | 78  | 74  | 76   | 82  | 73  | 77   |
| 13    | 64  | 58  | 61   | 61  | 54  | 57   | 83  | 77  | 80   | 81  | 71  | 75   |
| 14    | 63  | 59  | 61   | 67  | 60  | 64   | 98  | 80  | 89   | 81  | 71  | 74   |
| 15    | 61  | 57  | 59   | 66  | 62  | 63   | 83  | 78  | 81   | 81  | 70  | 74   |
| 16    | 62  | 57  | 60   | 67  | 60  | 63   | 83  | 75  | 79   | 82  | 69  | 74   |
| 17    | 64  | 59  | 61   | 65  | 60  | 62   | 79  | 73  | 76   | 81  | 70  | 74   |
| 18    | 65  | 60  | 63   | 66  | 59  | 62   | 81  | 75  | 78   | 76  | 69  | 72   |
| 19    | 66  | 62  | 63   | 66  | 59  | 61   | 83  | 77  | 80   | 80  | 68  | 72   |
| 20    | 67  | 61  | 64   | 67  | 62  | 65   | 86  | 81  | 83   | 80  | 70  | 73   |
| 21    | 66  | 61  | 64   | 69  | 62  | 66   | 88  | 82  | 85   | 80  | 70  | 74   |
| 22    | 65  | 62  | 63   | 67  | 62  | 65   | 86  | 80  | 83   | 80  | 68  | 73   |
| 23    | 69  | 63  | 66   | 68  | 61  | 64   | 84  | 76  | 81   | 80  | 69  | 73   |
| 24    | 69  | 63  | 67   | 66  | 59  | 63   | 79  | 75  | 77   | 82  | 69  | 74   |
| 25    | 68  | 62  | 65   | 70  | 61  | 66   | 84  | 77  | 80   | 81  | 70  | 75   |
| 26    | 64  | 60  | 62   | 71  | 65  | 68   | 85  | 80  | 82   | 80  | 73  | 76   |
| 27    | 62  | 57  | 60   | 69  | 63  | 66   | 86  | 78  | 82   | 82  | 72  | 75   |
| 28    | 73  | 57  | 63   | 63  | 57  | 61   | 86  | 78  | 82   | 83  | 72  | 76   |
| 29    | 78  | 62  | 68   | 70  | 62  | 66   | 85  | 76  | 80   | 85  | 72  | 77   |
| 30    | 67  | 60  | 64   | 71  | 64  | 67   | 82  | 75  | 78   | 85  | 74  | 78   |
| 31    | 67  | 60  | 63   | --- | --- | ---  | 86  | 78  | 81   | 86  | 75  | 79   |
| MONTH | --- | --- | ---  | 71  | 50  | 62   | 98  | 63  | 77   | 87  | 68  | 75   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 87  | 75  | 79   | 80  | 66  | 73   | 86  | 74  | 79   | 77  | 68  | 72   |
| 2     | 88  | 75  | 79   | 75  | 64  | 69   | 90  | 74  | 80   | 78  | 71  | 74   |
| 3     | 84  | 74  | 79   | 80  | 63  | 69   | 90  | 74  | 81   | 77  | 71  | 73   |
| 4     | 86  | 75  | 79   | 79  | 61  | 68   | 90  | 75  | 81   | 76  | 69  | 72   |
| 5     | 86  | 75  | 79   | 78  | 60  | 67   | 94  | 74  | 82   | 77  | 68  | 72   |
| 6     | 84  | 74  | 78   | 72  | 60  | 64   | 91  | 72  | 80   | 76  | 65  | 71   |
| 7     | 84  | 73  | 79   | 79  | 62  | 68   | 93  | 71  | 79   | 79  | 65  | 71   |
| 8     | 83  | 76  | 78   | 80  | 66  | 71   | 89  | 69  | 77   | 76  | 65  | 70   |
| 9     | 82  | 76  | 79   | 82  | 68  | 73   | 90  | 68  | 76   | 79  | 65  | 70   |
| 10    | 82  | 75  | 78   | 83  | 70  | 74   | 89  | 68  | 76   | 79  | 64  | 70   |
| 11    | 83  | 75  | 78   | 84  | 67  | 74   | 87  | 69  | 75   | --- | --- | ---  |
| 12    | 86  | 76  | 80   | 83  | 67  | 73   | 78  | 69  | 75   | --- | --- | ---  |
| 13    | 83  | 75  | 79   | 87  | 69  | 75   | 78  | 69  | 73   | --- | --- | ---  |
| 14    | 81  | 76  | 78   | 88  | 67  | 76   | 77  | 69  | 72   | 80  | 65  | 71   |
| 15    | 83  | 76  | 79   | 78  | 67  | 72   | 82  | 69  | 74   | 77  | 61  | 69   |
| 16    | 85  | 78  | 81   | 78  | 67  | 73   | 84  | 68  | 74   | 78  | 61  | 69   |
| 17    | 83  | 77  | 80   | 79  | 73  | 75   | 85  | 67  | 74   | 79  | 61  | 69   |
| 18    | 85  | 77  | 80   | 81  | 73  | 77   | 86  | 64  | 72   | 77  | 60  | 69   |
| 19    | 86  | 75  | 79   | 82  | 72  | 76   | 85  | 63  | 70   | 82  | 65  | 72   |
| 20    | 86  | 74  | 78   | 84  | 70  | 76   | 85  | 61  | 69   | 78  | 68  | 72   |
| 21    | 83  | 74  | 77   | 82  | 69  | 74   | 79  | 58  | 68   | 76  | 66  | 71   |
| 22    | 86  | 74  | 78   | 87  | 74  | 79   | 80  | 62  | 68   | 77  | 66  | 70   |
| 23    | 87  | 75  | 79   | 89  | 75  | 81   | 77  | 58  | 65   | 76  | 65  | 70   |
| 24    | 78  | 65  | 73   | 89  | 74  | 81   | 80  | 60  | 67   | --- | --- | ---  |
| 25    | 81  | 65  | 72   | 90  | 72  | 79   | 80  | 61  | 68   | --- | --- | ---  |
| 26    | 81  | 69  | 74   | 88  | 70  | 78   | 75  | 61  | 66   | --- | --- | ---  |
| 27    | 88  | 75  | 82   | 88  | 70  | 76   | 73  | 63  | 67   | --- | --- | ---  |
| 28    | 83  | 75  | 78   | 88  | 70  | 77   | 77  | 65  | 69   | --- | --- | ---  |
| 29    | 81  | 69  | 76   | 90  | 71  | 78   | 79  | 65  | 70   | --- | --- | ---  |
| 30    | --- | --- | ---  | 89  | 72  | 79   | 79  | 66  | 71   | --- | --- | ---  |
| 31    | --- | --- | ---  | 86  | 72  | 78   | --- | --- | ---  | --- | --- | ---  |
| MONTH | 88  | 65  | 78   | 90  | 60  | 74   | 94  | 58  | 73   | --- | --- | ---  |

## 02088000 MIDDLE CREEK NEAR CLAYTON, NC

LOCATION.--Lat 35°34'15", long 78°35'26", Johnston County, Hydrologic Unit 03020201, on left bank 800 ft downstream of bridge on State Highway 50, 0.5 mi upstream from Buffalo Branch, 3.7 mi downstream of Wake-Johnston County line, and 9.5 mi southwest of Clayton.

DRAINAGE AREA.--83.5 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1939 to current year. Monthly discharge only for Oct. 1939, published in WSP 1303.

REVISED RECORDS.--WSP 952: 1940(M), 1941. WSP 1233: 1943(M), 1945, 1949. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 184.53 ft above NGVD of 1929. Nov. 1-20, 1939, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating curve extended above 10,000 ft<sup>3</sup>/s, by logarithmic plotting; maximum gage height for period of record, 14.88 ft, from high-water mark in gage well. Minimum discharge for period of record, no flow, also occurred Oct. 12-13, 1954, and July 13-28, 1986. Minimum discharge for current water year also occurred several days in July and Aug.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|
| 1     | 49    | 85    | 55    | 69    | 86    | 231   | 87    | 41    | e49   | 56   | 37    | 566   |
| 2     | 47    | 68    | 52    | 66    | 71    | 159   | 90    | 94    | 36    | 43   | 50    | 140   |
| 3     | 44    | 60    | 49    | 70    | 116   | 134   | 75    | 489   | 27    | 37   | 73    | 98    |
| 4     | 42    | 55    | 49    | 67    | 263   | 116   | 69    | 573   | 38    | 33   | 54    | e80   |
| 5     | 43    | 54    | 75    | 69    | 116   | 104   | 64    | 152   | 237   | 32   | 38    | e68   |
| 6     | 39    | 57    | 94    | 78    | 100   | 98    | 59    | 98    | 92    | 29   | 278   | e66   |
| 7     | 39    | 66    | 71    | 74    | e239  | 104   | 57    | 70    | 51    | 25   | 96    | 105   |
| 8     | 41    | 83    | 62    | 62    | e305  | 109   | 57    | 60    | 40    | 23   | 50    | 158   |
| 9     | 59    | 95    | 57    | 60    | e123  | 103   | 56    | 51    | 35    | 21   | 31    | 360   |
| 10    | 66    | 77    | 75    | 72    | 91    | 97    | 54    | 47    | 34    | 20   | 25    | 332   |
| 11    | 64    | 65    | 356   | 69    | 80    | 94    | 70    | 42    | 35    | 32   | 21    | 106   |
| 12    | 63    | 61    | 424   | 64    | 126   | 87    | 93    | 40    | 33    | 35   | 20    | 78    |
| 13    | 55    | 59    | 146   | 71    | 330   | 81    | 224   | 50    | 39    | 36   | 70    | 69    |
| 14    | 49    | 52    | 248   | 70    | 176   | 77    | 206   | 49    | 35    | 42   | 113   | 65    |
| 15    | 59    | 47    | 486   | 63    | 155   | 79    | 126   | 40    | 32    | 35   | 578   | 122   |
| 16    | 67    | 47    | 255   | 61    | 231   | 141   | 93    | 36    | 30    | 42   | 1,150 | 120   |
| 17    | 54    | 50    | 160   | 58    | 210   | 244   | 78    | 34    | 64    | 25   | 444   | 120   |
| 18    | 46    | 52    | 187   | 72    | 160   | 170   | 67    | 32    | 76    | 23   | 117   | 511   |
| 19    | 45    | 71    | 137   | 108   | 130   | 208   | 61    | 30    | 59    | 32   | 344   | 781   |
| 20    | 42    | 284   | 114   | 79    | 109   | 175   | 58    | 32    | 37    | 26   | 490   | 350   |
| 21    | 39    | 205   | 100   | 65    | 95    | 119   | 51    | 40    | 29    | 20   | 113   | 116   |
| 22    | 38    | 100   | 92    | 63    | 85    | 101   | 49    | 30    | 25    | 18   | 129   | 88    |
| 23    | 36    | 78    | 88    | 60    | 75    | 90    | 45    | 29    | 24    | 24   | 132   | 74    |
| 24    | 35    | 70    | 119   | 57    | 72    | 86    | 43    | 61    | 23    | 33   | 77    | 66    |
| 25    | 34    | 64    | 114   | 56    | 68    | 81    | 40    | 50    | 28    | 24   | 60    | 61    |
| 26    | 34    | 59    | 90    | 63    | 64    | 80    | 38    | 31    | 63    | 20   | 51    | 58    |
| 27    | 37    | 56    | 81    | 63    | 175   | 78    | 80    | 25    | 68    | 19   | 45    | 57    |
| 28    | 46    | 56    | 77    | 66    | 433   | 75    | 77    | 23    | 45    | 18   | 41    | 80    |
| 29    | 277   | 61    | 74    | 77    | 359   | 71    | 52    | e22   | 172   | 26   | 38    | 150   |
| 30    | 442   | 59    | 75    | 95    | ---   | 68    | 43    | e24   | 132   | 45   | 464   | 94    |
| 31    | 141   | ---   | 75    | 104   | ---   | 73    | ---   | e115  | ---   | 46   | 820   | ---   |
| TOTAL | 2,172 | 2,296 | 4,137 | 2,171 | 4,643 | 3,533 | 2,262 | 2,510 | 1,688 | 940  | 6,049 | 5,139 |
| MEAN  | 70.1  | 76.5  | 133   | 70.0  | 160   | 114   | 75.4  | 81.0  | 56.3  | 30.3 | 195   | 171   |
| MAX   | 442   | 284   | 486   | 108   | 433   | 244   | 224   | 573   | 237   | 56   | 1,150 | 781   |
| MIN   | 34    | 47    | 49    | 56    | 64    | 68    | 38    | 22    | 23    | 18   | 20    | 57    |
| CFSM  | 0.84  | 0.92  | 1.60  | 0.84  | 1.92  | 1.36  | 0.90  | 0.97  | 0.67  | 0.36 | 2.34  | 2.05  |
| IN.   | 0.97  | 1.02  | 1.84  | 0.97  | 2.07  | 1.57  | 1.01  | 1.12  | 0.75  | 0.42 | 2.69  | 2.29  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

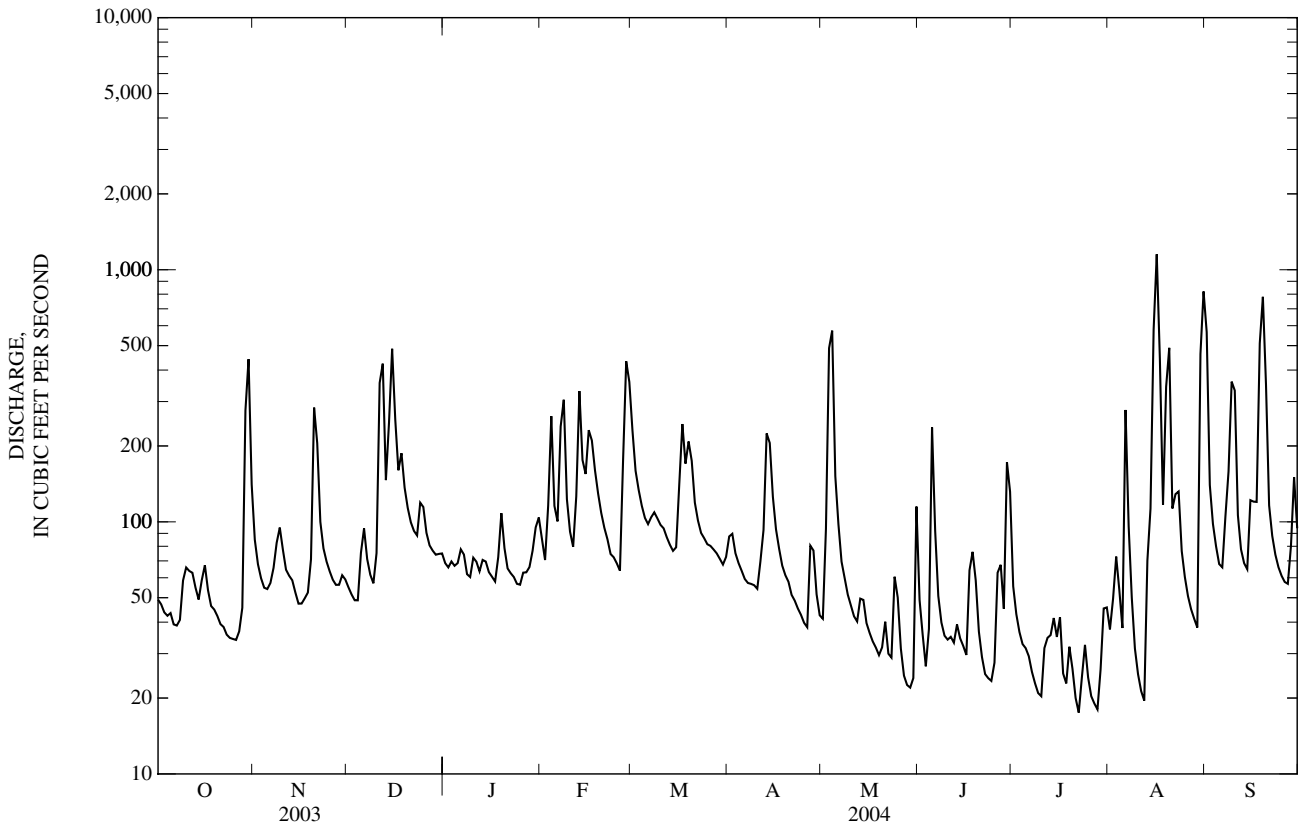
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 53.4   | 65.2   | 86.0   | 138    | 166    | 171    | 117    | 71.0   | 54.0   | 60.4   | 64.0   | 64.6   |
| MAX  | 275    | 230    | 254    | 378    | 450    | 439    | 319    | 330    | 203    | 472    | 340    | 601    |
| (WY) | (1960) | (1996) | (1973) | (1998) | (1973) | (1998) | (1959) | (1958) | (1992) | (1965) | (1949) | (1999) |
| MIN  | 0.77   | 4.67   | 19.7   | 31.6   | 46.2   | 45.1   | 16.1   | 11.4   | 2.15   | 0.23   | 1.75   | 0.50   |
| (WY) | (1987) | (1974) | (1952) | (1942) | (1941) | (1981) | (1986) | (1981) | (1986) | (1986) | (1983) | (1954) |

02088000 MIDDLE CREEK NEAR CLAYTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1940 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 66,304                 |        | 37,540              |        | 92.1                    |              |
| ANNUAL MEAN              | 182                    |        | 103                 |        | 193                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 30.0                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1981                    |              |
| HIGHEST DAILY MEAN       | 1,740                  | Apr 11 | 1,150               | Aug 16 | 6,260                   | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 34                     | Oct 25 | 18                  | Jul 22 | 0.00                    | Oct 11, 1954 |
| ANNUAL SEVEN-DAY MINIMUM | 36                     | Oct 21 | 22                  | Jul 22 | 0.00                    | Jul 13, 1986 |
| MAXIMUM PEAK FLOW        |                        |        | 1,470               | Aug 16 | 11900*                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 8.82                | Aug 16 | 14.88*                  | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 16*                 | Jul 22 | 0.00*                   | Oct 11, 1954 |
| ANNUAL RUNOFF (CFSM)     | 2.18                   |        | 1.23                |        | 1.10                    |              |
| ANNUAL RUNOFF (INCHES)   | 29.54                  |        | 16.72               |        | 14.99                   |              |
| 10 PERCENT EXCEEDS       | 404                    |        | 209                 |        | 200                     |              |
| 50 PERCENT EXCEEDS       | 95                     |        | 66                  |        | 47                      |              |
| 90 PERCENT EXCEEDS       | 48                     |        | 32                  |        | 7.9                     |              |

\* See REMARKS.

e Estimated.



02088090 BLACK CREEK NEAR FOUR OAKS, NC

LOCATION.--Lat 35°28'09", long 78°27'25", Johnston County, Hydrologic Unit 03020201, at bridge on Secondary Road 1162, 2.2 mi north of Four Oaks, and 5.0 mi above the mouth.

DRAINAGE AREA.--79 mi<sup>2</sup>.

PERIOD OF RECORD.--December 2003 to September 2004.

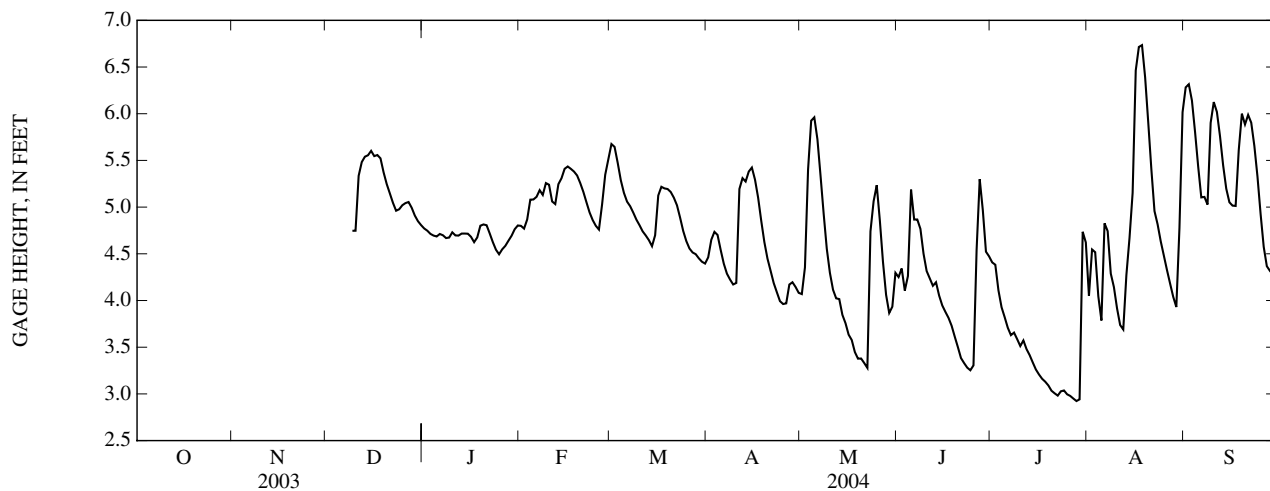
GAGE.--Water-stage recorder. Datum of gage is 120 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 6.79 ft, Aug. 18, 2004; minimum, 2.88 ft, July 29, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum, 6.79 ft, Aug. 18; minimum, 2.88 ft, July 29.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT | NOV | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|-----|-----|------|------|------|------|------|------|------|------|------|------|
| 1    | --- | --- | ---  | 4.77 | 4.80 | 5.68 | 4.46 | 4.07 | 4.25 | 4.41 | 4.05 | 6.28 |
| 2    | --- | --- | ---  | 4.75 | 4.77 | 5.64 | 4.65 | 4.35 | 4.34 | 4.38 | 4.55 | 6.32 |
| 3    | --- | --- | ---  | 4.71 | 4.87 | 5.47 | 4.74 | 5.40 | 4.11 | 4.11 | 4.52 | 6.14 |
| 4    | --- | --- | ---  | 4.70 | 5.08 | 5.29 | 4.70 | 5.93 | 4.26 | 3.93 | 4.05 | 5.80 |
| 5    | --- | --- | ---  | 4.69 | 5.08 | 5.15 | 4.54 | 5.96 | 5.19 | 3.82 | 3.79 | 5.44 |
| 6    | --- | --- | ---  | 4.71 | 5.11 | 5.06 | 4.39 | 5.73 | 4.87 | 3.71 | 4.83 | 5.10 |
| 7    | --- | --- | ---  | 4.70 | 5.18 | 5.01 | 4.29 | 5.34 | 4.87 | 3.63 | 4.74 | 5.11 |
| 8    | --- | --- | ---  | 4.67 | 5.13 | 4.94 | 4.22 | 4.93 | 4.77 | 3.66 | 4.29 | 5.03 |
| 9    | --- | --- | 4.75 | 4.67 | 5.26 | 4.87 | 4.17 | 4.55 | 4.50 | 3.59 | 4.14 | 5.90 |
| 10   | --- | --- | 4.75 | 4.73 | 5.24 | 4.81 | 4.19 | 4.30 | 4.32 | 3.51 | 3.92 | 6.12 |
| 11   | --- | --- | 5.34 | 4.70 | 5.06 | 4.74 | 5.19 | 4.12 | 4.24 | 3.57 | 3.74 | 6.02 |
| 12   | --- | --- | 5.48 | 4.70 | 5.03 | 4.70 | 5.31 | 4.02 | 4.16 | 3.48 | 3.69 | 5.76 |
| 13   | --- | --- | 5.54 | 4.72 | 5.25 | 4.65 | 5.27 | 4.02 | 4.20 | 3.42 | 4.27 | 5.45 |
| 14   | --- | --- | 5.56 | 4.72 | 5.31 | 4.58 | 5.38 | 3.85 | 4.05 | 3.34 | 4.67 | 5.20 |
| 15   | --- | --- | 5.60 | 4.72 | 5.41 | 4.70 | 5.42 | 3.76 | 3.95 | 3.26 | 5.15 | 5.05 |
| 16   | --- | --- | 5.55 | 4.68 | 5.43 | 5.12 | 5.29 | 3.63 | 3.88 | 3.21 | 6.46 | 5.02 |
| 17   | --- | --- | 5.56 | 4.62 | 5.41 | 5.22 | 5.10 | 3.58 | 3.81 | 3.16 | 6.71 | 5.01 |
| 18   | --- | --- | 5.52 | 4.68 | 5.38 | 5.20 | 4.85 | 3.45 | 3.73 | 3.13 | 6.73 | 5.61 |
| 19   | --- | --- | 5.37 | 4.80 | 5.34 | 5.19 | 4.63 | 3.38 | 3.61 | 3.09 | 6.39 | 6.00 |
| 20   | --- | --- | 5.25 | 4.81 | 5.26 | 5.16 | 4.45 | 3.38 | 3.50 | 3.03 | 5.91 | 5.89 |
| 21   | --- | --- | 5.15 | 4.81 | 5.16 | 5.10 | 4.32 | 3.33 | 3.38 | 3.01 | 5.40 | 5.99 |
| 22   | --- | --- | 5.05 | 4.72 | 5.05 | 5.02 | 4.19 | 3.28 | 3.33 | 2.98 | 4.96 | 5.90 |
| 23   | --- | --- | 4.96 | 4.62 | 4.94 | 4.89 | 4.09 | 4.74 | 3.28 | 3.03 | 4.82 | 5.66 |
| 24   | --- | --- | 4.98 | 4.54 | 4.86 | 4.74 | 3.99 | 5.06 | 3.25 | 3.04 | 4.63 | 5.33 |
| 25   | --- | --- | 5.02 | 4.49 | 4.80 | 4.64 | 3.96 | 5.23 | 3.31 | 3.00 | 4.48 | 4.93 |
| 26   | --- | --- | 5.04 | 4.55 | 4.76 | 4.56 | 3.97 | 4.86 | 4.54 | 2.98 | 4.33 | 4.57 |
| 27   | --- | --- | 5.05 | 4.58 | 5.03 | 4.51 | 4.17 | 4.41 | 5.30 | 2.95 | 4.18 | 4.37 |
| 28   | --- | --- | 4.99 | 4.64 | 5.35 | 4.50 | 4.20 | 4.06 | 4.96 | 2.92 | 4.04 | 4.32 |
| 29   | --- | --- | 4.91 | 4.69 | 5.51 | 4.45 | 4.14 | 3.87 | 4.52 | 2.94 | 3.93 | 4.34 |
| 30   | --- | --- | 4.85 | 4.76 | ---  | 4.42 | 4.08 | 3.93 | 4.47 | 4.74 | 4.78 | 4.36 |
| 31   | --- | --- | 4.81 | 4.80 | ---  | 4.40 | ---  | 4.30 | ---  | 4.62 | 6.02 | ---  |
| MEAN | --- | --- | ---  | 4.69 | 5.13 | 4.92 | 4.54 | 4.35 | 4.17 | 3.47 | 4.78 | 5.40 |
| MAX  | --- | --- | ---  | 4.81 | 5.51 | 5.68 | 5.42 | 5.96 | 5.30 | 4.74 | 6.73 | 6.32 |
| MIN  | --- | --- | ---  | 4.49 | 4.76 | 4.40 | 3.96 | 3.28 | 3.25 | 2.92 | 3.69 | 4.32 |



02088270 MILLS CREEK AT COX MILL, NC

LOCATION.--Lat 35°20'30", long 78°12'59", Johnston County, Hydrologic Unit 03020201, at bridge on Secondary Road 1200, 1 mi northwest of Cox Mill.

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

PERIOD OF RECORD.--September 2003 to September 2004.

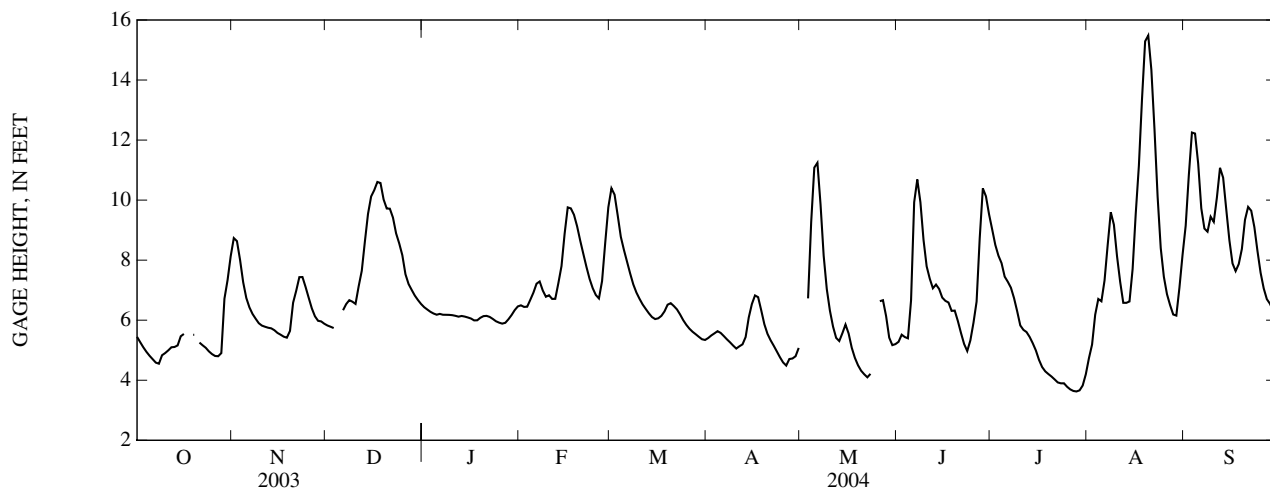
GAGE.--Water-stage recorder. Datum of gage is 80 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 15.67 ft, Aug. 20, 2004; minimum, 3.61 ft, July 27, 28, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum, 15.67 ft, Aug. 20; minimum, 3.61 ft, July 27, 28.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC   | JAN  | FEB  | MAR   | APR  | MAY   | JUN   | JUL  | AUG   | SEP   |
|------|------|------|-------|------|------|-------|------|-------|-------|------|-------|-------|
| 1    | 5.44 | 8.74 | 5.82  | 6.43 | 6.50 | 10.39 | 5.41 | ---   | 5.28  | 9.02 | 4.74  | 9.15  |
| 2    | 5.27 | 8.63 | 5.78  | 6.35 | 6.44 | 10.18 | 5.49 | ---   | 5.52  | 8.51 | 5.19  | 10.82 |
| 3    | 5.10 | 8.01 | 5.74  | 6.28 | 6.45 | 9.49  | 5.56 | 6.73  | 5.44  | 8.15 | 6.18  | 12.25 |
| 4    | 4.95 | 7.26 | ---   | 6.22 | 6.68 | 8.78  | 5.63 | 9.27  | 5.40  | 7.90 | 6.71  | 12.22 |
| 5    | 4.82 | 6.74 | ---   | 6.18 | 6.92 | 8.34  | 5.58 | 11.08 | 6.66  | 7.45 | 6.63  | 11.22 |
| 6    | 4.70 | 6.43 | 6.33  | 6.21 | 7.22 | 7.95  | 5.47 | 11.24 | 9.93  | 7.28 | 7.32  | 9.73  |
| 7    | 4.59 | 6.21 | 6.54  | 6.18 | 7.29 | 7.55  | 5.36 | 9.85  | 10.69 | 7.08 | 8.50  | 9.05  |
| 8    | 4.55 | 6.05 | 6.67  | 6.18 | 6.99 | 7.19  | 5.26 | 8.15  | 9.93  | 6.73 | 9.60  | 8.95  |
| 9    | 4.83 | 5.90 | 6.62  | 6.18 | 6.78 | 6.92  | 5.15 | 7.04  | 8.67  | 6.30 | 9.18  | 9.45  |
| 10   | 4.90 | 5.82 | 6.54  | 6.17 | 6.83 | 6.71  | 5.05 | 6.32  | 7.79  | 5.83 | 8.13  | 9.28  |
| 11   | 4.99 | 5.78 | 7.13  | 6.15 | 6.71 | 6.52  | 5.13 | 5.79  | 7.38  | 5.68 | 7.28  | 10.09 |
| 12   | 5.10 | 5.75 | 7.64  | 6.12 | 6.71 | 6.37  | 5.19 | 5.41  | 7.06  | 5.60 | 6.58  | 11.08 |
| 13   | 5.11 | 5.73 | 8.62  | 6.14 | 7.24 | 6.23  | 5.44 | 5.31  | 7.19  | 5.44 | 6.58  | 10.75 |
| 14   | 5.16 | 5.67 | 9.54  | 6.12 | 7.80 | 6.10  | 6.09 | 5.57  | 7.04  | 5.23 | 6.62  | 9.69  |
| 15   | 5.46 | 5.58 | 10.12 | 6.09 | 8.88 | 6.04  | 6.54 | 5.85  | 6.75  | 4.99 | 7.71  | 8.66  |
| 16   | 5.54 | 5.52 | 10.33 | 6.06 | 9.76 | 6.06  | 6.82 | 5.56  | 6.64  | 4.68 | 9.55  | 7.89  |
| 17   | ---  | 5.45 | 10.60 | 5.99 | 9.72 | 6.14  | 6.77 | 5.08  | 6.59  | 4.44 | 11.14 | 7.63  |
| 18   | ---  | 5.42 | 10.57 | 6.00 | 9.51 | 6.29  | 6.33 | 4.75  | 6.31  | 4.30 | 13.37 | 7.87  |
| 19   | 5.51 | 5.64 | 10.02 | 6.08 | 9.13 | 6.52  | 5.87 | 4.50  | 6.32  | 4.21 | 15.29 | 8.37  |
| 20   | ---  | 6.58 | 9.72  | 6.13 | 8.65 | 6.57  | 5.55 | 4.32  | 5.97  | 4.12 | 15.48 | 9.35  |
| 21   | 5.25 | 6.98 | 9.71  | 6.14 | 8.21 | 6.47  | 5.33 | 4.20  | 5.58  | 4.03 | 14.34 | 9.77  |
| 22   | 5.16 | 7.43 | 9.42  | 6.11 | 7.77 | 6.36  | 5.15 | 4.10  | 5.21  | 3.93 | 12.36 | 9.65  |
| 23   | 5.08 | 7.44 | 8.89  | 6.04 | 7.38 | 6.19  | 4.96 | 4.21  | 4.97  | 3.90 | 10.12 | 9.10  |
| 24   | 4.96 | 7.11 | 8.56  | 5.96 | 7.07 | 6.00  | 4.77 | ---   | 5.33  | 3.90 | 8.40  | 8.30  |
| 25   | 4.87 | 6.75 | 8.16  | 5.92 | 6.84 | 5.84  | 4.59 | ---   | 5.91  | 3.78 | 7.45  | 7.58  |
| 26   | 4.81 | 6.39 | 7.53  | 5.89 | 6.72 | 5.72  | 4.49 | 6.63  | 6.62  | 3.70 | 6.87  | 7.06  |
| 27   | 4.80 | 6.13 | 7.20  | 5.91 | 7.30 | 5.61  | 4.71 | 6.67  | 8.73  | 3.64 | 6.50  | 6.70  |
| 28   | 4.90 | 5.98 | 7.01  | 6.03 | 8.58 | 5.53  | 4.72 | 6.14  | 10.39 | 3.63 | 6.19  | 6.55  |
| 29   | 6.71 | 5.96 | 6.82  | 6.17 | 9.76 | 5.45  | 4.80 | 5.42  | 10.13 | 3.66 | 6.15  | 6.32  |
| 30   | 7.33 | 5.88 | 6.67  | 6.33 | ---  | 5.37  | 5.08 | 5.17  | 9.52  | 3.82 | 7.09  | 6.16  |
| 31   | 8.13 | ---  | 6.54  | 6.46 | ---  | 5.34  | ---  | 5.20  | ---   | 4.20 | 8.18  | ---   |
| MEAN | ---  | 6.43 | ---   | 6.14 | 7.65 | 6.78  | 5.41 | ---   | 7.17  | 5.33 | 8.56  | 9.02  |
| MAX  | ---  | 8.74 | ---   | 6.46 | 9.76 | 10.39 | 6.82 | ---   | 10.69 | 9.02 | 15.48 | 12.25 |
| MIN  | ---  | 5.42 | ---   | 5.89 | 6.44 | 5.34  | 4.49 | ---   | 4.97  | 3.63 | 4.74  | 6.16  |



## 02088500 LITTLE RIVER NEAR PRINCETON, NC

LOCATION.--Lat 35°30'41", long 78°09'37", Johnston County, Hydrologic Unit 03020201, on left bank 600 ft downstream of bridge on Secondary Road 2320, 0.8 mi upstream from Little Creek, and 3 mi north of Princeton.

DRAINAGE AREA.--232 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1930 to current year. Monthly discharge only for some periods, published in WSP 1303.

REVISED RECORD.--WSP 1233: 1935(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 107.75 ft above NGVD of 1929. Prior to Nov. 17, 1934, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Slight fluctuation and occasional regulation for short periods is caused by mills upstream from station. Maximum discharge for period of record, from rating curve extended above 9,000 ft<sup>3</sup>/s, by logarithmic plotting. Minimum discharge for period of record occurred several days in Aug. 2002, due to regulation from unknown source. Minimum discharge for current water year also occurred July 23.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB    | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|--------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| 1     | 74    | 431   | 149    | 176   | 249    | 561   | 135   | 85    | 25    | 127   | 24    | 1,410  |
| 2     | 65    | 346   | 119    | 165   | 207    | 476   | 156   | 238   | 24    | 95    | 24    | 1,250  |
| 3     | 58    | 245   | 102    | 159   | 235    | 400   | 167   | 1,070 | 24    | 67    | 33    | 869    |
| 4     | 55    | 170   | 98     | 157   | 461    | 335   | 164   | 1,260 | 462   | 54    | 62    | 611    |
| 5     | 54    | 133   | 210    | 159   | 449    | 287   | 153   | 821   | 979   | 46    | 77    | 382    |
| 6     | 51    | 116   | 311    | 186   | 371    | 255   | 127   | 538   | 331   | 48    | 268   | 230    |
| 7     | 50    | 129   | 254    | 186   | 464    | 251   | 112   | 361   | 139   | 54    | 241   | 178    |
| 8     | 53    | 149   | 199    | 162   | 590    | 242   | 105   | 222   | 141   | 45    | 82    | 177    |
| 9     | 61    | 151   | 171    | 155   | 514    | 236   | 97    | 154   | 88    | 35    | 51    | 535    |
| 10    | 64    | 130   | 173    | 166   | 452    | 220   | 92    | 118   | 60    | 72    | 36    | 901    |
| 11    | 71    | 117   | 603    | 159   | 360    | 190   | 130   | 96    | 54    | 369   | 28    | 688    |
| 12    | 74    | 112   | 755    | 150   | 368    | 166   | 179   | 84    | 54    | 109   | 23    | 456    |
| 13    | 74    | 105   | 647    | 151   | 602    | 148   | 291   | 88    | 58    | 65    | 59    | 327    |
| 14    | 73    | 93    | 775    | 151   | 585    | 132   | 564   | 76    | 51    | 70    | 97    | 231    |
| 15    | 83    | 82    | 1,080  | 146   | 533    | 145   | 483   | 65    | 43    | 72    | 328   | 198    |
| 16    | 84    | 76    | 943    | 134   | 616    | 340   | 378   | 57    | 39    | 61    | 1,010 | 185    |
| 17    | 83    | 73    | 773    | 123   | 635    | 554   | 288   | 51    | 40    | 47    | 832   | 168    |
| 18    | 75    | 71    | 711    | 131   | 584    | 574   | 211   | 44    | 39    | 39    | 735   | 374    |
| 19    | 69    | 114   | 623    | 184   | 539    | 556   | 165   | 42    | 35    | 33    | 698   | 559    |
| 20    | 64    | 491   | 507    | 186   | 453    | 547   | 136   | 39    | 31    | 28    | 614   | 473    |
| 21    | 59    | 587   | 412    | 159   | 382    | 442   | 116   | 38    | 30    | 24    | 400   | 362    |
| 22    | 55    | 462   | 343    | 151   | 324    | 346   | 101   | 36    | 29    | 20    | 225   | 321    |
| 23    | 51    | 370   | 300    | 139   | 271    | 260   | 89    | 36    | 27    | 32    | 165   | 256    |
| 24    | 48    | 275   | 342    | 131   | 232    | 208   | 79    | 40    | 26    | 33    | 201   | 172    |
| 25    | 45    | 206   | 374    | 124   | 215    | 179   | 73    | 40    | 25    | 25    | 144   | 130    |
| 26    | 43    | 157   | 331    | 134   | 199    | 162   | 68    | 35    | 201   | 28    | 109   | 99     |
| 27    | 44    | 134   | 287    | 146   | 307    | 154   | 81    | 34    | 134   | 26    | 90    | 83     |
| 28    | 50    | 123   | 253    | 162   | 559    | 148   | 102   | 32    | 82    | 23    | 76    | 73     |
| 29    | 414   | 143   | 229    | 182   | 601    | 142   | 98    | 29    | 246   | 47    | 80    | 81     |
| 30    | 678   | 160   | 215    | 221   | ---    | 129   | 87    | 27    | 158   | 50    | 550   | 81     |
| 31    | 570   | ---   | 195    | 270   | ---    | 124   | ---   | 25    | ---   | 31    | 1,350 | ---    |
| TOTAL | 3,392 | 5,951 | 12,484 | 5,005 | 12,357 | 8,909 | 5,027 | 5,881 | 3,675 | 1,875 | 8,712 | 11,860 |
| MEAN  | 109   | 198   | 403    | 161   | 426    | 287   | 168   | 190   | 122   | 60.5  | 281   | 395    |
| MAX   | 678   | 587   | 1,080  | 270   | 635    | 574   | 564   | 1,260 | 979   | 369   | 1,350 | 1,410  |
| MIN   | 43    | 71    | 98     | 123   | 199    | 124   | 68    | 25    | 24    | 20    | 23    | 73     |
| CFSM  | 0.47  | 0.86  | 1.74   | 0.70  | 1.84   | 1.24  | 0.72  | 0.82  | 0.53  | 0.26  | 1.21  | 1.70   |
| IN.   | 0.54  | 0.95  | 2.00   | 0.80  | 1.98   | 1.43  | 0.81  | 0.94  | 0.59  | 0.30  | 1.40  | 1.90   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

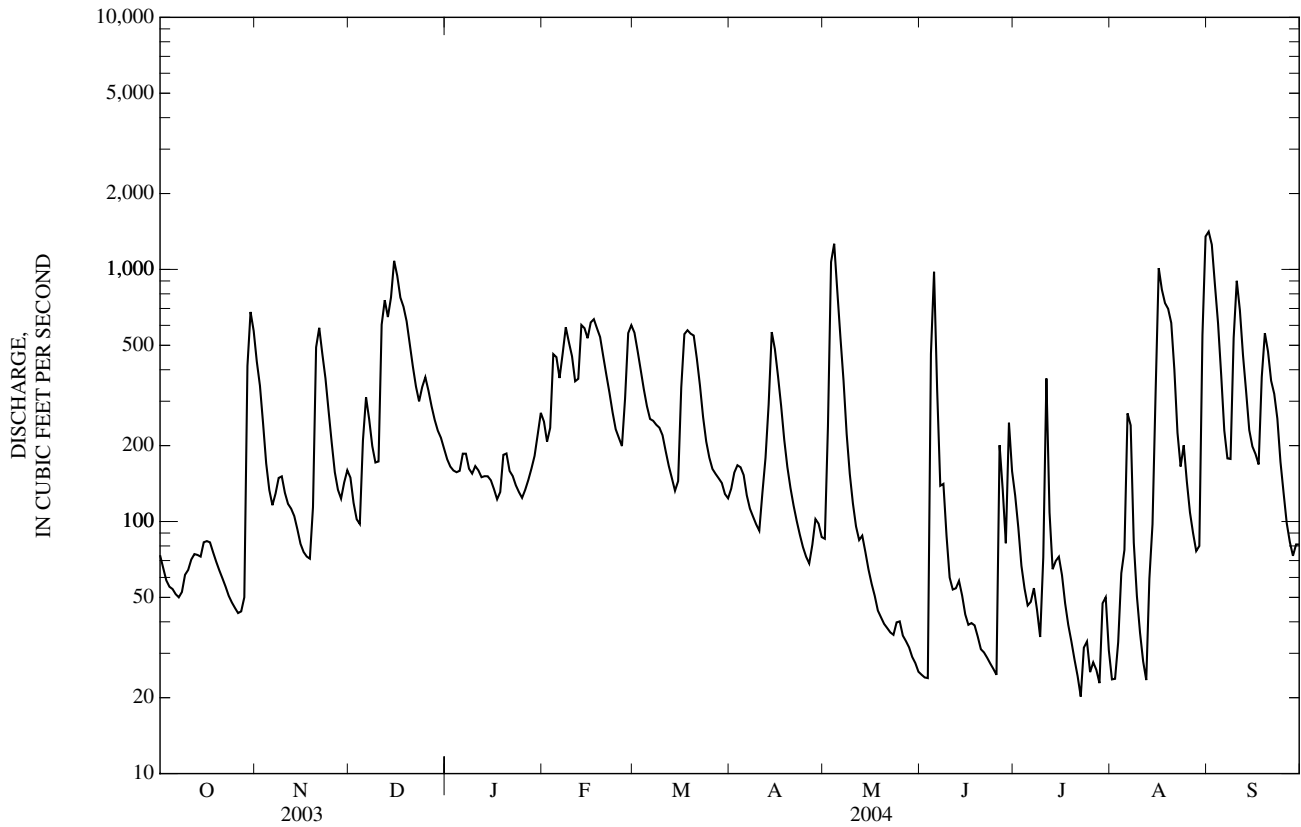
|      | 1930   | 1931   | 1932   | 1933   | 1934   | 1935   | 1936   | 1937   | 1938   | 1939   | 1940   | 1941   | 1942 | 1943 | 1944 | 1945 | 1946 | 1947 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 | 1955 | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 | 1966 | 1967 | 1968 | 1969 | 1970 | 1971 | 1972 | 1973 | 1974 | 1975 | 1976 | 1977 | 1978 | 1979 | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 144    | 148    | 232    | 387    | 471    | 479    | 325    | 184    | 149    | 173    | 186    | 184    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MAX  | 1,202  | 645    | 717    | 999    | 1,285  | 1,204  | 969    | 835    | 698    | 826    | 783    | 2,861  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | (1965) | (1948) | (1937) | (1954) | (1948) | (1989) | (1959) | (1989) | (1995) | (1959) | (1931) | (1999) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| MIN  | 6.00   | 13.0   | 16.0   | 24.1   | 49.6   | 120    | 53.3   | 17.3   | 7.24   | 12.4   | 4.10   | 2.84   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| (WY) | (1934) | (1934) | (1934) | (1934) | (1934) | (1981) | (1986) | (1986) | (2002) | (1999) | (1993) | (1980) |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |



02088500 LITTLE RIVER NEAR PRINCETON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1930 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 146,008                |        | 85,128              |        |                         |              |
| ANNUAL MEAN              | 400                    |        | 233                 |        | 255                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 511                     | 1960         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 91.8                    | 1951         |
| HIGHEST DAILY MEAN       | 3,650                  | Aug 13 | 1,410               | Sep 1  | 17,600                  | Sep 17, 1999 |
| LOWEST DAILY MEAN        | 42                     | Jul 29 | 20                  | Jul 22 | 0.00                    | Aug 12, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 48                     | Oct 22 | 27                  | May 28 | 0.02                    | Aug 11, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 1,560               | Jun 4  | 20700*                  | Sep 17, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 8.88                | Jun 4  | 16.58                   | Sep 17, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 18*                 | Jul 22 | 0.00*                   | Aug 12, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.72                   |        | 1.00                |        | 1.10                    |              |
| ANNUAL RUNOFF (INCHES)   | 23.41                  |        | 13.65               |        | 14.93                   |              |
| 10 PERCENT EXCEEDS       | 882                    |        | 566                 |        | 632                     |              |
| 50 PERCENT EXCEEDS       | 229                    |        | 150                 |        | 119                     |              |
| 90 PERCENT EXCEEDS       | 69                     |        | 37                  |        | 20                      |              |

\* See REMARKS.



## 02089000 NEUSE RIVER NEAR GOLDSBORO, NC

LOCATION.--Lat 35°20'15", long 77°59'51", Wayne County, Hydrologic Unit 03020202, on left bank at downstream side of bridge on Secondary Road 1915, 0.2 mi upstream from Stony Creek, 1.5 mi downstream of Seaboard Coast Line Railroad bridge, 3.2 mi south of Wayne County courthouse in Goldsboro, 4.3 mi downstream of Little River, and 135 mi upstream from mouth.

DRAINAGE AREA.--2,399 mi<sup>2</sup>.

PERIOD OF RECORD.--February 1930 to current year.

REVISED RECORDS.--WSP 1333: 1931, 1935. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 42.95 ft above NGVD of 1929. Prior to July 24, 1931, nonrecording gage at railroad bridge 1.5 mi upstream at 44.95 ft. July 24, 1931, to Aug. 31, 1948, water-stage recorder at site 2.3 mi upstream at 44.66 ft. National Weather Service telephone telemetry at station. Satellite telemetry at station.

REMARKS.--No estimated discharges. Records good. Flow regulated by Falls Lake (station 02087182). Prior to regulation, maximum discharge: 30,700 ft<sup>3</sup>/s, Sept. 27, 1945; gage height: 26.72 ft at site and datum then in use; minimum discharge: 76 ft<sup>3</sup>/s, Sept. 26, 1968. Minimum discharge during regulation also occurred Oct. 3, 1985.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods of June 1866 and July 1919, reached stages of about 29 and 28 ft, respectively, at site 2.3 mi upstream at present datum, from flood profiles of U.S. Army Corps of Engineers. Flood of Oct. 5, 1929, reached a stage of 27.3 ft at railroad bridge at present datum; discharge, 38,600 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC     | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG     | SEP     |
|-------|--------|--------|---------|--------|--------|--------|--------|--------|--------|--------|---------|---------|
| 1     | 2,090  | 4,020  | 1,340   | 1,900  | 1,910  | 4,400  | 1,290  | 1,380  | 792    | 2,740  | 1,700   | 4,570   |
| 2     | 1,970  | 3,200  | 1,280   | 1,830  | 1,880  | 4,400  | 1,330  | 1,440  | 972    | 2,210  | 1,650   | 5,960   |
| 3     | 1,650  | 2,450  | 1,220   | 1,770  | 1,820  | 4,010  | 1,510  | 2,500  | 890    | 1,660  | 1,610   | 6,610   |
| 4     | 1,250  | 1,990  | 1,200   | 1,770  | 1,940  | 3,450  | 1,570  | 4,440  | 869    | 1,420  | 1,840   | 6,930   |
| 5     | 1,040  | 1,680  | 1,320   | 1,860  | 2,670  | 3,010  | 1,660  | 5,700  | 1,730  | 1,400  | 1,980   | 6,790   |
| 6     | 879    | 1,510  | 1,540   | 1,880  | 2,820  | 2,710  | 1,840  | 6,330  | 4,140  | 1,280  | 1,740   | 5,840   |
| 7     | 776    | 1,420  | 1,880   | 1,850  | 2,520  | 2,480  | 1,670  | 5,770  | 5,040  | 1,120  | 2,150   | 4,570   |
| 8     | 756    | 1,410  | 1,830   | 1,840  | 2,740  | 2,350  | 1,280  | 3,750  | 3,460  | 1,040  | 2,870   | 3,950   |
| 9     | 819    | 1,490  | 1,680   | 1,720  | 3,350  | 2,260  | 1,150  | 2,340  | 2,260  | 937    | 2,580   | 4,080   |
| 10    | 868    | 1,470  | 1,630   | 1,640  | 3,110  | 2,170  | 1,130  | 1,730  | 1,860  | 780    | 1,740   | 4,710   |
| 11    | 994    | 1,420  | 2,250   | 1,650  | 2,770  | 2,060  | 1,260  | 1,420  | 1,840  | 784    | 1,250   | 5,170   |
| 12    | 1,030  | 1,320  | 3,240   | 1,670  | 3,240  | 1,940  | 1,360  | 1,230  | 1,520  | 1,410  | 990     | 5,480   |
| 13    | 1,010  | 1,260  | 4,250   | 1,620  | 3,830  | 1,800  | 1,700  | 1,140  | 1,500  | 1,340  | 1,010   | 5,380   |
| 14    | 1,000  | 1,200  | 4,920   | 1,610  | 4,330  | 1,620  | 2,390  | 1,090  | 1,390  | 1,020  | 1,560   | 4,760   |
| 15    | 1,030  | 1,120  | 5,570   | 1,600  | 4,840  | 1,520  | 3,180  | 1,070  | 1,170  | 1,090  | 3,090   | 3,900   |
| 16    | 1,050  | 1,060  | 5,970   | 1,560  | 5,180  | 1,540  | 3,120  | 983    | 1,230  | 890    | 4,620   | 3,040   |
| 17    | 1,140  | 1,020  | 6,370   | 1,480  | 5,300  | 2,310  | 2,660  | 837    | 1,450  | 744    | 5,440   | 2,550   |
| 18    | 1,090  | 1,000  | 6,540   | 1,430  | 5,240  | 3,230  | 2,520  | 756    | 1,320  | 636    | 6,120   | 2,400   |
| 19    | 1,010  | 1,110  | 6,350   | 1,460  | 5,000  | 3,490  | 2,320  | 694    | 1,410  | 551    | 6,760   | 3,120   |
| 20    | 1,090  | 1,590  | 6,030   | 1,680  | 4,650  | 3,300  | 2,120  | 668    | 1,180  | 590    | 7,370   | 4,040   |
| 21    | 1,240  | 2,460  | 5,720   | 1,730  | 4,210  | 3,090  | 1,960  | 645    | 955    | 705    | 7,700   | 4,230   |
| 22    | 969    | 3,060  | 5,480   | 1,610  | 3,630  | 2,670  | 1,840  | 704    | 776    | 614    | 7,570   | 3,860   |
| 23    | 804    | 2,680  | 5,240   | 1,510  | 3,040  | 2,260  | 1,750  | 689    | 778    | 582    | 6,510   | 3,360   |
| 24    | 737    | 2,170  | 5,080   | 1,460  | 2,730  | 1,950  | 1,620  | 969    | 1,550  | 580    | 5,060   | 2,800   |
| 25    | 703    | 1,830  | 4,890   | 1,420  | 2,540  | 1,730  | 1,280  | 1,070  | 1,180  | 1,230  | 3,970   | 2,420   |
| 26    | 687    | 1,600  | 3,960   | 1,420  | 2,380  | 1,620  | 1,140  | 1,090  | 1,360  | 968    | 2,970   | 2,130   |
| 27    | 686    | 1,440  | 2,860   | 1,440  | 2,460  | 1,540  | 1,260  | 1,040  | 2,370  | 729    | 1,940   | 1,900   |
| 28    | 713    | 1,340  | 2,420   | 1,510  | 3,020  | 1,490  | 1,330  | 889    | 2,890  | 821    | 1,410   | 1,860   |
| 29    | 1,730  | 1,280  | 2,210   | 1,590  | 3,900  | 1,430  | 1,570  | 746    | 2,840  | 732    | 1,210   | 1,770   |
| 30    | 2,940  | 1,290  | 2,090   | 1,680  | ---    | 1,370  | 1,440  | 674    | 2,470  | 592    | 1,450   | 1,490   |
| 31    | 4,060  | ---    | 1,990   | 1,810  | ---    | 1,340  | ---    | 677    | ---    | 935    | 2,680   | ---     |
| TOTAL | 37,811 | 51,890 | 108,350 | 51,000 | 97,050 | 74,540 | 52,250 | 54,461 | 53,192 | 32,130 | 100,540 | 119,670 |
| MEAN  | 1,220  | 1,730  | 3,495   | 1,645  | 3,347  | 2,405  | 1,742  | 1,757  | 1,773  | 1,036  | 3,243   | 3,989   |
| MAX   | 4,060  | 4,020  | 6,540   | 1,900  | 5,300  | 4,400  | 3,180  | 6,330  | 5,040  | 2,740  | 7,700   | 6,930   |
| MIN   | 686    | 1,000  | 1,200   | 1,420  | 1,820  | 1,340  | 1,130  | 645    | 776    | 551    | 990     | 1,490   |

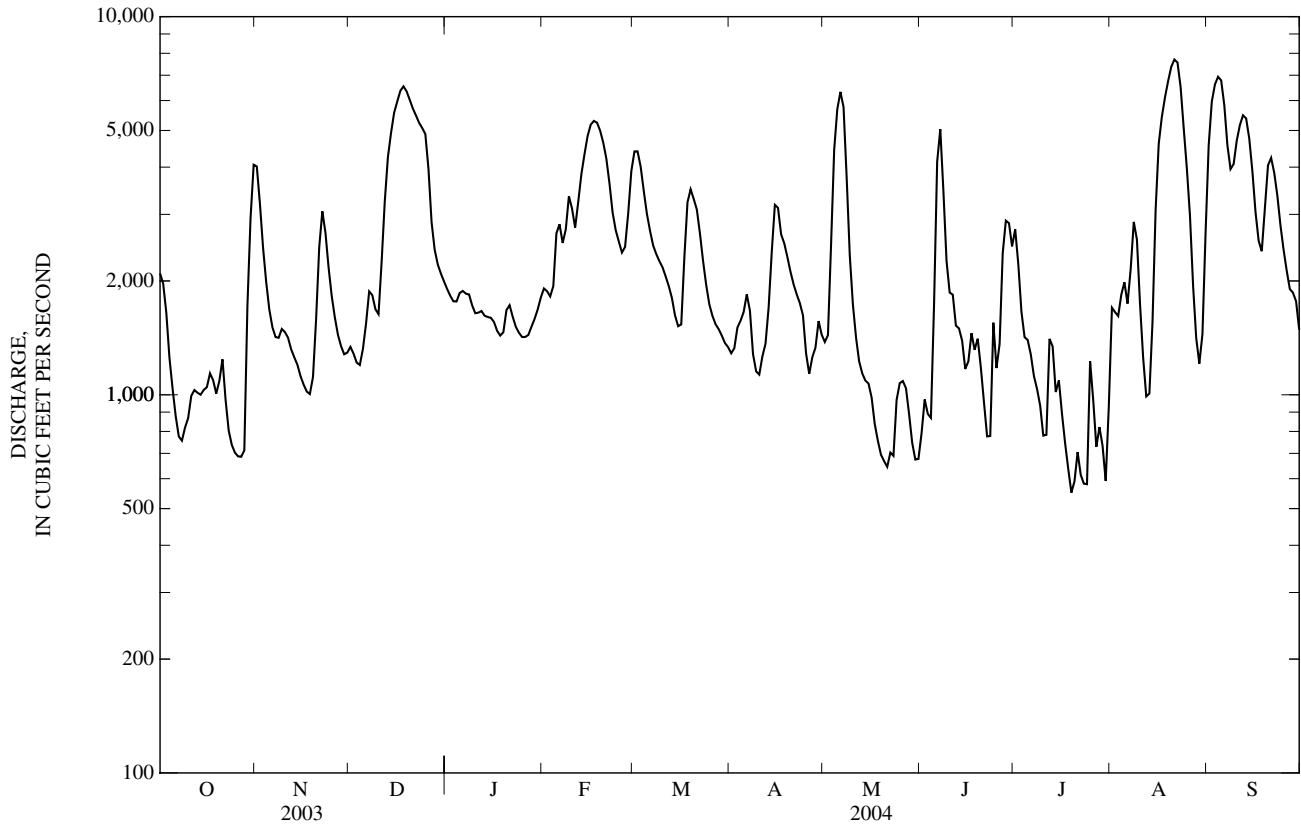
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004,\* BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1,853  | 1,519  | 2,096  | 3,280  | 4,143  | 5,022  | 3,919  | 2,005  | 1,573  | 1,443  | 1,669  | 2,313  |
| MAX  | 11,750 | 5,287  | 4,546  | 6,644  | 12,080 | 11,400 | 7,850  | 7,276  | 5,530  | 4,668  | 4,761  | 14,650 |
| (WY) | (2000) | (1996) | (1997) | (1993) | (1998) | (1998) | (1989) | (1989) | (1995) | (1989) | (2003) | (1999) |
| MIN  | 310    | 326    | 615    | 884    | 1,374  | 1,286  | 631    | 433    | 342    | 394    | 264    | 246    |
| (WY) | (1984) | (1988) | (2002) | (1986) | (2001) | (2002) | (1986) | (1986) | (1986) | (1987) | (1983) | (1985) |

02089000 NEUSE RIVER NEAR GOLDSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004* |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--------------|
| ANNUAL TOTAL             | 1,399,873              |        | 832,884             |        |                          |              |
| ANNUAL MEAN              | 3,835                  |        | 2,276               |        | 2,648                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 4,018                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,040                    | 2002         |
| HIGHEST DAILY MEAN       | 12,000                 | Apr 15 | 7,700               | Aug 21 | 38,200                   | Sep 20, 1999 |
| LOWEST DAILY MEAN        | 686                    | Oct 27 | 551                 | Jul 19 | 162                      | Sep 10, 1983 |
| ANNUAL SEVEN-DAY MINIMUM | 757                    | Oct 22 | 608                 | Jul 18 | 172                      | Sep 15, 1985 |
| MAXIMUM PEAK FLOW        |                        |        | 7,760               | Aug 22 | 38,500                   | Sep 20, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 16.26               | Aug 22 | 28.85                    | Sep 20, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 512                 | Jul 24 | 157*                     | Sep 19, 1985 |
| 10 PERCENT EXCEEDS       | 7,260                  |        | 4,860               |        | 6,720                    |              |
| 50 PERCENT EXCEEDS       | 3,230                  |        | 1,690               |        | 1,440                    |              |
| 90 PERCENT EXCEEDS       | 1,110                  |        | 859                 |        | 412                      |              |

\* Regulated period only (1983-2004). See REMARKS.



## 0208925200 BEAR CREEK AT MAYS STORE, NC

LOCATION.--Lat 35°16'29", long 77°47'40", Lenoir County, Hydrologic Unit 03020202, at downstream side of bridge on Secondary Road 1326, 0.7 mi west of Mays Store, and 1.0 mi downstream of Secondary Road 1002.

DRAINAGE AREA.--57.7 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1987 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for period of record from rating extension above 3,000 ft<sup>3</sup>/s on basis of slope conveyance of peak flow. Maximum gage height for period of record from floodmark.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 42    | 179   | 47    | 64    | 53    | 121   | 35    | 68    | 25    | 243   | 22    | 87    |
| 2     | 39    | 141   | 51    | 61    | 50    | 104   | 34    | 168   | 22    | 142   | 27    | 246   |
| 3     | e37   | 112   | 46    | 59    | 58    | 89    | 32    | 547   | 20    | 106   | 45    | 164   |
| 4     | 36    | 90    | 46    | 58    | 68    | 79    | 31    | 576   | 23    | 84    | 32    | 118   |
| 5     | 35    | 82    | 72    | 57    | 61    | 70    | 29    | 379   | 62    | 67    | 25    | 90    |
| 6     | 34    | 84    | 75    | 68    | 58    | 65    | 28    | 290   | 40    | 53    | 27    | 71    |
| 7     | 33    | 96    | 64    | 63    | 60    | 61    | 28    | 227   | 37    | 45    | 26    | 58    |
| 8     | 36    | 86    | 58    | 57    | 54    | 55    | 27    | 186   | 37    | 47    | 23    | 74    |
| 9     | 73    | 76    | 54    | 57    | 49    | 50    | 27    | 149   | 38    | 97    | 20    | 168   |
| 10    | 82    | 68    | 61    | 60    | 47    | 47    | 27    | 118   | 49    | 81    | 19    | 135   |
| 11    | 74    | 63    | 299   | 55    | 45    | 45    | 46    | 92    | 76    | 62    | 17    | 99    |
| 12    | 64    | 61    | 215   | 54    | 62    | 43    | 67    | 79    | 61    | 62    | 19    | 77    |
| 13    | 55    | 64    | 172   | 56    | 98    | 42    | 174   | 69    | 47    | 49    | 37    | 61    |
| 14    | 52    | 62    | 341   | 54    | 88    | 40    | 259   | 54    | 37    | 40    | 143   | 53    |
| 15    | 63    | 60    | 449   | 53    | 111   | 41    | 154   | 46    | 32    | 33    | 499   | 52    |
| 16    | 57    | 56    | 320   | 50    | 134   | 44    | 114   | 40    | 29    | 28    | 398   | 48    |
| 17    | 52    | 54    | 298   | 47    | e124  | 45    | 85    | 37    | 45    | 25    | 242   | 47    |
| 18    | 47    | 52    | 299   | 52    | e135  | 43    | 66    | 33    | 39    | 24    | 167   | 98    |
| 19    | 44    | 62    | 241   | 54    | e115  | 42    | 55    | 31    | 40    | 24    | 125   | 91    |
| 20    | 41    | 146   | 202   | 50    | 100   | 39    | 47    | 41    | 32    | 22    | 94    | 76    |
| 21    | 40    | 128   | 166   | 47    | 88    | 38    | 41    | 32    | 27    | 21    | 68    | 61    |
| 22    | 39    | 120   | 145   | 46    | 76    | 36    | 36    | 30    | 25    | 19    | 71    | 49    |
| 23    | 37    | 92    | 131   | 45    | 68    | 35    | 33    | 34    | 38    | 25    | 62    | 43    |
| 24    | 37    | 82    | 129   | 44    | 65    | 34    | 30    | 48    | 379   | 27    | 52    | 39    |
| 25    | 37    | 71    | 120   | 45    | 63    | 33    | 28    | 34    | 158   | 24    | 44    | 36    |
| 26    | 36    | 63    | 102   | 47    | 62    | 32    | 29    | 29    | 109   | 22    | 39    | 34    |
| 27    | 36    | 55    | 91    | 49    | 130   | 32    | 73    | 26    | 96    | 21    | 43    | 33    |
| 28    | 40    | 53    | 82    | 57    | 183   | 33    | 61    | 24    | 84    | 19    | 38    | 34    |
| 29    | 356   | 52    | 77    | 60    | 145   | 32    | 47    | 22    | 102   | 20    | 39    | 33    |
| 30    | 389   | 49    | 73    | 61    | ---   | 31    | 39    | 24    | 73    | 19    | 67    | 31    |
| 31    | 245   | ---   | 68    | 58    | ---   | 33    | ---   | 29    | ---   | 18    | 72    | ---   |
| TOTAL | 2,288 | 2,459 | 4,594 | 1,688 | 2,450 | 1,534 | 1,782 | 3,562 | 1,882 | 1,569 | 2,602 | 2,306 |
| MEAN  | 73.8  | 82.0  | 148   | 54.5  | 84.5  | 49.5  | 59.4  | 115   | 62.7  | 50.6  | 83.9  | 76.9  |
| MAX   | 389   | 179   | 449   | 68    | 183   | 121   | 259   | 576   | 379   | 243   | 499   | 246   |
| MIN   | 33    | 49    | 46    | 44    | 45    | 31    | 27    | 22    | 20    | 18    | 17    | 31    |
| CFSM  | 1.28  | 1.42  | 2.57  | 0.94  | 1.46  | 0.86  | 1.03  | 1.99  | 1.09  | 0.88  | 1.45  | 1.33  |
| IN.   | 1.48  | 1.59  | 2.96  | 1.09  | 1.58  | 0.99  | 1.15  | 2.30  | 1.21  | 1.01  | 1.68  | 1.49  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

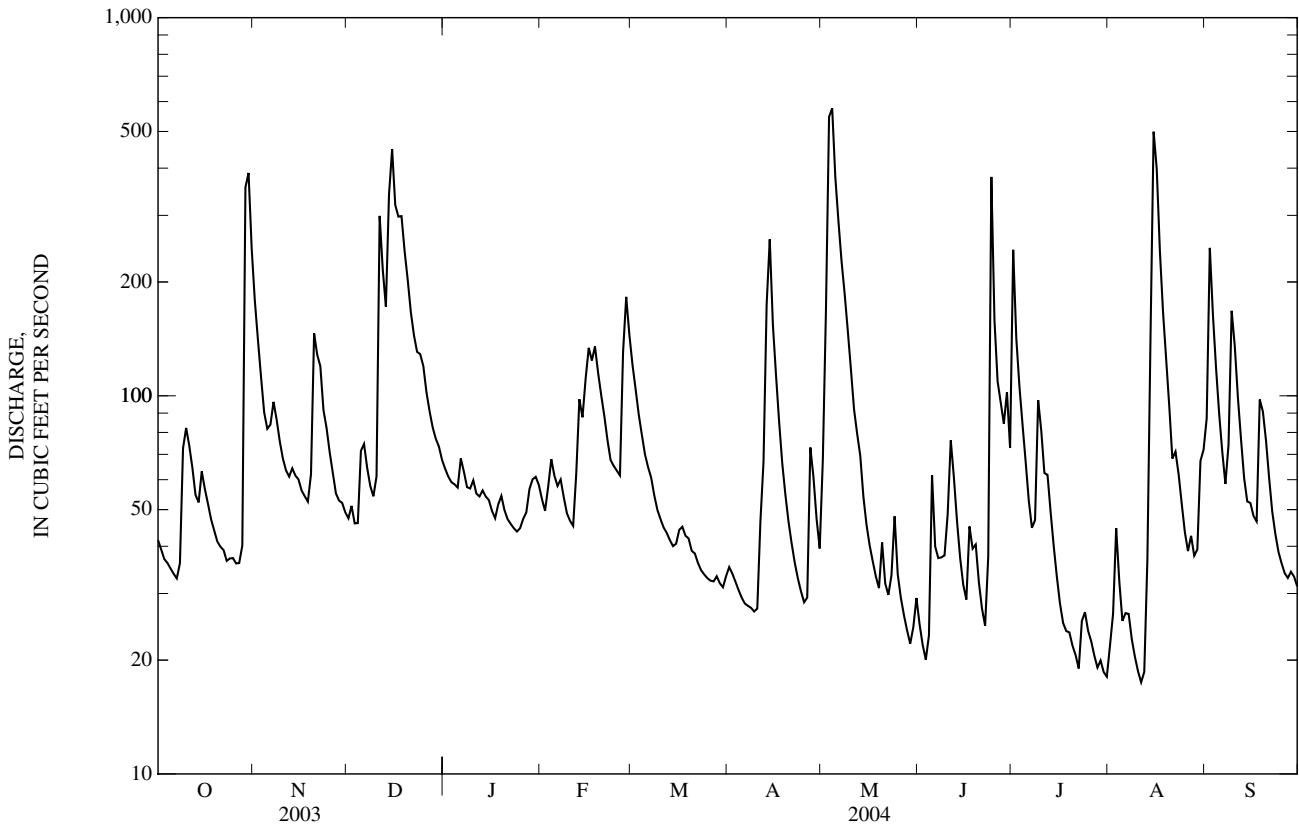
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 62.6   | 49.3   | 59.0   | 94.2   | 87.3   | 99.7   | 76.7   | 63.5   | 58.0   | 48.8   | 63.9   | 135    |
| MAX  | 316    | 119    | 148    | 266    | 306    | 230    | 204    | 216    | 201    | 156    | 231    | 1,401  |
| (WY) | (2000) | (1993) | (2004) | (1993) | (1998) | (1998) | (1998) | (1989) | (1995) | (2003) | (1992) | (1999) |
| MIN  | 17.2   | 15.8   | 21.5   | 29.0   | 40.1   | 35.3   | 26.5   | 19.8   | 13.2   | 12.5   | 12.8   | 17.6   |
| (WY) | (1995) | (1995) | (1995) | (1995) | (2001) | (1988) | (1995) | (1994) | (1994) | (1993) | (1993) | (1994) |

0208925200 BEAR CREEK AT MAYS STORE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1988 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 39,213                 |        | 28,712              |        | 74.7                    |              |
| ANNUAL MEAN              | 107                    |        | 78.4                |        | 169                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 31.7                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1988                    |              |
| HIGHEST DAILY MEAN       | 592                    | May 27 | 576                 | May 4  | 8,000                   | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 26                     | Jan 28 | 17                  | Aug 11 | 8.4                     | Aug 18, 1997 |
| ANNUAL SEVEN-DAY MINIMUM | 27                     | Jan 24 | 20                  | Jul 26 | 9.2                     | Aug 12, 1997 |
| MAXIMUM PEAK FLOW        |                        |        | 699                 | May 4  | 11000*                  | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 8.46                | May 4  | 16.04*                  | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 16                  | Aug 12 | 7.7                     | Aug 18, 1997 |
| ANNUAL RUNOFF (CFSM)     | 1.86                   |        | 1.36                |        | 1.29                    |              |
| ANNUAL RUNOFF (INCHES)   | 25.28                  |        | 18.51               |        | 17.59                   |              |
| 10 PERCENT EXCEEDS       | 236                    |        | 150                 |        | 145                     |              |
| 50 PERCENT EXCEEDS       | 72                     |        | 54                  |        | 41                      |              |
| 90 PERCENT EXCEEDS       | 32                     |        | 27                  |        | 18                      |              |

\* See REMARKS.

e Estimated.



## 02089500 NEUSE RIVER AT KINSTON, NC

LOCATION.--Lat 35°15'28", long 77°35'08", Lenoir County, Hydrologic Unit 03020202, on left bank at Kinston, 600 ft downstream of bridge on State Highway 11, and 90 mi upstream from mouth.

DRAINAGE AREA.--2,692 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1930 to current year.

GAGE.--Water-stage recorder. Datum of gage is 10.90 ft above NGVD of 1929. Prior to Nov. 25, 1934, nonrecording gage at highway bridge 1 mi downstream at 10.10 ft. National Weather Service telephone telemetry at station. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Falls Lake (station 02087182). Prior to regulation, maximum discharge: 26,000 ft<sup>3</sup>/s, Oct. 13, 1964; gage height: 22.86 ft, at site and datum then in use; minimum discharge: 124 ft<sup>3</sup>/s, Sept. 26, 1932, at site then in use. Minimum discharge for current water year also occurred July 25.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1919 reached a stage of 25.0 ft, at present site and datum; discharge, about 39,000 ft<sup>3</sup>/s, from information provided by North Carolina State Highway Commission. Flood in October 1924 reached a stage of 24.7 ft, at present site and datum; discharge, 36,000 ft<sup>3</sup>/s, from information provided by North Carolina State Highway Commission. Flood of Sept. 25-26, 1928, reached a stage of 24.2 ft, at present site and datum; discharge, 34,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC     | JAN    | FEB     | MAR    | APR    | MAY    | JUN    | JUL    | AUG     | SEP     |
|-------|--------|--------|---------|--------|---------|--------|--------|--------|--------|--------|---------|---------|
| 1     | 2,720  | 4,360  | 1,540   | 2,630  | 2,120   | 4,070  | 1,620  | 1,840  | 896    | 3,330  | 883     | 2,870   |
| 2     | 2,520  | 4,710  | 1,560   | 2,510  | 2,210   | 4,500  | 1,560  | 2,220  | 895    | 3,310  | 1,580   | 3,840   |
| 3     | 2,380  | 4,610  | 1,530   | 2,420  | 2,240   | 4,850  | 1,540  | 2,990  | 1,000  | 3,130  | 1,780   | 4,680   |
| 4     | 2,130  | 3,720  | 1,450   | 2,390  | 2,240   | 4,930  | 1,650  | 4,190  | 1,030  | 2,590  | 1,830   | 5,340   |
| 5     | 1,690  | 2,880  | 1,530   | 2,360  | 2,300   | 4,660  | 1,740  | 5,170  | 1,020  | 2,200  | 1,890   | 6,110   |
| 6     | 1,380  | 2,500  | 1,650   | 2,410  | 2,760   | 4,150  | 1,810  | 5,720  | 1,730  | 1,930  | 2,110   | 6,630   |
| 7     | 1,200  | 2,250  | 1,800   | 2,450  | 3,100   | 3,630  | 1,950  | 6,300  | 3,250  | 1,720  | 2,040   | 6,860   |
| 8     | 1,080  | 2,070  | 2,080   | 2,390  | 3,040   | 3,210  | 1,920  | 6,690  | 4,130  | 1,470  | 2,170   | 6,680   |
| 9     | 1,210  | 1,950  | 2,150   | 2,360  | 3,020   | 2,930  | 1,580  | 6,530  | 4,330  | 1,310  | 2,670   | 6,130   |
| 10    | 1,360  | 1,950  | 2,130   | 2,290  | 3,370   | 2,760  | 1,370  | 4,800  | 3,470  | 1,210  | 2,770   | 5,510   |
| 11    | 1,390  | 1,900  | 2,810   | 2,170  | 3,520   | 2,630  | 1,400  | 3,100  | 3,040  | 1,070  | 2,060   | 5,210   |
| 12    | 1,430  | 1,830  | 3,230   | 2,110  | 3,400   | 2,490  | 2,280  | 2,140  | 2,710  | 989    | 1,560   | 5,230   |
| 13    | 1,450  | 1,710  | 3,630   | 2,090  | 3,560   | 2,350  | 2,340  | 1,770  | 2,220  | 1,380  | 1,410   | 5,400   |
| 14    | 1,410  | 1,590  | 4,710   | 2,010  | 3,950   | 2,200  | 2,860  | 1,580  | 1,860  | 1,500  | 2,310   | 5,600   |
| 15    | 1,390  | 1,510  | 5,330   | 1,960  | 4,400   | 2,020  | 3,160  | 1,430  | 1,690  | 1,220  | 4,160   | 5,730   |
| 16    | 1,410  | 1,420  | 6,080   | 1,940  | 4,940   | 1,950  | 3,540  | 1,350  | 1,450  | 1,140  | 4,650   | 5,510   |
| 17    | 1,380  | 1,340  | 6,560   | 1,890  | 5,390   | 1,990  | 3,700  | 1,250  | 1,480  | 1,050  | 5,130   | 4,870   |
| 18    | 1,400  | 1,280  | 6,820   | 1,830  | 5,720   | 2,420  | 3,450  | 1,110  | 1,730  | 895    | 5,490   | 3,850   |
| 19    | 1,390  | 1,290  | 7,050   | 1,780  | 5,900   | 3,140  | 3,110  | 1,000  | 1,660  | 808    | 5,830   | 3,410   |
| 20    | 1,300  | 1,580  | 7,190   | 1,770  | 5,900   | 3,600  | 2,830  | 927    | 1,690  | 731    | 6,190   | 3,310   |
| 21    | 1,290  | 2,070  | 7,140   | 1,900  | 5,750   | 3,720  | 2,560  | 894    | 1,460  | 690    | 6,580   | 3,740   |
| 22    | 1,440  | 2,770  | 6,940   | 2,010  | 5,440   | 3,620  | 2,340  | 854    | 1,200  | 760    | 7,060   | 4,150   |
| 23    | 1,300  | 3,190  | 6,690   | 1,940  | 4,990   | 3,300  | 2,170  | 859    | 1,060  | 759    | 7,510   | 4,350   |
| 24    | 1,100  | 3,260  | 6,490   | 1,820  | 4,360   | 2,830  | 2,040  | 892    | 1,330  | 735    | 7,720   | 4,210   |
| 25    | 995    | 2,890  | 6,250   | 1,750  | 3,730   | 2,420  | 1,900  | 1,090  | 2,320  | 699    | 7,460   | 3,760   |
| 26    | 946    | 2,440  | 5,990   | 1,750  | 3,320   | 2,120  | 1,650  | 1,220  | 2,150  | 1,030  | 6,700   | 3,170   |
| 27    | 925    | 2,090  | 5,640   | 1,750  | 3,320   | 1,930  | 1,690  | 1,200  | 1,960  | 1,090  | 5,280   | 2,680   |
| 28    | 965    | 1,860  | 4,550   | 1,790  | 3,500   | 1,840  | 1,750  | 1,160  | 3,020  | 880    | 3,720   | 2,420   |
| 29    | 2,430  | 1,700  | 3,610   | 1,860  | 3,710   | 1,760  | 1,670  | 1,040  | 3,340  | 823    | 2,370   | 2,250   |
| 30    | 3,490  | 1,590  | 3,170   | 1,930  | ---     | 1,680  | 1,790  | 954    | 3,540  | 885    | 1,870   | 2,140   |
| 31    | 3,880  | ---    | 2,830   | 2,010  | ---     | 1,630  | ---    | 934    | ---    | 736    | 1,890   | ---     |
| TOTAL | 50,381 | 70,310 | 130,130 | 64,270 | 111,200 | 91,330 | 64,970 | 73,204 | 62,661 | 42,070 | 116,673 | 135,640 |
| MEAN  | 1,625  | 2,344  | 4,198   | 2,073  | 3,834   | 2,946  | 2,166  | 2,361  | 2,089  | 1,357  | 3,764   | 4,521   |
| MAX   | 3,880  | 4,710  | 7,190   | 2,630  | 5,900   | 4,930  | 3,700  | 6,690  | 4,330  | 3,330  | 7,720   | 6,860   |
| MIN   | 925    | 1,280  | 1,450   | 1,750  | 2,120   | 1,630  | 1,370  | 854    | 895    | 690    | 883     | 2,140   |

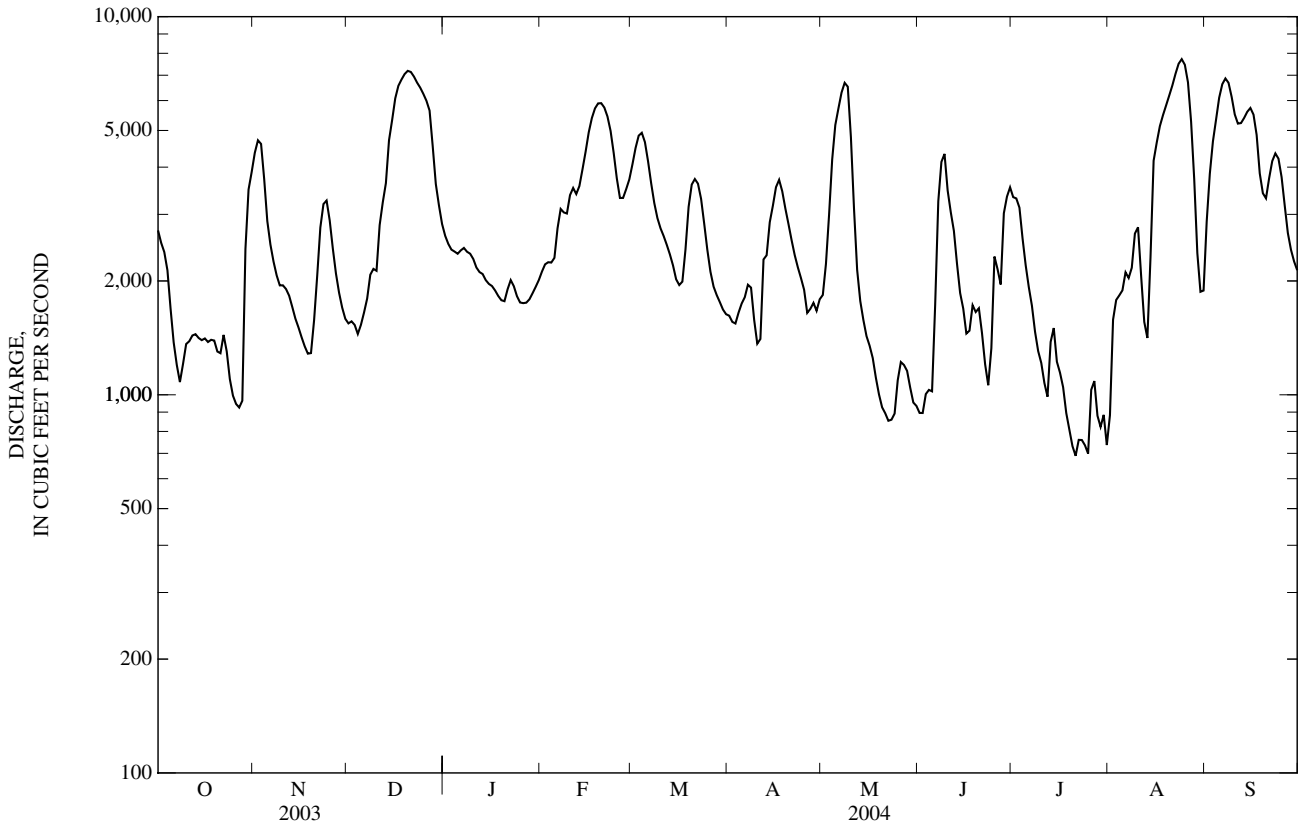
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004,\* BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 1,979  | 1,736  | 2,408  | 3,539  | 4,554  | 5,561  | 4,551  | 2,320  | 1,889  | 1,657  | 1,980  | 2,625  |
| MAX  | 14,280 | 5,643  | 5,097  | 7,560  | 12,600 | 11,410 | 9,582  | 8,773  | 6,062  | 5,223  | 5,565  | 16,430 |
| (WY) | (2000) | (1996) | (1990) | (1993) | (1998) | (1998) | (1989) | (1989) | (1995) | (1989) | (2003) | (1999) |
| MIN  | 366    | 430    | 760    | 1,181  | 1,571  | 1,673  | 878    | 563    | 400    | 468    | 314    | 357    |
| (WY) | (1984) | (1988) | (1988) | (1986) | (2001) | (1988) | (1986) | (1986) | (2002) | (1987) | (1983) | (1985) |

02089500 NEUSE RIVER AT KINSTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004* |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--------------|
| ANNUAL TOTAL             | 1,647,751              |        | 1,012,839           |        |                          |              |
| ANNUAL MEAN              | 4,514                  |        | 2,767               |        | 2,842                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 4,583                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,204                    | 1988         |
| HIGHEST DAILY MEAN       | 12,000                 | Apr 18 | 7,720               | Aug 24 | 35,800                   | Sep 23, 1999 |
| LOWEST DAILY MEAN        | 925                    | Oct 27 | 690                 | Jul 21 | 200                      | Sep 20, 1985 |
| ANNUAL SEVEN-DAY MINIMUM | 1,100                  | Oct 22 | 740                 | Jul 19 | 214                      | Sep 16, 1985 |
| MAXIMUM PEAK FLOW        |                        |        | 7,780               | Aug 24 | 36,300                   | Sep 22, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 14.95               | Aug 24 | 27.71                    | Sep 22, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 677*                | Jul 21 | 196                      | Sep 20, 1985 |
| 10 PERCENT EXCEEDS       | 8,150                  |        | 5,510               |        | 7,150                    |              |
| 50 PERCENT EXCEEDS       | 4,190                  |        | 2,180               |        | 1,600                    |              |
| 90 PERCENT EXCEEDS       | 1,400                  |        | 1,080               |        | 507                      |              |

\* Regulated period only (1983-2004). See REMARKS.



## 02089500 NEUSE RIVER AT KINSTON, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1955-56, 1959-67, 1973 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1973 to September 1986, March 2002 to July 2004.

WATER TEMPERATURE: October 1949 to September 1950, January 1955 to September 1956, July 1973 to September 1986, March 2002 to May 2003, January to August 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from March 2002 to August 2004. Water-quality monitor from October 1981 to September 1986.

REMARKS.--Station operated as part of NAWQA Program from March 1993 to current year. Station also operated as part of NASQAN network from October 1974 to September 1994. Daily records of specific conductance for January 1955 to September 1956 are available in the files of the District Office in Raleigh, NC. The water temperature data from June 17 to September 30, 2003 was revised.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                        | MAXIMUM RECORDED                | MINIMUM RECORDED                                |
|------------------------------------|---------------------------------|---|
| SPECIFIC CONDUCTANCE, microsiemens | 248, August 17, 2002            | 43, March 28, 1975 (daily)                      |
| WATER TEMPERATURE, °C              | 36.0, July 13, 14, 19, 20, 1986 | 0.0, February 7, 1978, January 13, 1981 (daily) |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                        | MAXIMUM RECORDED | MINIMUM RECORDED |
|------------------------------------|------------------|------------------|
| SPECIFIC CONDUCTANCE, microsiemens | 199, February 3  | 77, December 19  |
| WATER TEMPERATURE, °C              | 32.0, July 21    | 2.7, January 28  |

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Medium code | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd, uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086) | Bicarbonate, wat flt incrm. titr., field, mg/L (00453) | Chloride, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00945) |
|-------|------|-------------|--------------------------------------|------------------------------------|--------------------------------|---|---|--|-----------------------------------|--|--|--------------------------------------|------------------------------------|
| OCT   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 22... | 1000 | 9           | 1,460                                | 750                                | 8.3                            | 89  | 7.1   | 127  | 17.9                              | 20   | 25   | 12.7                                 | 8.8                                |
| DEC   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 23... | 1000 | 9           | 6,710                                | 765                                | 16.6                           | 132   | 6.5   | 85   | 5.7                               | 12   | 15   | 9.01                                 | 7.5                                |
| FEB   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 18... | 1000 | 9           | 5,720                                | 765                                | 11.4                           | 91  | 6.7   | 94   | 5.8                               | 12   | 15   | 11.4                                 | 7.9                                |
| MAR   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 16... | 1000 | 9           | 1,940                                | 756                                | 9.5                            | 91  | 6.7   | 109  | 13.2                              | 20   | 24   | 13.8                                 | 9.3                                |
| APR   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 14... | 1100 | 9           | 2,650                                | 754                                | 7.8                            | 82  | 6.7   | 113  | 17.4                              | 13   | 16   | 12.9                                 | 8.4                                |
| MAY   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 13... | 1130 | 9           | 1,760                                | 769                                | 6.3                            | 74  | 6.2   | 120  | 24.0                              | 20   | 24   | 12.9                                 | 8.8                                |
| JUN   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 09... | 1230 | 9           | 4,390                                | 767                                | 5.4                            | 65  | 5.7   | 77   | 24.7                              | 10   | 12   | 8.10                                 | 6.9                                |
| JUL   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 14... | 1100 | 9           | 1,530                                | 754                                | 5.2                            | 69  | 6.9   | 137  | 29.8                              | 20   | 24   | 16.1                                 | 10.5                               |
| AUG   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 18... | 1200 | 9           | 5,490                                | 762                                | 5.8                            | 68  | 5.8   | 78   | 23.4                              | --   | --   | 7.43                                 | 7.3                                |
| SEP   |      |             |                                      |                                    |                                |   |   |  |                                   |  |  |                                      |                                    |
| 22... | 1200 | 9           | 4,160                                | 766                                | 6.2                            | 69  | 6.6   | 82   | 21.0                              | 16   | 19   | 8.49                                 | 4.7                                |







## 02089500 NEUSE RIVER AT KINSTON, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Para-<br>thion,<br>water,<br>fltrd,<br>ug/L<br>(39542) | Peb-<br>ulate,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82669) | Pendi-<br>meth-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82683) | Phorate<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82664) | Prome-<br>ton,<br>water,<br>fltrd,<br>ug/L<br>(04037) | Propy-<br>zamide,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82676) | Propa-<br>chlor,<br>water,<br>fltrd,<br>ug/L<br>(04024) | Pro-<br>panil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82679) | Propar-<br>gite,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82685) | Sima-<br>zine,<br>water,<br>fltrd,<br>ug/L<br>(04035) | Tebu-<br>thiuron<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82670) | Terba-<br>cil,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82665) | Terbu-<br>fos,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82675) |
|--------------|--|---|---|---|---|--|---|---|---|---|--|---|---|
| OCT<br>22... | <.010  | <.004   | <.022   | <.011   | .02   | <.004  | <.010   | <.011   | <.02  | .010  | <.02   | <.034   | <.02  |
| DEC<br>23... | <.010  | <.004   | <.022   | <.011   | .01   | <.004  | <.025   | <.011   | <.02  | .129  | <.02   | <.034   | <.02  |
| FEB<br>18... | <.010  | <.004   | <.022   | <.011   | .01   | <.004  | <.025   | <.011   | <.02  | .246  | <.02   | <.034   | <.02  |
| MAR<br>16... | <.010  | <.004   | <.022   | <.011   | .01   | <.004  | <.025   | <.011   | <.02  | .138  | <.02   | <.034   | <.02  |
| APR<br>14... | <.010  | <.004   | E.014   | <.011   | .01   | <.004  | <.025   | <.011   | <.02  | .144  | E.01   | <.034   | <.02  |
| MAY<br>13... | <.010  | <.004   | <.022   | <.011   | .02   | <.004  | <.025   | <.011   | <.02  | .060  | E.01   | <.034   | <.02  |
| JUN<br>09... | <.010  | <.004   | <.022   | <.011   | .03   | <.004  | <.025   | <.011   | <.02  | .052  | E.01   | <.034   | <.02  |
| JUL<br>14... | --   | --  | --  | --  | --  | --   | --  | --  | --  | --  | --   | --  | --  |
| AUG<br>18... | <.010  | <.004   | <.022   | <.011   | .03   | <.004  | <.025   | <.011   | <.02  | .026  | <.02   | <.034   | <.02  |
| SEP<br>22... | --   | --  | --  | --  | --  | --   | --  | --  | --  | --  | --   | --  | --  |

| Date         | Thio-<br>bencarb<br>water<br>fltrd<br>0.7u GF<br>ug/L<br>(82681) | Tri-<br>allate,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82678) | Tri-<br>flur-<br>alin,<br>water,<br>fltrd<br>0.7u GF<br>ug/L<br>(82661) | Suspnd.<br>sedi-<br>ment,<br>sieve<br>diametr<br>percent<br><.063mm<br>(70331) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) | Sus-<br>pended<br>sedi-<br>ment<br>dis-<br>charge,<br>tons/d<br>(80155) |
|--------------|--|--|---|--|--|---|
| OCT<br>22... | <.005  | <.002  | <.009   | 98   | 15   | 59  |
| DEC<br>23... | <.010  | <.002  | <.009   | 91   | 14   | 254   |
| FEB<br>18... | <.010  | <.002  | <.009   | 67   | 23   | 355   |
| MAR<br>16... | <.010  | <.002  | <.009   | 95   | 20   | 105   |
| APR<br>14... | <.010  | <.002  | <.009   | 82   | 62   | 444   |
| MAY<br>13... | <.010  | <.002  | <.009   | 93   | 32   | 152   |
| JUN<br>09... | <.010  | <.002  | <.009   | 80   | 29   | 344   |
| JUL<br>14... | --   | --   | --  | 95   | 28   | 116   |
| AUG<br>18... | <.010  | <.002  | <.009   | 92   | 31   | 460   |
| SEP<br>22... | --   | --   | --  | 99   | 29   | 326   |

Remark codes used in this table:

< -- Less than  
E -- Estimated value

Medium codes used in this table:

9 -- Surface water

## 02089500 NEUSE RIVER AT KINSTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 100      | 96  | 98   | 113      | 99  | 106  | 129      | 124 | 126  | 106     | 103 | 104  |
| 2     | 101      | 99  | 100  | 99       | 91  | 94   | 130      | 126 | 128  | 105     | 103 | 104  |
| 3     | 103      | 100 | 101  | ---      | --- | ---  | ---      | --- | ---  | 106     | 103 | 104  |
| 4     | 104      | 102 | 103  | ---      | --- | ---  | ---      | --- | ---  | 107     | 104 | 106  |
| 5     | ---      | --- | ---  | 104      | 99  | 102  | 127      | 123 | 125  | 110     | 105 | 107  |
| 6     | ---      | --- | ---  | 109      | 103 | 106  | 125      | 121 | 123  | ---     | --- | ---  |
| 7     | ---      | --- | ---  | 113      | 108 | 111  | 123      | 119 | 121  | ---     | --- | ---  |
| 8     | ---      | --- | ---  | 121      | 113 | 118  | 124      | 120 | 122  | ---     | --- | ---  |
| 9     | ---      | --- | ---  | 122      | 117 | 119  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | ---      | --- | ---  | 127      | 121 | 124  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 130      | 125 | 128  | 131      | 127 | 129  | 106      | 102 | 104  | ---     | --- | ---  |
| 12    | 136      | 130 | 134  | 133      | 126 | 130  | 106      | 93  | 98   | ---     | --- | ---  |
| 13    | 141      | 135 | 138  | 129      | 126 | 128  | 105      | 98  | 102  | 120     | 118 | 119  |
| 14    | 143      | 140 | 142  | 131      | 127 | 129  | 102      | 83  | 92   | 122     | 119 | 120  |
| 15    | 141      | 135 | 137  | ---      | --- | ---  | 84       | 79  | 81   | 139     | 122 | 130  |
| 16    | 136      | 133 | 134  | ---      | --- | ---  | ---      | --- | ---  | 139     | 132 | 135  |
| 17    | 133      | 130 | 131  | ---      | --- | ---  | ---      | --- | ---  | 133     | 127 | 129  |
| 18    | 134      | 129 | 131  | 140      | 137 | 138  | ---      | --- | ---  | 128     | 124 | 125  |
| 19    | 137      | 133 | 135  | 140      | 133 | 138  | 78       | 77  | 78   | 126     | 123 | 125  |
| 20    | 139      | 135 | 137  | 138      | 135 | 137  | 81       | 78  | 79   | 126     | 124 | 125  |
| 21    | 135      | 129 | 131  | 135      | 127 | 131  | 82       | 81  | 81   | 127     | 124 | 125  |
| 22    | 137      | 130 | 133  | 132      | 128 | 130  | 82       | 81  | 82   | 128     | 124 | 125  |
| 23    | 144      | 137 | 141  | 129      | 116 | 123  | ---      | --- | ---  | 130     | 124 | 127  |
| 24    | 142      | 123 | 131  | 116      | 105 | 109  | ---      | --- | ---  | 128     | 122 | 124  |
| 25    | 128      | 122 | 124  | 109      | 107 | 108  | ---      | --- | ---  | 125     | 121 | 123  |
| 26    | 133      | 128 | 131  | 115      | 109 | 112  | ---      | --- | ---  | 131     | 123 | 124  |
| 27    | 147      | 133 | 142  | 119      | 114 | 116  | ---      | --- | ---  | 130     | 123 | 125  |
| 28    | 148      | 132 | 143  | 121      | 119 | 120  | ---      | --- | ---  | 132     | 125 | 130  |
| 29    | 140      | 109 | 119  | 124      | 119 | 122  | ---      | --- | ---  | 136     | 132 | 134  |
| 30    | 114      | 102 | 110  | 127      | 122 | 125  | ---      | --- | ---  | 135     | 127 | 130  |
| 31    | 113      | 102 | 109  | ---      | --- | ---  | ---      | --- | ---  | 129     | 125 | 126  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 137      | 129 | 131  | 108      | 105 | 107  | 129      | 127 | 128  | 141     | 131 | 137  |
| 2     | 191      | 136 | 161  | 145      | 105 | 125  | 129      | 124 | 127  | ---     | --- | ---  |
| 3     | 199      | 178 | 188  | 142      | 113 | 125  | 128      | 123 | 126  | ---     | --- | ---  |
| 4     | 181      | 158 | 171  | 113      | 106 | 108  | 128      | 125 | 127  | ---     | --- | ---  |
| 5     | 158      | 143 | 152  | 107      | 105 | 106  | 132      | 128 | 130  | 102     | 94  | 99   |
| 6     | 143      | 131 | 136  | 110      | 107 | 108  | 132      | 129 | 130  | 94      | 86  | 90   |
| 7     | 141      | 131 | 136  | 111      | 110 | 110  | 135      | 129 | 132  | 86      | 84  | 85   |
| 8     | 135      | 122 | 126  | 115      | 111 | 113  | 131      | 126 | 129  | 87      | 84  | 85   |
| 9     | 122      | 119 | 121  | 116      | 114 | 115  | 128      | 116 | 122  | 91      | 86  | 89   |
| 10    | 121      | 118 | 119  | 118      | 115 | 117  | 123      | 118 | 120  | 100     | 91  | 96   |
| 11    | 119      | 113 | 115  | 121      | 117 | 120  | 127      | 118 | 124  | 110     | 100 | 105  |
| 12    | 114      | 111 | 112  | 123      | 120 | 122  | 127      | 106 | 117  | 118     | 110 | 113  |
| 13    | 119      | 112 | 116  | 124      | 122 | 123  | 124      | 110 | 119  | 121     | 118 | 120  |
| 14    | 112      | 102 | 107  | 126      | 122 | 124  | 125      | 115 | 120  | 126     | 121 | 124  |
| 15    | 102      | 100 | 101  | 126      | 124 | 125  | 116      | 111 | 113  | 131     | 124 | 128  |
| 16    | 103      | 97  | 99   | 125      | 120 | 122  | 118      | 113 | 116  | ---     | --- | ---  |
| 17    | 97       | 95  | 96   | 127      | 122 | 125  | 113      | 106 | 108  | ---     | --- | ---  |
| 18    | 98       | 95  | 97   | 128      | 126 | 127  | 107      | 104 | 105  | ---     | --- | ---  |
| 19    | 102      | 96  | 98   | 130      | 122 | 126  | 118      | 107 | 112  | 146     | 136 | 141  |
| 20    | 106      | 100 | 104  | 122      | 117 | 119  | 118      | 114 | 116  | 144     | 139 | 142  |
| 21    | 110      | 104 | 106  | 117      | 114 | 114  | 118      | 116 | 117  | 153     | 141 | 145  |
| 22    | 111      | 106 | 108  | 115      | 113 | 114  | 120      | 118 | 119  | 156     | 151 | 153  |
| 23    | 106      | 104 | 105  | 113      | 110 | 111  | 122      | 119 | 121  | 160     | 154 | 156  |
| 24    | 106      | 104 | 105  | 115      | 113 | 114  | 129      | 121 | 126  | 168     | 160 | 163  |
| 25    | 116      | 106 | 110  | 120      | 115 | 118  | 129      | 127 | 128  | 168     | 151 | 160  |
| 26    | 115      | 112 | 113  | 122      | 118 | 120  | 131      | 121 | 129  | 158     | 150 | 154  |
| 27    | 115      | 111 | 113  | 125      | 121 | 122  | 127      | 120 | 125  | 159     | 139 | 151  |
| 28    | 112      | 108 | 111  | 126      | 124 | 125  | 127      | 122 | 124  | 148     | 129 | 137  |
| 29    | 109      | 108 | 108  | 127      | 125 | 126  | 135      | 127 | 131  | 144     | 133 | 140  |
| 30    | ---      | --- | ---  | 127      | 123 | 126  | 141      | 135 | 139  | 145     | 131 | 139  |
| 31    | ---      | --- | ---  | 128      | 126 | 127  | ---      | --- | ---  | 137     | 132 | 134  |
| MONTH | 199      | 95  | 119  | 145      | 105 | 119  | 141      | 104 | 123  | ---     | --- | ---  |



02089500 NEUSE RIVER AT KINSTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|-----|------|-------|------|------|-------|------|------|------|------|------|
|       |          |     |      |       |      |      |       |      |      |      |      |      |
| 1     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 2     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 3     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 4     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 5     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 6     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 7     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 8     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 9     | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 10    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 11    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 12    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 13    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.0  | 4.1  | 4.6  |
| 14    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.3  | 4.5  | 4.9  |
| 15    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.9  | 5.0  | 5.3  |
| 16    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.7  | 5.0  | 5.3  |
| 17    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.6  | 4.8  | 5.2  |
| 18    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 7.0  | 5.4  | 6.2  |
| 19    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 7.4  | 6.6  | 7.1  |
| 20    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 6.6  | 5.8  | 6.2  |
| 21    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.8  | 5.1  | 5.4  |
| 22    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.6  | 4.7  | 5.2  |
| 23    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.6  | 4.9  | 5.3  |
| 24    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.9  | 4.9  | 5.4  |
| 25    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 5.4  | 3.9  | 4.7  |
| 26    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 3.9  | 3.2  | 3.6  |
| 27    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 3.2  | 3.0  | 3.1  |
| 28    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 3.6  | 2.7  | 3.1  |
| 29    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 3.9  | 2.8  | 3.3  |
| 30    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 4.2  | 3.3  | 3.7  |
| 31    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 4.2  | 3.4  | 3.8  |
| MONTH | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
|       | FEBRUARY |     |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
| 1     | 4.0      | 3.3 | 3.6  | 7.6   | 6.3  | 6.9  | 16.4  | 15.5 | 16.0 | 21.2 | 20.4 | 20.8 |
| 2     | 4.2      | 3.1 | 3.7  | 9.9   | 7.6  | 8.7  | 15.5  | 14.6 | 15.1 | ---  | ---  | ---  |
| 3     | 5.1      | 4.2 | 4.6  | 11.6  | 9.8  | 10.6 | 15.1  | 13.9 | 14.6 | ---  | ---  | ---  |
| 4     | 5.8      | 4.7 | 5.3  | 13.6  | 11.6 | 12.4 | 15.8  | 14.4 | 14.9 | ---  | ---  | ---  |
| 5     | 6.0      | 5.3 | 5.6  | 15.3  | 13.6 | 14.4 | 15.3  | 13.9 | 14.6 | 19.1 | 17.8 | 18.5 |
| 6     | 7.6      | 5.7 | 6.4  | 16.2  | 15.3 | 15.8 | 15.2  | 13.6 | 14.4 | 19.7 | 18.3 | 19.0 |
| 7     | 8.9      | 7.6 | 8.4  | 16.9  | 16.0 | 16.4 | 16.0  | 14.3 | 15.1 | 20.4 | 18.9 | 19.6 |
| 8     | 8.7      | 8.1 | 8.4  | 16.6  | 15.5 | 16.0 | 16.9  | 15.4 | 16.2 | 21.3 | 19.9 | 20.5 |
| 9     | 8.2      | 7.8 | 8.0  | 15.5  | 14.6 | 15.0 | 18.4  | 16.3 | 17.3 | 22.4 | 20.8 | 21.5 |
| 10    | 8.8      | 8.2 | 8.5  | 14.6  | 13.2 | 13.9 | 18.2  | 17.2 | 17.7 | 23.5 | 22.1 | 22.7 |
| 11    | 8.9      | 8.3 | 8.6  | 13.4  | 12.4 | 13.0 | 18.8  | 17.6 | 18.1 | 24.6 | 23.1 | 23.8 |
| 12    | 8.6      | 7.6 | 8.2  | 13.4  | 12.3 | 12.8 | 18.1  | 16.8 | 17.3 | 24.8 | 23.9 | 24.3 |
| 13    | 8.2      | 7.3 | 7.7  | 13.2  | 12.2 | 12.7 | 18.0  | 16.8 | 17.3 | 24.8 | 23.8 | 24.2 |
| 14    | 7.8      | 7.3 | 7.5  | 12.8  | 12.0 | 12.4 | 17.8  | 16.7 | 17.4 | 25.4 | 23.6 | 24.4 |
| 15    | 7.5      | 7.0 | 7.3  | 12.9  | 12.3 | 12.6 | 16.9  | 15.8 | 16.4 | 26.1 | 24.3 | 25.1 |
| 16    | 7.1      | 6.3 | 6.7  | 13.7  | 12.9 | 13.3 | 16.8  | 15.6 | 16.2 | ---  | ---  | ---  |
| 17    | 6.7      | 6.0 | 6.3  | 13.6  | 12.5 | 13.1 | 17.4  | 16.0 | 16.7 | ---  | ---  | ---  |
| 18    | 6.8      | 5.7 | 6.2  | 12.6  | 12.0 | 12.4 | 18.6  | 17.1 | 17.8 | ---  | ---  | ---  |
| 19    | 7.0      | 5.8 | 6.4  | 13.6  | 12.3 | 12.9 | 19.8  | 18.3 | 19.0 | 27.1 | 25.0 | 26.0 |
| 20    | 7.7      | 6.3 | 6.9  | 13.6  | 12.5 | 13.1 | 20.7  | 19.2 | 19.9 | 27.6 | 25.3 | 26.4 |
| 21    | 8.9      | 7.4 | 8.1  | 13.8  | 13.2 | 13.4 | 21.5  | 20.3 | 20.9 | 28.1 | 25.9 | 27.0 |
| 22    | 9.2      | 8.1 | 8.6  | 13.4  | 12.5 | 12.9 | 22.2  | 20.8 | 21.5 | 29.3 | 26.8 | 27.9 |
| 23    | 9.3      | 8.5 | 8.9  | 13.2  | 12.2 | 12.7 | 23.0  | 21.4 | 22.1 | 29.2 | 27.3 | 28.2 |
| 24    | 9.3      | 9.2 | 9.2  | 13.4  | 12.1 | 12.7 | 23.2  | 22.2 | 22.6 | 28.6 | 26.9 | 27.7 |
| 25    | 9.6      | 8.8 | 9.2  | 14.4  | 12.7 | 13.5 | 22.7  | 21.9 | 22.3 | 28.8 | 26.7 | 27.7 |
| 26    | 9.2      | 7.4 | 8.3  | 15.1  | 13.6 | 14.4 | 23.3  | 21.8 | 22.4 | 29.5 | 27.5 | 28.5 |
| 27    | 7.4      | 6.3 | 6.8  | 16.1  | 14.4 | 15.4 | 22.5  | 21.5 | 22.0 | 29.8 | 27.9 | 28.8 |
| 28    | 6.9      | 5.8 | 6.4  | 17.2  | 16.0 | 16.5 | 21.7  | 20.3 | 21.0 | 29.6 | 27.9 | 28.7 |
| 29    | 7.2      | 6.1 | 6.7  | 17.1  | 15.7 | 16.3 | 21.5  | 19.9 | 20.7 | 29.5 | 27.5 | 28.4 |
| 30    | ---      | --- | ---  | 16.7  | 15.7 | 16.2 | 21.5  | 20.3 | 20.9 | 28.2 | 26.3 | 27.0 |
| 31    | ---      | --- | ---  | 16.8  | 15.8 | 16.2 | ---   | ---  | ---  | 26.4 | 25.5 | 26.0 |
| MONTH | 9.6      | 3.1 | 7.1  | 17.2  | 6.3  | 13.5 | 23.3  | 13.6 | 18.3 | ---  | ---  | ---  |

## NEUSE RIVER BASIN

02089500 NEUSE RIVER AT KINSTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 27.7 | 25.3 | 26.4 | 26.7 | 25.6 | 26.1 | 29.5 | 28.0 | 28.8 | --- | --- | ---  |
| 2     | 28.4 | 25.8 | 27.0 | 26.6 | 25.9 | 26.3 | 28.8 | 27.8 | 28.3 | --- | --- | ---  |
| 3     | 29.2 | 26.6 | 27.8 | 27.0 | 25.9 | 26.4 | 27.8 | 27.0 | 27.4 | --- | --- | ---  |
| 4     | ---  | ---  | ---  | 27.6 | 26.4 | 26.9 | 28.7 | 27.0 | 27.8 | --- | --- | ---  |
| 5     | ---  | ---  | ---  | 28.6 | 26.6 | 27.5 | 29.3 | 27.9 | 28.5 | --- | --- | ---  |
| 6     | ---  | ---  | ---  | 29.8 | 28.0 | 28.8 | 28.5 | 27.2 | 27.9 | --- | --- | ---  |
| 7     | ---  | ---  | ---  | 30.6 | 28.9 | 29.6 | 27.2 | 25.8 | 26.4 | --- | --- | ---  |
| 8     | ---  | ---  | ---  | 30.9 | 29.2 | 30.0 | 26.4 | 25.2 | 25.9 | --- | --- | ---  |
| 9     | ---  | ---  | ---  | 31.1 | 29.0 | 30.0 | 25.8 | 24.9 | 25.2 | --- | --- | ---  |
| 10    | ---  | ---  | ---  | 31.4 | 29.1 | 30.2 | 25.4 | 24.4 | 24.9 | --- | --- | ---  |
| 11    | ---  | ---  | ---  | 30.7 | 29.4 | 30.1 | 26.1 | 24.8 | 25.3 | --- | --- | ---  |
| 12    | ---  | ---  | ---  | 30.7 | 29.0 | 29.8 | 26.3 | 25.4 | 25.8 | --- | --- | ---  |
| 13    | ---  | ---  | ---  | 31.0 | 29.1 | 30.0 | 25.6 | 24.8 | 25.2 | --- | --- | ---  |
| 14    | ---  | ---  | ---  | 30.7 | 29.2 | 30.0 | 24.8 | 22.5 | 24.0 | --- | --- | ---  |
| 15    | 27.1 | 25.3 | 26.1 | 30.9 | 29.4 | 30.1 | 23.2 | 22.3 | 22.5 | --- | --- | ---  |
| 16    | 27.0 | 26.3 | 26.6 | 30.6 | 28.7 | 29.6 | 23.1 | 22.3 | 22.6 | --- | --- | ---  |
| 17    | 26.7 | 25.7 | 26.1 | 29.9 | 28.4 | 29.0 | 23.8 | 22.7 | 23.2 | --- | --- | ---  |
| 18    | 27.8 | 26.2 | 26.8 | 28.7 | 27.8 | 28.3 | 23.9 | 23.1 | 23.5 | --- | --- | ---  |
| 19    | 28.7 | 26.9 | 27.7 | 29.1 | 27.2 | 28.1 | 24.5 | 23.4 | 23.9 | --- | --- | ---  |
| 20    | 28.7 | 27.8 | 28.2 | 29.6 | 27.3 | 28.2 | 25.1 | 24.2 | 24.6 | --- | --- | ---  |
| 21    | 28.8 | 27.2 | 27.9 | 32.0 | 26.0 | 28.5 | 25.5 | 24.7 | 25.1 | --- | --- | ---  |
| 22    | 28.8 | 27.0 | 27.8 | 30.1 | 27.9 | 29.0 | 25.4 | 25.0 | 25.1 | --- | --- | ---  |
| 23    | 29.7 | 26.9 | 28.2 | 29.1 | 28.2 | 28.6 | 25.4 | 24.7 | 25.0 | --- | --- | ---  |
| 24    | 28.0 | 27.2 | 27.5 | 29.4 | 27.4 | 28.3 | 25.4 | 24.8 | 25.1 | --- | --- | ---  |
| 25    | 27.3 | 26.3 | 26.8 | 31.5 | 27.4 | 28.7 | 25.5 | 24.8 | 25.2 | --- | --- | ---  |
| 26    | 26.9 | 26.4 | 26.7 | 29.5 | 27.6 | 28.4 | 25.4 | 25.0 | 25.2 | --- | --- | ---  |
| 27    | 27.1 | 26.1 | 26.5 | 30.2 | 28.4 | 29.2 | 25.8 | 25.0 | 25.4 | --- | --- | ---  |
| 28    | 26.4 | 25.8 | 26.1 | 29.7 | 28.4 | 29.0 | 26.2 | 25.4 | 25.8 | --- | --- | ---  |
| 29    | 26.4 | 25.5 | 26.0 | 29.6 | 28.1 | 28.8 | 26.8 | 26.1 | 26.4 | --- | --- | ---  |
| 30    | 26.1 | 25.7 | 25.9 | 29.4 | 27.8 | 28.6 | 26.4 | 25.5 | 25.8 | --- | --- | ---  |
| 31    | ---  | ---  | ---  | 29.7 | 27.9 | 28.7 | 26.3 | 25.2 | 25.7 | --- | --- | ---  |
| MONTH | ---  | ---  | ---  | 32.0 | 25.6 | 28.7 | 29.5 | 22.3 | 25.5 | --- | --- | ---  |

02090380 CONTENTNEA CREEK NEAR LUCAMA, NC

LOCATION.--Lat 35°41'28", long 78°06'35", Wilson County, Hydrologic Unit 03020203, on right bank 250 ft upstream from bridge on State Highway 581, 1.0 mi downstream of Buckhorn Reservoir, 1.0 mi upstream from Buckhorn Branch, and 6.5 mi northwest of Lucama.

DRAINAGE AREA.--161 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1964 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 116.83 ft above NGVD of 1929 (levels by North Carolina Geodetic Survey). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Since September 1976, some regulation at low flow by Buckhorn Reservoir (station 02090370) 1 mi upstream. Maximum discharge for period of record, from rating curve extended above 6,000 ft<sup>3</sup>/s, on basis of flow over dam measurement of peak flow; maximum gage height from flood marks. Minimum discharge for period of record also occurred Sept. 10-14, 1976, due to regulation. Minimum discharge for current year also occurred May 31.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1     | 24    | 265   | 86    | 114   | 136   | 378   | 128   | 58    | 42    | 45    | 44    | 2,620  |
| 2     | 42    | 165   | 75    | 124   | 133   | 347   | 113   | 159   | 38    | 45    | 42    | 1,550  |
| 3     | 19    | 125   | 46    | 128   | 176   | 275   | 118   | 668   | 35    | 44    | 37    | 568    |
| 4     | 29    | 104   | 55    | 130   | 280   | 223   | 178   | 790   | 79    | 44    | 36    | 269    |
| 5     | 20    | 88    | 112   | 136   | 298   | 187   | 100   | 543   | 188   | 45    | 36    | 158    |
| 6     | 18    | 86    | 142   | 150   | 264   | 180   | 38    | 305   | 130   | 44    | 37    | 128    |
| 7     | 17    | 88    | 127   | 123   | 448   | 189   | 48    | 179   | 96    | 44    | 36    | 142    |
| 8     | 17    | 78    | 100   | 91    | 487   | 196   | 52    | 121   | 71    | 43    | 35    | 174    |
| 9     | 23    | 68    | 94    | 99    | 451   | 155   | 57    | 98    | 59    | 43    | 35    | 957    |
| 10    | 36    | 58    | 108   | 108   | 307   | 168   | 57    | 77    | 56    | 44    | 34    | 1,070  |
| 11    | 42    | 57    | 368   | 98    | 210   | 135   | 116   | 59    | 53    | 45    | 33    | 840    |
| 12    | 47    | 70    | 451   | 100   | 217   | 127   | 135   | 45    | 49    | 44    | 33    | 471    |
| 13    | 39    | 181   | 420   | 106   | 324   | 103   | 282   | 43    | 40    | 45    | 35    | 238    |
| 14    | 39    | 47    | 601   | 90    | 335   | 92    | 529   | 37    | 36    | 45    | 34    | 154    |
| 15    | 99    | 24    | 845   | 123   | 329   | 119   | 473   | 33    | 42    | 46    | 27    | 135    |
| 16    | 31    | 19    | 767   | 92    | 405   | 233   | 298   | 27    | 48    | 44    | 73    | 111    |
| 17    | 36    | 17    | 635   | 79    | 431   | 451   | 195   | 20    | 48    | 43    | 417   | 110    |
| 18    | 42    | 18    | 460   | 111   | 415   | 499   | 146   | 21    | 47    | 40    | 483   | 284    |
| 19    | 37    | 57    | 386   | 114   | 345   | 476   | 119   | 25    | 47    | 40    | 267   | 384    |
| 20    | 32    | 206   | 300   | 113   | 276   | 378   | 95    | 19    | 45    | 39    | 144   | 362    |
| 21    | 41    | 269   | 193   | 92    | 262   | 340   | 82    | 20    | 43    | 48    | 99    | 234    |
| 22    | 65    | 224   | 169   | 91    | 180   | 193   | 69    | 23    | 43    | 57    | 93    | 156    |
| 23    | 39    | 162   | 152   | 96    | 161   | 147   | 62    | 70    | 42    | 56    | 119   | 116    |
| 24    | 17    | 137   | 176   | 78    | 149   | 132   | 51    | 79    | 41    | 56    | 124   | 85     |
| 25    | 17    | 106   | 181   | 69    | 137   | 124   | 42    | 63    | 44    | 56    | 91    | 68     |
| 26    | 18    | 84    | 167   | 109   | 135   | 116   | 54    | 54    | 46    | 54    | 66    | 55     |
| 27    | 20    | 76    | 145   | 110   | 197   | 113   | 97    | 44    | 44    | 53    | 62    | 48     |
| 28    | 24    | 108   | 134   | 136   | 261   | 104   | 75    | 53    | 45    | 53    | 60    | 76     |
| 29    | 271   | 132   | 127   | 93    | 349   | 96    | 66    | 21    | 46    | 47    | 62    | 96     |
| 30    | 502   | 57    | 140   | 114   | ---   | 87    | 59    | 16    | 45    | 24    | 625   | 106    |
| 31    | 438   | ---   | 110   | 132   | ---   | 94    | ---   | 26    | ---   | 31    | 2,510 | ---    |
| TOTAL | 2,141 | 3,176 | 7,872 | 3,349 | 8,098 | 6,457 | 3,934 | 3,796 | 1,688 | 1,407 | 5,829 | 11,765 |
| MEAN  | 69.1  | 106   | 254   | 108   | 279   | 208   | 131   | 122   | 56.3  | 45.4  | 188   | 392    |
| MAX   | 502   | 269   | 845   | 150   | 487   | 499   | 529   | 790   | 188   | 57    | 2,510 | 2,620  |
| MIN   | 17    | 17    | 46    | 69    | 133   | 87    | 38    | 16    | 35    | 24    | 27    | 48     |
| CFSM  | 0.43  | 0.66  | 1.58  | 0.67  | 1.73  | 1.29  | 0.81  | 0.76  | 0.35  | 0.28  | 1.17  | 2.44   |
| IN.   | 0.49  | 0.73  | 1.82  | 0.77  | 1.87  | 1.49  | 0.91  | 0.88  | 0.39  | 0.33  | 1.35  | 2.72   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1964 - 2004, BY WATER YEAR (WY)

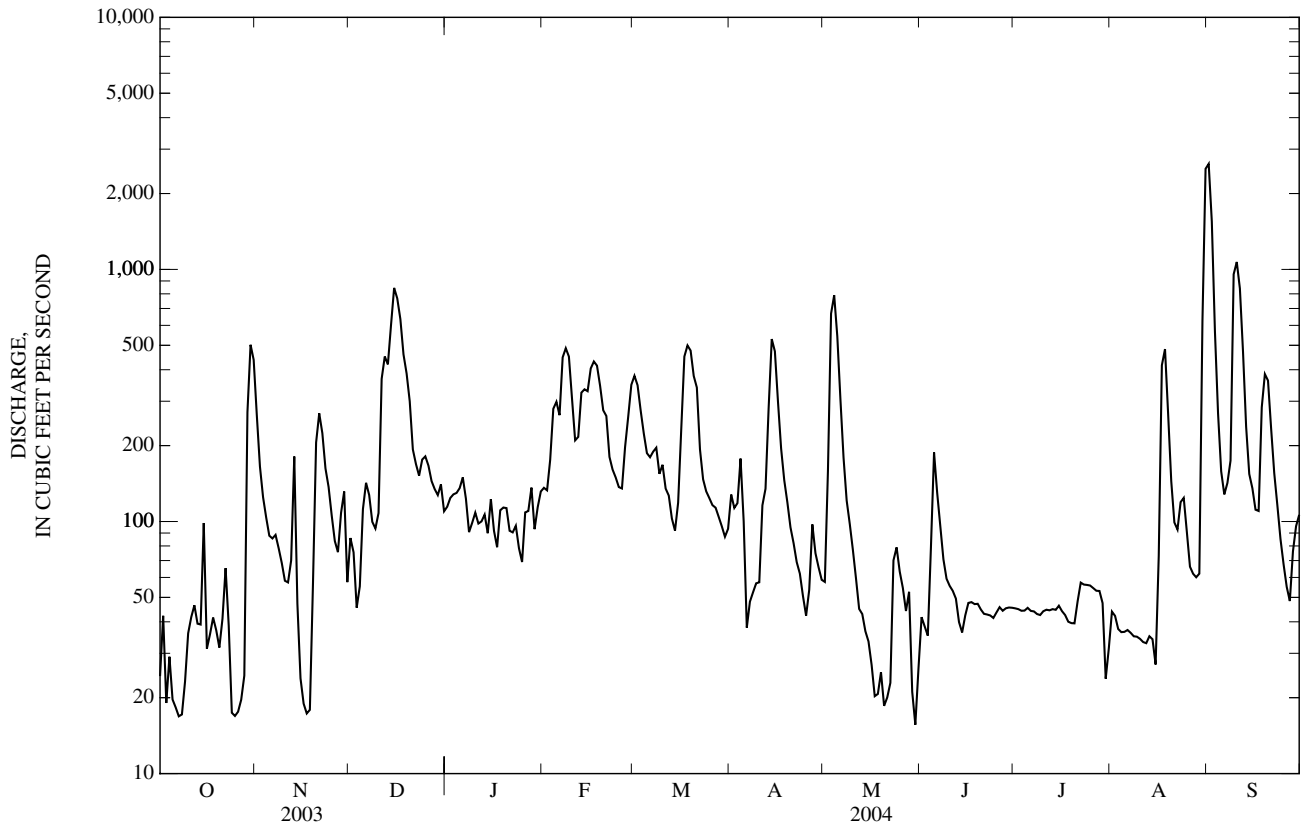
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 83.7   | 90.7   | 140    | 259    | 305    | 336    | 203    | 119    | 95.1   | 87.3   | 110    | 107    |
| MAX  | 644    | 304    | 404    | 690    | 633    | 803    | 701    | 537    | 359    | 624    | 512    | 1,326  |
| (WY) | (1965) | (1996) | (1973) | (1987) | (1998) | (1989) | (1987) | (1989) | (1965) | (1984) | (1986) | (1999) |
| MIN  | 2.05   | 2.76   | 21.2   | 39.4   | 87.5   | 67.7   | 24.7   | 8.08   | 10.4   | 3.96   | 3.18   | 2.52   |
| (WY) | (1981) | (1974) | (1966) | (1981) | (1986) | (1981) | (1986) | (1981) | (1970) | (1981) | (1980) | (1968) |



02090380 CONTENTNEA CREEK NEAR LUCAMA, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1964 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 99,960.9               |        | 59,512              |        | 160                     |              |
| ANNUAL MEAN              | 274                    |        | 163                 |        | 299                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 35.5                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1981                    |              |
| HIGHEST DAILY MEAN       | 2,370                  | Aug 12 | 2,620               | Sep 1  | 13,000                  | Sep 17, 1999 |
| LOWEST DAILY MEAN        | 4.2                    | May 15 | 16                  | May 30 | 0.04                    | Sep 9, 1976  |
| ANNUAL SEVEN-DAY MINIMUM | 20                     | Jul 23 | 20                  | Oct 3  | 0.04                    | Sep 8, 1976  |
| MAXIMUM PEAK FLOW        |                        |        | 3,010               | Sep 1  | 24000*                  | Sep 17, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 12.94               | Sep 1  | 24.82*                  | Sep 17, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 14*                 | May 30 | 0.04*                   | Sep 9, 1976  |
| ANNUAL RUNOFF (CFSM)     | 1.70                   |        | 1.01                |        | 0.992                   |              |
| ANNUAL RUNOFF (INCHES)   | 23.10                  |        | 13.75               |        | 13.48                   |              |
| 10 PERCENT EXCEEDS       | 652                    |        | 380                 |        | 386                     |              |
| 50 PERCENT EXCEEDS       | 141                    |        | 94                  |        | 70                      |              |
| 90 PERCENT EXCEEDS       | 32                     |        | 34                  |        | 11                      |              |

\* See REMARKS.



0209050750 HOMINY SWAMP AT FOREST HILL ROAD NEAR WILSON, NC

LOCATION.--Lat 35°44'32", long 77°57'07", Wilson County, Hydrologic Unit 03020203, at bridge culvert on Forest Hills Road (Secondary Road 1165), 2.5 mi northwest of Wilson.

DRAINAGE AREA.--1.77 mi<sup>2</sup>.

PERIOD OF RECORD.--September 2003 to September 2004.

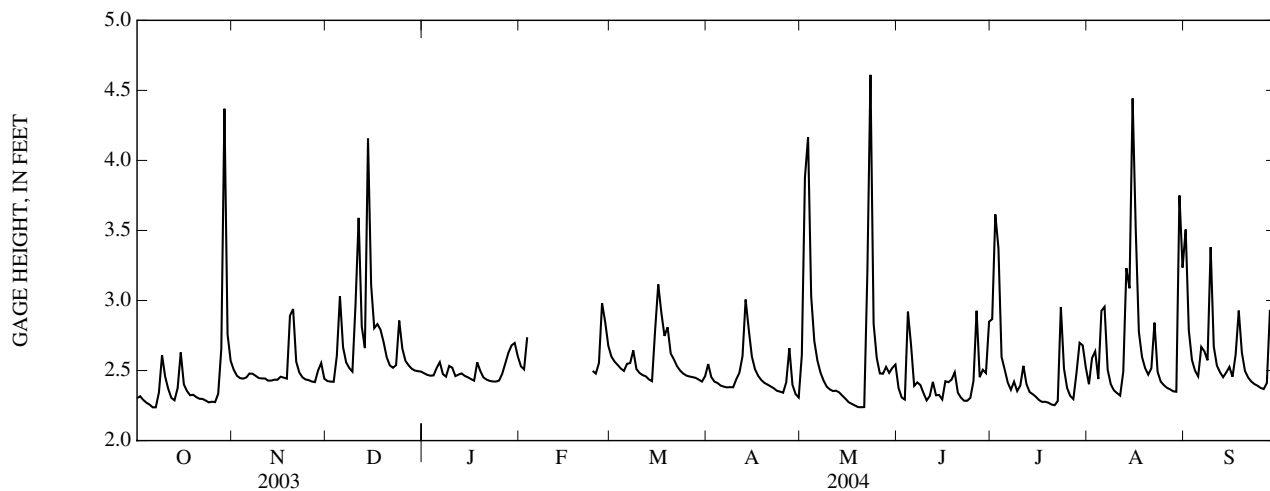
GAGE.--Water-stage recorder. Datum of gage is 121 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 10.55 ft, May 22, 2004; minimum, 2.22 ft, May 22, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum, 10.55 ft, May 22; minimum, 2.22 ft, May 22.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1    | 2.30 | 2.50 | 2.43 | 2.48 | 2.53 | 2.60 | 2.55 | 2.61 | 2.38 | 2.87 | 2.40 | 3.51 |
| 2    | 2.32 | 2.46 | 2.42 | 2.47 | 2.51 | 2.56 | 2.45 | 3.88 | 2.31 | 3.61 | 2.59 | 2.79 |
| 3    | 2.29 | 2.45 | 2.42 | 2.46 | 2.74 | 2.54 | 2.42 | 4.17 | 2.29 | 3.37 | 2.64 | 2.58 |
| 4    | 2.27 | 2.44 | 2.60 | 2.47 | ---  | 2.51 | 2.41 | 3.03 | 2.92 | 2.60 | 2.44 | 2.50 |
| 5    | 2.26 | 2.45 | 3.03 | 2.52 | ---  | 2.50 | 2.39 | 2.71 | 2.68 | 2.51 | 2.93 | 2.46 |
| 6    | 2.24 | 2.48 | 2.67 | 2.56 | ---  | 2.55 | 2.39 | 2.57 | 2.39 | 2.41 | 2.95 | 2.67 |
| 7    | 2.24 | 2.48 | 2.56 | 2.47 | ---  | 2.55 | 2.38 | 2.48 | 2.42 | 2.36 | 2.51 | 2.64 |
| 8    | 2.34 | 2.46 | 2.52 | 2.46 | ---  | 2.64 | 2.38 | 2.43 | 2.40 | 2.42 | 2.40 | 2.57 |
| 9    | 2.61 | 2.45 | 2.49 | 2.53 | ---  | 2.51 | 2.38 | 2.38 | 2.34 | 2.35 | 2.36 | 3.38 |
| 10   | 2.46 | 2.44 | 2.97 | 2.52 | ---  | 2.48 | 2.44 | 2.37 | 2.29 | 2.39 | 2.34 | 2.67 |
| 11   | 2.37 | 2.44 | 3.59 | 2.46 | ---  | 2.47 | 2.48 | 2.35 | 2.32 | 2.53 | 2.32 | 2.54 |
| 12   | 2.30 | 2.43 | 2.81 | 2.47 | ---  | 2.46 | 2.60 | 2.36 | 2.42 | 2.40 | 2.49 | 2.49 |
| 13   | 2.29 | 2.43 | 2.66 | 2.48 | ---  | 2.44 | 3.01 | 2.34 | 2.32 | 2.35 | 3.23 | 2.45 |
| 14   | 2.37 | 2.43 | 4.16 | 2.46 | ---  | 2.42 | 2.79 | 2.32 | 2.33 | 2.33 | 3.09 | 2.49 |
| 15   | 2.63 | 2.43 | 3.11 | 2.45 | ---  | 2.79 | 2.60 | 2.30 | 2.29 | 2.31 | 4.44 | 2.53 |
| 16   | 2.40 | 2.46 | 2.80 | 2.44 | ---  | 3.11 | 2.51 | 2.27 | 2.42 | 2.29 | 3.51 | 2.46 |
| 17   | 2.35 | 2.45 | 2.83 | 2.43 | ---  | 2.91 | 2.46 | 2.26 | 2.42 | 2.28 | 2.78 | 2.61 |
| 18   | 2.32 | 2.44 | 2.79 | 2.56 | ---  | 2.75 | 2.43 | 2.25 | 2.44 | 2.28 | 2.60 | 2.93 |
| 19   | 2.33 | 2.89 | 2.70 | 2.50 | ---  | 2.81 | 2.41 | 2.24 | 2.49 | 2.27 | 2.52 | 2.63 |
| 20   | 2.31 | 2.94 | 2.59 | 2.45 | ---  | 2.62 | 2.40 | 2.24 | 2.34 | 2.26 | 2.47 | 2.50 |
| 21   | 2.30 | 2.56 | 2.54 | 2.44 | ---  | 2.58 | 2.39 | 2.24 | 2.31 | 2.25 | 2.52 | 2.45 |
| 22   | 2.30 | 2.49 | 2.52 | 2.43 | ---  | 2.53 | 2.37 | 3.20 | 2.28 | 2.28 | 2.84 | 2.42 |
| 23   | 2.29 | 2.45 | 2.54 | 2.42 | ---  | 2.50 | 2.36 | 4.61 | 2.28 | 2.95 | 2.49 | 2.40 |
| 24   | 2.27 | 2.44 | 2.86 | 2.42 | 2.50 | 2.48 | 2.35 | 2.83 | 2.31 | 2.51 | 2.42 | 2.39 |
| 25   | 2.28 | 2.43 | 2.66 | 2.43 | 2.48 | 2.46 | 2.34 | 2.59 | 2.43 | 2.38 | 2.40 | 2.38 |
| 26   | 2.27 | 2.42 | 2.57 | 2.48 | 2.55 | 2.46 | 2.42 | 2.48 | 2.93 | 2.32 | 2.38 | 2.37 |
| 27   | 2.33 | 2.42 | 2.54 | 2.55 | 2.98 | 2.45 | 2.66 | 2.48 | 2.45 | 2.30 | 2.37 | 2.41 |
| 28   | 2.66 | 2.50 | 2.51 | 2.63 | 2.85 | 2.45 | 2.40 | 2.53 | 2.51 | 2.48 | 2.35 | 2.93 |
| 29   | 4.37 | 2.55 | 2.50 | 2.68 | 2.68 | 2.43 | 2.33 | 2.48 | 2.48 | 2.70 | 2.35 | 2.57 |
| 30   | 2.76 | 2.44 | 2.50 | 2.70 | ---  | 2.42 | 2.31 | 2.52 | 2.85 | 2.68 | 3.75 | 2.44 |
| 31   | 2.57 | ---  | 2.49 | 2.60 | ---  | 2.46 | ---  | 2.54 | ---  | 2.52 | 3.24 | ---  |
| MEAN | 2.43 | 2.49 | 2.72 | 2.50 | ---  | 2.56 | 2.46 | 2.65 | 2.43 | 2.50 | 2.71 | 2.61 |
| MAX  | 4.37 | 2.94 | 4.16 | 2.70 | ---  | 3.11 | 3.01 | 4.61 | 2.93 | 3.61 | 4.44 | 3.51 |
| MIN  | 2.24 | 2.42 | 2.42 | 2.42 | ---  | 2.42 | 2.31 | 2.24 | 2.28 | 2.25 | 2.32 | 2.37 |



## 02091000 NAHUNTA SWAMP NEAR SHINE, NC

LOCATION.--Lat 35°29'20", long 77°48'22", Greene County, Hydrologic Unit 03020203, on right bank 10 ft downstream of 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>.

## WATER-DISCHARGE 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 NGVD of 1929. Prior to Apr. 1, 1955, nonrecording gage at same site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. 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 Oct. 8, 1954, Aug. 11-15, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 36    | 107   | 53    | 74    | 68    | 125   | 49    | 47    | 21    | 70    | 14      | 173   |
| 2     | 33    | 80    | 50    | 71    | 62    | 107   | 48    | 179   | 19    | 47    | 17      | 200   |
| 3     | 31    | 66    | 47    | 71    | 87    | 94    | 45    | 560   | 18    | 66    | 15      | 65    |
| 4     | 29    | 59    | 49    | 69    | 104   | 85    | 41    | 490   | 29    | 39    | 14      | 48    |
| 5     | 30    | 57    | 107   | 70    | 81    | 79    | 40    | 223   | 258   | 36    | 12      | 41    |
| 6     | 28    | 59    | 97    | 69    | 72    | 75    | 37    | 117   | 225   | 30    | 14      | 82    |
| 7     | 25    | 95    | 76    | 63    | 78    | 72    | 36    | 82    | 93    | 24    | 16      | 109   |
| 8     | 29    | 80    | 66    | 59    | 68    | 68    | 36    | 63    | 58    | 25    | 13      | 109   |
| 9     | 74    | 65    | 60    | 62    | 60    | 61    | 35    | 53    | 46    | 64    | 11      | 120   |
| 10    | 71    | 57    | 81    | 68    | 60    | 59    | 34    | 47    | 41    | 29    | 9.8     | 106   |
| 11    | 58    | 55    | 567   | 62    | 61    | 56    | 43    | 41    | 35    | 254   | 8.9     | 63    |
| 12    | 49    | 53    | 287   | 62    | 115   | 55    | 56    | 38    | 35    | 58    | 8.6     | 51    |
| 13    | 43    | 49    | 147   | 65    | 178   | 53    | 118   | 43    | 34    | 38    | 19      | 42    |
| 14    | 44    | 43    | 503   | 64    | 122   | 51    | 144   | 37    | 30    | 27    | 130     | 37    |
| 15    | 63    | 40    | 730   | 61    | 138   | 51    | 77    | 34    | 27    | 21    | 347     | 39    |
| 16    | 53    | 39    | 428   | 57    | 202   | 61    | 55    | 30    | 26    | 17    | 308     | 39    |
| 17    | 44    | 39    | 286   | 55    | 161   | 65    | 46    | 28    | 37    | 14    | 119     | 38    |
| 18    | 40    | 39    | 249   | 61    | 159   | 61    | 41    | 26    | 30    | 13    | 65      | 81    |
| 19    | 38    | 66    | 182   | 68    | 127   | 62    | 37    | 26    | 30    | 13    | 49      | 71    |
| 20    | 35    | 256   | 143   | 61    | 106   | 56    | 34    | 28    | 24    | 12    | 40      | 50    |
| 21    | 33    | 152   | 119   | 56    | 94    | 54    | 32    | 26    | 20    | 11    | 33      | 41    |
| 22    | 33    | 99    | 107   | 54    | 83    | 49    | 30    | 24    | 18    | 10    | 36      | 37    |
| 23    | 32    | 80    | 100   | 53    | 75    | 46    | 28    | 33    | 18    | 24    | 33      | 35    |
| 24    | 27    | 71    | 129   | 51    | 73    | 45    | 26    | 36    | 37    | 29    | 28      | 34    |
| 25    | 26    | 66    | 131   | 51    | 70    | 44    | 26    | 32    | 28    | 19    | 25      | 34    |
| 26    | 28    | 60    | 108   | 64    | 70    | 43    | 26    | 27    | 27    | 15    | 23      | 35    |
| 27    | 30    | 58    | 95    | 61    | 184   | 43    | 55    | 23    | 33    | 13    | 23      | 35    |
| 28    | 36    | 59    | 88    | 71    | 263   | 44    | 45    | 21    | 41    | 12    | 21      | 34    |
| 29    | 541   | 62    | 83    | 78    | 166   | 42    | 34    | 19    | 53    | 18    | 26      | 38    |
| 30    | 494   | 56    | 82    | 84    | ---   | 40    | 29    | 19    | 34    | 15    | 81      | 34    |
| 31    | 200   | ---   | 76    | 81    | ---   | 44    | ---   | 22    | ---   | 13    | 102     | ---   |
| TOTAL | 2,333 | 2,167 | 5,326 | 1,996 | 3,187 | 1,890 | 1,383 | 2,474 | 1,425 | 1,076 | 1,661.3 | 1,921 |
| MEAN  | 75.3  | 72.2  | 172   | 64.4  | 110   | 61.0  | 46.1  | 79.8  | 47.5  | 34.7  | 53.6    | 64.0  |
| MAX   | 541   | 256   | 730   | 84    | 263   | 125   | 144   | 560   | 258   | 254   | 347     | 200   |
| MIN   | 25    | 39    | 47    | 51    | 60    | 40    | 26    | 19    | 18    | 10    | 8.6     | 34    |
| CFSM  | 0.94  | 0.90  | 2.14  | 0.80  | 1.37  | 0.76  | 0.57  | 0.99  | 0.59  | 0.43  | 0.67    | 0.80  |
| IN.   | 1.08  | 1.00  | 2.46  | 0.92  | 1.47  | 0.87  | 0.64  | 1.14  | 0.66  | 0.50  | 0.77    | 0.89  |

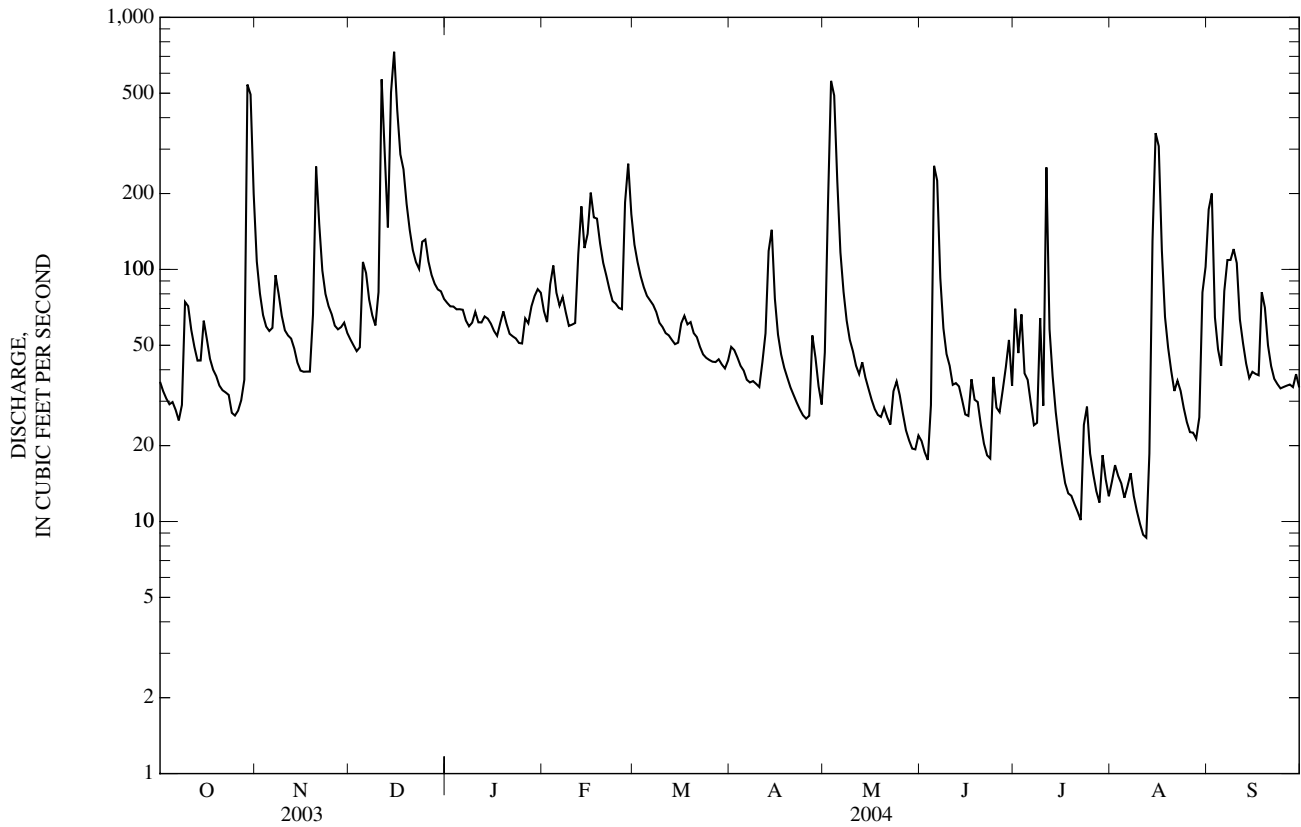
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 53.7   | 55.9   | 71.1   | 117    | 139    | 143    | 102    | 60.9   | 51.8   | 58.6   | 67.9   | 80.4   |
| MAX  | 473    | 253    | 184    | 261    | 327    | 311    | 252    | 277    | 243    | 395    | 360    | 1,083  |
| (WY) | (1965) | (1978) | (1958) | (1993) | (1998) | (1983) | (1974) | (1989) | (1995) | (1965) | (1974) | (1999) |
| MIN  | 2.26   | 11.2   | 19.5   | 29.4   | 34.6   | 33.7   | 19.1   | 10.8   | 5.35   | 3.10   | 4.22   | 2.58   |
| (WY) | (1955) | (1987) | (2002) | (2001) | (1988) | (1986) | (1986) | (1986) | (1986) | (1987) | (2002) | (1954) |

02091000 NAHUNTA SWAMP NEAR SHINE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1954 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 45,446                 |        | 26,839.3            |        | 84.2                    |              |
| ANNUAL MEAN              | 125                    |        | 73.3                |        | 22.9                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 150                     | 1965         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 22.9                    | 1986         |
| HIGHEST DAILY MEAN       | 1,170                  | Apr 11 | 730                 | Dec 15 | 7,000                   | Sep 17, 1999 |
| LOWEST DAILY MEAN        | 18                     | Jul 1  | 8.6                 | Aug 12 | 1.0                     | Oct 7, 1954  |
| ANNUAL SEVEN-DAY MINIMUM | 25                     | Jun 25 | 12                  | Aug 6  | 1.1                     | Aug 9, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 777                 | Dec 14 | 23000*                  | Sep 17, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 8.43                | Dec 14 | 21.00*                  | Sep 17, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 8.3                 | Aug 12 | 1.0*                    | Oct 7, 1954  |
| ANNUAL RUNOFF (CFSM)     | 1.55                   |        | 0.912               |        | 1.05                    |              |
| ANNUAL RUNOFF (INCHES)   | 21.03                  |        | 12.42               |        | 14.24                   |              |
| 10 PERCENT EXCEEDS       | 269                    |        | 130                 |        | 176                     |              |
| 50 PERCENT EXCEEDS       | 74                     |        | 51                  |        | 44                      |              |
| 90 PERCENT EXCEEDS       | 33                     |        | 21                  |        | 11                      |              |

\* See REMARKS.



## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC

LOCATION.--Lat 35°25'44", long 77°34'57", Greene County, Hydrologic Unit 03020203, on left bank at bridge on State Highway 123 at Hookerton, and 2.2 mi upstream from Wheat Swamp Creek.

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

## WATER-DISCHARGE RECORDS

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

REVISED RECORDS.--WSP 1333: 1903-35. 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 Nov. 26, 1934, nonrecording gage at site 1,400 ft upstream and Nov. 27, 1934, to Sept. 30, 1987, water-stage recorder at site 0.3 mi upstream at present datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Buckhorn Reservoir (station 02090370) 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.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 527    | 1,810  | 521    | 852    | 695    | 1,180  | 411    | 312    | 268    | 439    | 187    | 477    |
| 2     | 468    | 1,990  | 514    | 776    | 704    | 1,230  | 419    | 380    | 217    | 472    | 188    | 830    |
| 3     | 415    | 2,180  | 491    | 724    | 712    | 1,250  | 435    | 884    | 182    | 570    | 199    | 1,050  |
| 4     | 371    | 2,190  | 460    | 679    | 732    | 1,260  | 442    | 1,580  | 183    | 682    | 172    | 1,360  |
| 5     | 336    | 2,010  | 483    | 652    | 770    | 1,230  | 431    | 1,900  | 246    | 778    | 180    | 1,900  |
| 6     | 309    | 1,690  | 557    | 654    | 805    | 1,160  | 410    | 2,340  | 531    | 930    | 172    | 2,580  |
| 7     | 290    | 1,400  | 655    | 650    | 849    | 1,060  | 396    | 3,000  | 813    | 1,040  | 161    | 3,050  |
| 8     | 276    | 1,090  | 721    | 650    | 885    | 942    | 378    | 3,380  | 970    | 1,020  | 235    | 3,040  |
| 9     | 324    | 967    | 745    | 654    | 897    | 834    | 336    | 3,310  | 1,160  | 696    | 242    | 2,780  |
| 10    | 405    | 847    | 744    | 655    | 907    | 764    | 296    | 2,900  | 1,300  | 465    | 187    | 2,320  |
| 11    | 470    | 760    | 1,030  | 647    | 934    | 720    | 285    | 2,070  | 1,310  | 445    | 139    | 1,810  |
| 12    | 482    | 685    | 1,190  | 625    | 987    | 678    | 338    | 1,340  | 975    | 582    | 112    | 1,490  |
| 13    | 456    | 616    | 1,410  | 602    | 1,060  | 629    | 441    | 813    | 604    | 527    | 126    | 1,400  |
| 14    | 438    | 549    | 1,960  | 596    | 1,110  | 582    | 746    | 511    | 429    | 407    | 450    | 1,490  |
| 15    | 440    | 498    | 2,610  | 594    | 1,190  | 540    | 874    | 395    | 360    | 338    | 1,580  | 1,630  |
| 16    | 443    | 474    | 3,150  | 574    | 1,330  | 502    | 917    | 329    | 302    | 292    | 1,510  | 1,700  |
| 17    | 449    | 467    | 3,450  | 558    | 1,430  | 512    | 964    | 287    | 272    | 235    | 1,520  | 1,570  |
| 18    | 445    | 431    | 3,640  | 549    | 1,510  | 601    | 1,010  | 257    | 261    | 189    | 1,520  | 1,270  |
| 19    | 426    | 403    | 3,730  | 552    | 1,540  | 725    | 1,030  | 227    | 306    | 159    | 1,570  | 1,020  |
| 20    | 390    | 541    | 3,630  | 556    | 1,550  | 845    | 878    | 203    | 296    | 136    | 1,690  | 904    |
| 21    | 360    | 743    | 3,390  | 561    | 1,550  | 955    | 653    | 188    | 258    | 119    | 1,760  | 841    |
| 22    | 340    | 865    | 3,050  | 561    | 1,520  | 1,030  | 483    | 177    | 220    | 108    | 1,690  | 805    |
| 23    | 322    | 975    | 2,620  | 549    | 1,430  | 1,060  | 395    | 170    | 186    | 106    | 1,400  | 766    |
| 24    | 305    | 1,040  | 2,150  | 526    | 1,300  | 1,020  | 331    | 266    | 186    | 133    | 1,040  | 708    |
| 25    | 286    | 1,060  | 1,720  | 500    | 1,150  | 859    | 289    | 625    | 191    | 236    | 645    | 610    |
| 26    | 279    | 1,010  | 1,430  | 489    | 999    | 697    | 262    | 903    | 186    | 253    | 417    | 496    |
| 27    | 276    | 829    | 1,270  | 490    | 946    | 591    | 302    | 1,170  | 183    | 198    | 348    | 420    |
| 28    | 276    | 688    | 1,180  | 512    | 1,050  | 506    | 332    | 1,280  | 303    | 159    | 299    | 410    |
| 29    | 1,010  | 616    | 1,120  | 556    | 1,130  | 462    | 334    | 1,100  | 478    | 138    | 258    | 400    |
| 30    | 1,410  | 547    | 1,050  | 612    | ---    | 435    | 319    | 652    | 462    | 129    | 236    | 396    |
| 31    | 1,600  | ---    | 951    | 663    | ---    | 417    | ---    | 363    | ---    | 153    | 265    | ---    |
| TOTAL | 14,624 | 29,971 | 51,622 | 18,818 | 31,672 | 25,276 | 15,137 | 33,312 | 13,638 | 12,134 | 20,498 | 39,523 |
| MEAN  | 472    | 999    | 1,665  | 607    | 1,092  | 815    | 505    | 1,075  | 455    | 391    | 661    | 1,317  |
| MAX   | 1,600  | 2,190  | 3,730  | 852    | 1,550  | 1,260  | 1,030  | 3,380  | 1,310  | 1,040  | 1,760  | 3,050  |
| MIN   | 276    | 403    | 460    | 489    | 695    | 417    | 262    | 170    | 182    | 106    | 112    | 396    |
| CFSM  | 0.64   | 1.36   | 2.27   | 0.83   | 1.49   | 1.11   | 0.69   | 1.47   | 0.62   | 0.53   | 0.90   | 1.80   |
| IN.   | 0.74   | 1.52   | 2.62   | 0.96   | 1.61   | 1.28   | 0.77   | 1.69   | 0.69   | 0.62   | 1.04   | 2.01   |

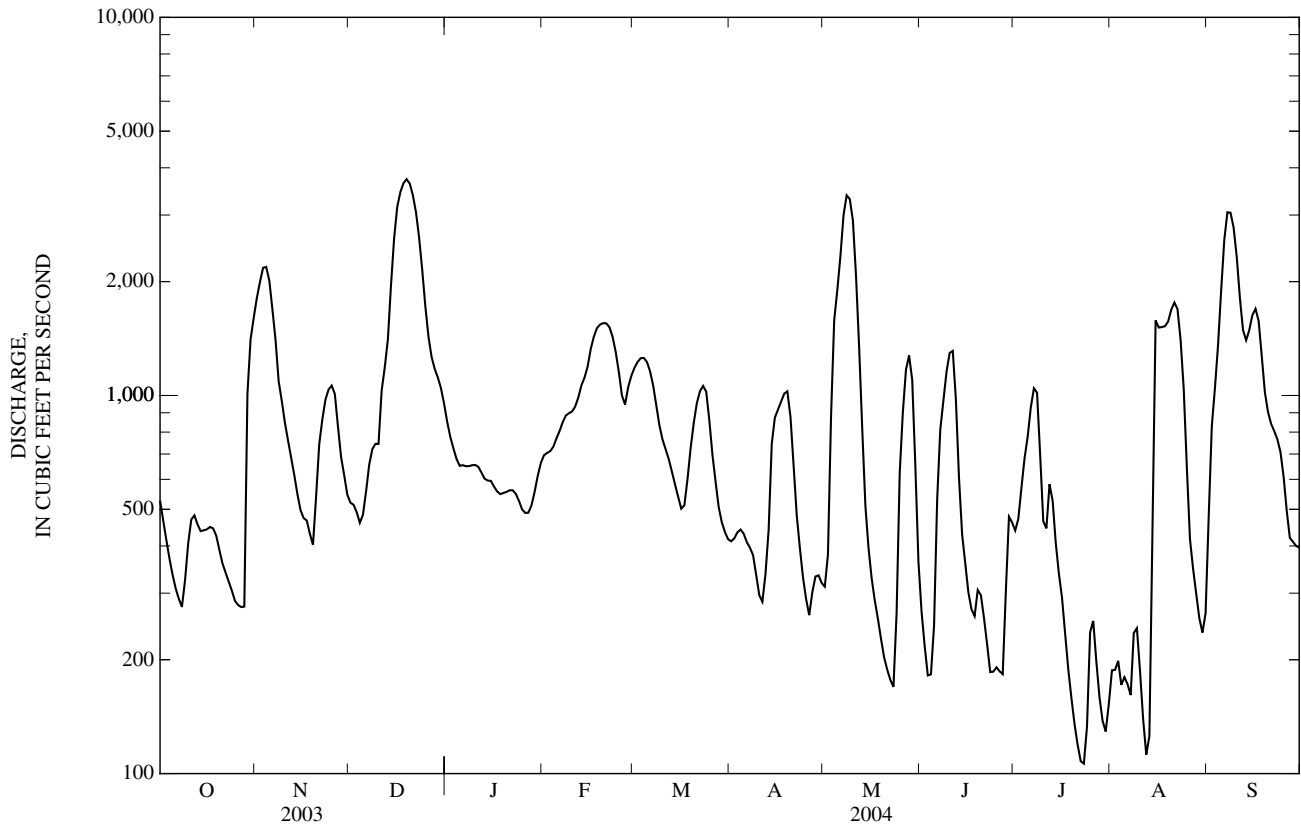
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 507    | 475    | 691    | 1,113  | 1,380  | 1,446  | 1,035  | 594    | 464    | 549    | 637    | 642    |
| MAX  | 4,798  | 2,150  | 2,349  | 2,626  | 4,316  | 3,491  | 2,752  | 3,363  | 1,770  | 2,203  | 2,422  | 8,825  |
| (WY) | (2000) | (1948) | (1949) | (1993) | (1948) | (1989) | (1989) | (1989) | (1995) | (1929) | (1960) | (1999) |
| MIN  | 20.3   | 41.1   | 64.7   | 92.5   | 239    | 382    | 202    | 82.9   | 38.5   | 63.3   | 37.2   | 24.9   |
| (WY) | (1955) | (1955) | (1934) | (1934) | (1934) | (1981) | (1986) | (1986) | (1986) | (1952) | (1954) | (1954) |

02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1929 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 504,394                |        | 306,225             |        | 782                     |              |
| ANNUAL MEAN              | 1,382                  |        | 837                 |        | 1,422                   |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1960                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1951                    |              |
| HIGHEST DAILY MEAN       | 5,300                  | Apr 14 | 3,730               | Dec 19 | 31,500                  | Sep 19, 1999 |
| LOWEST DAILY MEAN        | 247                    | Sep 17 | 106                 | Jul 23 | 15                      | Oct 28, 1933 |
| ANNUAL SEVEN-DAY MINIMUM | 282                    | Sep 11 | 136                 | Jul 18 | 16                      | Oct 8, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 3,780               | Dec 19 | 31,900                  | Sep 18, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 13.78               | Dec 19 | 28.28*                  | Sep 18, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 101                 | Jul 23 | 15                      | Oct 28, 1933 |
| ANNUAL RUNOFF (CFSM)     | 1.89                   |        | 1.14                |        | 1.07                    |              |
| ANNUAL RUNOFF (INCHES)   | 25.60                  |        | 15.54               |        | 14.50                   |              |
| 10 PERCENT EXCEEDS       | 3,130                  |        | 1,650               |        | 1,900                   |              |
| 50 PERCENT EXCEEDS       | 1,080                  |        | 616                 |        | 446                     |              |
| 90 PERCENT EXCEEDS       | 405                    |        | 225                 |        | 87                      |              |

\* See REMARKS.



## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1950, 1969-72, 1979 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: March 1979 to September 1984, April 2002 to August 2004.

WATER TEMPERATURE: October 1949 to September 1950, March 1979 to September 1984, April 2002 to August 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from April 2002 to August 2004. Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated as part of NAWQA Program from March 1993 to current year. Station also operated as part of NASQAN network from March 1979 to September 1993. Miscellaneous chemical data published for water years 1945, 1947-49, 1955-67.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                        | MAXIMUM RECORDED      | MINIMUM RECORDED                                    |
|------------------------------------|-----------------------|---|
| SPECIFIC CONDUCTANCE, microsiemens | 307, August 29, 2002  | 41, June 11, 1979 (daily)                           |
| WATER TEMPERATURE, °C              | 31.8, August 25, 2002 | 1.0, January 13, 14, 1981 (daily), January 18, 1982 |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                        | MAXIMUM RECORDED | MINIMUM RECORDED                        |
|------------------------------------|------------------|---|
| SPECIFIC CONDUCTANCE, microsiemens | 132, February 1  | 64, May 7, 8, June 9, July 7, August 14 |
| WATER TEMPERATURE, °C              | 29.1, July 15    | 2.7, January 29                         |

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Medium code | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Alkalinity, wat fltr inc tit field, mg/L as CaCO3 (39086) | Bicarbonate, wat fltr incrm. titr., mg/L (00453) | Chloride, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00945) |
|-----------|------|-------------|--------------------------------------|------------------------------------|--------------------------------|---|---|---|-----------------------------------|---|--|--------------------------------------|------------------------------------|
| OCT 22... | 0830 | 9           | 343                                  | 750                                | 7.2                            | 76  | 6.5   | 105   | 17.0                              | 15  | 18   | 12.6                                 | 6.5                                |
| DEC 22... | 1345 | 9           | 3,030                                | 769                                | --                             | --  | 6.0   | 72  | 5.3                               | 5   | 6  | 9.23                                 | 6.2                                |
| FEB 18... | 1245 | 9           | 1,060                                | 764                                | 11.0                           | 88  | 6.4   | 88  | 5.8                               | 7   | 8  | 12.5                                 | 7.0                                |
| MAR 16... | 1315 | 9           | 499                                  | 753                                | 9.9                            | 95  | 6.4   | 89  | 12.9                              | 12  | 15   | 12.7                                 | 7.0                                |
| APR 14... | 1530 | 9           | 730                                  | 753                                | 7.1                            | 74  | 6.6   | 90  | 17.0                              | 11  | 14   | 11.6                                 | 6.3                                |
| MAY 13... | 1430 | 9           | 878                                  | 770                                | 4.7                            | 54  | 5.7   | 90  | 22.8                              | 16  | 20   | 9.94                                 | 5.7                                |
| JUN 09... | 1600 | 9           | 1,190                                | 767                                | 5.1                            | 68  | 5.6   | 66  | 31.0                              | 8   | 10   | 7.37                                 | 5.4                                |
| JUL 14... | 1400 | 9           | 394                                  | 752                                | 4.1                            | 54  | 6.4   | 95  | 29.1                              | 13  | 15   | 10.0                                 | 7.3                                |
| AUG 11... | 1100 | D           | 140                                  | 762                                | 6.1                            | 73  | 6.2   | 103   | 24.7                              | --  | --   | --                                   | --                                 |
| 18...     | 1500 | 9           | 1,520                                | 762                                | 5.6                            | 66  | 5.8   | 71  | 23.3                              | 11  | 13   | 7.65                                 | 7.1                                |
| SEP 22... | 1500 | 9           | 801                                  | 767                                | 6.0                            | 67  | 6.5   | 82  | 20.8                              | 14  | 18   | 9.39                                 | 4.2                                |







02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Methyl parathion, water, fltrd<br>0.7u GF<br>(82667) | Metolachlor, water, fltrd,<br>ug/L<br>(39415) | Metribuzin, water, fltrd,<br>ug/L<br>(82630) | Molinate, water, fltrd<br>0.7u GF<br>(82671) | Napropamide, water, fltrd<br>0.7u GF<br>(82684) | p,p'-DDE, water, fltrd,<br>ug/L<br>(34653) | Parathion, water, fltrd,<br>ug/L<br>(39542) | Pebulate, water, fltrd<br>0.7u GF<br>(82669) | Pendimethalin, water, fltrd<br>0.7u GF<br>(82683) | Phorate water fltrd<br>0.7u GF<br>(82664) | Prometon, water, fltrd,<br>ug/L<br>(04037) | Propyzamide, water, fltrd<br>0.7u GF<br>(82676) | Propachlor, water, fltrd,<br>ug/L<br>(04024) |
|-----------|--|---|--|--|---|--|---|--|---|---|--|---|--|
| OCT 22... | <.006  | E.011   | <.006  | <.002  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | E.01                                       | <.004   | <.010  |
| DEC 22... | <.015  | .014  | <.006  | <.003  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .01  | <.004   | <.025  |
| FEB 18... | <.015  | E.013   | <.006  | <.003  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .01  | <.004   | <.025  |
| MAR 16... | <.015  | E.011   | <.006  | <.003  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .01  | <.004   | <.025  |
| APR 14... | <.015  | .107  | <.006  | <.003  | <.007   | <.003                                      | <.010                                       | .004   | <.022   | <.011                                     | .01  | <.004   | <.025  |
| MAY 13... | <.015  | .133  | .008   | <.003  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .02  | <.004   | <.025  |
| JUN 09... | <.015  | .402  | <.006  | <.003  | E.006   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .03  | <.004   | <.025  |
| JUL 14... | --   | --  | --   | --   | --  | --   | --  | --   | --  | --  | --   | --  | --   |
| AUG 11... | --   | --  | --   | --   | --  | --   | --  | --   | --  | --  | --   | --  | --   |
| 18...     | <.015  | .026  | <.010  | <.003  | <.007   | <.003                                      | <.010                                       | <.004  | <.022   | <.011                                     | .03  | <.004   | <.025  |
| SEP 22... | --   | --  | --   | --   | --  | --   | --  | --   | --  | --  | --   | --  | --   |

| Date      | Propanil, water, fltrd<br>0.7u GF<br>(82679) | Propargite, water, fltrd<br>0.7u GF<br>(82685) | Simazine, water, fltrd,<br>ug/L<br>(04035) | Tebu-thiuron water fltrd<br>0.7u GF<br>(82670) | Terbacil, water, fltrd<br>0.7u GF<br>(82665) | Terbufos, water, fltrd<br>0.7u GF<br>(82675) | Thio-bencarb water fltrd<br>0.7u GF<br>(82681) | Tri-allate, water, fltrd<br>0.7u GF<br>(82678) | Tri-flur-alin, water, fltrd<br>0.7u GF<br>(82661) | Suspnd. sedi-ment, sieve diametr percent <.063mm<br>(70331) | Sus-pended sedi-ment concen-tration mg/L<br>(80154) | Sus-pended sedi-ment dis-charge, tons/d<br>(80155) |
|-----------|--|--|--|--|--|--|--|--|---|---|---|--|
| OCT 22... | <.011  | <.02   | <.007                                      | <.02   | <.034  | <.02   | <.005  | <.002  | <.009   | 91  | 20  | 19   |
| DEC 22... | <.011  | <.02   | .018                                       | <.02   | <.034  | <.02   | <.010  | <.002  | <.009   | 91  | 6   | 49   |
| FEB 18... | <.011  | <.02   | .047                                       | M  | <.034  | <.02   | <.010  | <.002  | <.009   | 95  | 13  | 37   |
| MAR 16... | <.011  | <.02   | .088                                       | <.02   | <.034  | <.02   | <.010  | <.002  | <.009   | 92  | 11  | 15   |
| APR 14... | <.011  | <.02   | .035                                       | <.02   | <.034  | <.02   | <.010  | <.002  | .016  | 74  | 50  | 99   |
| MAY 13... | <.011  | <.02   | .068                                       | <.02   | <.034  | <.02   | <.010  | <.002  | <.009   | 92  | 17  | 40   |
| JUN 09... | <.011  | <.02   | .040                                       | <.02   | <.034  | <.02   | <.010  | <.002  | <.009   | 83  | 15  | 48   |
| JUL 14... | --   | --   | --   | --   | --   | --   | --   | --   | --  | 90  | 10  | 11   |
| AUG 11... | --   | --   | --   | --   | --   | --   | --   | --   | --  | --  | --  | --   |
| 18...     | <.011  | <.02   | .015                                       | <.02   | <.034  | <.02   | <.010  | <.002  | <.009   | 97  | 47  | 193  |
| SEP 22... | --   | --   | --   | --   | --   | --   | --   | --   | --  | 96  | 8   | 17   |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value  
 M-- Presence verified, not quantified

Medium codes used in this table:  
 9 -- Surface water  
 D -- Plant tissue

## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 103      | 101 | 102  | 92       | 88  | 91   | 103      | 101 | 103  | 93      | 91  | 92   |
| 2     | 104      | 102 | 103  | 89       | 80  | 84   | 104      | 102 | 103  | 95      | 93  | 94   |
| 3     | 105      | 103 | 104  | 80       | 77  | 78   | 108      | 102 | 104  | 97      | 95  | 95   |
| 4     | 106      | 104 | 105  | 77       | 76  | 77   | 103      | 98  | 102  | 98      | 96  | 96   |
| 5     | 110      | 106 | 107  | 83       | 77  | 80   | 101      | 99  | 100  | 99      | 97  | 98   |
| 6     | 111      | 108 | 110  | 88       | 82  | 86   | 104      | 100 | 102  | 99      | 98  | 98   |
| 7     | 111      | 109 | 111  | 94       | 87  | 90   | 105      | 101 | 103  | 98      | 97  | 97   |
| 8     | 114      | 111 | 113  | 96       | 93  | 94   | 105      | 103 | 104  | 98      | 97  | 97   |
| 9     | 113      | 111 | 112  | 100      | 96  | 98   | 105      | 99  | 103  | 110     | 97  | 100  |
| 10    | 115      | 113 | 114  | 103      | 99  | 101  | 99       | 94  | 97   | 112     | 97  | 101  |
| 11    | 116      | 112 | 114  | 104      | 98  | 101  | 96       | 94  | 95   | 100     | 96  | 98   |
| 12    | 117      | 111 | 114  | 106      | 100 | 104  | 96       | 90  | 93   | 101     | 96  | 98   |
| 13    | 120      | 116 | 117  | 106      | 105 | 106  | 92       | 87  | 89   | 105     | 99  | 101  |
| 14    | 123      | 118 | 121  | 108      | 105 | 106  | 87       | 79  | 83   | 105     | 101 | 103  |
| 15    | 118      | 114 | 116  | 109      | 106 | 107  | 82       | 76  | 78   | 103     | 100 | 101  |
| 16    | 114      | 112 | 114  | 110      | 108 | 109  | 77       | 73  | 74   | 103     | 101 | 101  |
| 17    | 112      | 109 | 111  | 111      | 109 | 110  | 74       | 71  | 72   | 104     | 101 | 102  |
| 18    | 109      | 108 | 108  | 112      | 110 | 111  | 71       | 69  | 70   | 102     | 101 | 101  |
| 19    | 111      | 107 | 109  | 110      | 104 | 107  | 70       | 69  | 69   | 103     | 101 | 102  |
| 20    | 115      | 111 | 113  | 106      | 104 | 105  | 70       | 69  | 69   | 103     | 101 | 102  |
| 21    | 115      | 112 | 114  | 107      | 105 | 107  | 72       | 70  | 71   | 102     | 100 | 101  |
| 22    | 112      | 108 | 109  | 111      | 107 | 108  | 75       | 72  | 73   | 106     | 101 | 103  |
| 23    | 108      | 107 | 107  | 111      | 108 | 110  | 79       | 74  | 76   | 105     | 101 | 103  |
| 24    | 112      | 108 | 110  | 108      | 98  | 103  | 84       | 78  | 81   | 102     | 100 | 101  |
| 25    | 115      | 111 | 113  | 100      | 97  | 98   | 88       | 84  | 87   | 106     | 101 | 102  |
| 26    | 115      | 113 | 114  | 98       | 96  | 97   | 89       | 86  | 88   | 113     | 103 | 108  |
| 27    | 120      | 114 | 116  | 97       | 96  | 97   | 91       | 88  | 90   | 116     | 106 | 110  |
| 28    | 118      | 113 | 116  | 99       | 97  | 98   | 91       | 87  | 90   | 115     | 103 | 108  |
| 29    | 114      | 102 | 106  | 101      | 99  | 100  | 90       | 88  | 89   | 107     | 103 | 105  |
| 30    | 102      | 93  | 97   | 101      | 98  | 100  | 91       | 88  | 90   | 108     | 104 | 106  |
| 31    | 93       | 91  | 92   | ---      | --- | ---  | 92       | 88  | 91   | 131     | 107 | 113  |
| MONTH | 123      | 91  | 110  | 112      | 76  | 99   | 108      | 69  | 88   | 131     | 91  | 101  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 132      | 116 | 125  | 103      | 100 | 101  | 106      | 99  | 102  | 111     | 107 | 108  |
| 2     | 120      | 111 | 114  | 102      | 99  | 101  | 102      | 100 | 101  | 114     | 103 | 110  |
| 3     | 114      | 110 | 111  | 101      | 96  | 99   | 102      | 100 | 101  | 104     | 86  | 96   |
| 4     | 111      | 106 | 108  | 98       | 95  | 97   | 104      | 102 | 104  | 86      | 78  | 82   |
| 5     | 106      | 103 | 104  | 96       | 94  | 95   | 107      | 104 | 105  | 78      | 76  | 77   |
| 6     | 109      | 103 | 104  | 95       | 94  | 94   | 106      | 102 | 104  | 77      | 68  | 72   |
| 7     | 112      | 104 | 110  | 96       | 95  | 95   | ---      | --- | ---  | 68      | 64  | 66   |
| 8     | 108      | 99  | 103  | 96       | 96  | 96   | ---      | --- | ---  | 65      | 64  | 64   |
| 9     | 102      | 98  | 99   | 98       | 96  | 97   | ---      | --- | ---  | 67      | 65  | 66   |
| 10    | 100      | 97  | 99   | 100      | 98  | 99   | ---      | --- | ---  | 71      | 67  | 69   |
| 11    | 99       | 91  | 95   | 99       | 97  | 99   | ---      | --- | ---  | 76      | 71  | 73   |
| 12    | 96       | 90  | 91   | 99       | 98  | 99   | ---      | --- | ---  | 84      | 76  | 81   |
| 13    | 93       | 91  | 92   | 100      | 96  | 99   | 107      | 103 | 105  | 86      | 82  | 84   |
| 14    | 94       | 92  | 93   | 102      | 99  | 100  | 107      | 95  | 100  | 92      | 86  | 89   |
| 15    | 98       | 94  | 96   | 102      | 101 | 101  | 96       | 93  | 94   | 96      | 92  | 94   |
| 16    | 101      | 96  | 98   | 103      | 102 | 102  | 94       | 92  | 94   | 98      | 95  | 96   |
| 17    | 98       | 96  | 97   | 104      | 102 | 103  | 93       | 89  | 91   | 101     | 98  | 99   |
| 18    | 97       | 95  | 97   | 104      | 103 | 103  | 89       | 85  | 87   | 106     | 100 | 103  |
| 19    | 97       | 95  | 96   | 105      | 102 | 104  | 85       | 83  | 84   | 108     | 105 | 107  |
| 20    | 96       | 93  | 95   | 102      | 93  | 98   | 86       | 84  | 85   | 108     | 107 | 107  |
| 21    | 95       | 94  | 94   | 93       | 91  | 92   | 90       | 86  | 88   | 107     | 106 | 106  |
| 22    | 95       | 94  | 95   | 91       | 89  | 90   | 94       | 90  | 91   | 108     | 104 | 105  |
| 23    | 96       | 95  | 96   | 89       | 87  | 88   | 96       | 93  | 94   | 109     | 105 | 106  |
| 24    | 98       | 96  | 97   | 88       | 87  | 87   | 98       | 96  | 97   | 106     | 103 | 104  |
| 25    | 99       | 97  | 98   | 89       | 88  | 88   | 101      | 97  | 99   | 121     | 100 | 111  |
| 26    | 99       | 98  | 98   | 91       | 89  | 90   | 104      | 101 | 103  | 100     | 67  | 79   |
| 27    | 102      | 98  | 100  | 95       | 91  | 93   | 103      | 102 | 103  | 68      | 65  | 66   |
| 28    | 103      | 99  | 101  | 99       | 95  | 97   | 103      | 102 | 102  | 69      | 66  | 67   |
| 29    | 101      | 99  | 100  | 101      | 98  | 99   | 104      | 102 | 103  | 73      | 68  | 70   |
| 30    | ---      | --- | ---  | 102      | 100 | 101  | 108      | 103 | 106  | 77      | 73  | 75   |
| 31    | ---      | --- | ---  | 102      | 101 | 102  | ---      | --- | ---  | 88      | 77  | 83   |
| MONTH | 132      | 90  | 100  | 105      | 87  | 97   | ---      | --- | ---  | 121     | 64  | 88   |

## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 93   | 88  | 90   | 102  | 95  | 99   | 111    | 103 | 106  | ---       | --- | ---  |
| 2     | 98   | 93  | 96   | 95   | 91  | 92   | 107    | 102 | 105  | ---       | --- | ---  |
| 3     | 101  | 98  | 99   | 91   | 88  | 89   | 115    | 103 | 108  | ---       | --- | ---  |
| 4     | 108  | 101 | 104  | 89   | 80  | 85   | 117    | 114 | 116  | ---       | --- | ---  |
| 5     | 105  | 94  | 99   | 81   | 76  | 79   | 118    | 115 | 116  | ---       | --- | ---  |
| 6     | 105  | 98  | 102  | 77   | 68  | 72   | 117    | 113 | 115  | ---       | --- | ---  |
| 7     | 102  | 87  | 95   | 68   | 64  | 66   | 114    | 110 | 112  | ---       | --- | ---  |
| 8     | 87   | 66  | 81   | 69   | 65  | 67   | 121    | 110 | 116  | ---       | --- | ---  |
| 9     | 76   | 64  | 69   | 74   | 69  | 71   | 114    | 110 | 112  | ---       | --- | ---  |
| 10    | 69   | 65  | 66   | 81   | 74  | 76   | 117    | 110 | 114  | ---       | --- | ---  |
| 11    | 75   | 68  | 70   | 79   | 77  | 78   | 112    | 104 | 109  | ---       | --- | ---  |
| 12    | 79   | 72  | 75   | 83   | 79  | 82   | 111    | 104 | 106  | ---       | --- | ---  |
| 13    | 80   | 76  | 77   | 79   | 74  | 76   | 107    | 101 | 104  | ---       | --- | ---  |
| 14    | 90   | 80  | 84   | 92   | 79  | 85   | 108    | 64  | 91   | ---       | --- | ---  |
| 15    | 95   | 87  | 89   | 99   | 92  | 96   | 80     | 67  | 75   | ---       | --- | ---  |
| 16    | 97   | 91  | 94   | 100  | 96  | 98   | ---    | --- | ---  | ---       | --- | ---  |
| 17    | 99   | 96  | 97   | 97   | 92  | 94   | ---    | --- | ---  | ---       | --- | ---  |
| 18    | 99   | 98  | 99   | 94   | 93  | 93   | ---    | --- | ---  | ---       | --- | ---  |
| 19    | 99   | 97  | 98   | 94   | 93  | 94   | 72     | 67  | 70   | ---       | --- | ---  |
| 20    | 101  | 99  | 100  | 99   | 94  | 96   | 70     | 65  | 67   | ---       | --- | ---  |
| 21    | 104  | 100 | 101  | 104  | 99  | 102  | 70     | 65  | 67   | ---       | --- | ---  |
| 22    | 110  | 104 | 108  | 109  | 103 | 106  | ---    | --- | ---  | ---       | --- | ---  |
| 23    | 109  | 106 | 107  | 113  | 108 | 110  | ---    | --- | ---  | ---       | --- | ---  |
| 24    | 110  | 107 | 108  | 112  | 110 | 111  | ---    | --- | ---  | ---       | --- | ---  |
| 25    | 110  | 103 | 107  | 114  | 109 | 111  | ---    | --- | ---  | ---       | --- | ---  |
| 26    | 105  | 102 | 104  | 122  | 110 | 114  | ---    | --- | ---  | ---       | --- | ---  |
| 27    | 105  | 101 | 103  | 129  | 118 | 121  | ---    | --- | ---  | ---       | --- | ---  |
| 28    | 104  | 96  | 101  | 130  | 113 | 122  | ---    | --- | ---  | ---       | --- | ---  |
| 29    | 106  | 103 | 105  | 115  | 111 | 113  | ---    | --- | ---  | ---       | --- | ---  |
| 30    | 107  | 102 | 105  | 114  | 107 | 111  | ---    | --- | ---  | ---       | --- | ---  |
| 31    | ---  | --- | ---  | 111  | 106 | 108  | ---    | --- | ---  | ---       | --- | ---  |
| MONTH | 110  | 64  | 94   | 130  | 64  | 94   | ---    | --- | ---  | ---       | --- | ---  |

## 02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 20.6     | 19.6 | 20.1 | 15.0  | 14.7 | 14.8 | 11.0  | 10.6 | 10.8 | 7.6  | 7.3  | 7.5  |
| 2     | 19.9     | 19.0 | 19.4 | 15.3  | 14.9 | 15.1 | 10.6  | 9.6  | 10.2 | 8.0  | 7.5  | 7.8  |
| 3     | 19.0     | 17.8 | 18.3 | 15.9  | 15.3 | 15.5 | 9.6   | 8.4  | 8.9  | 8.8  | 8.0  | 8.3  |
| 4     | 18.5     | 17.4 | 18.0 | 17.2  | 15.9 | 16.6 | 8.4   | 8.0  | 8.1  | 10.3 | 8.8  | 9.6  |
| 5     | 18.9     | 17.8 | 18.4 | 18.2  | 17.2 | 17.7 | 8.1   | 8.0  | 8.0  | 12.3 | 10.3 | 11.2 |
| 6     | 18.8     | 17.8 | 18.4 | 19.3  | 18.2 | 18.7 | 8.0   | 7.6  | 7.9  | 12.6 | 11.8 | 12.4 |
| 7     | 18.9     | 18.2 | 18.5 | 19.7  | 19.3 | 19.6 | 7.6   | 6.9  | 7.2  | 11.8 | 9.9  | 10.8 |
| 8     | 18.8     | 18.5 | 18.6 | 19.6  | 18.2 | 19.0 | 6.9   | 6.5  | 6.7  | 9.9  | 8.6  | 9.2  |
| 9     | 19.6     | 18.5 | 19.0 | 18.2  | 16.2 | 17.2 | 6.6   | 6.1  | 6.4  | 8.6  | 7.2  | 7.9  |
| 10    | 19.5     | 19.1 | 19.3 | 16.2  | 15.3 | 15.7 | 8.1   | 6.4  | 6.8  | 7.2  | 5.5  | 6.3  |
| 11    | 19.4     | 19.0 | 19.2 | 15.3  | 14.8 | 15.0 | 9.2   | 8.1  | 8.7  | 5.5  | 4.2  | 4.7  |
| 12    | 19.7     | 18.8 | 19.2 | 15.4  | 14.7 | 15.0 | 9.2   | 8.5  | 8.9  | 4.5  | 3.9  | 4.2  |
| 13    | 20.2     | 19.0 | 19.6 | 15.6  | 14.4 | 15.2 | 9.2   | 8.7  | 8.9  | 4.9  | 4.2  | 4.5  |
| 14    | 19.9     | 19.5 | 19.6 | 14.4  | 13.0 | 13.7 | 8.7   | 8.1  | 8.4  | 5.0  | 4.5  | 4.7  |
| 15    | 19.6     | 18.7 | 19.2 | 13.1  | 12.6 | 12.9 | 8.1   | 7.3  | 7.6  | 5.6  | 4.7  | 5.1  |
| 16    | 18.8     | 17.8 | 18.2 | 13.6  | 12.9 | 13.2 | 7.3   | 6.9  | 7.1  | 5.6  | 5.1  | 5.3  |
| 17    | 18.0     | 17.1 | 17.6 | 14.2  | 13.5 | 13.9 | 7.7   | 7.2  | 7.5  | 5.4  | 4.9  | 5.2  |
| 18    | 17.7     | 17.0 | 17.4 | 14.8  | 13.9 | 14.3 | 7.5   | 7.1  | 7.3  | 6.7  | 5.3  | 6.0  |
| 19    | 17.0     | 16.0 | 16.5 | 15.6  | 14.7 | 15.2 | 7.1   | 6.8  | 7.0  | 7.0  | 6.4  | 6.7  |
| 20    | 16.9     | 15.9 | 16.4 | 15.5  | 14.8 | 15.2 | 6.8   | 6.3  | 6.6  | 6.4  | 5.7  | 6.0  |
| 21    | 17.3     | 16.2 | 16.8 | 14.8  | 14.3 | 14.6 | 6.3   | 5.6  | 5.9  | 5.7  | 5.1  | 5.3  |
| 22    | 17.8     | 17.0 | 17.3 | 14.5  | 14.0 | 14.2 | 5.6   | 5.4  | 5.5  | 5.3  | 4.7  | 5.1  |
| 23    | 17.1     | 16.0 | 16.4 | 14.2  | 13.6 | 13.8 | 6.2   | 5.5  | 5.7  | 5.2  | 4.6  | 4.9  |
| 24    | 16.0     | 15.1 | 15.5 | 13.9  | 13.3 | 13.6 | 7.7   | 6.2  | 7.0  | 5.3  | 4.5  | 4.9  |
| 25    | 15.3     | 14.9 | 15.1 | 13.9  | 13.0 | 13.6 | 7.8   | 7.4  | 7.6  | 5.0  | 3.7  | 4.5  |
| 26    | 16.0     | 15.2 | 15.6 | 13.0  | 12.7 | 12.8 | 7.4   | 7.1  | 7.2  | 3.7  | 3.3  | 3.5  |
| 27    | 16.9     | 16.0 | 16.5 | 12.7  | 12.2 | 12.4 | 7.2   | 7.0  | 7.1  | 3.4  | 3.2  | 3.3  |
| 28    | 16.9     | 16.5 | 16.8 | 13.7  | 12.4 | 13.1 | 7.0   | 6.5  | 6.7  | 3.4  | 2.8  | 3.1  |
| 29    | 16.5     | 15.1 | 15.9 | 13.5  | 11.6 | 12.6 | 6.8   | 6.3  | 6.5  | 3.4  | 2.7  | 3.1  |
| 30    | 15.6     | 14.9 | 15.2 | 11.6  | 11.0 | 11.3 | 7.7   | 6.8  | 7.3  | 3.8  | 3.1  | 3.4  |
| 31    | 15.2     | 14.7 | 14.9 | ---   | ---  | ---  | 7.7   | 7.1  | 7.4  | 3.8  | 3.4  | 3.6  |
| MONTH | 20.6     | 14.7 | 17.6 | 19.7  | 11.0 | 14.8 | 11.0  | 5.4  | 7.5  | 12.6 | 2.7  | 6.1  |
| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 3.7      | 3.2  | 3.5  | 9.1   | 7.8  | 8.3  | 16.3  | 15.7 | 16.1 | 20.0 | 19.6 | 19.8 |
| 2     | 4.1      | 3.2  | 3.6  | 11.2  | 9.1  | 10.2 | 15.7  | 14.8 | 15.2 | 20.5 | 19.5 | 20.0 |
| 3     | 4.8      | 4.1  | 4.5  | 13.1  | 11.2 | 12.1 | 15.0  | 14.1 | 14.6 | 20.4 | 18.9 | 19.9 |
| 4     | 5.2      | 4.5  | 4.9  | 15.0  | 13.1 | 14.0 | 15.5  | 14.3 | 14.9 | 18.9 | 17.8 | 18.1 |
| 5     | 5.8      | 5.2  | 5.5  | 16.5  | 15.0 | 15.8 | 14.9  | 14.1 | 14.5 | 17.8 | 17.3 | 17.6 |
| 6     | 7.7      | 5.8  | 6.5  | 17.2  | 16.5 | 17.0 | 14.7  | 13.5 | 14.2 | 18.5 | 17.7 | 18.0 |
| 7     | 9.0      | 7.7  | 8.5  | 17.6  | 16.9 | 17.3 | ---   | ---  | ---  | 19.1 | 18.4 | 18.7 |
| 8     | 8.9      | 8.3  | 8.6  | 17.4  | 16.0 | 16.7 | ---   | ---  | ---  | 20.0 | 19.1 | 19.5 |
| 9     | 8.5      | 8.1  | 8.3  | 16.0  | 15.0 | 15.3 | ---   | ---  | ---  | 20.8 | 19.9 | 20.2 |
| 10    | 8.6      | 8.3  | 8.4  | 15.0  | 13.5 | 14.2 | ---   | ---  | ---  | 21.7 | 20.8 | 21.2 |
| 11    | 8.4      | 8.1  | 8.3  | 13.5  | 12.5 | 13.1 | ---   | ---  | ---  | 22.6 | 21.7 | 22.1 |
| 12    | 8.3      | 7.7  | 8.1  | 13.3  | 12.5 | 13.0 | ---   | ---  | ---  | 22.8 | 22.4 | 22.6 |
| 13    | 8.2      | 7.4  | 7.8  | 13.2  | 12.6 | 12.9 | 17.6  | 16.4 | 16.9 | 23.2 | 22.4 | 22.7 |
| 14    | 8.1      | 7.9  | 8.0  | 12.9  | 12.4 | 12.7 | 17.4  | 16.4 | 17.0 | 23.7 | 22.7 | 23.2 |
| 15    | 8.1      | 7.7  | 8.0  | 13.2  | 12.8 | 13.0 | 16.4  | 15.7 | 16.1 | 24.2 | 23.1 | 23.6 |
| 16    | 7.7      | 6.9  | 7.2  | 13.7  | 13.1 | 13.4 | 16.3  | 15.5 | 16.0 | 24.5 | 23.4 | 24.0 |
| 17    | 7.1      | 6.0  | 6.6  | 13.5  | 12.6 | 13.2 | 16.8  | 15.9 | 16.3 | 24.7 | 23.6 | 24.1 |
| 18    | 6.3      | 5.8  | 6.1  | 12.7  | 12.1 | 12.5 | 17.8  | 16.8 | 17.3 | 24.6 | 23.5 | 24.1 |
| 19    | 6.6      | 6.0  | 6.2  | 13.5  | 12.5 | 13.0 | 19.1  | 17.8 | 18.4 | 24.9 | 23.6 | 24.3 |
| 20    | 7.6      | 6.6  | 7.0  | 13.2  | 12.6 | 12.9 | 20.1  | 19.0 | 19.5 | 25.3 | 23.8 | 24.6 |
| 21    | 9.1      | 7.6  | 8.4  | 13.9  | 13.2 | 13.6 | 20.7  | 20.0 | 20.3 | 26.1 | 24.5 | 25.3 |
| 22    | 9.5      | 9.0  | 9.2  | 13.6  | 13.1 | 13.3 | 21.4  | 20.5 | 20.9 | 26.9 | 25.2 | 26.1 |
| 23    | 9.8      | 9.4  | 9.6  | 13.1  | 12.6 | 12.8 | 22.3  | 20.8 | 21.5 | 27.1 | 25.8 | 26.4 |
| 24    | 9.9      | 9.6  | 9.8  | 12.8  | 12.3 | 12.6 | 22.4  | 21.6 | 22.0 | 26.3 | 25.0 | 25.8 |
| 25    | 9.7      | 9.2  | 9.5  | 13.5  | 12.4 | 13.0 | 22.0  | 21.3 | 21.7 | 26.3 | 25.7 | 26.1 |
| 26    | 9.5      | 7.6  | 8.6  | 14.5  | 13.3 | 13.9 | 22.4  | 21.2 | 21.8 | 25.7 | 25.2 | 25.5 |
| 27    | 7.7      | 7.0  | 7.4  | 15.7  | 14.4 | 15.0 | 21.8  | 20.8 | 21.2 | 25.9 | 25.4 | 25.7 |
| 28    | 7.6      | 6.6  | 7.2  | 16.8  | 15.7 | 16.3 | 20.8  | 19.7 | 20.2 | 26.1 | 25.7 | 25.9 |
| 29    | 7.9      | 7.0  | 7.4  | 16.8  | 15.9 | 16.3 | 20.2  | 19.1 | 19.7 | 26.0 | 25.7 | 25.9 |
| 30    | ---      | ---  | ---  | 16.6  | 15.8 | 16.2 | 20.4  | 19.2 | 19.8 | 25.8 | 24.8 | 25.3 |
| 31    | ---      | ---  | ---  | 16.6  | 16.0 | 16.3 | ---   | ---  | ---  | 25.2 | 24.5 | 24.8 |
| MONTH | 9.9      | 3.2  | 7.3  | 17.6  | 7.8  | 13.9 | ---   | ---  | ---  | 27.1 | 17.3 | 22.9 |

02091500 CONTENTNEA CREEK AT HOOKERTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 25.8 | 24.6 | 25.2 | 26.5 | 25.3 | 25.8 | 27.7 | 26.8 | 27.3 | --- | --- | ---  |
| 2     | 25.9 | 24.4 | 25.2 | 26.8 | 25.7 | 26.2 | 27.6 | 26.8 | 27.2 | --- | --- | ---  |
| 3     | 26.6 | 24.9 | 25.8 | 26.6 | 25.9 | 26.2 | 27.3 | 26.4 | 26.8 | --- | --- | ---  |
| 4     | 26.3 | 24.5 | 25.7 | 26.3 | 25.4 | 25.9 | 28.0 | 26.2 | 27.2 | --- | --- | ---  |
| 5     | 24.7 | 23.6 | 24.1 | 26.9 | 25.9 | 26.4 | 28.6 | 27.1 | 27.9 | --- | --- | ---  |
| 6     | 24.4 | 23.6 | 24.0 | 27.0 | 26.4 | 26.7 | 28.1 | 26.5 | 27.3 | --- | --- | ---  |
| 7     | 23.7 | 23.0 | 23.4 | 27.6 | 26.8 | 27.2 | 26.5 | 24.9 | 25.6 | --- | --- | ---  |
| 8     | 24.0 | 23.5 | 23.7 | 28.0 | 27.3 | 27.6 | 25.6 | 24.3 | 25.0 | --- | --- | ---  |
| 9     | 24.4 | 23.8 | 24.1 | 28.4 | 27.5 | 27.9 | 25.4 | 24.4 | 24.9 | --- | --- | ---  |
| 10    | 25.0 | 24.1 | 24.5 | 29.0 | 27.8 | 28.3 | 25.8 | 24.3 | 25.1 | --- | --- | ---  |
| 11    | 25.9 | 25.0 | 25.4 | 28.4 | 27.1 | 27.7 | 26.1 | 24.6 | 25.4 | --- | --- | ---  |
| 12    | 25.9 | 24.9 | 25.5 | 27.7 | 27.0 | 27.3 | 25.8 | 25.1 | 25.5 | --- | --- | ---  |
| 13    | 24.9 | 24.2 | 24.5 | 28.2 | 26.8 | 27.4 | 25.3 | 24.4 | 24.7 | --- | --- | ---  |
| 14    | 25.0 | 24.1 | 24.5 | 29.0 | 27.7 | 28.3 | 24.5 | 22.1 | 23.5 | --- | --- | ---  |
| 15    | 25.7 | 24.3 | 25.0 | 29.1 | 28.2 | 28.6 | 22.1 | 21.6 | 21.7 | --- | --- | ---  |
| 16    | 25.7 | 25.1 | 25.4 | 28.7 | 27.7 | 28.3 | 22.6 | 21.8 | 22.1 | --- | --- | ---  |
| 17    | 25.9 | 24.8 | 25.3 | 28.2 | 27.3 | 27.8 | 23.0 | 22.2 | 22.6 | --- | --- | ---  |
| 18    | 27.1 | 25.4 | 26.2 | 27.5 | 26.8 | 27.1 | 23.5 | 22.8 | 23.1 | --- | --- | ---  |
| 19    | 28.0 | 26.5 | 27.2 | 27.1 | 26.1 | 26.7 | 24.3 | 23.4 | 23.8 | --- | --- | ---  |
| 20    | 27.7 | 26.9 | 27.3 | 27.8 | 26.0 | 26.9 | 25.0 | 24.3 | 24.6 | --- | --- | ---  |
| 21    | 27.0 | 26.0 | 26.6 | 28.2 | 26.7 | 27.5 | 25.5 | 24.9 | 25.2 | --- | --- | ---  |
| 22    | 27.0 | 25.7 | 26.4 | 28.2 | 27.1 | 27.7 | 25.6 | 25.3 | 25.5 | --- | --- | ---  |
| 23    | 28.0 | 26.3 | 27.1 | 27.8 | 27.0 | 27.3 | 25.4 | 25.0 | 25.3 | --- | --- | ---  |
| 24    | 27.5 | 26.6 | 27.0 | 27.2 | 26.5 | 26.8 | 25.3 | 24.8 | 25.1 | --- | --- | ---  |
| 25    | 27.5 | 26.1 | 26.8 | 26.9 | 26.1 | 26.5 | 25.4 | 24.6 | 25.0 | --- | --- | ---  |
| 26    | 27.1 | 26.4 | 26.8 | 27.6 | 26.2 | 26.8 | 25.5 | 24.9 | 25.2 | --- | --- | ---  |
| 27    | 26.4 | 25.4 | 26.0 | 28.3 | 26.9 | 27.6 | 25.8 | 24.9 | 25.3 | --- | --- | ---  |
| 28    | 26.1 | 25.4 | 25.7 | 28.3 | 27.5 | 27.9 | 26.3 | 25.1 | 25.7 | --- | --- | ---  |
| 29    | 26.0 | 25.0 | 25.5 | 28.4 | 27.2 | 27.7 | 26.5 | 25.7 | 26.1 | --- | --- | ---  |
| 30    | 26.1 | 25.4 | 25.7 | 28.5 | 27.1 | 27.8 | 26.1 | 25.1 | 25.5 | --- | --- | ---  |
| 31    | ---  | ---  | ---  | 28.0 | 27.1 | 27.6 | 25.6 | 24.6 | 25.1 | --- | --- | ---  |
| MONTH | 28.0 | 23.0 | 25.5 | 29.1 | 25.3 | 27.3 | 28.6 | 21.6 | 25.2 | --- | --- | ---  |

0209173150 UNNAMED TRIBUTARY TO SANDY RUN AT SECONDARY ROAD 1335 NEAR LIZZIE, NC

LOCATION.--Lat 35°31'03", long 77°33'52", Greene County, Hydrologic Unit 03020203, at Secondary Road 1335, approximately 6.0 mi south of Farmville.

DRAINAGE AREA.--0.34 mi<sup>2</sup>

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources and the U.S. Environmental Protection Agency to examine nutrient loadings as part of the Lizzie research site water-quality monitoring project.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Flow rate, instantaneous gal/min (00059) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unf uS/cm 25 degC (00095) | Temperature, air, deg C (00020) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) |
|-----------|------|--|------------------------------------|--------------------------------|---|---|---|---------------------------------|-----------------------------------|--|------------------------------------|---------------------------------------|---------------------------------------|
| OCT 03... | 1045 | 36.9                                     | 773                                | 7.4                            | 74  | 6.1   | 183   | 15.0                            | 15.3                              | --                                     | --                                 | --                                    | --                                    |
| FEB 11... | 1055 | 37.5                                     | 770                                | 10.4                           | 86  | 6.0   | 136   | 13.0                            | 7.7                               | 36                                     | 10.1                               | 2.64                                  | 2.91                                  |
| AUG 15... | 1235 | 360                                      | 768                                | 6.8                            | 75  | 5.1   | 161   | 22.0                            | 20.9                              | 42                                     | 12.1                               | 2.96                                  | 7.45                                  |
| AUG 17... | 1205 | 205                                      | --                                 | 6.4                            | --  | 4.8   | 164   | --                              | 21.7                              | --                                     | --                                 | --                                    | --                                    |

| Date      | Sodium, water, fltrd, mg/L (00930) | Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801) | Chloride, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00945) | Residue water, fltrd, sum of constituents mg/L (70301) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd mg/L (00605) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------------------------------------|--|--------------------------------------|------------------------------------|--|--|---|---|--|---|--|---|---|
| OCT 03... | --                                 | --   | --                                   | --                                 | --   | .56  | .62   | .13                                     | 3.80   | E.005                                   | .43  | .50   | E.01  |
| FEB 11... | 6.27                               | 3  | 20.2                                 | 12.1                               | 69   | .37  | .42   | .09                                     | 2.95   | <.008                                   | .28  | .33   | <.02  |
| AUG 15... | 5.52                               | 4  | 16.6                                 | 23.1                               | 87   | .76  | .86   | <.04                                    | 3.88   | <.008                                   | --   | --  | .03   |
| AUG 17... | --                                 | --   | --                                   | --                                 | --   | --   | --  | --                                      | --   | --                                      | --   | --  | --  |

| Date      | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Organic carbon, water, fltrd, mg/L (00681) | Iron, water, fltrd, ug/L (01046) |
|-----------|--|---|--|---|--|----------------------------------|
| OCT 03... | .025                                   | .080                                    | 4.4  | 4.4   | --   | --                               |
| FEB 11... | .012                                   | .042                                    | 3.3  | 3.4   | 5.5  | 327                              |
| AUG 15... | .047                                   | .088                                    | 4.6  | 4.7   | --   | 271                              |
| AUG 17... | --                                     | --                                      | --   | --  | --   | --                               |

## 0209173190 UNNAMED TRIBUTARY TO SANDY RUN NEAR LIZZIE, NC

LOCATION.--Lat 35°31'31", long 77°33'46", Greene County, Hydrologic Unit 03020203, approximately 6.0 mi south of Farmville.

DRAINAGE AREA.-- Approximately 0.57 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1999 to September 2001, June 2002 to current year.

GAGE.--Water-stage recorder. Datum of gage is 48.50 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records poor. Station operated in cooperation with the U.S. Environmental Protection Agency and the North Carolina Department of Environment and Natural Resources to monitor water quality changes in an agricultural watershed. Maximum discharge for period of record from rating curve extended above 10 ft<sup>3</sup>/s by logarithmic plotting. No flow occurs on many days during most years. Discharge for period Oct. 2001 to May 2002 not published due to beaver activity affecting the accuracy of the data.DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB   | MAR   | APR  | MAY  | JUN  | JUL   | AUG   | SEP  |
|-------|-------|-------|-------|------|-------|-------|------|------|------|-------|-------|------|
| 1     | 0.38  | 1.1   | 0.32  | 0.35 | 0.28  | 0.79  | 0.10 | 0.19 | 0.01 | e0.04 | 0.01  | 0.22 |
| 2     | 0.33  | 0.86  | 0.29  | 0.33 | 0.26  | 0.64  | 0.08 | 0.55 | 0.01 | 0.05  | 0.17  | 0.09 |
| 3     | 0.30  | 0.69  | 0.29  | 0.32 | 0.40  | 0.52  | 0.07 | 4.2  | 0.00 | 0.05  | 0.04  | 0.05 |
| 4     | 0.30  | 0.59  | 0.34  | 0.32 | 0.39  | 0.45  | 0.06 | 2.0  | 0.05 | 0.02  | 0.02  | 0.04 |
| 5     | 0.25  | 1.0   | 0.53  | 0.31 | 0.34  | 0.39  | 0.08 | 0.80 | 0.02 | 0.02  | 0.01  | 0.04 |
| 6     | 0.23  | 2.5   | 0.40  | 0.30 | 0.32  | 0.36  | 0.07 | 0.44 | 0.01 | 0.01  | 0.01  | 0.05 |
| 7     | 0.21  | 3.3   | 0.34  | 0.26 | 0.31  | 0.44  | 0.05 | 0.27 | 0.02 | 0.01  | 0.01  | 0.07 |
| 8     | 0.23  | 1.6   | 0.31  | 0.26 | 0.24  | 0.61  | 0.05 | 0.16 | 0.01 | 0.01  | 0.00  | 0.09 |
| 9     | 0.87  | 1.1   | 0.29  | 0.29 | 0.23  | 0.47  | 0.07 | 0.11 | 0.00 | 0.00  | 0.00  | 0.11 |
| 10    | 0.65  | 0.85  | 2.7   | 0.28 | 0.23  | 0.48  | 0.12 | 0.06 | 0.00 | 0.00  | 0.00  | 0.05 |
| 11    | 0.54  | 0.72  | 5.1   | 0.25 | 0.21  | 0.50  | 0.09 | 0.03 | 0.00 | 0.00  | 0.00  | 0.03 |
| 12    | 0.45  | 0.62  | 2.0   | 0.27 | 0.78  | 0.47  | 0.30 | 0.16 | 0.00 | 0.00  | 0.00  | 0.03 |
| 13    | 0.37  | 0.52  | 1.2   | 0.27 | 0.84  | 0.35  | 0.33 | 0.13 | 0.00 | 0.00  | 0.06  | 0.02 |
| 14    | 0.43  | 0.43  | 6.5   | 0.26 | 0.83  | 0.29  | 0.29 | 0.08 | 0.00 | 0.00  | 8.9   | 0.02 |
| 15    | 0.50  | 0.41  | 3.9   | 0.25 | 1.4   | 0.31  | 0.22 | 0.07 | 0.00 | 0.00  | 3.1   | 0.03 |
| 16    | 0.36  | 0.38  | 2.2   | 0.21 | 2.5   | 0.66  | 0.16 | 0.06 | 0.00 | 0.00  | 1.7   | 0.02 |
| 17    | 0.31  | 0.35  | 2.5   | 0.20 | 2.1   | e0.50 | 0.13 | 0.04 | 0.01 | 0.00  | 0.71  | 0.11 |
| 18    | 0.29  | 0.34  | 1.9   | 0.27 | 1.7   | 0.24  | 0.08 | 0.04 | 0.03 | 0.00  | 0.41  | 0.22 |
| 19    | 0.26  | 0.93  | 1.3   | 0.24 | 1.2   | 0.24  | 0.06 | 0.05 | 0.04 | 0.00  | 0.27  | 0.14 |
| 20    | 0.23  | 1.1   | 0.99  | 0.21 | 0.87  | 0.20  | 0.04 | 0.02 | 0.01 | 0.01  | 0.17  | 0.08 |
| 21    | 0.22  | 0.71  | 0.78  | 0.20 | 0.68  | 0.20  | 0.04 | 0.02 | 0.00 | 0.00  | 0.11  | 0.05 |
| 22    | 0.19  | 0.56  | 0.70  | 0.20 | 0.52  | 0.16  | 0.04 | 0.02 | 0.00 | 0.00  | 0.16  | 0.04 |
| 23    | 0.17  | 0.48  | 0.63  | 0.18 | 0.45  | 0.14  | 0.03 | 0.04 | 0.00 | 0.03  | 0.09  | 0.03 |
| 24    | 0.15  | 0.46  | 0.80  | 0.16 | 0.43  | 0.14  | 0.06 | 0.05 | 0.01 | 0.02  | 0.05  | 0.03 |
| 25    | 0.16  | 0.43  | 0.69  | 0.16 | 0.37  | 0.13  | 0.06 | 0.02 | 0.01 | 0.01  | 0.05  | 0.02 |
| 26    | 0.18  | 0.40  | 0.57  | 0.21 | 0.42  | e0.12 | 0.11 | 0.02 | 0.02 | 0.01  | 0.09  | 0.02 |
| 27    | 0.18  | 0.38  | 0.50  | 0.25 | 2.3   | 0.10  | 0.22 | 0.01 | 0.02 | 0.00  | e0.10 | 0.03 |
| 28    | 0.50  | 0.39  | 0.45  | 0.33 | 1.7   | 0.10  | 0.12 | 0.01 | 0.13 | 0.00  | e0.08 | 0.10 |
| 29    | 10    | 0.36  | 0.43  | 0.34 | 1.1   | 0.11  | 0.11 | 0.01 | 0.05 | 0.00  | 0.06  | 0.04 |
| 30    | 3.1   | 0.34  | 0.41  | 0.38 | ---   | 0.14  | 0.12 | 0.02 | 0.06 | 0.00  | 0.14  | 0.04 |
| 31    | 1.7   | ---   | 0.36  | 0.33 | ---   | 0.14  | ---  | 0.02 | ---  | 0.01  | 0.16  | ---  |
| TOTAL | 24.04 | 23.90 | 39.72 | 8.19 | 23.40 | 10.39 | 3.36 | 9.70 | 0.52 | 0.30  | 16.68 | 1.91 |
| MEAN  | 0.78  | 0.80  | 1.28  | 0.26 | 0.81  | 0.34  | 0.11 | 0.31 | 0.02 | 0.01  | 0.54  | 0.06 |
| MAX   | 10    | 3.3   | 6.5   | 0.38 | 2.5   | 0.79  | 0.33 | 4.2  | 0.13 | 0.05  | 8.9   | 0.22 |
| MIN   | 0.15  | 0.34  | 0.29  | 0.16 | 0.21  | 0.10  | 0.03 | 0.01 | 0.00 | 0.00  | 0.00  | 0.02 |
| CFSM  | 1.36  | 1.40  | 2.25  | 0.46 | 1.42  | 0.59  | 0.20 | 0.55 | 0.03 | 0.02  | 0.94  | 0.11 |
| IN.   | 1.57  | 1.56  | 2.59  | 0.53 | 1.53  | 0.68  | 0.22 | 0.63 | 0.03 | 0.02  | 1.09  | 0.12 |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, @ BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 0.75   | 0.47   | 0.58   | 0.23   | 0.65   | 0.76   | 0.40   | 0.66   | 0.25   | 0.17   | 0.53   | 2.86   |
| MAX  | 2.06   | 0.80   | 1.28   | 0.28   | 1.04   | 1.49   | 1.06   | 2.60   | 1.13   | 0.62   | 2.39   | 15.4   |
| (WY) | (2000) | (2004) | (2004) | (2000) | (2003) | (2003) | (2003) | (2003) | (2001) | (2003) | (2003) | (1999) |
| MIN  | 0.08   | 0.05   | 0.09   | 0.13   | 0.20   | 0.30   | 0.11   | 0.08   | 0.02   | 0.01   | 0.00   | 0.00   |
| (WY) | (2003) | (2001) | (2001) | (2001) | (2001) | (2000) | (2004) | (2001) | (2004) | (2000) | (2002) | (2002) |



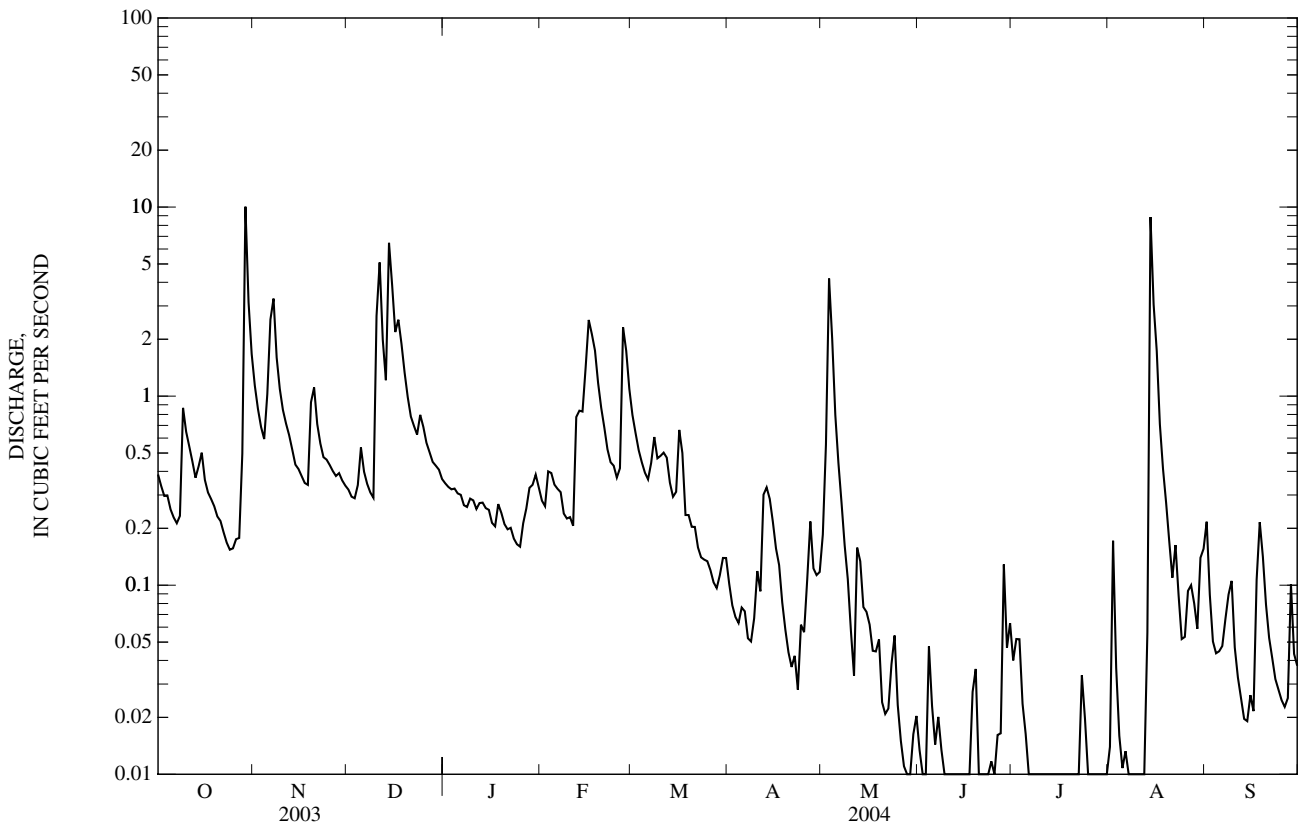
0209173190 UNNAMED TRIBUTARY TO SANDY RUN NEAR LIZZIE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1999 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 409.58                 |        | 162.11              |        | 0.54                                 |              |
| ANNUAL MEAN              | 1.12                   |        | 0.44                |        | 1.01                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 0.31                                 |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2001                                 |              |
| HIGHEST DAILY MEAN       | 19                     | Aug 10 | 10                  | Oct 29 | 283                                  | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 0.02                   | Jun 24 | 0.00                | Jun 3  | 0.00                                 | Jun 10, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 0.02                   | Jun 24 | 0.00                | Jun 9  | 0.00                                 | Jul 30, 1999 |
| MAXIMUM PEAK FLOW        |                        |        | 93                  | Aug 14 | 500                                  | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 3.00                | Aug 14 | 5.18                                 | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.00*               | Jun 2  | 0.00*                                | Jun 10, 1999 |
| ANNUAL RUNOFF (CFSM)     | 1.97                   |        | 0.777               |        | 0.950                                |              |
| ANNUAL RUNOFF (INCHES)   | 26.73                  |        | 10.58               |        | 12.90                                |              |
| 10 PERCENT EXCEEDS       | 2.9                    |        | 0.87                |        | 1.1                                  |              |
| 50 PERCENT EXCEEDS       | 0.44                   |        | 0.19                |        | 0.18                                 |              |
| 90 PERCENT EXCEEDS       | 0.13                   |        | 0.01                |        | 0.01                                 |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



0209173190 UNNAMED TRIBUTARY TO SANDY RUN NEAR LIZZIE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources and the U.S. Environmental Protection Agency to examine nutrient loadings as part of the Lizzie research site water-quality monitoring project.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Flow rate, instantaneous gal/min (00059) | Instantaneous discharge, cfs (00061) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, air, deg C (00020) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium, water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) |
|-----------|------|--|--------------------------------------|------------------------------------|--------------------------------|---|---|---|---------------------------------|-----------------------------------|--|-------------------------------------|---------------------------------------|
| OCT 03... | 1200 | 139                                      | .31                                  | 773                                | 7.9                            | 75  | 6.7   | 257   | 16.0                            | 13.4                              | --                                     | --                                  | --                                    |
| FEB 11... | 1245 | 94.2                                     | .21                                  | 769                                | 10.1                           | 85  | 6.5   | 194   | 13.0                            | 8.2                               | 51                                     | 14.8                                | 3.42                                  |
| AUG 15... | 1405 | 628                                      | 1.4                                  | 767                                | 7.1                            | 79  | 5.7   | 193   | 22.0                            | 20.8                              | 52                                     | 15.4                                | 3.35                                  |
| AUG 17... | 1245 | 314                                      | .70                                  | --                                 | 7.2                            | --  | 5.7   | 204   | --                              | 20.4                              | --                                     | --                                  | --                                    |

| Date      | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801) | Chloride, water, fltrd, mg/L (00940) | Sulfate, water, fltrd, mg/L (00945) | Residue water, fltrd, sum of constituents mg/L (70301) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Nitrite, water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd, mg/L (00605) |
|-----------|---------------------------------------|------------------------------------|--|--------------------------------------|-------------------------------------|--|--|--|--|--|--|--|--|
| OCT 03... | --                                    | --                                 | --   | --                                   | --                                  | --   | 1.9  | 2.0  | 1.32                                     | 8.25   | .106                                     | .62  | .65  |
| FEB 11... | 4.76                                  | 8.83                               | 13   | 24.4                                 | 10.4                                | 102  | 1.5  | 1.6  | 1.15                                     | 5.78   | .021                                     | .31  | .40  |
| AUG 15... | 8.21                                  | 7.76                               | 5  | 22.6                                 | 20.7                                | 104  | 1.3  | 1.3  | .54                                      | 5.05   | .008                                     | .75  | .73  |
| AUG 17... | --                                    | --                                 | --   | --                                   | --                                  | --   | --   | --   | --                                       | --   | --                                       | --   | --   |

| Date      | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd, mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd, mg/L (00600) | Organic carbon, water, fltrd, mg/L (00681) | Iron, water, fltrd, ug/L (01046) |
|-----------|---|--|--|--|--|--|----------------------------------|
| OCT 03... | <.02  | .011                                   | .054                                     | 10   | 10   | --   | --                               |
| FEB 11... | <.02  | .009                                   | .039                                     | 7.2  | 7.3  | 4.1  | 220                              |
| AUG 15... | .02   | .039                                   | .100                                     | 6.3  | 6.3  | --   | 278                              |
| AUG 17... | --  | --                                     | --                                       | --   | --   | --   | --                               |

353137077332801 WEATHER STATION #2 NEAR LIZZIE, NC

LOCATION.--Lat 35°31'38", long 77°33'27", Greene County, Hydrologic Unit 03020203, approximately 6.0 mi south of Farmville.

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1999 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources and the U.S. Environmental Protection Agency to examine nutrient loadings as part of the Lizzie research site water-quality monitoring project. Formerly published as station number, 0209173196. Station moved to current location on December 13, 2000.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date         | Time | End time | Precipitation total, inches (00045) | Barometric pressure, mm Hg (00025) | pH, water, unfltrd field, std units (00400) | Specif. conductance, wat unfiltered, uS/cm 25 degC (00095) | Temperature, air, deg C (00020) | Temperature, water, deg C (00010) | Potassium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | Chloride, water, fltrd, mg/L (00940) | Sulfate water, fltrd, mg/L (00945) | Ammonia water, fltrd, mg/L as N (00608) |
|--------------|------|----------|-------------------------------------|------------------------------------|---|--|---------------------------------|-----------------------------------|---------------------------------------|------------------------------------|--------------------------------------|------------------------------------|---|
| FEB<br>12-13 | 0445 | 1030     | .78                                 | 770                                | 5.0   | 6  | 10.0                            | 8.2                               | E.005                                 | E.07                               | .03                                  | .56                                | .042                                    |
| JUN<br>16-17 | 1430 | 1130     | .58                                 | 766                                | 5.8   | 14   | 29.0                            | 27.0                              | --                                    | --                                 | --                                   | --                                 | .742                                    |
| AUG<br>12-13 | 1730 | 1300     | 1.12                                | 759                                | 5.3   | 5  | 30.0                            | 25.3                              | E.005                                 | <.10                               | .14                                  | .36                                | .078                                    |

| Date         | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Ortho-phosphate, water, fltrd, mg/L as P (00671) |
|--------------|--|---|--|
| FEB<br>12-13 | .140   | .002                                    | <.006  |
| JUN<br>16-17 | .167   | .003                                    | <.006  |
| AUG<br>12-13 | .069   | E.001                                   | <.006  |

353137077332801 WEATHER STATION #2 NEAR LIZZIE, NC—Continued

LOCATION.--Lat 35°31'43", long 77°33'28", Greene County, Hydrologic Unit 03020203, approximately 6.0 mi south of Farmville.

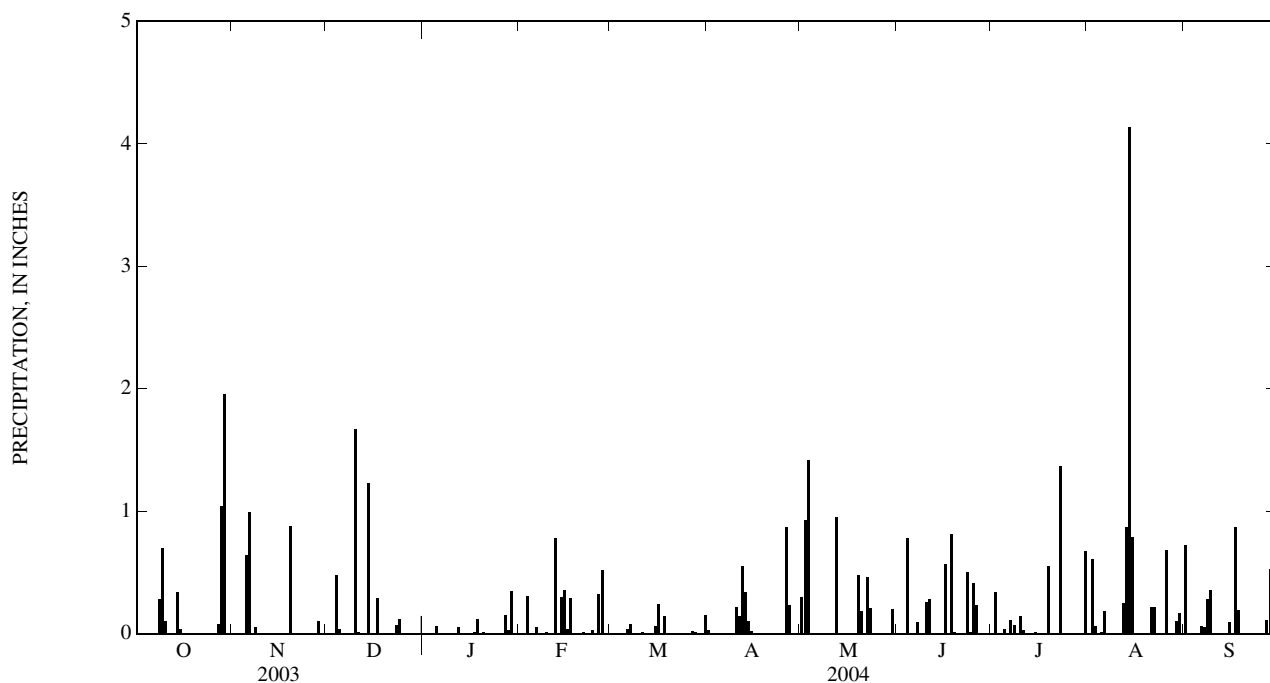
PERIOD OF RECORD.--November 2000 to current year.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation gage is operated in cooperation with the U.S. Environmental Protection Agency and the North Carolina Department of Environment and Natural Resources to monitor water quality changes in an agricultural watershed. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.30 | 0.00 | ---  | 0.00 | 0.72 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.93 | 0.00 | 0.34 | 0.61 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.00 | 0.00 | 1.42 | 0.00 | 0.00 | 0.06 | 0.00 |
| 4     | 0.00 | 0.00 | 0.48 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.78 | 0.00 | 0.00 | 0.00 |
| 5     | 0.00 | 0.64 | 0.04 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.01 | 0.00 |
| 6     | 0.00 | 0.99 | 0.00 | 0.00 | 0.05 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.06 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.09 | 0.11 | 0.00 | 0.05 |
| 8     | 0.28 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.28 |
| 9     | 0.70 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 |
| 10    | 0.10 | 0.00 | 1.67 | 0.00 | 0.00 | 0.00 | 0.22 | 0.00 | 0.26 | 0.14 | 0.00 | 0.00 |
| 11    | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.14 | 0.00 | 0.28 | 0.03 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.05 | 0.78 | 0.00 | 0.55 | 0.95 | 0.00 | 0.00 | 0.25 | 0.00 |
| 13    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.87 | 0.00 |
| 14    | 0.34 | 0.00 | 1.23 | 0.00 | 0.30 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 4.14 | 0.00 |
| 15    | 0.04 | 0.00 | 0.00 | 0.00 | 0.36 | 0.06 | 0.02 | 0.00 | 0.00 | 0.01 | 0.79 | 0.09 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.24 | 0.00 | 0.00 | 0.57 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.00 | 0.29 | 0.01 | 0.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.87 |
| 18    | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 | 0.14 | 0.00 | 0.00 | 0.81 | 0.00 | 0.00 | 0.19 |
| 19    | 0.00 | 0.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.01 | 0.55 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | 0.00 | 0.00 | 0.22 | 0.00 |
| 23    | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.50 | 1.37 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.12 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 | 0.00 |
| 26    | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 | 0.00 | 0.87 | 0.00 | 0.23 | 0.00 | 0.68 | 0.00 |
| 27    | 0.08 | 0.00 | 0.00 | 0.15 | 0.52 | 0.02 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 |
| 28    | 1.04 | 0.10 | 0.00 | 0.03 | 0.00 | 0.01 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.53 |
| 29    | 1.96 | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.10 | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.20 | ---  | 0.00 | 0.17 | 0.35 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.15 | ---  | 0.00 | ---  | 0.67 | 0.00 | ---  |
| TOTAL | 4.54 | 2.66 | 3.91 | 0.78 | 3.02 | 0.75 | 2.50 | 5.13 | ---  | ---  | 8.30 | 3.61 |



353119077332001 MIDDLE DRAINAGE DITCH (MS4-D3) NEAR WILLOW GREEN, NC

LOCATION.--Lat 35°31'19", long 77°33'20", Greene County, Hydrologic Unit 03020203, east of Secondary Road 1345 and 1.4 mi west-northwest of Willow Green.

DRAINAGE AREA.-- Indeterminate.

PERIOD OF RECORD.--February 2003 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources and the U.S. Environmental Protection Agency to examine nutrient loadings from field drainage ditches as part of the Lizzie research site water-quality monitoring project.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Flow rate, instantaneous gal/min (00059) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, air, deg C (00020) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium, water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) |
|-----------|------|--|------------------------------------|--------------------------------|---|---|---|---------------------------------|-----------------------------------|--|-------------------------------------|---------------------------------------|---------------------------------------|
| OCT 03... | 1235 | 3.0                                      | 772                                | 5.4                            | 59  | 4.7   | 554   | 18.0                            | 19.9                              | --                                     | --                                  | --                                    | --                                    |
| FEB 11... | 1000 | 6.2                                      | 770                                | 8.6                            | 73  | 4.1   | 546   | 10.5                            | 8.5                               | 120                                    | 32.3                                | 10.1                                  | 16.4                                  |
| AUG 15... | 1505 | 250                                      | 768                                | 5.7                            | 64  | 5.6   | 154   | 21.5                            | 22.0                              | 26                                     | 6.57                                | 2.40                                  | 17.0                                  |
| AUG 17... | 1335 | 19.4                                     | --                                 | 4.4                            | --  | 4.2   | 560   | --                              | 22.0                              | --                                     | --                                  | --                                    | --                                    |

| Date      | Sodium, water, fltrd, mg/L (00930) | Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801) | Chloride, water, fltrd, mg/L (00940) | Sulfate, water, fltrd, mg/L (00945) | Residue water, fltrd, sum of constituents mg/L (70301) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Nitrite, water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) | Phosphorus, water, unfltrd mg/L (00665) |
|-----------|------------------------------------|--|--------------------------------------|-------------------------------------|--|--|---|--|--|--|---|--|---|
| OCT 03... | --                                 | --   | --                                   | --                                  | --   | .39  | .48   | <.04                                     | 29.0   | <.008                                    | .02   | .032                                   | .043                                    |
| FEB 11... | 23.9                               | --   | 65.3                                 | 28.8                                | --   | .31  | .27   | <.04                                     | 28.6   | <.008                                    | E.01  | .012                                   | .019                                    |
| AUG 15... | 5.89                               | 8  | 16.7                                 | 6.0                                 | 89   | 1.5  | 1.8   | E.03                                     | 6.46   | .008                                     | .33   | .37                                    | .70                                     |
| AUG 17... | --                                 | --   | --                                   | --                                  | --   | --   | --  | --                                       | --   | --                                       | --  | --                                     | --                                      |

| Date      | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Organic carbon, water, fltrd, mg/L (00681) | Iron, water, fltrd, ug/L (01046) |
|-----------|--|---|--|----------------------------------|
| OCT 03... | 29   | 29  | --   | --                               |
| FEB 11... | 29   | 29  | 1.7  | 15                               |
| AUG 15... | 7.9  | 8.3   | --   | 126                              |
| AUG 17... | --   | --  | --   | --                               |









02091734 NORTH DRAINAGE DITCH (MS4-D2) NEAR WILLOW GREEN, NC

LOCATION.--Lat 35°31'29", long 77°33'05", Greene County, Hydrologic Unit 03020203, approximately 0.2 mi east of Secondary Road 1345 and 1.3 mi west-northwest of Willow Green.

DRAINAGE AREA.-- Indeterminate.

PERIOD OF RECORD.--August 2000 to August 2001, February 2003 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources and the U.S. Environmental Protection Agency to examine nutrient loadings from field drainages as part of the Lizzie research site water-quality monitoring project.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Flow rate, instantaneous gal/min (00059) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, air, deg C (00020) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium, water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) |
|-----------|------|--|------------------------------------|--------------------------------|---|---|---|---------------------------------|-----------------------------------|--|-------------------------------------|---------------------------------------|---------------------------------------|
| OCT 03... | 1410 | 18.0                                     | 769                                | 9.3                            | 96  | 6.0   | 209   | 19.0                            | 17.2                              | --                                     | --                                  | --                                    | --                                    |
| FEB 11... | 0850 | 11.4                                     | 769                                | 11.6                           | 96  | 5.0   | 248   | 9.0                             | 7.6                               | 64                                     | 16.3                                | 5.62                                  | 8.01                                  |
| AUG 15... | 1725 | 255                                      | 767                                | 7.3                            | 83  | 4.8   | 381   | 21.0                            | 22.0                              | 64                                     | 16.8                                | 5.36                                  | 31.9                                  |
| AUG 17... | 1440 | 43.5                                     | --                                 | 7.4                            | --  | 4.6   | 416   | --                              | 22.4                              | --                                     | --                                  | --                                    | --                                    |

| Date      | Sodium, water, fltrd, mg/L (00930) | Alkalinity, wat flt fxd end lab, mg/L as CaCO3 (29801) | Chloride, water, fltrd, mg/L (00940) | Sulfate, water, fltrd, mg/L (00945) | Ammonia + org-N, water, fltrd, mg/L as N (00623) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Nitrite, water, fltrd, mg/L as N (00613) | Organic nitrogen, water, fltrd, mg/L (00607) | Organic nitrogen, water, unfltrd mg/L (00605) | Orthophosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, fltrd, mg/L (00666) |
|-----------|------------------------------------|--|--------------------------------------|-------------------------------------|--|---|--|--|--|--|---|---|--|
| OCT 03... | --                                 | --   | --                                   | --                                  | .25  | 2.5   | E.03                                     | 9.90   | <.008                                    | --   | --  | <.02  | .004                                   |
| FEB 11... | 11.1                               | <2   | 29.5                                 | 16.6                                | .16  | .17   | <.04                                     | 12.9   | E.005                                    | --   | --  | <.02  | E.003                                  |
| AUG 15... | 14.0                               | <2   | 35.4                                 | 12.0                                | .86  | 1.2   | .04                                      | 22.9   | <.008                                    | .82  | 1.2   | <.02  | .016                                   |
| AUG 17... | --                                 | --   | --                                   | --                                  | --   | --  | --                                       | --   | --                                       | --   | --  | --  | --                                     |

| Date      | Phosphorus, water, unfltrd mg/L (00665) | Total nitrogen, water, fltrd, mg/L (00602) | Total nitrogen, water, unfltrd mg/L (00600) | Organic carbon, water, fltrd, mg/L (00681) | Iron, water, fltrd, ug/L (01046) |
|-----------|---|--|---|--|----------------------------------|
| OCT 03... | .045                                    | 10   | 12  | --   | --                               |
| FEB 11... | .007                                    | 13   | 13  | 1.1  | 17                               |
| AUG 15... | .162                                    | 24   | 24  | --   | 72                               |
| AUG 17... | --                                      | --   | --  | --   | --                               |

## 02091736 MIDDLE SWAMP NEAR FARMVILLE, NC

LOCATION.--Lat 35°31'58", long 77°32'43", Pitt County, Hydrologic Unit 03020203, at bridge on Secondary Road 1139, 1.2 mi above mouth and 5 mi southeast of Farmville.

DRAINAGE AREA.-- 51.0 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Station operated in cooperation with the U.S. Environmental Protection Agency and the North Carolina Department of Environment and Natural Resources to monitor water quality changes in an agricultural watershed. Maximum gage height for period of record probably occurred on Sept. 17, 1999, discharge not determined. Maximum gage height from floodmarks. No flow also occurred on June 10, 1999; and on several days in Sept. and Oct. 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT     | NOV   | DEC   | JAN  | FEB   | MAR   | APR   | MAY     | JUN   | JUL   | AUG      | SEP    |
|-------|---------|-------|-------|------|-------|-------|-------|---------|-------|-------|----------|--------|
| 1     | 29      | 160   | 17    | 27   | 31    | 108   | 9.5   | 9.6     | 3.4   | 17    | 0.79     | 2.6    |
| 2     | 22      | 126   | 15    | 25   | 28    | 89    | 9.5   | 22      | 2.4   | 11    | 0.97     | 2.6    |
| 3     | 16      | 95    | 13    | 23   | 34    | 72    | 9.3   | 235     | 1.9   | 11    | 1.9      | 1.4    |
| 4     | 13      | 70    | 17    | 22   | 43    | 55    | 8.5   | 321     | 3.3   | 6.6   | 1.2      | 1.1    |
| 5     | 11      | 55    | 33    | 20   | 39    | 42    | 6.9   | 207     | 4.9   | 4.5   | 0.94     | 0.81   |
| 6     | 9.7     | 81    | 45    | 22   | 40    | 36    | 6.0   | 150     | 14    | 3.1   | 0.89     | 0.78   |
| 7     | 8.9     | 146   | 39    | 19   | 38    | 33    | 5.0   | 110     | 12    | 2.3   | 0.77     | 0.88   |
| 8     | 9.0     | 129   | 33    | 18   | 32    | 29    | 4.3   | 82      | 22    | 1.9   | 0.57     | 1.1    |
| 9     | 27      | 105   | 31    | 18   | 27    | 25    | 4.2   | 53      | 14    | 1.6   | 0.44     | 1.9    |
| 10    | 55      | 87    | 43    | 20   | 25    | 22    | 4.1   | 33      | 7.9   | 1.2   | 0.30     | 4.7    |
| 11    | 65      | 67    | 199   | 18   | 24    | 19    | 7.1   | 23      | 5.8   | 1.1   | 0.25     | 15     |
| 12    | 48      | 55    | 174   | 18   | 43    | 18    | 17    | 18      | 7.4   | 0.89  | 0.22     | 13     |
| 13    | 35      | 38    | 135   | 19   | 105   | 16    | 29    | 87      | 7.4   | 0.76  | 1.0      | 8.1    |
| 14    | 34      | 28    | 194   | 18   | 113   | 14    | 101   | 46      | 6.2   | 0.59  | 93       | 4.8    |
| 15    | 50      | 24    | 289   | 17   | 115   | 14    | 105   | 22      | 4.3   | 0.43  | 378      | 3.8    |
| 16    | 39      | 22    | 214   | 15   | 153   | 18    | 74    | 13      | 5.1   | 0.29  | 315      | 3.0    |
| 17    | 36      | 18    | 176   | 14   | 157   | 21    | 44    | 9.6     | 8.4   | 0.19  | 198      | 2.9    |
| 18    | 29      | 15    | 180   | 16   | 149   | 20    | 30    | 7.5     | 7.5   | 0.16  | 126      | 7.7    |
| 19    | 23      | 24    | 162   | 18   | 130   | 20    | 21    | 6.5     | 15    | 0.20  | 60       | 9.5    |
| 20    | 20      | 80    | 132   | 18   | 107   | 18    | 16    | 7.8     | 7.3   | 0.49  | 29       | 8.3    |
| 21    | 16      | 93    | 107   | 16   | 89    | 17    | 13    | 6.1     | 4.8   | 0.25  | 23       | 6.0    |
| 22    | 14      | 75    | 90    | 17   | 72    | 15    | 10    | 4.9     | 3.7   | 0.18  | 18       | 4.4    |
| 23    | 13      | 56    | 76    | 15   | 54    | 13    | 8.3   | 172     | 3.0   | 0.73  | 11       | 2.9    |
| 24    | 13      | 41    | 79    | 14   | 42    | 12    | 6.6   | 108     | 3.8   | 1.7   | 6.9      | 2.1    |
| 25    | 15      | 31    | 79    | 13   | 34    | 10    | 5.3   | 56      | 3.9   | 1.6   | 4.4      | 1.8    |
| 26    | 12      | 25    | 67    | 18   | 32    | 9.4   | 5.6   | 27      | 10    | 1.2   | 3.1      | 1.5    |
| 27    | 11      | 22    | 58    | 20   | 94    | 8.9   | 16    | 16      | 7.7   | 0.89  | 4.3      | 1.3    |
| 28    | 16      | 22    | 48    | 25   | 159   | 8.5   | 17    | 12      | 12    | 0.67  | 2.5      | 2.9    |
| 29    | 248     | 22    | 40    | 30   | 140   | 8.1   | 16    | 8.7     | 39    | 0.59  | 1.9      | 6.1    |
| 30    | 333     | 18    | 36    | 35   | ---   | 7.6   | 11    | 5.5     | 29    | 0.52  | 1.8      | 9.6    |
| 31    | 223     | ---   | 30    | 35   | ---   | 8.7   | ---   | 4.6     | ---   | 0.69  | 1.8      | ---    |
| TOTAL | 1,493.6 | 1,830 | 2,851 | 623  | 2,149 | 807.2 | 620.2 | 1,883.8 | 277.1 | 74.32 | 1,287.94 | 132.57 |
| MEAN  | 48.2    | 61.0  | 92.0  | 20.1 | 74.1  | 26.0  | 20.7  | 60.8    | 9.24  | 2.40  | 41.5     | 4.42   |
| MAX   | 333     | 160   | 289   | 35   | 159   | 108   | 105   | 321     | 39    | 17    | 378      | 15     |
| MIN   | 8.9     | 15    | 13    | 13   | 24    | 7.6   | 4.1   | 4.6     | 1.9   | 0.16  | 0.22     | 0.78   |
| CFSM  | 0.94    | 1.20  | 1.80  | 0.39 | 1.45  | 0.51  | 0.41  | 1.19    | 0.18  | 0.05  | 0.81     | 0.09   |
| IN.   | 1.09    | 1.33  | 2.08  | 0.45 | 1.57  | 0.59  | 0.45  | 1.37    | 0.20  | 0.05  | 0.94     | 0.10   |

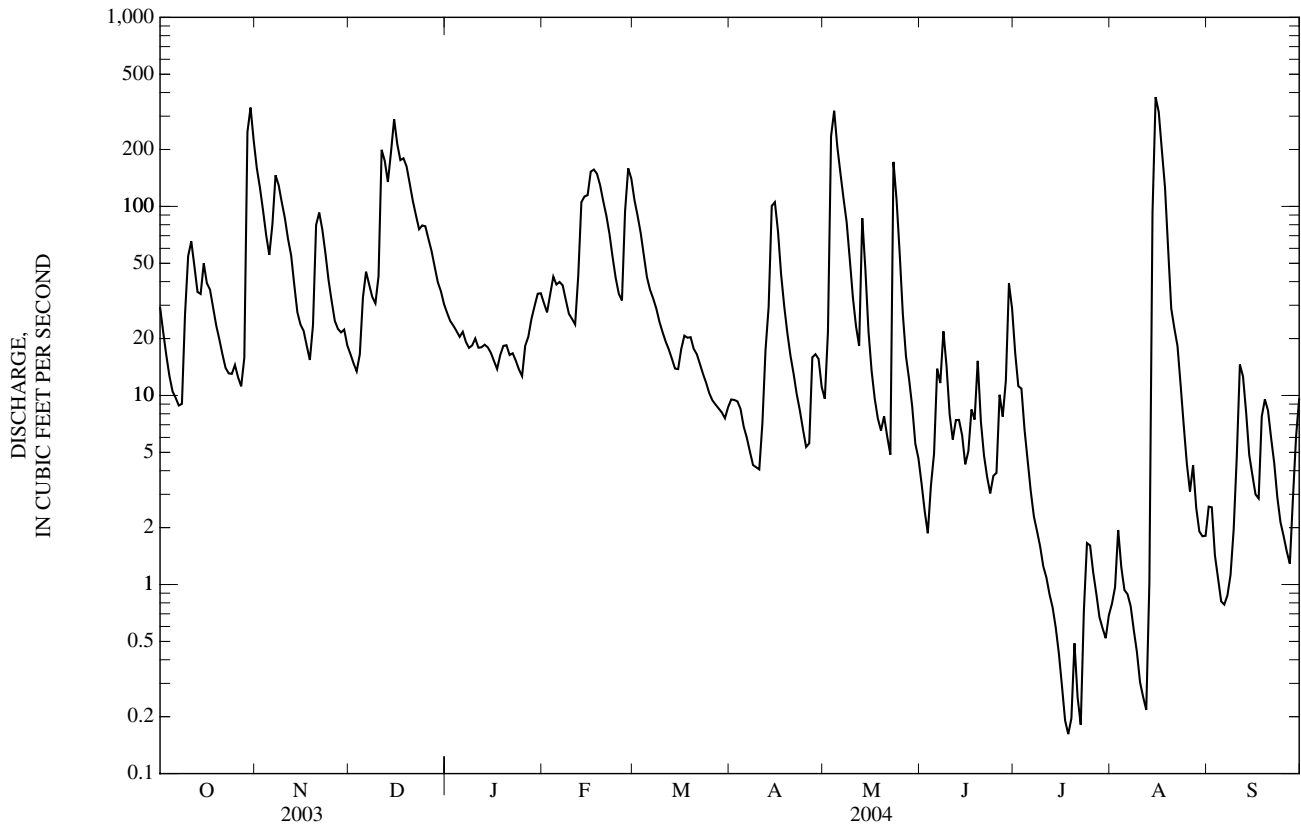
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 48.3   | 33.9   | 40.1   | 37.2   | 63.6   | 63.5   | 53.4   | 46.5   | 17.1   | 22.6   | 49.0   | 111    |
| MAX  | 166    | 61.0   | 92.0   | 91.1   | 98.3   | 180    | 150    | 173    | 48.3   | 111    | 232    | 462    |
| (WY) | (2000) | (2004) | (2004) | (2000) | (2000) | (2003) | (2003) | (2003) | (2001) | (2003) | (2003) | (1999) |
| MIN  | 0.52   | 0.35   | 0.52   | 9.29   | 22.1   | 21.4   | 20.1   | 2.09   | 0.50   | 1.77   | 0.16   | 0.01   |
| (WY) | (2002) | (2002) | (2002) | (2001) | (2001) | (2002) | (1999) | (2001) | (2002) | (2000) | (1999) | (2002) |

02091736 MIDDLE SWAMP NEAR FARMVILLE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1999 - 2004 |  |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--|
| ANNUAL TOTAL             | 40,410.02              |        | 14,029.73           |        | 45.0                    |  |
| ANNUAL MEAN              | 111                    |        | 38.3                |        | 107 2003                |  |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 14.1 2002               |  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 3,000 Sep 17, 1999      |  |
| HIGHEST DAILY MEAN       | 1,110                  | Apr 11 | 378                 | Aug 15 |                         |  |
| LOWEST DAILY MEAN        | 0.29                   | Jul 1  | 0.16                | Jul 18 | 0.00 Sep 6, 2002        |  |
| ANNUAL SEVEN-DAY MINIMUM | 0.72                   | Jun 25 | 0.25                | Jul 16 | 0.00 Sep 6, 2002        |  |
| MAXIMUM PEAK FLOW        |                        |        | 390                 | Aug 15 | NOT DETERMINED*         |  |
| MAXIMUM PEAK STAGE       |                        |        | 9.14                | Aug 15 | 19.03* Sep 17, 1999     |  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.12                | Jul 19 | 0.00* Jun 9, 1999       |  |
| ANNUAL RUNOFF (CFSM)     | 2.17                   |        | 0.752               |        | 0.882                   |  |
| ANNUAL RUNOFF (INCHES)   | 29.48                  |        | 10.23               |        | 11.98                   |  |
| 10 PERCENT EXCEEDS       | 287                    |        | 108                 |        | 126                     |  |
| 50 PERCENT EXCEEDS       | 48                     |        | 17                  |        | 13                      |  |
| 90 PERCENT EXCEEDS       | 11                     |        | 1.2                 |        | 0.47                    |  |

\* See REMARKS.



## 02091814 NEUSE RIVER NEAR FORT BARNWELL, NC

LOCATION.--Lat 35°18'50", long 77°18'10", Craven County, Hydrologic Unit 03020202, on left bank 0.2 mi upstream from bridge on Secondary Road 1470, 1.5 mi upstream from Core Creek and 2.0 mi east of Fort Barnwell.

DRAINAGE AREA.--3,900 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Occasional measurements water years 1955-1995, October 1996 to current year.

REVISED RECORDS.--WDR NC-02-1A: 2001.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records good, except those for estimated daily discharges, which are fair. Maximum gage height for period of record, from floodmarks. Flow regulated by Falls Lake (station 02087182) and is affected by both astronomical and wind tides.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV     | DEC     | JAN    | FEB     | MAR     | APR    | MAY     | JUN    | JUL    | AUG     | SEP     |
|-------|--------|---------|---------|--------|---------|---------|--------|---------|--------|--------|---------|---------|
| 1     | 3,790  | 7,830   | 2,620   | 4,950  | 2,950   | 6,100   | 2,420  | 2,460   | 1,930  | 4,540  | 1,080   | 2,880   |
| 2     | 3,580  | 7,980   | 2,430   | 4,420  | 3,110   | 6,260   | 2,310  | 2,830   | 1,450  | 4,380  | 1,460   | 3,350   |
| 3     | 3,390  | 7,920   | 2,320   | 4,090  | 3,320   | 6,440   | 2,220  | e3,940  | 1,300  | 4,430  | 2,220   | 4,080   |
| 4     | 3,170  | 7,670   | 2,270   | 3,910  | 3,370   | 6,590   | 2,260  | e5,050  | 1,350  | 4,240  | 2,530   | 4,860   |
| 5     | 2,850  | 7,110   | 2,430   | 3,810  | 3,370   | 6,590   | 2,380  | 6,150   | 1,410  | 3,970  | 2,500   | 5,620   |
| 6     | 2,410  | 6,260   | 2,620   | 3,660  | 3,650   | 6,320   | 2,480  | 7,160   | 1,540  | 3,710  | 2,530   | 6,540   |
| 7     | 2,050  | 5,670   | 2,710   | 3,620  | 4,230   | 5,860   | 2,630  | 7,990   | 2,470  | 3,430  | 2,640   | 7,360   |
| 8     | 1,750  | 5,270   | 2,920   | 3,510  | 4,470   | 5,250   | 2,730  | 8,620   | 4,030  | 3,260  | 2,510   | 8,150   |
| 9     | 1,900  | 4,850   | 3,250   | 3,370  | 4,460   | 4,720   | 2,510  | 9,240   | 4,830  | 3,030  | 2,850   | 8,590   |
| 10    | 2,310  | 4,550   | 3,360   | e3,230 | e4,600  | 4,260   | 2,130  | 9,420   | 5,270  | 2,710  | 3,220   | 8,520   |
| 11    | 2,520  | 4,280   | 4,340   | 3,090  | e4,780  | 3,980   | 1,960  | 8,630   | 5,330  | 2,430  | 3,170   | 8,020   |
| 12    | 2,640  | 3,940   | 5,040   | 2,990  | 4,960   | 3,770   | 2,590  | 7,080   | 5,180  | 2,170  | 2,510   | 7,430   |
| 13    | 2,650  | 3,680   | 5,660   | 2,960  | 5,080   | 3,490   | 3,560  | 5,340   | 4,820  | 1,980  | 2,210   | 7,020   |
| 14    | 2,590  | 3,240   | 6,710   | 2,880  | 5,300   | 3,270   | 3,950  | 4,240   | 4,060  | 2,300  | 2,470   | 6,820   |
| 15    | 2,560  | 2,850   | 8,280   | 2,860  | 5,760   | 3,080   | 4,320  | 3,500   | 3,350  | 2,170  | 5,300   | 6,770   |
| 16    | 2,460  | 2,610   | 9,400   | 2,770  | 6,410   | 2,940   | 4,690  | e2,950  | 2,740  | 1,800  | 7,150   | 6,850   |
| 17    | 2,330  | 2,400   | 10,300  | 2,700  | 7,130   | 2,980   | 5,000  | e2,400  | 2,290  | 1,620  | 8,200   | 6,780   |
| 18    | 2,250  | 2,240   | 11,000  | 2,660  | 7,790   | 3,060   | 5,080  | 1,860   | 2,210  | 1,400  | 8,610   | 6,600   |
| 19    | 2,210  | 2,190   | 11,400  | 2,580  | 8,110   | 3,510   | 4,880  | 1,520   | 2,410  | 1,210  | 8,580   | 5,950   |
| 20    | 2,110  | 2,560   | 11,600  | 2,510  | 8,380   | 3,990   | 4,550  | 1,300   | 2,420  | 1,130  | 8,340   | 5,170   |
| 21    | 1,970  | 3,080   | 11,700  | 2,500  | 8,460   | 4,440   | 4,170  | 1,240   | 2,310  | 998    | 8,190   | 4,790   |
| 22    | 1,910  | 3,620   | 11,500  | 2,620  | 8,360   | 4,690   | 3,780  | 1,160   | 1,990  | 960    | 8,200   | 4,720   |
| 23    | 1,910  | 4,200   | 11,000  | 2,680  | 8,030   | 4,860   | 3,400  | 1,110   | 1,610  | 1,050  | 8,330   | 4,850   |
| 24    | 1,720  | 4,660   | 10,500  | 2,620  | 7,520   | 4,780   | e3,070 | 1,380   | 1,810  | 1,100  | 8,470   | e4,970  |
| 25    | 1,540  | 4,810   | 9,850   | 2,500  | 6,800   | 4,410   | e2,740 | e1,800  | 2,420  | 1,060  | 8,440   | e4,800  |
| 26    | 1,380  | 4,560   | 9,370   | 2,520  | 6,090   | 3,990   | e2,410 | e2,220  | 2,900  | 1,220  | 8,200   | e4,380  |
| 27    | 1,310  | 4,130   | 8,960   | 2,500  | 5,750   | 3,560   | 2,510  | 2,640   | 2,650  | 1,510  | 7,460   | e3,960  |
| 28    | 1,340  | 3,730   | 8,530   | 2,560  | 5,850   | 3,120   | 2,580  | 2,860   | 2,950  | e1,350 | 6,660   | 3,530   |
| 29    | 3,720  | 3,360   | 7,860   | 2,610  | 5,970   | 2,790   | 2,500  | 2,780   | 3,890  | e1,140 | 5,410   | 3,170   |
| 30    | 6,130  | 2,910   | 6,720   | 2,720  | ---     | 2,580   | 2,420  | 2,690   | 4,340  | 1,230  | 4,020   | 2,920   |
| 31    | 7,380  | ---     | 5,690   | 2,840  | ---     | 2,440   | ---    | 2,510   | ---    | 1,140  | 3,170   | ---     |
| TOTAL | 81,830 | 134,160 | 212,340 | 95,240 | 164,060 | 134,120 | 94,230 | 124,070 | 87,260 | 68,668 | 156,630 | 169,450 |
| MEAN  | 2,640  | 4,472   | 6,850   | 3,072  | 5,657   | 4,326   | 3,141  | 4,002   | 2,909  | 2,215  | 5,053   | 5,648   |
| MAX   | 7,380  | 7,980   | 11,700  | 4,950  | 8,460   | 6,590   | 5,080  | 9,420   | 5,330  | 4,540  | 8,610   | 8,590   |
| MIN   | 1,310  | 2,190   | 2,270   | 2,500  | 2,950   | 2,440   | 1,960  | 1,110   | 1,300  | 960    | 1,080   | 2,880   |

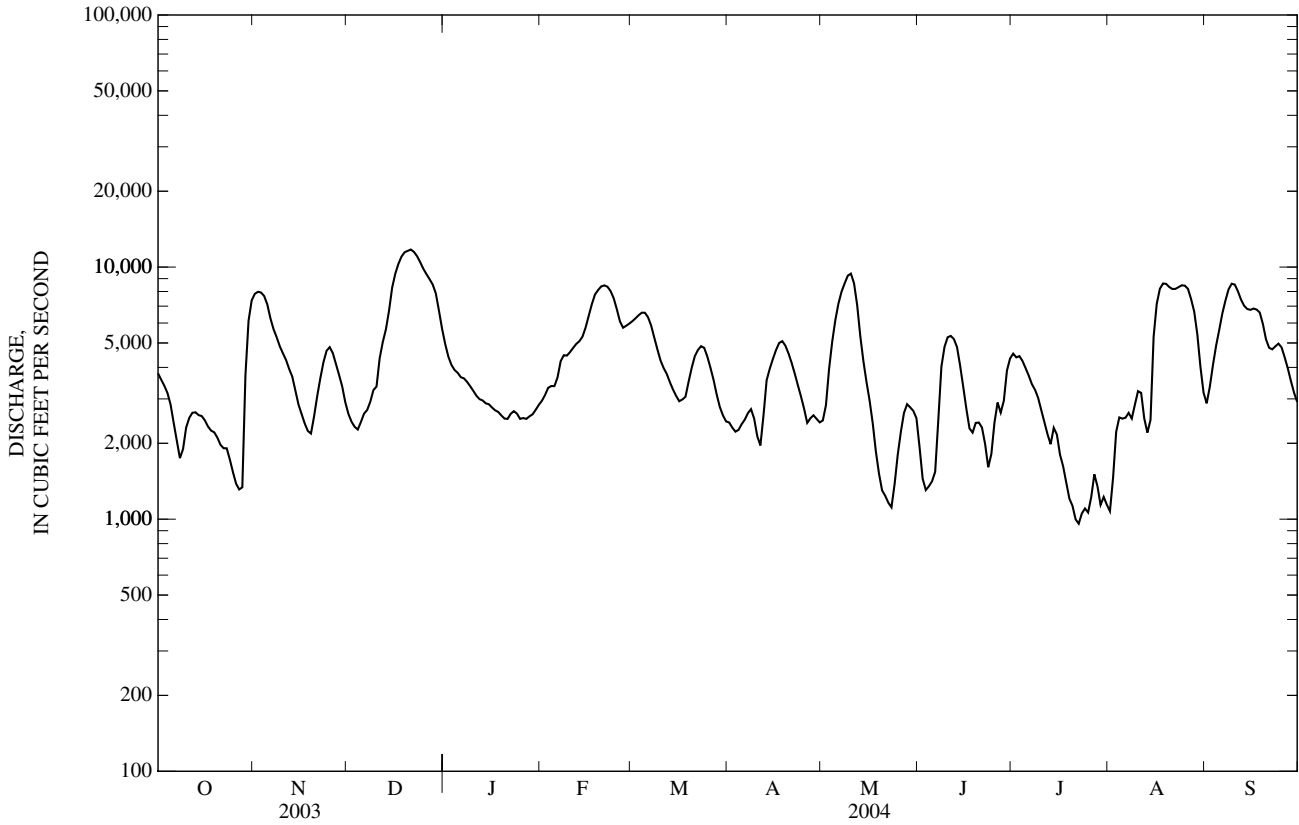
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 5,406  | 3,132  | 3,707  | 4,971  | 7,435  | 6,654  | 5,946  | 3,304  | 2,463  | 2,001  | 3,173  | 5,807  |
| MAX  | 23,040 | 6,630  | 6,969  | 8,707  | 19,110 | 15,340 | 11,760 | 6,973  | 6,429  | 5,764  | 7,856  | 26,590 |
| (WY) | (2000) | (2000) | (1997) | (1998) | (1998) | (1998) | (1998) | (2003) | (2003) | (2003) | (2003) | (1999) |
| MIN  | 938    | 732    | 952    | 1,501  | 1,988  | 2,715  | 2,739  | 893    | 573    | 788    | 659    | 1,041  |
| (WY) | (2002) | (2002) | (2002) | (2001) | (2001) | (2002) | (1999) | (2002) | (2002) | (2002) | (2002) | (1997) |

02091814 NEUSE RIVER NEAR FORT BARNWELL, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1997 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 2,375,030              |        | 1,522,058           |        |                         |              |
| ANNUAL MEAN              | 6,507                  |        | 4,159               |        | 4,479                   |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 6,376                   | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,766                   | 2002         |
| HIGHEST DAILY MEAN       | 17,900                 | Apr 16 | 11,700              | Dec 21 | 57,000                  | Sep 20, 1999 |
| LOWEST DAILY MEAN        | 1,310                  | Oct 27 | 960                 | Jul 22 | 340                     | Jun 27, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 1,590                  | Oct 22 | 1,070               | Jul 19 | 413                     | Aug 12, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 12,200              | Dec 21 | e57,200                 | Sep 20, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 10.71               | Dec 20 | 22.75*                  | Sep 20, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 901                 | Jul 22 | 41                      | Jul 11, 1999 |
| 10 PERCENT EXCEEDS       | 12,700                 |        | 8,020               |        | 9,450                   |              |
| 50 PERCENT EXCEEDS       | 6,170                  |        | 3,380               |        | 2,760                   |              |
| 90 PERCENT EXCEEDS       | 2,080                  |        | 1,800               |        | 866                     |              |

\* See REMARKS.  
e Estimated.



## 0209205053 SWIFT CREEK AT NC HIGHWAY 43 NEAR STREETS FERRY, NC

LOCATION.--Lat 35°13'51", long 77°06'50", Craven County, Hydrologic Unit 03020202, at downstream side of bridge on NC Highway 43, 0.5 mi upstream from mouth, 2 mi upstream from Little Fisher Creek, and 1.3 mi north-northeast of Streets Ferry.

DRAINAGE AREA.--269 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1996 to current year.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at NGVD of 1929. Prior to Oct. 1999 datum reported as 10 ft below NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records poor. This site is strongly affected by both astronomical and wind tides. The astronomical tides occur at primary harmonic periods of 12.42 hours and 24.8 hours. Mean daily discharge data for this site may be affected by aliasing due to tides and can contain fluctuations that are not representative of net downstream discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,900 ft<sup>3</sup>/s, Sept. 21, 1999, maximum gage height, 12.28 ft, Sept. 21, 1999, from flood mark; minimum discharge, -5,140 ft<sup>3</sup>/s, Aug. 30, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,090 ft<sup>3</sup>/s, Nov. 1, maximum gage height, 3.88 ft, Feb. 27; minimum discharge, -1,640 ft<sup>3</sup>/s, Feb. 26.

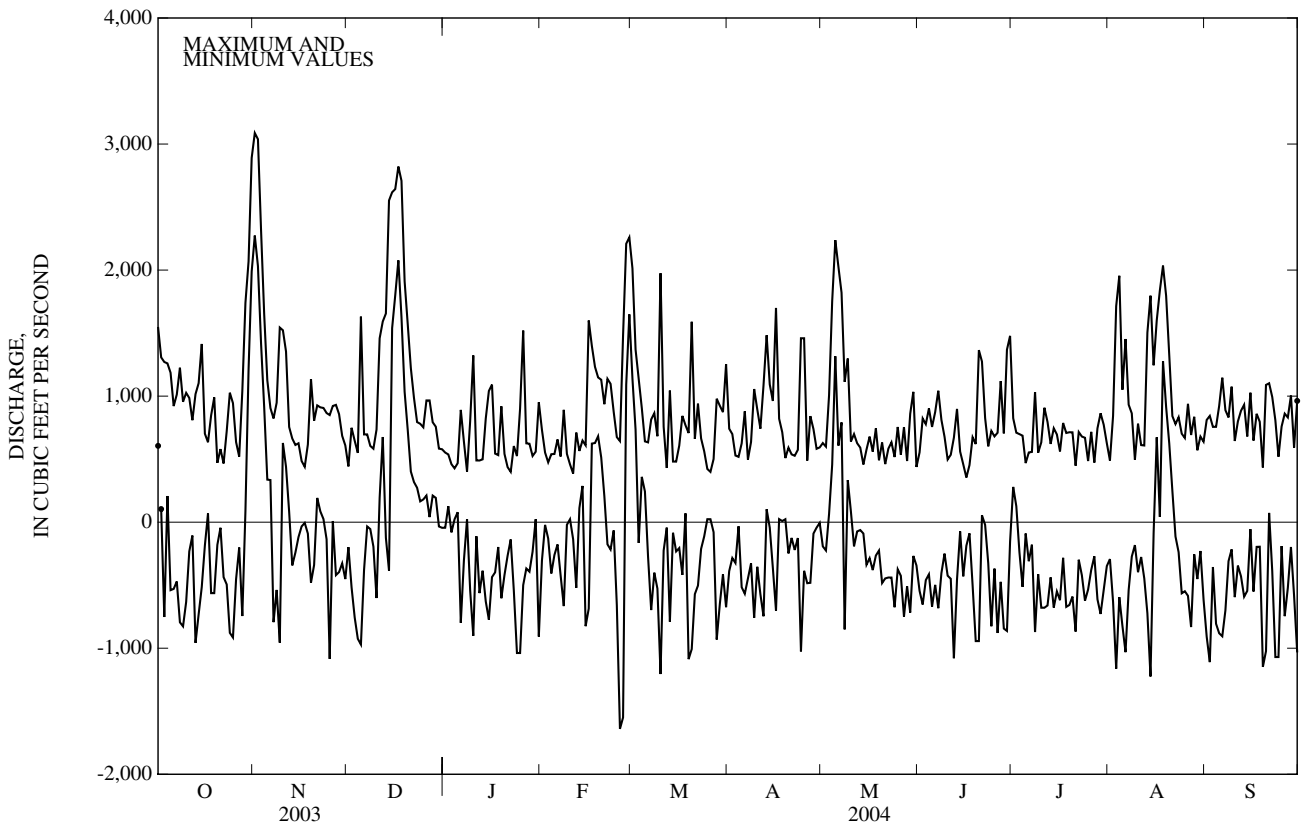
DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | OCTOBER |       | NOVEMBER |        | DECEMBER |       | JANUARY |        | FEBRUARY |        | MARCH |        |
|-------|---------|-------|----------|--------|----------|-------|---------|--------|----------|--------|-------|--------|
|       | MAX     | MIN   | MAX      | MIN    | MAX      | MIN   | MAX     | MIN    | MAX      | MIN    | MAX   | MIN    |
| 1     | 1,550   | 605   | 3,090    | 2,270  | 442      | -198  | 552     | -44    | 733      | -304   | 2,010 | 1,140  |
| 2     | 1,310   | 105   | 3,040    | 2,030  | 749      | -517  | 537     | 127    | 553      | -21    | 1,370 | 734    |
| 3     | 1,270   | -752  | 2,310    | 1,420  | 646      | -756  | 460     | -81    | 475      | -129   | 1,140 | -165   |
| 4     | 1,260   | 208   | 1,650    | 912    | 550      | -925  | 427     | 23     | 539      | -407   | 905   | 360    |
| 5     | 1,190   | -539  | 1,130    | 338    | 1,630    | -971  | 468     | 79     | 541      | -260   | 641   | 243    |
| 6     | 921     | -529  | 905      | 334    | 696      | -379  | 891     | -799   | 656      | -177   | 633   | -273   |
| 7     | 1,010   | -470  | 823      | -793   | 696      | -34   | 638     | -303   | 521      | -425   | 815   | -697   |
| 8     | 1,230   | -795  | 948      | -537   | 605      | -55   | 402     | 23     | 891      | -666   | 865   | -401   |
| 9     | 955     | -826  | 1,540    | -956   | 583      | -194  | 801     | -541   | 542      | -21    | 682   | -527   |
| 10    | 1,030   | -633  | 1,520    | 629    | 735      | -602  | 1,320   | -902   | 458      | 23     | 1,980 | -1,200 |
| 11    | 985     | -232  | 1,350    | 439    | 1,460    | 194   | 490     | -112   | 386      | -136   | 757   | -225   |
| 12    | 809     | -106  | 755      | 83     | 1,590    | 676   | 489     | -563   | 711      | -521   | 430   | -43    |
| 13    | 1,020   | -958  | 664      | -343   | 1,660    | -124  | 499     | -385   | 565      | 112    | 1,040 | -790   |
| 14    | 1,100   | -731  | 612      | -242   | 2,550    | -384  | 822     | -629   | 648      | 288    | 481   | -84    |
| 15    | 1,410   | -515  | 626      | -118   | 2,620    | 1,540 | 1,040   | -773   | 610      | -825   | 481   | -232   |
| 16    | 702     | -185  | 485      | -33    | 2,640    | 1,800 | 1,090   | -436   | 1,600    | -685   | 607   | -205   |
| 17    | 634     | 69    | 439      | -6.0   | 2,820    | 2,080 | 544     | -398   | 1,400    | 623    | 843   | -418   |
| 18    | 847     | -563  | 616      | -91    | 2,710    | 1,630 | 532     | -197   | 1,230    | 628    | 769   | 70     |
| 19    | 990     | -563  | 1,140    | -480   | 1,910    | 1,040 | 919     | -604   | 1,150    | 682    | 707   | -1,090 |
| 20    | 471     | -180  | 805      | -340   | 1,570    | 732   | 541     | -420   | 1,130    | 513    | 1,590 | -1,010 |
| 21    | 579     | -44   | 926      | 193    | 1,220    | 402   | 437     | -266   | 936      | 207    | 661   | -571   |
| 22    | 466     | -436  | 911      | 86     | 986      | 318   | 400     | -137   | 1,140    | -176   | 940   | -503   |
| 23    | 723     | -494  | 906      | 25     | 794      | 273   | 604     | -544   | 1,100    | -217   | 665   | -212   |
| 24    | 1,030   | -878  | 866      | -136   | 781      | 165   | 524     | -1,040 | 875      | -66    | 562   | -112   |
| 25    | 944     | -915  | 850      | -1,080 | 753      | 181   | 900     | -1,040 | 675      | -659   | 422   | 24     |
| 26    | 635     | -452  | 922      | 9.3    | 966      | 211   | 1,520   | -499   | 644      | -1,640 | 399   | 23     |
| 27    | 520     | -201  | 931      | -420   | 966      | 40    | 625     | -368   | 1,480    | -1,550 | 501   | -80    |
| 28    | 1,040   | -745  | 857      | -396   | 793      | 211   | 622     | -393   | 2,210    | 1,090  | 979   | -931   |
| 29    | 1,740   | 89    | 685      | -327   | 757      | 193   | 525     | -234   | 2,260    | 1,650  | 924   | -649   |
| 30    | 2,070   | 1,210 | 609      | -451   | 584      | -34   | 559     | 23     | ---      | ---    | 873   | -414   |
| 31    | 2,890   | 1,990 | ---      | ---    | 578      | -45   | 951     | -908   | ---      | ---    | 1,250 | -674   |
| MONTH | 2,890   | -958  | 3,090    | -1,080 | 2,820    | -971  | 1,520   | -1,040 | 2,260    | -1,640 | 2,010 | -1,200 |

0209205053 SWIFT CREEK AT NC HIGHWAY 43 NEAR STREETS FERRY, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX   | MIN    | MAX   | MIN   | MAX   | MIN    | MAX   | MIN  | MAX    | MIN    | MAX       | MIN    |
|-------|-------|--------|-------|-------|-------|--------|-------|------|--------|--------|-----------|--------|
|       | APRIL |        | MAY   |       | JUNE  |        | JULY  |      | AUGUST |        | SEPTEMBER |        |
| 1     | 742   | -388   | 628   | -192  | 554   | -545   | 825   | 280  | 489    | -293   | 811       | -908   |
| 2     | 699   | -285   | 599   | -225  | 823   | -653   | 710   | 126  | 843    | -631   | 843       | -1,110 |
| 3     | 529   | -324   | 1,010 | 65    | 777   | -460   | 699   | -239 | 1,710  | -1,160 | 756       | -356   |
| 4     | 518   | -33    | 1,750 | 457   | 902   | -414   | 686   | -513 | 1,960  | -595   | 757       | -806   |
| 5     | 625   | -516   | 2,240 | 1,320 | 756   | -670   | 469   | -90  | 1,050  | -822   | 922       | -881   |
| 6     | 879   | -568   | 2,030 | 608   | 874   | -497   | 553   | -310 | 1,450  | -1,030 | 1,150     | -905   |
| 7     | 497   | -448   | 1,820 | 792   | 1,040 | -683   | 557   | -179 | 932    | -538   | 889       | -699   |
| 8     | 636   | -327   | 1,110 | -851  | 812   | -404   | 1,030 | -872 | 863    | -273   | 831       | -309   |
| 9     | 1,060 | -759   | 1,300 | 334   | 677   | -250   | 551   | -412 | 496    | -182   | 1,080     | -216   |
| 10    | 895   | -354   | 640   | 84    | 497   | -425   | 633   | -679 | 781    | -397   | 644       | -595   |
| 11    | 742   | -572   | 699   | -192  | 535   | -449   | 908   | -679 | 611    | -276   | 799       | -345   |
| 12    | 1,090 | -747   | 627   | -74   | 671   | -1,080 | 795   | -661 | 608    | -446   | 884       | -430   |
| 13    | 1,480 | 102    | 591   | -63   | 899   | -455   | 621   | -438 | 1,500  | -722   | 931       | -591   |
| 14    | 1,090 | -44    | 458   | -90   | 560   | -73    | 745   | -677 | 1,800  | -1,220 | 680       | -545   |
| 15    | 962   | -366   | 576   | -338  | 459   | -430   | 696   | -550 | 1,240  | -85    | 1,030     | -55    |
| 16    | 1,700 | -701   | 679   | -286  | 354   | -187   | 561   | -619 | 1,600  | 673    | 647       | -550   |
| 17    | 821   | 24     | 560   | -380  | 453   | -89    | 787   | -283 | 1,840  | 42     | 860       | -196   |
| 18    | 714   | 8.8    | 744   | -265  | 674   | -501   | 708   | -672 | 2,040  | 1,280  | 796       | -195   |
| 19    | 509   | 23     | 491   | -225  | 620   | -943   | 714   | -657 | 1,800  | 913    | 434       | -1,150 |
| 20    | 591   | -248   | 632   | -483  | 1,370 | -943   | 713   | -590 | 1,330  | 625    | 1,090     | -1,020 |
| 21    | 538   | -125   | 461   | -446  | 1,270 | 55     | 448   | -868 | 842    | 249    | 1,100     | 74     |
| 22    | 527   | -220   | 583   | -439  | 827   | -21    | 715   | -298 | 779    | -114   | 993       | -387   |
| 23    | 574   | -126   | 633   | -440  | 602   | -325   | 679   | -421 | 832    | -238   | 809       | -1,070 |
| 24    | 1,460 | -1,030 | 517   | -675  | 724   | -826   | 670   | -623 | 702    | -564   | 520       | -1,070 |
| 25    | 1,460 | -386   | 755   | -374  | 681   | -368   | 485   | -534 | 668    | -548   | 759       | -189   |
| 26    | 489   | -484   | 535   | -426  | 710   | -879   | 717   | -379 | 939    | -584   | 861       | -746   |
| 27    | 841   | -481   | 754   | -748  | 1,120 | -473   | 473   | -271 | 691    | -832   | 831       | -521   |
| 28    | 738   | -91    | 485   | -509  | 704   | -844   | 745   | -612 | 836    | -255   | 1,000     | -197   |
| 29    | 582   | -43    | 860   | -717  | 1,370 | -863   | 864   | -728 | 570    | -451   | 592       | -583   |
| 30    | 593   | -6.0   | 1,030 | -268  | 1,480 | -155   | 773   | -538 | 679    | -229   | 963       | -1,030 |
| 31    | ---   | ---    | 438   | -344  | ---   | ---    | 626   | -348 | 639    | -615   | ---       | ---    |
| MONTH | 1,700 | -1,030 | 2,240 | -851  | 1,480 | -1,080 | 1,030 | -872 | 2,040  | -1,220 | 1,150     | -1,150 |
| YEAR  | 3,090 | -1,640 |       |       |       |        |       |      |        |        |           |        |



## 02092162 NEUSE RIVER AT NEW BERN, NC

LOCATION.--Lat 35°06'34", long 77°01'58", Craven County, Hydrologic Unit 03020204, at U.S. Coast Guard Channel Marker 38.

DRAINAGE AREA.--4,470 mi<sup>2</sup>.

PERIOD OF RECORD.-- Water years 1957-67, 1996 to current year.

PERIOD OF DAILY RECORD.--

SALINITY (TOP AND BOTTOM): June 1996 to current year.

pH (TOP AND BOTTOM): June 1996 to current year.

WATER TEMPERATURE (TOP AND BOTTOM): June 1996 to current year.

DISSOLVED OXYGEN (TOP AND BOTTOM): June 1996 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION, (TOP AND BOTTOM): June 1996 to current year.

INSTRUMENTATION.-- Water-quality monitor with satellite telemetry from June 1996 to current year.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. The monitor was relocated from the U.S. Highway 17 bridge at New Bern to channel marker 38 on August 5, 1999. Channel marker 38 is approximately 500 yards upstream of the bridge. The monitor was removed on September 16, 2003, to prevent possible destruction of equipment during Hurricane Isabel. It was reinstalled September 19, 2003. Top constituents were monitored at 8 feet above the streambed, and bottom constituents, 2 feet above the streambed. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water-Supply Paper 2311. The dissolved oxygen percent saturation is computed using a barometric pressure of 760mm of Hg beginning October 1, 2000. Salinity, minimum extremes are reported as <0.1 ppt. Dissolved oxygen, minimum extremes are reported as <1.0 mg/L. Dissolved oxygen, percent saturation, minimum extremes are reported only as <10%. Daily records of salinity and water temperature for October 1956 to September 1967 are available in the files of the District Office in Raleigh, NC.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                     | MAXIMUM RECORDED        | MINIMUM RECORDED                                     |
|---------------------------------|-------------------------|--|
| SALINITY (TOP), ppt             | 21.8, August 1, 2002    | <0.1, on many days during the period                 |
| SALINITY (BOTOM), ppt           | 22.1, August 1, 2002    | <0.1, on many days during the period                 |
| pH (TOP), standard units        | 9.9, June 6, 7, 1999    | 5.7, September 29, 30, 1999, October 9, 14, 15, 1999 |
| pH (BOTTOM), standard units     | 9.7, July 10, 11, 1997  | 4.9, October 13, 15-17, 1999                         |
| WATER TEMPERATURE (TOP), °C     | 33.4, August 1, 1999    | 1.0, January 29, 2000                                |
| WATER TEMPERATURE (BOTTOM), °C  | 31.2, August 10, 2001   | 1.1, January 29, 2000                                |
| DISSOLVED OXYGEN (TOP), mg/L    | 17.4, December 19, 1997 | <1.0, on many days during the period                 |
| DISSOLVED OXYGEN (BOTTOM), mg/L | 16.1, January 8, 1998   | <1.0, on many days during the period                 |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                                     | MAXIMUM RECORDED             | MINIMUM RECORDED                      |
|---|------------------------------|---------------------------------------|
| SALINITY (TOP), ppt                             | 16.5, July 16                | <0.1, on many days during the year    |
| SALINITY (BOTTOM), ppt                          | 17.0, July 16                | <0.1, on many days during the year    |
| pH (TOP), standard units                        | 8.9, July 13                 | 6.3, August 20                        |
| pH (BOTTOM), standard units                     | 8.4, July 31                 | 6.2, August 20                        |
| WATER TEMPERATURE (TOP), °C                     | 31.6, July 9                 | 2.6, January 31                       |
| WATER TEMPERATURE (BOTTOM), °C                  | 30.1, July 27, 28            | 3.0, January 29                       |
| DISSOLVED OXYGEN (TOP), mg/L                    | 12.7, January 28, 29, 30     | <1.0, on several days during the year |
| DISSOLVED OXYGEN (BOTTOM), mg/L                 | 12.5, January 29, February 1 | <1.0, on many days during the year    |
| DISSOLVED OXYGEN, PERCENT SATURATION (TOP),%    | 170, July 13                 | <10, on several days during the year  |
| DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM),% | 121, July 31                 | <10, on many days during the year     |



## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 0.77 | 0.11 | 0.21 | 0.06 | 0.04 | 0.05 | 0.61 | 0.06 | 0.12 | 0.14 | 0.07 | 0.09 |
| 2     | 0.57 | 0.13 | 0.26 | 0.05 | 0.04 | 0.04 | 1.5  | 0.31 | 0.87 | 0.11 | 0.07 | 0.09 |
| 3     | 0.57 | 0.10 | 0.28 | 0.05 | 0.04 | 0.04 | 0.43 | 0.21 | 0.29 | 0.14 | 0.08 | 0.11 |
| 4     | 0.13 | 0.08 | 0.09 | 0.05 | 0.04 | 0.05 | 0.70 | 0.18 | 0.27 | 0.12 | 0.06 | 0.10 |
| 5     | 0.13 | 0.07 | 0.09 | 0.05 | 0.04 | 0.05 | 0.73 | 0.09 | 0.19 | 0.12 | 0.06 | 0.08 |
| 6     | 0.14 | 0.07 | 0.09 | 0.05 | 0.04 | 0.05 | 0.63 | 0.10 | 0.20 | 1.2  | 0.06 | 0.25 |
| 7     | 0.09 | 0.07 | 0.07 | 0.06 | 0.05 | 0.05 | 0.39 | 0.16 | 0.30 | 1.6  | 0.52 | 1.1  |
| 8     | 0.43 | 0.08 | 0.14 | 0.06 | 0.04 | 0.05 | 0.23 | 0.12 | 0.16 | 0.96 | 0.37 | 0.52 |
| 9     | 0.36 | 0.14 | 0.21 | 0.05 | 0.04 | 0.05 | 0.13 | 0.09 | 0.11 | 3.2  | 0.32 | 0.71 |
| 10    | 0.27 | 0.10 | 0.16 | 0.06 | 0.05 | 0.06 | 0.23 | 0.08 | 0.11 | 3.7  | 0.79 | 2.2  |
| 11    | 0.19 | 0.08 | 0.11 | 0.07 | 0.05 | 0.06 | 0.18 | 0.06 | 0.08 | 2.4  | 1.2  | 1.6  |
| 12    | 0.17 | 0.10 | 0.14 | 0.08 | 0.06 | 0.07 | 0.10 | 0.06 | 0.08 | 2.7  | 1.1  | 1.7  |
| 13    | 0.20 | 0.11 | 0.14 | 0.09 | 0.06 | 0.08 | 0.10 | 0.07 | 0.08 | 1.4  | 0.48 | 0.92 |
| 14    | 0.16 | 0.10 | 0.12 | 0.07 | 0.06 | 0.07 | 0.11 | 0.05 | 0.07 | 2.1  | 0.47 | 0.86 |
| 15    | 0.11 | 0.08 | 0.09 | 0.07 | 0.07 | 0.07 | 0.07 | 0.06 | 0.07 | 2.1  | 0.31 | 0.93 |
| 16    | 0.12 | 0.08 | 0.10 | 0.09 | 0.06 | 0.07 | 0.08 | 0.04 | 0.05 | 1.2  | 0.30 | 0.70 |
| 17    | 0.12 | 0.08 | 0.11 | 0.07 | 0.06 | 0.07 | 0.05 | 0.04 | 0.04 | 0.77 | 0.15 | 0.26 |
| 18    | 0.12 | 0.08 | 0.10 | 0.10 | 0.06 | 0.07 | 0.05 | 0.04 | 0.04 | 0.68 | 0.14 | 0.26 |
| 19    | 0.12 | 0.07 | 0.09 | 0.10 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 | 0.85 | 0.14 | 0.32 |
| 20    | 0.10 | 0.08 | 0.09 | 0.49 | 0.07 | 0.21 | 0.05 | 0.04 | 0.04 | 0.60 | 0.23 | 0.34 |
| 21    | 0.10 | 0.08 | 0.10 | 0.29 | 0.08 | 0.14 | 0.04 | 0.04 | 0.04 | 0.57 | 0.15 | 0.22 |
| 22    | 0.10 | 0.07 | 0.08 | 0.10 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 | 0.35 | 0.16 | 0.26 |
| 23    | 0.22 | 0.09 | 0.16 | 0.09 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 | 1.5  | 0.26 | 0.77 |
| 24    | 0.24 | 0.13 | 0.18 | 0.09 | 0.08 | 0.08 | 0.05 | 0.04 | 0.04 | 1.2  | 0.32 | 0.61 |
| 25    | 0.25 | 0.09 | 0.13 | 0.12 | 0.07 | 0.08 | 0.05 | 0.04 | 0.04 | 2.0  | 0.50 | 1.0  |
| 26    | 0.09 | 0.08 | 0.09 | 0.08 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 | 0.74 | 0.25 | 0.35 |
| 27    | 0.11 | 0.09 | 0.10 | 0.07 | 0.06 | 0.07 | 0.06 | 0.04 | 0.05 | 0.42 | 0.24 | 0.32 |
| 28    | 0.11 | 0.10 | 0.11 | 0.08 | 0.06 | 0.07 | 0.08 | 0.04 | 0.06 | 1.0  | 0.23 | 0.54 |
| 29    | 0.12 | 0.10 | 0.10 | 0.08 | 0.06 | 0.07 | 0.08 | 0.06 | 0.07 | 0.70 | 0.45 | 0.53 |
| 30    | 0.13 | 0.07 | 0.11 | 0.08 | 0.07 | 0.07 | 0.17 | 0.06 | 0.09 | 0.45 | 0.14 | 0.22 |
| 31    | 0.12 | 0.05 | 0.06 | ---  | ---  | ---  | 0.13 | 0.06 | 0.08 | 1.2  | 0.14 | 0.53 |
| MONTH | 0.77 | 0.05 | 0.13 | 0.49 | 0.04 | 0.07 | 1.5  | 0.04 | 0.12 | 3.7  | 0.06 | 0.60 |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 0.19 | 0.11 | 0.16 | 0.06 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 |
| 2     | 0.18 | 0.10 | 0.14 | 0.08 | 0.05 | 0.05 | 0.08 | 0.06 | 0.07 | 0.07 | 0.06 | 0.07 |
| 3     | 0.22 | 0.11 | 0.16 | 0.06 | 0.05 | 0.05 | 0.08 | 0.07 | 0.08 | 0.08 | 0.06 | 0.07 |
| 4     | 0.26 | 0.12 | 0.19 | 0.06 | 0.05 | 0.05 | 0.27 | 0.07 | 0.11 | 0.11 | 0.07 | 0.08 |
| 5     | 0.18 | 0.11 | 0.15 | 0.06 | 0.05 | 0.06 | 0.69 | 0.17 | 0.42 | 0.07 | 0.06 | 0.06 |
| 6     | 0.12 | 0.07 | 0.09 | 0.06 | 0.05 | 0.06 | 0.60 | 0.29 | 0.48 | 0.06 | 0.04 | 0.05 |
| 7     | 0.18 | 0.08 | 0.11 | 0.06 | 0.05 | 0.06 | 0.29 | 0.10 | 0.22 | 0.04 | 0.04 | 0.04 |
| 8     | 0.22 | 0.09 | 0.16 | 0.06 | 0.05 | 0.06 | 0.12 | 0.08 | 0.08 | 0.05 | 0.04 | 0.04 |
| 9     | 0.19 | 0.07 | 0.11 | 0.07 | 0.05 | 0.06 | 0.16 | 0.08 | 0.10 | 0.04 | 0.04 | 0.04 |
| 10    | 0.08 | 0.07 | 0.07 | 0.06 | 0.05 | 0.06 | 0.15 | 0.08 | 0.11 | 0.05 | 0.04 | 0.04 |
| 11    | 0.08 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.08 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 |
| 12    | 0.15 | 0.06 | 0.09 | 0.07 | 0.06 | 0.06 | 0.09 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 |
| 13    | 0.10 | 0.06 | 0.08 | 0.07 | 0.06 | 0.06 | 0.09 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 |
| 14    | 0.07 | 0.06 | 0.07 | 0.06 | 0.06 | 0.06 | 0.12 | 0.07 | 0.09 | 0.05 | 0.04 | 0.04 |
| 15    | 0.47 | 0.06 | 0.13 | 0.06 | 0.06 | 0.06 | 0.09 | 0.08 | 0.09 | 0.05 | 0.04 | 0.05 |
| 16    | 0.50 | 0.06 | 0.11 | 0.07 | 0.06 | 0.06 | 0.09 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 |
| 17    | 0.07 | 0.06 | 0.06 | 0.10 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.05 | 0.05 |
| 18    | 0.09 | 0.06 | 0.07 | 0.10 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.06 | 0.05 | 0.06 |
| 19    | 0.07 | 0.05 | 0.06 | 0.50 | 0.06 | 0.17 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 |
| 20    | 0.05 | 0.04 | 0.05 | 0.48 | 0.07 | 0.15 | 0.06 | 0.05 | 0.06 | 0.28 | 0.06 | 0.09 |
| 21    | 0.06 | 0.04 | 0.05 | 0.13 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.24 | 0.07 | 0.12 |
| 22    | 0.06 | 0.04 | 0.05 | 0.13 | 0.06 | 0.09 | 0.06 | 0.05 | 0.05 | 0.36 | 0.09 | 0.18 |
| 23    | 0.05 | 0.04 | 0.05 | 0.07 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | 0.54 | 0.19 | 0.29 |
| 24    | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 0.65 | 0.16 | 0.36 |
| 25    | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 1.2  | 0.21 | 0.43 |
| 26    | 0.05 | 0.04 | 0.05 | 0.07 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 1.1  | 0.16 | 0.26 |
| 27    | 0.05 | 0.04 | 0.05 | 0.07 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | 7.3  | 0.26 | 1.5  |
| 28    | 0.06 | 0.04 | 0.06 | 0.08 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | 7.3  | 1.0  | 2.8  |
| 29    | 0.07 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | 12.4 | 2.1  | 6.7  |
| 30    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 8.6  | 3.5  | 5.0  |
| 31    | ---  | ---  | ---  | 0.07 | 0.06 | 0.06 | ---  | ---  | ---  | 3.9  | 0.98 | 2.4  |
| MONTH | 0.50 | 0.04 | 0.09 | 0.50 | 0.05 | 0.07 | 0.69 | 0.05 | 0.10 | 12.4 | 0.04 | 0.68 |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 5.6  | 1.2  | 2.8  | 2.8  | 0.26 | 0.63 | 3.7    | 2.2  | 3.0  | 0.11      | 0.06 | 0.07 |
| 2     | 10.0 | 3.2  | 5.9  | 0.43 | 0.11 | 0.22 | 3.2    | 1.4  | 2.1  | 0.31      | 0.06 | 0.10 |
| 3     | 9.5  | 2.5  | 4.4  | 0.55 | 0.10 | 0.21 | 5.7    | 1.5  | 3.0  | 0.07      | 0.06 | 0.07 |
| 4     | 5.1  | 2.2  | 3.5  | 1.1  | 0.15 | 0.38 | 4.2    | 1.3  | 2.6  | 0.08      | 0.06 | 0.07 |
| 5     | 4.5  | 1.8  | 2.9  | 0.41 | 0.19 | 0.31 | 3.2    | 1.2  | 1.9  | 0.08      | 0.06 | 0.07 |
| 6     | 8.3  | 1.8  | 5.1  | 12.3 | 0.21 | 5.6  | 5.0    | 1.2  | 2.8  | 0.10      | 0.06 | 0.06 |
| 7     | 4.6  | 1.6  | 3.3  | 11.9 | 1.7  | 7.8  | 3.3    | 1.6  | 2.4  | 0.06      | 0.06 | 0.06 |
| 8     | 4.7  | 1.7  | 3.4  | 5.1  | 1.4  | 2.2  | 5.6    | 1.9  | 3.7  | 0.06      | 0.04 | 0.05 |
| 9     | 3.6  | 0.60 | 1.5  | 3.6  | 0.45 | 1.6  | 4.0    | 0.90 | 2.2  | 0.07      | 0.04 | 0.06 |
| 10    | 1.2  | 0.43 | 0.82 | 6.5  | 0.82 | 2.5  | 4.2    | 0.53 | 1.4  | ---       | ---  | ---  |
| 11    | 2.9  | 0.23 | 0.71 | 11.9 | 1.0  | 4.4  | 1.1    | 0.54 | 0.73 | ---       | ---  | ---  |
| 12    | 5.7  | 0.81 | 1.9  | 6.7  | 1.6  | 2.4  | 1.5    | 0.38 | 0.64 | ---       | ---  | ---  |
| 13    | 5.6  | 0.67 | 1.7  | 2.6  | 1.8  | 2.1  | 1.2    | 0.38 | 0.75 | ---       | ---  | ---  |
| 14    | 0.91 | 0.29 | 0.52 | 4.3  | 1.3  | 2.1  | 2.1    | 0.31 | 0.71 | ---       | ---  | ---  |
| 15    | 0.35 | 0.12 | 0.25 | 6.0  | 1.4  | 2.6  | 0.55   | 0.12 | 0.27 | ---       | ---  | ---  |
| 16    | 0.14 | 0.07 | 0.11 | 16.5 | 2.5  | 8.4  | 0.15   | 0.07 | 0.10 | ---       | ---  | ---  |
| 17    | 0.09 | 0.07 | 0.08 | 12.7 | 5.2  | 8.2  | 0.17   | 0.04 | 0.09 | ---       | ---  | ---  |
| 18    | 0.48 | 0.07 | 0.16 | 7.1  | 3.5  | 5.5  | 0.06   | 0.04 | 0.05 | ---       | ---  | ---  |
| 19    | 8.2  | 0.08 | 0.37 | 9.8  | 3.3  | 4.9  | 0.05   | 0.04 | 0.05 | ---       | ---  | ---  |
| 20    | 9.4  | 0.38 | 2.2  | 8.5  | 4.0  | 5.9  | 0.05   | 0.04 | 0.04 | ---       | ---  | ---  |
| 21    | 4.1  | 1.1  | 1.7  | 9.3  | 3.2  | 5.0  | 0.05   | 0.04 | 0.05 | ---       | ---  | ---  |
| 22    | 2.5  | 0.64 | 1.3  | 9.3  | 3.6  | 6.2  | 0.05   | 0.04 | 0.05 | ---       | ---  | ---  |
| 23    | 1.0  | 0.63 | 0.84 | 6.2  | 3.7  | 4.9  | 0.07   | 0.04 | 0.05 | 0.06      | 0.05 | 0.05 |
| 24    | 5.5  | 0.86 | 1.4  | 4.5  | 2.0  | 2.7  | 0.14   | 0.07 | 0.10 | 0.09      | 0.05 | 0.06 |
| 25    | 6.6  | 1.0  | 2.7  | 10.2 | 3.3  | 5.1  | 0.17   | 0.06 | 0.11 | 0.10      | 0.05 | 0.07 |
| 26    | 5.0  | 0.99 | 1.7  | 8.3  | 4.6  | 5.8  | 0.19   | 0.07 | 0.10 | 0.09      | 0.05 | 0.06 |
| 27    | 5.3  | 0.76 | 2.3  | 5.8  | 3.6  | 4.7  | 0.09   | 0.05 | 0.06 | 0.21      | 0.05 | 0.06 |
| 28    | 6.0  | 0.59 | 1.8  | 5.4  | 2.5  | 4.0  | 0.06   | 0.04 | 0.05 | 0.06      | 0.05 | 0.05 |
| 29    | 7.3  | 1.5  | 3.2  | 5.2  | 2.4  | 3.9  | 0.10   | 0.04 | 0.06 | 0.06      | 0.05 | 0.06 |
| 30    | 4.2  | 0.44 | 0.85 | 4.0  | 2.6  | 3.2  | 0.09   | 0.05 | 0.06 | 0.09      | 0.06 | 0.07 |
| 31    | ---  | ---  | ---  | 4.1  | 2.4  | 3.3  | 0.07   | 0.06 | 0.06 | ---       | ---  | ---  |
| MONTH | 10.0 | 0.07 | 2.0  | 16.5 | 0.10 | 3.8  | 5.7    | 0.04 | 0.94 | ---       | ---  | ---  |

## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 4.0  | 1.7  | 3.5  | 0.06 | 0.04 | 0.05 | 3.4  | 0.06 | 0.77 | 7.8  | 0.17 | 3.5  |
| 2     | 3.2  | 0.27 | 1.5  | 0.08 | 0.04 | 0.05 | 3.5  | 0.87 | 1.6  | 7.7  | 0.24 | 2.9  |
| 3     | 0.76 | 0.14 | 0.32 | 0.05 | 0.04 | 0.04 | 1.5  | 0.23 | 0.56 | 2.7  | 0.14 | 0.38 |
| 4     | 0.35 | 0.08 | 0.11 | 0.05 | 0.04 | 0.05 | 0.75 | 0.18 | 0.30 | 0.57 | 0.07 | 0.19 |
| 5     | 0.23 | 0.09 | 0.13 | 0.05 | 0.04 | 0.05 | 0.75 | 0.10 | 0.31 | 0.21 | 0.06 | 0.09 |
| 6     | 0.18 | 0.07 | 0.10 | 0.05 | 0.04 | 0.05 | 0.65 | 0.10 | 0.32 | 3.3  | 0.07 | 0.72 |
| 7     | 1.7  | 0.07 | 0.21 | 0.06 | 0.05 | 0.05 | 0.62 | 0.31 | 0.45 | 5.4  | 0.66 | 3.0  |
| 8     | 2.4  | 0.09 | 0.92 | 0.06 | 0.04 | 0.05 | 2.3  | 0.20 | 0.73 | 7.1  | 3.1  | 5.1  |
| 9     | 1.1  | 0.15 | 0.38 | 0.05 | 0.04 | 0.05 | 2.7  | 0.96 | 2.2  | 7.8  | 3.1  | 6.5  |
| 10    | 0.33 | 0.10 | 0.18 | 0.06 | 0.05 | 0.06 | 2.4  | 0.09 | 1.1  | 7.5  | 1.5  | 4.6  |
| 11    | 0.19 | 0.08 | 0.11 | 0.08 | 0.05 | 0.07 | 0.18 | 0.06 | 0.09 | 4.9  | 1.4  | 3.3  |
| 12    | 0.20 | 0.10 | 0.16 | 0.09 | 0.06 | 0.08 | 0.14 | 0.06 | 0.10 | 3.9  | 1.6  | 2.8  |
| 13    | 1.1  | 0.12 | 0.32 | 0.09 | 0.06 | 0.08 | 0.10 | 0.07 | 0.08 | 4.1  | 1.6  | 2.8  |
| 14    | 0.36 | 0.09 | 0.16 | 0.08 | 0.06 | 0.07 | 0.12 | 0.05 | 0.07 | 4.1  | 0.92 | 2.5  |
| 15    | 0.10 | 0.08 | 0.09 | 0.08 | 0.07 | 0.07 | 0.08 | 0.06 | 0.07 | 2.8  | 0.52 | 1.8  |
| 16    | 0.12 | 0.08 | 0.10 | 0.10 | 0.07 | 0.08 | 0.08 | 0.04 | 0.05 | 1.8  | 0.64 | 1.2  |
| 17    | 0.12 | 0.08 | 0.10 | 0.12 | 0.07 | 0.08 | 0.05 | 0.04 | 0.04 | 2.8  | 1.0  | 1.9  |
| 18    | 0.12 | 0.09 | 0.10 | 2.7  | 0.08 | 0.65 | 0.05 | 0.04 | 0.04 | 1.7  | 0.14 | 0.84 |
| 19    | 0.12 | 0.07 | 0.09 | 0.32 | 0.06 | 0.09 | 0.04 | 0.04 | 0.04 | 1.2  | 0.24 | 0.50 |
| 20    | 0.16 | 0.08 | 0.09 | 0.49 | 0.06 | 0.23 | 0.05 | 0.04 | 0.04 | 1.1  | 0.28 | 0.59 |
| 21    | 0.12 | 0.08 | 0.09 | 0.30 | 0.10 | 0.17 | 0.04 | 0.04 | 0.04 | 2.5  | 0.21 | 1.3  |
| 22    | 0.10 | 0.07 | 0.08 | 0.12 | 0.08 | 0.09 | 0.04 | 0.04 | 0.04 | 2.7  | 0.71 | 1.8  |
| 23    | 0.24 | 0.09 | 0.17 | 0.10 | 0.07 | 0.08 | 0.04 | 0.04 | 0.04 | 3.0  | 1.1  | 2.0  |
| 24    | 0.38 | 0.13 | 0.21 | 0.09 | 0.07 | 0.07 | 0.05 | 0.04 | 0.04 | 2.5  | 0.48 | 1.2  |
| 25    | 0.25 | 0.09 | 0.13 | 0.15 | 0.06 | 0.08 | 0.05 | 0.04 | 0.04 | 2.3  | 0.52 | 1.3  |
| 26    | 0.16 | 0.08 | 0.10 | 0.08 | 0.06 | 0.07 | 0.05 | 0.04 | 0.04 | 1.6  | 0.31 | 0.64 |
| 27    | 0.15 | 0.09 | 0.11 | 0.08 | 0.06 | 0.07 | 0.15 | 0.04 | 0.06 | 1.4  | 0.30 | 0.76 |
| 28    | 0.16 | 0.10 | 0.11 | 0.07 | 0.06 | 0.06 | 6.7  | 0.09 | 2.3  | 1.2  | 0.38 | 0.76 |
| 29    | 0.12 | 0.09 | 0.10 | 0.09 | 0.06 | 0.07 | 7.0  | 0.14 | 0.79 | 0.99 | 0.49 | 0.64 |
| 30    | 0.13 | 0.07 | 0.12 | 0.08 | 0.07 | 0.07 | 5.0  | 0.06 | 0.43 | 2.6  | 0.25 | 0.88 |
| 31    | 0.12 | 0.05 | 0.06 | ---  | ---  | ---  | 7.8  | 0.14 | 4.6  | 3.2  | 0.46 | 1.1  |
| MONTH | 4.0  | 0.05 | 0.32 | 2.7  | 0.04 | 0.09 | 7.8  | 0.04 | 0.56 | 7.8  | 0.06 | 1.9  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 2.5  | 0.17 | 1.2  | 0.06 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | 0.07 | 0.07 | 0.07 |
| 2     | 2.5  | 1.1  | 2.2  | 0.07 | 0.05 | 0.05 | 0.08 | 0.06 | 0.07 | 0.07 | 0.06 | 0.07 |
| 3     | 2.4  | 0.12 | 1.2  | 0.06 | 0.05 | 0.05 | 0.08 | 0.07 | 0.07 | 0.08 | 0.06 | 0.07 |
| 4     | 1.6  | 0.20 | 0.77 | 0.06 | 0.05 | 0.05 | 0.39 | 0.07 | 0.14 | 0.12 | 0.07 | 0.08 |
| 5     | 1.7  | 0.12 | 0.46 | 0.06 | 0.05 | 0.06 | 0.87 | 0.18 | 0.58 | 0.07 | 0.05 | 0.06 |
| 6     | 0.17 | 0.07 | 0.10 | 0.06 | 0.05 | 0.05 | 0.87 | 0.36 | 0.65 | 0.06 | 0.05 | 0.05 |
| 7     | 0.20 | 0.07 | 0.12 | 0.06 | 0.05 | 0.06 | 0.45 | 0.14 | 0.26 | 0.05 | 0.04 | 0.05 |
| 8     | 0.21 | 0.08 | 0.16 | 0.06 | 0.05 | 0.06 | 0.18 | 0.07 | 0.11 | 0.05 | 0.04 | 0.05 |
| 9     | 0.19 | 0.07 | 0.11 | 0.06 | 0.05 | 0.06 | 0.26 | 0.07 | 0.12 | 0.04 | 0.04 | 0.04 |
| 10    | 0.08 | 0.06 | 0.07 | 0.06 | 0.05 | 0.06 | 0.15 | 0.08 | 0.11 | 0.05 | 0.04 | 0.04 |
| 11    | 0.10 | 0.07 | 0.07 | 0.06 | 0.06 | 0.06 | 0.09 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 |
| 12    | 0.42 | 0.07 | 0.14 | 0.07 | 0.06 | 0.06 | 0.09 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 |
| 13    | 0.17 | 0.07 | 0.10 | 0.06 | 0.06 | 0.06 | 0.09 | 0.06 | 0.07 | ---  | ---  | ---  |
| 14    | 0.08 | 0.06 | 0.07 | 0.06 | 0.06 | 0.06 | 0.11 | 0.07 | 0.08 | ---  | ---  | ---  |
| 15    | 0.90 | 0.06 | 0.18 | 0.06 | 0.06 | 0.06 | 0.09 | 0.07 | 0.08 | ---  | ---  | ---  |
| 16    | 0.66 | 0.06 | 0.12 | 0.06 | 0.06 | 0.06 | 0.08 | 0.05 | 0.06 | ---  | ---  | ---  |
| 17    | 0.06 | 0.06 | 0.06 | 0.12 | 0.06 | 0.08 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  |
| 18    | 0.09 | 0.06 | 0.07 | 0.10 | 0.06 | 0.07 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  |
| 19    | 0.07 | 0.05 | 0.06 | 0.70 | 0.06 | 0.19 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  |
| 20    | 0.05 | 0.04 | 0.05 | 0.64 | 0.07 | 0.17 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  |
| 21    | 0.06 | 0.04 | 0.05 | 0.13 | 0.06 | 0.07 | 0.06 | 0.05 | 0.05 | 7.5  | 0.07 | 3.5  |
| 22    | 0.06 | 0.04 | 0.05 | 0.12 | 0.06 | 0.09 | 0.06 | 0.05 | 0.05 | 9.8  | 1.1  | 6.5  |
| 23    | 0.05 | 0.04 | 0.05 | 0.07 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | 9.0  | 0.29 | 2.1  |
| 24    | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | 3.5  | 0.18 | 1.1  |
| 25    | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 2.9  | 0.23 | 0.97 |
| 26    | 0.05 | 0.04 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 7.1  | 0.40 | 3.8  |
| 27    | 0.05 | 0.04 | 0.05 | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.07 | 11.5 | 5.7  | 9.1  |
| 28    | 0.06 | 0.04 | 0.06 | 0.07 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | 13.9 | 9.1  | 11.2 |
| 29    | 0.07 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 14.2 | 10.7 | 13.6 |
| 30    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | 11.8 | 4.5  | 8.4  |
| 31    | ---  | ---  | ---  | 0.07 | 0.06 | 0.06 | ---  | ---  | ---  | 6.8  | 4.1  | 5.5  |
| MONTH | 2.5  | 0.04 | 0.27 | 0.70 | 0.05 | 0.07 | 0.87 | 0.05 | 0.11 | ---  | ---  | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 10.1 | 5.6  | 8.5  | 7.7  | 2.8  | 6.1  | 6.0    | 2.9  | 4.2  | 0.12      | 0.06 | 0.07 |
| 2     | 10.4 | 6.6  | 9.8  | 7.3  | 2.7  | 5.4  | 6.3    | 3.0  | 4.7  | 0.31      | 0.06 | 0.10 |
| 3     | 9.9  | 6.8  | 9.1  | 10.3 | 5.2  | 8.5  | 7.5    | 2.7  | 4.5  | 0.07      | 0.06 | 0.06 |
| 4     | 9.0  | 2.7  | 6.6  | 10.7 | 5.3  | 9.3  | 7.5    | 3.9  | 5.9  | 0.08      | 0.06 | 0.07 |
| 5     | 7.4  | 4.0  | 5.7  | 10.9 | 1.1  | 6.5  | 10.7   | 4.0  | 7.7  | 0.08      | 0.06 | 0.07 |
| 6     | 9.0  | 5.4  | 7.7  | 12.8 | 10.6 | 11.7 | 10.7   | 5.1  | 8.0  | 0.10      | 0.05 | 0.06 |
| 7     | 8.0  | 5.8  | 7.2  | 13.2 | 9.5  | 12.2 | 9.4    | 7.3  | 8.6  | 0.06      | 0.05 | 0.06 |
| 8     | 9.0  | 7.6  | 8.4  | 11.8 | 3.9  | 9.6  | 9.5    | 7.0  | 9.1  | 0.06      | 0.04 | 0.05 |
| 9     | 8.8  | 4.7  | 7.2  | 12.6 | 8.2  | 10.8 | 10.6   | 7.0  | 9.8  | 0.06      | 0.04 | 0.05 |
| 10    | 9.0  | 1.7  | 6.8  | 14.3 | 11.9 | 13.3 | 11.1   | 4.8  | 9.3  | ---       | ---  | ---  |
| 11    | 10.4 | 1.2  | 7.9  | 15.2 | 11.9 | 14.4 | 10.3   | 2.3  | 8.0  | ---       | ---  | ---  |
| 12    | 11.1 | 3.4  | 8.9  | 14.5 | 6.3  | 11.9 | 9.2    | 0.97 | 5.7  | ---       | ---  | ---  |
| 13    | 10.7 | 2.5  | 7.8  | 13.2 | 5.3  | 9.4  | 11.9   | 0.38 | 2.3  | ---       | ---  | ---  |
| 14    | 5.1  | 0.30 | 1.9  | 14.6 | 9.5  | 13.4 | 6.0    | 0.33 | 1.9  | ---       | ---  | ---  |
| 15    | 1.8  | 0.12 | 0.34 | 15.4 | 11.1 | 14.0 | 1.9    | 0.20 | 0.94 | ---       | ---  | ---  |
| 16    | 0.16 | 0.07 | 0.11 | 17.0 | 15.3 | 16.3 | 1.7    | 0.08 | 0.51 | ---       | ---  | ---  |
| 17    | 0.18 | 0.07 | 0.09 | 16.9 | 11.3 | 16.1 | 4.4    | 0.05 | 0.98 | ---       | ---  | ---  |
| 18    | 1.6  | 0.07 | 0.30 | 15.6 | 9.4  | 14.6 | 0.08   | 0.04 | 0.05 | ---       | ---  | ---  |
| 19    | 9.5  | 0.30 | 5.5  | 15.2 | 11.8 | 14.3 | 0.05   | 0.04 | 0.05 | ---       | ---  | ---  |
| 20    | 11.7 | 8.5  | 10.3 | 15.1 | 10.8 | 13.9 | 0.05   | 0.04 | 0.04 | ---       | ---  | ---  |
| 21    | 11.7 | 7.6  | 10.7 | 15.8 | 12.0 | 14.6 | 0.05   | 0.04 | 0.04 | ---       | ---  | ---  |
| 22    | 9.7  | 1.5  | 6.0  | 15.8 | 9.1  | 14.4 | 0.06   | 0.04 | 0.05 | ---       | ---  | ---  |
| 23    | 9.5  | 1.4  | 4.3  | 14.1 | 6.5  | 11.6 | 10.3   | 0.04 | 4.4  | 0.06      | 0.05 | 0.05 |
| 24    | 11.4 | 7.1  | 10.3 | 14.7 | 5.6  | 11.3 | 11.7   | 9.1  | 10.2 | 1.9       | 0.05 | 0.17 |
| 25    | 11.5 | 3.3  | 9.3  | 14.9 | 13.1 | 14.4 | 10.4   | 0.19 | 5.2  | 1.9       | 0.06 | 0.53 |
| 26    | 8.1  | 1.4  | 4.4  | 14.6 | 11.8 | 13.8 | 2.9    | 0.07 | 0.38 | 0.13      | 0.05 | 0.07 |
| 27    | 9.0  | 5.5  | 7.7  | 13.3 | 5.1  | 10.1 | 0.12   | 0.05 | 0.07 | 0.58      | 0.04 | 0.07 |
| 28    | 9.2  | 5.6  | 7.8  | 8.6  | 3.4  | 5.8  | 0.10   | 0.04 | 0.06 | 0.06      | 0.04 | 0.05 |
| 29    | 9.1  | 4.8  | 7.6  | 7.6  | 3.6  | 5.4  | 0.10   | 0.05 | 0.07 | 0.09      | 0.05 | 0.06 |
| 30    | 7.9  | 5.0  | 7.1  | 8.1  | 4.9  | 6.7  | 0.12   | 0.05 | 0.06 | 0.12      | 0.06 | 0.07 |
| 31    | ---  | ---  | ---  | 8.0  | 3.8  | 6.2  | 0.07   | 0.06 | 0.06 | ---       | ---  | ---  |
| MONTH | 11.7 | 0.07 | 6.5  | 17.0 | 1.1  | 11.2 | 11.9   | 0.04 | 3.6  | ---       | ---  | ---  |

## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 6.7      | 6.6 | 6.6  | 6.6      | 6.4 | 6.5  | 7.3      | 7.0 | 7.1  | 7.0     | 6.9 | 6.9  |
| 2     | 6.8      | 6.6 | 6.7  | 6.5      | 6.4 | 6.4  | 7.4      | 7.2 | 7.3  | 7.0     | 6.9 | 6.9  |
| 3     | 6.9      | 6.7 | 6.8  | 6.5      | 6.4 | 6.4  | 7.3      | 7.2 | 7.2  | 7.0     | 6.9 | 7.0  |
| 4     | 6.7      | 6.6 | 6.7  | 6.6      | 6.4 | 6.4  | 7.3      | 7.1 | 7.2  | 7.1     | 6.9 | 7.0  |
| 5     | 6.7      | 6.6 | 6.7  | 6.6      | 6.4 | 6.5  | 7.4      | 7.2 | 7.2  | 7.2     | 7.0 | 7.1  |
| 6     | 6.8      | 6.6 | 6.7  | 6.6      | 6.4 | 6.5  | 7.4      | 7.2 | 7.3  | 7.3     | 7.1 | 7.2  |
| 7     | 6.9      | 6.8 | 6.8  | 6.6      | 6.5 | 6.6  | 7.4      | 7.4 | 7.4  | 7.3     | 7.1 | 7.2  |
| 8     | 6.9      | 6.9 | 6.9  | 6.8      | 6.5 | 6.6  | 7.4      | 7.2 | 7.3  | 7.2     | 7.0 | 7.2  |
| 9     | 7.0      | 6.9 | 7.0  | 6.9      | 6.6 | 6.8  | 7.2      | 7.1 | 7.2  | 7.2     | 7.0 | 7.1  |
| 10    | 7.2      | 7.0 | 7.1  | 6.8      | 6.5 | 6.6  | 7.2      | 7.1 | 7.1  | 7.3     | 7.1 | 7.2  |
| 11    | 7.2      | 7.1 | 7.2  | 6.6      | 6.5 | 6.6  | 7.5      | 7.2 | 7.3  | 7.3     | 7.2 | 7.2  |
| 12    | 7.2      | 7.1 | 7.2  | 6.8      | 6.6 | 6.7  | 7.4      | 7.3 | 7.4  | 7.3     | 7.2 | 7.2  |
| 13    | 7.2      | 7.0 | 7.1  | 7.1      | 6.8 | 6.9  | 7.4      | 7.1 | 7.2  | 7.2     | 7.2 | 7.2  |
| 14    | 7.1      | 6.9 | 7.0  | 7.1      | 7.0 | 7.1  | 7.4      | 7.0 | 7.2  | 7.4     | 7.2 | 7.2  |
| 15    | 7.2      | 7.0 | 7.1  | 7.1      | 7.0 | 7.1  | 7.1      | 7.0 | 7.1  | 7.4     | 7.2 | 7.3  |
| 16    | 7.2      | 7.1 | 7.2  | 7.1      | 6.8 | 7.0  | 7.1      | 6.7 | 6.9  | 7.4     | 7.3 | 7.3  |
| 17    | 7.2      | 6.8 | 7.0  | 6.9      | 6.8 | 6.8  | 6.9      | 6.7 | 6.8  | 7.3     | 7.2 | 7.3  |
| 18    | 7.1      | 6.8 | 7.0  | 6.9      | 6.8 | 6.8  | 6.8      | 6.6 | 6.7  | 7.3     | 7.2 | 7.3  |
| 19    | 7.0      | 6.9 | 7.0  | 7.1      | 6.8 | 7.0  | 6.7      | 6.6 | 6.7  | 7.4     | 7.3 | 7.3  |
| 20    | 7.0      | 6.9 | 6.9  | 7.2      | 7.0 | 7.1  | 6.8      | 6.6 | 6.7  | 7.4     | 7.3 | 7.3  |
| 21    | 7.0      | 6.9 | 7.0  | 7.2      | 7.0 | 7.1  | 6.8      | 6.7 | 6.7  | 7.4     | 7.3 | 7.3  |
| 22    | 7.2      | 7.0 | 7.1  | 7.0      | 6.8 | 7.0  | 6.8      | 6.7 | 6.7  | 7.3     | 7.2 | 7.3  |
| 23    | 7.2      | 7.0 | 7.2  | 6.9      | 6.8 | 6.8  | 6.8      | 6.7 | 6.7  | 7.5     | 7.3 | 7.4  |
| 24    | 7.4      | 7.2 | 7.2  | 6.9      | 6.8 | 6.9  | 6.9      | 6.7 | 6.8  | 7.4     | 7.3 | 7.4  |
| 25    | 7.4      | 7.2 | 7.3  | 7.1      | 6.9 | 7.0  | 6.9      | 6.8 | 6.8  | 7.6     | 7.4 | 7.5  |
| 26    | 7.2      | 7.0 | 7.1  | 7.1      | 6.9 | 7.0  | 6.9      | 6.8 | 6.8  | 7.5     | 7.4 | 7.5  |
| 27    | 7.1      | 7.0 | 7.1  | 7.0      | 6.8 | 6.9  | 6.9      | 6.8 | 6.9  | 7.5     | 7.4 | 7.5  |
| 28    | 7.1      | 7.1 | 7.1  | 7.1      | 6.8 | 6.9  | 6.9      | 6.8 | 6.9  | 7.6     | 7.3 | 7.5  |
| 29    | 7.2      | 7.1 | 7.1  | 7.4      | 7.1 | 7.2  | 7.0      | 6.9 | 6.9  | 7.6     | 7.5 | 7.5  |
| 30    | 7.1      | 6.8 | 7.0  | 7.3      | 7.2 | 7.3  | 7.0      | 6.9 | 7.0  | ---     | --- | ---  |
| 31    | 7.0      | 6.5 | 6.7  | ---      | --- | ---  | 7.0      | 6.9 | 6.9  | 7.5     | 7.2 | 7.4  |
| MONTH | 7.4      | 6.5 | 7.0  | 7.4      | 6.4 | 6.8  | 7.5      | 6.6 | 7.0  | ---     | --- | ---  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 7.3      | 7.2 | 7.2  | 7.0      | 6.9 | 7.0  | 7.1      | 6.9 | 7.0  | 7.2     | 6.9 | 7.0  |
| 2     | 7.2      | 7.1 | 7.2  | 7.2      | 6.9 | 7.0  | 7.2      | 7.0 | 7.2  | 7.1     | 7.0 | 7.1  |
| 3     | 7.2      | 7.2 | 7.2  | 7.1      | 6.9 | 7.0  | 7.3      | 7.2 | 7.3  | 7.2     | 7.0 | 7.1  |
| 4     | 7.3      | 7.2 | 7.3  | 7.0      | 6.8 | 7.0  | 7.4      | 7.2 | 7.3  | 7.3     | 6.8 | 7.1  |
| 5     | 7.3      | 7.2 | 7.2  | 7.1      | 6.9 | 7.0  | 7.4      | 7.2 | 7.3  | 6.8     | 6.6 | 6.8  |
| 6     | 7.2      | 7.1 | 7.2  | 7.2      | 6.9 | 7.0  | 7.6      | 7.3 | 7.4  | 6.8     | 6.6 | 6.6  |
| 7     | 7.3      | 7.1 | 7.2  | 7.2      | 6.9 | 7.1  | 7.4      | 7.2 | 7.3  | 6.7     | 6.6 | 6.6  |
| 8     | 7.5      | 7.3 | 7.4  | 7.2      | 7.0 | 7.1  | 7.3      | 7.1 | 7.2  | 6.6     | 6.6 | 6.6  |
| 9     | 7.5      | 7.2 | 7.3  | 7.2      | 7.0 | 7.1  | 7.5      | 7.2 | 7.3  | 6.6     | 6.5 | 6.5  |
| 10    | 7.2      | 7.0 | 7.1  | 7.3      | 7.0 | 7.1  | 7.6      | 7.2 | 7.4  | 6.6     | 6.5 | 6.6  |
| 11    | 7.1      | 7.0 | 7.0  | 7.3      | 7.2 | 7.3  | 7.4      | 7.2 | 7.3  | 6.6     | 6.4 | 6.5  |
| 12    | 7.1      | 7.0 | 7.0  | 7.2      | 7.0 | 7.1  | 7.3      | 7.1 | 7.2  | 6.6     | 6.4 | 6.5  |
| 13    | 7.1      | 7.0 | 7.0  | 7.3      | 7.1 | 7.2  | 7.3      | 7.1 | 7.1  | 6.6     | 6.5 | 6.5  |
| 14    | 7.0      | 6.9 | 7.0  | 7.2      | 7.0 | 7.1  | 7.2      | 7.0 | 7.1  | 6.6     | 6.5 | 6.5  |
| 15    | 7.0      | 6.8 | 6.9  | 7.1      | 7.0 | 7.1  | 7.5      | 7.1 | 7.3  | 6.6     | 6.5 | 6.6  |
| 16    | 7.0      | 6.8 | 6.9  | 7.1      | 7.0 | 7.0  | 7.4      | 6.8 | 7.0  | 6.7     | 6.6 | 6.6  |
| 17    | 6.8      | 6.7 | 6.8  | 7.2      | 7.0 | 7.1  | 6.9      | 6.7 | 6.8  | 6.7     | 6.6 | 6.6  |
| 18    | 7.1      | 6.7 | 6.9  | 7.1      | 7.0 | 7.0  | 6.9      | 6.8 | 6.8  | 6.8     | 6.6 | 6.7  |
| 19    | 7.0      | 6.6 | 6.7  | 7.2      | 7.0 | 7.1  | 7.0      | 6.8 | 6.9  | 6.9     | 6.7 | 6.8  |
| 20    | 7.0      | 6.5 | 6.8  | 7.3      | 7.1 | 7.2  | 7.1      | 6.9 | 7.0  | 7.0     | 6.8 | 6.9  |
| 21    | 7.2      | 6.9 | 7.0  | 7.3      | 7.1 | 7.2  | 7.0      | 6.8 | 6.9  | 7.0     | 6.7 | 6.9  |
| 22    | 7.1      | 6.8 | 7.0  | 7.4      | 7.2 | 7.3  | 7.0      | 6.7 | 6.9  | 7.6     | 7.0 | 7.1  |
| 23    | 7.0      | 6.8 | 6.9  | 7.3      | 7.0 | 7.2  | 7.0      | 6.8 | 6.9  | 7.7     | 7.1 | 7.2  |
| 24    | 7.0      | 6.9 | 7.0  | 7.1      | 7.0 | 7.1  | 7.2      | 6.8 | 6.9  | 7.5     | 7.1 | 7.2  |
| 25    | 7.1      | 6.9 | 7.0  | 7.1      | 6.7 | 7.0  | 7.0      | 6.8 | 6.9  | 8.0     | 6.9 | 7.3  |
| 26    | 7.2      | 7.0 | 7.1  | 7.0      | 6.9 | 6.9  | 7.0      | 6.8 | 6.9  | 8.6     | 7.0 | 7.6  |
| 27    | 7.2      | 7.0 | 7.2  | 7.0      | 6.9 | 7.0  | 7.1      | 6.9 | 7.0  | 7.7     | 6.8 | 7.3  |
| 28    | 7.0      | 6.9 | 7.0  | 7.2      | 6.9 | 7.0  | 7.5      | 7.0 | 7.2  | 7.4     | 6.8 | 7.1  |
| 29    | 7.0      | 6.9 | 7.0  | 7.3      | 7.1 | 7.2  | 7.2      | 6.9 | 7.0  | 7.4     | 6.7 | 7.0  |
| 30    | ---      | --- | ---  | 7.2      | 7.0 | 7.1  | 7.3      | 6.9 | 7.0  | 7.7     | 7.0 | 7.4  |
| 31    | ---      | --- | ---  | 7.3      | 7.0 | 7.0  | ---      | --- | ---  | 7.2     | 6.8 | 7.0  |
| MONTH | 7.5      | 6.5 | 7.1  | 7.4      | 6.7 | 7.1  | 7.6      | 6.7 | 7.1  | 8.6     | 6.4 | 6.9  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.6 | 6.8 | 7.1  | 6.9 | 6.7 | 6.8  | 8.4 | 8.1 | 8.2  | 6.8 | 6.7 | 6.8  |
| 2     | 7.5 | 6.6 | 6.9  | 6.8 | 6.6 | 6.7  | 8.5 | 7.5 | 8.0  | 7.0 | 6.8 | 6.9  |
| 3     | 7.5 | 6.6 | 6.9  | 6.7 | 6.5 | 6.6  | 8.2 | 7.5 | 7.9  | 7.0 | 6.7 | 6.8  |
| 4     | 8.3 | 6.7 | 7.5  | 6.8 | 6.5 | 6.6  | 7.5 | 6.9 | 7.2  | 6.8 | 6.7 | 6.7  |
| 5     | 7.6 | 6.9 | 7.1  | 6.8 | 6.7 | 6.7  | 7.3 | 6.8 | 7.0  | 6.8 | 6.7 | 6.7  |
| 6     | 7.1 | 6.4 | 6.7  | 7.1 | 6.6 | 6.8  | 7.4 | 7.0 | 7.2  | 6.7 | 6.6 | 6.7  |
| 7     | 7.3 | 6.6 | 6.8  | 7.1 | 6.8 | 6.9  | 7.3 | 6.8 | 7.0  | 6.7 | 6.5 | 6.6  |
| 8     | 7.0 | 6.4 | 6.6  | 7.2 | 6.8 | 7.0  | 7.0 | 6.7 | 6.8  | 6.7 | 6.5 | 6.6  |
| 9     | 7.0 | 6.4 | 6.7  | 7.2 | 6.8 | 7.0  | 7.0 | 6.6 | 6.8  | 6.7 | 6.5 | 6.7  |
| 10    | 7.3 | 6.6 | 6.9  | 7.2 | 6.9 | 7.0  | 7.2 | 6.7 | 6.9  | --- | --- | ---  |
| 11    | 7.1 | 6.7 | 6.9  | 7.5 | 6.9 | 7.2  | 7.3 | 6.7 | 6.9  | --- | --- | ---  |
| 12    | 7.2 | 6.7 | 6.9  | 8.0 | 7.0 | 7.4  | 7.7 | 6.8 | 7.1  | --- | --- | ---  |
| 13    | 7.0 | 6.6 | 6.8  | 8.9 | 7.3 | 8.0  | 7.3 | 7.1 | 7.2  | --- | --- | ---  |
| 14    | 6.8 | 6.6 | 6.7  | 8.5 | 7.0 | 7.7  | 7.3 | 7.0 | 7.1  | --- | --- | ---  |
| 15    | 6.8 | 6.6 | 6.7  | 8.6 | 7.2 | 7.8  | 7.1 | 6.9 | 7.0  | --- | --- | ---  |
| 16    | 6.9 | 6.7 | 6.8  | 7.5 | 7.0 | 7.2  | 6.9 | 6.7 | 6.8  | --- | --- | ---  |
| 17    | 7.0 | 6.8 | 6.9  | 7.6 | 6.9 | 7.1  | 6.8 | 6.5 | 6.6  | --- | --- | ---  |
| 18    | 7.0 | 6.6 | 6.9  | 7.9 | 7.0 | 7.5  | 6.6 | 6.4 | 6.5  | --- | --- | ---  |
| 19    | 7.9 | 6.7 | 7.2  | 8.8 | 7.1 | 7.7  | 6.5 | 6.4 | 6.4  | --- | --- | ---  |
| 20    | 7.3 | 6.8 | 7.0  | 8.0 | 7.1 | 7.4  | 6.6 | 6.3 | 6.4  | --- | --- | ---  |
| 21    | 7.3 | 6.8 | 7.0  | 7.7 | 6.8 | 7.3  | 6.5 | 6.4 | 6.4  | --- | --- | ---  |
| 22    | 7.1 | 6.7 | 6.9  | 8.3 | 6.8 | 7.1  | 6.5 | 6.4 | 6.5  | --- | --- | ---  |
| 23    | 7.6 | 6.9 | 7.1  | 8.5 | 7.4 | 8.0  | 6.5 | 6.4 | 6.4  | 6.7 | 6.6 | 6.6  |
| 24    | 7.9 | 7.0 | 7.3  | 8.7 | 7.3 | 7.9  | 6.5 | 6.4 | 6.4  | 6.9 | 6.7 | 6.8  |
| 25    | 7.4 | 6.8 | 7.0  | 7.8 | 6.9 | 7.3  | 6.6 | 6.4 | 6.5  | 6.9 | 6.8 | 6.8  |
| 26    | 7.6 | 7.0 | 7.1  | 8.4 | 6.8 | 7.6  | 6.5 | 6.4 | 6.5  | 6.8 | 6.7 | 6.8  |
| 27    | 7.4 | 6.8 | 7.1  | 8.5 | 7.5 | 8.1  | 6.6 | 6.4 | 6.5  | 6.9 | 6.7 | 6.8  |
| 28    | 7.2 | 6.8 | 6.9  | 8.6 | 7.3 | 7.9  | 6.6 | 6.4 | 6.5  | 6.9 | 6.7 | 6.8  |
| 29    | 7.1 | 6.8 | 6.9  | 8.1 | 7.1 | 7.6  | 6.7 | 6.4 | 6.6  | 7.1 | 6.8 | 6.9  |
| 30    | 7.1 | 6.7 | 6.9  | 8.7 | 7.5 | 8.2  | 6.8 | 6.7 | 6.8  | 7.0 | 6.8 | 6.9  |
| 31    | --- | --- | ---  | 8.6 | 7.8 | 8.4  | 6.8 | 6.7 | 6.8  | --- | --- | ---  |
| MONTH | 8.3 | 6.4 | 6.9  | 8.9 | 6.5 | 7.4  | 8.5 | 6.3 | 6.9  | --- | --- | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.9 | 6.7 | 6.8  | --- | --- | ---  | 7.2 | 6.8 | 6.9  | 7.0 | 6.6 | 6.9  |
| 2     | 6.8 | 6.7 | 6.7  | --- | --- | ---  | 7.3 | 7.1 | 7.2  | 7.0 | 6.7 | 6.9  |
| 3     | 6.9 | 6.7 | 6.8  | --- | --- | ---  | 7.2 | 7.0 | 7.1  | 7.0 | 6.5 | 6.9  |
| 4     | 6.7 | 6.6 | 6.7  | --- | --- | ---  | 7.4 | 6.9 | 7.1  | 7.0 | 6.8 | 6.9  |
| 5     | 6.8 | 6.7 | 6.7  | 6.5 | 6.4 | 6.5  | 7.4 | 7.2 | 7.3  | 7.1 | 6.9 | 7.0  |
| 6     | 6.7 | 6.7 | 6.7  | 6.5 | 6.4 | 6.5  | 7.5 | 7.2 | 7.3  | 7.2 | 6.9 | 7.1  |
| 7     | 6.8 | 6.7 | 6.7  | 6.6 | 6.5 | 6.5  | 7.5 | 7.4 | 7.5  | 7.2 | 7.0 | 7.1  |
| 8     | 7.0 | 6.7 | 6.8  | 6.8 | 6.5 | 6.6  | 7.5 | 7.3 | 7.4  | 7.1 | 6.9 | 7.0  |
| 9     | 7.1 | 6.9 | 7.0  | 6.9 | 6.6 | 6.7  | 7.5 | 7.2 | 7.4  | 7.1 | 6.8 | 7.0  |
| 10    | 7.2 | 7.1 | 7.2  | 6.8 | 6.5 | 6.6  | 7.4 | 7.1 | 7.2  | 7.3 | 7.0 | 7.2  |
| 11    | 7.2 | 7.1 | 7.2  | 6.6 | 6.5 | 6.6  | 7.5 | 7.2 | 7.3  | 7.4 | 7.1 | 7.2  |
| 12    | 7.2 | 7.1 | 7.2  | 6.8 | 6.6 | 6.7  | 7.5 | 7.3 | 7.4  | 7.2 | 7.1 | 7.2  |
| 13    | 7.2 | 6.9 | 7.1  | 7.1 | 6.7 | 6.9  | 7.4 | 7.1 | 7.2  | 7.2 | 7.1 | 7.2  |
| 14    | 7.1 | 6.9 | 7.0  | 7.2 | 7.0 | 7.1  | 7.5 | 7.0 | 7.1  | 7.3 | 7.1 | 7.2  |
| 15    | 7.2 | 7.0 | 7.1  | 7.2 | 7.1 | 7.1  | 7.2 | 7.0 | 7.1  | 7.3 | 7.1 | 7.2  |
| 16    | 7.2 | 7.1 | 7.2  | 7.1 | 6.9 | 7.0  | 7.1 | 6.7 | 6.8  | 7.4 | 7.2 | 7.3  |
| 17    | 7.2 | 6.7 | 6.9  | 6.9 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | 7.4 | 7.2 | 7.3  |
| 18    | 7.0 | 6.8 | 6.9  | 6.9 | 6.6 | 6.7  | 6.8 | 6.6 | 6.6  | 7.3 | 7.1 | 7.2  |
| 19    | 7.2 | 6.8 | 6.9  | 6.8 | 6.6 | 6.7  | 6.7 | 6.6 | 6.6  | 7.4 | 7.2 | 7.3  |
| 20    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.8 | 6.6 | 6.7  | 7.4 | 7.2 | 7.3  |
| 21    | --- | --- | ---  | 7.0 | 6.9 | 7.0  | 6.7 | 6.6 | 6.7  | 7.5 | 7.2 | 7.3  |
| 22    | --- | --- | ---  | 6.9 | 6.7 | 6.7  | 6.8 | 6.6 | 6.7  | 7.3 | 7.1 | 7.2  |
| 23    | --- | --- | ---  | 6.7 | 6.6 | 6.6  | 6.7 | 6.6 | 6.7  | 7.5 | 7.1 | 7.4  |
| 24    | --- | --- | ---  | 6.7 | 6.6 | 6.7  | 6.8 | 6.7 | 6.7  | 7.5 | 7.3 | 7.4  |
| 25    | --- | --- | ---  | 6.9 | 6.7 | 6.8  | 6.9 | 6.7 | 6.8  | 7.7 | 7.4 | 7.5  |
| 26    | --- | --- | ---  | 6.9 | 6.7 | 6.8  | 6.9 | 6.7 | 6.8  | 7.7 | 7.4 | 7.5  |
| 27    | --- | --- | ---  | 6.7 | 6.6 | 6.7  | 6.9 | 6.7 | 6.8  | 7.6 | 7.3 | 7.5  |
| 28    | --- | --- | ---  | 6.9 | 6.6 | 6.7  | 7.0 | 6.7 | 6.8  | 7.6 | 7.4 | 7.5  |
| 29    | --- | --- | ---  | 7.2 | 6.8 | 7.0  | 7.0 | 6.7 | 6.8  | 7.6 | 7.4 | 7.5  |
| 30    | --- | --- | ---  | 7.1 | 7.0 | 7.1  | 7.0 | 6.7 | 6.9  | --- | --- | ---  |
| 31    | --- | --- | ---  | --- | --- | ---  | 7.1 | 6.8 | 6.9  | 7.4 | 7.1 | 7.3  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 7.5 | 6.6 | 7.0  | --- | --- | ---  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.4 | 7.2 | 7.3  | 7.0 | 6.9 | 6.9  | 7.3 | 7.1 | 7.2  | 7.4 | 7.0 | 7.1  |
| 2     | 7.4 | 7.2 | 7.3  | 7.1 | 6.8 | 6.9  | 7.4 | 7.2 | 7.3  | 7.3 | 7.0 | 7.2  |
| 3     | 7.3 | 7.0 | 7.2  | 7.0 | 6.9 | 6.9  | 7.5 | 7.3 | 7.4  | 7.4 | 7.1 | 7.2  |
| 4     | 7.3 | 7.0 | 7.1  | 7.0 | 6.8 | 6.9  | 7.6 | 7.3 | 7.4  | 7.4 | 7.0 | 7.2  |
| 5     | 7.2 | 6.9 | 7.1  | 7.0 | 6.8 | 6.9  | 7.6 | 7.4 | 7.5  | 7.0 | 6.8 | 6.9  |
| 6     | 7.2 | 6.5 | 7.0  | 7.1 | 6.8 | 6.9  | 7.6 | 7.4 | 7.5  | 6.8 | 6.7 | 6.7  |
| 7     | 7.1 | 6.7 | 6.9  | 7.1 | 6.8 | 7.0  | 7.5 | 7.3 | 7.4  | 6.8 | 6.7 | 6.8  |
| 8     | 7.2 | 7.1 | 7.2  | 7.1 | 6.9 | 7.0  | 7.5 | 7.3 | 7.4  | 6.8 | 6.7 | 6.8  |
| 9     | 7.3 | 7.0 | 7.1  | 7.1 | 6.9 | 7.0  | 7.7 | 7.3 | 7.4  | 6.8 | 6.6 | 6.7  |
| 10    | 7.0 | 6.9 | 7.0  | 7.2 | 6.9 | 7.1  | 7.8 | 7.3 | 7.5  | 6.8 | 6.6 | 6.7  |
| 11    | 7.0 | 6.8 | 6.9  | 7.3 | 7.1 | 7.2  | 7.5 | 7.1 | 7.3  | 6.8 | 6.5 | 6.7  |
| 12    | 7.0 | 6.8 | 6.9  | 7.1 | 7.0 | 7.0  | 7.5 | 7.2 | 7.4  | 6.8 | 6.5 | 6.7  |
| 13    | 7.0 | 6.7 | 6.9  | 7.2 | 7.0 | 7.1  | 7.3 | 7.2 | 7.2  | --- | --- | ---  |
| 14    | 6.8 | 6.6 | 6.7  | 7.1 | 6.9 | 7.0  | 7.3 | 7.1 | 7.2  | --- | --- | ---  |
| 15    | 6.9 | 6.6 | 6.7  | 7.0 | 6.9 | 6.9  | 7.5 | 7.2 | 7.4  | --- | --- | ---  |
| 16    | 6.9 | 6.7 | 6.8  | 7.0 | 6.9 | 6.9  | 7.5 | 6.9 | 7.1  | --- | --- | ---  |
| 17    | 6.8 | 6.6 | 6.7  | 7.1 | 7.0 | 7.0  | 7.0 | 6.8 | 6.9  | --- | --- | ---  |
| 18    | 7.1 | 6.7 | 6.9  | 7.0 | 6.9 | 6.9  | 7.0 | 6.9 | 6.9  | --- | --- | ---  |
| 19    | 6.9 | 6.6 | 6.7  | 7.1 | 6.9 | 7.0  | 7.0 | 6.9 | 7.0  | --- | --- | ---  |
| 20    | 7.0 | 6.5 | 6.7  | 7.2 | 7.0 | 7.1  | 7.0 | 6.9 | 7.0  | --- | --- | ---  |
| 21    | 7.1 | 6.9 | 7.0  | 7.2 | 7.0 | 7.1  | 7.0 | 6.9 | 6.9  | 6.8 | 6.3 | 6.5  |
| 22    | 7.1 | 6.8 | 7.0  | 7.3 | 7.1 | 7.2  | 7.0 | 6.8 | 6.9  | 6.8 | 6.4 | 6.5  |
| 23    | 7.0 | 6.8 | 6.9  | 7.2 | 6.9 | 7.1  | 7.0 | 6.8 | 6.9  | 7.5 | 6.4 | 6.8  |
| 24    | 7.0 | 6.9 | 6.9  | 7.0 | 6.9 | 7.0  | 7.3 | 6.8 | 7.0  | 7.3 | 6.6 | 6.9  |
| 25    | 7.0 | 6.9 | 7.0  | 7.2 | 6.9 | 7.1  | 7.1 | 6.9 | 7.0  | 7.2 | 6.6 | 6.9  |
| 26    | 7.2 | 7.0 | 7.1  | 7.3 | 7.1 | 7.2  | 7.1 | 6.9 | 7.0  | 7.0 | 6.4 | 6.6  |
| 27    | 7.2 | 7.0 | 7.1  | 7.3 | 7.2 | 7.2  | 7.2 | 7.0 | 7.1  | 6.6 | 6.5 | 6.6  |
| 28    | 7.0 | 6.9 | 7.0  | 7.4 | 7.2 | 7.3  | 7.2 | 7.1 | 7.2  | 6.7 | 6.6 | 6.6  |
| 29    | 7.0 | 6.9 | 7.0  | 7.5 | 7.4 | 7.4  | 7.3 | 7.0 | 7.1  | 6.7 | 6.6 | 6.6  |
| 30    | --- | --- | ---  | 7.4 | 7.2 | 7.3  | 7.4 | 7.0 | 7.1  | 7.2 | 6.6 | 6.7  |
| 31    | --- | --- | ---  | 7.5 | 7.2 | 7.2  | --- | --- | ---  | 6.8 | 6.5 | 6.6  |
| MONTH | 7.4 | 6.5 | 7.0  | 7.5 | 6.8 | 7.1  | 7.8 | 6.8 | 7.2  | --- | --- | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.7 | 6.3 | 6.4  | 6.8 | 6.7 | 6.8  | 8.3 | 6.7 | 7.6  | 6.8 | 6.6 | 6.7  |
| 2     | 6.5 | 6.3 | 6.4  | 6.8 | 6.6 | 6.7  | 8.0 | 6.8 | 7.1  | 7.0 | 6.8 | 6.9  |
| 3     | 6.4 | 6.3 | 6.4  | 7.0 | 6.7 | 6.9  | 7.7 | 6.9 | 7.4  | 6.9 | 6.7 | 6.8  |
| 4     | 7.5 | 6.3 | 6.6  | 7.1 | 6.7 | 7.0  | 7.3 | 6.6 | 6.9  | 6.7 | 6.6 | 6.7  |
| 5     | 6.8 | 6.4 | 6.6  | 7.0 | 6.6 | 6.8  | 6.8 | 6.6 | 6.7  | 6.8 | 6.7 | 6.7  |
| 6     | 6.5 | 6.3 | 6.4  | 7.1 | 7.0 | 7.1  | 7.0 | 6.6 | 6.7  | 6.8 | 6.6 | 6.7  |
| 7     | 6.5 | 6.3 | 6.3  | 7.3 | 6.9 | 7.2  | 6.7 | 6.6 | 6.6  | 6.6 | 6.5 | 6.6  |
| 8     | 6.6 | 6.4 | 6.5  | 7.0 | 6.7 | 6.9  | 6.7 | 6.6 | 6.6  | 6.7 | 6.5 | 6.6  |
| 9     | 6.6 | 6.4 | 6.5  | 7.1 | 6.8 | 7.0  | 6.8 | 6.5 | 6.7  | 6.7 | 6.6 | 6.7  |
| 10    | 6.9 | 6.4 | 6.6  | 7.2 | 6.9 | 7.1  | 6.9 | 6.4 | 6.7  | --- | --- | ---  |
| 11    | 6.9 | 6.6 | 6.8  | 7.2 | 6.9 | 7.2  | 6.8 | 6.3 | 6.6  | --- | --- | ---  |
| 12    | 6.9 | 6.8 | 6.8  | 7.3 | 6.8 | 7.1  | 7.2 | 6.3 | 6.7  | --- | --- | ---  |
| 13    | 6.9 | 6.6 | 6.7  | 7.2 | 6.7 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 14    | 6.7 | 6.5 | 6.6  | 7.2 | 6.8 | 7.1  | 7.3 | 6.9 | 7.1  | --- | --- | ---  |
| 15    | 6.7 | 6.5 | 6.5  | 7.3 | 6.9 | 7.1  | 7.2 | 6.8 | 7.0  | --- | --- | ---  |
| 16    | 6.7 | 6.5 | 6.6  | 7.2 | 7.1 | 7.2  | 7.0 | 6.7 | 6.9  | --- | --- | ---  |
| 17    | 6.8 | 6.6 | 6.7  | 7.3 | 7.0 | 7.2  | 6.8 | 6.6 | 6.7  | --- | --- | ---  |
| 18    | 6.8 | 6.5 | 6.7  | 7.3 | 6.9 | 7.2  | 6.6 | 6.5 | 6.5  | --- | --- | ---  |
| 19    | 6.8 | 6.5 | 6.6  | 7.4 | 6.9 | 7.3  | 6.5 | 6.4 | 6.5  | --- | --- | ---  |
| 20    | 6.7 | 6.5 | 6.6  | 7.4 | 7.0 | 7.3  | 6.5 | 6.2 | 6.4  | --- | --- | ---  |
| 21    | 6.7 | 6.6 | 6.6  | 7.4 | 7.1 | 7.3  | 6.5 | 6.3 | 6.4  | --- | --- | ---  |
| 22    | 6.6 | 6.5 | 6.5  | 7.3 | 6.9 | 7.2  | 6.5 | 6.3 | 6.4  | --- | --- | ---  |
| 23    | 6.7 | 6.4 | 6.5  | 7.7 | 6.9 | 7.2  | 7.1 | 6.3 | 6.6  | 6.8 | 6.7 | 6.7  |
| 24    | 6.9 | 6.4 | 6.7  | 7.4 | 6.8 | 7.1  | 7.2 | 7.0 | 7.1  | 6.9 | 6.7 | 6.8  |
| 25    | 7.0 | 6.7 | 6.9  | 7.5 | 7.1 | 7.3  | 7.1 | 6.5 | 6.8  | 6.9 | 6.7 | 6.8  |
| 26    | 7.0 | 6.6 | 6.7  | 7.4 | 7.1 | 7.3  | 6.7 | 6.4 | 6.5  | 6.9 | 6.7 | 6.8  |
| 27    | 6.8 | 6.6 | 6.7  | 7.3 | 6.9 | 7.2  | 6.6 | 6.4 | 6.5  | 6.9 | 6.7 | 6.8  |
| 28    | 6.8 | 6.6 | 6.7  | 8.3 | 6.9 | 7.3  | 6.5 | 6.4 | 6.4  | 7.0 | 6.8 | 6.9  |
| 29    | 6.8 | 6.8 | 6.8  | 7.8 | 6.8 | 7.2  | 6.7 | 6.4 | 6.5  | 7.0 | 6.9 | 7.0  |
| 30    | 6.8 | 6.7 | 6.8  | 7.6 | 6.8 | 7.0  | 6.8 | 6.7 | 6.7  | 7.0 | 6.8 | 6.9  |
| 31    | --- | --- | ---  | 8.4 | 6.8 | 7.3  | 6.8 | 6.6 | 6.7  | --- | --- | ---  |
| MONTH | 7.5 | 6.3 | 6.6  | 8.4 | 6.6 | 7.1  | --- | --- | ---  | --- | --- | ---  |



## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 22.9     | 21.5 | 22.1 | 17.0  | 15.8 | 16.3 | 11.7  | 10.8 | 11.2 | 8.4  | 7.3  | 7.9  |
| 2     | 21.8     | 20.4 | 21.1 | 18.6  | 15.7 | 16.7 | 11.3  | 9.8  | 10.8 | 8.3  | 7.4  | 7.9  |
| 3     | 20.8     | 18.8 | 20.1 | 18.0  | 16.1 | 17.0 | 10.2  | 8.8  | 9.3  | 9.4  | 7.6  | 8.5  |
| 4     | 20.1     | 19.0 | 19.6 | 17.9  | 16.9 | 17.2 | 9.0   | 8.3  | 8.7  | 10.8 | 9.1  | 9.8  |
| 5     | 21.6     | 19.1 | 20.1 | 19.2  | 17.6 | 18.2 | 9.1   | 8.7  | 8.9  | 12.9 | 10.6 | 11.5 |
| 6     | 20.3     | 19.4 | 19.8 | 19.6  | 18.5 | 18.8 | 8.9   | 8.1  | 8.7  | 13.0 | 10.7 | 12.1 |
| 7     | 20.7     | 19.6 | 20.2 | 19.4  | 19.1 | 19.3 | 8.3   | 7.3  | 7.9  | 10.7 | 8.5  | 9.4  |
| 8     | 20.5     | 19.9 | 20.2 | 19.3  | 17.6 | 18.7 | 8.2   | 6.9  | 7.6  | 9.2  | 7.4  | 8.3  |
| 9     | 20.6     | 19.7 | 20.2 | 17.6  | 16.2 | 16.8 | 8.3   | 7.2  | 7.7  | 9.5  | 7.4  | 8.0  |
| 10    | 20.6     | 20.2 | 20.4 | 16.2  | 15.2 | 15.5 | 9.2   | 7.7  | 8.2  | 7.5  | 6.2  | 6.9  |
| 11    | 20.6     | 20.0 | 20.3 | 15.8  | 14.6 | 14.9 | 10.0  | 8.6  | 9.2  | 6.2  | 5.2  | 5.6  |
| 12    | 20.9     | 19.9 | 20.4 | 16.4  | 15.2 | 15.8 | 9.7   | 8.5  | 9.0  | 6.4  | 4.7  | 5.7  |
| 13    | 22.2     | 20.4 | 21.0 | 16.4  | 15.2 | 16.0 | 9.2   | 8.6  | 8.9  | 6.8  | 5.6  | 6.2  |
| 14    | 21.6     | 21.0 | 21.2 | 15.2  | 13.5 | 14.2 | 9.2   | 8.6  | 8.9  | 6.7  | 5.7  | 6.1  |
| 15    | 21.1     | 19.7 | 20.1 | 13.6  | 12.6 | 13.0 | 8.6   | 7.9  | 8.3  | 7.0  | 5.6  | 6.2  |
| 16    | 19.8     | 18.9 | 19.3 | 14.1  | 12.9 | 13.4 | 8.5   | 7.7  | 8.0  | 6.2  | 5.1  | 5.8  |
| 17    | 19.6     | 18.7 | 19.0 | 14.9  | 13.9 | 14.5 | 9.1   | 7.8  | 8.4  | 6.1  | 4.5  | 5.3  |
| 18    | 19.7     | 18.6 | 19.0 | 15.5  | 14.5 | 14.9 | 8.5   | 7.7  | 8.1  | 7.4  | 5.6  | 6.4  |
| 19    | 19.5     | 17.9 | 18.7 | 15.9  | 15.0 | 15.4 | 7.7   | 6.9  | 7.3  | 7.4  | 6.9  | 7.2  |
| 20    | 19.4     | 18.2 | 18.6 | 15.7  | 14.7 | 15.2 | 7.0   | 6.0  | 6.7  | 6.9  | 5.2  | 5.8  |
| 21    | 19.4     | 18.3 | 18.8 | 16.6  | 14.3 | 15.0 | 6.4   | 5.5  | 5.9  | 5.8  | 4.7  | 5.2  |
| 22    | 19.4     | 18.6 | 19.1 | 16.3  | 14.3 | 15.1 | 6.3   | 5.4  | 5.8  | 6.6  | 4.9  | 5.8  |
| 23    | 18.7     | 17.8 | 18.1 | 15.8  | 14.8 | 15.2 | 6.7   | 5.7  | 6.2  | 6.3  | 5.7  | 5.9  |
| 24    | 17.9     | 17.0 | 17.5 | 15.7  | 14.7 | 15.3 | 8.4   | 6.7  | 7.5  | 6.3  | 5.1  | 5.8  |
| 25    | 17.2     | 16.1 | 16.6 | 15.5  | 14.2 | 15.0 | 7.8   | 7.2  | 7.6  | 6.0  | 4.5  | 5.1  |
| 26    | 17.8     | 16.6 | 17.0 | 14.3  | 13.6 | 13.8 | 7.5   | 6.9  | 7.1  | 4.5  | 3.8  | 4.3  |
| 27    | 18.6     | 17.4 | 18.0 | 13.8  | 13.5 | 13.7 | 7.3   | 6.4  | 6.9  | 4.2  | 3.8  | 4.0  |
| 28    | 18.6     | 18.1 | 18.3 | 14.8  | 13.3 | 13.9 | 7.3   | 6.2  | 6.8  | 4.4  | 3.4  | 4.0  |
| 29    | 18.4     | 17.5 | 17.9 | 14.2  | 12.1 | 12.6 | 7.4   | 6.5  | 6.9  | 4.4  | 3.0  | 3.8  |
| 30    | 18.9     | 17.2 | 17.9 | 12.4  | 10.7 | 11.3 | 8.9   | 7.1  | 8.0  | 4.6  | 3.6  | 4.1  |
| 31    | 17.6     | 16.5 | 16.9 | ---   | ---  | ---  | 8.7   | 7.4  | 8.0  | 4.3  | 2.6  | 3.8  |
| MONTH | 22.9     | 16.1 | 19.3 | 19.6  | 10.7 | 15.4 | 11.7  | 5.4  | 8.0  | 13.0 | 2.6  | 6.5  |
| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 3.9      | 2.8  | 3.3  | 9.6   | 7.1  | 8.2  | 15.8  | 14.9 | 15.3 | 22.0 | 21.4 | 21.6 |
| 2     | 4.7      | 3.0  | 3.8  | 12.4  | 8.9  | 10.2 | 14.9  | 14.1 | 14.3 | 22.3 | 21.1 | 21.7 |
| 3     | 5.8      | 4.4  | 5.1  | 13.1  | 10.8 | 11.7 | 14.4  | 13.6 | 14.1 | 22.2 | 21.2 | 21.6 |
| 4     | 6.6      | 5.2  | 5.9  | 14.6  | 11.9 | 13.2 | 15.1  | 13.8 | 14.3 | 21.9 | 20.1 | 20.8 |
| 5     | 6.2      | 5.4  | 5.8  | 15.9  | 13.6 | 14.7 | 14.5  | 12.9 | 13.6 | 20.8 | 19.3 | 20.0 |
| 6     | 8.8      | 5.7  | 7.0  | 17.2  | 15.0 | 16.2 | 14.8  | 12.2 | 13.5 | 21.8 | 18.8 | 19.9 |
| 7     | 10.5     | 8.8  | 9.8  | 17.7  | 16.7 | 17.0 | 15.6  | 13.7 | 14.4 | 21.7 | 19.4 | 20.4 |
| 8     | 9.8      | 8.6  | 9.1  | 16.7  | 15.0 | 15.6 | 17.3  | 15.2 | 16.2 | 23.2 | 20.6 | 21.7 |
| 9     | 8.9      | 7.2  | 7.9  | 15.8  | 13.8 | 14.7 | 19.1  | 16.7 | 17.5 | 23.2 | 21.5 | 22.2 |
| 10    | 8.5      | 8.0  | 8.2  | 14.8  | 12.5 | 13.4 | 18.5  | 17.5 | 18.0 | 23.6 | 21.7 | 22.4 |
| 11    | 8.8      | 8.1  | 8.4  | 12.7  | 11.4 | 12.1 | 18.9  | 17.7 | 18.3 | 23.6 | 22.0 | 22.7 |
| 12    | 8.8      | 8.0  | 8.4  | 13.2  | 11.8 | 12.5 | 18.5  | 17.8 | 18.0 | 24.2 | 22.5 | 23.2 |
| 13    | 9.1      | 7.9  | 8.5  | 13.4  | 12.2 | 12.8 | 19.0  | 17.9 | 18.3 | 24.4 | 23.0 | 23.6 |
| 14    | 8.9      | 8.5  | 8.7  | 13.2  | 12.3 | 12.8 | 18.3  | 16.8 | 17.6 | 24.7 | 23.1 | 23.8 |
| 15    | 8.6      | 8.2  | 8.5  | 14.2  | 13.0 | 13.5 | 17.2  | 16.1 | 16.7 | 25.1 | 23.7 | 24.5 |
| 16    | 8.2      | 7.0  | 7.4  | 14.0  | 13.8 | 13.9 | 19.5  | 16.3 | 17.5 | 25.9 | 24.4 | 25.0 |
| 17    | 7.2      | 6.2  | 6.5  | 13.9  | 12.7 | 13.4 | 18.3  | 16.5 | 17.3 | 26.5 | 24.8 | 25.6 |
| 18    | 7.3      | 5.7  | 6.4  | 12.9  | 12.0 | 12.6 | 19.4  | 17.3 | 18.3 | 26.6 | 25.4 | 25.9 |
| 19    | 7.4      | 5.6  | 6.4  | 14.0  | 12.6 | 13.3 | 20.6  | 18.4 | 19.5 | 27.4 | 25.1 | 26.1 |
| 20    | 8.5      | 6.3  | 7.3  | 14.6  | 12.7 | 13.6 | 21.5  | 19.2 | 20.1 | 28.0 | 25.7 | 26.4 |
| 21    | 10.0     | 7.6  | 8.8  | 14.5  | 13.2 | 13.8 | 22.0  | 20.4 | 21.1 | 27.9 | 26.0 | 26.6 |
| 22    | 10.4     | 8.6  | 9.4  | 13.9  | 12.5 | 13.0 | 22.5  | 20.7 | 21.6 | 29.0 | 26.5 | 27.6 |
| 23    | 10.1     | 8.8  | 9.5  | 14.3  | 11.8 | 12.8 | 23.0  | 21.1 | 22.1 | 28.5 | 27.0 | 27.8 |
| 24    | 9.7      | 9.0  | 9.3  | 13.7  | 12.6 | 13.2 | 23.1  | 21.8 | 22.5 | 28.1 | 26.9 | 27.4 |
| 25    | 9.4      | 8.6  | 9.0  | 14.6  | 12.5 | 13.5 | 22.4  | 21.8 | 22.1 | 28.2 | 26.8 | 27.3 |
| 26    | 9.0      | 7.7  | 8.2  | 15.7  | 13.6 | 14.5 | 23.3  | 21.8 | 22.5 | 29.4 | 26.8 | 28.1 |
| 27    | 7.7      | 6.8  | 7.3  | 16.8  | 14.8 | 15.8 | 22.8  | 21.7 | 22.3 | 29.2 | 26.8 | 28.2 |
| 28    | 7.6      | 6.0  | 6.8  | 16.8  | 15.8 | 16.4 | 22.8  | 20.6 | 21.5 | 29.0 | 26.8 | 27.9 |
| 29    | 8.6      | 6.4  | 7.3  | 15.9  | 14.8 | 15.3 | 21.8  | 20.2 | 21.1 | 27.8 | 25.8 | 26.8 |
| 30    | ---      | ---  | ---  | 16.3  | 14.5 | 15.3 | 22.3  | 20.8 | 21.7 | 27.0 | 25.5 | 26.0 |
| 31    | ---      | ---  | ---  | 16.2  | 15.6 | 15.9 | ---   | ---  | ---  | 27.1 | 25.5 | 26.3 |
| MONTH | 10.5     | 2.8  | 7.5  | 17.7  | 7.1  | 13.7 | 23.3  | 12.2 | 18.4 | 29.4 | 18.8 | 24.5 |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 27.5 | 26.0 | 26.7 | 28.0 | 26.6 | 27.2 | 30.0 | 28.5 | 29.2 | 26.5 | 25.7 | 26.0 |
| 2     | 27.7 | 25.7 | 26.6 | 27.5 | 26.2 | 26.8 | 29.6 | 29.0 | 29.3 | 26.3 | 24.9 | 25.5 |
| 3     | 28.2 | 26.1 | 27.0 | 27.1 | 26.1 | 26.5 | 29.1 | 28.3 | 28.6 | 26.8 | 25.0 | 25.8 |
| 4     | 28.3 | 27.2 | 27.8 | 28.2 | 26.6 | 27.3 | 29.5 | 27.8 | 28.6 | 26.9 | 25.8 | 26.3 |
| 5     | 28.7 | 26.5 | 27.4 | 29.6 | 27.1 | 28.2 | 29.7 | 28.2 | 29.0 | 27.0 | 25.9 | 26.4 |
| 6     | 27.7 | 26.4 | 27.0 | 29.3 | 27.6 | 28.2 | 29.5 | 27.0 | 28.1 | 26.8 | 25.3 | 26.0 |
| 7     | 28.7 | 27.3 | 27.6 | 30.3 | 27.9 | 28.6 | 28.1 | 26.0 | 27.0 | 25.4 | 25.0 | 25.2 |
| 8     | 28.5 | 27.4 | 27.7 | 30.4 | 28.9 | 29.6 | 27.6 | 26.2 | 27.1 | 25.9 | 24.9 | 25.4 |
| 9     | 28.4 | 27.2 | 27.7 | 31.6 | 28.9 | 29.8 | 27.6 | 26.1 | 26.9 | 26.3 | 25.2 | 25.7 |
| 10    | 28.8 | 26.8 | 27.6 | 31.2 | 29.4 | 30.0 | 28.1 | 26.4 | 27.0 | ---  | ---  | ---  |
| 11    | 29.5 | 26.3 | 27.7 | 30.9 | 28.7 | 29.6 | 27.7 | 26.5 | 27.2 | ---  | ---  | ---  |
| 12    | 27.5 | 26.0 | 26.6 | 30.4 | 28.6 | 29.3 | 27.6 | 26.7 | 27.0 | ---  | ---  | ---  |
| 13    | 26.6 | 24.8 | 25.8 | 31.0 | 29.0 | 29.9 | 26.9 | 26.3 | 26.6 | ---  | ---  | ---  |
| 14    | 25.8 | 24.9 | 25.4 | 30.9 | 29.2 | 29.9 | 26.5 | 25.3 | 25.9 | ---  | ---  | ---  |
| 15    | 26.7 | 24.6 | 25.6 | 30.8 | 29.4 | 30.0 | 25.4 | 24.4 | 24.8 | ---  | ---  | ---  |
| 16    | 26.9 | 25.6 | 26.2 | 30.1 | 28.1 | 28.8 | 25.1 | 23.9 | 24.5 | ---  | ---  | ---  |
| 17    | 27.0 | 26.0 | 26.4 | 29.7 | 28.7 | 29.2 | 25.9 | 23.5 | 24.5 | ---  | ---  | ---  |
| 18    | 27.4 | 26.6 | 26.9 | 29.5 | 28.3 | 28.9 | 25.5 | 23.9 | 24.6 | ---  | ---  | ---  |
| 19    | 30.5 | 26.6 | 28.4 | 30.9 | 28.4 | 29.0 | 25.6 | 23.9 | 24.6 | ---  | ---  | ---  |
| 20    | 29.2 | 26.7 | 27.7 | 29.2 | 27.0 | 28.0 | 26.4 | 24.7 | 25.3 | ---  | ---  | ---  |
| 21    | 28.8 | 25.6 | 27.1 | 29.9 | 28.5 | 28.8 | 26.7 | 25.5 | 26.0 | ---  | ---  | ---  |
| 22    | 28.8 | 27.5 | 28.1 | 29.9 | 28.6 | 29.2 | 26.1 | 25.5 | 25.7 | ---  | ---  | ---  |
| 23    | 29.7 | 27.7 | 28.5 | 29.8 | 28.7 | 29.4 | 26.8 | 24.9 | 25.8 | 24.2 | 22.0 | 23.0 |
| 24    | 29.3 | 28.0 | 28.4 | 30.5 | 28.1 | 29.1 | 26.6 | 24.8 | 25.7 | 23.4 | 22.7 | 23.0 |
| 25    | 29.8 | 27.6 | 28.5 | 29.4 | 27.8 | 28.4 | 26.3 | 24.6 | 25.5 | 23.6 | 22.4 | 23.0 |
| 26    | 29.1 | 27.6 | 28.3 | 30.3 | 28.1 | 29.0 | 25.8 | 24.9 | 25.4 | 23.3 | 22.5 | 23.0 |
| 27    | 29.1 | 27.1 | 27.8 | 30.9 | 29.7 | 30.2 | 26.5 | 24.9 | 25.6 | 23.9 | 22.6 | 23.2 |
| 28    | 28.6 | 27.2 | 27.9 | 30.4 | 28.7 | 29.5 | 28.5 | 25.5 | 26.3 | 24.0 | 23.1 | 23.5 |
| 29    | 28.5 | 27.1 | 27.7 | 29.0 | 27.8 | 28.4 | 27.6 | 26.0 | 26.7 | 26.2 | 23.1 | 24.1 |
| 30    | 28.7 | 27.0 | 27.7 | 29.3 | 27.6 | 28.4 | 26.8 | 25.9 | 26.4 | 24.9 | 23.8 | 24.2 |
| 31    | ---  | ---  | ---  | 29.6 | 28.1 | 28.8 | 27.4 | 25.9 | 26.4 | ---  | ---  | ---  |
| MONTH | 30.5 | 24.6 | 27.3 | 31.6 | 26.1 | 28.8 | 30.0 | 23.5 | 26.5 | ---  | ---  | ---  |

## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 23.6     | 22.3 | 23.1 | 16.5     | 15.6 | 16.0 | 12.8     | 10.7 | 11.4 | 8.9     | 7.5  | 8.3  |
| 2     | 22.9     | 20.6 | 21.8 | 16.8     | 15.6 | 16.2 | 12.5     | 10.3 | 11.2 | 8.7     | 7.6  | 8.1  |
| 3     | 21.0     | 18.6 | 19.7 | 17.5     | 16.0 | 16.6 | 11.2     | 8.9  | 9.6  | 9.1     | 7.7  | 8.2  |
| 4     | 19.7     | 18.9 | 19.3 | 17.7     | 16.8 | 17.1 | 9.2      | 8.2  | 8.7  | 10.7    | 8.7  | 9.5  |
| 5     | 20.3     | 19.0 | 19.6 | 18.8     | 17.6 | 17.9 | 9.1      | 8.5  | 8.8  | 12.6    | 10.3 | 11.3 |
| 6     | 20.1     | 19.2 | 19.5 | 19.1     | 18.4 | 18.6 | 9.1      | 8.4  | 8.7  | 12.9    | 10.7 | 12.1 |
| 7     | 20.6     | 19.4 | 19.8 | 19.4     | 19.0 | 19.3 | 8.6      | 7.6  | 8.2  | 10.7    | 9.1  | 9.9  |
| 8     | 20.5     | 20.0 | 20.2 | 19.2     | 17.6 | 18.7 | 8.8      | 7.1  | 8.0  | 10.4    | 9.3  | 10   |
| 9     | 20.6     | 19.8 | 20.2 | 17.6     | 16.1 | 16.8 | 9.0      | 7.9  | 8.6  | 10.4    | 9.3  | 10   |
| 10    | 20.6     | 20.1 | 20.4 | 16.1     | 15.1 | 15.4 | 9.0      | 7.9  | 8.5  | 9.5     | 6.5  | 7.7  |
| 11    | 20.6     | 20.0 | 20.3 | 15.3     | 14.5 | 14.7 | 9.9      | 8.4  | 9.1  | 7.2     | 5.3  | 6.2  |
| 12    | 20.5     | 19.9 | 20.1 | 16.3     | 15.0 | 15.7 | 9.1      | 8.4  | 8.9  | 6.6     | 5.6  | 6.1  |
| 13    | 21.5     | 20.3 | 20.7 | 16.4     | 15.1 | 15.9 | 9.0      | 8.5  | 8.7  | 6.9     | 6.0  | 6.5  |
| 14    | 21.5     | 20.9 | 21.1 | 15.2     | 13.3 | 13.9 | 9.0      | 8.5  | 8.8  | 7.0     | 6.0  | 6.5  |
| 15    | 21.0     | 19.6 | 20.0 | 13.5     | 12.5 | 12.8 | 8.5      | 7.8  | 8.2  | 7.1     | 5.8  | 6.5  |
| 16    | 19.7     | 18.7 | 19.1 | 13.8     | 12.8 | 13.1 | 8.4      | 7.6  | 7.9  | 6.3     | 5.7  | 6.0  |
| 17    | 18.9     | 18.4 | 18.7 | 14.3     | 13.7 | 14.0 | 9.1      | 7.8  | 8.3  | 6.5     | 5.7  | 6.2  |
| 18    | 19.2     | 18.5 | 18.8 | 15.0     | 14.0 | 14.4 | 8.5      | 7.6  | 8.1  | 7.3     | 6.0  | 6.6  |
| 19    | 18.5     | 17.7 | 18.0 | 15.8     | 14.7 | 15.3 | 7.6      | 6.9  | 7.3  | 7.5     | 7.0  | 7.2  |
| 20    | 18.4     | 18.0 | 18.1 | 15.6     | 14.8 | 15.1 | 6.9      | 6.0  | 6.6  | 7.0     | 5.3  | 6.1  |
| 21    | 19.3     | 18.2 | 18.7 | 15.2     | 14.2 | 14.5 | 6.4      | 5.5  | 5.8  | 6.8     | 4.7  | 5.9  |
| 22    | 19.2     | 18.5 | 18.9 | 15.1     | 14.1 | 14.4 | 6.3      | 5.4  | 5.8  | 6.9     | 5.9  | 6.4  |
| 23    | 18.5     | 17.4 | 18.0 | 15.1     | 14.4 | 14.7 | 6.6      | 5.6  | 6.1  | 7.0     | 6.0  | 6.4  |
| 24    | 17.8     | 16.9 | 17.3 | 15.6     | 14.6 | 15.0 | 8.3      | 6.6  | 7.4  | 6.3     | 5.2  | 5.9  |
| 25    | 17.1     | 16.0 | 16.4 | 15.4     | 14.0 | 14.9 | 7.8      | 7.1  | 7.5  | 6.1     | 4.6  | 5.2  |
| 26    | 17.1     | 16.3 | 16.6 | 14.1     | 13.4 | 13.6 | 7.5      | 6.8  | 7.1  | 4.8     | 3.9  | 4.3  |
| 27    | 18.0     | 17.1 | 17.6 | 13.7     | 13.3 | 13.5 | 7.3      | 6.4  | 6.8  | 4.6     | 3.9  | 4.2  |
| 28    | 18.3     | 18.0 | 18.2 | 14.7     | 13.1 | 13.7 | 8.0      | 6.2  | 7.0  | 4.4     | 3.8  | 4.1  |
| 29    | 18.3     | 17.3 | 17.7 | 14.0     | 11.8 | 12.4 | 7.7      | 6.7  | 7.1  | 4.4     | 3.0  | 3.9  |
| 30    | 18.1     | 17.0 | 17.5 | 12.2     | 10.6 | 11.0 | 8.8      | 7.2  | 8.0  | 4.5     | 3.8  | 4.3  |
| 31    | 17.4     | 16.3 | 16.6 | ---      | ---  | ---  | 8.8      | 7.9  | 8.5  | 4.5     | 3.6  | 4.0  |
| MONTH | 23.6     | 16.0 | 19.1 | 19.4     | 10.6 | 15.2 | 12.8     | 5.4  | 8.1  | 12.9    | 3.0  | 6.9  |
| DAY   | FEBRUARY |      |      | MARCH    |      |      | APRIL    |      |      | MAY     |      |      |
|       | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
| 1     | 4.2      | 3.4  | 4.0  | 9.5      | 7.0  | 8.1  | 15.8     | 14.9 | 15.3 | 22.1    | 21.4 | 21.7 |
| 2     | 4.4      | 3.7  | 4.1  | 12.1     | 8.7  | 10   | 14.9     | 14.1 | 14.3 | 22.3    | 21.1 | 21.6 |
| 3     | 5.5      | 4.4  | 4.9  | 12.6     | 10.6 | 11.2 | 14.4     | 13.6 | 14.1 | 22.1    | 21.3 | 21.6 |
| 4     | 6.4      | 4.9  | 5.6  | 14.3     | 11.8 | 13.0 | 15.1     | 13.8 | 14.4 | 21.3    | 20.1 | 20.5 |
| 5     | 6.2      | 5.2  | 5.8  | 15.8     | 13.4 | 14.4 | 14.4     | 13.2 | 13.7 | 20.8    | 19.2 | 19.8 |
| 6     | 8.7      | 5.7  | 6.9  | 17.1     | 14.8 | 16.0 | 14.0     | 12.7 | 13.4 | 20.2    | 18.7 | 19.1 |
| 7     | 10.4     | 8.7  | 9.7  | 17.4     | 16.4 | 16.8 | 14.8     | 13.6 | 14.0 | 20.8    | 19.2 | 19.7 |
| 8     | 9.8      | 8.6  | 9.1  | 16.6     | 14.7 | 15.4 | 17.2     | 14.6 | 15.9 | 22.8    | 20.5 | 21.4 |
| 9     | 8.9      | 7.3  | 7.9  | 15.0     | 13.7 | 14.3 | 18.4     | 16.4 | 17.2 | 22.8    | 21.4 | 21.9 |
| 10    | 8.5      | 7.9  | 8.2  | 14.5     | 12.4 | 13.3 | 18.5     | 17.5 | 18.0 | 23.5    | 21.6 | 22.1 |
| 11    | 8.6      | 8.1  | 8.4  | 12.6     | 11.1 | 12.0 | 18.8     | 17.7 | 18.2 | 23.6    | 21.9 | 22.4 |
| 12    | 8.8      | 8.0  | 8.4  | 13.1     | 11.7 | 12.4 | 18.5     | 17.7 | 18.0 | 24.1    | 22.4 | 22.9 |
| 13    | 8.9      | 7.8  | 8.3  | 13.2     | 12.0 | 12.6 | 19.0     | 17.9 | 18.3 | ---     | ---  | ---  |
| 14    | 8.8      | 8.5  | 8.6  | 13.1     | 12.2 | 12.5 | 18.3     | 16.8 | 17.6 | ---     | ---  | ---  |
| 15    | 8.6      | 8.1  | 8.5  | 13.7     | 12.8 | 13.1 | 17.2     | 16.1 | 16.7 | ---     | ---  | ---  |
| 16    | 8.1      | 6.9  | 7.3  | 13.8     | 13.5 | 13.8 | 18.1     | 16.3 | 16.7 | ---     | ---  | ---  |
| 17    | 7.2      | 6.2  | 6.5  | 13.8     | 12.6 | 13.3 | 18.3     | 16.5 | 17.2 | ---     | ---  | ---  |
| 18    | 7.2      | 5.7  | 6.3  | 12.7     | 11.9 | 12.4 | 19.4     | 17.2 | 18.1 | ---     | ---  | ---  |
| 19    | 7.3      | 5.6  | 6.3  | 13.8     | 12.6 | 13.1 | 20.7     | 18.4 | 19.4 | ---     | ---  | ---  |
| 20    | 8.4      | 6.3  | 7.1  | 14.4     | 12.6 | 13.3 | 20.9     | 19.1 | 19.5 | ---     | ---  | ---  |
| 21    | 9.8      | 7.5  | 8.7  | 14.4     | 13.1 | 13.7 | 22.0     | 20.2 | 20.9 | 26.6    | 23.3 | 25.0 |
| 22    | 9.9      | 8.5  | 9.1  | 13.8     | 12.1 | 12.9 | 22.5     | 20.7 | 21.5 | 27.6    | 23.0 | 24.3 |
| 23    | 9.9      | 8.7  | 9.3  | 13.4     | 11.6 | 12.2 | 23.0     | 21.0 | 21.9 | 28.5    | 23.5 | 26.7 |
| 24    | 9.6      | 8.9  | 9.2  | 13.6     | 12.2 | 12.9 | 23.0     | 21.6 | 22.4 | 28.1    | 26.6 | 27.2 |
| 25    | 9.3      | 8.5  | 8.9  | 14.4     | 12.3 | 13.1 | 22.4     | 21.8 | 22.1 | 27.6    | 26.6 | 27.0 |
| 26    | 8.9      | 7.5  | 8.1  | 15.0     | 13.5 | 14.0 | 23.2     | 21.8 | 22.5 | 27.4    | 25.2 | 26.3 |
| 27    | 7.6      | 6.7  | 7.2  | 16.8     | 14.5 | 15.5 | 22.8     | 21.7 | 22.3 | 25.8    | 24.7 | 25.0 |
| 28    | 7.5      | 6.0  | 6.6  | 16.8     | 15.6 | 16.3 | 21.7     | 20.5 | 20.9 | 25.6    | 24.8 | 25.1 |
| 29    | 8.4      | 6.3  | 7.1  | 16.0     | 14.8 | 15.3 | 21.7     | 20.1 | 20.9 | 26.0    | 24.7 | 25.0 |
| 30    | ---      | ---  | ---  | 16.1     | 14.4 | 15.1 | 22.3     | 20.7 | 21.5 | 26.1    | 25.5 | 25.8 |
| 31    | ---      | ---  | ---  | 16.3     | 15.5 | 15.9 | ---      | ---  | ---  | 25.9    | 25.5 | 25.7 |
| MONTH | 10.4     | 3.4  | 7.5  | 17.4     | 7.0  | 13.5 | 23.2     | 12.7 | 18.2 | ---     | ---  | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 26.0 | 25.2 | 25.5 | 27.8 | 27.1 | 27.5 | 30.0 | 28.7 | 29.2 | 26.5 | 25.7 | 26.0 |
| 2     | 26.5 | 25.2 | 25.4 | 27.5 | 26.7 | 27.2 | 29.6 | 29.2 | 29.4 | 26.3 | 24.9 | 25.5 |
| 3     | 26.5 | 25.6 | 25.8 | 27.5 | 27.0 | 27.2 | 29.5 | 28.3 | 28.7 | 26.7 | 25.0 | 25.7 |
| 4     | 27.8 | 25.7 | 26.6 | 27.3 | 27.0 | 27.1 | 28.7 | 28.5 | 28.6 | 26.8 | 25.7 | 26.2 |
| 5     | 27.4 | 26.8 | 27.1 | 27.6 | 27.1 | 27.2 | 28.8 | 28.4 | 28.5 | 27.0 | 25.8 | 26.4 |
| 6     | 27.1 | 26.8 | 26.9 | 27.6 | 27.2 | 27.4 | 28.6 | 28.2 | 28.3 | 26.8 | 25.3 | 26.0 |
| 7     | 27.0 | 26.7 | 26.8 | 28.0 | 27.4 | 27.6 | 28.3 | 27.5 | 27.8 | 25.3 | 25.0 | 25.2 |
| 8     | 26.8 | 26.5 | 26.6 | 29.0 | 27.6 | 28.1 | 27.7 | 27.4 | 27.5 | 25.8 | 24.9 | 25.3 |
| 9     | 27.1 | 26.5 | 26.8 | 28.6 | 27.7 | 28.1 | 27.5 | 27.0 | 27.2 | 26.2 | 25.2 | 25.7 |
| 10    | 27.4 | 26.5 | 26.9 | 28.4 | 27.7 | 27.9 | 27.3 | 26.8 | 27.0 | ---  | ---  | ---  |
| 11    | 27.8 | 26.5 | 26.9 | 28.4 | 27.9 | 28.0 | 27.2 | 26.9 | 27.1 | ---  | ---  | ---  |
| 12    | 27.4 | 26.5 | 26.8 | 29.1 | 27.8 | 28.3 | 27.4 | 26.9 | 27.1 | ---  | ---  | ---  |
| 13    | 26.8 | 26.2 | 26.6 | 29.3 | 28.0 | 28.6 | 26.9 | 26.3 | 26.6 | ---  | ---  | ---  |
| 14    | 26.3 | 25.2 | 25.7 | 28.6 | 27.9 | 28.1 | 26.7 | 25.5 | 26.2 | ---  | ---  | ---  |
| 15    | 26.0 | 24.5 | 25.2 | 28.7 | 27.9 | 28.2 | 25.7 | 24.6 | 25.1 | ---  | ---  | ---  |
| 16    | 26.8 | 25.5 | 26.0 | 28.2 | 27.9 | 28.0 | 25.4 | 24.0 | 24.5 | ---  | ---  | ---  |
| 17    | 27.0 | 25.9 | 26.3 | 28.9 | 27.8 | 28.0 | 25.6 | 23.6 | 24.3 | ---  | ---  | ---  |
| 18    | 27.3 | 26.5 | 26.7 | 28.6 | 28.0 | 28.2 | 25.0 | 23.8 | 24.2 | ---  | ---  | ---  |
| 19    | 27.2 | 26.2 | 26.6 | 28.4 | 27.9 | 28.1 | 25.4 | 23.8 | 24.3 | ---  | ---  | ---  |
| 20    | 26.5 | 26.3 | 26.4 | 28.4 | 27.9 | 28.0 | 26.1 | 24.7 | 25.1 | ---  | ---  | ---  |
| 21    | 26.8 | 26.2 | 26.4 | 28.1 | 27.8 | 27.9 | 26.6 | 25.4 | 25.9 | ---  | ---  | ---  |
| 22    | 28.1 | 26.5 | 27.1 | 28.9 | 27.8 | 28.1 | 26.1 | 25.5 | 25.7 | ---  | ---  | ---  |
| 23    | 28.2 | 26.8 | 27.5 | 29.0 | 27.9 | 28.4 | 25.8 | 24.9 | 25.4 | 23.7 | 21.7 | 22.5 |
| 24    | 27.5 | 26.5 | 26.8 | 28.9 | 28.0 | 28.4 | 25.9 | 25.7 | 25.8 | 23.4 | 22.6 | 22.9 |
| 25    | 28.6 | 26.4 | 27.0 | 28.5 | 28.0 | 28.2 | 26.0 | 24.6 | 25.4 | 23.6 | 22.5 | 23.0 |
| 26    | 28.4 | 27.5 | 27.9 | 28.6 | 28.0 | 28.2 | 25.7 | 24.8 | 25.3 | 23.2 | 22.4 | 22.9 |
| 27    | 27.9 | 27.2 | 27.5 | 30.1 | 28.1 | 28.9 | 26.4 | 24.9 | 25.6 | 23.7 | 22.6 | 23.1 |
| 28    | 27.9 | 27.2 | 27.5 | 30.1 | 28.7 | 29.4 | 27.1 | 25.5 | 25.9 | 23.8 | 23.1 | 23.4 |
| 29    | 27.7 | 27.3 | 27.5 | 29.0 | 28.3 | 28.6 | 27.0 | 26.0 | 26.6 | 24.7 | 23.0 | 23.3 |
| 30    | 27.7 | 27.3 | 27.5 | 28.6 | 28.3 | 28.5 | 26.8 | 25.9 | 26.4 | 24.3 | 23.2 | 23.9 |
| 31    | ---  | ---  | ---  | 29.6 | 28.4 | 28.8 | 26.9 | 25.8 | 26.2 | ---  | ---  | ---  |
| MONTH | 28.6 | 24.5 | 26.7 | 30.1 | 26.7 | 28.1 | 30.0 | 23.6 | 26.5 | ---  | ---  | ---  |

## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 4.2  | 2.9  | 3.6  | 5.8  | 5.5  | 5.7  | 9.8  | 8.8  | 9.3  | 10.3 | 10.0 | 10.1 |
| 2     | 5.1  | 3.8  | 4.3  | 6.1  | 5.7  | 5.8  | 9.8  | 9.2  | 9.6  | 10.3 | 10.0 | 10.2 |
| 3     | 5.7  | 4.8  | 5.2  | 6.2  | 5.8  | 6.0  | 10.2 | 9.6  | 10   | 10.4 | 10.0 | 10.2 |
| 4     | 5.1  | 4.4  | 4.7  | 5.9  | 5.2  | 5.6  | 10.6 | 9.5  | 9.9  | 10.4 | 10.0 | 10.2 |
| 5     | 5.2  | 4.4  | 4.8  | 5.6  | 5.0  | 5.3  | 10.6 | 10.2 | 10.3 | 10.2 | 9.8  | 10.0 |
| 6     | 5.2  | 4.4  | 4.8  | 5.3  | 4.7  | 5.1  | 10.9 | 10.2 | 10.4 | 10.0 | 9.0  | 9.7  |
| 7     | 6.1  | 4.9  | 5.6  | 5.8  | 5.0  | 5.4  | 11.0 | 10.6 | 10.8 | 10.1 | 9.2  | 9.6  |
| 8     | 6.1  | 5.2  | 5.8  | 6.5  | 5.1  | 5.8  | 11.0 | 10.3 | 10.8 | 10.3 | 9.5  | 9.8  |
| 9     | 6.6  | 5.6  | 6.1  | 7.5  | 6.3  | 6.9  | 10.4 | 10.1 | 10.2 | 10.0 | 7.6  | 9.6  |
| 10    | 7.1  | 6.5  | 6.8  | 7.2  | 4.8  | 5.7  | 10.6 | 10.1 | 10.3 | 10.8 | 9.7  | 10.1 |
| 11    | 7.2  | 6.6  | 6.9  | 5.0  | 4.4  | 4.7  | 11.2 | 9.9  | 10.8 | 10.8 | 10.1 | 10.4 |
| 12    | 6.9  | 6.5  | 6.7  | 6.6  | 4.8  | 5.5  | 11.2 | 10.0 | 10.8 | 11.3 | 10.1 | 10.6 |
| 13    | 6.8  | 5.9  | 6.4  | 8.0  | 6.3  | 7.1  | 10.6 | 9.6  | 10.0 | 11.3 | 10.4 | 10.8 |
| 14    | 6.3  | 5.6  | 6.0  | 8.6  | 7.8  | 8.2  | 10.6 | 9.3  | 9.8  | 11.4 | 10.5 | 11.1 |
| 15    | 6.7  | 5.8  | 6.2  | 8.7  | 8.1  | 8.4  | 10.0 | 9.6  | 9.9  | 11.4 | 10.7 | 11.1 |
| 16    | 6.9  | 6.2  | 6.5  | 8.4  | 7.1  | 7.6  | 9.8  | 9.1  | 9.4  | 11.8 | 11.1 | 11.4 |
| 17    | 6.4  | 5.1  | 5.7  | 7.3  | 6.9  | 7.1  | 9.8  | 9.1  | 9.4  | 12.0 | 11.0 | 11.7 |
| 18    | 6.6  | 5.4  | 6.0  | 7.9  | 7.0  | 7.3  | 9.8  | 9.0  | 9.3  | 11.8 | 11.1 | 11.5 |
| 19    | 7.0  | 6.2  | 6.5  | 8.3  | 7.3  | 7.9  | 9.8  | 9.1  | 9.5  | 11.6 | 11.0 | 11.3 |
| 20    | 6.7  | 5.9  | 6.4  | 8.6  | 7.7  | 8.3  | 10.3 | 9.4  | 9.8  | 12.0 | 11.2 | 11.6 |
| 21    | 7.0  | 6.0  | 6.5  | 8.7  | 7.8  | 8.3  | 10.4 | 9.9  | 10.1 | 12.0 | 11.5 | 11.7 |
| 22    | 7.6  | 6.5  | 7.1  | 7.9  | 6.9  | 7.4  | 10.6 | 10.1 | 10.3 | 11.9 | 11.1 | 11.5 |
| 23    | 7.7  | 6.7  | 7.4  | 7.1  | 6.6  | 6.9  | 10.7 | 10.3 | 10.5 | 11.7 | 11.2 | 11.5 |
| 24    | 8.2  | 7.4  | 7.7  | 7.5  | 6.7  | 7.0  | 10.8 | 10.0 | 10.4 | 11.9 | 11.3 | 11.6 |
| 25    | 8.2  | 7.6  | 7.9  | 8.5  | 7.4  | 8.0  | 10.6 | 10.1 | 10.3 | 12.3 | 11.5 | 11.9 |
| 26    | 7.8  | 7.2  | 7.5  | 8.5  | 7.4  | 8.1  | 10.4 | 9.9  | 10.2 | 12.6 | 12.0 | 12.3 |
| 27    | 7.5  | 7.2  | 7.3  | 7.5  | 7.1  | 7.3  | 10.4 | 10.0 | 10.2 | 12.5 | 11.9 | 12.3 |
| 28    | 7.5  | 7.0  | 7.2  | 8.7  | 7.1  | 7.7  | 10.6 | 10.1 | 10.3 | 12.7 | 11.7 | 12.2 |
| 29    | 7.6  | 7.2  | 7.4  | 9.7  | 8.6  | 9.2  | 10.6 | 10.2 | 10.4 | 12.7 | 11.9 | 12.3 |
| 30    | 7.3  | 6.0  | 6.6  | 9.9  | 9.3  | 9.6  | 10.7 | 10.2 | 10.5 | 12.7 | 11.8 | 12.2 |
| 31    | 6.2  | 5.5  | 5.8  | ---  | ---  | ---  | 10.6 | 10.0 | 10.3 | 12.3 | 11.4 | 11.9 |
| MONTH | 8.2  | 2.9  | 6.2  | 9.9  | 4.4  | 7.0  | 11.2 | 8.8  | 10.1 | 12.7 | 7.6  | 11.0 |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 12.3 | 12.1 | 12.2 | 10.8 | 10.4 | 10.6 | ---  | ---  | ---  | 7.9  | 6.5  | 6.9  |
| 2     | 12.2 | 12.0 | 12.1 | 10.6 | 10.3 | 10.4 | ---  | ---  | ---  | 7.1  | 6.4  | 6.9  |
| 3     | 12.0 | 11.7 | 11.8 | 10.3 | 10.0 | 10.2 | ---  | ---  | ---  | 7.0  | 6.6  | 6.8  |
| 4     | 11.8 | 11.5 | 11.7 | 10.2 | 9.6  | 9.8  | ---  | ---  | ---  | 7.3  | 6.1  | 6.8  |
| 5     | 11.8 | 11.6 | 11.7 | 9.6  | 8.9  | 9.3  | ---  | ---  | ---  | 6.2  | 5.3  | 5.8  |
| 6     | 11.8 | 11.1 | 11.6 | 9.0  | 8.6  | 8.8  | ---  | ---  | ---  | 5.7  | 4.8  | 5.3  |
| 7     | 11.1 | 10.5 | 10.7 | 8.9  | 8.3  | 8.6  | ---  | ---  | ---  | 5.3  | 4.9  | 5.0  |
| 8     | 10.7 | 10.2 | 10.5 | 8.4  | 7.4  | 8.1  | ---  | ---  | ---  | 5.6  | 5.0  | 5.3  |
| 9     | 11.2 | 10.3 | 10.8 | 8.7  | 8.2  | 8.4  | ---  | ---  | ---  | 5.5  | 4.5  | 4.9  |
| 10    | 10.9 | 10.6 | 10.8 | 8.9  | 8.2  | 8.6  | ---  | ---  | ---  | 5.2  | 4.7  | 4.9  |
| 11    | 10.8 | 10.5 | 10.6 | 9.2  | 8.8  | 9.0  | ---  | ---  | ---  | 5.1  | 4.6  | 4.8  |
| 12    | 10.6 | 9.9  | 10.4 | 9.0  | 8.5  | 8.7  | ---  | ---  | ---  | 5.0  | 4.3  | 4.6  |
| 13    | 10.4 | 10.2 | 10.3 | 9.2  | 8.5  | 8.8  | ---  | ---  | ---  | 5.0  | 4.2  | 4.6  |
| 14    | 10.3 | 9.8  | 10   | 8.9  | 8.3  | 8.7  | ---  | ---  | ---  | 4.7  | 4.1  | 4.4  |
| 15    | 10.0 | 9.7  | 9.8  | 8.5  | 8.2  | 8.3  | ---  | ---  | ---  | 4.9  | 4.1  | 4.5  |
| 16    | 10.6 | 9.8  | 10.4 | 8.3  | 8.0  | 8.2  | ---  | ---  | ---  | 5.3  | 4.3  | 4.6  |
| 17    | 10.6 | 10.2 | 10.3 | 8.2  | 8.0  | 8.1  | ---  | ---  | ---  | 5.8  | 4.2  | 4.8  |
| 18    | 11.1 | 10.2 | 10.6 | 8.1  | 7.8  | 7.9  | ---  | ---  | ---  | 6.2  | 4.7  | 5.1  |
| 19    | 11.0 | 10.6 | 10.8 | 8.3  | 7.8  | 8.0  | ---  | ---  | ---  | 6.6  | 4.8  | 5.5  |
| 20    | 11.1 | 10.5 | 10.7 | 8.4  | 7.8  | 8.1  | ---  | ---  | ---  | 7.3  | 5.1  | 6.1  |
| 21    | 10.9 | 10.6 | 10.7 | 8.3  | 7.9  | 8.1  | ---  | ---  | ---  | 7.1  | 6.0  | 6.7  |
| 22    | 11.0 | 10.2 | 10.6 | 8.5  | 8.1  | 8.3  | ---  | ---  | ---  | 8.3  | 6.4  | 7.0  |
| 23    | 10.7 | 10.0 | 10.4 | 8.5  | 7.8  | 8.2  | 7.4  | 6.7  | 7.0  | 8.5  | 6.8  | 7.4  |
| 24    | 10.4 | 10.1 | 10.2 | 8.2  | 7.8  | 8.0  | 8.0  | 6.5  | 7.1  | 8.2  | 6.7  | 7.3  |
| 25    | 10.5 | 10.1 | 10.3 | 8.4  | 7.7  | 8.0  | 7.2  | 6.6  | 6.9  | 9.3  | 6.5  | 7.6  |
| 26    | 10.8 | 10.3 | 10.5 | ---  | ---  | ---  | 7.1  | 6.5  | 6.8  | 10.0 | 6.6  | 8.0  |
| 27    | 11.0 | 10.5 | 10.8 | ---  | ---  | ---  | 7.7  | 6.8  | 7.1  | 8.8  | 2.8  | 7.4  |
| 28    | 10.5 | 9.9  | 10.1 | ---  | ---  | ---  | 8.6  | 6.9  | 7.5  | 7.0  | 2.8  | 6.0  |
| 29    | 10.7 | 9.9  | 10.3 | ---  | ---  | ---  | 8.0  | 6.4  | 7.0  | 6.8  | 0.1  | 4.5  |
| 30    | ---  | ---  | ---  | ---  | ---  | ---  | 8.4  | 6.2  | 6.9  | 7.2  | 3.8  | 6.6  |
| 31    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | 6.2  | 4.7  | 5.4  |
| MONTH | 12.3 | 9.7  | 10.7 | ---  | ---  | ---  | ---  | ---  | ---  | 10.0 | 0.1  | 5.9  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 8.0  | 4.9 | 6.1  | 4.9  | 2.0 | 4.0  | 8.0    | 7.0 | 7.4  | 5.8       | 4.6 | 5.3  |
| 2     | 7.7  | 0.1 | 4.3  | 4.6  | 3.3 | 4.0  | 8.1    | 5.4 | 7.0  | 6.5       | 5.5 | 6.0  |
| 3     | 7.4  | 0.3 | 4.9  | 4.3  | 3.0 | 3.8  | 7.3    | 5.4 | 6.4  | 6.3       | 5.0 | 5.6  |
| 4     | 8.0  | 3.3 | 6.3  | 4.3  | 3.2 | 3.7  | 6.9    | 3.1 | 4.7  | 5.4       | 4.6 | 5.0  |
| 5     | 6.8  | 4.3 | 5.5  | 4.5  | 3.6 | 4.0  | 6.0    | 1.9 | 3.8  | 5.5       | 5.0 | 5.2  |
| 6     | 5.7  | 1.1 | 3.2  | 4.0  | 0.1 | 2.1  | 6.7    | 3.3 | 5.5  | 5.6       | 4.6 | 5.1  |
| 7     | 6.4  | 2.9 | 4.5  | 3.8  | 0.1 | 1.3  | 6.2    | 2.4 | 4.2  | 4.8       | 4.2 | 4.6  |
| 8     | 5.2  | 1.4 | 3.1  | 4.0  | 2.1 | 3.3  | 4.5    | 1.3 | 2.6  | 5.7       | 4.2 | 4.8  |
| 9     | 4.9  | 1.4 | 3.1  | 7.9  | 2.6 | 4.9  | 5.2    | 2.2 | 3.5  | 5.9       | 4.6 | 5.2  |
| 10    | 7.5  | 2.6 | 4.9  | 7.6  | 3.7 | 5.6  | 7.1    | 2.1 | 4.8  | ---       | --- | ---  |
| 11    | 6.9  | 4.5 | 5.9  | 8.6  | 1.1 | 5.0  | 7.5    | 2.6 | 5.1  | ---       | --- | ---  |
| 12    | 6.8  | 3.7 | 5.7  | 10.6 | 2.6 | 7.7  | 7.4    | 4.4 | 5.9  | ---       | --- | ---  |
| 13    | 6.1  | 2.8 | 5.0  | 12.6 | 7.0 | 10.2 | 6.8    | 5.6 | 6.3  | ---       | --- | ---  |
| 14    | 6.0  | 5.1 | 5.5  | 11.7 | 4.0 | 8.5  | 6.2    | 3.2 | 5.0  | ---       | --- | ---  |
| 15    | 6.2  | 5.0 | 5.6  | 10.3 | 4.3 | 7.6  | 5.2    | 3.6 | 4.5  | ---       | --- | ---  |
| 16    | 6.8  | 5.5 | 6.0  | 6.9  | 0.2 | 3.7  | 4.8    | 4.3 | 4.6  | ---       | --- | ---  |
| 17    | 6.8  | 5.8 | 6.2  | 6.9  | 0.3 | 3.3  | 5.0    | 3.8 | 4.3  | ---       | --- | ---  |
| 18    | 6.6  | 6.0 | 6.3  | 7.1  | 4.3 | 6.2  | 4.9    | 3.8 | 4.4  | ---       | --- | ---  |
| 19    | 9.3  | 0.6 | 7.2  | 10.4 | 1.9 | 6.5  | 4.6    | 3.9 | 4.3  | ---       | --- | ---  |
| 20    | 7.6  | 0.7 | 5.7  | 8.3  | 1.6 | 5.0  | 5.2    | 3.8 | 4.5  | ---       | --- | ---  |
| 21    | 8.0  | 3.5 | 6.2  | 7.6  | 0.2 | 5.5  | 5.3    | 4.6 | 4.9  | ---       | --- | ---  |
| 22    | 7.2  | 3.8 | 5.6  | 8.9  | 0.6 | 4.4  | 4.9    | 4.2 | 4.7  | ---       | --- | ---  |
| 23    | 8.9  | 5.7 | 7.0  | 9.1  | 5.1 | 7.7  | 4.5    | 4.0 | 4.3  | 5.2       | 4.1 | 4.7  |
| 24    | 8.9  | 3.5 | 7.0  | 11.1 | 5.9 | 8.0  | 4.8    | 3.9 | 4.3  | 6.4       | 4.9 | 5.7  |
| 25    | 7.3  | 1.5 | 4.9  | 7.7  | 0.0 | 4.8  | 5.0    | 4.1 | 4.5  | 6.4       | 5.9 | 6.1  |
| 26    | 7.3  | 3.5 | 5.7  | 8.8  | 0.0 | 5.3  | 4.9    | 4.0 | 4.3  | 6.3       | 5.8 | 6.1  |
| 27    | 6.6  | 2.4 | 5.0  | 8.5  | 5.8 | 7.6  | 5.3    | 3.8 | 4.6  | 6.7       | 6.0 | 6.3  |
| 28    | 5.8  | 2.1 | 4.3  | 8.6  | 4.4 | 6.7  | 5.3    | 4.0 | 4.7  | 7.0       | 6.1 | 6.4  |
| 29    | 5.1  | 1.5 | 3.6  | 7.9  | 3.0 | 5.7  | 5.7    | 3.8 | 4.7  | 7.8       | 6.2 | 7.1  |
| 30    | 5.2  | 2.4 | 4.4  | 10.4 | 6.5 | 8.3  | 6.5    | 5.4 | 5.9  | 7.3       | 6.0 | 6.7  |
| 31    | ---  | --- | ---  | 9.4  | 6.7 | 8.4  | 5.9    | 5.0 | 5.5  | ---       | --- | ---  |
| MONTH | 9.3  | 0.1 | 5.3  | 12.6 | 0.0 | 5.6  | 8.1    | 1.3 | 4.9  | ---       | --- | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|-----|-----|------|------|------|------|------|------|------|
|       |      |      |      |     |     |      |      |      |      |      |      |      |
| 1     | 2.2  | 0.0  | 0.2  | --- | --- | ---  | 9.1  | 7.3  | 8.2  | 9.6  | 3.3  | 6.9  |
| 2     | 4.8  | 0.0  | 2.5  | --- | --- | ---  | 9.2  | 7.5  | 8.6  | 9.5  | 3.7  | 6.4  |
| 3     | 5.7  | 4.1  | 5.2  | --- | --- | ---  | 9.6  | 8.5  | 9.2  | 9.7  | 6.0  | 9.4  |
| 4     | 4.8  | 4.1  | 4.6  | --- | --- | ---  | 10.0 | 8.9  | 9.3  | 9.9  | 9.1  | 9.6  |
| 5     | 4.8  | 4.1  | 4.6  | 5.4 | 5.0 | 5.2  | 9.9  | 9.3  | 9.5  | 9.8  | 9.5  | 9.7  |
| 6     | 5.1  | 4.3  | 4.6  | 5.3 | 4.8 | 5.1  | 10.0 | 9.2  | 9.7  | 9.7  | 6.7  | 9.0  |
| 7     | 6.1  | 3.6  | 5.0  | 5.9 | 4.8 | 5.4  | 10.4 | 9.8  | 10.1 | 9.2  | 6.1  | 7.9  |
| 8     | 6.3  | 2.6  | 4.5  | 6.6 | 5.3 | 5.9  | 10.3 | 9.0  | 9.9  | 8.3  | 5.3  | 6.8  |
| 9     | 6.7  | 4.0  | 5.9  | 7.6 | 6.3 | 7.0  | 9.7  | 8.1  | 9.1  | 7.3  | 4.7  | 6.1  |
| 10    | 6.9  | 6.4  | 6.7  | 7.2 | 4.8 | 5.7  | 10.0 | 8.0  | 9.1  | 10.2 | 6.2  | 8.7  |
| 11    | 7.1  | 6.8  | 6.9  | 5.0 | 4.5 | 4.7  | 10.5 | 9.3  | 10.1 | 10.4 | 8.6  | 9.7  |
| 12    | 7.0  | 6.1  | 6.6  | 6.7 | 4.5 | 5.5  | 10.5 | 9.5  | 10.1 | 10.6 | 8.8  | 9.7  |
| 13    | 6.6  | 3.7  | 5.8  | 8.0 | 6.5 | 7.3  | 10.1 | 9.2  | 9.6  | 10.4 | 8.6  | 9.6  |
| 14    | 6.3  | 5.1  | 5.8  | 8.7 | 7.9 | 8.4  | 10.2 | 8.9  | 9.3  | 11.1 | 8.4  | 9.8  |
| 15    | 6.8  | 5.8  | 6.3  | 8.6 | 8.1 | 8.5  | 9.6  | 9.1  | 9.5  | 11.2 | 9.2  | 10.4 |
| 16    | 6.8  | 6.2  | 6.5  | 8.3 | 7.1 | 7.7  | 9.4  | 9.0  | 9.1  | 11.5 | 10.6 | 11.1 |
| 17    | ---  | ---  | ---  | 7.2 | 6.7 | 7.0  | 9.5  | 9.0  | 9.2  | 11.3 | 10.1 | 10.7 |
| 18    | ---  | ---  | ---  | 7.2 | 4.8 | 6.1  | 9.4  | 8.8  | 9.0  | 11.5 | 9.8  | 10.8 |
| 19    | ---  | ---  | ---  | 7.5 | 5.8 | 7.0  | 9.4  | 8.9  | 9.1  | 11.5 | 10.7 | 11.2 |
| 20    | ---  | ---  | ---  | 7.6 | 6.7 | 7.4  | 9.8  | 9.2  | 9.5  | 11.8 | 11.0 | 11.4 |
| 21    | ---  | ---  | ---  | 7.7 | 7.3 | 7.5  | 9.9  | 9.6  | 9.8  | 11.8 | 9.9  | 10.9 |
| 22    | ---  | ---  | ---  | 7.4 | 6.4 | 6.8  | 10.0 | 9.8  | 9.9  | 11.0 | 9.2  | 10.2 |
| 23    | ---  | ---  | ---  | 6.5 | 6.0 | 6.2  | 10.2 | 10.0 | 10.1 | 11.5 | 9.2  | 10.6 |
| 24    | ---  | ---  | ---  | 6.8 | 6.1 | 6.4  | 10.2 | 9.7  | 10.0 | 11.6 | 10.5 | 11.1 |
| 25    | ---  | ---  | ---  | 7.8 | 6.7 | 7.3  | 10.1 | 9.8  | 10   | 12.3 | 11.2 | 11.8 |
| 26    | ---  | ---  | ---  | 7.8 | 6.9 | 7.5  | 10.0 | 9.7  | 9.8  | 12.4 | 12.0 | 12.2 |
| 27    | ---  | ---  | ---  | 7.0 | 6.4 | 6.7  | 10.0 | 9.5  | 9.9  | 12.4 | 11.6 | 12.1 |
| 28    | ---  | ---  | ---  | 8.0 | 6.5 | 7.0  | 9.9  | 3.2  | 6.6  | 12.4 | 11.4 | 12.0 |
| 29    | ---  | ---  | ---  | 9.1 | 7.9 | 8.6  | 9.8  | 3.5  | 7.8  | 12.5 | 11.6 | 12.1 |
| 30    | ---  | ---  | ---  | 9.2 | 8.6 | 9.0  | 10.2 | 5.6  | 9.6  | 12.3 | 11.0 | 11.8 |
| 31    | ---  | ---  | ---  | --- | --- | ---  | 9.7  | 3.8  | 5.6  | 12.2 | 11.3 | 11.9 |
| MONTH | ---  | ---  | ---  | --- | --- | ---  | 10.5 | 3.2  | 9.2  | 12.5 | 3.3  | 10.1 |
| DAY   | MAX  | MIN  | MEAN | MAX | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |     |     |      |      |      |      |      |      |      |
| 1     | 12.5 | 11.1 | 11.7 | 9.8 | 9.4 | 9.6  | 7.8  | 7.2  | 7.6  | 7.5  | 6.1  | 6.5  |
| 2     | 11.6 | 10.2 | 10.9 | 9.7 | 9.3 | 9.5  | 8.3  | 7.7  | 8.0  | 6.9  | 6.3  | 6.6  |
| 3     | 12.1 | 9.2  | 10.8 | 9.4 | 8.9 | 9.1  | 8.6  | 8.1  | 8.3  | 6.9  | 6.4  | 6.6  |
| 4     | 12.0 | 9.3  | 11.0 | 9.3 | 8.6 | 8.8  | 8.7  | 8.0  | 8.4  | 6.9  | 5.9  | 6.6  |
| 5     | 12.4 | 9.9  | 11.5 | 8.6 | 8.0 | 8.3  | 9.0  | 8.1  | 8.6  | 6.0  | 5.1  | 5.5  |
| 6     | 12.3 | 11.4 | 12.0 | 8.1 | 7.7 | 7.9  | 9.3  | 8.7  | 9.0  | 5.4  | 4.3  | 4.9  |
| 7     | 11.6 | 10.9 | 11.3 | 7.8 | 7.3 | 7.6  | 9.2  | 8.4  | 8.8  | 4.8  | 4.3  | 4.6  |
| 8     | 11.3 | 10.7 | 11.0 | 7.6 | 6.3 | 7.2  | 8.8  | 8.1  | 8.4  | 5.2  | 4.4  | 4.8  |
| 9     | 11.6 | 10.8 | 11.2 | 7.7 | 7.1 | 7.5  | 9.3  | 8.2  | 8.6  | 5.0  | 4.0  | 4.4  |
| 10    | 11.3 | 10.8 | 11.1 | 8.3 | 7.3 | 8.0  | 9.5  | 5.2  | 8.5  | 4.9  | 4.3  | 4.5  |
| 11    | 11.1 | 10.6 | 10.8 | 8.7 | 8.2 | 8.5  | 8.7  | 4.1  | 7.4  | 4.7  | 4.2  | 4.4  |
| 12    | 11.0 | 10.1 | 10.6 | 8.6 | 8.0 | 8.2  | 8.6  | 7.5  | 8.1  | 4.7  | 3.9  | 4.3  |
| 13    | 10.7 | 10.1 | 10.4 | 8.6 | 8.1 | 8.4  | 7.9  | 7.0  | 7.6  | ---  | ---  | ---  |
| 14    | 10.5 | 9.7  | 10   | 8.5 | 7.9 | 8.2  | 7.2  | 6.6  | 7.0  | ---  | ---  | ---  |
| 15    | 10.0 | 8.2  | 9.6  | 8.0 | 7.6 | 7.8  | 8.2  | 7.2  | 7.7  | ---  | ---  | ---  |
| 16    | 10.7 | 9.4  | 10.3 | 7.9 | 7.5 | 7.7  | 8.3  | 6.5  | 7.4  | ---  | ---  | ---  |
| 17    | 10.5 | 9.9  | 10.2 | 8.0 | 7.6 | 7.8  | 7.4  | 6.7  | 7.0  | ---  | ---  | ---  |
| 18    | 10.9 | 9.8  | 10.3 | 7.8 | 7.4 | 7.6  | 7.6  | 7.1  | 7.4  | ---  | ---  | ---  |
| 19    | 10.7 | 10.1 | 10.4 | 8.1 | 7.6 | 7.8  | 7.8  | 7.5  | 7.6  | ---  | ---  | ---  |
| 20    | 10.3 | 9.4  | 9.9  | 8.2 | 7.6 | 8.0  | 7.8  | 7.0  | 7.5  | ---  | ---  | ---  |
| 21    | 9.6  | 9.3  | 9.4  | 8.3 | 7.8 | 8.0  | 7.7  | 7.0  | 7.3  | 6.2  | 0.2  | 2.6  |
| 22    | 9.6  | 8.8  | 9.2  | 8.7 | 8.0 | 8.3  | 7.7  | 6.6  | 7.2  | 5.3  | 0.0  | 0.9  |
| 23    | 9.4  | 8.7  | 9.0  | 8.7 | 7.8 | 8.2  | 7.0  | 6.2  | 6.6  | 8.0  | 0.1  | 4.8  |
| 24    | 9.2  | 8.8  | 9.0  | 8.3 | 7.8 | 8.0  | 7.8  | 6.2  | 6.8  | 7.4  | 3.7  | 6.0  |
| 25    | 9.3  | 8.8  | 9.1  | 8.4 | 7.7 | 8.0  | 7.0  | 6.4  | 6.6  | 7.1  | 3.9  | 6.0  |
| 26    | 9.7  | 9.1  | 9.3  | 8.2 | 7.6 | 7.9  | 6.9  | 6.2  | 6.5  | 6.6  | 0.7  | 3.3  |
| 27    | 10.0 | 9.4  | 9.7  | 8.1 | 7.4 | 7.8  | 7.3  | 6.4  | 6.8  | 1.9  | 0.0  | 0.7  |
| 28    | 9.4  | 8.9  | 9.1  | 8.0 | 7.2 | 7.7  | 7.3  | 6.5  | 6.9  | 0.7  | 0.0  | 0.3  |
| 29    | 9.6  | 8.9  | 9.3  | 8.3 | 7.8 | 8.0  | 7.7  | 6.2  | 6.6  | 2.1  | 0.0  | 0.2  |
| 30    | ---  | ---  | ---  | 8.2 | 7.6 | 7.9  | 8.0  | 6.2  | 6.6  | 6.0  | 0.0  | 2.4  |
| 31    | ---  | ---  | ---  | 8.7 | 7.2 | 7.6  | ---  | ---  | ---  | 4.6  | 0.9  | 3.0  |
| MONTH | 12.5 | 8.2  | 10.3 | 9.8 | 6.3 | 8.1  | 9.5  | 4.1  | 7.6  | ---  | ---  | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 4.2  | 0.0 | 1.3  | 2.1  | 0.0 | 0.5  | 8.8    | 0.9 | 6.0  | ---       | --- | ---  |
| 2     | 3.7  | 0.0 | 0.3  | 2.2  | 0.0 | 0.4  | 7.4    | 1.9 | 4.0  | ---       | --- | ---  |
| 3     | 2.8  | 0.0 | 0.3  | 0.4  | 0.0 | 0.1  | 6.5    | 2.4 | 5.4  | ---       | --- | ---  |
| 4     | 8.3  | 0.0 | 2.6  | 1.2  | 0.0 | 0.1  | 4.7    | 0.8 | 2.5  | ---       | --- | ---  |
| 5     | 5.8  | 2.5 | 4.2  | 3.5  | 0.0 | 0.9  | 2.6    | 0.4 | 0.8  | ---       | --- | ---  |
| 6     | 3.1  | 1.2 | 1.9  | 0.1  | 0.0 | 0.0  | 4.8    | 0.4 | 1.9  | ---       | --- | ---  |
| 7     | 2.3  | 0.1 | 0.8  | 0.5  | 0.0 | 0.1  | 2.3    | 0.6 | 1.2  | ---       | --- | ---  |
| 8     | 0.5  | 0.0 | 0.1  | 2.6  | 0.0 | 0.4  | 0.8    | 0.6 | 0.6  | ---       | --- | ---  |
| 9     | 1.3  | 0.0 | 0.3  | 0.7  | 0.0 | 0.1  | 0.8    | 0.6 | 0.7  | ---       | --- | ---  |
| 10    | 3.8  | 0.0 | 0.6  | 0.2  | 0.1 | 0.1  | 1.6    | 0.6 | 0.7  | ---       | --- | ---  |
| 11    | 4.8  | 0.0 | 0.5  | 0.1  | 0.1 | 0.1  | 3.8    | 0.6 | 1.0  | ---       | --- | ---  |
| 12    | 3.5  | 0.0 | 1.0  | 2.0  | 0.1 | 0.4  | 5.7    | 0.2 | 1.8  | ---       | --- | ---  |
| 13    | 4.6  | 0.0 | 1.4  | 2.1  | 0.1 | 0.3  | 7.0    | 0.5 | 4.7  | ---       | --- | ---  |
| 14    | 6.2  | 1.5 | 4.0  | 0.4  | 0.0 | 0.1  | 6.2    | 0.8 | 4.0  | ---       | --- | ---  |
| 15    | 5.7  | 4.4 | 5.2  | 0.2  | 0.0 | 0.0  | 5.0    | 2.6 | 3.8  | ---       | --- | ---  |
| 16    | 6.8  | 5.3 | 6.0  | 0.0  | 0.0 | 0.0  | 5.0    | 2.2 | 3.9  | ---       | --- | ---  |
| 17    | 6.7  | 5.9 | 6.2  | 0.1  | 0.0 | 0.0  | 4.6    | 0.1 | 3.1  | ---       | --- | ---  |
| 18    | 7.5  | 5.6 | 6.4  | 1.5  | 0.0 | 0.1  | 4.7    | 3.7 | 4.1  | ---       | --- | ---  |
| 19    | 7.3  | 0.1 | 2.5  | 0.1  | 0.0 | 0.0  | 4.3    | 3.5 | 3.9  | ---       | --- | ---  |
| 20    | 0.3  | 0.1 | 0.1  | 0.3  | 0.0 | 0.0  | 4.8    | 3.5 | 4.1  | ---       | --- | ---  |
| 21    | 1.2  | 0.1 | 0.2  | 2.5  | 0.0 | 0.2  | 5.0    | 4.4 | 4.6  | ---       | --- | ---  |
| 22    | 5.9  | 0.1 | 2.0  | 0.6  | 0.1 | 0.1  | 4.8    | 4.1 | 4.5  | ---       | --- | ---  |
| 23    | 6.4  | 0.2 | 2.6  | 6.6  | 0.1 | 0.7  | 4.2    | 0.0 | 2.2  | 5.1       | 3.8 | 4.4  |
| 24    | 1.4  | 0.0 | 0.2  | 4.3  | 0.1 | 0.9  | 0.2    | 0.0 | 0.0  | 6.1       | 4.1 | 5.4  |
| 25    | 3.5  | 0.0 | 0.6  | 0.1  | 0.1 | 0.1  | 4.2    | 0.0 | 1.9  | 6.2       | 4.0 | 5.5  |
| 26    | 5.2  | 0.8 | 2.7  | 0.1  | 0.1 | 0.1  | 4.2    | 3.0 | 3.8  | 6.2       | 5.6 | 5.9  |
| 27    | 2.9  | 0.0 | 0.9  | 5.1  | 0.1 | 1.2  | 5.1    | 3.7 | 4.5  | 6.4       | 5.5 | 6.0  |
| 28    | 1.9  | 0.0 | 0.4  | 7.0  | 0.1 | 3.4  | 5.0    | 3.6 | 4.2  | 7.1       | 5.8 | 6.4  |
| 29    | 1.8  | 0.1 | 0.7  | 7.2  | 0.8 | 3.7  | 5.3    | 3.5 | 4.3  | 7.3       | 6.2 | 6.8  |
| 30    | 1.4  | 0.0 | 0.3  | 6.3  | 0.3 | 2.3  | 6.0    | 5.0 | 5.4  | 6.6       | 5.5 | 6.2  |
| 31    | ---  | --- | ---  | 9.2  | 0.2 | 3.3  | 5.1    | 4.4 | 4.8  | ---       | --- | ---  |
| MONTH | 8.3  | 0.0 | 1.9  | 9.2  | 0.0 | 0.6  | 8.8    | 0.0 | 3.2  | ---       | --- | ---  |



## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 48  | 33  | 41   | 60  | 56  | 58   | 89  | 80  | 85   | 88  | 83  | 86   |
| 2     | 57  | 43  | 48   | 65  | 58  | 60   | 89  | 84  | 87   | 88  | 84  | 86   |
| 3     | 62  | 53  | 57   | 66  | 59  | 62   | 88  | 85  | 87   | 90  | 85  | 87   |
| 4     | 56  | 48  | 52   | 62  | 54  | 58   | 92  | 82  | 85   | 93  | 87  | 90   |
| 5     | 59  | 48  | 53   | 61  | 53  | 56   | 92  | 88  | 89   | 95  | 89  | 92   |
| 6     | 57  | 48  | 53   | 57  | 50  | 55   | 92  | 88  | 90   | 95  | 84  | 91   |
| 7     | 68  | 54  | 62   | 63  | 54  | 58   | 93  | 90  | 91   | 87  | 81  | 84   |
| 8     | 68  | 58  | 64   | 69  | 55  | 63   | 92  | 86  | 90   | 87  | 81  | 84   |
| 9     | 74  | 62  | 68   | 77  | 64  | 71   | 88  | 85  | 86   | 84  | 67  | 81   |
| 10    | 79  | 72  | 76   | 72  | 48  | 57   | 92  | 85  | 87   | 88  | 80  | 83   |
| 11    | 80  | 73  | 77   | 50  | 44  | 47   | 97  | 88  | 94   | 86  | 80  | 83   |
| 12    | 76  | 72  | 75   | 67  | 48  | 56   | 97  | 87  | 94   | 90  | 80  | 85   |
| 13    | 77  | 66  | 73   | 80  | 64  | 72   | 91  | 83  | 87   | 90  | 85  | 87   |
| 14    | 72  | 63  | 67   | 84  | 77  | 80   | 92  | 80  | 85   | 92  | 85  | 89   |
| 15    | 74  | 64  | 69   | 83  | 77  | 80   | 86  | 82  | 84   | 92  | 87  | 90   |
| 16    | 75  | 68  | 71   | 80  | 69  | 73   | 84  | 77  | 80   | 94  | 89  | 91   |
| 17    | 69  | 55  | 62   | 71  | 67  | 70   | 83  | 77  | 81   | 95  | 88  | 92   |
| 18    | 71  | 59  | 65   | 79  | 69  | 73   | 83  | 76  | 79   | 96  | 89  | 93   |
| 19    | 76  | 66  | 69   | 84  | 73  | 79   | 82  | 76  | 79   | 96  | 91  | 94   |
| 20    | 73  | 63  | 68   | 85  | 77  | 83   | 85  | 77  | 80   | 96  | 91  | 93   |
| 21    | 76  | 64  | 70   | 89  | 78  | 82   | 83  | 80  | 81   | 95  | 90  | 93   |
| 22    | 83  | 70  | 77   | 78  | 70  | 74   | 85  | 80  | 83   | 95  | 89  | 92   |
| 23    | 82  | 72  | 78   | 72  | 65  | 69   | 88  | 82  | 85   | 94  | 89  | 92   |
| 24    | 85  | 77  | 81   | 76  | 67  | 70   | 89  | 85  | 87   | 95  | 90  | 92   |
| 25    | 85  | 78  | 82   | 83  | 74  | 80   | 89  | 84  | 86   | 96  | 91  | 94   |
| 26    | 82  | 74  | 77   | 83  | 72  | 78   | 87  | 82  | 84   | 96  | 93  | 95   |
| 27    | 79  | 75  | 77   | 73  | 68  | 70   | 86  | 82  | 84   | 96  | 91  | 94   |
| 28    | 80  | 75  | 77   | 85  | 68  | 75   | 88  | 82  | 85   | 97  | 89  | 93   |
| 29    | 81  | 76  | 78   | 90  | 83  | 87   | 88  | 83  | 86   | 96  | 90  | 94   |
| 30    | 77  | 63  | 70   | 90  | 86  | 88   | 92  | 85  | 88   | 97  | 91  | 94   |
| 31    | 65  | 57  | 60   | --- | --- | ---  | 90  | 84  | 87   | 93  | 87  | 90   |
| MONTH | 85  | 33  | 68   | 90  | 44  | 69   | 97  | 76  | 86   | 97  | 67  | 90   |
|       | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 93  | 90  | 92   | 95  | 86  | 90   | --- | --- | ---  | 90  | 74  | 78   |
| 2     | 95  | 90  | 92   | 98  | 89  | 93   | --- | --- | ---  | 82  | 72  | 79   |
| 3     | 95  | 91  | 93   | 98  | 91  | 94   | --- | --- | ---  | 80  | 75  | 78   |
| 4     | 96  | 92  | 94   | 97  | 89  | 94   | --- | --- | ---  | 82  | 68  | 76   |
| 5     | 95  | 92  | 94   | 96  | 88  | 92   | --- | --- | ---  | 69  | 58  | 63   |
| 6     | 97  | 93  | 95   | 94  | 86  | 90   | --- | --- | ---  | 63  | 53  | 58   |
| 7     | 97  | 93  | 95   | 94  | 86  | 89   | --- | --- | ---  | 60  | 53  | 56   |
| 8     | 94  | 89  | 91   | 87  | 74  | 81   | --- | --- | ---  | 66  | 56  | 61   |
| 9     | 93  | 88  | 91   | 86  | 80  | 82   | --- | --- | ---  | 63  | 51  | 56   |
| 10    | 93  | 90  | 92   | 85  | 80  | 83   | --- | --- | ---  | 62  | 54  | 57   |
| 11    | 93  | 89  | 91   | 87  | 81  | 84   | --- | --- | ---  | 60  | 53  | 56   |
| 12    | 91  | 84  | 89   | 85  | 79  | 82   | --- | --- | ---  | 60  | 50  | 54   |
| 13    | 90  | 86  | 88   | 88  | 81  | 84   | --- | --- | ---  | 60  | 49  | 54   |
| 14    | 89  | 84  | 86   | 84  | 79  | 83   | --- | --- | ---  | 57  | 48  | 52   |
| 15    | 86  | 83  | 84   | 83  | 78  | 80   | --- | --- | ---  | 60  | 49  | 54   |
| 16    | 89  | 83  | 86   | 81  | 78  | 80   | --- | --- | ---  | 65  | 52  | 56   |
| 17    | 86  | 83  | 84   | 80  | 76  | 78   | --- | --- | ---  | 72  | 51  | 59   |
| 18    | 90  | 84  | 86   | 77  | 73  | 75   | --- | --- | ---  | 78  | 57  | 63   |
| 19    | 91  | 84  | 88   | 80  | 74  | 76   | --- | --- | ---  | 84  | 58  | 68   |
| 20    | 95  | 85  | 89   | 83  | 76  | 78   | --- | --- | ---  | 94  | 63  | 76   |
| 21    | 96  | 89  | 93   | 81  | 75  | 78   | --- | --- | ---  | 91  | 75  | 84   |
| 22    | 98  | 88  | 93   | 81  | 77  | 79   | --- | --- | ---  | 108 | 80  | 90   |
| 23    | 95  | 86  | 91   | 80  | 75  | 77   | 86  | 76  | 81   | 110 | 86  | 94   |
| 24    | 92  | 88  | 89   | 79  | 74  | 77   | 93  | 75  | 82   | 105 | 84  | 93   |
| 25    | 92  | 87  | 89   | 80  | 75  | 77   | 83  | 76  | 79   | 120 | 82  | 96   |
| 26    | 91  | 87  | 89   | --- | --- | ---  | 82  | 74  | 78   | 131 | 85  | 103  |
| 27    | 91  | 86  | 89   | --- | --- | ---  | 89  | 78  | 82   | 115 | 35  | 95   |
| 28    | 86  | 80  | 83   | --- | --- | ---  | 100 | 78  | 85   | 91  | 35  | 76   |
| 29    | 91  | 81  | 86   | --- | --- | ---  | 91  | 73  | 79   | 86  | 1   | 56   |
| 30    | --- | --- | ---  | --- | --- | ---  | 97  | 70  | 79   | 88  | 48  | 81   |
| 31    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 78  | 58  | 68   |
| MONTH | 98  | 80  | 90   | --- | --- | ---  | --- | --- | ---  | 131 | 1   | 71   |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 100  | 62  | 76   | 63   | 25  | 51   | 106    | 91  | 97   | 72        | 57  | 66   |
| 2     | 97   | 1   | 54   | 58   | 41  | 51   | 106    | 71  | 92   | 81        | 67  | 73   |
| 3     | 94   | 4   | 62   | 54   | 37  | 47   | 95     | 70  | 83   | 77        | 62  | 69   |
| 4     | 103  | 42  | 81   | 55   | 40  | 47   | 90     | 41  | 61   | 68        | 57  | 62   |
| 5     | 87   | 54  | 69   | 59   | 46  | 51   | 79     | 25  | 50   | 69        | 62  | 65   |
| 6     | 73   | 14  | 40   | 52   | 1   | 27   | 86     | 42  | 70   | 70        | 56  | 63   |
| 7     | 81   | 37  | 58   | 51   | 1   | 17   | 78     | 30  | 53   | 59        | 51  | 55   |
| 8     | 67   | 18  | 40   | 53   | 27  | 44   | 57     | 17  | 33   | 70        | 51  | 59   |
| 9     | 63   | 18  | 40   | 107  | 34  | 65   | 66     | 27  | 44   | 72        | 57  | 64   |
| 10    | 97   | 33  | 62   | 103  | 49  | 75   | 91     | 27  | 61   | ---       | --- | ---  |
| 11    | 91   | 57  | 75   | 116  | 14  | 66   | 96     | 33  | 65   | ---       | --- | ---  |
| 12    | 85   | 46  | 71   | 141  | 34  | 101  | 94     | 55  | 74   | ---       | --- | ---  |
| 13    | 75   | 35  | 62   | 170  | 93  | 135  | 84     | 70  | 78   | ---       | --- | ---  |
| 14    | 74   | 62  | 67   | 157  | 53  | 113  | 77     | 39  | 62   | ---       | --- | ---  |
| 15    | 78   | 60  | 69   | 139  | 57  | 101  | 63     | 44  | 54   | ---       | --- | ---  |
| 16    | 85   | 68  | 74   | 92   | 3   | 49   | 58     | 51  | 55   | ---       | --- | ---  |
| 17    | 86   | 72  | 77   | 90   | 4   | 43   | 61     | 45  | 52   | ---       | --- | ---  |
| 18    | 84   | 75  | 79   | 92   | 57  | 81   | 59     | 45  | 52   | ---       | --- | ---  |
| 19    | 125  | 8   | 94   | 140  | 25  | 86   | 56     | 47  | 51   | ---       | --- | ---  |
| 20    | 100  | 9   | 73   | 107  | 21  | 64   | 65     | 46  | 56   | ---       | --- | ---  |
| 21    | 104  | 44  | 78   | 101  | 3   | 71   | 66     | 56  | 61   | ---       | --- | ---  |
| 22    | 93   | 48  | 72   | 118  | 8   | 58   | 61     | 52  | 58   | ---       | --- | ---  |
| 23    | 118  | 73  | 91   | 120  | 67  | 101  | 56     | 49  | 52   | 62        | 47  | 54   |
| 24    | 117  | 45  | 90   | 148  | 76  | 104  | 60     | 47  | 52   | 75        | 58  | 67   |
| 25    | 96   | 19  | 63   | 101  | 0   | 62   | 62     | 50  | 55   | 75        | 68  | 72   |
| 26    | 95   | 45  | 73   | 116  | 0   | 69   | 60     | 49  | 53   | 74        | 67  | 71   |
| 27    | 84   | 31  | 64   | 113  | 77  | 101  | 66     | 46  | 57   | 80        | 70  | 74   |
| 28    | 75   | 27  | 55   | 115  | 58  | 88   | 66     | 49  | 58   | 83        | 72  | 76   |
| 29    | 66   | 19  | 45   | 102  | 39  | 74   | 72     | 48  | 59   | 97        | 73  | 85   |
| 30    | 68   | 31  | 56   | 136  | 84  | 107  | 81     | 67  | 73   | 88        | 71  | 80   |
| 31    | ---  | --- | ---  | 124  | 87  | 110  | 75     | 62  | 68   | ---       | --- | ---  |
| MONTH | 125  | 1   | 67   | 170  | 0   | 73   | 106    | 17  | 61   | ---       | --- | ---  |

## NEUSE RIVER BASIN

02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 25  | 0   | 3    | --- | --- | ---  | 82  | 69  | 76   | 81  | 29  | 59   |
| 2     | 54  | 0   | 29   | --- | --- | ---  | 83  | 71  | 79   | 80  | 32  | 54   |
| 3     | 61  | 46  | 57   | --- | --- | ---  | 83  | 77  | 81   | 83  | 51  | 80   |
| 4     | 53  | 45  | 50   | --- | --- | ---  | 86  | 77  | 80   | 89  | 80  | 84   |
| 5     | 53  | 45  | 50   | 57  | 53  | 56   | 85  | 80  | 82   | 91  | 85  | 88   |
| 6     | 56  | 47  | 50   | 57  | 52  | 54   | 86  | 80  | 83   | 92  | 62  | 84   |
| 7     | 68  | 40  | 55   | 64  | 52  | 59   | 88  | 84  | 85   | 80  | 54  | 70   |
| 8     | 70  | 29  | 49   | 70  | 57  | 64   | 86  | 78  | 84   | 73  | 47  | 61   |
| 9     | 75  | 44  | 65   | 78  | 64  | 72   | 83  | 68  | 78   | 64  | 42  | 54   |
| 10    | 77  | 71  | 74   | 72  | 48  | 58   | 87  | 69  | 78   | 83  | 54  | 73   |
| 11    | 79  | 75  | 76   | 50  | 44  | 47   | 91  | 82  | 88   | 82  | 71  | 78   |
| 12    | 77  | 68  | 73   | 68  | 45  | 56   | 90  | 82  | 88   | 86  | 72  | 78   |
| 13    | 75  | 41  | 64   | 81  | 67  | 74   | 87  | 79  | 82   | 85  | 71  | 79   |
| 14    | 72  | 57  | 65   | 84  | 79  | 81   | 88  | 77  | 81   | 90  | 69  | 80   |
| 15    | 75  | 64  | 70   | 82  | 77  | 80   | 82  | 78  | 80   | 91  | 76  | 85   |
| 16    | 73  | 68  | 70   | 79  | 69  | 73   | 80  | 76  | 77   | 92  | 86  | 89   |
| 17    | --- | --- | ---  | 70  | 65  | 68   | 81  | 76  | 78   | 90  | 82  | 87   |
| 18    | --- | --- | ---  | 71  | 47  | 60   | 80  | 74  | 76   | 95  | 79  | 88   |
| 19    | --- | --- | ---  | 76  | 57  | 70   | 78  | 74  | 76   | 95  | 89  | 93   |
| 20    | --- | --- | ---  | 76  | 66  | 74   | 80  | 76  | 77   | 94  | 90  | 92   |
| 21    | --- | --- | ---  | 76  | 71  | 74   | 79  | 77  | 78   | 92  | 80  | 88   |
| 22    | --- | --- | ---  | 73  | 63  | 67   | 81  | 78  | 80   | 88  | 75  | 83   |
| 23    | --- | --- | ---  | 64  | 59  | 61   | 83  | 80  | 81   | 93  | 76  | 86   |
| 24    | --- | --- | ---  | 68  | 60  | 63   | 85  | 82  | 84   | 93  | 85  | 89   |
| 25    | --- | --- | ---  | 76  | 67  | 72   | 85  | 81  | 83   | 97  | 90  | 93   |
| 26    | --- | --- | ---  | 76  | 67  | 72   | 83  | 80  | 81   | 96  | 93  | 94   |
| 27    | --- | --- | ---  | 68  | 61  | 64   | 83  | 79  | 81   | 95  | 90  | 93   |
| 28    | --- | --- | ---  | 78  | 62  | 68   | 82  | 27  | 55   | 95  | 88  | 92   |
| 29    | --- | --- | ---  | 84  | 76  | 80   | 81  | 29  | 64   | 95  | 89  | 92   |
| 30    | --- | --- | ---  | 84  | 80  | 82   | 88  | 48  | 81   | 94  | 85  | 91   |
| 31    | --- | --- | ---  | --- | --- | ---  | 82  | 33  | 48   | 94  | 87  | 91   |
| MONTH | --- | --- | ---  | --- | --- | ---  | 91  | 27  | 78   | 97  | 29  | 82   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 94  | 85  | 89   | 86  | 78  | 81   | 78  | 72  | 76   | 86  | 70  | 75   |
| 2     | 88  | 79  | 83   | 89  | 80  | 84   | 81  | 75  | 78   | 80  | 71  | 76   |
| 3     | 95  | 72  | 84   | 89  | 80  | 83   | 84  | 78  | 81   | 78  | 73  | 76   |
| 4     | 97  | 74  | 88   | 87  | 80  | 84   | 86  | 79  | 82   | 77  | 65  | 73   |
| 5     | 100 | 78  | 92   | 87  | 78  | 82   | 87  | 79  | 83   | 67  | 55  | 60   |
| 6     | 101 | 95  | 99   | 84  | 77  | 80   | 90  | 84  | 86   | 59  | 46  | 53   |
| 7     | 101 | 97  | 99   | 82  | 75  | 78   | 90  | 82  | 85   | 53  | 47  | 50   |
| 8     | 99  | 93  | 95   | 77  | 63  | 72   | 91  | 80  | 85   | 61  | 49  | 55   |
| 9     | 98  | 92  | 94   | 76  | 69  | 74   | 99  | 85  | 90   | 57  | 46  | 51   |
| 10    | 96  | 92  | 94   | 79  | 72  | 77   | 101 | 55  | 90   | 58  | 49  | 52   |
| 11    | 95  | 90  | 93   | 82  | 76  | 79   | 92  | 43  | 78   | 55  | 48  | 51   |
| 12    | 94  | 86  | 90   | 80  | 74  | 77   | 92  | 79  | 86   | 56  | 45  | 50   |
| 13    | 92  | 85  | 89   | 81  | 77  | 79   | 85  | 74  | 81   | --- | --- | ---  |
| 14    | 91  | 83  | 86   | 80  | 74  | 78   | 76  | 69  | 74   | --- | --- | ---  |
| 15    | 86  | 70  | 83   | 77  | 72  | 74   | 85  | 74  | 80   | --- | --- | ---  |
| 16    | 89  | 80  | 86   | 76  | 72  | 75   | 85  | 69  | 76   | --- | --- | ---  |
| 17    | 85  | 80  | 83   | 76  | 73  | 75   | 79  | 69  | 73   | --- | --- | ---  |
| 18    | 88  | 81  | 84   | 74  | 69  | 72   | 83  | 74  | 79   | --- | --- | ---  |
| 19    | 88  | 80  | 84   | 78  | 72  | 74   | 87  | 80  | 83   | --- | --- | ---  |
| 20    | 85  | 79  | 82   | 80  | 74  | 76   | 86  | 77  | 82   | --- | --- | ---  |
| 21    | 84  | 78  | 81   | 81  | 74  | 77   | 86  | 78  | 82   | 78  | 2   | 32   |
| 22    | 85  | 75  | 79   | 82  | 76  | 79   | 87  | 75  | 82   | 67  | 0   | 11   |
| 23    | 83  | 75  | 79   | 81  | 74  | 77   | 82  | 70  | 76   | 103 | 1   | 60   |
| 24    | 81  | 76  | 78   | 80  | 73  | 76   | 91  | 71  | 79   | 95  | 46  | 76   |
| 25    | 81  | 76  | 79   | 79  | 75  | 77   | 81  | 74  | 76   | 90  | 49  | 75   |
| 26    | 81  | 77  | 79   | 81  | 73  | 76   | 80  | 71  | 75   | 84  | 9   | 42   |
| 27    | 82  | 77  | 81   | 83  | 74  | 78   | 84  | 74  | 78   | 23  | 0   | 9    |
| 28    | 77  | 72  | 74   | 83  | 73  | 78   | 82  | 73  | 77   | 9   | 0   | 4    |
| 29    | 82  | 73  | 77   | 84  | 78  | 81   | 88  | 69  | 74   | 26  | 0   | 2    |
| 30    | --- | --- | ---  | 82  | 76  | 78   | 92  | 70  | 75   | 74  | 0   | 30   |
| 31    | --- | --- | ---  | 89  | 72  | 77   | --- | --- | ---  | 56  | 11  | 37   |
| MONTH | 101 | 70  | 86   | 89  | 63  | 78   | 101 | 43  | 80   | --- | --- | ---  |

## 02092162 NEUSE RIVER AT NEW BERN, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 52  | 0   | 16   | 27  | 0   | 6    | 117 | 12  | 78   | --- | --- | ---  |
| 2     | 46  | 0   | 4    | 28  | 0   | 5    | 97  | 25  | 53   | --- | --- | ---  |
| 3     | 35  | 0   | 4    | 5   | 0   | 0    | 85  | 31  | 70   | --- | --- | ---  |
| 4     | 106 | 0   | 32   | 15  | 0   | 2    | 61  | 10  | 32   | --- | --- | ---  |
| 5     | 74  | 31  | 53   | 44  | 0   | 11   | 34  | 5   | 10   | --- | --- | ---  |
| 6     | 39  | 15  | 24   | 1   | 0   | 0    | 62  | 5   | 25   | --- | --- | ---  |
| 7     | 29  | 1   | 10   | 6   | 0   | 1    | 30  | 8   | 15   | --- | --- | ---  |
| 8     | 6   | 0   | 0    | 34  | 0   | 5    | 10  | 8   | 8    | --- | --- | ---  |
| 9     | 16  | 0   | 4    | 9   | 0   | 2    | 10  | 8   | 9    | --- | --- | ---  |
| 10    | 48  | 0   | 8    | 3   | 1   | 1    | 20  | 8   | 9    | --- | --- | ---  |
| 11    | 61  | 0   | 7    | 1   | 1   | 1    | 48  | 8   | 13   | --- | --- | ---  |
| 12    | 44  | 0   | 12   | 26  | 1   | 4    | 72  | 3   | 22   | --- | --- | ---  |
| 13    | 58  | 0   | 17   | 28  | 1   | 4    | 88  | 6   | 59   | --- | --- | ---  |
| 14    | 76  | 19  | 49   | 5   | 0   | 0    | 77  | 10  | 49   | --- | --- | ---  |
| 15    | 69  | 53  | 64   | 3   | 0   | 0    | 60  | 32  | 46   | --- | --- | ---  |
| 16    | 85  | 65  | 74   | 0   | 0   | 0    | 60  | 27  | 47   | --- | --- | ---  |
| 17    | 83  | 73  | 77   | 1   | 0   | 0    | 55  | 1   | 37   | --- | --- | ---  |
| 18    | 95  | 70  | 80   | 19  | 0   | 0    | 57  | 44  | 49   | --- | --- | ---  |
| 19    | 92  | 1   | 31   | 1   | 0   | 0    | 52  | 42  | 47   | --- | --- | ---  |
| 20    | 4   | 1   | 1    | 4   | 0   | 0    | 59  | 42  | 50   | --- | --- | ---  |
| 21    | 15  | 1   | 2    | 32  | 0   | 2    | 63  | 54  | 57   | --- | --- | ---  |
| 22    | 76  | 1   | 26   | 8   | 1   | 1    | 59  | 50  | 55   | --- | --- | ---  |
| 23    | 82  | 3   | 34   | 86  | 1   | 9    | 52  | 0   | 26   | 60  | 44  | 51   |
| 24    | 18  | 0   | 2    | 56  | 1   | 11   | 2   | 0   | 0    | 71  | 48  | 63   |
| 25    | 45  | 0   | 8    | 1   | 1   | 1    | 52  | 0   | 23   | 73  | 47  | 65   |
| 26    | 67  | 10  | 35   | 1   | 1   | 1    | 52  | 37  | 47   | 73  | 65  | 69   |
| 27    | 37  | 0   | 11   | 68  | 1   | 16   | 63  | 45  | 55   | 75  | 64  | 70   |
| 28    | 24  | 0   | 5    | 93  | 1   | 45   | 62  | 44  | 52   | 84  | 68  | 75   |
| 29    | 23  | 1   | 8    | 93  | 10  | 48   | 67  | 43  | 54   | 86  | 73  | 80   |
| 30    | 18  | 0   | 4    | 82  | 4   | 30   | 74  | 62  | 67   | 79  | 65  | 73   |
| 31    | --- | --- | ---  | 121 | 3   | 43   | 63  | 54  | 59   | --- | --- | ---  |
| MONTH | 106 | 0   | 23   | 121 | 0   | 8    | 117 | 0   | 39   | --- | --- | ---  |

02092500 TRENT RIVER NEAR TRENTON, NC

LOCATION.--Lat 35°03'51", long 77°27'41", Jones County, Hydrologic Unit 03020204, on left bank 50 ft downstream of Free 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>.

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

GAGE.--Water-stage recorder. Datum of gage is 19.15 ft above NGVD of 1929. Prior to Mar. 21, 1951, nonrecording gage on bridge 50 ft upstream at same datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. 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. Minimum discharge for period of record also occurred Oct. 24, 25, 26, 1974. Minimum discharge for current water year also occurred May 30.

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.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|--------|--------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 102    | 1,980  | 102    | 184   | 139   | 684   | 64    | 81    | 21    | 190   | 48     | 267   |
| 2     | 92     | 1,380  | 91     | 162   | 127   | 590   | 71    | 252   | 22    | 170   | 53     | 371   |
| 3     | 82     | 949    | 83     | 148   | 116   | 469   | 69    | 579   | 22    | 177   | 182    | 398   |
| 4     | 75     | 684    | 79     | 137   | 113   | 362   | 64    | 1,050 | 21    | 281   | 246    | 351   |
| 5     | 66     | 540    | 109    | 128   | 113   | 275   | 58    | 1,420 | 23    | 370   | 253    | 274   |
| 6     | 57     | 414    | 174    | 121   | 111   | 217   | 53    | 1,480 | 56    | 436   | 434    | 203   |
| 7     | 48     | 359    | 217    | 116   | 120   | 181   | 49    | 1,080 | 87    | 442   | 547    | 183   |
| 8     | 44     | 381    | 221    | 109   | 129   | 157   | 45    | 767   | 101   | 388   | 541    | 193   |
| 9     | 232    | 396    | 207    | 103   | 122   | 139   | 43    | 537   | 100   | 316   | 449    | 201   |
| 10    | 439    | 382    | 191    | 103   | 109   | 126   | 41    | 352   | 111   | 210   | 299    | 213   |
| 11    | 557    | 349    | 403    | 103   | 99    | 114   | 64    | 208   | 153   | 145   | 176    | 226   |
| 12    | 636    | 300    | 520    | 100   | 103   | 102   | 340   | 143   | 197   | 115   | 118    | 230   |
| 13    | 605    | 249    | 695    | 98    | 165   | 92    | 471   | 108   | 240   | 88    | 354    | 212   |
| 14    | 531    | 202    | 919    | 96    | 239   | 83    | 573   | 87    | 264   | 67    | 821    | 173   |
| 15    | 479    | 165    | 1,090  | 93    | 303   | 76    | 591   | 71    | 255   | 52    | 1,790  | 187   |
| 16    | 408    | 139    | 1,220  | 89    | 378   | 81    | 534   | 61    | 211   | 42    | 2,680  | 200   |
| 17    | 333    | 121    | 1,210  | 84    | 458   | 116   | 438   | 53    | 149   | 35    | 3,160  | 156   |
| 18    | 267    | 107    | 1,030  | 83    | 571   | 140   | 327   | 47    | 123   | 32    | 2,370  | 154   |
| 19    | 211    | 106    | 824    | 83    | 613   | 137   | 220   | 42    | 164   | 30    | 1,440  | 179   |
| 20    | 168    | 176    | 653    | 82    | 580   | 123   | 156   | 38    | 205   | 28    | 967    | 183   |
| 21    | 140    | 250    | 521    | 79    | 499   | 108   | 122   | 35    | 236   | 24    | 697    | 166   |
| 22    | 118    | 279    | 424    | 75    | 407   | 97    | 98    | 32    | 233   | 20    | 508    | 142   |
| 23    | 101    | 270    | 350    | 72    | 317   | 91    | 82    | 29    | 182   | 32    | 352    | 116   |
| 24    | 86     | 244    | 324    | 69    | 249   | 83    | 69    | 27    | 185   | 94    | 251    | 96    |
| 25    | 76     | 212    | 341    | 67    | 217   | 72    | 59    | 25    | 200   | 112   | 183    | 79    |
| 26    | 69     | 180    | 353    | 70    | 214   | 64    | 52    | 23    | 197   | 107   | 145    | 65    |
| 27    | 65     | 153    | 349    | 85    | 365   | 59    | 60    | 21    | 173   | 85    | 133    | 60    |
| 28    | 72     | 135    | 320    | 113   | 503   | 58    | 82    | 20    | 148   | 89    | 125    | 63    |
| 29    | 862    | 120    | 280    | 137   | 666   | 56    | 85    | 18    | 160   | 90    | 121    | 73    |
| 30    | 1,580  | 110    | 241    | 147   | ---   | 55    | 76    | 19    | 187   | 72    | 174    | 98    |
| 31    | 2,210  | ---    | 210    | 147   | ---   | 56    | ---   | 20    | ---   | 57    | 211    | ---   |
| TOTAL | 10,811 | 11,332 | 13,751 | 3,283 | 8,145 | 5,063 | 5,056 | 8,725 | 4,426 | 4,396 | 19,828 | 5,512 |
| MEAN  | 349    | 378    | 444    | 106   | 281   | 163   | 169   | 281   | 148   | 142   | 640    | 184   |
| MAX   | 2,210  | 1,980  | 1,220  | 184   | 666   | 684   | 591   | 1,480 | 264   | 442   | 3,160  | 398   |
| MIN   | 44     | 106    | 79     | 67    | 99    | 55    | 41    | 18    | 21    | 20    | 48     | 60    |
| CFSM  | 2.08   | 2.25   | 2.64   | 0.63  | 1.67  | 0.97  | 1.00  | 1.68  | 0.88  | 0.84  | 3.81   | 1.09  |
| IN.   | 2.39   | 2.51   | 3.04   | 0.73  | 1.80  | 1.12  | 1.12  | 1.93  | 0.98  | 0.97  | 4.39   | 1.22  |

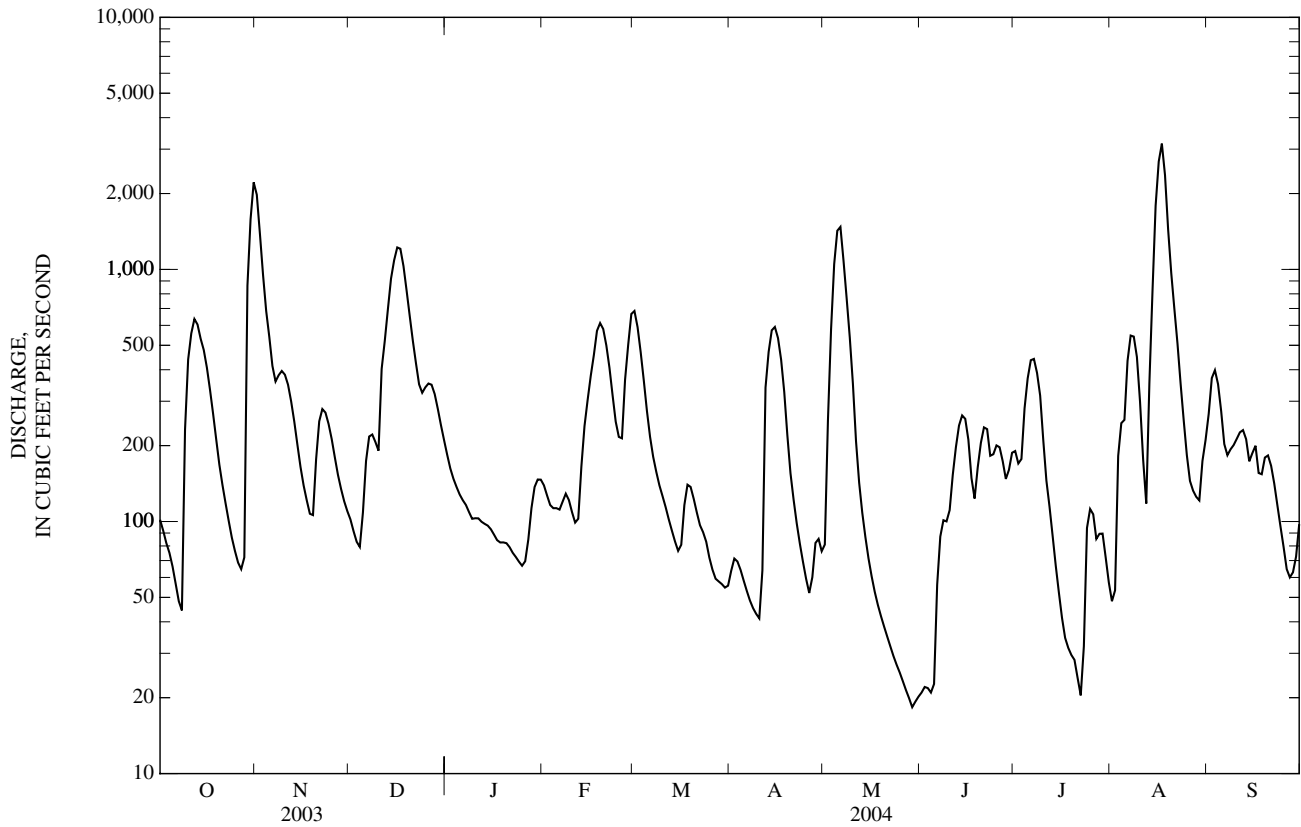
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 111    | 91.7   | 165    | 290    | 325    | 342    | 215    | 120    | 127    | 159    | 178    | 172    |
| MAX  | 864    | 378    | 551    | 703    | 1,024  | 963    | 684    | 435    | 768    | 1,381  | 1,587  | 2,121  |
| (WY) | (1972) | (2004) | (1958) | (1978) | (1998) | (1983) | (1973) | (1978) | (1961) | (1962) | (1955) | (1999) |
| MIN  | 1.58   | 1.80   | 6.65   | 17.2   | 31.8   | 36.5   | 23.1   | 10.2   | 2.77   | 4.78   | 1.81   | 2.55   |
| (WY) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1985) | (1985) | (1993) | (1993) | (1995) |

02092500 TRENT RIVER NEAR TRENTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1951 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 133,417                |        | 100,328             |        | 192                     |              |
| ANNUAL MEAN              | 366                    |        | 274                 |        | 316                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 74.2                    | 1960         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 12,000                  | 2002         |
| HIGHEST DAILY MEAN       | 2,930                  | Jul 16 | 3,160               | Aug 17 | 15,000*                 | Sep 17, 1999 |
| LOWEST DAILY MEAN        | 20                     | Sep 17 | 18                  | May 29 | 0.33                    | Oct 7, 1993  |
| ANNUAL SEVEN-DAY MINIMUM | 26                     | Sep 12 | 20                  | May 27 | 0.39                    | Oct 22, 1973 |
| MAXIMUM PEAK FLOW        |                        |        | 3,280               | Aug 17 | 15,000*                 | Sep 17, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 15.12               | Aug 17 | 22.33*                  | Sep 17, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 17*                 | May 29 | 0.30*                   | Oct 23, 1974 |
| ANNUAL RUNOFF (CFSM)     | 2.18                   |        | 1.63                |        | 1.15                    |              |
| ANNUAL RUNOFF (INCHES)   | 29.54                  |        | 22.22               |        | 15.57                   |              |
| 10 PERCENT EXCEEDS       | 911                    |        | 579                 |        | 477                     |              |
| 50 PERCENT EXCEEDS       | 207                    |        | 148                 |        | 81                      |              |
| 90 PERCENT EXCEEDS       | 52                     |        | 53                  |        | 8.0                     |              |

\* See REMARKS.



## 02092554 TRENT RIVER AT POLLOCKSVILLE, NC

LOCATION.--Lat 35°00'36", long 77°13'08", Jones County, Hydrologic Unit 03020204, at downstream side of bridge on U.S. Highway 17, 0.5 mi downstream from Goshen Branch, and 0.2 mi northeast of Pollocksville.

DRAINAGE AREA.--370 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1996 to current year.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at NGVD of 1929. Prior to Oct. 1999 datum reported as 10 ft below NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for negative daily discharges, which are poor. This site is strongly affected by both astronomical and wind tides. The astronomical tides occur at primary harmonic periods of 12.42 hours and 24.8 hours. Mean daily discharge data for this site may be affected by aliasing due to tides and can contain fluctuations that are not representative of net downstream discharge.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,600 ft<sup>3</sup>/s, Sept. 19, 1999, maximum gage height, 16.29 ft, Sept. 19, 1999, from flood mark; minimum discharge, -3,560 ft<sup>3</sup>/s, Sept. 6, 1996.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,050 ft<sup>3</sup>/s, Aug. 19, maximum gage height, 3.95 ft, Feb. 27; minimum discharge, -818 ft<sup>3</sup>/s, Aug. 3.

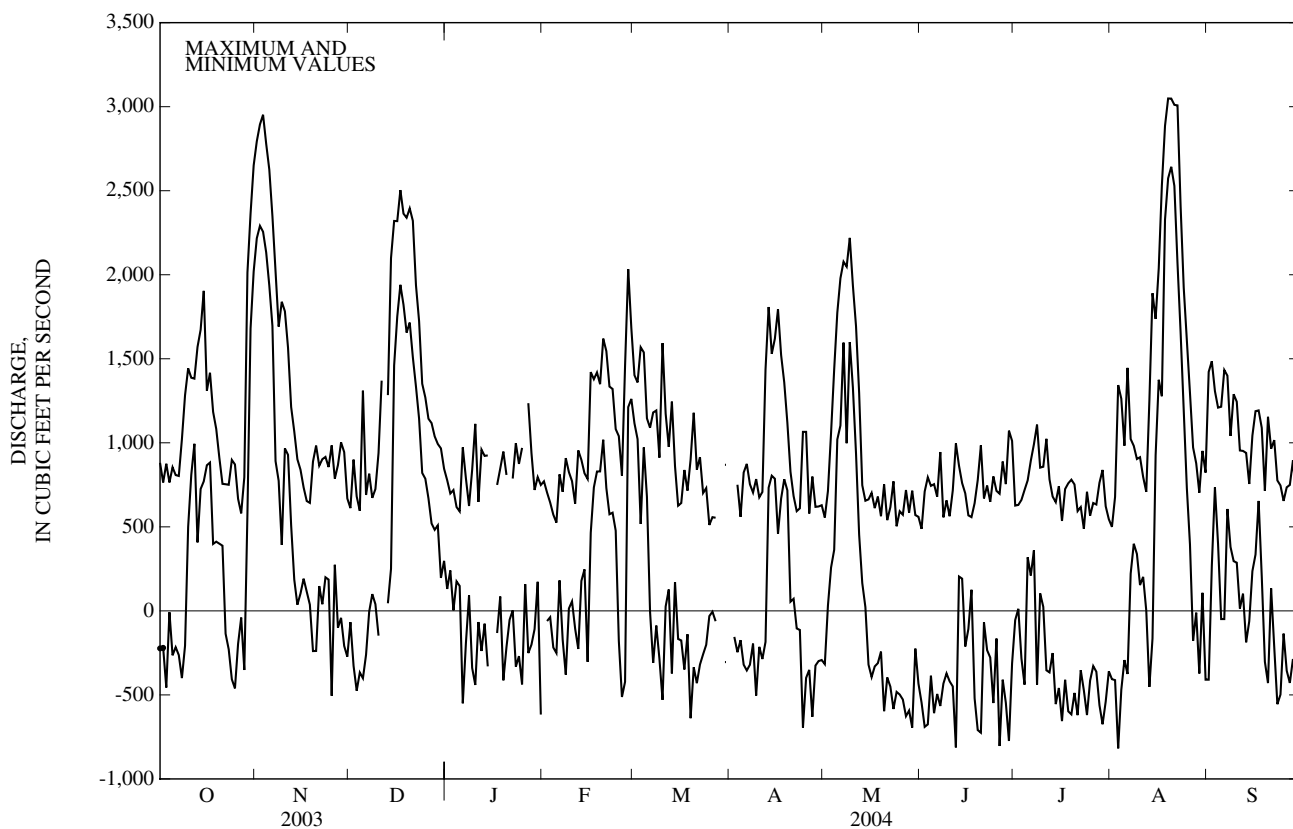
DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | OCTOBER |       | NOVEMBER |       | DECEMBER |       | JANUARY |      | FEBRUARY |       | MARCH |       |
|-------|---------|-------|----------|-------|----------|-------|---------|------|----------|-------|-------|-------|
|       | MAX     | MIN   | MAX      | MIN   | MAX      | MIN   | MAX     | MIN  | MAX      | MIN   | MAX   | MIN   |
| 1     | 881     | -223  | 2,790    | 2,220 | 611      | -67   | 777     | 131  | 771      | ---   | 1,400 | 1,120 |
| 2     | 764     | -220  | 2,890    | 2,290 | 900      | -327  | 698     | 240  | 704      | -61   | 1,360 | 1,020 |
| 3     | 876     | -456  | 2,950    | 2,260 | 681      | -475  | 719     | 2.8  | 644      | -38   | 1,570 | 517   |
| 4     | 764     | -8.1  | 2,780    | 2,130 | 595      | -367  | 618     | 175  | 573      | -218  | 1,540 | 972   |
| 5     | 854     | -264  | 2,630    | 1,940 | 1,310    | -401  | 592     | 148  | 525      | -251  | 1,150 | 679   |
| 6     | 808     | -216  | 2,350    | 1,700 | 690      | -261  | 973     | -550 | 812      | 181   | 1,090 | -5.3  |
| 7     | 803     | -263  | 2,020    | 891   | 816      | -5.3  | 788     | -191 | 708      | -171  | 1,180 | -310  |
| 8     | 1,020   | -400  | 1,690    | 774   | 673      | 100   | 624     | 92   | 909      | -379  | 1,190 | -88   |
| 9     | 1,280   | -208  | 1,840    | 392   | 725      | 40    | 839     | -339 | 826      | 14    | 912   | -284  |
| 10    | 1,440   | 500   | 1,780    | 967   | 939      | -147  | 1,110   | -441 | 772      | 57    | 1,590 | -529  |
| 11    | 1,390   | 810   | 1,570    | 929   | 1,370    | ---   | 648     | -66  | 638      | -106  | 1,170 | 26    |
| 12    | 1,380   | 994   | 1,210    | 509   | ---      | ---   | 959     | -239 | 955      | -227  | 976   | 127   |
| 13    | 1,570   | 407   | 1,070    | 186   | 1,280    | 45    | 922     | -76  | 899      | 178   | 1,250 | -372  |
| 14    | 1,670   | 725   | 902      | 37    | 2,100    | 250   | 925     | -330 | 819      | 247   | 861   | 171   |
| 15    | 1,900   | 771   | 840      | 103   | 2,320    | 1,460 | ---     | ---  | 785      | -303  | 626   | -167  |
| 16    | 1,310   | 866   | 734      | 191   | 2,320    | 1,750 | ---     | ---  | 1,420    | 465   | 642   | -176  |
| 17    | 1,420   | 883   | 654      | 114   | 2,500    | 1,940 | 749     | -132 | 1,380    | 735   | 838   | -349  |
| 18    | 1,180   | 398   | 642      | 37    | 2,360    | 1,820 | 847     | 85   | 1,420    | 829   | 715   | -139  |
| 19    | 1,080   | 412   | 888      | -239  | 2,340    | 1,660 | 948     | -413 | 1,350    | 830   | 901   | -639  |
| 20    | 911     | 400   | 983      | -239  | 2,390    | 1,720 | 809     | -215 | 1,620    | 1,020 | 1,180 | -336  |
| 21    | 756     | 388   | 864      | 148   | 2,320    | 1,510 | ---     | -53  | 1,550    | 731   | 840   | -430  |
| 22    | 753     | -136  | 903      | 39    | 1,940    | 1,330 | 787     | 2.8  | 1,330    | 575   | 915   | -319  |
| 23    | 750     | -229  | 916      | 200   | 1,720    | 1,140 | 997     | -332 | 1,320    | 584   | 701   | -259  |
| 24    | 898     | -407  | 856      | 186   | 1,350    | 821   | 875     | -269 | 1,080    | 477   | 731   | -202  |
| 25    | 871     | -461  | 985      | -505  | 1,270    | 786   | 970     | -437 | 1,040    | -179  | 511   | -31   |
| 26    | 667     | -196  | 787      | 274   | 1,140    | 670   | ---     | 159  | 805      | -512  | 558   | -5.2  |
| 27    | 580     | -40   | 868      | -100  | 1,120    | 520   | 1,240   | -251 | 1,460    | -422  | 554   | -62   |
| 28    | 795     | -352  | 1,000    | -42   | 1,040    | 482   | 939     | -201 | 2,030    | 1,210 | ---   | ---   |
| 29    | 2,010   | 580   | 945      | -209  | 993      | 509   | 720     | -109 | 1,680    | 1,260 | ---   | ---   |
| 30    | 2,360   | 1,680 | 669      | -272  | 967      | 196   | 796     | 173  | ---      | ---   | 869   | -305  |
| 31    | 2,650   | 2,020 | ---      | ---   | 846      | 298   | 749     | -617 | ---      | ---   | ---   | ---   |
| MONTH | 2,650   | -461  | 2,950    | -505  | ---      | ---   | ---     | ---  | 2,030    | ---   | ---   | ---   |

02092554 TRENT RIVER AT POLLOCKSVILLE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX   |      | MIN   |       | MAX    |           | MIN   |      | MAX   |       | MIN   |      |
|-------|-------|------|-------|-------|--------|-----------|-------|------|-------|-------|-------|------|
|       | APRIL | MAY  | JUNE  | JULY  | AUGUST | SEPTEMBER |       |      |       |       |       |      |
| 1     | ---   | ---  | 555   | -317  | 488    | -546      | 626   | -55  | 500   | -406  | 1,420 | -409 |
| 2     | ---   | -155 | 714   | 32    | 710    | -690      | 630   | 12   | 678   | -412  | 1,490 | 266  |
| 3     | 750   | -246 | 1,060 | 258   | 795    | -675      | 660   | -283 | 1,340 | -818  | 1,310 | 734  |
| 4     | 560   | -174 | 1,440 | 363   | 744    | -386      | 719   | -439 | 1,260 | -469  | 1,210 | 398  |
| 5     | 824   | -320 | 1,770 | 1,020 | 754    | -609      | 776   | 319  | 983   | -293  | 1,210 | -49  |
| 6     | 875   | -355 | 1,980 | 1,100 | 679    | -494      | 893   | 210  | 1,450 | -375  | 1,430 | -49  |
| 7     | 753   | -321 | 2,080 | 1,600 | 945    | -566      | 991   | 360  | 1,020 | 221   | 1,400 | 606  |
| 8     | 704   | -195 | 2,050 | 998   | 556    | -432      | 1,110 | -439 | 982   | 399   | 1,040 | 380  |
| 9     | 784   | -504 | 2,220 | 1,600 | 657    | -372      | 852   | 104  | 904   | 339   | 1,290 | 296  |
| 10    | 675   | -214 | 1,940 | 1,330 | 563    | -419      | 858   | 24   | 914   | 154   | 1,240 | 287  |
| 11    | 708   | -287 | 1,690 | 936   | 716    | -450      | 1,020 | -354 | 797   | 202   | 954   | 14   |
| 12    | 1,440 | -185 | 1,300 | 453   | 996    | -812      | 782   | -366 | 708   | 1.4   | 952   | 102  |
| 13    | 1,810 | 733  | 748   | 165   | 863    | 204       | 680   | -251 | 1,250 | -452  | 940   | -187 |
| 14    | 1,530 | 804  | 655   | 23    | 760    | 192       | 647   | -555 | 1,890 | -164  | 755   | -62  |
| 15    | 1,620 | 786  | 663   | -320  | 699    | -212      | 742   | -459 | 1,740 | 926   | 1,040 | 236  |
| 16    | 1,790 | 458  | 702   | -394  | 568    | -108      | 535   | -656 | 2,040 | 1,370 | 1,190 | 335  |
| 17    | 1,520 | 668  | 611   | -331  | 558    | 126       | 725   | -410 | 2,530 | 1,280 | 1,190 | 654  |
| 18    | 1,360 | 783  | 680   | -311  | 641    | -520      | 759   | -598 | 2,890 | 2,330 | 1,090 | 205  |
| 19    | 1,120 | 717  | 563   | -243  | 778    | -709      | 781   | -616 | 3,050 | 2,570 | 714   | -303 |
| 20    | 828   | 54   | 752   | -597  | 985    | -725      | 752   | -488 | 3,050 | 2,640 | 1,150 | -430 |
| 21    | 683   | 72   | 540   | -396  | 669    | -68       | 594   | -621 | 3,010 | 2,530 | 965   | 134  |
| 22    | 593   | -105 | 617   | -451  | 746    | -234      | 617   | -353 | 3,010 | 2,070 | 1,020 | -215 |
| 23    | 610   | -114 | 771   | -584  | 649    | -278      | 488   | -474 | 2,410 | 1,660 | 776   | -555 |
| 24    | 1,070 | -694 | 503   | -482  | 800    | -549      | 709   | -620 | 1,920 | 1,200 | 746   | -498 |
| 25    | 1,070 | -399 | 593   | -498  | 714    | -165      | 566   | -415 | 1,610 | 730   | 654   | -135 |
| 26    | 579   | -351 | 572   | -528  | 697    | -804      | 642   | -328 | 1,300 | 395   | 735   | -356 |
| 27    | 799   | -630 | 719   | -627  | 888    | -410      | 633   | -362 | 972   | -179  | 749   | -429 |
| 28    | 619   | -325 | 584   | -593  | 754    | -547      | 762   | -561 | 878   | -11   | 895   | -287 |
| 29    | 621   | -299 | 715   | -694  | 1,070  | -774      | 838   | -675 | 703   | -373  | 673   | -412 |
| 30    | 629   | -292 | 570   | -225  | 1,010  | -313      | 622   | -540 | 952   | 107   | 941   | -662 |
| 31    | ---   | ---  | 560   | -433  | ---    | ---       | 545   | -360 | 823   | -409  | ---   | ---  |
| MONTH | ---   | ---  | 2,220 | -694  | 1,070  | -812      | 1,110 | -675 | 3,050 | -818  | 1,490 | -662 |





## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11

LOCATION.--Lat. 34°59'57", long. 76°56'35", Craven County, Hydrologic Unit 03020204, at U.S. Coast Guard Channel Light 11.

PERIOD OF RECORD.--Water years 1989 to 1993, 1996 to current year.

## PERIOD OF DAILY RECORD.--

SALINITY (TOP AND BOTTOM): May to December 1989, January 1991 to July 1993, June 1996 to current year.

pH (TOP AND BOTTOM): June 1996 to current year.

WATER TEMPERATURE (TOP): May to December 1989, January 1991 to July 1993, June 1996 to current year.

WATER TEMPERATURE (BOTTOM): June 1996 to current year.

DISSOLVED OXYGEN (TOP AND BOTTOM): May to December 1989, January 1991 to July 1993, June 1996 to current year.

DISSOLVED OXYGEN (MID): May to December 1989, January 1991 to July 1993.

DISSOLVED OXYGEN, PERCENT SATURATION, (TOP AND BOTTOM): May to December 1989, January 1991 to July 1993, June 1996 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION, (MID): May to December 1989, January 1991 to July 1993.

INSTRUMENTATION.-- Water-quality monitor from May to December 1989, January 1991 to July 1993. Constituents monitored were: specific conductance, top and bottom, water temperature top, dissolved oxygen, top, mid-depth and bottom. Water-quality monitor with satellite telemetry from June 1996 to current year. Constituents monitored were the same as previous water years except, mid-depth dissolved oxygen was not measured, water temperature, bottom, was added as well as pH top and bottom.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. The monitor was removed on August 29, 1999 to prevent possible destruction of the equipment during Hurricanes Dennis and Floyd. It was reinstalled October 6, 1999. The monitor was removed on September 15, 2003 to prevent possible destruction of the equipment during Hurricane Isabel. It was relocated approximately 150 feet west-southwest of old site on September 19, 2003. Prior to June 1996, top constituents were monitored at 10 feet above streambed, mid constituents at 6 feet above streambed, and bottom constituents 2 feet above streambed. Beginning in June 1996 top constituents were monitored at 8 feet above streambed, and bottom constituents 2 feet above streambed. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water-Supply Paper 2311. The dissolved oxygen percent saturation is computed using a barometric pressure of 760 mm of Hg beginning October 1, 2000. Salinity, minimum extremes are reported as <0.1 ppt. Dissolved oxygen minimum extremes are reported as <1.0 mg/L. Dissolved oxygen, percent saturation minimum extremes are reported as <10%.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                     | MAXIMUM RECORDED        | MINIMUM RECORDED                     |
|---------------------------------|-------------------------|--------------------------------------|
| SALINITY (TOP), ppt             | 23.5, July 31           | <0.1, on many days during the period |
| SALINITY (BOTOM), ppt           | 24.6, July 31           | <0.1, on many days during the period |
| pH (TOP), standard units        | 9.9, March 17, 1999     | 5.7, February 16, 1998               |
| pH (BOTTOM), standard units     | 9.6, April 3, 2004      | 4.3, August 21, 2003                 |
| WATER TEMPERATURE (TOP), °C     | 33.3, August 1, 1999    | 0.6, January 25, 2003                |
| WATER TEMPERATURE (BOTTOM), °C  | 30.7, August 2, 2002    | 1.2, January 24, 2003                |
| DISSOLVED OXYGEN (TOP), mg/L    | 20.0, February 18, 1992 | <1.0, on many days during the period |
| DISSOLVED OXYGEN (BOTTOM), mg/L | 21.2, February 20, 1991 | <1.0, on many days during the period |

## EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                                     | MAXIMUM RECORDED  | MINIMUM RECORDED                      |
|---|-------------------|---------------------------------------|
| SALINITY (TOP), ppt                             | 18.1, July 15, 16 | <0.1, on several days during the year |
| SALINITY (BOTTOM), ppt                          | 21.2, July 16     | <0.1, September 17, 18                |
| pH (TOP), standard units                        | 9.5, March 24     | 6.5, November 5, 6, 7                 |
| pH (BOTTOM), standard units                     | 9.6, April 13     | 6.2, February 20                      |
| WATER TEMPERATURE (TOP), °C                     | 30.8, July 6      | 3.0, February 1                       |
| WATER TEMPERATURE (BOTTOM), °C                  | 29.5, August 2    | 3.0, February 2                       |
| DISSOLVED OXYGEN (TOP), mg/L                    | 15.6, February 20 | <1.0, on several days during the year |
| DISSOLVED OXYGEN (BOTTOM), mg/L                 | 14.2, January 21  | <1.0, on many days during the year    |
| DISSOLVED OXYGEN, PERCENT SATURATION (TOP),%    | 152, October 19   | <10, on several days during the year  |
| DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM),% | 128, May 8        | <10, on many days during the year     |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 3.7      | 2.9  | 3.4  | 0.9   | 0.2  | 0.4  | 4.6   | 3.2  | 3.7  | 1.8  | 1.0  | 1.4  |
| 2     | 3.3      | 2.8  | 3.1  | 0.3   | 0.1  | 0.2  | 4.0   | 3.7  | 3.8  | 1.9  | 1.1  | 1.4  |
| 3     | 3.9      | 2.7  | 3.3  | 0.4   | 0.2  | 0.3  | 3.8   | 3.3  | 3.5  | 4.4  | 1.3  | 1.6  |
| 4     | 3.5      | 1.8  | 2.5  | 0.2   | 0.09 | 0.2  | 3.8   | 3.4  | 3.5  | 8.2  | 1.1  | 4.6  |
| 5     | 3.3      | 2.3  | 2.6  | 0.4   | 0.08 | 0.2  | 3.8   | 2.9  | 3.1  | 10.6 | 6.8  | 9.2  |
| 6     | 2.4      | 2.1  | 2.3  | 0.5   | 0.1  | 0.2  | 4.0   | 2.1  | 3.3  | 10.5 | 4.0  | 6.1  |
| 7     | 2.6      | 2.2  | 2.4  | 0.9   | 0.2  | 0.6  | 3.2   | 2.2  | 2.9  | 7.6  | 5.2  | 6.6  |
| 8     | 3.1      | 2.4  | 2.7  | 1.1   | 0.5  | 0.9  | 3.2   | 2.4  | 2.7  | 6.7  | 5.0  | 5.8  |
| 9     | 3.2      | 2.6  | 2.9  | 2.6   | 1.0  | 1.5  | 2.9   | 2.4  | 2.7  | 6.6  | 5.0  | 5.6  |
| 10    | 3.0      | 2.6  | 2.8  | 3.0   | 1.6  | 2.0  | 3.0   | 2.1  | 2.6  | 6.7  | 5.5  | 6.5  |
| 11    | 2.8      | 2.4  | 2.6  | 1.7   | 0.6  | 1.0  | 2.8   | 2.0  | 2.4  | 7.1  | 4.6  | 6.2  |
| 12    | 3.1      | 2.4  | 2.9  | 2.3   | 0.7  | 1.8  | 2.7   | 1.6  | 2.2  | 7.3  | 4.9  | 6.4  |
| 13    | 2.8      | 2.0  | 2.5  | 4.0   | 2.1  | 2.8  | 2.8   | 1.7  | 2.2  | 7.1  | 5.2  | 6.0  |
| 14    | 3.4      | 2.6  | 3.0  | 3.9   | 2.3  | 2.8  | 2.8   | 1.0  | 1.6  | 6.4  | 5.2  | 5.9  |
| 15    | 3.8      | 2.3  | 3.1  | 2.5   | 1.9  | 2.2  | 1.5   | 0.7  | 1.1  | 6.4  | 5.6  | 5.9  |
| 16    | 3.2      | 1.9  | 2.3  | 2.2   | 1.7  | 2.1  | 1.2   | 0.3  | 0.6  | 6.1  | 5.2  | 5.7  |
| 17    | 2.5      | 2.1  | 2.4  | 2.4   | 1.6  | 2.0  | 0.5   | 0.09 | 0.3  | 5.7  | 5.0  | 5.4  |
| 18    | 2.6      | 1.8  | 2.4  | 2.4   | 1.7  | 2.0  | 1.0   | 0.2  | 0.5  | 5.1  | 4.3  | 4.7  |
| 19    | 2.6      | 1.9  | 2.2  | 2.5   | 1.7  | 2.0  | 1.6   | 0.2  | 0.7  | 5.9  | 4.8  | 5.3  |
| 20    | 2.4      | 1.2  | 1.6  | 2.0   | 1.7  | 1.9  | 2.2   | 1.6  | 1.8  | 5.1  | 4.6  | 4.8  |
| 21    | 3.7      | 1.1  | 2.5  | 2.1   | 1.4  | 1.8  | 2.0   | 1.2  | 1.7  | 5.0  | 3.5  | 4.4  |
| 22    | 4.2      | 3.4  | 3.8  | 2.4   | 1.4  | 1.8  | 1.8   | 0.7  | 1.3  | 5.5  | 3.4  | 4.4  |
| 23    | 4.0      | 2.3  | 3.3  | 2.1   | 1.4  | 1.7  | 1.6   | 0.9  | 1.3  | 5.4  | 4.5  | 5.0  |
| 24    | 3.4      | 3.0  | 3.2  | 2.0   | 1.0  | 1.5  | 1.4   | 0.3  | 0.9  | 5.4  | 5.2  | 5.2  |
| 25    | 3.4      | 2.2  | 2.9  | 3.0   | 1.4  | 2.6  | 1.9   | 0.4  | 1.1  | 5.2  | 5.1  | 5.2  |
| 26    | 2.9      | 2.2  | 2.7  | 2.2   | 1.7  | 1.9  | 2.1   | 1.8  | 2.0  | 5.3  | 4.4  | 4.9  |
| 27    | 3.1      | 2.0  | 2.6  | 2.6   | 1.5  | 1.9  | 2.1   | 1.8  | 1.9  | 4.8  | 3.8  | 4.5  |
| 28    | 2.9      | 2.3  | 2.6  | 2.6   | 1.4  | 2.1  | 1.9   | 0.8  | 1.4  | 4.9  | 3.9  | 4.4  |
| 29    | 2.9      | 2.0  | 2.3  | 5.4   | 1.7  | 3.9  | 1.6   | 0.9  | 1.2  | 5.2  | 3.9  | 5.0  |
| 30    | 2.1      | 1.5  | 1.9  | 4.3   | 3.1  | 3.3  | 4.5   | 1.2  | 2.0  | 5.2  | 4.0  | 4.8  |
| 31    | 1.9      | 0.8  | 1.3  | ---   | ---  | ---  | 2.1   | 1.4  | 1.5  | 4.8  | 3.9  | 4.4  |
| MONTH | 4.2      | 0.8  | 2.6  | 5.4   | 0.08 | 1.7  | 4.6   | 0.09 | 2.0  | 10.6 | 1.0  | 5.1  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 4.4      | 3.1  | 3.9  | 0.5   | 0.05 | 0.2  | 2.9   | 1.4  | 2.1  | 2.2  | 1.4  | 1.7  |
| 2     | 3.9      | 3.4  | 3.7  | 1.0   | 0.2  | 0.5  | 3.6   | 2.6  | 3.1  | 1.6  | 1.0  | 1.3  |
| 3     | 3.9      | 3.4  | 3.5  | 0.6   | 0.06 | 0.2  | 3.3   | 2.6  | 2.8  | 1.7  | 0.9  | 1.1  |
| 4     | 3.6      | 2.6  | 3.2  | 0.8   | 0.1  | 0.4  | 3.1   | 2.6  | 2.7  | 2.4  | 1.3  | 1.9  |
| 5     | 3.7      | 3.0  | 3.4  | 0.9   | 0.3  | 0.6  | 3.4   | 2.0  | 3.0  | 5.3  | 1.5  | 3.7  |
| 6     | 3.3      | 2.5  | 2.9  | 2.5   | 0.4  | 1.4  | 2.7   | 2.3  | 2.5  | 3.1  | 1.1  | 2.0  |
| 7     | 3.3      | 2.2  | 2.7  | 1.4   | 0.7  | 1.1  | 3.2   | 2.5  | 2.8  | 3.6  | 0.6  | 1.1  |
| 8     | 4.1      | 2.3  | 3.3  | 4.1   | 0.8  | 2.6  | 3.2   | 2.7  | 3.0  | 3.3  | 1.1  | 1.9  |
| 9     | 3.2      | 2.1  | 2.8  | 3.9   | 0.8  | 1.3  | 3.3   | 2.7  | 3.1  | 2.0  | 1.0  | 1.4  |
| 10    | 2.2      | 1.8  | 2.1  | 2.5   | 1.1  | 1.8  | 3.2   | 2.8  | 3.0  | 3.3  | 1.2  | 1.7  |
| 11    | 2.0      | 1.5  | 1.8  | 2.4   | 1.2  | 1.9  | 3.1   | 2.8  | 2.9  | 2.4  | 0.9  | 1.7  |
| 12    | 2.4      | 1.7  | 2.2  | 4.4   | 1.5  | 2.6  | 3.5   | 2.4  | 3.1  | 1.6  | 0.6  | 1.1  |
| 13    | 2.4      | 1.8  | 2.2  | 2.7   | 1.2  | 2.2  | 2.5   | 0.8  | 1.9  | 1.1  | 0.2  | 0.6  |
| 14    | 2.2      | 1.2  | 1.5  | 2.8   | 1.9  | 2.5  | 2.1   | 0.9  | 1.5  | 3.4  | 0.4  | 0.9  |
| 15    | 2.2      | 1.2  | 1.5  | 3.3   | 1.6  | 2.4  | 2.3   | 1.2  | 1.9  | 7.5  | 0.5  | 2.3  |
| 16    | 3.7      | 1.9  | 2.7  | 2.6   | 2.0  | 2.4  | 2.0   | 1.0  | 1.4  | 6.8  | 0.9  | 2.7  |
| 17    | 3.6      | 2.5  | 2.8  | 2.6   | 2.0  | 2.3  | 1.5   | 0.7  | 1.0  | 4.4  | 1.0  | 1.3  |
| 18    | 3.2      | 1.8  | 2.4  | 2.4   | 1.4  | 2.0  | 1.7   | 0.4  | 0.9  | 1.9  | 0.9  | 1.2  |
| 19    | 2.4      | 1.2  | 1.6  | 3.6   | 1.7  | 2.5  | 1.0   | 0.5  | 0.7  | 9.3  | 1.2  | 3.7  |
| 20    | 2.2      | 1.2  | 1.6  | 3.5   | 1.9  | 2.5  | 1.1   | 0.4  | 0.6  | 14.1 | 2.9  | 6.6  |
| 21    | 2.7      | 1.2  | 1.9  | 3.0   | 1.3  | 2.3  | 1.1   | 0.3  | 0.6  | 14.4 | 4.8  | 9.6  |
| 22    | 2.2      | 0.8  | 1.7  | 2.8   | 1.9  | 2.3  | 1.2   | 0.6  | 0.9  | 14.6 | 7.5  | 10.9 |
| 23    | 1.3      | 0.8  | 1.0  | 2.3   | 1.0  | 1.7  | 1.0   | 0.4  | 0.8  | 13.4 | 8.3  | 11.0 |
| 24    | 1.1      | 0.7  | 0.9  | 1.7   | 0.6  | 1.1  | 2.9   | 0.4  | 1.5  | 15.2 | 8.1  | 11.9 |
| 25    | 0.9      | 0.6  | 0.7  | 1.8   | 0.4  | 1.1  | 2.8   | 1.3  | 2.1  | 12.2 | 9.8  | 11.2 |
| 26    | 1.7      | 0.6  | 1.0  | 1.4   | 0.7  | 1.1  | 1.3   | 0.5  | 0.9  | 15.0 | 9.2  | 11.3 |
| 27    | 2.3      | 0.8  | 1.8  | 1.5   | 0.3  | 0.6  | 2.8   | 1.2  | 1.8  | 13.8 | 7.7  | 10.3 |
| 28    | 1.9      | 0.08 | 0.5  | 2.2   | 0.6  | 1.3  | 2.9   | 1.8  | 2.2  | 14.7 | 10.6 | 12.8 |
| 29    | 0.5      | 0.01 | 0.07 | 2.4   | 1.3  | 1.8  | 2.6   | 1.0  | 1.4  | 12.9 | 10.6 | 11.6 |
| 30    | ---      | ---  | ---  | 2.7   | 1.3  | 1.8  | 2.3   | 0.9  | 1.5  | 12.8 | 11.3 | 12.0 |
| 31    | ---      | ---  | ---  | 2.3   | 1.2  | 1.8  | ---   | ---  | ---  | 12.0 | 11.1 | 11.6 |
| MONTH | 4.4      | 0.01 | 2.1  | 4.4   | 0.05 | 1.6  | 3.6   | 0.3  | 1.9  | 15.2 | 0.2  | 5.3  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |     |      |
|-------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|-----|------|
|       |      |      |      | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
| 1     | 12.6 | 11.0 | 12.1 | 12.0 | 7.6  | 9.4  | 13.1 | 12.8 | 13.0 | 3.0    | 2.0  | 2.2  |           |     |      |
| 2     | 12.8 | 10.7 | 11.8 | 11.5 | 8.5  | 9.8  | 13.1 | 12.6 | 12.9 | 3.6    | 2.7  | 3.2  |           |     |      |
| 3     | 12.7 | 11.3 | 12.2 | 13.7 | 7.1  | 9.9  | 14.2 | 12.1 | 13.4 | 3.3    | 2.0  | 2.5  |           |     |      |
| 4     | 12.4 | 10.2 | 11.7 | 12.3 | 6.6  | 9.4  | 14.9 | 10.7 | 12.5 | 2.2    | 1.4  | 1.8  |           |     |      |
| 5     | 12.4 | 10.8 | 11.4 | 13.1 | 6.9  | 8.8  | 14.8 | 12.2 | 13.8 | 2.2    | 1.4  | 1.8  |           |     |      |
| 6     | 12.4 | 10.9 | 11.7 | 16.2 | 6.3  | 10   | 14.2 | 11.9 | 13.5 | 2.1    | 1.4  | 1.5  |           |     |      |
| 7     | 12.4 | 10.6 | 11.7 | 15.9 | 6.3  | 11.9 | 13.7 | 10.6 | 12.5 | 1.6    | 1.3  | 1.5  |           |     |      |
| 8     | 12.9 | 10.2 | 11.4 | 14.8 | 10.7 | 12.5 | 15.4 | 7.9  | 12.2 | 1.7    | 0.8  | 1.3  |           |     |      |
| 9     | 12.0 | 9.8  | 10.9 | 15.6 | 11.3 | 12.8 | 15.3 | 9.5  | 11.9 | 1.0    | 0.4  | 0.6  |           |     |      |
| 10    | 13.3 | 10.4 | 11.7 | 17.6 | 9.7  | 12.9 | 13.6 | 9.0  | 11.2 | 0.7    | 0.4  | 0.6  |           |     |      |
| 11    | 14.3 | 8.7  | 12.2 | 15.5 | 8.1  | 10.6 | 12.4 | 9.1  | 10.9 | 0.8    | 0.5  | 0.6  |           |     |      |
| 12    | ---  | ---  | ---  | 12.2 | 8.3  | 9.9  | 11.1 | 8.2  | 9.6  | 0.8    | 0.5  | 0.6  |           |     |      |
| 13    | ---  | ---  | ---  | 17.2 | 8.8  | 12.1 | 11.1 | 8.2  | 9.6  | 0.8    | 0.5  | 0.6  |           |     |      |
| 14    | ---  | ---  | ---  | 17.5 | 12.1 | 14.6 | 11.1 | 7.4  | 9.7  | 0.8    | 0.4  | 0.6  |           |     |      |
| 15    | ---  | ---  | ---  | 18.1 | 10.1 | 14.1 | 9.3  | 6.7  | 8.3  | 0.5    | 0.10 | 0.3  |           |     |      |
| 16    | ---  | ---  | ---  | 18.1 | 11.8 | 13.0 | 8.6  | 4.3  | 5.8  | 0.2    | 0.09 | 0.1  |           |     |      |
| 17    | ---  | ---  | ---  | 15.1 | 12.0 | 13.2 | 5.7  | 3.5  | 4.7  | 0.2    | 0.06 | 0.1  |           |     |      |
| 18    | ---  | ---  | ---  | 14.4 | 12.9 | 13.8 | 5.1  | 2.9  | 4.4  | 0.4    | 0.05 | 0.1  |           |     |      |
| 19    | ---  | ---  | ---  | 15.1 | 12.0 | 13.1 | 5.0  | 1.4  | 3.3  | 1.7    | 0.1  | 0.6  |           |     |      |
| 20    | ---  | ---  | ---  | 14.6 | 11.2 | 12.5 | 8.8  | 1.6  | 3.7  | 2.3    | 0.8  | 1.5  |           |     |      |
| 21    | ---  | ---  | ---  | 13.1 | 11.1 | 11.6 | 8.3  | 1.1  | 2.7  | 2.4    | 0.7  | 1.4  |           |     |      |
| 22    | ---  | ---  | ---  | 15.0 | 10.9 | 12.6 | 8.5  | 1.6  | 2.7  | 1.1    | 0.4  | 0.6  |           |     |      |
| 23    | ---  | ---  | ---  | 15.1 | 12.0 | 13.4 | 3.2  | 1.2  | 2.2  | 2.2    | 0.2  | 0.5  |           |     |      |
| 24    | ---  | ---  | ---  | 13.3 | 12.2 | 12.7 | 3.3  | 1.9  | 2.6  | 2.4    | 0.7  | 1.4  |           |     |      |
| 25    | 13.0 | 6.8  | 9.3  | 14.1 | 11.5 | 13.1 | 3.9  | 2.3  | 3.0  | 2.1    | 1.0  | 1.6  |           |     |      |
| 26    | 12.6 | 10.1 | 11.4 | 14.8 | 11.3 | 13.3 | 4.0  | 2.0  | 2.3  | 1.8    | 0.9  | 1.3  |           |     |      |
| 27    | 13.1 | 7.9  | 10.3 | 14.7 | 13.1 | 13.6 | 2.1  | 1.8  | 2.0  | 1.9    | 0.9  | 1.1  |           |     |      |
| 28    | 11.8 | 8.3  | 10.4 | 13.5 | 12.4 | 12.9 | 1.9  | 1.3  | 1.6  | 1.8    | 0.4  | 1.0  |           |     |      |
| 29    | 10.8 | 8.0  | 9.3  | 14.3 | 12.6 | 13.1 | 2.9  | 1.4  | 1.9  | 1.7    | 0.7  | 1.4  |           |     |      |
| 30    | 10.3 | 7.3  | 8.8  | 13.5 | 12.1 | 13.0 | 2.5  | 1.3  | 1.9  | 1.9    | 1.3  | 1.6  |           |     |      |
| 31    | ---  | ---  | ---  | 13.9 | 12.4 | 13.3 | 2.5  | 1.8  | 2.2  | ---    | ---  | ---  |           |     |      |
| MONTH | ---  | ---  | ---  | 18.1 | 6.3  | 12.2 | 15.4 | 1.1  | 7.2  | 3.6    | 0.05 | 1.1  |           |     |      |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|------|------|------|------|------|
|       |          |     |      |       |     |      |       |      |      |      |      |      |
| 1     | 3.7      | 3.4 | 3.5  | 3.9   | 1.2 | 2.8  | 5.0   | 3.7  | 4.4  | 10.6 | 7.7  | 10.2 |
| 2     | 3.6      | 2.9 | 3.2  | 4.3   | 2.6 | 3.8  | 4.0   | 3.7  | 3.9  | 10.4 | 7.1  | 9.6  |
| 3     | 4.0      | 3.1 | 3.7  | 4.2   | 0.8 | 3.3  | 3.9   | 3.4  | 3.6  | 10.4 | 7.5  | 9.7  |
| 4     | 5.4      | 3.9 | 4.6  | 3.5   | 1.0 | 2.5  | 3.8   | 3.4  | 3.6  | 11.1 | 8.5  | 10.2 |
| 5     | 5.5      | 2.9 | 4.6  | 2.9   | 1.1 | 2.0  | 3.9   | 2.9  | 3.4  | 11.2 | 8.5  | 10.6 |
| 6     | 5.0      | 4.0 | 4.9  | 4.0   | 1.0 | 2.6  | 4.1   | 3.1  | 3.7  | 11.2 | 5.8  | 9.0  |
| 7     | 5.0      | 4.1 | 4.7  | 5.7   | 3.3 | 4.5  | 4.0   | 2.8  | 3.5  | 8.9  | 5.3  | 7.2  |
| 8     | 4.6      | 2.8 | 3.6  | 5.6   | 0.5 | 2.6  | 3.8   | 3.0  | 3.4  | 10   | 6.5  | 7.9  |
| 9     | 3.4      | 2.8 | 3.1  | 3.4   | 1.2 | 1.7  | 4.6   | 3.5  | 3.9  | 9.7  | 4.0  | 7.0  |
| 10    | 3.0      | 2.6 | 2.8  | 3.2   | 1.8 | 2.2  | 4.7   | 2.7  | 3.7  | 6.8  | 4.5  | 5.8  |
| 11    | 3.2      | 2.4 | 2.8  | 5.7   | 1.5 | 3.0  | 3.0   | 2.0  | 2.4  | 7.8  | 4.9  | 6.8  |
| 12    | 3.6      | 3.0 | 3.4  | 5.7   | 2.6 | 4.5  | 3.6   | 2.6  | 3.1  | 8.5  | 5.7  | 7.3  |
| 13    | 3.6      | 2.9 | 3.4  | 4.0   | 2.3 | 3.0  | 3.2   | 2.2  | 2.7  | 7.6  | 4.1  | 6.7  |
| 14    | 3.4      | 2.7 | 3.0  | 3.9   | 2.4 | 2.9  | 2.8   | 1.0  | 1.9  | 7.0  | 4.1  | 6.1  |
| 15    | 3.8      | 2.3 | 3.0  | 2.7   | 2.2 | 2.4  | 2.0   | 0.9  | 1.2  | 6.5  | 5.7  | 6.1  |
| 16    | 3.8      | 2.7 | 3.3  | 2.7   | 2.3 | 2.5  | 2.0   | 1.0  | 1.5  | 6.4  | 4.0  | 5.7  |
| 17    | 3.6      | 2.7 | 3.1  | 4.3   | 2.3 | 3.0  | 1.0   | 0.10 | 0.3  | 6.0  | 4.4  | 5.5  |
| 18    | 3.0      | 2.1 | 2.6  | 5.1   | 4.1 | 4.8  | 2.0   | 0.3  | 1.2  | 6.0  | 3.5  | 5.2  |
| 19    | 2.8      | 2.4 | 2.6  | 4.4   | 1.7 | 2.7  | 8.2   | 1.6  | 5.8  | 5.9  | 4.0  | 5.4  |
| 20    | 5.0      | 2.8 | 4.1  | 2.4   | 1.6 | 2.0  | 8.0   | 2.1  | 5.7  | 5.2  | 3.4  | 4.6  |
| 21    | 5.3      | 3.5 | 4.8  | 2.7   | 2.1 | 2.3  | 8.4   | 2.0  | 4.5  | 5.5  | 3.4  | 4.7  |
| 22    | 5.1      | 3.9 | 4.4  | 5.1   | 2.7 | 4.1  | 8.3   | 4.2  | 6.4  | 7.0  | 4.3  | 6.1  |
| 23    | 4.0      | 3.1 | 3.8  | 5.3   | 5.1 | 5.2  | 7.6   | 1.7  | 5.0  | 7.1  | 3.9  | 5.7  |
| 24    | 4.3      | 3.1 | 3.4  | 5.7   | 5.1 | 5.4  | 7.4   | 1.6  | 4.8  | 5.7  | 4.2  | 5.4  |
| 25    | 3.3      | 2.7 | 3.1  | 5.3   | 2.6 | 3.2  | 9.0   | 2.7  | 7.6  | 5.4  | 5.3  | 5.3  |
| 26    | 3.9      | 2.8 | 3.4  | 8.1   | 2.6 | 5.5  | 9.9   | 5.3  | 8.9  | 5.4  | 4.4  | 5.1  |
| 27    | 4.0      | 3.4 | 3.8  | 8.3   | 7.4 | 8.0  | 11.0  | 9.9  | 10.6 | 5.1  | 3.9  | 4.8  |
| 28    | 3.9      | 2.6 | 3.2  | 8.0   | 1.8 | 6.0  | 11.0  | 9.7  | 10.9 | 5.2  | 4.0  | 4.5  |
| 29    | 3.4      | 2.3 | 2.8  | 5.7   | 1.8 | 4.3  | 10.9  | 9.7  | 10.3 | 5.4  | 5.1  | 5.3  |
| 30    | 3.2      | 2.2 | 2.8  | 5.0   | 3.7 | 4.5  | 10.6  | 9.2  | 10.0 | 5.4  | 4.8  | 5.2  |
| 31    | 3.2      | 1.4 | 2.3  | ---   | --- | ---  | 10.7  | 9.8  | 10.6 | 5.4  | 4.3  | 4.6  |
| MONTH | 5.5      | 1.4 | 3.5  | 8.3   | 0.5 | 3.6  | 11.0  | 0.1  | 4.9  | 11.2 | 3.4  | 6.6  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 4.8      | 4.0 | 4.3  | 3.7   | 2.7 | 3.5  | 4.5   | 1.8  | 3.3  | 3.3  | 1.6  | 2.4  |
| 2     | 4.5      | 3.5 | 4.1  | 4.0   | 3.6 | 3.8  | 3.4   | 2.5  | 3.1  | 2.1  | 1.0  | 1.3  |
| 3     | 4.3      | 3.5 | 3.8  | 5.4   | 2.0 | 4.0  | 3.4   | 2.5  | 3.0  | 1.7  | 1.0  | 1.3  |
| 4     | 4.7      | 3.3 | 3.9  | 5.6   | 2.4 | 4.8  | 2.9   | 2.5  | 2.6  | 6.3  | 1.6  | 3.0  |
| 5     | 3.7      | 3.0 | 3.5  | 5.7   | 4.9 | 5.4  | 3.2   | 2.7  | 3.0  | 7.2  | 4.3  | 6.4  |
| 6     | 3.9      | 2.5 | 3.2  | 6.0   | 1.6 | 4.6  | 4.7   | 2.3  | 3.1  | 7.0  | 4.6  | 6.3  |
| 7     | 3.6      | 2.2 | 2.9  | 5.9   | 0.9 | 4.3  | 5.5   | 4.5  | 5.1  | 7.1  | 5.7  | 6.5  |
| 8     | 4.1      | 3.3 | 3.8  | 4.1   | 1.0 | 2.8  | 5.3   | 4.0  | 4.8  | 7.5  | 2.6  | 5.6  |
| 9     | 3.8      | 2.8 | 3.3  | 4.0   | 1.5 | 2.8  | 5.1   | 3.0  | 4.6  | 6.5  | 1.9  | 4.3  |
| 10    | 4.3      | 2.3 | 3.3  | 2.6   | 1.3 | 2.0  | 4.3   | 2.8  | 3.3  | 7.0  | 4.9  | 6.3  |
| 11    | 4.9      | 2.8 | 4.5  | 5.6   | 1.5 | 3.4  | 3.1   | 2.6  | 2.8  | 7.3  | 5.8  | 6.6  |
| 12    | 4.9      | 2.3 | 3.3  | 6.0   | 4.8 | 5.4  | 3.3   | 2.5  | 3.1  | 7.5  | 5.7  | 6.9  |
| 13    | 5.1      | 2.0 | 2.5  | 5.7   | 2.4 | 3.5  | 2.6   | 0.7  | 1.9  | 7.9  | 6.7  | 7.4  |
| 14    | 5.4      | 3.8 | 5.1  | 3.7   | 2.7 | 3.2  | 2.0   | 0.9  | 1.5  | 9.6  | 7.7  | 8.7  |
| 15    | 5.3      | 1.3 | 3.2  | 4.0   | 3.5 | 3.9  | 2.3   | 1.2  | 2.0  | 11.2 | 8.1  | 10.1 |
| 16    | 4.1      | 1.9 | 3.0  | 3.9   | 3.0 | 3.8  | 2.3   | 1.7  | 2.1  | 12.2 | 9.2  | 11.2 |
| 17    | 3.5      | 2.5 | 2.9  | 3.2   | 2.5 | 2.8  | 3.7   | 1.5  | 2.7  | 12.6 | 10.8 | 11.9 |
| 18    | 4.1      | 2.0 | 3.0  | 6.5   | 2.6 | 5.2  | 3.8   | 2.4  | 3.4  | 12.5 | 10.8 | 11.9 |
| 19    | 4.1      | 3.4 | 3.9  | 5.9   | 2.6 | 4.1  | 3.6   | 0.5  | 3.0  | 13.0 | 11.9 | 12.5 |
| 20    | 4.2      | 2.0 | 3.7  | 4.0   | 2.5 | 3.2  | 3.8   | 0.5  | 3.4  | 14.0 | 12.2 | 13.3 |
| 21    | 3.9      | 1.7 | 2.6  | 3.4   | 1.6 | 2.6  | 4.8   | 2.9  | 3.7  | 14.8 | 13.5 | 14.4 |
| 22    | 2.8      | 1.2 | 2.0  | 3.2   | 2.3 | 2.7  | 5.0   | 0.9  | 2.7  | 15.7 | 12.5 | 14.8 |
| 23    | 1.8      | 1.0 | 1.2  | 3.0   | 2.4 | 2.8  | 5.7   | 2.4  | 4.1  | 16.3 | 12.6 | 15.0 |
| 24    | 1.4      | 0.9 | 1.1  | 3.3   | 2.5 | 2.9  | 7.9   | 2.2  | 5.2  | 16.4 | 12.9 | 15.2 |
| 25    | 0.9      | 0.6 | 0.8  | 2.9   | 2.3 | 2.6  | 3.2   | 2.0  | 2.5  | 16.6 | 13.0 | 15.6 |
| 26    | 1.9      | 0.7 | 1.3  | 2.9   | 2.2 | 2.5  | 4.3   | 0.8  | 2.9  | 16.9 | 14.1 | 16.1 |
| 27    | 2.3      | 0.8 | 1.9  | 3.4   | 2.1 | 3.0  | 7.6   | 2.0  | 3.8  | 18.4 | 15.9 | 17.4 |
| 28    | 2.0      | 0.4 | 0.7  | 3.6   | 1.3 | 2.6  | 5.5   | 2.1  | 3.1  | 18.5 | 15.1 | 17.7 |
| 29    | 3.3      | 0.4 | 1.3  | 2.3   | 1.3 | 1.9  | 5.5   | 3.3  | 4.4  | 18.4 | 13.5 | 17.1 |
| 30    | ---      | --- | ---  | 4.4   | 1.7 | 3.6  | 3.7   | 2.3  | 3.1  | 15.8 | 12.1 | 13.5 |
| 31    | ---      | --- | ---  | 4.8   | 3.0 | 4.3  | ---   | ---  | ---  | 14.7 | 12.8 | 13.8 |
| MONTH | 5.4      | 0.4 | 2.9  | 6.5   | 0.9 | 3.5  | 7.9   | 0.5  | 3.2  | 18.5 | 1.0  | 10.1 |

## NEUSE RIVER BASIN

0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 15.1 | 13.1 | 14.4 | 14.5 | 13.3 | 13.9 | 13.9   | 12.8 | 13.2 | 8.8       | 4.0  | 5.8  |
| 2     | 15.6 | 14.2 | 15.2 | 14.3 | 13.5 | 14.0 | 14.1   | 13.2 | 13.8 | 6.7       | 2.9  | 3.9  |
| 3     | 15.9 | 13.4 | 14.8 | 14.7 | 14.3 | 14.6 | 14.8   | 12.8 | 13.6 | 7.5       | 2.5  | 3.9  |
| 4     | 14.5 | 11.4 | 13.1 | 14.7 | 14.0 | 14.6 | 14.9   | 12.8 | 14.2 | 8.3       | 2.1  | 4.2  |
| 5     | 13.3 | 11.8 | 12.5 | 16.5 | 14.0 | 15.2 | 16.1   | 13.1 | 15.4 | 7.8       | 1.9  | 4.1  |
| 6     | 13.2 | 12.4 | 12.6 | 18.4 | 16.5 | 17.6 | 15.4   | 12.1 | 13.6 | 6.6       | 1.6  | 2.8  |
| 7     | 15.6 | 12.7 | 14.2 | 18.4 | 17.3 | 18.1 | 15.1   | 13.2 | 13.9 | 3.1       | 1.5  | 2.1  |
| 8     | 15.9 | 14.2 | 15.2 | 18.0 | 16.4 | 17.6 | 16.1   | 15.1 | 15.8 | 3.5       | 1.0  | 1.7  |
| 9     | 15.7 | 14.3 | 15.2 | 18.2 | 17.3 | 17.9 | 16.0   | 15.5 | 15.7 | 1.0       | 0.5  | 0.6  |
| 10    | 15.9 | 15.1 | 15.7 | 18.4 | 16.9 | 18.0 | 15.5   | 15.0 | 15.2 | 1.6       | 0.5  | 0.9  |
| 11    | 16.0 | 13.7 | 15.4 | 18.3 | 17.5 | 18.1 | 15.3   | 14.2 | 15.0 | 1.1       | 0.5  | 0.7  |
| 12    | 15.7 | 11.3 | 12.5 | 17.8 | 16.7 | 17.5 | 15.0   | 13.5 | 14.5 | 0.8       | 0.5  | 0.6  |
| 13    | 12.3 | 10.7 | 11.3 | 18.1 | 17.3 | 17.8 | 14.6   | 9.6  | 12.5 | 0.8       | 0.5  | 0.7  |
| 14    | 12.7 | 11.0 | 12.0 | 19.0 | 18.0 | 18.5 | 13.2   | 9.2  | 11.5 | 0.8       | 0.4  | 0.6  |
| 15    | 12.2 | 11.2 | 11.7 | 20.5 | 17.3 | 19.4 | 11.5   | 9.9  | 10.7 | 0.8       | 0.1  | 0.4  |
| 16    | 11.5 | 10.5 | 11.0 | 21.2 | 19.6 | 20.6 | 12.4   | 10.6 | 11.7 | 1.5       | 0.1  | 0.3  |
| 17    | 13.4 | 10   | 11.7 | 21.0 | 18.5 | 20.2 | 12.5   | 10.7 | 12.1 | 0.2       | 0.06 | 0.1  |
| 18    | 14.7 | 12.0 | 13.7 | 19.7 | 16.0 | 18.8 | 11.6   | 9.5  | 10.6 | 0.4       | 0.06 | 0.1  |
| 19    | 16.7 | 14.0 | 15.9 | 20.6 | 17.8 | 20.1 | 11.9   | 9.5  | 10.9 | 4.3       | 0.1  | 1.1  |
| 20    | 16.6 | 10.9 | 15.3 | 20.7 | 13.7 | 19.5 | 12.5   | 10.6 | 12.0 | 4.8       | 1.4  | 2.6  |
| 21    | 15.1 | 10.4 | 12.2 | 20.4 | 17.4 | 20.0 | 14.1   | 11.6 | 12.9 | 3.9       | 1.2  | 2.4  |
| 22    | 13.5 | 10.5 | 12.2 | 20.3 | 17.5 | 19.4 | 15.7   | 13.0 | 14.7 | 5.6       | 3.7  | 5.0  |
| 23    | 15.0 | 11.3 | 13.8 | 19.1 | 16.5 | 18.1 | 15.7   | 13.5 | 15.1 | 5.6       | 4.7  | 5.5  |
| 24    | 15.4 | 14.2 | 14.9 | 18.5 | 15.4 | 17.3 | 14.9   | 4.1  | 12.1 | 5.5       | 2.3  | 3.7  |
| 25    | 15.5 | 14.5 | 15.2 | 19.9 | 16.7 | 19.3 | 7.6    | 3.6  | 4.5  | 3.7       | 1.7  | 2.4  |
| 26    | 15.1 | 13.5 | 14.5 | 19.6 | 17.0 | 18.6 | 4.5    | 2.3  | 3.2  | 3.5       | 1.1  | 2.1  |
| 27    | 14.9 | 13.7 | 14.5 | 18.8 | 16.1 | 17.2 | 5.1    | 2.1  | 2.5  | 2.7       | 1.0  | 2.1  |
| 28    | 14.5 | 12.4 | 13.9 | 16.8 | 14.1 | 15.8 | 5.1    | 1.4  | 3.2  | 3.5       | 0.5  | 1.8  |
| 29    | 14.3 | 12.4 | 13.7 | 16.5 | 13.3 | 15.0 | 5.4    | 1.9  | 3.4  | 1.9       | 0.7  | 1.6  |
| 30    | 13.9 | 12.7 | 13.4 | 15.3 | 13.3 | 14.3 | 4.6    | 1.3  | 2.3  | 2.0       | 1.5  | 1.7  |
| 31    | ---  | ---  | ---  | 13.7 | 13.1 | 13.4 | 4.0    | 2.1  | 3.0  | ---       | ---  | ---  |
| MONTH | 16.7 | 10.0 | 13.7 | 21.2 | 13.1 | 17.4 | 16.1   | 1.3  | 11.1 | 8.8       | 0.06 | 2.2  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.8 | 7.6 | 8.1  | 8.1 | 7.1 | 7.4  | 7.6 | 7.2 | 7.5  | 7.4 | 7.2 | 7.3  |
| 2     | 8.1 | 7.5 | 7.9  | 7.2 | 7.0 | 7.2  | 7.6 | 7.5 | 7.5  | 7.5 | 7.2 | 7.4  |
| 3     | 8.4 | 7.5 | 7.8  | 7.4 | 7.1 | 7.2  | 7.6 | 7.5 | 7.6  | 7.6 | 7.2 | 7.3  |
| 4     | 8.4 | 7.4 | 7.8  | 7.1 | 6.6 | 6.9  | 7.7 | 7.5 | 7.6  | 7.4 | 7.0 | 7.2  |
| 5     | 8.0 | 7.4 | 7.7  | 6.9 | 6.5 | 6.7  | 7.7 | 7.6 | 7.6  | 7.2 | 7.1 | 7.1  |
| 6     | 8.5 | 7.5 | 7.9  | 6.7 | 6.5 | 6.6  | 7.7 | 7.5 | 7.6  | 7.5 | 7.2 | 7.4  |
| 7     | 8.3 | 7.7 | 8.0  | 6.9 | 6.5 | 6.7  | 7.8 | 7.5 | 7.7  | 7.8 | 7.4 | 7.5  |
| 8     | 8.0 | 7.2 | 7.6  | 7.1 | 6.9 | 7.0  | 7.9 | 7.7 | 7.7  | 7.9 | 7.4 | 7.6  |
| 9     | 7.3 | 7.2 | 7.3  | 7.3 | 7.0 | 7.2  | 7.9 | 7.7 | 7.8  | 7.9 | 7.7 | 7.8  |
| 10    | 7.4 | 7.2 | 7.3  | 7.3 | 7.2 | 7.3  | 8.0 | 7.7 | 7.9  | 7.8 | 7.6 | 7.7  |
| 11    | 7.3 | 7.2 | 7.2  | 7.3 | 7.1 | 7.1  | 7.7 | 7.6 | 7.7  | 8.0 | 7.6 | 7.8  |
| 12    | 7.5 | 7.2 | 7.3  | 7.4 | 7.1 | 7.2  | 7.8 | 7.6 | 7.7  | 8.2 | 7.7 | 7.9  |
| 13    | 8.0 | 7.3 | 7.6  | 7.3 | 7.2 | 7.2  | 7.8 | 7.7 | 7.8  | 8.1 | 7.9 | 8.0  |
| 14    | 8.0 | 7.5 | 7.7  | 7.4 | 7.2 | 7.3  | 7.8 | 7.6 | 7.7  | 8.3 | 7.9 | 8.1  |
| 15    | 7.8 | 7.4 | 7.5  | 7.4 | 7.3 | 7.4  | 8.0 | 7.7 | 7.7  | 8.2 | 7.9 | 8.0  |
| 16    | 7.9 | 7.5 | 7.6  | 7.6 | 7.3 | 7.4  | 8.0 | 7.7 | 7.9  | 8.2 | 8.0 | 8.1  |
| 17    | 8.9 | 7.6 | 8.1  | 7.4 | 7.1 | 7.3  | 7.9 | 7.4 | 7.7  | 8.6 | 8.0 | 8.3  |
| 18    | 8.7 | 7.8 | 8.1  | 7.9 | 6.9 | 7.2  | 7.9 | 7.4 | 7.7  | 8.4 | 7.9 | 8.2  |
| 19    | 9.0 | 7.8 | 8.2  | 7.0 | 6.8 | 6.9  | 7.8 | 7.5 | 7.7  | 8.4 | 8.0 | 8.2  |
| 20    | 8.8 | 7.8 | 8.1  | 7.1 | 7.0 | 7.0  | 8.0 | 7.8 | 7.9  | 8.3 | 8.2 | 8.3  |
| 21    | 8.2 | 7.4 | 7.8  | 7.2 | 7.0 | 7.1  | 7.9 | 7.6 | 7.8  | 8.8 | 8.3 | 8.5  |
| 22    | 7.9 | 7.4 | 7.6  | 8.2 | 7.0 | 7.4  | 7.7 | 7.5 | 7.6  | 8.8 | 8.4 | 8.6  |
| 23    | 8.6 | 7.6 | 8.1  | 8.4 | 7.2 | 7.8  | 7.7 | 7.4 | 7.6  | 8.5 | 8.3 | 8.3  |
| 24    | 8.4 | 7.9 | 8.1  | 8.2 | 7.3 | 7.7  | 7.5 | 7.1 | 7.3  | 8.4 | 8.2 | 8.3  |
| 25    | 8.3 | 7.8 | 8.1  | 7.6 | 7.0 | 7.2  | 7.4 | 7.1 | 7.3  | 8.3 | 8.2 | 8.3  |
| 26    | 8.5 | 7.6 | 7.9  | 7.3 | 7.1 | 7.2  | 7.5 | 7.4 | 7.5  | 8.3 | 8.1 | 8.2  |
| 27    | 8.0 | 7.4 | 7.6  | 7.6 | 7.2 | 7.2  | 7.6 | 7.4 | 7.5  | 8.3 | 8.1 | 8.2  |
| 28    | 7.7 | 7.4 | 7.6  | 7.4 | 7.0 | 7.3  | 7.5 | 7.2 | 7.4  | 8.2 | 7.8 | 8.0  |
| 29    | 7.8 | 7.5 | 7.7  | 7.4 | 7.0 | 7.2  | 7.4 | 7.1 | 7.3  | 8.3 | 7.6 | 7.9  |
| 30    | 8.1 | 7.6 | 7.8  | 7.6 | 7.2 | 7.4  | 7.4 | 7.2 | 7.3  | 8.5 | 7.8 | 8.1  |
| 31    | 8.2 | 7.7 | 7.9  | --- | --- | ---  | 7.3 | 7.2 | 7.2  | 8.4 | 8.1 | 8.3  |
| MONTH | 9.0 | 7.2 | 7.8  | 8.4 | 6.5 | 7.2  | 8.0 | 7.1 | 7.6  | 8.8 | 7.0 | 7.9  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.5 | 8.2 | 8.4  | 8.0 | 7.5 | 7.8  | 8.5 | 7.6 | 7.9  | 7.7 | 7.2 | 7.4  |
| 2     | 8.6 | 8.3 | 8.4  | 8.0 | 7.5 | 7.7  | 8.5 | 7.7 | 8.2  | 7.6 | 7.2 | 7.3  |
| 3     | 8.6 | 8.2 | 8.4  | 7.8 | 7.4 | 7.5  | 8.6 | 8.1 | 8.4  | 7.4 | 7.2 | 7.3  |
| 4     | 8.6 | 8.4 | 8.5  | 7.9 | 7.5 | 7.7  | 8.3 | 7.7 | 8.1  | 7.9 | 7.1 | 7.4  |
| 5     | 8.7 | 8.3 | 8.5  | 7.7 | 7.6 | 7.7  | 8.0 | 7.7 | 7.8  | 7.7 | 7.1 | 7.3  |
| 6     | 8.7 | 8.3 | 8.5  | 7.8 | 7.4 | 7.6  | 8.6 | 7.6 | 8.0  | 8.8 | 7.0 | 7.7  |
| 7     | 8.4 | 7.8 | 8.3  | 8.2 | 7.7 | 7.9  | 9.0 | 7.9 | 8.4  | 8.4 | 7.3 | 7.8  |
| 8     | 8.6 | 8.0 | 8.3  | 7.8 | 7.6 | 7.7  | 8.8 | 7.9 | 8.4  | 8.8 | 7.5 | 8.2  |
| 9     | 8.8 | 8.2 | 8.5  | 7.9 | 7.7 | 7.8  | 9.1 | 8.0 | 8.5  | 9.0 | 7.4 | 8.3  |
| 10    | 8.9 | 8.3 | 8.6  | 8.0 | 7.8 | 7.9  | 9.0 | 8.6 | 8.8  | 8.9 | 7.6 | 8.4  |
| 11    | 8.8 | 8.5 | 8.7  | 8.1 | 7.9 | 8.0  | 8.8 | 8.3 | 8.6  | 7.7 | 7.0 | 7.3  |
| 12    | 8.8 | 8.4 | 8.6  | 8.2 | 7.9 | 8.0  | 8.6 | 7.9 | 8.2  | 7.2 | 6.9 | 7.0  |
| 13    | 8.8 | 8.0 | 8.5  | 8.5 | 8.1 | 8.2  | 8.1 | 7.6 | 7.9  | 7.2 | 6.8 | 7.0  |
| 14    | 8.8 | 8.4 | 8.6  | 8.9 | 8.2 | 8.4  | 8.2 | 7.6 | 7.8  | 7.0 | 6.9 | 7.0  |
| 15    | 8.6 | 8.3 | 8.4  | 9.4 | 8.2 | 8.7  | 8.0 | 7.6 | 7.8  | 7.1 | 6.7 | 6.9  |
| 16    | 8.4 | 7.5 | 8.0  | 9.4 | 8.7 | 8.9  | 8.8 | 7.6 | 7.9  | 7.1 | 6.8 | 6.9  |
| 17    | 7.7 | 7.4 | 7.6  | 8.9 | 8.6 | 8.7  | 8.2 | 7.6 | 7.9  | 8.2 | 6.9 | 7.4  |
| 18    | 7.7 | 7.2 | 7.5  | 9.3 | 8.3 | 8.9  | 8.1 | 7.5 | 7.7  | 8.5 | 7.4 | 7.8  |
| 19    | 8.2 | 7.1 | 7.7  | 9.0 | 8.5 | 8.7  | 7.8 | 7.5 | 7.6  | 7.7 | 6.9 | 7.3  |
| 20    | 8.7 | 7.5 | 8.1  | 9.1 | 8.3 | 8.7  | 8.6 | 7.5 | 7.7  | 7.4 | 6.8 | 7.1  |
| 21    | 8.7 | 7.3 | 7.7  | 9.0 | 8.3 | 8.7  | 7.7 | 7.6 | 7.6  | 8.0 | 6.8 | 7.0  |
| 22    | 9.0 | 7.6 | 8.4  | 9.0 | 8.4 | 8.6  | 8.3 | 7.6 | 7.8  | 7.4 | 6.8 | 7.0  |
| 23    | 8.8 | 7.5 | 8.3  | 9.1 | 8.4 | 8.5  | 8.8 | 7.6 | 8.1  | 7.9 | 6.9 | 7.2  |
| 24    | 8.3 | 7.6 | 7.8  | 9.5 | 8.7 | 9.0  | 8.8 | 7.3 | 8.0  | 7.9 | 7.2 | 7.3  |
| 25    | 7.8 | 7.6 | 7.7  | 9.1 | 8.4 | 8.8  | 8.9 | 7.9 | 8.4  | 8.0 | 7.2 | 7.5  |
| 26    | 8.0 | 7.6 | 7.7  | 9.0 | 8.5 | 8.7  | 8.6 | 7.6 | 8.1  | 8.5 | 7.1 | 7.7  |
| 27    | 8.1 | 7.6 | 8.0  | 8.5 | 7.8 | 8.1  | 8.6 | 7.5 | 8.1  | 8.1 | 7.3 | 7.9  |
| 28    | 8.0 | 7.6 | 7.7  | 8.1 | 7.5 | 7.8  | 8.7 | 7.7 | 8.2  | 8.0 | 7.1 | 7.5  |
| 29    | 7.7 | 7.5 | 7.6  | 7.8 | 7.5 | 7.7  | 8.8 | 8.0 | 8.4  | 7.8 | 7.4 | 7.6  |
| 30    | --- | --- | ---  | 8.6 | 7.5 | 7.8  | 8.3 | 7.5 | 8.0  | 7.6 | 7.2 | 7.4  |
| 31    | --- | --- | ---  | 8.6 | 7.8 | 8.2  | --- | --- | ---  | 7.3 | 7.2 | 7.2  |
| MONTH | 9.0 | 7.1 | 8.2  | 9.5 | 7.4 | 8.2  | 9.1 | 7.3 | 8.1  | 9.0 | 6.7 | 7.4  |

## NEUSE RIVER BASIN

0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.0 | 7.2 | 7.6  | 8.5 | 7.3 | 8.1  | 8.0 | 7.7 | 7.9  | 7.3 | 7.1 | 7.2  |
| 2     | 8.3 | 7.7 | 7.9  | 8.9 | 7.5 | 7.8  | 7.9 | 7.4 | 7.8  | 7.6 | 7.2 | 7.4  |
| 3     | 8.4 | 7.3 | 7.8  | 8.0 | 7.3 | 7.5  | 7.9 | 7.4 | 7.7  | 8.0 | 7.3 | 7.5  |
| 4     | 7.9 | 7.3 | 7.7  | 8.9 | 7.4 | 7.9  | 8.0 | 7.1 | 7.6  | 7.9 | 7.3 | 7.5  |
| 5     | 8.0 | 7.4 | 7.7  | 8.4 | 7.5 | 7.8  | 7.9 | 7.1 | 7.4  | 8.2 | 7.6 | 7.8  |
| 6     | 8.4 | 7.7 | 7.9  | 8.6 | 7.6 | 7.9  | 8.0 | 7.2 | 7.7  | 8.0 | 7.5 | 7.7  |
| 7     | 8.4 | 7.6 | 7.9  | 8.3 | 7.5 | 7.9  | 8.1 | 7.3 | 7.8  | 8.0 | 7.5 | 7.6  |
| 8     | 8.1 | 7.3 | 7.9  | 8.9 | 7.8 | 8.0  | 8.4 | 7.3 | 7.8  | 7.7 | 7.3 | 7.5  |
| 9     | 8.2 | 7.3 | 7.8  | 8.0 | 7.1 | 7.7  | 8.5 | 7.2 | 7.8  | 7.5 | 7.4 | 7.4  |
| 10    | 7.4 | 7.1 | 7.2  | 8.0 | 7.0 | 7.5  | 8.5 | 7.6 | 8.2  | 7.4 | 7.1 | 7.3  |
| 11    | 8.2 | 7.1 | 7.4  | 8.3 | 7.1 | 7.7  | 8.6 | 7.4 | 8.3  | 7.4 | 7.0 | 7.2  |
| 12    | 7.7 | 7.2 | 7.4  | 8.5 | 7.2 | 8.0  | 8.6 | 7.4 | 8.2  | 7.5 | 7.2 | 7.3  |
| 13    | 7.8 | 7.3 | 7.5  | 8.2 | 6.9 | 7.3  | 8.3 | 7.7 | 8.0  | 7.4 | 7.2 | 7.2  |
| 14    | 7.7 | 7.2 | 7.5  | 7.8 | 6.9 | 7.2  | 8.0 | 7.3 | 7.7  | 7.4 | 7.2 | 7.3  |
| 15    | 7.5 | 7.1 | 7.3  | 8.1 | 7.0 | 7.6  | 7.7 | 7.2 | 7.4  | 7.5 | 7.2 | 7.4  |
| 16    | 7.5 | 7.0 | 7.3  | 8.2 | 7.2 | 8.0  | 7.5 | 7.2 | 7.3  | 7.7 | 7.1 | 7.3  |
| 17    | 7.4 | 7.0 | 7.2  | 8.5 | 7.7 | 8.0  | 7.8 | 7.1 | 7.3  | 7.5 | 7.2 | 7.4  |
| 18    | 7.7 | 6.8 | 7.2  | 8.3 | 7.5 | 8.0  | 8.2 | 7.4 | 7.7  | 7.5 | 7.2 | 7.3  |
| 19    | 8.2 | 6.8 | 7.3  | 8.6 | 7.4 | 7.8  | 7.7 | 6.8 | 7.0  | 7.7 | 7.4 | 7.6  |
| 20    | 8.1 | 6.9 | 7.7  | 8.3 | 7.7 | 8.1  | 7.0 | 6.6 | 6.8  | 7.8 | 7.6 | 7.7  |
| 21    | 8.2 | 7.4 | 7.8  | 8.3 | 7.7 | 8.1  | 7.1 | 6.6 | 6.9  | 8.2 | 7.7 | 7.9  |
| 22    | 7.8 | 6.8 | 7.4  | 8.3 | 7.6 | 8.0  | 7.5 | 6.8 | 7.1  | 8.0 | 7.4 | 7.7  |
| 23    | 8.0 | 6.8 | 7.1  | 7.8 | 7.2 | 7.5  | 8.1 | 7.0 | 7.3  | 8.6 | 7.4 | 7.8  |
| 24    | 8.2 | 7.0 | 7.7  | 8.2 | 7.5 | 7.9  | 8.2 | 7.2 | 7.6  | 8.4 | 7.7 | 8.0  |
| 25    | 8.1 | 7.2 | 7.6  | 8.3 | 7.8 | 8.0  | 8.2 | 7.3 | 7.7  | 8.2 | 7.4 | 7.7  |
| 26    | 7.8 | 7.1 | 7.4  | 8.4 | 7.7 | 8.0  | 7.8 | 7.1 | 7.3  | 8.4 | 7.6 | 7.8  |
| 27    | 8.4 | 7.4 | 7.8  | 8.3 | 7.8 | 8.1  | 7.8 | 7.1 | 7.4  | 8.2 | 7.6 | 7.8  |
| 28    | 8.3 | 7.6 | 7.9  | 8.2 | 7.7 | 8.0  | 7.4 | 7.0 | 7.2  | 7.8 | 7.3 | 7.5  |
| 29    | 8.8 | 7.7 | 8.1  | 8.0 | 7.7 | 7.9  | 7.4 | 7.0 | 7.2  | 8.8 | 7.5 | 7.9  |
| 30    | 8.8 | 7.9 | 8.3  | 8.0 | 7.8 | 7.9  | 7.3 | 7.1 | 7.2  | 8.6 | 7.7 | 7.9  |
| 31    | --- | --- | ---  | 7.9 | 7.7 | 7.8  | 7.7 | 7.2 | 7.3  | --- | --- | ---  |
| MONTH | 8.8 | 6.8 | 7.6  | 8.9 | 6.9 | 7.8  | 8.6 | 6.6 | 7.5  | 8.8 | 7.0 | 7.6  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.0 | 7.5 | 7.7  | 7.4 | 6.9 | 7.1  | 7.0 | 6.8 | 6.9  | 7.2 | 7.2 | 7.2  |
| 2     | 7.9 | 7.5 | 7.7  | 7.0 | 6.8 | 6.9  | 7.2 | 7.0 | 7.1  | 7.2 | 7.1 | 7.2  |
| 3     | 7.9 | 7.3 | 7.6  | 7.1 | 6.8 | 6.9  | 7.3 | 7.1 | 7.2  | 7.2 | 7.1 | 7.1  |
| 4     | 7.5 | 7.1 | 7.2  | 7.0 | 6.8 | 6.9  | 7.2 | 7.1 | 7.2  | 7.2 | 7.1 | 7.1  |
| 5     | 7.5 | 7.0 | 7.1  | 7.0 | 6.8 | 6.9  | 7.1 | 7.0 | 7.0  | 7.3 | 7.0 | 7.1  |
| 6     | 7.1 | 6.9 | 7.0  | 7.0 | 6.8 | 6.9  | 7.1 | 7.0 | 7.1  | 7.4 | 7.2 | 7.3  |
| 7     | 7.0 | 6.9 | 7.0  | 7.0 | 6.9 | 6.9  | 7.1 | 7.0 | 7.0  | 8.0 | 7.2 | 7.6  |
| 8     | 7.5 | 6.9 | 7.2  | 7.1 | 6.9 | 7.0  | 7.2 | 7.1 | 7.1  | 8.0 | 7.2 | 7.6  |
| 9     | 7.6 | 7.3 | 7.5  | 7.3 | 7.1 | 7.2  | 7.1 | 6.9 | 7.0  | 7.8 | 7.2 | 7.5  |
| 10    | 7.7 | 7.5 | 7.6  | 7.4 | 7.3 | 7.3  | 7.3 | 6.8 | 7.0  | 7.8 | 7.6 | 7.7  |
| 11    | 7.7 | 7.5 | 7.6  | 7.3 | 6.9 | 7.2  | 7.5 | 7.1 | 7.3  | 8.0 | 7.6 | 7.8  |
| 12    | 7.8 | 7.5 | 7.6  | 7.2 | 6.9 | 7.0  | 7.7 | 7.5 | 7.5  | 8.2 | 7.6 | 7.9  |
| 13    | 7.6 | 7.4 | 7.6  | 7.3 | 7.1 | 7.3  | 7.8 | 7.5 | 7.7  | 8.1 | 7.7 | 8.0  |
| 14    | 8.3 | 7.5 | 8.1  | 7.4 | 7.3 | 7.4  | 7.8 | 7.7 | 7.7  | 8.2 | 7.7 | 8.0  |
| 15    | 8.2 | 7.9 | 8.0  | 7.4 | 7.3 | 7.4  | 7.8 | 7.6 | 7.7  | 8.2 | 7.9 | 8.0  |
| 16    | 8.0 | 7.8 | 7.8  | 7.3 | 7.2 | 7.3  | 8.1 | 7.7 | 7.9  | 8.2 | 7.9 | 8.1  |
| 17    | 7.9 | 7.0 | 7.4  | 7.3 | 7.1 | 7.1  | 8.0 | 7.6 | 7.8  | 8.4 | 7.9 | 8.1  |
| 18    | 8.0 | 7.0 | 7.6  | 7.1 | 6.5 | 6.9  | 8.1 | 7.7 | 8.0  | 8.3 | 7.5 | 7.9  |
| 19    | 7.7 | 7.3 | 7.5  | 6.8 | 6.5 | 6.7  | 7.9 | 7.6 | 7.8  | 8.4 | 8.0 | 8.2  |
| 20    | 7.3 | 6.9 | 7.0  | 6.9 | 6.7 | 6.8  | 8.1 | 7.7 | 7.9  | 8.4 | 8.2 | 8.3  |
| 21    | 7.2 | 6.9 | 7.0  | 6.9 | 6.7 | 6.8  | 8.0 | 7.6 | 7.8  | 8.6 | 8.2 | 8.4  |
| 22    | 7.6 | 7.0 | 7.3  | 6.8 | 6.7 | 6.7  | 7.8 | 7.4 | 7.7  | 8.3 | 8.0 | 8.2  |
| 23    | 7.8 | 7.2 | 7.4  | 6.8 | 6.7 | 6.7  | 7.7 | 7.4 | 7.5  | 8.4 | 7.8 | 8.2  |
| 24    | 8.0 | 7.1 | 7.6  | 6.7 | 6.6 | 6.7  | 7.7 | 7.3 | 7.4  | 8.4 | 8.2 | 8.3  |
| 25    | 7.8 | 7.5 | 7.6  | 7.5 | 6.6 | 7.1  | 7.6 | 7.3 | 7.4  | 8.3 | 8.2 | 8.3  |
| 26    | 7.5 | 7.0 | 7.2  | 7.2 | 6.5 | 6.8  | 7.6 | 7.4 | 7.5  | 8.3 | 8.1 | 8.2  |
| 27    | 7.1 | 7.0 | 7.0  | 6.8 | 6.6 | 6.7  | 7.7 | 7.5 | 7.6  | 8.3 | 8.0 | 8.1  |
| 28    | 7.3 | 7.0 | 7.1  | 7.1 | 6.6 | 6.8  | 7.6 | 7.5 | 7.6  | 8.2 | 7.8 | 8.1  |
| 29    | 7.3 | 7.0 | 7.2  | 7.1 | 6.9 | 7.0  | 7.5 | 7.4 | 7.5  | 8.0 | 7.7 | 7.8  |
| 30    | 7.3 | 7.0 | 7.1  | 7.0 | 6.8 | 6.9  | 7.4 | 7.3 | 7.4  | 8.4 | 7.9 | 8.1  |
| 31    | 7.7 | 6.9 | 7.3  | --- | --- | ---  | 7.4 | 7.2 | 7.3  | 8.5 | 8.0 | 8.3  |
| MONTH | 8.3 | 6.9 | 7.4  | 7.5 | 6.5 | 7.0  | 8.1 | 6.8 | 7.4  | 8.6 | 7.0 | 7.9  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.6 | 8.1 | 8.3  | 8.3 | 7.6 | 7.8  | 9.3 | 8.2 | 8.6  | 7.4 | 6.8 | 7.0  |
| 2     | 8.6 | 8.0 | 8.4  | 7.6 | 7.3 | 7.4  | 9.5 | 8.8 | 9.2  | 7.5 | 7.1 | 7.3  |
| 3     | 8.6 | 8.1 | 8.4  | 7.6 | 7.3 | 7.4  | 9.6 | 9.0 | 9.3  | 7.4 | 7.1 | 7.2  |
| 4     | 8.7 | 7.6 | 8.3  | 7.4 | 7.3 | 7.3  | 9.3 | 8.7 | 9.0  | 7.3 | 6.7 | 7.1  |
| 5     | 8.8 | 8.5 | 8.7  | 7.3 | 7.2 | 7.3  | 8.7 | 8.5 | 8.6  | 7.0 | 6.7 | 6.9  |
| 6     | 8.8 | 8.2 | 8.6  | 7.6 | 7.3 | 7.4  | 8.6 | 8.1 | 8.3  | 7.1 | 6.7 | 6.8  |
| 7     | 8.5 | 8.2 | 8.4  | 7.8 | 7.4 | 7.5  | 8.1 | 7.8 | 7.9  | 6.8 | 6.7 | 6.7  |
| 8     | 8.5 | 8.1 | 8.3  | 7.8 | 7.6 | 7.7  | 8.0 | 7.7 | 7.8  | 9.0 | 6.7 | 7.1  |
| 9     | 8.7 | 7.7 | 8.3  | 7.9 | 7.6 | 7.8  | 9.3 | 7.7 | 7.9  | 8.6 | 6.6 | 7.4  |
| 10    | 8.6 | 6.8 | 7.8  | 7.9 | 7.9 | 7.9  | 9.5 | 7.7 | 8.8  | 6.9 | 6.6 | 6.7  |
| 11    | 8.2 | 6.7 | 6.8  | 8.0 | 7.9 | 7.9  | 9.4 | 8.4 | 9.1  | 6.7 | 6.6 | 6.6  |
| 12    | 8.8 | 6.6 | 7.9  | 8.1 | 7.8 | 8.0  | 9.1 | 8.3 | 8.8  | 6.7 | 6.6 | 6.6  |
| 13    | 8.8 | 6.6 | 8.4  | 8.2 | 7.8 | 8.0  | 8.7 | 8.1 | 8.3  | 6.8 | 6.7 | 6.7  |
| 14    | 7.0 | 6.4 | 6.5  | 8.9 | 8.2 | 8.5  | 8.7 | 8.1 | 8.3  | 6.9 | 6.8 | 6.9  |
| 15    | 8.6 | 6.4 | 7.5  | 8.9 | 8.1 | 8.4  | 8.5 | 8.0 | 8.3  | 6.9 | 6.8 | 6.8  |
| 16    | 8.5 | 6.8 | 7.7  | 8.5 | 8.0 | 8.1  | 8.2 | 7.8 | 8.0  | 6.9 | 6.8 | 6.9  |
| 17    | 7.8 | 7.0 | 7.4  | 8.7 | 8.4 | 8.5  | 7.8 | 7.3 | 7.5  | 7.0 | 6.9 | 6.9  |
| 18    | 7.7 | 7.1 | 7.4  | 8.7 | 7.8 | 8.0  | 7.6 | 7.3 | 7.4  | 7.0 | 6.9 | 7.0  |
| 19    | 7.5 | 6.9 | 7.2  | 8.9 | 7.7 | 8.4  | 8.0 | 7.2 | 7.3  | 7.0 | 6.9 | 7.0  |
| 20    | 7.5 | 6.2 | 7.0  | 8.8 | 8.2 | 8.5  | 7.7 | 7.1 | 7.3  | 7.0 | 6.6 | 7.0  |
| 21    | 8.6 | 6.9 | 7.5  | 8.9 | 8.3 | 8.6  | 7.2 | 7.0 | 7.1  | 7.0 | 7.0 | 7.0  |
| 22    | 8.9 | 7.6 | 8.3  | 8.7 | 8.4 | 8.6  | 8.1 | 6.6 | 7.3  | 7.0 | 6.9 | 7.0  |
| 23    | 8.8 | 7.7 | 8.3  | 8.5 | 8.3 | 8.4  | 7.6 | 6.6 | 6.9  | 7.2 | 6.8 | 6.9  |
| 24    | 8.4 | 7.7 | 7.9  | 8.4 | 8.2 | 8.3  | 8.6 | 6.6 | 7.1  | 7.3 | 6.8 | 7.0  |
| 25    | 7.7 | 7.6 | 7.6  | 8.5 | 8.1 | 8.3  | 8.8 | 7.1 | 8.3  | 7.3 | 6.9 | 7.0  |
| 26    | 8.3 | 7.6 | 7.8  | 8.5 | 8.2 | 8.4  | 8.5 | 6.8 | 7.5  | 7.3 | 6.9 | 7.0  |
| 27    | 8.1 | 7.6 | 8.0  | 8.6 | 8.2 | 8.3  | 8.1 | 6.6 | 7.3  | 7.1 | 6.9 | 7.0  |
| 28    | 8.0 | 7.5 | 7.6  | 9.2 | 8.2 | 8.7  | 8.2 | 6.7 | 7.6  | 7.3 | 7.0 | 7.0  |
| 29    | 8.0 | 7.5 | 7.6  | 9.1 | 8.6 | 8.8  | 7.4 | 6.6 | 6.9  | 7.4 | 7.0 | 7.1  |
| 30    | --- | --- | ---  | 8.9 | 8.4 | 8.6  | 7.4 | 6.8 | 7.0  | 7.7 | 7.0 | 7.2  |
| 31    | --- | --- | ---  | 8.5 | 8.2 | 8.3  | --- | --- | ---  | 7.3 | 7.0 | 7.1  |
| MONTH | 8.9 | 6.2 | 7.9  | 9.2 | 7.2 | 8.1  | 9.6 | 6.6 | 8.0  | 9.0 | 6.6 | 7.0  |



## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.4 | 6.9 | 7.0  | 7.2 | 7.1 | 7.1  | 8.1 | 7.7 | 8.0  | 7.1 | 7.0 | 7.0  |
| 2     | 7.2 | 7.0 | 7.1  | 7.2 | 7.1 | 7.2  | 7.9 | 7.6 | 7.8  | 7.7 | 7.0 | 7.4  |
| 3     | 7.2 | 7.0 | 7.1  | 7.2 | 7.2 | 7.2  | 8.0 | 7.6 | 7.8  | 7.5 | 7.0 | 7.2  |
| 4     | 7.9 | 7.0 | 7.3  | 7.3 | 7.2 | 7.2  | 7.8 | 7.5 | 7.6  | 7.9 | 7.1 | 7.4  |
| 5     | 7.7 | 7.0 | 7.3  | 7.3 | 7.2 | 7.2  | 7.7 | 7.2 | 7.4  | 8.0 | 7.0 | 7.4  |
| 6     | 7.8 | 7.0 | 7.4  | 7.3 | 7.2 | 7.3  | 8.1 | 7.2 | 7.8  | 7.4 | 7.0 | 7.2  |
| 7     | 7.4 | 7.0 | 7.1  | 7.3 | 7.2 | 7.2  | 8.0 | 7.8 | 7.9  | 7.6 | 7.2 | 7.2  |
| 8     | 7.4 | 7.1 | 7.2  | 7.3 | 7.1 | 7.3  | 7.8 | 7.6 | 7.8  | 7.3 | 7.1 | 7.2  |
| 9     | 7.4 | 7.0 | 7.2  | 7.3 | 6.9 | 7.1  | 7.8 | 7.4 | 7.5  | 7.2 | 7.0 | 7.1  |
| 10    | 7.3 | 6.9 | 7.1  | 7.1 | 7.0 | 7.1  | 7.4 | 7.1 | 7.2  | 7.3 | 7.0 | 7.1  |
| 11    | 7.2 | 7.0 | 7.0  | 7.2 | 7.1 | 7.1  | 7.6 | 7.1 | 7.1  | 7.3 | 7.0 | 7.2  |
| 12    | 7.6 | 7.0 | 7.3  | 7.2 | 7.0 | 7.1  | 7.6 | 7.1 | 7.2  | 7.4 | 7.1 | 7.3  |
| 13    | 7.5 | 7.0 | 7.3  | 7.1 | 7.0 | 7.1  | 7.9 | 7.1 | 7.4  | 7.4 | 7.2 | 7.2  |
| 14    | 7.3 | 6.9 | 7.1  | 7.3 | 7.0 | 7.2  | 7.9 | 7.2 | 7.5  | 7.3 | 7.2 | 7.2  |
| 15    | 7.2 | 6.9 | 7.0  | 7.3 | 7.0 | 7.3  | 7.3 | 7.1 | 7.1  | 7.3 | 7.0 | 7.2  |
| 16    | 7.3 | 6.9 | 7.0  | 7.4 | 7.3 | 7.3  | 7.3 | 7.0 | 7.1  | 7.2 | 6.9 | 7.1  |
| 17    | 7.1 | 6.8 | 7.0  | 7.4 | 7.3 | 7.4  | 7.1 | 6.8 | 7.0  | 7.4 | 7.1 | 7.2  |
| 18    | 7.2 | 6.9 | 7.1  | 7.4 | 7.2 | 7.3  | 6.8 | 6.7 | 6.7  | 7.3 | 7.0 | 7.2  |
| 19    | 7.2 | 7.1 | 7.1  | 7.4 | 7.2 | 7.4  | 6.8 | 6.6 | 6.7  | 7.7 | 7.1 | 7.4  |
| 20    | 7.4 | 7.0 | 7.1  | 7.7 | 7.2 | 7.4  | 6.8 | 6.7 | 6.7  | 7.7 | 7.3 | 7.6  |
| 21    | 7.9 | 7.0 | 7.2  | 7.4 | 7.2 | 7.3  | 6.8 | 6.7 | 6.8  | 7.7 | 7.2 | 7.6  |
| 22    | 7.3 | 6.9 | 7.0  | 7.2 | 7.1 | 7.2  | 6.9 | 6.8 | 6.8  | 7.5 | 7.1 | 7.3  |
| 23    | 7.3 | 6.9 | 7.1  | 7.2 | 6.9 | 7.1  | 6.9 | 6.7 | 6.9  | 7.2 | 6.9 | 7.0  |
| 24    | 7.2 | 7.0 | 7.1  | 7.2 | 7.0 | 7.1  | 7.7 | 6.6 | 6.9  | 8.3 | 6.9 | 7.5  |
| 25    | 7.1 | 7.1 | 7.1  | 7.2 | 7.0 | 7.1  | 7.8 | 7.0 | 7.4  | 8.0 | 7.1 | 7.6  |
| 26    | 7.3 | 7.0 | 7.1  | 7.2 | 7.0 | 7.1  | 7.7 | 7.1 | 7.3  | 8.3 | 7.0 | 7.8  |
| 27    | 7.3 | 7.0 | 7.1  | 7.4 | 7.0 | 7.2  | 7.8 | 6.8 | 7.4  | 8.1 | 7.2 | 7.5  |
| 28    | 7.1 | 7.0 | 7.0  | 7.7 | 7.0 | 7.2  | 7.6 | 6.9 | 7.2  | 7.5 | 6.9 | 7.2  |
| 29    | 7.1 | 6.9 | 7.0  | 7.9 | 7.0 | 7.2  | 7.4 | 6.9 | 7.2  | 7.5 | 7.3 | 7.4  |
| 30    | 7.1 | 7.0 | 7.0  | 8.0 | 7.0 | 7.3  | 7.2 | 7.0 | 7.1  | 7.9 | 7.4 | 7.7  |
| 31    | --- | --- | ---  | 8.1 | 7.7 | 7.9  | 7.2 | 7.0 | 7.1  | --- | --- | ---  |
| MONTH | 7.9 | 6.8 | 7.1  | 8.1 | 6.9 | 7.2  | 8.1 | 6.6 | 7.3  | 8.3 | 6.9 | 7.3  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 23.1 | 22.2 | 22.6 | 18.5 | 17.6 | 18.0 | 12.4 | 11.7 | 12.0 | 8.8  | 8.1  | 8.4  |
| 2     | 22.6 | 21.5 | 21.9 | 18.7 | 17.3 | 17.9 | 11.7 | 10.7 | 11.2 | 9.0  | 8.2  | 8.6  |
| 3     | 21.5 | 20.2 | 20.8 | 19.8 | 18.1 | 18.5 | 10.7 | 9.4  | 9.9  | 10.2 | 8.4  | 9.2  |
| 4     | 21.2 | 19.8 | 20.5 | 19.9 | 17.5 | 18.7 | 9.4  | 8.9  | 9.1  | 10.9 | 9.4  | 10.1 |
| 5     | 21.5 | 20.2 | 20.7 | 19.7 | 18.1 | 19.1 | 9.3  | 8.8  | 9.0  | 10.7 | 10.0 | 10.5 |
| 6     | 21.8 | 20.6 | 21.0 | 19.6 | 18.7 | 19.2 | 8.9  | 8.2  | 8.7  | 12.5 | 10.7 | 11.7 |
| 7     | 21.7 | 21.1 | 21.3 | 20.0 | 19.2 | 19.6 | 8.4  | 7.7  | 8.0  | 10.9 | 8.1  | 9.2  |
| 8     | 21.3 | 21.0 | 21.2 | 19.7 | 18.2 | 18.9 | 8.1  | 7.1  | 7.4  | 8.3  | 7.3  | 7.7  |
| 9     | 21.2 | 20.8 | 21.0 | 18.2 | 16.0 | 17.1 | 7.8  | 7.2  | 7.5  | 7.3  | 6.4  | 6.8  |
| 10    | 21.4 | 21.0 | 21.2 | 16.3 | 15.6 | 16.0 | 9.3  | 7.6  | 8.2  | 6.8  | 5.4  | 6.2  |
| 11    | 21.3 | 20.8 | 21.0 | 16.5 | 15.5 | 15.8 | 9.6  | 9.0  | 9.3  | 5.4  | 4.0  | 4.8  |
| 12    | 21.6 | 20.6 | 21.0 | 16.7 | 15.6 | 16.1 | 9.3  | 8.7  | 9.0  | 5.8  | 4.0  | 4.9  |
| 13    | 21.7 | 20.6 | 21.2 | 17.1 | 15.5 | 16.5 | 9.0  | 8.6  | 8.8  | 6.1  | 4.7  | 5.4  |
| 14    | 21.5 | 21.0 | 21.2 | 15.5 | 13.5 | 14.4 | 9.1  | 8.7  | 8.9  | 6.2  | 5.3  | 5.7  |
| 15    | 21.2 | 19.7 | 20.7 | 13.6 | 13.0 | 13.3 | 8.8  | 8.2  | 8.5  | 6.2  | 5.7  | 5.9  |
| 16    | 20.1 | 18.9 | 19.4 | 14.9 | 13.2 | 13.5 | 8.9  | 8.0  | 8.5  | 6.0  | 5.4  | 5.7  |
| 17    | 21.3 | 18.8 | 19.5 | 13.7 | 13.1 | 13.3 | 9.6  | 8.5  | 9.1  | 6.0  | 5.0  | 5.4  |
| 18    | 20.2 | 18.9 | 19.4 | 14.9 | 13.3 | 14.0 | 9.0  | 8.2  | 8.5  | 7.2  | 5.4  | 6.4  |
| 19    | 20.3 | 18.2 | 18.8 | 15.5 | 14.1 | 14.8 | 8.3  | 7.6  | 8.1  | 7.1  | 6.5  | 6.8  |
| 20    | 19.8 | 18.2 | 18.8 | 15.2 | 14.4 | 14.9 | 7.7  | 6.9  | 7.4  | 6.6  | 5.6  | 6.1  |
| 21    | 19.8 | 18.1 | 19.1 | 14.7 | 14.1 | 14.2 | 7.0  | 6.3  | 6.7  | 5.9  | 5.0  | 5.5  |
| 22    | 19.7 | 18.8 | 19.3 | 15.6 | 14.2 | 14.6 | 6.6  | 5.7  | 6.2  | 6.2  | 5.0  | 5.7  |
| 23    | 18.8 | 17.7 | 18.1 | 17.3 | 14.5 | 15.5 | 7.4  | 6.1  | 6.7  | 5.8  | 5.2  | 5.4  |
| 24    | 17.8 | 17.1 | 17.4 | 16.4 | 15.1 | 15.9 | 8.4  | 7.4  | 8.0  | 5.8  | 4.9  | 5.4  |
| 25    | 17.3 | 16.8 | 17.0 | 16.2 | 14.5 | 15.4 | 8.1  | 7.6  | 7.8  | 5.7  | 4.8  | 5.1  |
| 26    | 18.1 | 17.0 | 17.2 | 14.6 | 14.0 | 14.3 | 7.7  | 7.0  | 7.3  | 4.8  | 4.2  | 4.4  |
| 27    | 18.2 | 17.3 | 17.8 | 14.4 | 13.9 | 14.1 | 7.6  | 6.8  | 7.2  | 4.3  | 4.1  | 4.2  |
| 28    | 18.2 | 18.1 | 18.2 | 15.8 | 14.0 | 14.8 | 7.6  | 6.6  | 7.1  | 4.2  | 3.8  | 3.9  |
| 29    | 18.7 | 18.0 | 18.2 | 14.9 | 12.5 | 13.8 | 7.6  | 7.1  | 7.2  | 4.3  | 3.3  | 3.8  |
| 30    | 18.3 | 17.7 | 18.0 | 13.0 | 11.8 | 12.3 | 9.3  | 7.3  | 8.5  | 4.6  | 3.8  | 4.2  |
| 31    | 18.9 | 17.3 | 17.9 | ---  | ---  | ---  | 9.0  | 8.1  | 8.5  | 4.3  | 3.6  | 3.9  |
| MONTH | 23.1 | 16.8 | 19.7 | 20.0 | 11.8 | 15.8 | 12.4 | 5.7  | 8.3  | 12.5 | 3.3  | 6.4  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 3.8  | 3.0  | 3.5  | 9.3  | 7.3  | 8.3  | 14.5 | 13.6 | 14.0 | 21.4 | 20.8 | 21.0 |
| 2     | 4.1  | 3.1  | 3.6  | 11.1 | 9.2  | 10.1 | 13.6 | 13.0 | 13.4 | 22.0 | 20.9 | 21.5 |
| 3     | 5.2  | 3.5  | 4.5  | 12.3 | 10.3 | 11.1 | 13.6 | 12.7 | 13.2 | 21.9 | 20.8 | 21.6 |
| 4     | 5.9  | 4.5  | 5.2  | 13.6 | 11.7 | 12.7 | 13.9 | 13.1 | 13.5 | 20.8 | 19.7 | 20.3 |
| 5     | 6.1  | 5.0  | 5.6  | 15.1 | 13.4 | 14.3 | 13.4 | 12.5 | 12.9 | 21.4 | 20.0 | 20.5 |
| 6     | 8.5  | 5.7  | 6.7  | 15.6 | 13.1 | 14.4 | 13.6 | 12.0 | 12.6 | 23.1 | 19.6 | 20.9 |
| 7     | 9.4  | 8.5  | 9.0  | 16.1 | 15.1 | 15.6 | 15.1 | 12.6 | 13.5 | 24.4 | 21.4 | 22.3 |
| 8     | 9.0  | 7.8  | 8.4  | 15.5 | 12.8 | 13.7 | 15.1 | 13.4 | 14.4 | 23.6 | 22.3 | 22.9 |
| 9     | 8.3  | 7.5  | 7.8  | 13.8 | 12.7 | 13.1 | 16.4 | 14.7 | 15.3 | 25.7 | 22.7 | 23.7 |
| 10    | 8.8  | 7.9  | 8.2  | 12.7 | 11.0 | 11.9 | 16.5 | 15.4 | 15.9 | 25.2 | 23.4 | 24.2 |
| 11    | 9.1  | 8.3  | 8.7  | 11.7 | 10.3 | 11.0 | 17.6 | 16.4 | 17.0 | 24.6 | 22.5 | 23.3 |
| 12    | 9.0  | 8.2  | 8.6  | 12.4 | 10.1 | 11.2 | 17.3 | 16.9 | 17.0 | 24.9 | 23.4 | 24.0 |
| 13    | 9.4  | 7.9  | 8.5  | 12.5 | 11.2 | 11.8 | 18.6 | 17.3 | 17.9 | 25.0 | 23.3 | 24.2 |
| 14    | 8.9  | 8.4  | 8.6  | 12.3 | 11.4 | 11.8 | 18.3 | 16.8 | 17.6 | 25.2 | 23.7 | 24.4 |
| 15    | 8.7  | 8.2  | 8.6  | 13.4 | 11.5 | 12.2 | 16.8 | 15.9 | 16.4 | 24.7 | 22.1 | 23.8 |
| 16    | 8.2  | 6.8  | 7.5  | 13.6 | 12.4 | 13.0 | 17.8 | 15.7 | 16.3 | 25.1 | 22.1 | 23.6 |
| 17    | 6.9  | 6.5  | 6.6  | 13.2 | 12.3 | 12.7 | 18.5 | 16.5 | 17.3 | 26.1 | 23.6 | 25.0 |
| 18    | 6.8  | 6.2  | 6.5  | 13.0 | 11.7 | 12.4 | 18.9 | 17.0 | 17.9 | 26.5 | 25.2 | 25.6 |
| 19    | 7.5  | 6.0  | 6.7  | 13.4 | 12.4 | 12.8 | 20.0 | 17.9 | 18.9 | 25.7 | 23.1 | 24.7 |
| 20    | 8.1  | 6.9  | 7.5  | 13.8 | 12.1 | 12.9 | 21.8 | 18.8 | 19.7 | 24.9 | 22.0 | 23.9 |
| 21    | 9.1  | 7.7  | 8.3  | 14.0 | 13.1 | 13.7 | 21.0 | 19.9 | 20.5 | 25.0 | 22.3 | 23.6 |
| 22    | 9.4  | 8.3  | 8.8  | 13.1 | 12.1 | 12.6 | 21.6 | 19.9 | 20.7 | 25.9 | 22.5 | 23.4 |
| 23    | 9.6  | 8.6  | 9.1  | 12.6 | 11.4 | 11.8 | 22.7 | 20.6 | 21.5 | 26.4 | 23.0 | 24.3 |
| 24    | 9.3  | 9.0  | 9.2  | 13.4 | 11.9 | 12.7 | 22.3 | 21.0 | 21.5 | 26.0 | 24.3 | 24.8 |
| 25    | 9.2  | 8.7  | 8.9  | 14.2 | 12.8 | 13.4 | 21.4 | 20.7 | 21.0 | 26.6 | 24.1 | 25.0 |
| 26    | 8.8  | 7.8  | 8.2  | 15.7 | 13.8 | 14.5 | 22.7 | 21.2 | 21.9 | 28.0 | 24.3 | 25.5 |
| 27    | 7.8  | 7.0  | 7.4  | 16.0 | 14.4 | 15.3 | 22.3 | 20.9 | 21.6 | 27.6 | 25.3 | 26.6 |
| 28    | 7.9  | 6.5  | 7.0  | 15.7 | 14.7 | 15.4 | 21.0 | 19.5 | 20.1 | 27.6 | 25.9 | 26.7 |
| 29    | 8.5  | 6.7  | 7.4  | 14.7 | 13.9 | 14.3 | 21.2 | 19.7 | 20.3 | 27.7 | 25.9 | 26.9 |
| 30    | ---  | ---  | ---  | 14.6 | 13.5 | 13.9 | 21.8 | 19.7 | 20.7 | 26.8 | 25.3 | 25.8 |
| 31    | ---  | ---  | ---  | 15.0 | 13.9 | 14.3 | ---  | ---  | ---  | 26.3 | 25.0 | 25.6 |
| MONTH | 9.6  | 3.0  | 7.4  | 16.1 | 7.3  | 12.9 | 22.7 | 12.0 | 17.5 | 28.0 | 19.6 | 23.9 |

## NEUSE RIVER BASIN

0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 27.2 | 25.6 | 26.3 | 28.7 | 28.0 | 28.5 | 29.6 | 28.5 | 29.0 | 27.7 | 26.6 | 27.0 |
| 2     | 27.5 | 25.9 | 26.5 | 29.5 | 27.1 | 28.0 | 29.6 | 28.8 | 29.2 | 26.6 | 25.8 | 26.3 |
| 3     | 30.4 | 25.6 | 26.7 | 28.5 | 27.4 | 27.9 | 28.9 | 28.1 | 28.6 | 27.3 | 25.6 | 26.1 |
| 4     | 27.6 | 26.5 | 27.1 | 30.3 | 27.5 | 28.9 | 28.5 | 27.7 | 28.1 | 27.5 | 25.8 | 26.4 |
| 5     | 28.4 | 26.3 | 27.0 | 30.3 | 28.1 | 29.1 | 29.4 | 27.8 | 28.3 | 27.4 | 26.2 | 26.7 |
| 6     | 28.0 | 26.8 | 27.2 | 30.8 | 27.9 | 29.3 | 28.9 | 26.8 | 27.8 | 27.0 | 26.5 | 26.7 |
| 7     | 28.4 | 26.9 | 27.4 | 30.5 | 28.6 | 29.2 | 27.5 | 25.7 | 26.6 | 26.5 | 26.1 | 26.3 |
| 8     | 28.1 | 27.1 | 27.5 | 29.9 | 28.4 | 29.1 | 27.1 | 25.7 | 26.7 | 26.6 | 26.2 | 26.4 |
| 9     | 28.0 | 27.4 | 27.7 | 29.3 | 28.2 | 28.5 | 27.3 | 25.4 | 26.5 | 26.6 | 25.7 | 26.2 |
| 10    | 28.0 | 26.0 | 27.1 | 29.9 | 28.4 | 29.1 | 28.5 | 26.7 | 27.6 | 26.7 | 26.1 | 26.4 |
| 11    | 28.2 | 25.9 | 26.9 | 30.3 | 29.1 | 29.8 | 28.3 | 27.4 | 28.0 | 26.3 | 25.8 | 26.0 |
| 12    | 27.7 | 25.9 | 26.5 | 29.7 | 28.6 | 29.4 | 28.2 | 27.2 | 27.7 | 26.0 | 25.2 | 25.6 |
| 13    | 26.6 | 25.1 | 25.8 | 29.6 | 28.3 | 28.9 | 27.5 | 26.8 | 27.1 | 25.6 | 24.9 | 25.2 |
| 14    | 26.4 | 25.3 | 25.9 | 29.3 | 27.8 | 28.3 | 27.2 | 26.2 | 26.6 | 25.1 | 24.5 | 24.7 |
| 15    | 26.9 | 25.1 | 26.1 | 30.0 | 27.6 | 28.7 | 26.3 | 25.2 | 25.6 | 25.4 | 24.4 | 24.7 |
| 16    | 27.2 | 25.7 | 26.5 | 29.4 | 28.1 | 28.7 | 26.4 | 25.0 | 25.6 | 25.9 | 24.8 | 25.2 |
| 17    | 27.6 | 25.9 | 26.8 | 29.6 | 28.3 | 28.8 | 27.0 | 25.4 | 26.2 | 26.1 | 25.2 | 25.6 |
| 18    | 27.8 | 26.1 | 26.9 | 29.4 | 28.2 | 28.6 | 27.7 | 26.0 | 26.7 | 25.4 | 24.2 | 24.9 |
| 19    | 28.8 | 26.5 | 27.1 | 29.3 | 27.6 | 28.2 | 27.2 | 25.8 | 26.8 | 24.2 | 22.9 | 23.5 |
| 20    | 28.7 | 27.2 | 27.9 | 28.8 | 27.6 | 28.0 | 27.3 | 26.0 | 26.5 | 23.2 | 21.8 | 22.2 |
| 21    | 28.6 | 26.3 | 27.2 | 29.8 | 27.8 | 28.3 | 27.6 | 26.1 | 26.9 | 22.5 | 21.2 | 21.9 |
| 22    | 28.3 | 26.9 | 27.7 | 29.9 | 28.4 | 29.0 | 27.2 | 26.5 | 26.8 | 23.0 | 21.8 | 22.1 |
| 23    | 29.0 | 27.0 | 27.6 | 29.4 | 28.4 | 28.8 | 26.8 | 25.6 | 26.3 | 24.6 | 22.1 | 23.0 |
| 24    | 28.7 | 27.6 | 28.1 | 29.9 | 28.2 | 28.9 | 26.7 | 25.4 | 26.1 | 24.1 | 22.9 | 23.4 |
| 25    | 28.7 | 27.8 | 28.2 | 29.0 | 28.5 | 28.7 | 26.7 | 25.4 | 25.9 | 23.9 | 22.6 | 23.3 |
| 26    | 27.9 | 26.7 | 27.4 | 30.3 | 28.5 | 29.1 | 26.2 | 25.7 | 25.9 | 23.7 | 22.9 | 23.3 |
| 27    | 27.8 | 26.4 | 27.2 | 30.2 | 29.3 | 29.8 | 26.9 | 25.8 | 26.3 | 24.2 | 23.2 | 23.7 |
| 28    | 28.8 | 27.6 | 28.1 | 29.8 | 28.6 | 29.0 | 27.6 | 26.1 | 26.6 | 24.5 | 23.8 | 24.0 |
| 29    | 28.9 | 27.3 | 27.8 | 28.7 | 27.8 | 28.3 | 27.4 | 26.4 | 26.9 | 25.8 | 23.8 | 24.3 |
| 30    | 29.1 | 28.1 | 28.4 | 29.1 | 28.0 | 28.6 | 27.2 | 26.5 | 26.9 | 25.6 | 24.4 | 24.7 |
| 31    | ---  | ---  | ---  | 29.2 | 28.3 | 28.7 | 28.3 | 26.8 | 27.2 | ---  | ---  | ---  |
| MONTH | 30.4 | 25.1 | 27.2 | 30.8 | 27.1 | 28.8 | 29.6 | 25.0 | 27.0 | 27.7 | 21.2 | 24.9 |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 22.9 | 22.2 | 22.5 | 18.3 | 17.8 | 18.1 | 12.7 | 11.5 | 12.1 | 8.9  | 8.7  | 8.8  |
| 2     | 22.7 | 21.4 | 22.0 | 18.4 | 18.1 | 18.3 | 11.6 | 10.7 | 11.0 | 9.1  | 8.8  | 9.0  |
| 3     | 21.4 | 20.4 | 20.8 | 18.4 | 18.0 | 18.3 | 10.8 | 9.2  | 9.8  | 9.2  | 8.9  | 9.1  |
| 4     | 21.6 | 20.6 | 21.0 | 18.4 | 17.8 | 18.1 | 9.3  | 8.7  | 9.1  | 9.1  | 8.9  | 9.0  |
| 5     | 21.6 | 20.0 | 21.0 | 18.4 | 17.9 | 18.1 | 9.3  | 8.7  | 9.0  | 10.7 | 8.9  | 9.7  |
| 6     | 21.3 | 20.8 | 21.2 | 18.6 | 17.9 | 18.3 | 9.3  | 8.4  | 8.8  | 11.8 | 10.1 | 11.2 |
| 7     | 21.3 | 21.1 | 21.2 | 19.0 | 18.5 | 18.6 | 8.6  | 7.6  | 8.2  | 10.8 | 8.7  | 9.3  |
| 8     | 21.3 | 21.1 | 21.2 | 19.1 | 18.4 | 18.7 | 8.1  | 7.0  | 7.7  | 9.5  | 8.0  | 8.9  |
| 9     | 21.2 | 20.9 | 21.0 | 18.4 | 16.4 | 17.2 | 8.8  | 7.8  | 8.1  | 9.6  | 6.4  | 8.1  |
| 10    | 21.4 | 20.9 | 21.2 | 16.5 | 15.8 | 16.0 | 9.1  | 8.0  | 8.6  | 6.9  | 5.5  | 6.3  |
| 11    | 21.3 | 20.9 | 21.1 | 17.7 | 15.9 | 16.5 | 9.4  | 8.9  | 9.2  | 5.7  | 4.7  | 5.3  |
| 12    | 21.0 | 20.6 | 20.8 | 17.9 | 16.7 | 17.3 | 9.5  | 9.0  | 9.2  | 6.2  | 5.0  | 5.7  |
| 13    | 21.3 | 20.8 | 21.1 | 17.1 | 15.5 | 16.6 | 9.4  | 8.6  | 8.9  | 6.1  | 5.4  | 5.7  |
| 14    | 21.4 | 21.0 | 21.1 | 15.5 | 13.6 | 14.5 | 8.8  | 8.6  | 8.6  | 6.1  | 5.4  | 5.8  |
| 15    | 21.2 | 20.2 | 20.7 | 13.6 | 13.0 | 13.3 | 8.6  | 8.0  | 8.4  | 6.2  | 5.8  | 6.0  |
| 16    | 20.2 | 19.1 | 19.6 | 14.0 | 13.4 | 13.6 | 9.0  | 8.6  | 8.7  | 6.0  | 5.5  | 5.8  |
| 17    | 20.0 | 18.6 | 19.3 | 14.6 | 13.6 | 14.1 | 9.6  | 8.7  | 9.1  | 5.8  | 5.2  | 5.4  |
| 18    | 19.5 | 18.8 | 19.2 | 14.8 | 14.6 | 14.7 | 9.3  | 8.5  | 8.8  | 7.2  | 5.4  | 6.2  |
| 19    | 18.8 | 18.4 | 18.5 | 15.3 | 14.1 | 14.7 | 9.3  | 8.8  | 9.1  | 7.1  | 6.6  | 6.8  |
| 20    | 19.6 | 18.4 | 19.1 | 15.1 | 14.3 | 14.7 | 9.3  | 7.3  | 8.4  | 6.8  | 5.8  | 6.2  |
| 21    | 19.9 | 19.1 | 19.6 | 14.8 | 14.0 | 14.4 | 8.5  | 6.5  | 7.4  | 5.8  | 5.2  | 5.5  |
| 22    | 19.8 | 18.8 | 19.4 | 15.2 | 14.4 | 14.9 | 8.8  | 7.2  | 8.0  | 5.8  | 5.5  | 5.7  |
| 23    | 18.8 | 17.3 | 17.9 | 15.2 | 15.2 | 15.2 | 8.4  | 7.0  | 7.8  | 5.8  | 5.3  | 5.6  |
| 24    | 18.1 | 17.1 | 17.5 | 15.3 | 15.2 | 15.2 | 8.8  | 7.3  | 8.1  | 5.9  | 5.0  | 5.5  |
| 25    | 17.3 | 16.8 | 17.0 | 15.5 | 14.8 | 15.2 | 9.0  | 7.7  | 8.6  | 5.8  | 4.8  | 5.1  |
| 26    | 17.5 | 17.0 | 17.2 | 15.2 | 14.5 | 14.9 | 9.0  | 8.6  | 8.8  | 4.9  | 4.3  | 4.5  |
| 27    | 17.8 | 17.3 | 17.6 | 15.1 | 15.0 | 15.1 | 8.9  | 8.2  | 8.4  | 4.5  | 4.2  | 4.3  |
| 28    | 18.2 | 17.6 | 17.9 | 15.6 | 14.8 | 15.2 | 8.2  | 8.0  | 8.2  | 4.2  | 3.9  | 4.0  |
| 29    | 18.1 | 17.9 | 18.0 | 14.9 | 13.1 | 13.8 | 8.3  | 8.0  | 8.2  | 4.2  | 3.4  | 3.9  |
| 30    | 18.0 | 17.3 | 17.8 | 13.5 | 12.3 | 13.1 | 8.7  | 8.1  | 8.5  | 4.4  | 4.0  | 4.2  |
| 31    | 18.1 | 17.5 | 17.8 | ---  | ---  | ---  | 8.7  | 8.5  | 8.6  | 4.3  | 3.6  | 3.8  |
| MONTH | 22.9 | 16.8 | 19.7 | 19.1 | 12.3 | 15.9 | 12.7 | 6.5  | 8.8  | 11.8 | 3.4  | 6.5  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 3.9  | 3.3  | 3.7  | 7.9  | 7.6  | 7.8  | 14.2 | 13.4 | 13.7 | 21.1 | 20.1 | 20.7 |
| 2     | 4.0  | 3.0  | 3.6  | 8.2  | 7.9  | 7.9  | 13.7 | 12.9 | 13.3 | 22.0 | 20.8 | 21.4 |
| 3     | 5.0  | 3.5  | 4.2  | 10.3 | 7.9  | 8.6  | 13.6 | 12.6 | 13.2 | 21.9 | 20.8 | 21.5 |
| 4     | 5.5  | 4.6  | 4.9  | 10.3 | 8.0  | 8.4  | 13.8 | 13.1 | 13.4 | 20.8 | 19.7 | 20.0 |
| 5     | 6.0  | 5.1  | 5.6  | 9.6  | 8.2  | 8.7  | 13.4 | 12.4 | 12.8 | 20.5 | 19.8 | 20.0 |
| 6     | 8.4  | 5.6  | 6.5  | 14.2 | 8.8  | 11.2 | 12.9 | 12.0 | 12.6 | 20.2 | 19.4 | 19.8 |
| 7     | 9.1  | 8.2  | 8.7  | 15.7 | 11.0 | 12.6 | 12.9 | 12.8 | 12.9 | 20.1 | 19.7 | 19.8 |
| 8     | 8.8  | 7.8  | 8.2  | 15.5 | 12.8 | 13.7 | 14.1 | 12.9 | 13.3 | 23.5 | 19.7 | 20.8 |
| 9     | 8.4  | 7.6  | 8.0  | 13.0 | 12.1 | 12.7 | 15.7 | 13.5 | 14.0 | 23.0 | 20.8 | 22.1 |
| 10    | 8.2  | 7.8  | 8.0  | 12.7 | 11.0 | 11.9 | 16.4 | 14.5 | 15.6 | 22.0 | 20.8 | 21.3 |
| 11    | 8.2  | 8.0  | 8.0  | 11.0 | 10.5 | 10.8 | 17.5 | 16.3 | 16.8 | 21.7 | 20.9 | 21.1 |
| 12    | 8.6  | 8.0  | 8.3  | 11.2 | 10.4 | 10.9 | 17.3 | 16.7 | 16.9 | 21.6 | 20.9 | 21.1 |
| 13    | 8.8  | 7.9  | 8.1  | 12.0 | 11.0 | 11.5 | 18.5 | 17.1 | 17.7 | 21.3 | 20.9 | 21.0 |
| 14    | 8.1  | 7.9  | 8.0  | 12.4 | 11.3 | 11.9 | 18.3 | 16.8 | 17.6 | 21.1 | 20.7 | 20.8 |
| 15    | 8.6  | 8.0  | 8.3  | 12.2 | 11.8 | 11.9 | 16.8 | 15.9 | 16.3 | 21.2 | 20.7 | 20.9 |
| 16    | 8.1  | 6.8  | 7.3  | 13.0 | 11.9 | 12.0 | 16.2 | 16.0 | 16.1 | 21.2 | 20.8 | 21.0 |
| 17    | 7.1  | 6.4  | 6.7  | 13.0 | 12.4 | 12.8 | 17.4 | 16.0 | 16.2 | 21.5 | 20.9 | 21.1 |
| 18    | 6.9  | 6.1  | 6.5  | 12.7 | 11.4 | 11.8 | 17.5 | 16.2 | 16.4 | 21.5 | 20.9 | 21.1 |
| 19    | 6.9  | 6.6  | 6.8  | 13.3 | 11.7 | 12.5 | 19.7 | 16.4 | 17.1 | 21.7 | 21.0 | 21.2 |
| 20    | 8.0  | 6.9  | 7.1  | 13.6 | 12.2 | 12.6 | 19.3 | 16.7 | 17.1 | 22.1 | 21.0 | 21.6 |
| 21    | 9.0  | 7.5  | 8.2  | 14.0 | 13.1 | 13.6 | 18.3 | 16.7 | 17.1 | 22.2 | 21.6 | 22.0 |
| 22    | 9.5  | 8.3  | 8.9  | 13.1 | 12.2 | 12.6 | 21.4 | 17.3 | 19.4 | 23.2 | 22.0 | 22.3 |
| 23    | 9.7  | 8.9  | 9.3  | 12.4 | 11.4 | 11.8 | 20.3 | 17.8 | 19.1 | 24.2 | 22.2 | 22.8 |
| 24    | 9.4  | 9.0  | 9.2  | 12.1 | 11.7 | 11.8 | 21.4 | 17.5 | 18.9 | 24.7 | 22.6 | 23.5 |
| 25    | 9.2  | 8.8  | 9.0  | 12.3 | 11.9 | 12.1 | 21.3 | 20.4 | 20.9 | 24.8 | 23.5 | 23.9 |
| 26    | 9.0  | 7.8  | 8.4  | 12.6 | 12.1 | 12.3 | 22.6 | 19.7 | 21.0 | 24.5 | 23.5 | 23.9 |
| 27    | 7.9  | 7.1  | 7.5  | 13.0 | 12.3 | 12.5 | 21.7 | 19.6 | 20.9 | 24.9 | 24.1 | 24.5 |
| 28    | 7.5  | 6.6  | 6.9  | 15.4 | 12.2 | 13.8 | 20.8 | 19.5 | 19.8 | 26.4 | 24.6 | 25.0 |
| 29    | 7.7  | 7.1  | 7.4  | 14.6 | 13.8 | 14.2 | 20.1 | 19.5 | 19.7 | 26.7 | 25.2 | 25.7 |
| 30    | ---  | ---  | ---  | 13.9 | 13.0 | 13.4 | 20.4 | 20.0 | 20.3 | 26.5 | 25.4 | 25.8 |
| 31    | ---  | ---  | ---  | 13.5 | 12.9 | 13.1 | ---  | ---  | ---  | 25.9 | 25.4 | 25.5 |
| MONTH | 9.7  | 3.0  | 7.3  | 15.7 | 7.6  | 11.7 | 22.6 | 12.0 | 16.7 | 26.7 | 19.4 | 22.0 |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 25.8 | 25.4 | 25.5 | 27.4 | 27.1 | 27.2 | 29.4 | 28.5 | 28.9 | 27.3 | 27.0 | 27.1 |
| 2     | 25.8 | 25.4 | 25.6 | 28.0 | 27.0 | 27.3 | 29.5 | 29.0 | 29.1 | 27.0 | 25.8 | 26.3 |
| 3     | 25.9 | 25.4 | 25.6 | 27.6 | 27.3 | 27.4 | 29.0 | 28.3 | 28.5 | 26.3 | 25.6 | 26.0 |
| 4     | 27.3 | 25.4 | 26.2 | 27.5 | 27.1 | 27.4 | 28.4 | 28.2 | 28.3 | 26.6 | 25.8 | 26.2 |
| 5     | 27.1 | 26.2 | 26.6 | 27.8 | 27.1 | 27.5 | 28.5 | 28.0 | 28.3 | 26.8 | 26.2 | 26.4 |
| 6     | 27.1 | 26.4 | 26.7 | 27.8 | 27.5 | 27.7 | 28.5 | 27.0 | 27.8 | 27.0 | 26.6 | 26.7 |
| 7     | 26.7 | 26.2 | 26.4 | 27.8 | 27.5 | 27.6 | 27.1 | 26.2 | 26.6 | 26.6 | 26.1 | 26.3 |
| 8     | 26.6 | 26.0 | 26.3 | 27.8 | 27.4 | 27.5 | 27.4 | 26.8 | 27.1 | 26.6 | 26.1 | 26.3 |
| 9     | 26.7 | 26.0 | 26.3 | 28.1 | 27.4 | 27.7 | 27.3 | 27.0 | 27.1 | 26.4 | 25.7 | 26.1 |
| 10    | 26.6 | 26.0 | 26.2 | 28.3 | 27.7 | 27.8 | 27.2 | 27.0 | 27.1 | 26.7 | 26.1 | 26.3 |
| 11    | 26.5 | 25.8 | 26.1 | 28.1 | 27.7 | 27.8 | 27.6 | 27.0 | 27.2 | 26.5 | 25.7 | 26.0 |
| 12    | 26.6 | 25.9 | 26.3 | 28.3 | 27.6 | 27.9 | 27.8 | 27.1 | 27.3 | 25.9 | 25.1 | 25.6 |
| 13    | 25.9 | 25.2 | 25.5 | 28.2 | 27.6 | 27.8 | 27.5 | 27.0 | 27.2 | 25.6 | 24.9 | 25.2 |
| 14    | 26.1 | 25.7 | 25.9 | 28.3 | 27.6 | 28.1 | 27.2 | 26.5 | 26.9 | 25.1 | 24.5 | 24.7 |
| 15    | 25.9 | 25.6 | 25.8 | 28.4 | 27.5 | 28.1 | 26.6 | 26.0 | 26.4 | 24.7 | 24.4 | 24.5 |
| 16    | 26.2 | 25.6 | 25.9 | 28.5 | 28.1 | 28.4 | 26.3 | 25.8 | 26.0 | 25.3 | 24.4 | 24.6 |
| 17    | 26.4 | 25.8 | 26.1 | 28.6 | 28.3 | 28.5 | 26.1 | 25.9 | 26.0 | 26.0 | 24.8 | 25.5 |
| 18    | 26.5 | 26.0 | 26.2 | 28.4 | 28.1 | 28.3 | 26.2 | 26.0 | 26.0 | 25.4 | 24.1 | 24.8 |
| 19    | 26.4 | 26.0 | 26.3 | 28.3 | 28.2 | 28.3 | 26.1 | 25.9 | 26.0 | 24.1 | 23.1 | 23.5 |
| 20    | 27.1 | 26.2 | 26.5 | 28.3 | 28.0 | 28.2 | 26.0 | 25.9 | 25.9 | 23.8 | 21.8 | 22.5 |
| 21    | 27.3 | 26.4 | 27.0 | 28.2 | 28.0 | 28.1 | 26.0 | 25.9 | 25.9 | 22.5 | 21.3 | 21.6 |
| 22    | 27.5 | 26.5 | 26.8 | 28.4 | 27.8 | 28.0 | 26.3 | 25.9 | 26.1 | 22.7 | 22.0 | 22.3 |
| 23    | 27.4 | 26.2 | 26.7 | 28.6 | 27.9 | 28.1 | 26.6 | 26.1 | 26.3 | 22.7 | 22.4 | 22.6 |
| 24    | 27.0 | 26.5 | 26.8 | 28.5 | 27.8 | 28.1 | 26.5 | 26.1 | 26.3 | 23.7 | 22.5 | 23.0 |
| 25    | 27.1 | 26.7 | 27.0 | 28.6 | 27.8 | 28.1 | 26.3 | 25.3 | 25.9 | 23.8 | 22.8 | 23.2 |
| 26    | 27.2 | 26.4 | 26.9 | 28.8 | 28.0 | 28.3 | 26.4 | 25.7 | 26.0 | 23.9 | 23.0 | 23.4 |
| 27    | 27.3 | 27.0 | 27.2 | 29.3 | 28.0 | 28.5 | 26.9 | 25.8 | 26.3 | 23.6 | 23.2 | 23.4 |
| 28    | 27.7 | 27.0 | 27.2 | 29.1 | 28.3 | 28.7 | 27.0 | 26.1 | 26.6 | 24.5 | 23.4 | 23.8 |
| 29    | 27.7 | 27.3 | 27.4 | 28.5 | 27.9 | 28.3 | 27.3 | 26.3 | 26.7 | 24.1 | 23.7 | 23.9 |
| 30    | 27.5 | 27.2 | 27.3 | 28.8 | 28.0 | 28.3 | 27.2 | 26.5 | 26.9 | 24.9 | 23.9 | 24.6 |
| 31    | ---  | ---  | ---  | 29.2 | 28.2 | 28.8 | 27.2 | 26.8 | 27.0 | ---  | ---  | ---  |
| MONTH | 27.7 | 25.2 | 26.4 | 29.3 | 27.0 | 28.0 | 29.5 | 25.3 | 26.9 | 27.3 | 21.3 | 24.7 |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 9.6  | 4.7  | 7.5  | 10.3 | 6.1  | 8.0  | 9.9  | 8.7  | 9.4  | 10.2 | 9.7  | 9.9  |
| 2     | 8.9  | 4.5  | 7.4  | 8.0  | 6.0  | 7.1  | 10.0 | 9.4  | 9.7  | 10.5 | 10.1 | 10.3 |
| 3     | 9.7  | 7.1  | 8.1  | 9.5  | 7.2  | 8.0  | 10.5 | 9.8  | 10.2 | 10.8 | 8.5  | 10.2 |
| 4     | 9.9  | 7.7  | 8.5  | 7.8  | 5.5  | 6.6  | 10.7 | 10.3 | 10.4 | 10.1 | 5.5  | 7.7  |
| 5     | 9.2  | 7.0  | 8.2  | 7.1  | 4.6  | 6.2  | 10.8 | 10.4 | 10.6 | 7.0  | 4.5  | 5.6  |
| 6     | 10.7 | 8.2  | 9.0  | 6.1  | 4.5  | 5.7  | 11.0 | 10.6 | 10.7 | 8.9  | 5.8  | 8.2  |
| 7     | 10.0 | 8.3  | 9.1  | 5.6  | 4.7  | 5.2  | 11.2 | 10.9 | 11.1 | 10.2 | 8.4  | 9.2  |
| 8     | 8.8  | 6.4  | 7.6  | 6.3  | 5.4  | 5.9  | 11.8 | 11.1 | 11.3 | 11.2 | 9.6  | 10.3 |
| 9     | 7.1  | 6.1  | 6.7  | 6.8  | 6.0  | 6.5  | 11.9 | 11.4 | 11.7 | 11.1 | 10.6 | 10.9 |
| 10    | 7.6  | 6.6  | 7.1  | 7.0  | 6.3  | 6.7  | 12.2 | 10.9 | 11.6 | 11.2 | 10.5 | 10.8 |
| 11    | 7.2  | 6.6  | 6.9  | 7.1  | 6.5  | 6.8  | 11.2 | 10.8 | 11.0 | 12.2 | 10.9 | 11.5 |
| 12    | 8.2  | 6.6  | 7.4  | 7.0  | 6.3  | 6.7  | 11.2 | 10.9 | 11.1 | 12.7 | 11.3 | 12.0 |
| 13    | 9.1  | 7.3  | 8.2  | 6.7  | 5.0  | 6.0  | 11.6 | 11.2 | 11.4 | 12.6 | 11.9 | 12.3 |
| 14    | 8.9  | 7.0  | 8.0  | 7.0  | 5.9  | 6.5  | 11.6 | 11.2 | 11.3 | 13.0 | 12.0 | 12.5 |
| 15    | 8.2  | 7.1  | 7.5  | 7.3  | 6.7  | 7.0  | 11.5 | 11.1 | 11.3 | 12.9 | 11.9 | 12.2 |
| 16    | 9.1  | 7.5  | 7.9  | 8.2  | 6.7  | 7.1  | 11.5 | 9.4  | 10.4 | 12.5 | 11.9 | 12.2 |
| 17    | 12.8 | 8.1  | 9.8  | 7.4  | 5.4  | 6.7  | 9.6  | 8.4  | 9.0  | 14.2 | 12.1 | 13.0 |
| 18    | 12.3 | 7.0  | 9.8  | 9.0  | 5.6  | 7.6  | 9.4  | 8.7  | 9.1  | 13.7 | 11.9 | 13.0 |
| 19    | 13.7 | 6.6  | 9.9  | 8.3  | 6.6  | 7.6  | 9.7  | 8.8  | 9.2  | 13.2 | 11.9 | 12.5 |
| 20    | 12.4 | 8.5  | 9.9  | 8.5  | 7.8  | 8.2  | 10.0 | 9.5  | 9.8  | 12.8 | 12.3 | 12.6 |
| 21    | 10.5 | 6.6  | 8.6  | 8.7  | 8.2  | 8.5  | 10.2 | 9.8  | 10   | 14.9 | 12.5 | 13.5 |
| 22    | 8.6  | 6.3  | 7.7  | 11.3 | 8.2  | 9.3  | 10.1 | 9.7  | 10   | 14.9 | 13.2 | 13.8 |
| 23    | 11.3 | 8.0  | 9.5  | 11.8 | 8.7  | 10.0 | 10.3 | 9.9  | 10.1 | 13.8 | 12.8 | 13.1 |
| 24    | 10.8 | 9.0  | 9.8  | 11.0 | 9.1  | 10.0 | 10.2 | 9.6  | 9.9  | 13.2 | 12.5 | 12.9 |
| 25    | 10.7 | 9.2  | 9.8  | 9.7  | 7.9  | 8.6  | 9.8  | 9.3  | 9.6  | 13.0 | 12.5 | 12.7 |
| 26    | 11.3 | 7.7  | 9.1  | 9.2  | 8.2  | 8.6  | 10.0 | 9.3  | 9.7  | 13.1 | 12.3 | 12.8 |
| 27    | 10.1 | 7.0  | 8.5  | 9.9  | 8.8  | 9.0  | 10.3 | 9.7  | 10.0 | 13.8 | 12.5 | 13.0 |
| 28    | 8.9  | 7.6  | 8.2  | 9.7  | 7.9  | 9.1  | 10.4 | 9.8  | 10.1 | 13.3 | 12.6 | 13.0 |
| 29    | 9.4  | 6.8  | 8.4  | 9.1  | 7.0  | 8.3  | 10.4 | 9.6  | 10.1 | 14.5 | 12.4 | 13.0 |
| 30    | 10.2 | 8.5  | 9.3  | 9.9  | 8.7  | 9.3  | 10.6 | 7.7  | 9.7  | 14.2 | 11.4 | 12.7 |
| 31    | 11.0 | 9.1  | 9.8  | ---  | ---  | ---  | 9.8  | 9.4  | 9.6  | 12.6 | 11.4 | 11.8 |
| MONTH | 13.7 | 4.5  | 8.5  | 11.8 | 4.5  | 7.6  | 12.2 | 7.7  | 10.3 | 14.9 | 4.5  | 11.6 |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 13.0 | 11.8 | 12.3 | 11.9 | 11.1 | 11.6 | 10.9 | 9.3  | 9.9  | 9.0  | 7.5  | 8.2  |
| 2     | 12.9 | 11.9 | 12.5 | 11.8 | 10.0 | 10.8 | 10.9 | 9.4  | 10.2 | 8.4  | 7.3  | 7.8  |
| 3     | 12.8 | 11.7 | 12.4 | 11.2 | 10.2 | 10.7 | 11.3 | 10.2 | 10.8 | 8.0  | 6.9  | 7.5  |
| 4     | 13.6 | 12.4 | 12.9 | 11.2 | 9.8  | 10.4 | 10.7 | 9.6  | 10.4 | 9.5  | 6.6  | 7.9  |
| 5     | 13.6 | 12.0 | 12.9 | 10.2 | 9.3  | 9.8  | 10.1 | 9.6  | 9.8  | 9.1  | 6.8  | 7.6  |
| 6     | 13.5 | 11.1 | 12.5 | 9.3  | 7.1  | 8.4  | 11.5 | 9.5  | 10.3 | 11.0 | 6.3  | 8.3  |
| 7     | 11.3 | 10.3 | 10.9 | 10.0 | 8.4  | 9.3  | 12.4 | 9.9  | 11.0 | 9.9  | 7.0  | 8.9  |
| 8     | 12.3 | 10.2 | 11.0 | 8.8  | 7.7  | 8.2  | 11.7 | 9.7  | 10.6 | 10.8 | 8.1  | 9.4  |
| 9     | 13.3 | 11.0 | 11.8 | 9.4  | 8.1  | 9.1  | 12.9 | 9.7  | 10.9 | 11.9 | 8.4  | 9.9  |
| 10    | 13.9 | 11.7 | 12.4 | 9.9  | 8.9  | 9.4  | 11.7 | 10.4 | 10.9 | 10.9 | 7.4  | 9.5  |
| 11    | 13.6 | 12.3 | 12.9 | 10.2 | 9.8  | 10.0 | 10.6 | 9.2  | 10.1 | 8.1  | 5.7  | 7.1  |
| 12    | 13.5 | 11.5 | 12.4 | 10.4 | 9.2  | 9.8  | 9.7  | 8.5  | 9.0  | 7.5  | 5.8  | 6.5  |
| 13    | 13.9 | 10.6 | 12.1 | 10.9 | 9.8  | 10.3 | 9.2  | 8.3  | 8.7  | 7.5  | 5.9  | 6.6  |
| 14    | 13.6 | 11.8 | 12.5 | 11.8 | 10.3 | 10.9 | 9.6  | 7.9  | 8.7  | 7.1  | 4.4  | 6.4  |
| 15    | 12.5 | 10.9 | 11.9 | 12.4 | 10.4 | 11.3 | 9.6  | 8.5  | 9.1  | 7.2  | 0.5  | 4.8  |
| 16    | 11.6 | 10.4 | 10.9 | 12.3 | 10.9 | 11.4 | 11.8 | 8.5  | 9.4  | 7.2  | 0.8  | 5.1  |
| 17    | 11.3 | 10.5 | 10.9 | 11.2 | 10.5 | 10.8 | 10.6 | 8.2  | 9.5  | 9.2  | 3.4  | 7.5  |
| 18    | 11.7 | 10.6 | 11.1 | 11.8 | 9.9  | 11.0 | 9.8  | 8.0  | 8.7  | 9.4  | 7.8  | 8.5  |
| 19    | 12.9 | 10.9 | 11.9 | 10.9 | 10.1 | 10.5 | 9.0  | 7.5  | 8.4  | 8.4  | 1.5  | 6.1  |
| 20    | 15.6 | 11.1 | 12.6 | 11.4 | 9.6  | 10.5 | 11.2 | 7.3  | 8.6  | 6.9  | 0.1  | 4.6  |
| 21    | 12.7 | 10.1 | 11.2 | 10.7 | 9.2  | 9.9  | 9.0  | 7.9  | 8.3  | 8.8  | 0.3  | 4.0  |
| 22    | 14.2 | 11.3 | 12.5 | 10.9 | 9.3  | 9.8  | 9.8  | 7.8  | 8.7  | 6.5  | 1.5  | 4.0  |
| 23    | 13.5 | 11.1 | 12.4 | 11.4 | 9.3  | 10   | 10.5 | 8.4  | 9.3  | 8.5  | 3.3  | 5.5  |
| 24    | 12.5 | 11.0 | 11.5 | 12.2 | 10.4 | 10.9 | 10.7 | 7.6  | 9.0  | 8.0  | 4.9  | 5.8  |
| 25    | 11.3 | 10.8 | 11.0 | 13.4 | 10.2 | 11.6 | 10.9 | 8.6  | 9.4  | 8.6  | 5.5  | 6.9  |
| 26    | 11.4 | 10.7 | 11.1 | 13.4 | 11.6 | 12.2 | 9.7  | 8.3  | 9.0  | 9.7  | 4.6  | 7.1  |
| 27    | 11.8 | 10.9 | 11.3 | 11.8 | 10.6 | 11.2 | 10.2 | 8.0  | 9.0  | 8.8  | 5.6  | 7.6  |
| 28    | 11.6 | 11.1 | 11.4 | 10.7 | 9.2  | 10.2 | 10.7 | 8.3  | 9.3  | 7.9  | 4.4  | 6.1  |
| 29    | 12.2 | 11.3 | 11.8 | 10.1 | 9.0  | 9.6  | 11.0 | 8.8  | 9.9  | 8.0  | 6.2  | 7.1  |
| 30    | ---  | ---  | ---  | 11.4 | 9.2  | 9.9  | 9.7  | 8.3  | 9.2  | 7.0  | 6.1  | 6.5  |
| 31    | ---  | ---  | ---  | 11.4 | 9.7  | 10.5 | ---  | ---  | ---  | 7.0  | 6.1  | 6.6  |
| MONTH | 15.6 | 10.1 | 11.9 | 13.4 | 7.1  | 10.3 | 12.9 | 7.3  | 9.5  | 11.9 | 0.1  | 6.9  |

## NEUSE RIVER BASIN

0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 7.7  | 6.1 | 6.8  | 8.9  | 2.1 | 7.0  | ---    | --- | ---  | 6.0       | 3.9 | 5.1  |
| 2     | 8.8  | 6.3 | 7.1  | 11.4 | 3.6 | 6.1  | ---    | --- | ---  | 5.9       | 4.8 | 5.4  |
| 3     | 9.6  | 4.9 | 6.8  | 7.5  | 2.0 | 3.9  | ---    | --- | ---  | 6.8       | 4.7 | 5.3  |
| 4     | 6.9  | 4.4 | 6.1  | ---  | --- | ---  | ---    | --- | ---  | 7.1       | 5.2 | 5.9  |
| 5     | 8.1  | 5.5 | 6.3  | ---  | --- | ---  | ---    | --- | ---  | 7.9       | 5.3 | 6.4  |
| 6     | 10.1 | 6.5 | 7.3  | ---  | --- | ---  | ---    | --- | ---  | 7.6       | 5.8 | 6.6  |
| 7     | 9.5  | 6.0 | 7.5  | ---  | --- | ---  | ---    | --- | ---  | 7.9       | 5.4 | 6.7  |
| 8     | 7.9  | 4.4 | 7.0  | ---  | --- | ---  | ---    | --- | ---  | 7.7       | 5.9 | 6.6  |
| 9     | 8.7  | 4.8 | 6.7  | ---  | --- | ---  | ---    | --- | ---  | 7.7       | 5.2 | 6.9  |
| 10    | 5.3  | 2.5 | 4.1  | 6.7  | 0.5 | 4.3  | ---    | --- | ---  | 7.4       | 4.3 | 6.3  |
| 11    | 8.9  | 2.1 | 4.9  | 7.9  | 1.3 | 5.0  | ---    | --- | ---  | 6.4       | 5.5 | 5.9  |
| 12    | ---  | --- | ---  | 9.0  | 2.2 | 6.0  | ---    | --- | ---  | 6.8       | 5.8 | 6.2  |
| 13    | ---  | --- | ---  | 7.4  | 0.1 | 3.3  | 7.3    | 4.7 | 5.8  | 6.8       | 5.9 | 6.3  |
| 14    | ---  | --- | ---  | 6.2  | 0.1 | 2.6  | 6.1    | 3.9 | 5.2  | 6.6       | 6.0 | 6.3  |
| 15    | ---  | --- | ---  | 7.3  | 0.4 | 4.6  | 6.2    | 4.0 | 4.9  | 6.8       | 5.9 | 6.4  |
| 16    | ---  | --- | ---  | 7.3  | 1.5 | 6.2  | 6.3    | 3.6 | 5.0  | 7.6       | 5.6 | 6.3  |
| 17    | ---  | --- | ---  | 10.0 | 4.3 | 6.2  | 7.7    | 4.8 | 5.8  | 6.6       | 5.4 | 6.2  |
| 18    | ---  | --- | ---  | 8.0  | 4.1 | 6.0  | 9.6    | 6.4 | 7.5  | 6.3       | 5.2 | 5.7  |
| 19    | ---  | --- | ---  | 10.7 | 3.1 | 5.6  | 7.6    | 3.6 | 5.8  | 6.6       | 5.9 | 6.3  |
| 20    | ---  | --- | ---  | 7.2  | 4.9 | 6.1  | 5.5    | 1.0 | 3.7  | 7.3       | 6.3 | 6.8  |
| 21    | ---  | --- | ---  | 8.8  | 5.4 | 6.7  | 6.2    | 0.9 | 4.6  | 8.0       | 6.7 | 7.4  |
| 22    | ---  | --- | ---  | 8.3  | 3.8 | 6.5  | 6.7    | 0.8 | 5.7  | 8.9       | 7.1 | 7.9  |
| 23    | ---  | --- | ---  | 6.0  | 1.4 | 4.0  | 8.0    | 5.8 | 6.5  | 9.6       | 7.7 | 8.5  |
| 24    | ---  | --- | ---  | 7.6  | 4.5 | 6.2  | 8.1    | 6.4 | 7.2  | 9.2       | 8.1 | 8.5  |
| 25    | 8.0  | 3.3 | 5.8  | 7.8  | 5.0 | 5.8  | 8.2    | 6.6 | 7.1  | 9.0       | 7.3 | 8.0  |
| 26    | 7.1  | 2.7 | 5.0  | 8.3  | 4.4 | 6.2  | 7.0    | 6.0 | 6.5  | 8.8       | 7.6 | 8.1  |
| 27    | 9.6  | 4.2 | 7.0  | 7.2  | 4.8 | 6.4  | 7.9    | 5.8 | 6.6  | 8.2       | 7.4 | 7.9  |
| 28    | 8.6  | 5.4 | 6.9  | 6.5  | 4.9 | 5.6  | 7.6    | 4.5 | 6.7  | 8.0       | 6.4 | 7.0  |
| 29    | 11.3 | 6.2 | 7.9  | 6.2  | 4.8 | 5.5  | 7.3    | 4.6 | 6.3  | 9.7       | 6.6 | 7.6  |
| 30    | 10.9 | 6.8 | 8.6  | 6.3  | 5.1 | 5.8  | 7.1    | 5.4 | 6.1  | 9.0       | 7.0 | 7.6  |
| 31    | ---  | --- | ---  | ---  | --- | ---  | 7.4    | 4.1 | 5.6  | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | ---  | --- | ---  | ---    | --- | ---  | 9.7       | 3.9 | 6.7  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|-----|------|------|------|------|------|------|------|
|       |      |      |      |      |     |      |      |      |      |      |      |      |
| 1     | 8.0  | 5.6  | 6.7  | 9.1  | 1.8 | 4.9  | 9.6  | 7.5  | 8.6  | 5.2  | 4.0  | 4.7  |
| 2     | 8.2  | 5.5  | 7.1  | 4.1  | 1.4 | 2.3  | 10.1 | 9.4  | 9.8  | 5.2  | 3.3  | 3.9  |
| 3     | 8.1  | 5.6  | 7.1  | 7.0  | 1.5 | 3.2  | 10.6 | 9.8  | 10.2 | 5.2  | 3.1  | 3.5  |
| 4     | 6.8  | 3.8  | 5.2  | 4.4  | 0.9 | 2.3  | 10.8 | 10.1 | 10.5 | 3.6  | 3.2  | 3.4  |
| 5     | 7.2  | 2.1  | 3.9  | 4.1  | 1.1 | 2.2  | 10.7 | 10.1 | 10.4 | 6.4  | 2.9  | 4.1  |
| 6     | 3.5  | 0.9  | 1.6  | 3.7  | 0.6 | 1.7  | 11.0 | 10.0 | 10.6 | 8.6  | 5.0  | 6.8  |
| 7     | 1.9  | 0.3  | 0.9  | 1.6  | 0.5 | 0.8  | 11.1 | 10.4 | 10.8 | 10.8 | 5.6  | 9.3  |
| 8     | 6.6  | 0.3  | 3.2  | 7.7  | 0.7 | 4.8  | 11.2 | 10.3 | 10.9 | 10.7 | 5.3  | 9.0  |
| 9     | 6.7  | 4.0  | 5.7  | 8.7  | 6.6 | 8.0  | 10.8 | 9.0  | 10.1 | 11.1 | 5.5  | 8.7  |
| 10    | 6.9  | 6.1  | 6.5  | 9.2  | 8.0 | 8.7  | 11.2 | 7.6  | 9.7  | 11.6 | 10.3 | 11.1 |
| 11    | 6.4  | 5.4  | 6.0  | 9.2  | 3.6 | 7.2  | 11.1 | 10.6 | 10.9 | 12.0 | 10.9 | 11.4 |
| 12    | 6.2  | 4.8  | 5.7  | 8.7  | 3.3 | 5.3  | 11.2 | 10.2 | 10.6 | 12.4 | 10.3 | 11.6 |
| 13    | 6.4  | 4.8  | 5.6  | 9.3  | 6.3 | 8.7  | 11.4 | 9.8  | 10.9 | 12.8 | 11.4 | 12.1 |
| 14    | 8.1  | 5.3  | 7.3  | 10.4 | 8.9 | 9.7  | 11.4 | 10.5 | 11.1 | 13.1 | 11.3 | 12.4 |
| 15    | 8.1  | 7.1  | 7.5  | 10.9 | 9.5 | 10.3 | 11.3 | 11.1 | 11.2 | 12.9 | 12.1 | 12.4 |
| 16    | 7.5  | 5.6  | 6.8  | 10.3 | 8.8 | 9.7  | 11.2 | 8.8  | 10.2 | 12.8 | 12.1 | 12.4 |
| 17    | 7.1  | 4.8  | 5.8  | 10.3 | 7.3 | 8.6  | 9.7  | 8.4  | 9.1  | 13.4 | 11.7 | 12.5 |
| 18    | 8.6  | 4.6  | 7.5  | 7.5  | 4.1 | 5.8  | 9.7  | 8.9  | 9.4  | 13.3 | 10.9 | 12.1 |
| 19    | 8.3  | 6.6  | 7.4  | 8.2  | 3.9 | 6.5  | 9.2  | 6.8  | 7.7  | 13.3 | 12.2 | 12.6 |
| 20    | 6.8  | 2.0  | 3.9  | 8.6  | 7.5 | 8.2  | 10.2 | 6.6  | 7.8  | 13.0 | 12.4 | 12.8 |
| 21    | 6.2  | 2.3  | 3.5  | 8.6  | 6.8 | 8.0  | 10.2 | 5.5  | 8.3  | 14.2 | 12.3 | 12.9 |
| 22    | 8.1  | 3.0  | 5.7  | 7.4  | 5.8 | 6.3  | 9.3  | 5.4  | 7.5  | 12.7 | 11.8 | 12.2 |
| 23    | 9.2  | 6.3  | 7.4  | 5.8  | 5.2 | 5.6  | 10.3 | 5.0  | 7.7  | 13.3 | 11.5 | 12.7 |
| 24    | 9.7  | 5.2  | 8.3  | 5.4  | 4.5 | 5.1  | 10.4 | 3.4  | 6.6  | 13.4 | 12.6 | 13.1 |
| 25    | 9.4  | 7.7  | 8.6  | 9.4  | 4.4 | 8.1  | 8.5  | 4.0  | 5.1  | 13.3 | 12.8 | 13.0 |
| 26    | 8.2  | 4.6  | 6.1  | 8.9  | 3.0 | 5.6  | 7.3  | 5.0  | 5.7  | 13.2 | 12.6 | 12.9 |
| 27    | 5.8  | 3.7  | 4.5  | 3.4  | 2.1 | 3.1  | 7.1  | 5.9  | 6.6  | 13.8 | 12.6 | 13.1 |
| 28    | 8.4  | 3.2  | 5.9  | 8.6  | 2.1 | 4.4  | 7.1  | 6.6  | 6.9  | 13.6 | 12.8 | 13.2 |
| 29    | 8.0  | 3.4  | 6.8  | 9.1  | 7.0 | 8.2  | 6.8  | 5.6  | 6.1  | 13.7 | 12.6 | 13.0 |
| 30    | 8.1  | 4.8  | 6.4  | 9.0  | 7.2 | 8.2  | 5.8  | 4.8  | 5.3  | 13.6 | 10.9 | 12.4 |
| 31    | 9.6  | 2.7  | 6.8  | ---  | --- | ---  | 5.6  | 4.9  | 5.3  | 12.0 | 10.6 | 11.6 |
| MONTH | 9.7  | 0.3  | 5.9  | 10.9 | 0.5 | 6.0  | 11.4 | 3.4  | 8.8  | 14.2 | 2.9  | 10.5 |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |     |      |      |      |      |      |      |      |
| 1     | 12.8 | 10.7 | 11.6 | 10.8 | 7.3 | 8.7  | 9.5  | 5.2  | 7.3  | 7.6  | 3.4  | 5.6  |
| 2     | 12.8 | 10.5 | 11.8 | 7.5  | 5.1 | 6.3  | 10.0 | 8.6  | 9.2  | 7.8  | 6.0  | 7.2  |
| 3     | 12.7 | 11.1 | 12.0 | 8.3  | 3.6 | 5.7  | 10.2 | 8.7  | 9.5  | 7.5  | 6.0  | 6.8  |
| 4     | 12.9 | 9.1  | 11.6 | 6.3  | 3.3 | 4.4  | 9.5  | 8.4  | 9.2  | 7.4  | 2.7  | 6.1  |
| 5     | 13.4 | 11.8 | 12.6 | 4.4  | 2.0 | 3.4  | 9.1  | 8.5  | 8.8  | 6.3  | 2.8  | 4.4  |
| 6     | 12.9 | 10.4 | 11.8 | 7.4  | 2.1 | 4.6  | 9.1  | 6.3  | 8.0  | 6.9  | 1.7  | 3.2  |
| 7     | 11.0 | 9.9  | 10.6 | 8.3  | 3.3 | 5.0  | 6.4  | 4.2  | 5.2  | 3.2  | 0.4  | 1.2  |
| 8     | 11.2 | 10.0 | 10.4 | 8.1  | 6.9 | 7.6  | 5.8  | 3.0  | 4.2  | 10.8 | 0.2  | 3.2  |
| 9     | 12.2 | 9.0  | 10.8 | 8.4  | 5.6 | 7.5  | 9.9  | 2.5  | 4.4  | 9.5  | 1.0  | 5.5  |
| 10    | 11.8 | 4.4  | 8.8  | 9.3  | 8.1 | 8.7  | 10.1 | 2.3  | 8.4  | 4.4  | 0.3  | 1.8  |
| 11    | 10.2 | 3.7  | 5.0  | 9.4  | 7.1 | 8.5  | 9.8  | 7.7  | 9.0  | 1.6  | 0.1  | 0.3  |
| 12    | 12.2 | 3.4  | 8.7  | 8.7  | 6.6 | 7.7  | 9.0  | 7.3  | 8.4  | 0.3  | 0.0  | 0.1  |
| 13    | 12.7 | 1.4  | 10.3 | 9.8  | 6.6 | 8.6  | 8.8  | 7.3  | 8.1  | 0.1  | 0.0  | 0.1  |
| 14    | 6.9  | 1.3  | 2.6  | 11.3 | 8.6 | 10   | 9.0  | 7.7  | 8.3  | 0.1  | 0.0  | 0.1  |
| 15    | 11.9 | 0.8  | 6.5  | 10.9 | 8.2 | 9.8  | 9.2  | 8.0  | 8.6  | 0.1  | 0.0  | 0.0  |
| 16    | 10.8 | 7.4  | 9.8  | 9.6  | 6.6 | 7.8  | 8.8  | 6.6  | 7.8  | 0.1  | 0.0  | 0.0  |
| 17    | 10.9 | 8.6  | 10.1 | 9.9  | 9.1 | 9.6  | 7.5  | 3.7  | 5.4  | 0.1  | 0.0  | 0.0  |
| 18    | 11.2 | 9.7  | 10.5 | 10.0 | 2.1 | 4.5  | 6.7  | 3.7  | 4.9  | 0.0  | 0.0  | 0.0  |
| 19    | 10.5 | 8.3  | 9.5  | 10.3 | 1.5 | 6.7  | 8.6  | 2.9  | 4.8  | 0.0  | 0.0  | 0.0  |
| 20    | 10.6 | 6.5  | 8.0  | 9.9  | 7.9 | 9.2  | 7.8  | 1.8  | 4.0  | 1.0  | 0.0  | 0.1  |
| 21    | 11.8 | 6.1  | 9.7  | 10.1 | 8.8 | 9.4  | 4.9  | 2.0  | 3.1  | 0.2  | 0.0  | 0.1  |
| 22    | 13.4 | 9.8  | 11.5 | 10.0 | 8.9 | 9.4  | 8.7  | 1.9  | 5.4  | 2.6  | 0.0  | 0.3  |
| 23    | 12.8 | 9.7  | 11.7 | 9.6  | 8.0 | 8.8  | 7.4  | 0.6  | 3.9  | 4.7  | 0.0  | 0.8  |
| 24    | 11.9 | 10.2 | 10.8 | 8.3  | 6.3 | 7.4  | 8.6  | 0.2  | 3.3  | 5.4  | 0.0  | 1.5  |
| 25    | 10.7 | 10.2 | 10.4 | 7.0  | 4.9 | 5.9  | 9.6  | 4.2  | 8.1  | 5.3  | 0.1  | 2.3  |
| 26    | 10.8 | 10.0 | 10.5 | 5.9  | 3.8 | 5.0  | 8.6  | 2.8  | 6.3  | 4.7  | 0.0  | 1.3  |
| 27    | 11.1 | 10.2 | 10.6 | 7.6  | 3.8 | 4.8  | 8.2  | 1.0  | 5.7  | 2.0  | 0.0  | 0.6  |
| 28    | 10.8 | 10.0 | 10.5 | 8.7  | 3.8 | 6.5  | 8.2  | 2.6  | 6.9  | 3.6  | 0.0  | 0.3  |
| 29    | 10.5 | 7.9  | 9.8  | 9.0  | 7.5 | 8.4  | 7.1  | 0.9  | 3.8  | 5.1  | 0.0  | 0.7  |
| 30    | ---  | ---  | ---  | 8.6  | 6.5 | 7.4  | 7.5  | 3.3  | 5.2  | 5.9  | 0.4  | 3.2  |
| 31    | ---  | ---  | ---  | 7.3  | 5.0 | 6.0  | ---  | ---  | ---  | 3.9  | 0.7  | 2.3  |
| MONTH | 13.4 | 0.8  | 9.9  | 11.3 | 1.5 | 7.2  | 10.2 | 0.2  | 6.5  | 10.8 | 0.0  | 1.9  |



## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 4.8  | 0.1 | 1.1  | 0.2  | 0.0 | 0.1  | 6.2    | 4.6 | 5.4  | 4.0       | 1.7 | 2.6  |
| 2     | 2.4  | 0.1 | 0.5  | 0.4  | 0.0 | 0.2  | 5.6    | 4.1 | 5.0  | 7.3       | 1.7 | 5.8  |
| 3     | 2.6  | 0.0 | 0.6  | 0.3  | 0.0 | 0.2  | 7.0    | 4.7 | 5.6  | 7.2       | 2.5 | 5.5  |
| 4     | 6.1  | 0.0 | 1.9  | 0.3  | 0.0 | 0.2  | 6.2    | 4.5 | 5.1  | 8.0       | 2.2 | 5.5  |
| 5     | 4.7  | 0.5 | 3.2  | 0.3  | 0.0 | 0.2  | 5.4    | 2.5 | 4.0  | ---       | --- | ---  |
| 6     | 5.4  | 0.5 | 3.8  | 0.4  | 0.1 | 0.2  | 7.2    | 2.0 | 5.6  | ---       | --- | ---  |
| 7     | 4.1  | 0.0 | 0.9  | 0.4  | 0.1 | 0.2  | 7.5    | 6.1 | 6.7  | ---       | --- | ---  |
| 8     | 0.2  | 0.0 | 0.1  | 0.6  | 0.1 | 0.3  | 6.6    | 5.3 | 6.0  | ---       | --- | ---  |
| 9     | 4.6  | 0.0 | 0.6  | 1.6  | 0.0 | 0.2  | 5.9    | 3.4 | 4.2  | ---       | --- | ---  |
| 10    | 1.6  | 0.0 | 0.5  | 0.1  | 0.0 | 0.1  | 4.0    | 0.8 | 2.0  | ---       | --- | ---  |
| 11    | 4.3  | 0.0 | 1.0  | 0.1  | 0.0 | 0.0  | 4.4    | 0.6 | 1.3  | 6.6       | 4.3 | 5.9  |
| 12    | 6.2  | 0.0 | 4.1  | 0.1  | 0.0 | 0.0  | 3.0    | 0.1 | 0.8  | 7.0       | 6.0 | 6.4  |
| 13    | 6.0  | 1.7 | 4.6  | 0.1  | 0.0 | 0.0  | 5.2    | 0.0 | 2.5  | 7.0       | 6.1 | 6.5  |
| 14    | 4.8  | 0.2 | 2.3  | 0.2  | 0.0 | 0.1  | 5.3    | 1.7 | 4.0  | 6.8       | 6.3 | 6.5  |
| 15    | 4.6  | 0.0 | 1.7  | 1.1  | 0.0 | 0.1  | 3.6    | 2.0 | 2.7  | 6.6       | 5.5 | 6.2  |
| 16    | 5.0  | 0.0 | 1.9  | 0.1  | 0.0 | 0.0  | 3.5    | 1.8 | 2.6  | 6.1       | 2.4 | 5.1  |
| 17    | 4.3  | 0.0 | 0.9  | 0.2  | 0.0 | 0.0  | 2.8    | 1.0 | 1.8  | 6.6       | 4.9 | 6.0  |
| 18    | 2.4  | 0.0 | 0.3  | 1.5  | 0.0 | 0.1  | 1.0    | 0.0 | 0.4  | 6.4       | 5.4 | 5.9  |
| 19    | 0.2  | 0.0 | 0.0  | 0.6  | 0.0 | 0.0  | 0.1    | 0.0 | 0.0  | 6.6       | 3.8 | 6.1  |
| 20    | 4.1  | 0.0 | 0.5  | 4.2  | 0.0 | 0.6  | 0.3    | 0.0 | 0.0  | 7.1       | 4.3 | 6.4  |
| 21    | 5.4  | 0.1 | 2.3  | 0.3  | 0.0 | 0.1  | 0.1    | 0.0 | 0.0  | 7.1       | 4.1 | 6.5  |
| 22    | 4.0  | 0.0 | 0.5  | 0.1  | 0.0 | 0.0  | 0.1    | 0.0 | 0.0  | 6.4       | 4.1 | 5.3  |
| 23    | 0.9  | 0.0 | 0.1  | 0.3  | 0.0 | 0.0  | 0.0    | 0.0 | 0.0  | 5.4       | 3.0 | 4.0  |
| 24    | 0.7  | 0.0 | 0.1  | 0.9  | 0.0 | 0.0  | 7.5    | 0.0 | 1.1  | 8.8       | 3.0 | 6.1  |
| 25    | 0.7  | 0.0 | 0.3  | 0.3  | 0.0 | 0.0  | 7.7    | 4.7 | 6.6  | 8.3       | 4.7 | 7.2  |
| 26    | 4.3  | 0.0 | 1.3  | 0.5  | 0.0 | 0.0  | 7.2    | 5.5 | 6.3  | 8.5       | 3.6 | 7.4  |
| 27    | 4.1  | 1.3 | 2.1  | 2.0  | 0.0 | 0.4  | 7.9    | 3.9 | 6.6  | 7.8       | 5.3 | 6.6  |
| 28    | 2.9  | 0.3 | 0.9  | 3.6  | 0.0 | 0.7  | 7.3    | 3.6 | 6.0  | 6.9       | 2.5 | 5.4  |
| 29    | 2.2  | 0.0 | 0.5  | 4.6  | 0.0 | 1.3  | 6.8    | 1.6 | 5.2  | 6.6       | 5.5 | 6.1  |
| 30    | 0.4  | 0.0 | 0.1  | 5.8  | 0.1 | 2.3  | 6.1    | 3.4 | 5.5  | 7.3       | 5.8 | 6.9  |
| 31    | ---  | --- | ---  | 6.6  | 3.9 | 5.4  | 5.9    | 4.0 | 5.1  | ---       | --- | ---  |
| MONTH | 6.2  | 0.0 | 1.3  | 6.6  | 0.0 | 0.4  | 7.9    | 0.0 | 3.5  | ---       | --- | ---  |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 112 | 54  | 86   | 110 | 64  | 84   | 92  | 81  | 88   | 88  | 83  | 85   |
| 2     | 102 | 52  | 85   | 86  | 63  | 76   | 92  | 86  | 89   | 91  | 87  | 89   |
| 3     | 108 | 80  | 90   | 104 | 77  | 86   | 92  | 88  | 90   | 95  | 75  | 89   |
| 4     | 112 | 85  | 94   | 86  | 58  | 71   | 93  | 89  | 91   | 91  | 48  | 69   |
| 5     | 105 | 78  | 92   | 78  | 49  | 67   | 94  | 91  | 92   | 63  | 40  | 51   |
| 6     | 122 | 92  | 101  | 67  | 48  | 61   | 94  | 91  | 92   | 82  | 52  | 75   |
| 7     | 114 | 94  | 103  | 61  | 51  | 56   | 95  | 92  | 94   | 88  | 75  | 80   |
| 8     | 100 | 72  | 86   | 67  | 59  | 63   | 99  | 92  | 94   | 94  | 81  | 87   |
| 9     | 80  | 68  | 75   | 70  | 63  | 67   | 100 | 95  | 98   | 91  | 87  | 89   |
| 10    | 86  | 74  | 80   | 71  | 64  | 68   | 102 | 95  | 99   | 90  | 85  | 88   |
| 11    | 81  | 74  | 77   | 73  | 65  | 68   | 98  | 94  | 96   | 94  | 86  | 90   |
| 12    | 93  | 74  | 83   | 72  | 63  | 68   | 97  | 94  | 96   | 100 | 88  | 94   |
| 13    | 104 | 82  | 92   | 69  | 51  | 61   | 100 | 96  | 98   | 100 | 94  | 97   |
| 14    | 101 | 79  | 90   | 69  | 59  | 64   | 100 | 97  | 98   | 105 | 95  | 100  |
| 15    | 92  | 79  | 84   | 70  | 64  | 67   | 99  | 95  | 97   | 104 | 96  | 98   |
| 16    | 100 | 81  | 86   | 81  | 64  | 69   | 99  | 81  | 89   | 100 | 95  | 97   |
| 17    | 144 | 87  | 107  | 71  | 52  | 64   | 82  | 74  | 78   | 114 | 96  | 103  |
| 18    | 136 | 76  | 107  | 88  | 54  | 74   | 80  | 75  | 78   | 109 | 98  | 105  |
| 19    | 152 | 71  | 106  | 82  | 64  | 76   | 82  | 74  | 78   | 109 | 97  | 103  |
| 20    | 136 | 92  | 106  | 85  | 78  | 81   | 84  | 79  | 81   | 104 | 99  | 101  |
| 21    | 113 | 72  | 93   | 86  | 81  | 83   | 84  | 80  | 82   | 119 | 99  | 108  |
| 22    | 93  | 69  | 84   | 113 | 81  | 91   | 83  | 79  | 81   | 119 | 104 | 110  |
| 23    | 120 | 85  | 101  | 123 | 86  | 101  | 85  | 80  | 83   | 111 | 102 | 104  |
| 24    | 114 | 94  | 103  | 112 | 92  | 102  | 86  | 81  | 84   | 106 | 98  | 102  |
| 25    | 111 | 95  | 102  | 99  | 79  | 87   | 83  | 78  | 81   | 103 | 98  | 100  |
| 26    | 120 | 81  | 95   | 91  | 80  | 84   | 84  | 78  | 81   | 101 | 95  | 99   |
| 27    | 107 | 73  | 89   | 97  | 85  | 88   | 86  | 80  | 83   | 106 | 96  | 100  |
| 28    | 95  | 81  | 88   | 95  | 79  | 90   | 86  | 82  | 84   | 102 | 96  | 99   |
| 29    | 101 | 72  | 89   | 87  | 69  | 80   | 86  | 79  | 84   | 111 | 93  | 99   |
| 30    | 109 | 90  | 98   | 93  | 83  | 87   | 89  | 66  | 83   | 108 | 88  | 97   |
| 31    | 119 | 96  | 104  | --- | --- | ---  | 85  | 80  | 83   | 97  | 87  | 90   |
| MONTH | 152 | 52  | 93   | 123 | 48  | 76   | 102 | 66  | 88   | 119 | 40  | 93   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 99  | 89  | 93   | 104 | 92  | 99   | 106 | 90  | 96   | 101 | 84  | 92   |
| 2     | 99  | 90  | 95   | 103 | 88  | 96   | 105 | 90  | 98   | 96  | 82  | 89   |
| 3     | 101 | 89  | 96   | 104 | 92  | 98   | 109 | 96  | 103  | 91  | 77  | 86   |
| 4     | 109 | 96  | 101  | 105 | 94  | 99   | 102 | 92  | 100  | 106 | 73  | 88   |
| 5     | 109 | 95  | 103  | 100 | 92  | 96   | 96  | 90  | 93   | 103 | 75  | 85   |
| 6     | 109 | 95  | 102  | 94  | 68  | 82   | 111 | 89  | 97   | 129 | 69  | 93   |
| 7     | 99  | 88  | 95   | 102 | 84  | 93   | 124 | 93  | 106  | 118 | 80  | 103  |
| 8     | 106 | 87  | 94   | 88  | 75  | 80   | 116 | 94  | 104  | 128 | 94  | 110  |
| 9     | 111 | 92  | 100  | 91  | 77  | 87   | 132 | 96  | 109  | 146 | 98  | 117  |
| 10    | 120 | 99  | 105  | 91  | 83  | 87   | 120 | 104 | 110  | 131 | 88  | 113  |
| 11    | 118 | 105 | 111  | 94  | 88  | 91   | 111 | 96  | 105  | 95  | 67  | 84   |
| 12    | 117 | 98  | 107  | 97  | 82  | 90   | 100 | 88  | 94   | 90  | 68  | 78   |
| 13    | 122 | 89  | 103  | 102 | 89  | 96   | 98  | 88  | 91   | 91  | 70  | 79   |
| 14    | 118 | 101 | 108  | 110 | 95  | 101  | 101 | 83  | 91   | 85  | 53  | 77   |
| 15    | 108 | 93  | 102  | 118 | 96  | 105  | 99  | 86  | 93   | 87  | 6   | 58   |
| 16    | 97  | 87  | 91   | 119 | 103 | 109  | 124 | 86  | 96   | 86  | 9   | 61   |
| 17    | 92  | 86  | 90   | 106 | 99  | 102  | 111 | 86  | 99   | 114 | 40  | 91   |
| 18    | 96  | 86  | 91   | 112 | 92  | 103  | 105 | 83  | 92   | 117 | 95  | 104  |
| 19    | 107 | 88  | 97   | 104 | 95  | 99   | 99  | 82  | 90   | 103 | 18  | 74   |
| 20    | 129 | 94  | 105  | 110 | 89  | 99   | 128 | 79  | 94   | 84  | 1   | 55   |
| 21    | 110 | 85  | 96   | 104 | 88  | 96   | 101 | 87  | 93   | 107 | 3   | 47   |
| 22    | 124 | 97  | 108  | 104 | 87  | 93   | 111 | 86  | 97   | 80  | 17  | 48   |
| 23    | 119 | 96  | 108  | 107 | 85  | 92   | 122 | 94  | 105  | 105 | 39  | 66   |
| 24    | 109 | 96  | 100  | 117 | 96  | 103  | 123 | 86  | 102  | 99  | 59  | 71   |
| 25    | 98  | 93  | 95   | 131 | 97  | 111  | 124 | 96  | 106  | 106 | 66  | 84   |
| 26    | 98  | 91  | 95   | 131 | 115 | 120  | 112 | 94  | 103  | 124 | 56  | 87   |
| 27    | 98  | 92  | 94   | 118 | 105 | 112  | 117 | 91  | 103  | 112 | 68  | 95   |
| 28    | 97  | 90  | 94   | 107 | 91  | 102  | 120 | 91  | 103  | 100 | 54  | 76   |
| 29    | 103 | 94  | 98   | 99  | 88  | 94   | 123 | 97  | 110  | 102 | 78  | 89   |
| 30    | --- | --- | ---  | 112 | 88  | 96   | 109 | 93  | 103  | 86  | 75  | 80   |
| 31    | --- | --- | ---  | 113 | 95  | 103  | --- | --- | ---  | 87  | 74  | 81   |
| MONTH | 129 | 85  | 99   | 131 | 68  | 98   | 132 | 79  | 100  | 146 | 1   | 83   |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 97  | 75  | 85   | 115 | 27  | 91   | --- | --- | ---  | 77  | 49  | 64   |
| 2     | 112 | 78  | 89   | 150 | 46  | 78   | --- | --- | ---  | 74  | 59  | 67   |
| 3     | 128 | 60  | 85   | 96  | 25  | 50   | --- | --- | ---  | 86  | 58  | 66   |
| 4     | 88  | 55  | 77   | --- | --- | ---  | --- | --- | ---  | 90  | 64  | 73   |
| 5     | 105 | 69  | 80   | --- | --- | ---  | --- | --- | ---  | 100 | 66  | 81   |
| 6     | 129 | 82  | 92   | --- | --- | ---  | --- | --- | ---  | 96  | 73  | 83   |
| 7     | 123 | 76  | 95   | --- | --- | ---  | --- | --- | ---  | 99  | 67  | 84   |
| 8     | 100 | 56  | 89   | --- | --- | ---  | --- | --- | ---  | 96  | 73  | 83   |
| 9     | 111 | 61  | 86   | --- | --- | ---  | --- | --- | ---  | 95  | 65  | 86   |
| 10    | 66  | 32  | 52   | 88  | 6   | 56   | --- | --- | ---  | 92  | 54  | 79   |
| 11    | 114 | 26  | 61   | 105 | 17  | 67   | --- | --- | ---  | 79  | 68  | 74   |
| 12    | --- | --- | ---  | 118 | 29  | 79   | --- | --- | ---  | 84  | 71  | 76   |
| 13    | --- | --- | ---  | 97  | 1   | 43   | 93  | 59  | 73   | 83  | 72  | 77   |
| 14    | --- | --- | ---  | 81  | 1   | 33   | 76  | 49  | 65   | 80  | 73  | 76   |
| 15    | --- | --- | ---  | 97  | 5   | 60   | 76  | 50  | 60   | 82  | 71  | 78   |
| 16    | --- | --- | ---  | 96  | 20  | 81   | 78  | 44  | 61   | 94  | 68  | 76   |
| 17    | --- | --- | ---  | 132 | 56  | 81   | 97  | 59  | 72   | 81  | 66  | 76   |
| 18    | --- | --- | ---  | 105 | 53  | 78   | 122 | 79  | 94   | 76  | 63  | 69   |
| 19    | --- | --- | ---  | 140 | 40  | 73   | 96  | 45  | 73   | 78  | 71  | 74   |
| 20    | --- | --- | ---  | 94  | 63  | 78   | 69  | 12  | 47   | 84  | 74  | 78   |
| 21    | --- | --- | ---  | 116 | 69  | 86   | 78  | 11  | 58   | 93  | 76  | 85   |
| 22    | --- | --- | ---  | 110 | 50  | 85   | 85  | 10  | 72   | 104 | 81  | 90   |
| 23    | --- | --- | ---  | 78  | 18  | 53   | 100 | 72  | 81   | 116 | 89  | 100  |
| 24    | --- | --- | ---  | 101 | 59  | 81   | 101 | 78  | 89   | 110 | 95  | 100  |
| 25    | 103 | 42  | 74   | 101 | 65  | 76   | 103 | 81  | 88   | 107 | 85  | 94   |
| 26    | 90  | 34  | 63   | 111 | 57  | 81   | 87  | 74  | 80   | 104 | 89  | 95   |
| 27    | 123 | 53  | 88   | 96  | 63  | 85   | 99  | 73  | 82   | 98  | 87  | 94   |
| 28    | 111 | 69  | 88   | 86  | 64  | 73   | 97  | 56  | 83   | 96  | 76  | 84   |
| 29    | 147 | 79  | 101  | 80  | 62  | 71   | 92  | 58  | 79   | 119 | 79  | 91   |
| 30    | 141 | 87  | 111  | 82  | 66  | 75   | 89  | 68  | 77   | 110 | 84  | 92   |
| 31    | --- | --- | ---  | --- | --- | ---  | 95  | 52  | 70   | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 119 | 49  | 82   |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 93  | 65  | 78   | 96  | 19  | 52   | 88  | 71  | 80   | 45  | 35  | 41   |
| 2     | 94  | 64  | 81   | 44  | 15  | 24   | 92  | 86  | 89   | 45  | 29  | 34   |
| 3     | 90  | 63  | 80   | 74  | 16  | 34   | 93  | 88  | 90   | 45  | 27  | 30   |
| 4     | 76  | 43  | 59   | 47  | 10  | 24   | 93  | 88  | 91   | 31  | 28  | 29   |
| 5     | 80  | 24  | 44   | 43  | 12  | 24   | 92  | 88  | 90   | 58  | 25  | 36   |
| 6     | 39  | 10  | 18   | 39  | 6   | 18   | 94  | 87  | 91   | 80  | 45  | 62   |
| 7     | 21  | 3   | 10   | 17  | 5   | 9    | 94  | 89  | 92   | 93  | 50  | 81   |
| 8     | 75  | 3   | 36   | 83  | 8   | 51   | 94  | 87  | 91   | 93  | 46  | 78   |
| 9     | 76  | 45  | 64   | 89  | 70  | 83   | 91  | 77  | 86   | 92  | 48  | 73   |
| 10    | 78  | 69  | 73   | 94  | 82  | 88   | 96  | 66  | 84   | 93  | 85  | 90   |
| 11    | 72  | 61  | 68   | 93  | 38  | 74   | 97  | 92  | 95   | 96  | 86  | 90   |
| 12    | 70  | 54  | 63   | 90  | 35  | 55   | 98  | 89  | 93   | 99  | 82  | 92   |
| 13    | 72  | 54  | 63   | 96  | 65  | 89   | 98  | 85  | 94   | 103 | 92  | 96   |
| 14    | 91  | 60  | 83   | 101 | 89  | 96   | 98  | 90  | 95   | 105 | 91  | 100  |
| 15    | 91  | 79  | 84   | 105 | 92  | 98   | 97  | 94  | 96   | 104 | 97  | 100  |
| 16    | 83  | 62  | 75   | 99  | 85  | 94   | 96  | 76  | 87   | 103 | 96  | 100  |
| 17    | 76  | 52  | 63   | 99  | 72  | 83   | 83  | 74  | 79   | 106 | 93  | 99   |
| 18    | 94  | 50  | 82   | 74  | 40  | 57   | 83  | 77  | 81   | 110 | 87  | 98   |
| 19    | 89  | 70  | 79   | 82  | 38  | 64   | 80  | 59  | 67   | 110 | 100 | 103  |
| 20    | 73  | 22  | 42   | 85  | 74  | 81   | 85  | 57  | 67   | 107 | 100 | 103  |
| 21    | 68  | 25  | 38   | 84  | 67  | 78   | 84  | 47  | 69   | 114 | 98  | 103  |
| 22    | 88  | 33  | 62   | 73  | 58  | 62   | 77  | 46  | 63   | 102 | 94  | 97   |
| 23    | 97  | 66  | 79   | 58  | 52  | 56   | 87  | 43  | 65   | 106 | 92  | 101  |
| 24    | 102 | 55  | 87   | 54  | 45  | 51   | 87  | 29  | 56   | 108 | 99  | 104  |
| 25    | 98  | 80  | 89   | 94  | 44  | 80   | 72  | 34  | 44   | 105 | 100 | 102  |
| 26    | 85  | 48  | 64   | 88  | 30  | 55   | 63  | 43  | 50   | 102 | 98  | 100  |
| 27    | 61  | 39  | 47   | 34  | 21  | 31   | 60  | 51  | 57   | 107 | 97  | 101  |
| 28    | 89  | 34  | 62   | 86  | 21  | 44   | 60  | 56  | 59   | 104 | 98  | 101  |
| 29    | 85  | 36  | 72   | 87  | 69  | 79   | 58  | 47  | 52   | 105 | 95  | 99   |
| 30    | 85  | 51  | 68   | 85  | 69  | 78   | 49  | 41  | 45   | 104 | 84  | 95   |
| 31    | 101 | 29  | 72   | --- | --- | ---  | 48  | 42  | 46   | 92  | 81  | 89   |
| MONTH | 102 | 3   | 64   | 105 | 5   | 60   | 98  | 29  | 76   | 114 | 25  | 85   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 97  | 81  | 88   | 91  | 62  | 73   | 92  | 50  | 70   | 86  | 38  | 63   |
| 2     | 98  | 80  | 90   | 63  | 43  | 53   | 96  | 82  | 89   | 89  | 67  | 81   |
| 3     | 100 | 85  | 93   | 73  | 31  | 49   | 98  | 83  | 91   | 86  | 68  | 78   |
| 4     | 102 | 71  | 91   | 56  | 28  | 37   | 91  | 81  | 89   | 82  | 30  | 67   |
| 5     | 108 | 94  | 100  | 39  | 17  | 29   | 87  | 80  | 83   | 70  | 31  | 48   |
| 6     | 103 | 83  | 97   | 72  | 18  | 42   | 85  | 60  | 75   | 75  | 19  | 35   |
| 7     | 94  | 85  | 91   | 84  | 30  | 48   | 61  | 40  | 50   | 35  | 4   | 13   |
| 8     | 96  | 85  | 88   | 81  | 66  | 73   | 57  | 29  | 40   | 128 | 2   | 37   |
| 9     | 103 | 77  | 91   | 80  | 53  | 71   | 100 | 24  | 43   | 111 | 11  | 64   |
| 10    | 100 | 37  | 74   | 85  | 77  | 81   | 103 | 23  | 85   | 50  | 3   | 20   |
| 11    | 87  | 31  | 42   | 85  | 64  | 77   | 103 | 79  | 92   | 18  | 1   | 3    |
| 12    | 104 | 29  | 74   | 79  | 60  | 70   | 93  | 75  | 87   | 3   | 0   | 1    |
| 13    | 109 | 12  | 87   | 90  | 60  | 79   | 94  | 76  | 86   | 1   | 0   | 0    |
| 14    | 58  | 11  | 22   | 106 | 80  | 93   | 94  | 81  | 87   | 1   | 0   | 0    |
| 15    | 102 | 7   | 55   | 102 | 76  | 91   | 94  | 81  | 88   | 1   | 0   | 0    |
| 16    | 91  | 61  | 82   | 91  | 61  | 73   | 90  | 67  | 80   | 1   | 0   | 0    |
| 17    | 89  | 71  | 83   | 94  | 86  | 91   | 78  | 38  | 55   | 1   | 0   | 0    |
| 18    | 92  | 79  | 86   | 94  | 19  | 42   | 70  | 38  | 51   | 0   | 0   | 0    |
| 19    | 86  | 68  | 78   | 98  | 14  | 64   | 94  | 30  | 50   | 0   | 0   | 0    |
| 20    | 90  | 54  | 66   | 95  | 74  | 87   | 85  | 19  | 42   | 11  | 0   | 0    |
| 21    | 102 | 51  | 83   | 98  | 85  | 91   | 52  | 21  | 32   | 2   | 0   | 0    |
| 22    | 117 | 84  | 99   | 95  | 84  | 89   | 98  | 20  | 60   | 31  | 0   | 3    |
| 23    | 113 | 84  | 102  | 88  | 74  | 81   | 82  | 6   | 43   | 56  | 0   | 10   |
| 24    | 104 | 89  | 94   | 77  | 59  | 68   | 98  | 2   | 37   | 65  | 0   | 18   |
| 25    | 93  | 88  | 90   | 65  | 46  | 55   | 109 | 47  | 91   | 64  | 1   | 27   |
| 26    | 93  | 85  | 89   | 55  | 36  | 47   | 99  | 31  | 72   | 57  | 0   | 16   |
| 27    | 93  | 86  | 89   | 72  | 36  | 45   | 92  | 11  | 64   | 24  | 0   | 7    |
| 28    | 90  | 83  | 87   | 87  | 35  | 64   | 92  | 28  | 76   | 45  | 0   | 4    |
| 29    | 88  | 66  | 81   | 88  | 73  | 82   | 78  | 10  | 42   | 64  | 0   | 8    |
| 30    | --- | --- | ---  | 83  | 63  | 71   | 83  | 36  | 58   | 74  | 5   | 39   |
| 31    | --- | --- | ---  | 70  | 48  | 58   | --- | --- | ---  | 48  | 9   | 28   |
| MONTH | 117 | 7   | 82   | 106 | 14  | 67   | 109 | 2   | 67   | 128 | 0   | 22   |

## 0209262905 NEUSE RIVER AT CHANNEL LIGHT 11—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 59   | 1   | 14   | 3    | 0   | 2    | 81     | 60  | 70   | 50        | 21  | 32   |
| 2     | 30   | 1   | 6    | 5    | 0   | 2    | 73     | 54  | 65   | 91        | 21  | 72   |
| 3     | 32   | 0   | 7    | 4    | 0   | 2    | 90     | 61  | 73   | 89        | 31  | 67   |
| 4     | 77   | 0   | 23   | 4    | 0   | 3    | 80     | 58  | 66   | 99        | 27  | 68   |
| 5     | 59   | 6   | 40   | 4    | 0   | 3    | 70     | 32  | 52   | ---       | --- | ---  |
| 6     | 68   | 6   | 48   | 5    | 1   | 3    | 92     | 26  | 71   | ---       | --- | ---  |
| 7     | 51   | 0   | 11   | 5    | 1   | 3    | 93     | 76  | 84   | ---       | --- | ---  |
| 8     | 2    | 0   | 0    | 8    | 1   | 3    | 84     | 67  | 76   | ---       | --- | ---  |
| 9     | 58   | 0   | 7    | 20   | 0   | 3    | 75     | 43  | 53   | ---       | --- | ---  |
| 10    | 20   | 0   | 6    | 1    | 0   | 0    | 50     | 10  | 26   | ---       | --- | ---  |
| 11    | 53   | 0   | 12   | 1    | 0   | 0    | 56     | 8   | 17   | 82        | 53  | 74   |
| 12    | 77   | 0   | 51   | 1    | 0   | 0    | 38     | 1   | 10   | 86        | 74  | 79   |
| 13    | 74   | 21  | 56   | 1    | 0   | 0    | 66     | 0   | 32   | 86        | 74  | 79   |
| 14    | 59   | 2   | 29   | 3    | 0   | 0    | 67     | 21  | 51   | 82        | 76  | 79   |
| 15    | 57   | 0   | 21   | 14   | 0   | 0    | 45     | 25  | 34   | 80        | 66  | 75   |
| 16    | 62   | 0   | 24   | 1    | 0   | 0    | 43     | 22  | 33   | 74        | 29  | 61   |
| 17    | 54   | 0   | 11   | 3    | 0   | 0    | 35     | 12  | 22   | 81        | 59  | 74   |
| 18    | 30   | 0   | 3    | 19   | 0   | 1    | 12     | 0   | 5    | 77        | 65  | 71   |
| 19    | 2    | 0   | 0    | 8    | 0   | 0    | 1      | 0   | 0    | 78        | 45  | 72   |
| 20    | 52   | 0   | 6    | 54   | 0   | 8    | 4      | 0   | 0    | 82        | 51  | 74   |
| 21    | 68   | 1   | 29   | 4    | 0   | 0    | 1      | 0   | 0    | 81        | 47  | 74   |
| 22    | 51   | 0   | 6    | 1    | 0   | 0    | 1      | 0   | 0    | 74        | 47  | 61   |
| 23    | 11   | 0   | 2    | 4    | 0   | 0    | 0      | 0   | 0    | 62        | 35  | 46   |
| 24    | 9    | 0   | 2    | 12   | 0   | 0    | 94     | 0   | 14   | 104       | 35  | 72   |
| 25    | 9    | 0   | 4    | 4    | 0   | 0    | 96     | 58  | 81   | 99        | 55  | 84   |
| 26    | 54   | 0   | 17   | 6    | 0   | 0    | 89     | 68  | 78   | 101       | 42  | 87   |
| 27    | 52   | 16  | 27   | 26   | 0   | 5    | 99     | 48  | 82   | 92        | 63  | 77   |
| 28    | 37   | 4   | 12   | 47   | 0   | 9    | 91     | 45  | 74   | 83        | 29  | 64   |
| 29    | 28   | 0   | 7    | 59   | 0   | 16   | 86     | 20  | 65   | 79        | 66  | 73   |
| 30    | 5    | 0   | 2    | 75   | 1   | 29   | 76     | 42  | 69   | 88        | 69  | 83   |
| 31    | ---  | --- | ---  | 86   | 51  | 70   | 74     | 50  | 64   | ---       | --- | ---  |
| MONTH | 77   | 0   | 16   | 86   | 0   | 5    | 99     | 0   | 44   | ---       | --- | ---  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9

LOCATION.--Lat. 34°56'55", long. 76°48'35", Craven County, Hydrologic Unit 03020204, at U.S. Coast Guard Channel Light 9.

PERIOD OF RECORD.--May 1989 to July 1993, 1996 to current year.

## PERIOD OF DAILY RECORD.--

SALINITY (TOP AND BOTTOM): May 1989 to July 1993, June 1996 to current year

pH (TOP AND BOTTOM): June 1996 to current year.

WATER TEMPERATURE (TOP): May 1989 to July 1993, June 1996 to current year.

WATER TEMPERATURE (BOTTOM): June 1996 to current year.

DISSOLVED OXYGEN (TOP AND BOTTOM): May 1989 to July 1993, June 1996 to current year.

DISSOLVED OXYGEN (MID): May 1989 to July 1993.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP AND BOTTOM): May 1989 to July 1993, June 1996 to current year.

DISSOLVED OXYGEN, PERCENT SATURATION (MID): May 1989 to July 1993.

INSTRUMENTATION.-- Water-quality monitor from May 1989 to July 1993. Constituents monitored were: specific conductance top and bottom, water temperature top and bottom, dissolved oxygen top, mid-depth and bottom. Water-quality monitor with satellite telemetry from June 1996 to current water year. Constituents monitored were the same as previous water years except mid-depth dissolved oxygen was not measured, water temperature, bottom, was added as well as pH top and bottom.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. The monitor was removed August 29, 1999 to prevent possible destruction of the equipment during Hurricanes Dennis and Floyd. It was reinstalled on October 5, 1999. The monitor was removed on September 15, 2003 to prevent possible destruction of the equipment during Hurricane Isabel. It was reinstalled on September 26, 2003. Prior to June 1996, top constituents were monitored at 8 ft above streambed, mid constituents at 6 ft above streambed and bottom constituents, 2 ft above streambed. Beginning in June 1996, top constituents were monitored at 8 ft above streambed and bottom constituents, 2 ft above streambed. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water-Supply Paper 2311. The dissolved oxygen percent saturation is computed using a barometric pressure of 760mm of Hg beginning October 1, 2000. Salinity, minimum extremes are reported as <0.1 ppt. Dissolved oxygen, minimum extremes are reported as <1.0 mg/L. Dissolved oxygen, percent saturation, minimum extremes are reported as <10%.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                     | MAXIMUM RECORDED                    | MINIMUM RECORDED                      |
|---------------------------------|-------------------------------------|---------------------------------------|
| SALINITY(TOP), ppt              | 23.6, August 28, 2002               | <0.1, on many days during the period  |
| SALINITY(BOTTOM), ppt           | 27.8, August 18, 2002               | <0.1, on many days during the period  |
| pH(TOP), standard units         | 10.4, April 19, 1999                | 4.3, June 13, 1997                    |
| pH(BOTTOM), standard units      | 9.3, March 12, 13, 14, 16-20, 1999  | 5.7, April 21, 2004                   |
| WATER TEMPERATURE (TOP), °C     | 32.3, August 6, 1989, July 30, 2002 | 0.2, January 25, 2003                 |
| WATER TEMPERATURE (BOTTOM), °C  | 31.4, July 29, 1999                 | 0.8, January 25, 2003                 |
| DISSOLVED OXYGEN (TOP), mg/L    | 20.7, April 10, 1991                | < 1.0, on many days during the period |
| DISSOLVED OXYGEN (BOTTOM), mg/L | 16.8, April 26, 1991                | < 1.0, on many days during the period |

## EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                                     | MAXIMUM RECORDED               | MINIMUM RECORDED                    |
|---|--------------------------------|-------------------------------------|
| SALINITY (TOP), ppt                             | 19.4, May 23                   | 0.7, November 7                     |
| SALINITY (BOTTOM), ppt                          | 23.0, July 19                  | 1.0, February 28                    |
| pH (TOP), standard units                        | 9.4, November 2                | 6.5, May 1                          |
| pH (BOTTOM), standard units                     | 9.1, February 25, September 24 | 5.7, April 21                       |
| WATER TEMPERATURE (TOP), °C                     | 31.8, July 6, 9                | 3.0, February 2                     |
| WATER TEMPERATURE (BOTTOM), °C                  | 30.0, July 22                  | 2.8, February 2                     |
| DISSOLVED OXYGEN (TOP), mg/L                    | 14.6, November 1               | <1.0, May 23                        |
| DISSOLVED OXYGEN (BOTTOM), mg/L                 | 14.9, February 20              | < 1.0, on many days during the year |
| DISSOLVED OXYGEN, PERCENT SATURATION (TOP),%    | 156, November 1                | 10, May 23                          |
| DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM),% | 131, March 3                   | < 10, on many days during the year  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|------|------|------|
|       |          |     |      |       |     |      |       |     |      |      |      |      |
| 1     | 5.1      | 3.7 | 4.2  | 3.8   | 2.9 | 3.2  | 3.9   | 3.3 | 3.6  | 3.9  | 2.4  | 2.8  |
| 2     | 4.7      | 4.1 | 4.4  | 3.4   | 2.1 | 2.7  | 4.3   | 3.5 | 3.8  | 3.4  | 2.2  | 2.5  |
| 3     | 5.1      | 3.7 | 4.3  | 2.9   | 1.4 | 2.0  | 4.1   | 3.7 | 3.9  | 3.8  | 2.2  | 2.5  |
| 4     | ---      | --- | ---  | 2.9   | 1.1 | 1.7  | 6.0   | 3.8 | 4.2  | 7.1  | 2.5  | 3.3  |
| 5     | ---      | --- | ---  | 3.4   | 1.1 | 1.7  | 5.7   | 4.0 | 4.3  | 10.5 | 4.0  | 8.6  |
| 6     | ---      | --- | ---  | 3.4   | 0.9 | 1.5  | 4.7   | 3.8 | 4.4  | 10.4 | 6.2  | 7.9  |
| 7     | 5.1      | 3.2 | 3.9  | 3.8   | 0.7 | 1.6  | 5.5   | 3.8 | 4.7  | 8.0  | 6.5  | 7.1  |
| 8     | 5.7      | 4.1 | 5.0  | 4.7   | 1.3 | 3.5  | 5.5   | 4.1 | 4.4  | 7.4  | 6.7  | 7.0  |
| 9     | 5.4      | 5.0 | 5.2  | 6.5   | 2.9 | 4.4  | 5.0   | 3.8 | 4.3  | 7.5  | 6.8  | 7.2  |
| 10    | 5.6      | 5.0 | 5.3  | 3.2   | 1.6 | 2.4  | 6.0   | 4.5 | 5.2  | 7.5  | 6.5  | 7.1  |
| 11    | 5.6      | 3.1 | 4.5  | 2.2   | 1.3 | 1.7  | 5.8   | 4.6 | 4.9  | 7.1  | 4.8  | 6.3  |
| 12    | 4.4      | 2.6 | 3.1  | 3.3   | 1.2 | 2.1  | 5.0   | 4.3 | 4.6  | 6.8  | 4.8  | 6.2  |
| 13    | 6.2      | 2.4 | 3.9  | 3.8   | 2.7 | 3.1  | 5.5   | 4.2 | 4.6  | 7.0  | 6.6  | 6.8  |
| 14    | 5.6      | 4.1 | 4.9  | ---   | --- | ---  | 5.7   | 2.9 | 4.2  | 7.1  | 6.7  | 6.9  |
| 15    | 4.9      | 4.2 | 4.5  | 4.0   | 2.9 | 3.3  | 4.8   | 2.8 | 3.5  | 7.4  | 7.0  | 7.2  |
| 16    | 5.0      | 4.0 | 4.5  | ---   | --- | ---  | 3.8   | 2.5 | 3.1  | 7.3  | 6.7  | 7.0  |
| 17    | 4.8      | 3.0 | 3.7  | ---   | --- | ---  | 3.7   | 2.5 | 2.9  | 6.9  | 6.4  | 6.6  |
| 18    | 4.0      | 3.3 | 3.6  | ---   | --- | ---  | 5.1   | 1.3 | 2.7  | 7.3  | 6.5  | 6.9  |
| 19    | 4.2      | 3.5 | 3.7  | 6.8   | 3.4 | 4.9  | 3.8   | 1.3 | 2.0  | 7.3  | 6.8  | 7.0  |
| 20    | ---      | --- | ---  | 5.4   | 3.9 | 4.6  | 3.8   | 2.0 | 2.5  | 7.0  | 6.5  | 6.7  |
| 21    | ---      | --- | ---  | 5.2   | 3.6 | 4.0  | 2.7   | 2.0 | 2.2  | 6.6  | 5.4  | 6.1  |
| 22    | 4.9      | 4.1 | 4.6  | 5.1   | 2.9 | 3.5  | 3.0   | 1.9 | 2.1  | 5.7  | 4.8  | 5.2  |
| 23    | 5.0      | 4.3 | 4.6  | 4.9   | 2.8 | 3.2  | 3.4   | 1.9 | 2.2  | 6.4  | 4.8  | 5.4  |
| 24    | 5.7      | 4.4 | 4.8  | 7.0   | 2.5 | 3.8  | 3.5   | 1.8 | 2.1  | 6.4  | 5.4  | 6.0  |
| 25    | 5.6      | 4.7 | 5.0  | 5.9   | 3.0 | 4.5  | 3.6   | 1.6 | 2.0  | 6.7  | 5.9  | 6.2  |
| 26    | 5.7      | 4.2 | 4.8  | 5.5   | 3.8 | 4.5  | 3.6   | 2.0 | 2.6  | 6.3  | 5.7  | 6.0  |
| 27    | 5.8      | 4.3 | 4.9  | 5.1   | 3.8 | 4.1  | 3.6   | 1.9 | 2.3  | 5.9  | 5.1  | 5.6  |
| 28    | 6.3      | 4.3 | 4.8  | 6.6   | 3.6 | 4.6  | 3.4   | 1.6 | 1.9  | 5.9  | 4.6  | 5.4  |
| 29    | 5.2      | 4.2 | 4.7  | 6.0   | 4.2 | 4.5  | 3.0   | 1.5 | 2.2  | 6.1  | 4.7  | 5.5  |
| 30    | 5.4      | 4.1 | 4.5  | 4.9   | 3.2 | 3.9  | 4.0   | 1.5 | 2.7  | 5.0  | 3.9  | 4.6  |
| 31    | 4.1      | 3.7 | 4.0  | ---   | --- | ---  | 3.8   | 2.6 | 2.9  | 5.3  | 4.7  | 4.9  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 6.0   | 1.3 | 3.3  | 10.5 | 2.2  | 6.0  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY  |      |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
| 1     | 5.4      | 4.9 | 5.2  | 1.8   | 0.9 | 1.1  | 4.4   | 3.6 | 4.0  | 8.6  | 5.2  | 6.7  |
| 2     | 6.1      | 5.2 | 5.4  | 4.8   | 0.9 | 2.4  | 4.4   | 3.8 | 4.1  | 6.5  | 4.4  | 5.5  |
| 3     | 5.6      | 5.1 | 5.2  | 5.0   | 2.1 | 3.7  | 4.4   | 4.0 | 4.2  | 7.7  | 4.9  | 5.9  |
| 4     | 5.5      | 5.1 | 5.2  | 4.5   | 2.1 | 3.1  | 4.7   | 3.8 | 4.1  | 5.9  | 3.6  | 4.6  |
| 5     | 5.9      | 5.2 | 5.6  | 4.1   | 2.0 | 2.9  | 5.6   | 3.6 | 4.3  | 4.7  | 3.2  | 3.7  |
| 6     | 5.7      | 5.2 | 5.4  | 8.7   | 2.4 | 5.2  | 5.4   | 3.7 | 4.2  | 5.1  | 3.6  | 4.3  |
| 7     | 5.7      | 5.1 | 5.4  | 6.6   | 3.5 | 5.6  | 5.7   | 4.1 | 4.6  | 6.3  | 3.5  | 4.2  |
| 8     | 5.6      | 4.3 | 5.0  | 6.4   | 5.4 | 5.9  | 5.7   | 4.6 | 4.9  | 6.4  | 3.1  | 4.7  |
| 9     | 5.9      | 4.4 | 4.9  | 6.5   | 5.0 | 5.6  | 5.9   | 4.9 | 5.3  | 6.4  | 4.3  | 4.8  |
| 10    | 4.8      | 4.2 | 4.4  | 6.5   | 3.7 | 5.6  | 6.2   | 4.9 | 5.7  | 4.6  | 3.2  | 3.8  |
| 11    | 4.3      | 3.8 | 4.0  | 3.7   | 1.9 | 2.4  | 6.2   | 4.5 | 5.4  | 5.8  | 2.3  | 3.6  |
| 12    | 4.9      | 3.9 | 4.2  | 4.3   | 2.6 | 3.7  | 5.9   | 5.4 | 5.8  | 6.2  | 3.9  | 4.7  |
| 13    | 4.4      | 3.4 | 3.8  | 4.5   | 3.2 | 3.6  | 6.2   | 5.6 | 5.9  | 6.0  | 4.1  | 4.8  |
| 14    | 3.4      | 2.5 | 3.0  | 4.7   | 3.8 | 4.4  | 5.9   | 5.2 | 5.5  | 8.2  | 3.2  | 4.6  |
| 15    | 4.6      | 2.8 | 3.4  | 4.5   | 3.3 | 3.8  | 5.3   | 4.4 | 4.9  | 10.8 | 3.2  | 5.9  |
| 16    | 4.4      | 2.7 | 3.4  | 4.5   | 3.2 | 4.0  | 5.9   | 3.7 | 4.4  | 10   | 4.7  | 6.8  |
| 17    | 2.7      | 1.5 | 2.1  | 5.0   | 3.6 | 4.2  | 6.2   | 3.4 | 4.3  | 8.8  | 5.7  | 6.8  |
| 18    | 2.2      | 1.4 | 1.7  | 4.6   | 3.3 | 3.9  | 5.1   | 3.2 | 4.1  | 7.8  | 5.3  | 6.8  |
| 19    | 3.0      | 2.1 | 2.6  | 5.7   | 4.0 | 4.4  | 5.9   | 3.3 | 4.7  | 7.5  | 3.9  | 5.3  |
| 20    | 5.1      | 2.7 | 3.3  | 5.7   | 4.4 | 4.9  | 6.5   | 3.3 | 4.7  | 10.8 | 4.1  | 6.9  |
| 21    | 5.1      | 3.7 | 4.0  | 5.1   | 4.6 | 4.9  | 6.1   | 3.3 | 4.7  | 11.3 | 5.4  | 7.6  |
| 22    | 5.0      | 3.0 | 3.6  | 4.9   | 4.2 | 4.6  | 6.3   | 4.8 | 5.6  | 13.2 | 7.4  | 9.6  |
| 23    | 4.5      | 3.1 | 3.8  | 4.7   | 3.7 | 4.2  | 6.1   | 4.0 | 5.1  | 19.4 | 10.3 | 14.3 |
| 24    | 4.0      | 2.5 | 3.1  | 4.5   | 3.7 | 4.0  | 7.2   | 2.7 | 5.2  | 18.1 | 13.1 | 15.9 |
| 25    | 3.4      | 2.5 | 2.8  | 4.6   | 3.9 | 4.1  | 8.0   | 5.9 | 7.2  | 17.8 | 13.6 | 15.5 |
| 26    | 6.4      | 3.2 | 4.6  | 4.2   | 3.5 | 3.9  | 7.5   | 5.5 | 6.6  | 17.1 | 14.9 | 15.9 |
| 27    | 6.4      | 1.3 | 3.4  | 3.6   | 2.6 | 3.0  | 6.6   | 5.6 | 6.0  | 16.2 | 14.1 | 15.1 |
| 28    | 2.6      | 1.0 | 1.4  | 4.0   | 2.5 | 3.2  | 6.2   | 4.3 | 5.3  | 15.9 | 12.3 | 13.4 |
| 29    | 2.1      | 0.9 | 1.5  | 4.4   | 3.1 | 3.9  | 6.8   | 4.3 | 5.4  | 15.6 | 13.1 | 14.3 |
| 30    | ---      | --- | ---  | 3.1   | 2.0 | 2.7  | 7.2   | 5.0 | 5.8  | 15.7 | 15.0 | 15.3 |
| 31    | ---      | --- | ---  | 4.6   | 1.9 | 2.9  | ---   | --- | ---  | 15.7 | 15.0 | 15.3 |
| MONTH | 6.4      | 0.9 | 3.8  | 8.7   | 0.9 | 3.9  | 8.0   | 2.7 | 5.1  | 19.4 | 2.3  | 8.3  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |     |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|-----|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
| 1     | 15.5 | 14.1 | 14.8 | 13.4 | 9.0  | 11.0 | 17.7   | 17.3 | 17.6 | 6.2       | 3.7 | 4.5  |
| 2     | 15.3 | 13.9 | 14.5 | 13.1 | 9.5  | 10.8 | 17.7   | 16.9 | 17.4 | 8.0       | 5.2 | 6.3  |
| 3     | 15.2 | 13.9 | 14.5 | 13.8 | 10.5 | 11.2 | 17.9   | 15.3 | 17.3 | 6.3       | 5.5 | 5.7  |
| 4     | 16.6 | 14.5 | 15.4 | 15.3 | 10.2 | 11.8 | 17.0   | 14.7 | 15.7 | 5.7       | 4.3 | 4.7  |
| 5     | 15.7 | 14.4 | 15.3 | 14.1 | 10.0 | 12.0 | 16.1   | 13.8 | 15.0 | 6.3       | 4.2 | 5.2  |
| 6     | 15.9 | 14.4 | 15.3 | 11.5 | 8.7  | 10.0 | 15.7   | 14.7 | 15.3 | 6.4       | 3.4 | 4.7  |
| 7     | 15.6 | 14.7 | 15.1 | 11.8 | 8.0  | 9.2  | 15.1   | 13.0 | 14.2 | 5.6       | 4.0 | 4.7  |
| 8     | 15.2 | 14.3 | 14.8 | 15.3 | 9.5  | 11.7 | 14.9   | 12.1 | 13.1 | 5.9       | 4.3 | 5.1  |
| 9     | 15.4 | 12.4 | 13.7 | 13.7 | 11.1 | 11.9 | 15.7   | 12.2 | 13.7 | 5.8       | 3.0 | 4.1  |
| 10    | 14.2 | 12.4 | 13.1 | 15.0 | 11.8 | 12.5 | 15.5   | 13.1 | 14.2 | 4.5       | 2.9 | 3.5  |
| 11    | 13.3 | 12.1 | 12.6 | 14.5 | 11.9 | 13.2 | 14.9   | 12.6 | 13.5 | 4.7       | 3.2 | 3.8  |
| 12    | 14.3 | 12.6 | 13.5 | 14.3 | 12.4 | 13.4 | 15.3   | 13.0 | 13.8 | 4.4       | 2.9 | 3.3  |
| 13    | 14.9 | 13.7 | 14.4 | 14.3 | 12.3 | 12.9 | 15.6   | 12.9 | 13.9 | 3.8       | 2.4 | 3.0  |
| 14    | 14.9 | 13.7 | 14.3 | 14.3 | 12.4 | 13.2 | 14.6   | 12.7 | 13.6 | 4.3       | 2.4 | 2.9  |
| 15    | 14.7 | 13.5 | 14.0 | 14.5 | 12.8 | 13.7 | 14.5   | 12.0 | 13.5 | 3.0       | 2.4 | 2.6  |
| 16    | 14.5 | 12.8 | 13.7 | 14.7 | 13.8 | 14.2 | 13.6   | 10   | 11.3 | 3.0       | 2.3 | 2.5  |
| 17    | 14.1 | 12.5 | 13.3 | 16.2 | 13.7 | 14.4 | 12.2   | 9.2  | 10.7 | 4.8       | 2.1 | 3.2  |
| 18    | 14.5 | 12.4 | 13.6 | 17.2 | 14.1 | 15.6 | 12.9   | 9.0  | 10.7 | 4.9       | 2.4 | 3.1  |
| 19    | 13.5 | 11.3 | 12.4 | 16.8 | 14.1 | 15.1 | 9.9    | 6.4  | 7.8  | 5.0       | 2.9 | 4.1  |
| 20    | 14.7 | 11.5 | 13.4 | 16.8 | 15.1 | 16.0 | 12.9   | 6.4  | 7.6  | 6.1       | 3.7 | 4.6  |
| 21    | 14.7 | 12.6 | 14.1 | 16.5 | 16.0 | 16.3 | 11.1   | 5.8  | 7.9  | 4.1       | 2.5 | 3.3  |
| 22    | 13.8 | 12.6 | 13.2 | 16.1 | 14.5 | 15.6 | 10.5   | 5.1  | 6.4  | 3.4       | 1.8 | 2.3  |
| 23    | 12.9 | 10.3 | 11.3 | 18.6 | 14.2 | 15.4 | 9.0    | 5.7  | 7.1  | 3.9       | 1.1 | 1.5  |
| 24    | 11.8 | 10   | 10.8 | 16.2 | 15.3 | 15.8 | 10.6   | 7.0  | 8.7  | 4.1       | 1.2 | 2.4  |
| 25    | 13.2 | 10.0 | 11.0 | 16.3 | 14.5 | 15.3 | 11.5   | 8.4  | 9.8  | 4.6       | 2.6 | 3.4  |
| 26    | 15.1 | 10.4 | 12.3 | 16.0 | 13.8 | 14.4 | 10.6   | 5.8  | 7.4  | 5.5       | 3.3 | 4.4  |
| 27    | 13.1 | 12.0 | 12.6 | 17.8 | 14.2 | 15.5 | 8.0    | 6.0  | 6.9  | 4.8       | 2.8 | 3.6  |
| 28    | 14.1 | 12.2 | 13.0 | 17.7 | 15.8 | 16.5 | 8.0    | 5.3  | 6.3  | 4.1       | 2.4 | 3.3  |
| 29    | 14.2 | 12.6 | 13.5 | 18.6 | 16.3 | 17.1 | 9.5    | 4.2  | 6.7  | 4.0       | 2.7 | 3.1  |
| 30    | 14.2 | 11.8 | 12.6 | 17.9 | 17.1 | 17.5 | 8.0    | 4.1  | 5.8  | 5.9       | 3.3 | 4.6  |
| 31    | ---  | ---  | ---  | 17.7 | 17.3 | 17.7 | 6.0    | 3.8  | 4.6  | ---       | --- | ---  |
| MONTH | 16.6 | 10.0 | 13.5 | 18.6 | 8.0  | 13.9 | 17.9   | 3.8  | 11.2 | 8.0       | 1.1 | 3.8  |



## NEUSE RIVER BASIN

0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|------|------|------|
|       |          |     |      |       |     |      |       |     |      |      |      |      |
| 1     | 6.4      | 4.1 | 5.3  | 5.6   | 3.7 | 4.5  | 5.1   | 3.4 | 3.9  | 11.0 | 4.3  | 7.7  |
| 2     | 5.0      | 4.1 | 4.4  | 5.7   | 3.1 | 4.4  | 4.8   | 3.5 | 3.9  | 11.1 | 8.8  | 10.4 |
| 3     | 5.2      | 4.0 | 4.5  | 5.3   | 2.6 | 3.7  | 4.9   | 3.8 | 4.0  | 11.3 | 7.8  | 10.8 |
| 4     | ---      | --- | ---  | 5.5   | 1.9 | 3.2  | 5.9   | 3.8 | 4.2  | 11.6 | 9.6  | 11.0 |
| 5     | ---      | --- | ---  | 7.5   | 2.7 | 5.0  | 5.9   | 3.9 | 4.4  | 11.5 | 9.3  | 10.5 |
| 6     | ---      | --- | ---  | 8.3   | 5.5 | 6.9  | 5.1   | 4.0 | 4.5  | 10.5 | 7.2  | 8.3  |
| 7     | 8.9      | 5.2 | 7.0  | 9.0   | 3.7 | 6.4  | 5.6   | 3.9 | 4.8  | 8.5  | 6.4  | 7.3  |
| 8     | 8.2      | 4.9 | 5.8  | 7.0   | 2.3 | 4.5  | 6.4   | 4.7 | 5.5  | 8.5  | 7.0  | 7.4  |
| 9     | 5.4      | 5.0 | 5.2  | 6.5   | 2.9 | 4.7  | 8.0   | 5.2 | 6.4  | 8.3  | 7.0  | 7.5  |
| 10    | 5.6      | 5.0 | 5.3  | 4.0   | 2.0 | 2.9  | 7.0   | 5.0 | 5.6  | 7.6  | 6.5  | 7.1  |
| 11    | 5.5      | 3.8 | 4.8  | 4.4   | 1.9 | 2.8  | 5.9   | 4.6 | 5.0  | 7.7  | 6.0  | 6.6  |
| 12    | 5.7      | 3.7 | 4.7  | 5.9   | 2.6 | 4.0  | 5.9   | 4.3 | 4.8  | 7.5  | 6.1  | 6.7  |
| 13    | 6.5      | 4.2 | 5.4  | 3.9   | 2.7 | 3.3  | 5.4   | 4.2 | 4.7  | 7.6  | 6.7  | 7.0  |
| 14    | 6.1      | 4.6 | 5.3  | ---   | --- | ---  | 6.0   | 2.9 | 4.3  | 7.3  | 6.7  | 7.0  |
| 15    | 5.1      | 4.2 | 4.5  | 6.4   | 3.0 | 4.2  | 5.4   | 2.9 | 4.1  | 7.4  | 7.0  | 7.2  |
| 16    | 6.0      | 4.1 | 5.0  | ---   | --- | ---  | 6.1   | 4.2 | 5.0  | 7.2  | 6.7  | 7.0  |
| 17    | 6.0      | 4.0 | 5.2  | ---   | --- | ---  | 7.4   | 2.7 | 4.7  | 7.3  | 6.5  | 6.9  |
| 18    | 6.1      | 3.3 | 4.1  | ---   | --- | ---  | 7.7   | 1.9 | 4.6  | 7.5  | 6.8  | 7.1  |
| 19    | 5.6      | 3.6 | 4.2  | 7.3   | 4.2 | 6.1  | 6.2   | 1.5 | 3.1  | 7.3  | 6.8  | 7.0  |
| 20    | 6.5      | 3.9 | 5.3  | 5.8   | 4.4 | 4.8  | 4.7   | 2.0 | 2.8  | 7.0  | 6.5  | 6.7  |
| 21    | 6.6      | 4.2 | 5.5  | 6.8   | 3.8 | 5.0  | 4.2   | 2.0 | 2.8  | 7.1  | 5.9  | 6.5  |
| 22    | 4.9      | 4.4 | 4.7  | 8.5   | 3.5 | 5.4  | 9.3   | 2.1 | 4.1  | 7.4  | 5.3  | 6.3  |
| 23    | 6.1      | 4.4 | 4.9  | 9.7   | 5.7 | 7.3  | 9.6   | 5.1 | 8.1  | 7.0  | 4.9  | 5.6  |
| 24    | 6.4      | 4.6 | 5.2  | 9.7   | 6.2 | 8.2  | 9.5   | 5.6 | 8.5  | 7.0  | 5.7  | 6.2  |
| 25    | 5.9      | 4.8 | 5.2  | 9.5   | 3.2 | 6.5  | 9.7   | 3.1 | 7.5  | 7.6  | 5.8  | 6.3  |
| 26    | 6.7      | 4.8 | 5.5  | 7.5   | 4.4 | 5.2  | 11.3  | 5.0 | 8.5  | 7.0  | 5.7  | 6.0  |
| 27    | 6.8      | 5.2 | 6.0  | 7.5   | 4.2 | 5.2  | 11.7  | 6.4 | 9.5  | 5.9  | 5.1  | 5.6  |
| 28    | 7.5      | 4.7 | 6.2  | 7.3   | 4.2 | 5.7  | 11.7  | 6.6 | 10   | 6.0  | 5.0  | 5.4  |
| 29    | 7.0      | 4.5 | 5.1  | 6.0   | 4.1 | 4.6  | 11.1  | 7.1 | 9.3  | 6.5  | 5.2  | 5.9  |
| 30    | 6.3      | 4.3 | 5.3  | 5.8   | 3.2 | 4.3  | 10.7  | 4.0 | 8.0  | 6.4  | 4.4  | 5.2  |
| 31    | 5.7      | 4.0 | 4.7  | ---   | --- | ---  | 10.7  | 3.2 | 6.5  | 6.8  | 4.7  | 5.2  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 11.7  | 1.5 | 5.6  | 11.6 | 4.3  | 7.1  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY  |      |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
| 1     | 6.8      | 5.0 | 5.3  | 7.0   | 3.8 | 5.3  | 5.1   | 3.5 | 4.0  | 8.9  | 7.0  | 8.2  |
| 2     | 6.2      | 5.1 | 5.5  | 8.1   | 4.7 | 6.3  | 4.3   | 3.7 | 4.1  | 8.6  | 5.2  | 6.6  |
| 3     | 6.1      | 5.1 | 5.3  | 7.5   | 3.5 | 5.4  | 7.2   | 4.0 | 4.6  | 9.1  | 5.0  | 6.5  |
| 4     | 6.0      | 5.1 | 5.4  | 6.8   | 3.0 | 5.0  | 6.2   | 3.8 | 4.6  | 7.8  | 4.3  | 5.8  |
| 5     | 6.0      | 5.2 | 5.6  | 8.3   | 4.4 | 6.5  | 6.2   | 3.6 | 4.6  | 9.2  | 4.9  | 6.6  |
| 6     | 6.1      | 5.2 | 5.5  | 8.8   | 4.6 | 6.8  | 6.7   | 4.0 | 5.5  | 8.3  | 4.3  | 6.0  |
| 7     | 5.6      | 5.0 | 5.3  | 6.7   | 5.5 | 6.2  | 8.3   | 4.4 | 5.7  | 9.7  | 5.2  | 7.5  |
| 8     | 6.4      | 4.8 | 5.3  | 6.4   | 5.6 | 5.8  | 8.1   | 4.8 | 6.1  | 10.9 | 5.0  | 7.9  |
| 9     | 6.0      | 4.7 | 5.5  | 6.7   | 5.1 | 5.8  | 8.0   | 5.0 | 5.9  | 8.3  | 5.0  | 6.5  |
| 10    | 5.7      | 4.3 | 4.9  | 6.4   | 4.0 | 5.6  | 7.3   | 5.6 | 6.1  | 8.8  | 3.9  | 5.8  |
| 11    | 6.2      | 4.0 | 4.8  | 6.5   | 2.3 | 4.3  | 6.5   | 5.2 | 5.9  | 12.0 | 5.9  | 9.2  |
| 12    | 6.1      | 4.1 | 4.8  | 6.5   | 4.3 | 5.0  | 5.9   | 5.3 | 5.7  | 12.4 | 6.9  | 9.7  |
| 13    | 5.7      | 3.6 | 4.2  | 7.0   | 3.5 | 5.2  | 6.4   | 5.5 | 5.9  | 13.5 | 9.0  | 11.4 |
| 14    | 6.5      | 3.4 | 5.1  | 6.2   | 4.1 | 4.8  | 5.7   | 5.1 | 5.5  | 14.2 | 9.3  | 12.9 |
| 15    | 6.2      | 3.0 | 4.6  | 6.9   | 4.1 | 5.1  | 6.1   | 4.4 | 5.0  | 14.7 | 11.0 | 13.6 |
| 16    | 4.4      | 2.8 | 3.5  | 7.5   | 4.0 | 6.4  | 6.8   | 4.3 | 5.5  | 15.3 | 12.2 | 14.1 |
| 17    | 2.9      | 1.5 | 2.3  | 7.0   | 3.7 | 4.8  | 7.3   | 5.0 | 6.0  | 15.5 | 9.7  | 12.9 |
| 18    | 3.1      | 1.4 | 2.1  | 7.0   | 3.4 | 5.1  | 7.6   | 5.0 | 6.2  | 15.2 | 11.0 | 13.2 |
| 19    | 3.9      | 2.1 | 3.0  | 6.2   | 4.0 | 4.7  | 8.8   | 4.8 | 6.5  | 15.9 | 12.4 | 14.7 |
| 20    | 6.2      | 2.9 | 4.1  | 6.0   | 4.7 | 5.2  | 7.4   | 5.0 | 6.0  | 17.6 | 11.1 | 15.7 |
| 21    | 5.0      | 3.7 | 4.2  | 5.3   | 4.6 | 4.9  | 10.1  | 5.5 | 7.2  | 18.2 | 14.4 | 16.6 |
| 22    | 5.3      | 3.1 | 4.1  | 4.9   | 4.2 | 4.6  | 10.7  | 5.7 | 7.6  | 18.8 | 13.7 | 17.6 |
| 23    | 4.7      | 3.1 | 4.0  | 5.3   | 4.2 | 4.6  | 11.4  | 6.4 | 8.5  | 19.4 | 14.9 | 17.5 |
| 24    | 4.1      | 2.6 | 3.3  | 4.9   | 4.1 | 4.5  | 11.6  | 4.9 | 7.7  | 18.6 | 15.7 | 17.2 |
| 25    | 4.0      | 2.5 | 2.9  | 5.0   | 4.2 | 4.5  | 8.5   | 6.7 | 7.7  | 19.5 | 15.7 | 16.9 |
| 26    | 6.4      | 3.3 | 4.6  | 5.6   | 4.0 | 4.8  | 8.6   | 6.6 | 7.2  | 18.5 | 15.1 | 16.7 |
| 27    | 6.4      | 1.3 | 3.7  | 7.2   | 3.9 | 5.9  | 7.1   | 5.6 | 6.2  | 17.0 | 14.4 | 15.5 |
| 28    | 4.8      | 1.0 | 2.6  | 7.8   | 3.1 | 5.0  | 8.0   | 5.6 | 6.3  | 17.3 | 12.6 | 14.4 |
| 29    | 5.3      | 2.6 | 4.0  | 6.4   | 3.2 | 4.1  | 8.2   | 6.4 | 7.4  | 16.7 | 13.4 | 14.9 |
| 30    | ---      | --- | ---  | 6.4   | 2.5 | 3.7  | 8.5   | 6.1 | 7.5  | 16.4 | 15.0 | 15.5 |
| 31    | ---      | --- | ---  | 6.5   | 3.5 | 5.4  | ---   | --- | ---  | 16.2 | 15.0 | 15.5 |
| MONTH | 6.8      | 1.0 | 4.3  | 8.8   | 2.3 | 5.2  | 11.6  | 3.5 | 6.1  | 19.5 | 3.9  | 12.0 |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|-----|------|
|       |      |      |      |      |      |      |      |      |      |      |     |      |
| 1     | 15.6 | 14.3 | 15.0 | 16.5 | 13.1 | 14.7 | 17.6 | 17.3 | 17.5 | 12.4 | 5.0 | 10.3 |
| 2     | 17.5 | 14.6 | 15.4 | 17.3 | 14.7 | 16.3 | 17.6 | 16.9 | 17.3 | 9.7  | 5.9 | 7.7  |
| 3     | 17.5 | 14.5 | 15.6 | 18.1 | 15.1 | 16.9 | 17.8 | 15.4 | 17.2 | 7.6  | 5.6 | 6.5  |
| 4     | 17.8 | 15.9 | 16.6 | 18.2 | 15.2 | 17.6 | 17.4 | 15.3 | 16.4 | 8.4  | 4.7 | 6.3  |
| 5     | 16.7 | 15.1 | 15.9 | 18.8 | 15.3 | 17.6 | 17.6 | 14.6 | 16.1 | 8.3  | 4.3 | 5.6  |
| 6     | 16.7 | 15.1 | 15.9 | 18.8 | 13.8 | 17.1 | 16.9 | 14.9 | 15.4 | 7.7  | 4.3 | 5.7  |
| 7     | 16.9 | 15.0 | 15.9 | 18.8 | 15.5 | 18.0 | 15.7 | 13.5 | 14.6 | 8.0  | 5.6 | 6.7  |
| 8     | 17.1 | 15.5 | 16.3 | 18.8 | 14.9 | 17.8 | 16.8 | 14.3 | 15.6 | 8.9  | 5.3 | 6.6  |
| 9     | 17.0 | 13.9 | 15.8 | 19.9 | 16.4 | 18.6 | 17.3 | 16.1 | 16.7 | 7.8  | 4.0 | 5.3  |
| 10    | 17.0 | 13.1 | 14.9 | 20.3 | 16.4 | 19.2 | 17.1 | 15.1 | 16.1 | 8.8  | 4.3 | 6.7  |
| 11    | 16.4 | 12.4 | 14.0 | 20.8 | 15.3 | 18.8 | 17.5 | 15.3 | 16.8 | 5.9  | 3.2 | 4.1  |
| 12    | 15.7 | 12.8 | 13.7 | 20.1 | 15.5 | 17.8 | 17.7 | 13.7 | 16.6 | 5.1  | 2.9 | 3.6  |
| 13    | 14.9 | 13.5 | 14.4 | 20.1 | 14.9 | 17.8 | 18.4 | 12.9 | 15.2 | 4.9  | 2.6 | 3.3  |
| 14    | 15.3 | 13.7 | 14.4 | 22.1 | 15.0 | 19.4 | 16.4 | 12.8 | 14.8 | 5.2  | 2.6 | 3.7  |
| 15    | 16.0 | 13.9 | 14.9 | 22.1 | 13.8 | 17.7 | 15.1 | 13.5 | 14.3 | 5.9  | 2.5 | 3.9  |
| 16    | 16.1 | 14.2 | 15.1 | 21.0 | 14.9 | 17.2 | 14.6 | 11.1 | 13.2 | 7.9  | 4.8 | 6.8  |
| 17    | 16.9 | 13.5 | 15.2 | 22.2 | 17.2 | 19.4 | 15.1 | 10.9 | 13.4 | 8.9  | 5.0 | 7.5  |
| 18    | 16.5 | 12.5 | 14.3 | 22.6 | 18.4 | 20.5 | 14.3 | 12.1 | 13.6 | 6.5  | 2.4 | 3.7  |
| 19    | 17.0 | 11.7 | 13.8 | 23.0 | 15.5 | 20.2 | 15.3 | 13.3 | 14.3 | 7.5  | 3.3 | 5.2  |
| 20    | 16.9 | 12.8 | 14.5 | 21.0 | 16.1 | 17.6 | 16.1 | 14.1 | 15.1 | 6.6  | 3.8 | 4.9  |
| 21    | 15.1 | 13.1 | 14.2 | 21.4 | 16.1 | 16.8 | 17.9 | 11.0 | 16.3 | 6.7  | 3.6 | 5.0  |
| 22    | 15.3 | 13.0 | 14.0 | 18.8 | 15.9 | 16.4 | 17.5 | 10.7 | 13.7 | 7.8  | 3.6 | 5.6  |
| 23    | 15.5 | 10.4 | 13.4 | 20.7 | 16.5 | 18.5 | 15.1 | 8.8  | 11.5 | 8.9  | 2.9 | 7.6  |
| 24    | 17.4 | 10.4 | 14.3 | 20.7 | 15.6 | 18.1 | 12.4 | 8.5  | 10.1 | 9.0  | 2.8 | 5.6  |
| 25    | 17.4 | 13.3 | 15.8 | 18.6 | 15.5 | 16.3 | 11.5 | 8.7  | 10   | 5.3  | 3.1 | 4.0  |
| 26    | 17.4 | 11.7 | 13.6 | 19.4 | 16.3 | 17.5 | 10.7 | 6.9  | 8.8  | 5.7  | 3.6 | 4.9  |
| 27    | 14.7 | 12.3 | 13.4 | 21.0 | 17.2 | 18.5 | 11.4 | 6.3  | 8.1  | 5.2  | 3.4 | 4.3  |
| 28    | 15.5 | 12.9 | 14.3 | 21.6 | 16.7 | 18.8 | 11.1 | 6.0  | 7.6  | 6.0  | 2.7 | 4.5  |
| 29    | 15.2 | 13.1 | 14.0 | 21.4 | 17.2 | 18.9 | 11.3 | 8.6  | 10.0 | 6.8  | 2.7 | 4.5  |
| 30    | 15.8 | 13.1 | 14.3 | 20.8 | 17.3 | 18.4 | 9.7  | 4.3  | 6.9  | 7.9  | 2.3 | 5.4  |
| 31    | ---  | ---  | ---  | 17.7 | 17.3 | 17.5 | 11.1 | 6.2  | 9.5  | ---  | --- | ---  |
| MONTH | 17.8 | 10.4 | 14.8 | 23.0 | 13.1 | 17.9 | 18.4 | 4.3  | 13.6 | 12.4 | 2.3 | 5.5  |

## NEUSE RIVER BASIN

0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 8.5      | 7.8 | 8.1  | 9.2      | 8.2 | 8.6  | 8.3      | 7.6 | 7.9  | 8.5     | 7.4 | 7.8  |
| 2     | 8.3      | 7.7 | 8.0  | 9.4      | 8.4 | 9.0  | 8.0      | 7.6 | 7.8  | 8.8     | 7.6 | 8.0  |
| 3     | 8.4      | 7.7 | 8.0  | 9.2      | 8.5 | 8.9  | 8.0      | 7.6 | 7.8  | 8.3     | 7.4 | 7.7  |
| 4     | ---      | --- | ---  | 8.8      | 7.8 | 8.5  | 7.9      | 7.7 | 7.8  | 8.3     | 7.2 | 7.6  |
| 5     | ---      | --- | ---  | 8.9      | 7.5 | 8.3  | 7.9      | 7.7 | 7.7  | 7.8     | 7.1 | 7.4  |
| 6     | ---      | --- | ---  | 8.4      | 7.2 | 7.7  | 7.7      | 7.6 | 7.6  | 7.8     | 7.5 | 7.6  |
| 7     | 8.3      | 7.3 | 7.9  | 7.3      | 7.1 | 7.2  | 7.8      | 7.6 | 7.7  | 7.6     | 7.5 | 7.5  |
| 8     | 8.2      | 7.1 | 7.6  | 7.6      | 7.2 | 7.4  | 8.1      | 7.6 | 7.8  | 8.1     | 7.5 | 7.7  |
| 9     | 7.7      | 7.4 | 7.6  | 7.6      | 7.4 | 7.5  | 8.2      | 7.8 | 8.0  | 8.0     | 7.6 | 7.8  |
| 10    | 7.8      | 7.6 | 7.7  | 7.7      | 7.4 | 7.5  | 8.3      | 7.8 | 8.1  | 8.1     | 7.7 | 7.8  |
| 11    | 7.9      | 7.6 | 7.7  | 7.6      | 7.4 | 7.5  | 7.9      | 7.8 | 7.8  | 8.2     | 7.6 | 7.9  |
| 12    | 8.5      | 7.6 | 7.9  | 7.8      | 7.4 | 7.5  | 8.2      | 7.8 | 7.9  | 8.5     | 8.0 | 8.1  |
| 13    | 8.6      | 7.5 | 7.9  | 7.6      | 7.4 | 7.4  | 8.3      | 7.8 | 8.0  | 8.6     | 8.0 | 8.2  |
| 14    | 8.1      | 7.5 | 7.7  | ---      | --- | ---  | 8.0      | 7.8 | 7.9  | 8.4     | 8.1 | 8.3  |
| 15    | 7.9      | 7.5 | 7.7  | 8.2      | 7.5 | 7.7  | 8.0      | 7.8 | 7.9  | 8.4     | 8.2 | 8.3  |
| 16    | 8.4      | 7.7 | 7.9  | ---      | --- | ---  | 7.8      | 7.4 | 7.7  | 8.5     | 8.2 | 8.3  |
| 17    | 8.5      | 7.0 | 7.6  | ---      | --- | ---  | 7.8      | 7.5 | 7.6  | 8.6     | 8.2 | 8.4  |
| 18    | 7.8      | 7.3 | 7.5  | ---      | --- | ---  | 7.6      | 7.4 | 7.5  | 8.6     | 8.2 | 8.4  |
| 19    | 8.3      | 7.3 | 7.8  | 7.5      | 7.0 | 7.2  | 7.5      | 7.4 | 7.4  | 8.5     | 8.2 | 8.4  |
| 20    | ---      | --- | ---  | 7.3      | 7.0 | 7.1  | 7.6      | 7.3 | 7.4  | 8.6     | 8.3 | 8.4  |
| 21    | ---      | --- | ---  | 8.1      | 7.1 | 7.4  | 7.5      | 7.2 | 7.4  | 8.6     | 8.4 | 8.5  |
| 22    | 8.1      | 7.3 | 7.7  | 8.3      | 7.2 | 7.7  | 7.6      | 7.3 | 7.4  | 8.7     | 8.5 | 8.6  |
| 23    | 8.3      | 7.5 | 7.9  | 8.2      | 7.3 | 7.7  | 7.5      | 7.3 | 7.4  | 8.8     | 8.4 | 8.6  |
| 24    | 8.3      | 7.6 | 8.0  | 8.2      | 7.1 | 7.7  | 7.5      | 7.3 | 7.4  | 8.8     | 8.4 | 8.5  |
| 25    | 8.0      | 7.6 | 7.9  | 7.9      | 7.4 | 7.6  | 7.4      | 7.2 | 7.3  | 8.6     | 8.2 | 8.4  |
| 26    | 8.6      | 7.6 | 8.0  | 8.2      | 7.5 | 7.8  | 7.3      | 7.1 | 7.2  | 8.3     | 8.0 | 8.2  |
| 27    | 8.5      | 7.6 | 8.0  | 8.2      | 7.8 | 8.0  | 7.5      | 7.2 | 7.3  | 8.4     | 8.2 | 8.3  |
| 28    | 8.3      | 7.6 | 8.0  | 8.2      | 7.1 | 7.8  | 8.2      | 7.2 | 7.4  | 8.3     | 7.9 | 8.1  |
| 29    | 8.4      | 7.7 | 7.9  | 7.6      | 7.2 | 7.4  | 8.4      | 7.3 | 7.5  | 8.5     | 7.9 | 8.2  |
| 30    | 8.6      | 7.7 | 8.1  | 8.3      | 7.4 | 7.7  | 7.8      | 7.3 | 7.6  | 8.6     | 8.2 | 8.5  |
| 31    | 8.6      | 7.9 | 8.2  | ---      | --- | ---  | 8.0      | 7.3 | 7.5  | 8.7     | 8.2 | 8.4  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | 8.4      | 7.1 | 7.6  | 8.8     | 7.1 | 8.1  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 8.6      | 8.2 | 8.3  | 8.6      | 7.9 | 8.3  | 8.4      | 7.5 | 8.0  | 7.0     | 6.5 | 6.7  |
| 2     | 8.4      | 8.1 | 8.2  | 8.1      | 7.6 | 7.9  | 8.5      | 7.6 | 7.9  | 7.0     | 6.6 | 6.8  |
| 3     | 8.6      | 8.2 | 8.5  | 8.7      | 7.5 | 8.0  | 8.5      | 7.8 | 8.2  | 7.1     | 6.6 | 6.9  |
| 4     | 8.6      | 8.3 | 8.5  | 8.9      | 7.6 | 8.4  | 8.6      | 8.1 | 8.4  | 7.6     | 6.8 | 7.0  |
| 5     | 8.5      | 8.1 | 8.3  | 8.6      | 7.5 | 8.1  | 8.1      | 7.9 | 8.0  | 7.7     | 7.0 | 7.3  |
| 6     | 8.5      | 8.2 | 8.4  | 8.1      | 7.2 | 7.5  | 8.8      | 7.8 | 8.2  | 8.6     | 6.7 | 7.7  |
| 7     | 8.5      | 8.0 | 8.3  | 7.7      | 7.2 | 7.5  | 8.9      | 7.9 | 8.5  | 8.9     | 7.3 | 8.3  |
| 8     | 8.3      | 8.0 | 8.1  | 7.3      | 7.2 | 7.2  | 9.0      | 8.0 | 8.7  | 8.7     | 7.6 | 8.2  |
| 9     | 8.2      | 8.0 | 8.1  | 7.5      | 7.1 | 7.3  | 9.0      | 8.6 | 8.8  | 8.8     | 7.5 | 8.3  |
| 10    | 8.5      | 8.1 | 8.3  | 7.4      | 7.2 | 7.3  | 8.9      | 8.2 | 8.6  | 9.1     | 8.1 | 8.6  |
| 11    | 8.7      | 8.3 | 8.5  | 7.5      | 7.3 | 7.4  | 8.9      | 8.2 | 8.7  | 9.1     | 7.3 | 8.3  |
| 12    | 8.5      | 8.0 | 8.3  | 8.3      | 7.3 | 7.6  | 8.7      | 8.0 | 8.3  | 8.9     | 7.3 | 8.0  |
| 13    | 8.5      | 8.2 | 8.3  | 8.2      | 7.5 | 7.8  | 8.4      | 7.7 | 8.0  | 8.6     | 7.2 | 7.7  |
| 14    | 8.6      | 8.4 | 8.5  | 8.4      | 7.8 | 8.0  | 8.6      | 7.7 | 8.0  | 8.1     | 7.0 | 7.4  |
| 15    | 8.5      | 7.7 | 8.3  | 8.0      | 7.6 | 7.8  | 8.0      | 7.8 | 7.9  | 8.4     | 6.9 | 7.3  |
| 16    | 8.2      | 7.7 | 8.0  | 7.9      | 7.3 | 7.6  | 8.7      | 7.9 | 8.3  | 8.5     | 6.9 | 7.4  |
| 17    | 8.3      | 8.0 | 8.2  | 8.0      | 7.4 | 7.6  | 8.9      | 7.9 | 8.6  | 8.9     | 7.0 | 7.7  |
| 18    | 8.0      | 7.3 | 7.7  | 8.5      | 7.5 | 7.9  | 9.2      | 8.1 | 8.7  | 8.5     | 7.2 | 7.9  |
| 19    | 8.1      | 7.1 | 7.6  | 8.1      | 7.5 | 7.9  | 9.0      | 7.8 | 8.5  | 7.9     | 7.2 | 7.5  |
| 20    | 9.0      | 7.6 | 8.2  | 8.2      | 7.4 | 7.7  | 9.1      | 7.8 | 8.5  | 8.6     | 6.8 | 7.6  |
| 21    | 8.5      | 7.7 | 8.2  | 8.1      | 7.4 | 7.6  | 9.1      | 8.2 | 8.6  | 8.7     | 7.1 | 7.8  |
| 22    | 9.0      | 8.3 | 8.6  | 7.9      | 7.3 | 7.5  | 8.5      | 7.6 | 8.1  | 7.8     | 6.9 | 7.4  |
| 23    | 8.9      | 8.2 | 8.7  | 8.2      | 7.3 | 7.7  | 8.7      | 7.9 | 8.3  | 7.9     | 6.8 | 7.2  |
| 24    | 8.9      | 8.4 | 8.7  | 8.6      | 7.6 | 8.0  | 8.5      | 7.2 | 7.9  | 7.8     | 7.1 | 7.3  |
| 25    | 9.0      | 8.4 | 8.7  | 9.1      | 7.8 | 8.4  | 7.6      | 7.1 | 7.3  | 8.0     | 7.1 | 7.6  |
| 26    | 8.7      | 7.8 | 8.3  | 9.1      | 8.4 | 8.7  | 7.5      | 7.0 | 7.2  | 8.1     | 7.3 | 7.8  |
| 27    | 8.3      | 7.6 | 8.1  | 9.2      | 8.5 | 8.9  | 7.6      | 6.9 | 7.3  | 8.1     | 7.5 | 7.9  |
| 28    | 8.3      | 7.6 | 7.8  | 9.0      | 8.3 | 8.7  | 7.8      | 7.0 | 7.3  | 8.0     | 7.4 | 7.9  |
| 29    | 9.1      | 7.6 | 8.4  | 8.4      | 8.0 | 8.2  | 7.8      | 6.7 | 7.3  | 7.6     | 7.3 | 7.5  |
| 30    | ---      | --- | ---  | 8.7      | 7.9 | 8.3  | 7.4      | 6.7 | 7.0  | 7.4     | 7.1 | 7.3  |
| 31    | ---      | --- | ---  | 8.9      | 7.8 | 8.3  | ---      | --- | ---  | 7.4     | 7.0 | 7.2  |
| MONTH | 9.1      | 7.1 | 8.3  | 9.2      | 7.1 | 7.9  | 9.2      | 6.7 | 8.1  | 9.1     | 6.5 | 7.6  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.0 | 7.0 | 7.5  | 8.7 | 7.8 | 8.3  | 7.5 | 7.1 | 7.3  | 8.3 | 7.4 | 7.8  |
| 2     | 8.0 | 7.6 | 7.8  | 8.5 | 7.9 | 8.3  | 7.4 | 7.1 | 7.3  | 8.2 | 7.7 | 7.9  |
| 3     | 8.2 | 7.6 | 7.8  | 8.6 | 7.8 | 8.3  | 7.5 | 7.1 | 7.3  | 8.5 | 7.7 | 8.1  |
| 4     | 7.8 | 7.2 | 7.5  | 8.5 | 7.5 | 8.0  | 8.1 | 7.1 | 7.5  | 8.7 | 8.0 | 8.3  |
| 5     | 8.0 | 7.3 | 7.6  | 8.5 | 7.3 | 7.9  | 8.2 | 7.3 | 7.8  | 8.6 | 8.0 | 8.3  |
| 6     | 7.9 | 7.4 | 7.7  | 8.2 | 7.7 | 8.0  | 7.9 | 7.5 | 7.7  | 8.4 | 8.0 | 8.2  |
| 7     | 8.2 | 7.6 | 7.8  | 8.5 | 7.6 | 8.1  | 7.9 | 7.5 | 7.7  | 8.3 | 7.6 | 7.9  |
| 8     | 8.1 | 7.3 | 7.8  | 8.0 | 7.3 | 7.7  | 8.3 | 7.5 | 7.8  | 7.8 | 7.3 | 7.5  |
| 9     | 8.2 | 7.4 | 7.8  | 8.5 | 7.4 | 8.0  | 8.3 | 7.4 | 7.9  | 8.3 | 7.5 | 7.8  |
| 10    | 8.2 | 7.4 | 7.8  | 8.4 | 7.7 | 8.2  | 8.2 | 7.5 | 7.8  | 8.2 | 7.4 | 7.8  |
| 11    | 8.2 | 7.8 | 8.0  | 8.2 | 7.6 | 8.0  | 8.2 | 7.3 | 7.8  | 8.4 | 7.8 | 8.1  |
| 12    | 8.0 | 7.5 | 7.6  | 8.2 | 7.8 | 8.1  | 8.0 | 7.0 | 7.6  | 8.6 | 7.9 | 8.2  |
| 13    | 7.8 | 7.5 | 7.6  | 8.6 | 7.6 | 8.1  | 7.9 | 7.3 | 7.6  | 8.5 | 7.8 | 8.2  |
| 14    | 7.8 | 7.4 | 7.6  | 8.3 | 8.0 | 8.2  | 7.7 | 7.4 | 7.5  | 8.3 | 7.8 | 8.1  |
| 15    | 7.8 | 7.4 | 7.6  | 8.5 | 7.9 | 8.1  | 7.5 | 7.3 | 7.4  | 8.8 | 7.8 | 8.2  |
| 16    | 7.6 | 7.3 | 7.5  | 8.3 | 7.8 | 8.0  | 8.2 | 7.4 | 7.7  | 9.2 | 8.2 | 8.6  |
| 17    | 7.7 | 7.5 | 7.6  | 8.3 | 7.8 | 8.2  | 8.2 | 7.5 | 7.9  | 8.8 | 7.7 | 8.2  |
| 18    | 7.9 | 7.3 | 7.6  | 8.2 | 7.7 | 8.0  | 8.1 | 7.2 | 7.8  | 8.0 | 7.7 | 7.9  |
| 19    | 8.2 | 7.4 | 7.8  | 8.4 | 7.6 | 8.0  | 8.4 | 7.6 | 8.0  | 8.2 | 7.7 | 7.9  |
| 20    | 8.1 | 7.5 | 7.7  | 8.2 | 7.9 | 8.0  | 8.3 | 7.2 | 7.8  | 8.4 | 7.9 | 8.1  |
| 21    | 7.9 | 7.3 | 7.6  | 8.4 | 7.8 | 8.1  | 7.7 | 7.2 | 7.5  | 8.7 | 7.9 | 8.2  |
| 22    | 7.7 | 7.3 | 7.5  | 8.3 | 8.0 | 8.2  | 7.5 | 7.2 | 7.3  | 8.6 | 7.7 | 8.2  |
| 23    | 8.1 | 7.5 | 7.8  | 8.3 | 7.4 | 8.1  | 7.9 | 7.3 | 7.6  | 8.7 | 7.6 | 8.2  |
| 24    | 8.4 | 7.7 | 8.2  | 8.2 | 7.8 | 8.1  | 7.8 | 7.2 | 7.5  | 8.6 | 8.1 | 8.3  |
| 25    | 8.7 | 7.9 | 8.3  | 8.2 | 7.8 | 8.0  | 7.7 | 7.1 | 7.4  | 8.1 | 7.8 | 8.0  |
| 26    | 8.2 | 7.6 | 8.0  | 8.1 | 7.9 | 8.0  | 7.5 | 7.2 | 7.3  | 7.8 | 7.3 | 7.6  |
| 27    | 8.5 | 7.8 | 8.1  | 8.2 | 7.6 | 8.0  | 7.9 | 7.2 | 7.6  | 7.7 | 7.2 | 7.4  |
| 28    | 8.4 | 7.4 | 7.9  | 8.1 | 7.6 | 7.8  | 8.3 | 7.6 | 7.9  | 7.4 | 7.0 | 7.2  |
| 29    | 8.5 | 7.4 | 7.9  | 7.9 | 7.2 | 7.5  | 8.4 | 7.3 | 7.9  | 7.9 | 7.0 | 7.4  |
| 30    | 8.5 | 7.7 | 8.2  | 7.7 | 7.2 | 7.4  | 7.7 | 7.1 | 7.5  | 7.7 | 7.0 | 7.3  |
| 31    | --- | --- | ---  | 7.6 | 7.2 | 7.3  | 8.7 | 7.4 | 7.9  | --- | --- | ---  |
| MONTH | 8.7 | 7.0 | 7.8  | 8.7 | 7.2 | 8.0  | 8.7 | 7.0 | 7.6  | 9.2 | 7.0 | 8.0  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.4 | 7.1 | 7.5  | 8.8 | 7.6 | 8.0  | 8.3 | 7.6 | 7.9  | 8.5 | 7.2 | 7.4  |
| 2     | 8.3 | 7.4 | 8.0  | 8.5 | 7.6 | 7.9  | 8.1 | 7.7 | 7.9  | 7.3 | 7.1 | 7.2  |
| 3     | 8.3 | 7.5 | 7.9  | 8.6 | 7.6 | 8.0  | 8.1 | 7.8 | 7.9  | 7.3 | 7.1 | 7.2  |
| 4     | --- | --- | ---  | 8.7 | 7.0 | 7.9  | 8.0 | 7.8 | 7.9  | 7.2 | 7.1 | 7.2  |
| 5     | --- | --- | ---  | 7.9 | 6.9 | 7.1  | 7.9 | 7.7 | 7.8  | 7.9 | 7.2 | 7.5  |
| 6     | --- | --- | ---  | 7.2 | 6.9 | 7.0  | 7.8 | 7.7 | 7.7  | 7.9 | 7.4 | 7.7  |
| 7     | 7.3 | 6.9 | 7.0  | 7.4 | 6.9 | 7.0  | 7.8 | 7.6 | 7.7  | 7.8 | 7.5 | 7.6  |
| 8     | 7.7 | 6.9 | 7.2  | 7.6 | 6.9 | 7.4  | 7.8 | 7.6 | 7.7  | 8.1 | 7.6 | 7.8  |
| 9     | 7.6 | 7.3 | 7.4  | 7.6 | 7.3 | 7.5  | 8.2 | 7.5 | 7.7  | 8.1 | 7.8 | 7.9  |
| 10    | 7.5 | 7.2 | 7.3  | 7.6 | 7.4 | 7.5  | 8.1 | 7.6 | 7.9  | 8.2 | 7.8 | 7.9  |
| 11    | 7.4 | 7.2 | 7.3  | 7.5 | 7.3 | 7.4  | 7.8 | 7.6 | 7.8  | 8.2 | 7.8 | 7.9  |
| 12    | 7.5 | 7.2 | 7.3  | 7.6 | 7.2 | 7.4  | 7.9 | 7.7 | 7.8  | 8.4 | 7.9 | 8.2  |
| 13    | 7.5 | 7.2 | 7.3  | 7.6 | 7.4 | 7.5  | 8.1 | 7.7 | 7.8  | 8.6 | 8.0 | 8.3  |
| 14    | 7.7 | 7.3 | 7.4  | --- | --- | ---  | 7.8 | 7.6 | 7.7  | 8.6 | 8.2 | 8.4  |
| 15    | 7.8 | 7.4 | 7.6  | 8.1 | 7.5 | 7.6  | 7.8 | 7.6 | 7.7  | 8.5 | 8.4 | 8.4  |
| 16    | 8.1 | 7.5 | 7.7  | --- | --- | ---  | 7.8 | 7.4 | 7.7  | 8.6 | 8.4 | 8.5  |
| 17    | 8.2 | 7.2 | 7.5  | --- | --- | ---  | 7.9 | 7.6 | 7.7  | 8.6 | 8.3 | 8.4  |
| 18    | 8.1 | 7.1 | 7.7  | --- | --- | ---  | 7.8 | 7.5 | 7.7  | 8.7 | 8.2 | 8.4  |
| 19    | 8.4 | 7.2 | 7.8  | 7.5 | 7.2 | 7.3  | 7.6 | 7.4 | 7.6  | 8.7 | 8.3 | 8.5  |
| 20    | 8.1 | 7.0 | 7.4  | 7.5 | 7.3 | 7.4  | 7.7 | 7.4 | 7.5  | 8.7 | 8.4 | 8.6  |
| 21    | 8.1 | 7.1 | 7.4  | 7.8 | 7.2 | 7.4  | 7.6 | 7.4 | 7.5  | 8.8 | 8.4 | 8.6  |
| 22    | 8.4 | 7.5 | 7.9  | 8.0 | 7.2 | 7.5  | 7.5 | 7.3 | 7.5  | 8.7 | 8.1 | 8.5  |
| 23    | 8.5 | 7.6 | 8.0  | 7.7 | 7.1 | 7.4  | 7.6 | 7.3 | 7.4  | 8.9 | 8.4 | 8.7  |
| 24    | 8.5 | 7.7 | 8.1  | 7.8 | 7.1 | 7.3  | 7.5 | 7.3 | 7.4  | 8.9 | 8.5 | 8.7  |
| 25    | 8.2 | 7.6 | 7.9  | 7.7 | 7.1 | 7.5  | 7.6 | 7.3 | 7.4  | 8.8 | 8.3 | 8.6  |
| 26    | 8.1 | 7.5 | 7.7  | 8.2 | 7.3 | 7.7  | 7.6 | 7.4 | 7.4  | 8.5 | 8.1 | 8.3  |
| 27    | 7.9 | 7.5 | 7.6  | 8.2 | 7.1 | 7.7  | 7.9 | 7.3 | 7.5  | 8.6 | 8.3 | 8.4  |
| 28    | 8.2 | 7.4 | 7.6  | 8.1 | 7.0 | 7.5  | 7.9 | 7.4 | 7.5  | 8.5 | 8.1 | 8.2  |
| 29    | 8.3 | 7.5 | 8.0  | 7.6 | 7.2 | 7.4  | 7.5 | 7.2 | 7.4  | 8.5 | 8.0 | 8.2  |
| 30    | 8.2 | 7.6 | 7.9  | 8.3 | 7.5 | 7.7  | 7.6 | 7.2 | 7.4  | 8.6 | 7.8 | 8.4  |
| 31    | 8.4 | 7.6 | 7.9  | --- | --- | ---  | 7.6 | 7.2 | 7.4  | 8.5 | 7.6 | 8.2  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 8.3 | 7.2 | 7.6  | 8.9 | 7.1 | 8.1  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 8.6 | 7.8 | 8.3  | 7.8 | 7.3 | 7.5  | 7.7 | 6.6 | 7.2  | 6.9 | 6.6 | 6.7  |
| 2     | 8.4 | 7.9 | 8.2  | 8.0 | 7.3 | 7.6  | 7.8 | 6.9 | 7.2  | 7.2 | 6.7 | 6.9  |
| 3     | 8.8 | 7.7 | 8.5  | 8.9 | 7.4 | 7.8  | 7.8 | 6.8 | 7.3  | 7.4 | 6.8 | 7.1  |
| 4     | 8.9 | 8.2 | 8.7  | 8.5 | 7.3 | 7.7  | 7.8 | 7.0 | 7.6  | 7.2 | 6.8 | 7.0  |
| 5     | 8.8 | 8.2 | 8.6  | 7.8 | 7.2 | 7.4  | 7.7 | 7.1 | 7.3  | 7.6 | 6.6 | 6.9  |
| 6     | 8.8 | 7.9 | 8.5  | 8.3 | 7.2 | 7.6  | 7.8 | 6.7 | 7.3  | 7.6 | 6.7 | 7.0  |
| 7     | 8.4 | 8.0 | 8.3  | 8.0 | 7.4 | 7.6  | 7.9 | 6.7 | 7.3  | 7.3 | 6.7 | 7.0  |
| 8     | 8.3 | 8.0 | 8.1  | 7.6 | 7.4 | 7.5  | 8.2 | 6.7 | 7.2  | 8.0 | 6.7 | 7.1  |
| 9     | 8.2 | 7.9 | 8.1  | 7.7 | 7.3 | 7.4  | 8.0 | 6.5 | 7.3  | 8.0 | 6.9 | 7.3  |
| 10    | 8.4 | 7.7 | 8.1  | 7.6 | 7.4 | 7.6  | 7.8 | 6.5 | 7.1  | 8.4 | 6.8 | 7.4  |
| 11    | 8.6 | 7.3 | 8.1  | 7.7 | 7.4 | 7.5  | 8.0 | 6.3 | 7.1  | 7.4 | 6.8 | 6.9  |
| 12    | 8.6 | 7.2 | 8.0  | 8.1 | 7.5 | 7.6  | 7.8 | 6.8 | 7.2  | 7.1 | 6.8 | 6.9  |
| 13    | 8.5 | 7.2 | 8.2  | 8.0 | 7.3 | 7.6  | 7.3 | 6.2 | 6.6  | 7.1 | 6.8 | 6.9  |
| 14    | 8.5 | 7.0 | 7.6  | 8.6 | 7.6 | 8.2  | 7.5 | 6.3 | 6.7  | 7.0 | 6.8 | 6.9  |
| 15    | 8.4 | 7.1 | 7.7  | 8.1 | 7.3 | 7.7  | 7.0 | 6.5 | 6.6  | 7.0 | 6.9 | 7.0  |
| 16    | 8.2 | 7.7 | 8.0  | 8.0 | 7.3 | 7.4  | 6.8 | 6.1 | 6.4  | 7.1 | 7.0 | 7.0  |
| 17    | 8.2 | 7.6 | 8.0  | 8.2 | 7.4 | 7.7  | 6.6 | 5.9 | 6.2  | 7.1 | 6.9 | 7.0  |
| 18    | 8.1 | 7.2 | 7.6  | 7.9 | 7.4 | 7.7  | 6.5 | 5.9 | 6.1  | 7.2 | 7.0 | 7.0  |
| 19    | 7.8 | 7.0 | 7.3  | 8.4 | 7.4 | 8.0  | 6.8 | 5.8 | 6.1  | 7.3 | 7.0 | 7.1  |
| 20    | 8.6 | 6.9 | 7.8  | 8.3 | 7.5 | 7.9  | 7.1 | 5.9 | 6.4  | 7.2 | 6.9 | 7.1  |
| 21    | 8.5 | 7.7 | 8.2  | 8.3 | 7.6 | 7.9  | 6.9 | 5.7 | 6.3  | 7.1 | 6.8 | 6.9  |
| 22    | 8.8 | 7.6 | 8.3  | 8.1 | 7.6 | 7.7  | 7.9 | 5.8 | 6.9  | 7.2 | 6.9 | 7.0  |
| 23    | 8.9 | 7.7 | 8.5  | 7.8 | 7.6 | 7.6  | 8.0 | 6.8 | 7.1  | 7.2 | 6.8 | 6.9  |
| 24    | 8.9 | 8.1 | 8.7  | 8.3 | 7.6 | 7.7  | 8.2 | 6.7 | 7.3  | 7.5 | 6.9 | 7.1  |
| 25    | 9.1 | 8.3 | 8.8  | 7.8 | 6.8 | 7.4  | 7.5 | 7.0 | 7.2  | 7.8 | 6.9 | 7.3  |
| 26    | 8.8 | 7.9 | 8.4  | 7.8 | 6.6 | 7.0  | 7.4 | 6.6 | 7.0  | 8.0 | 7.0 | 7.5  |
| 27    | 8.4 | 7.8 | 8.2  | 7.9 | 6.7 | 6.9  | 7.5 | 6.9 | 7.2  | 8.1 | 7.3 | 7.8  |
| 28    | 8.7 | 7.7 | 7.9  | 8.2 | 6.7 | 7.4  | 7.4 | 6.8 | 7.1  | 8.0 | 7.3 | 7.7  |
| 29    | 8.8 | 7.6 | 8.1  | 7.6 | 6.5 | 7.3  | 7.1 | 6.7 | 6.9  | 7.7 | 7.2 | 7.4  |
| 30    | --- | --- | ---  | 7.7 | 6.5 | 7.0  | 7.1 | 6.6 | 6.8  | 7.4 | 7.0 | 7.2  |
| 31    | --- | --- | ---  | 7.4 | 6.4 | 6.7  | --- | --- | ---  | 7.3 | 6.9 | 7.1  |
| MONTH | 9.1 | 6.9 | 8.2  | 8.9 | 6.4 | 7.5  | 8.2 | 5.7 | 6.9  | 8.4 | 6.6 | 7.1  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.9 | 7.1 | 7.5  | 8.1 | 7.2 | 7.6  | 7.4 | 7.0 | 7.3  | 7.9 | 7.3 | 7.5  |
| 2     | 7.8 | 7.3 | 7.6  | 7.6 | 7.1 | 7.2  | 7.4 | 7.1 | 7.2  | 8.2 | 7.3 | 7.7  |
| 3     | 7.7 | 7.1 | 7.4  | 7.4 | 7.1 | 7.2  | 7.5 | 7.2 | 7.3  | 8.1 | 7.5 | 7.8  |
| 4     | 7.4 | 7.0 | 7.2  | 7.3 | 7.2 | 7.2  | 7.7 | 7.2 | 7.3  | 8.5 | 7.2 | 7.8  |
| 5     | 7.8 | 7.1 | 7.4  | 7.5 | 7.1 | 7.2  | 8.0 | 7.1 | 7.5  | 8.5 | 7.3 | 8.1  |
| 6     | 7.7 | 7.1 | 7.4  | 8.1 | 7.1 | 7.3  | 8.0 | 7.2 | 7.7  | 8.1 | 7.3 | 7.7  |
| 7     | 7.6 | 6.9 | 7.2  | 7.7 | 7.1 | 7.2  | 7.9 | 7.3 | 7.7  | 7.4 | 7.2 | 7.3  |
| 8     | 7.2 | 6.9 | 7.0  | 7.4 | 7.2 | 7.2  | 7.6 | 7.0 | 7.3  | 7.6 | 7.2 | 7.3  |
| 9     | 7.6 | 6.9 | 7.0  | 7.3 | 7.1 | 7.2  | 7.6 | 6.9 | 7.2  | 7.8 | 7.3 | 7.6  |
| 10    | 7.9 | 6.9 | 7.3  | 7.4 | 7.1 | 7.2  | 7.4 | 6.9 | 7.1  | 7.7 | 7.0 | 7.4  |
| 11    | 7.9 | 7.3 | 7.6  | 7.6 | 7.1 | 7.2  | 7.2 | 6.9 | 7.0  | 8.4 | 7.5 | 8.1  |
| 12    | 8.0 | 7.3 | 7.5  | 7.4 | 7.0 | 7.1  | 7.9 | 6.9 | 7.3  | 8.6 | 7.6 | 8.2  |
| 13    | 7.8 | 7.4 | 7.6  | 7.9 | 7.0 | 7.2  | 7.9 | 7.2 | 7.5  | 8.5 | 7.9 | 8.2  |
| 14    | 7.7 | 7.1 | 7.5  | 7.7 | 7.1 | 7.3  | 7.8 | 7.4 | 7.6  | 8.3 | 7.5 | 8.0  |
| 15    | 7.6 | 7.1 | 7.3  | 8.1 | 7.1 | 7.5  | 7.6 | 7.4 | 7.5  | 8.1 | 7.3 | 7.6  |
| 16    | 7.4 | 7.0 | 7.2  | 8.0 | 7.2 | 7.6  | 7.8 | 7.3 | 7.4  | 7.6 | 7.3 | 7.5  |
| 17    | 7.5 | 6.9 | 7.2  | 7.7 | 7.3 | 7.5  | 7.9 | 7.2 | 7.4  | 7.8 | 7.5 | 7.6  |
| 18    | 7.7 | 7.0 | 7.3  | 7.5 | 7.2 | 7.3  | 7.6 | 7.0 | 7.1  | 8.0 | 7.6 | 7.8  |
| 19    | 7.6 | 7.0 | 7.3  | 8.1 | 7.2 | 7.4  | 7.1 | 7.0 | 7.1  | 8.1 | 7.7 | 7.9  |
| 20    | 7.7 | 6.9 | 7.3  | 8.0 | 7.4 | 7.7  | 7.2 | 7.0 | 7.1  | 8.4 | 7.9 | 8.1  |
| 21    | 7.7 | 7.0 | 7.4  | 8.0 | 7.4 | 7.8  | 7.4 | 7.1 | 7.2  | 8.1 | 7.7 | 7.9  |
| 22    | 7.2 | 6.7 | 7.0  | 8.4 | 7.6 | 8.1  | 7.5 | 7.0 | 7.1  | 8.6 | 7.7 | 7.9  |
| 23    | 7.6 | 6.8 | 7.0  | 8.2 | 7.3 | 7.7  | 7.7 | 7.0 | 7.2  | 8.5 | 7.8 | 7.9  |
| 24    | 8.0 | 6.7 | 7.5  | 8.2 | 7.4 | 7.7  | 7.9 | 6.9 | 7.6  | 9.1 | 7.8 | 8.4  |
| 25    | 8.0 | 7.2 | 7.5  | 8.4 | 7.9 | 8.2  | 7.7 | 7.2 | 7.5  | 8.8 | 7.9 | 8.5  |
| 26    | 8.2 | 7.3 | 7.9  | 8.2 | 7.6 | 7.9  | 7.4 | 7.0 | 7.2  | 8.6 | 7.9 | 8.3  |
| 27    | 8.0 | 7.3 | 7.7  | 7.8 | 7.1 | 7.5  | 7.8 | 7.0 | 7.3  | 8.0 | 7.5 | 7.7  |
| 28    | 7.9 | 7.2 | 7.4  | 7.7 | 7.1 | 7.3  | 7.9 | 7.0 | 7.5  | 7.8 | 7.3 | 7.5  |
| 29    | 8.0 | 7.3 | 7.6  | 7.4 | 7.1 | 7.2  | 7.7 | 7.1 | 7.3  | 7.7 | 7.4 | 7.5  |
| 30    | 7.9 | 7.3 | 7.5  | 7.6 | 7.1 | 7.3  | 7.7 | 7.0 | 7.3  | 8.2 | 7.4 | 7.6  |
| 31    | --- | --- | ---  | 7.4 | 7.2 | 7.3  | 7.5 | 7.2 | 7.3  | --- | --- | ---  |
| MONTH | 8.2 | 6.7 | 7.4  | 8.4 | 7.0 | 7.4  | 8.0 | 6.9 | 7.3  | 9.1 | 7.0 | 7.8  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 23.1     | 22.0 | 22.5 | 19.5     | 17.8 | 18.4 | 12.1     | 11.2 | 11.7 | 9.2     | 8.0  | 8.5  |
| 2     | 22.5     | 21.8 | 22.2 | 19.6     | 18.3 | 19.0 | 11.6     | 10.6 | 11.1 | 10.0    | 8.2  | 8.7  |
| 3     | 21.8     | 19.6 | 20.8 | 20.0     | 18.8 | 19.5 | 10.7     | 9.6  | 10.1 | 10.2    | 8.4  | 9.2  |
| 4     | ---      | ---  | ---  | 20.2     | 19.1 | 19.6 | 9.9      | 8.8  | 9.4  | 12.2    | 9.7  | 10.8 |
| 5     | ---      | ---  | ---  | 21.1     | 19.5 | 20.2 | 9.9      | 9.3  | 9.5  | 12.0    | 9.9  | 10.9 |
| 6     | ---      | ---  | ---  | 21.3     | 20.0 | 20.8 | 9.8      | 8.5  | 9.4  | 12.2    | 10.9 | 11.4 |
| 7     | 21.4     | 20.7 | 21.2 | 20.8     | 19.9 | 20.4 | 9.0      | 8.5  | 8.7  | 10.9    | 8.9  | 9.8  |
| 8     | 21.3     | 20.8 | 21.0 | 20.1     | 18.5 | 19.5 | 9.0      | 7.5  | 8.1  | 9.0     | 7.8  | 8.3  |
| 9     | 21.2     | 20.6 | 20.9 | 18.6     | 16.5 | 17.4 | 8.5      | 7.3  | 8.2  | 7.8     | 6.8  | 7.5  |
| 10    | 21.4     | 21.0 | 21.2 | 16.6     | 15.3 | 15.9 | 11.1     | 8.2  | 9.0  | 7.4     | 5.2  | 6.2  |
| 11    | 21.2     | 20.8 | 21.0 | 16.1     | 15.4 | 15.7 | 10.5     | 9.8  | 10.1 | 5.4     | 3.3  | 4.4  |
| 12    | 21.5     | 20.5 | 20.9 | 17.1     | 15.7 | 16.2 | 10.2     | 9.4  | 9.6  | 5.1     | 3.3  | 4.4  |
| 13    | 21.6     | 20.5 | 21.1 | 16.8     | 15.2 | 16.4 | 9.6      | 9.0  | 9.3  | 5.8     | 4.4  | 5.2  |
| 14    | 21.8     | 21.0 | 21.2 | ---      | ---  | ---  | 9.6      | 9.0  | 9.3  | 5.8     | 5.2  | 5.4  |
| 15    | 21.3     | 20.0 | 20.7 | 13.8     | 13.0 | 13.4 | 9.5      | 8.5  | 8.9  | 6.2     | 5.4  | 5.7  |
| 16    | 20.1     | 19.2 | 19.6 | ---      | ---  | ---  | 9.1      | 8.2  | 8.7  | 5.9     | 5.2  | 5.7  |
| 17    | 20.5     | 18.8 | 19.5 | ---      | ---  | ---  | 10.2     | 8.8  | 9.4  | 5.9     | 5.0  | 5.4  |
| 18    | 19.9     | 18.9 | 19.5 | ---      | ---  | ---  | 9.0      | 8.0  | 8.7  | 7.4     | 5.3  | 6.1  |
| 19    | 19.4     | 18.4 | 18.9 | 15.8     | 15.0 | 15.3 | 8.4      | 7.5  | 8.1  | 7.0     | 6.3  | 6.5  |
| 20    | ---      | ---  | ---  | 15.5     | 14.5 | 15.1 | 7.8      | 7.2  | 7.6  | 6.3     | 5.6  | 5.9  |
| 21    | ---      | ---  | ---  | 15.6     | 14.1 | 14.8 | 7.2      | 6.4  | 6.8  | 5.6     | 5.1  | 5.3  |
| 22    | 19.8     | 19.1 | 19.4 | 16.1     | 14.4 | 14.9 | 7.1      | 6.2  | 6.6  | 5.9     | 4.5  | 5.2  |
| 23    | 19.1     | 18.1 | 18.6 | 16.3     | 14.7 | 15.3 | 7.8      | 6.5  | 7.1  | 5.6     | 5.0  | 5.4  |
| 24    | 18.7     | 17.4 | 17.8 | 16.1     | 14.8 | 15.4 | 9.1      | 7.5  | 8.3  | 6.6     | 5.0  | 5.6  |
| 25    | 17.9     | 17.1 | 17.5 | 15.7     | 14.5 | 15.2 | 8.9      | 7.7  | 8.2  | 5.7     | 4.3  | 5.0  |
| 26    | 19.0     | 17.5 | 17.9 | 14.7     | 14.0 | 14.5 | 7.9      | 7.1  | 7.5  | 4.5     | 4.1  | 4.3  |
| 27    | 18.8     | 17.9 | 18.3 | 14.5     | 14.2 | 14.3 | 7.9      | 7.0  | 7.4  | 4.5     | 4.0  | 4.3  |
| 28    | 18.6     | 18.2 | 18.5 | 15.7     | 14.3 | 14.8 | 7.8      | 7.0  | 7.4  | 4.2     | 3.3  | 3.9  |
| 29    | 19.3     | 18.3 | 18.6 | 15.2     | 12.9 | 13.9 | 8.6      | 7.2  | 7.7  | 4.8     | 3.2  | 3.9  |
| 30    | 18.8     | 17.9 | 18.4 | 12.9     | 11.7 | 12.2 | 9.2      | 8.0  | 8.7  | 4.8     | 3.8  | 4.3  |
| 31    | 18.5     | 17.9 | 18.2 | ---      | ---  | ---  | 9.0      | 8.3  | 8.6  | 4.5     | 3.5  | 3.9  |
| MONTH | ---      | ---  | ---  | ---      | ---  | ---  | 12.1     | 6.2  | 8.7  | 12.2    | 3.2  | 6.4  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |      |      | APRIL    |      |      | MAY     |      |      |
| 1     | 4.1      | 3.4  | 3.6  | 9.4      | 7.1  | 8.3  | 14.6     | 13.4 | 13.8 | 21.1    | 20.1 | 20.4 |
| 2     | 4.2      | 3.0  | 3.6  | 10.8     | 8.9  | 9.8  | 13.5     | 12.2 | 13.1 | 22.3    | 20.0 | 20.6 |
| 3     | 5.0      | 3.9  | 4.5  | 12.1     | 9.8  | 10.7 | 13.7     | 12.8 | 13.2 | 21.2    | 20.4 | 20.9 |
| 4     | 6.2      | 4.6  | 5.1  | 13.7     | 10.6 | 12.3 | 13.9     | 13.1 | 13.5 | 20.7    | 19.0 | 19.8 |
| 5     | 5.6      | 4.8  | 5.3  | 14.9     | 12.1 | 13.5 | 13.5     | 12.5 | 12.9 | 21.2    | 19.2 | 20.0 |
| 6     | 9.9      | 5.4  | 6.5  | 14.2     | 10.1 | 13.1 | 13.6     | 11.9 | 12.6 | 22.6    | 19.5 | 20.6 |
| 7     | 10.4     | 7.7  | 8.6  | 14.6     | 12.7 | 13.6 | 15.5     | 12.1 | 13.4 | 23.7    | 20.8 | 22.0 |
| 8     | 8.7      | 7.8  | 8.3  | 13.1     | 11.4 | 12.5 | 15.3     | 13.6 | 14.5 | 23.6    | 22.1 | 22.5 |
| 9     | 8.1      | 7.3  | 7.6  | 12.6     | 11.6 | 12.0 | 16.5     | 14.8 | 15.4 | 25.0    | 22.5 | 23.7 |
| 10    | 8.2      | 7.5  | 7.9  | 12.1     | 10.2 | 11.2 | 16.5     | 15.2 | 15.8 | 25.4    | 23.2 | 24.1 |
| 11    | 8.8      | 7.9  | 8.3  | 11.3     | 10.2 | 10.8 | 17.0     | 15.8 | 16.4 | 25.8    | 23.2 | 24.2 |
| 12    | 8.8      | 8.0  | 8.3  | 13.0     | 10.1 | 11.3 | 16.7     | 16.1 | 16.4 | 25.9    | 23.9 | 24.5 |
| 13    | 8.8      | 7.9  | 8.2  | 12.7     | 11.4 | 11.9 | 17.8     | 16.4 | 16.9 | 25.9    | 24.0 | 24.7 |
| 14    | 8.6      | 8.2  | 8.4  | 11.8     | 11.2 | 11.5 | 17.1     | 16.1 | 16.7 | 25.9    | 23.9 | 24.8 |
| 15    | 8.4      | 8.0  | 8.3  | 12.3     | 11.4 | 11.9 | 16.3     | 15.3 | 16.0 | 25.6    | 23.5 | 24.3 |
| 16    | 8.0      | 6.9  | 7.5  | 12.7     | 11.7 | 12.3 | 17.5     | 15.3 | 16.2 | 26.0    | 23.7 | 24.6 |
| 17    | 7.2      | 6.6  | 6.8  | 12.6     | 11.9 | 12.2 | 18.1     | 16.1 | 17.1 | 26.6    | 24.0 | 25.1 |
| 18    | 6.6      | 6.0  | 6.4  | 12.6     | 10.9 | 12.0 | 19.1     | 17.0 | 17.9 | 27.0    | 24.6 | 25.4 |
| 19    | 7.3      | 6.0  | 6.6  | 12.9     | 12.1 | 12.4 | 18.8     | 17.2 | 18.1 | 25.8    | 24.5 | 25.1 |
| 20    | 8.2      | 6.8  | 7.4  | 13.1     | 11.7 | 12.3 | 21.3     | 17.4 | 18.9 | 26.7    | 23.9 | 25.1 |
| 21    | 8.9      | 7.3  | 8.1  | 13.8     | 12.3 | 12.9 | 20.6     | 18.8 | 19.5 | 27.5    | 24.8 | 25.8 |
| 22    | 9.2      | 8.2  | 8.6  | 12.9     | 11.8 | 12.3 | 20.5     | 19.0 | 19.7 | 27.2    | 24.7 | 25.8 |
| 23    | 9.0      | 8.3  | 8.7  | 12.4     | 11.0 | 11.7 | 22.0     | 19.6 | 20.6 | 27.2    | 23.8 | 25.1 |
| 24    | 9.1      | 8.7  | 9.0  | 12.9     | 11.0 | 12.0 | 21.9     | 20.0 | 20.9 | 26.4    | 24.1 | 25.0 |
| 25    | 9.1      | 8.6  | 8.8  | 14.1     | 12.1 | 12.8 | 20.7     | 19.5 | 20.1 | 27.0    | 24.5 | 25.6 |
| 26    | 8.6      | 7.0  | 7.8  | 14.8     | 12.7 | 13.4 | 22.4     | 19.8 | 20.6 | 28.0    | 25.1 | 26.6 |
| 27    | 7.5      | 7.0  | 7.3  | 15.7     | 13.7 | 14.7 | 20.9     | 20.3 | 20.6 | 28.5    | 26.5 | 27.3 |
| 28    | 7.7      | 6.6  | 7.1  | 15.7     | 14.7 | 15.3 | 21.1     | 19.3 | 20.1 | 28.5    | 27.0 | 27.5 |
| 29    | 9.3      | 6.4  | 7.7  | 14.7     | 13.8 | 14.2 | 21.1     | 19.4 | 20.2 | 27.8    | 26.7 | 27.2 |
| 30    | ---      | ---  | ---  | 14.5     | 13.5 | 14.0 | 21.6     | 19.6 | 20.6 | 26.8    | 25.7 | 26.1 |
| 31    | ---      | ---  | ---  | 14.8     | 13.9 | 14.3 | ---      | ---  | ---  | 27.1    | 25.6 | 26.2 |
| MONTH | 10.4     | 3.0  | 7.3  | 15.7     | 7.1  | 12.4 | 22.4     | 11.9 | 17.1 | 28.5    | 19.0 | 24.2 |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 27.3 | 25.8 | 26.5 | 29.0 | 27.6 | 28.3 | 29.7 | 28.6 | 29.1 | 27.9 | 26.7 | 27.2 |
| 2     | 28.0 | 26.3 | 26.9 | 29.1 | 27.8 | 28.5 | 29.5 | 28.6 | 29.1 | 26.8 | 26.0 | 26.5 |
| 3     | 28.6 | 26.1 | 27.3 | 29.6 | 27.8 | 28.6 | 29.1 | 28.0 | 28.5 | 27.0 | 25.8 | 26.4 |
| 4     | 27.5 | 26.5 | 27.0 | 29.3 | 28.2 | 28.6 | 29.7 | 27.5 | 28.5 | 27.5 | 25.9 | 26.4 |
| 5     | 27.7 | 26.1 | 26.8 | 30.8 | 27.9 | 29.2 | 30.1 | 27.9 | 29.0 | 27.8 | 25.8 | 26.8 |
| 6     | 27.1 | 26.3 | 26.8 | 31.8 | 29.4 | 30.4 | 29.0 | 27.3 | 28.1 | 27.3 | 26.3 | 26.7 |
| 7     | 28.1 | 26.6 | 27.2 | 31.2 | 30.0 | 30.4 | 27.5 | 26.4 | 26.7 | 26.6 | 26.0 | 26.4 |
| 8     | 28.2 | 27.1 | 27.7 | 30.6 | 28.9 | 29.6 | 27.2 | 25.7 | 26.4 | 27.0 | 26.2 | 26.6 |
| 9     | 28.9 | 27.2 | 27.7 | 31.8 | 28.8 | 29.8 | 27.6 | 26.3 | 26.9 | 27.0 | 26.3 | 26.6 |
| 10    | 28.6 | 26.7 | 27.6 | 31.6 | 29.5 | 30.3 | 28.4 | 26.4 | 27.3 | 26.8 | 26.3 | 26.5 |
| 11    | 29.2 | 27.3 | 28.0 | 30.2 | 29.3 | 29.8 | 28.0 | 27.0 | 27.4 | 26.4 | 25.4 | 26.0 |
| 12    | 28.5 | 26.5 | 27.2 | 29.6 | 28.9 | 29.2 | 27.7 | 26.5 | 27.1 | 26.0 | 25.4 | 25.7 |
| 13    | 26.7 | 25.4 | 26.2 | 30.3 | 28.4 | 29.2 | 27.1 | 26.4 | 26.8 | 25.5 | 25.0 | 25.2 |
| 14    | 26.8 | 25.6 | 26.1 | 30.4 | 28.7 | 29.6 | 26.8 | 25.9 | 26.4 | 25.2 | 24.6 | 24.9 |
| 15    | 27.4 | 25.7 | 26.5 | 30.3 | 28.7 | 29.3 | 26.2 | 25.1 | 25.8 | 25.2 | 24.6 | 24.9 |
| 16    | 27.3 | 26.4 | 26.8 | 29.8 | 28.4 | 29.2 | 26.7 | 24.7 | 25.8 | 26.0 | 24.9 | 25.3 |
| 17    | 27.4 | 26.4 | 26.9 | 29.6 | 28.4 | 29.0 | 27.3 | 25.8 | 26.5 | 25.9 | 25.2 | 25.6 |
| 18    | 29.1 | 26.5 | 27.5 | 29.1 | 27.9 | 28.5 | 27.3 | 26.1 | 26.6 | 25.6 | 24.0 | 24.8 |
| 19    | 30.0 | 27.3 | 28.5 | 29.7 | 27.7 | 28.4 | 29.1 | 26.3 | 27.2 | 24.0 | 22.7 | 23.4 |
| 20    | 29.9 | 27.4 | 28.2 | 29.6 | 27.6 | 28.4 | 28.4 | 26.6 | 27.2 | 22.8 | 21.0 | 22.0 |
| 21    | 27.7 | 26.8 | 27.2 | 30.8 | 28.3 | 29.1 | 28.4 | 26.7 | 27.5 | 22.4 | 20.9 | 21.8 |
| 22    | 28.1 | 26.9 | 27.5 | 30.7 | 28.4 | 29.4 | 27.4 | 26.5 | 27.0 | 23.1 | 21.4 | 21.8 |
| 23    | 29.3 | 27.4 | 28.2 | 29.6 | 28.6 | 29.0 | 26.7 | 25.8 | 26.3 | 23.5 | 21.6 | 22.5 |
| 24    | 29.6 | 27.9 | 28.5 | 30.7 | 28.0 | 29.0 | 27.1 | 25.7 | 26.3 | 23.7 | 22.8 | 23.2 |
| 25    | 30.0 | 27.9 | 28.9 | 29.8 | 28.6 | 29.1 | 26.8 | 26.2 | 26.5 | 23.8 | 22.7 | 23.3 |
| 26    | 28.5 | 27.6 | 28.1 | 30.4 | 28.5 | 29.1 | 26.6 | 26.0 | 26.3 | 23.5 | 23.0 | 23.2 |
| 27    | 28.9 | 27.3 | 28.0 | 30.2 | 28.8 | 29.5 | 27.2 | 26.0 | 26.6 | 24.0 | 23.2 | 23.5 |
| 28    | 28.6 | 27.7 | 28.2 | 29.5 | 27.8 | 28.6 | 28.4 | 26.5 | 27.0 | 24.1 | 23.4 | 23.7 |
| 29    | 28.8 | 27.3 | 28.1 | 29.1 | 27.5 | 28.1 | 28.2 | 26.8 | 27.4 | 25.2 | 23.6 | 24.1 |
| 30    | 29.0 | 27.6 | 28.3 | 29.6 | 27.6 | 28.5 | 27.5 | 26.7 | 27.1 | 24.5 | 23.7 | 24.0 |
| 31    | ---  | ---  | ---  | 29.6 | 28.1 | 28.8 | 28.7 | 26.7 | 27.4 | ---  | ---  | ---  |
| MONTH | 30.0 | 25.4 | 27.5 | 31.8 | 27.5 | 29.1 | 30.1 | 24.7 | 27.2 | 27.9 | 20.9 | 24.8 |



## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 23.6     | 22.4 | 23.1 | 18.5  | 17.8 | 18.3 | 12.3  | 11.2 | 11.7 | 8.7  | 8.2  | 8.5  |
| 2     | 22.9     | 21.7 | 22.2 | 19.4  | 18.2 | 18.5 | 11.5  | 10.6 | 11.1 | 8.7  | 8.4  | 8.5  |
| 3     | 21.9     | 20.2 | 20.9 | 19.3  | 18.5 | 18.8 | 11.1  | 9.5  | 10.1 | 8.7  | 8.5  | 8.6  |
| 4     | ---      | ---  | ---  | 19.8  | 18.7 | 19.2 | 10.0  | 8.6  | 9.3  | 9.2  | 8.5  | 8.7  |
| 5     | ---      | ---  | ---  | 20.0  | 18.6 | 19.1 | 9.8   | 9.2  | 9.4  | 12.5 | 8.6  | 10.2 |
| 6     | ---      | ---  | ---  | 19.6  | 18.8 | 19.1 | 9.6   | 8.6  | 9.4  | 12.9 | 10.9 | 11.5 |
| 7     | 21.3     | 21.0 | 21.1 | 20.2  | 18.7 | 19.4 | 9.0   | 8.5  | 8.7  | 10.9 | 9.3  | 9.9  |
| 8     | 21.4     | 20.8 | 21.0 | 20.0  | 18.6 | 19.4 | 9.2   | 7.9  | 8.7  | 9.5  | 8.1  | 8.7  |
| 9     | 21.2     | 20.7 | 20.9 | 18.8  | 16.5 | 17.4 | 9.7   | 8.4  | 8.9  | 8.5  | 6.8  | 7.8  |
| 10    | 21.3     | 20.9 | 21.1 | 16.6  | 15.5 | 16.2 | 10.9  | 8.5  | 9.0  | 7.4  | 5.2  | 6.2  |
| 11    | 21.2     | 20.9 | 21.1 | 16.5  | 15.7 | 16.1 | 10.3  | 9.6  | 9.9  | 6.3  | 3.8  | 4.7  |
| 12    | 21.3     | 20.6 | 21.0 | 16.6  | 15.8 | 16.3 | 9.6   | 9.2  | 9.4  | 5.2  | 4.2  | 4.7  |
| 13    | 21.5     | 20.9 | 21.1 | 16.8  | 15.2 | 16.3 | 9.5   | 8.8  | 9.2  | 5.8  | 4.7  | 5.2  |
| 14    | 21.7     | 21.1 | 21.3 | ---   | ---  | ---  | 9.4   | 8.8  | 9.2  | 5.7  | 5.2  | 5.4  |
| 15    | 21.3     | 20.2 | 20.7 | 14.8  | 13.1 | 13.7 | 9.3   | 8.5  | 8.9  | 6.0  | 5.4  | 5.7  |
| 16    | 20.4     | 19.5 | 19.8 | ---   | ---  | ---  | 9.2   | 8.9  | 9.0  | 5.9  | 5.2  | 5.7  |
| 17    | 20.1     | 19.3 | 19.8 | ---   | ---  | ---  | 10.1  | 9.0  | 9.3  | 5.5  | 5.0  | 5.4  |
| 18    | 20.1     | 19.0 | 19.6 | ---   | ---  | ---  | 9.3   | 8.3  | 8.9  | 7.1  | 5.4  | 6.0  |
| 19    | 19.7     | 18.4 | 19.0 | 15.5  | 14.6 | 15.0 | 9.1   | 8.0  | 8.3  | 6.9  | 6.3  | 6.5  |
| 20    | 20.0     | 19.0 | 19.3 | 15.4  | 14.6 | 15.0 | 8.5   | 7.2  | 7.6  | 6.3  | 5.6  | 5.9  |
| 21    | 19.9     | 19.0 | 19.5 | 15.2  | 14.3 | 14.8 | 7.6   | 6.6  | 7.0  | 5.9  | 5.1  | 5.4  |
| 22    | 19.8     | 19.1 | 19.4 | 15.2  | 14.4 | 14.8 | 8.7   | 6.5  | 7.1  | 5.8  | 5.1  | 5.4  |
| 23    | 19.1     | 18.1 | 18.7 | 15.2  | 14.8 | 14.9 | 8.9   | 7.4  | 8.3  | 5.6  | 5.0  | 5.4  |
| 24    | 18.9     | 17.3 | 18.0 | 15.4  | 14.9 | 15.1 | 8.9   | 7.8  | 8.5  | 6.5  | 5.2  | 5.6  |
| 25    | 18.3     | 17.1 | 17.6 | 15.5  | 14.4 | 15.1 | 9.0   | 8.1  | 8.6  | 5.7  | 4.4  | 5.0  |
| 26    | 18.2     | 17.5 | 17.8 | 15.0  | 14.0 | 14.4 | 8.6   | 7.9  | 8.2  | 4.6  | 4.1  | 4.3  |
| 27    | 18.4     | 17.8 | 18.0 | 14.9  | 14.2 | 14.5 | 8.3   | 7.5  | 7.9  | 4.5  | 4.0  | 4.3  |
| 28    | 18.6     | 17.7 | 18.1 | 15.5  | 14.3 | 14.8 | 8.1   | 7.4  | 7.9  | 4.2  | 3.4  | 3.9  |
| 29    | 19.0     | 18.0 | 18.4 | 15.1  | 12.9 | 13.8 | 8.2   | 7.7  | 7.9  | 4.6  | 3.4  | 3.9  |
| 30    | 18.8     | 18.0 | 18.4 | 12.9  | 11.8 | 12.2 | 9.0   | 7.9  | 8.4  | 4.4  | 3.8  | 4.1  |
| 31    | 18.4     | 18.0 | 18.3 | ---   | ---  | ---  | 8.9   | 8.3  | 8.5  | 4.2  | 3.4  | 3.8  |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | 12.3  | 6.5  | 8.8  | 12.9 | 3.4  | 6.3  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 3.9      | 3.1  | 3.5  | 7.7   | 7.1  | 7.3  | 14.4  | 13.3 | 13.7 | 20.5 | 19.9 | 20.1 |
| 2     | 3.9      | 2.8  | 3.4  | 10.5  | 7.0  | 8.2  | 13.4  | 12.1 | 13.0 | 22.1 | 20.1 | 20.5 |
| 3     | 4.7      | 3.6  | 4.2  | 11.7  | 8.1  | 9.8  | 13.5  | 12.7 | 13.0 | 21.2 | 20.5 | 20.9 |
| 4     | 5.1      | 4.4  | 4.7  | 11.8  | 9.3  | 10.4 | 13.8  | 13.1 | 13.4 | 20.6 | 19.0 | 19.9 |
| 5     | 5.3      | 4.6  | 5.0  | 12.3  | 7.9  | 9.8  | 13.4  | 12.4 | 12.8 | 20.4 | 19.8 | 20.1 |
| 6     | 8.2      | 5.1  | 6.0  | 13.7  | 8.0  | 11.6 | 13.2  | 12.0 | 12.6 | 21.2 | 19.6 | 20.1 |
| 7     | 9.2      | 7.4  | 8.3  | 13.6  | 12.6 | 13.1 | 13.9  | 12.3 | 12.9 | 21.2 | 20.2 | 20.6 |
| 8     | 8.5      | 7.3  | 7.9  | 13.0  | 11.4 | 12.5 | 15.0  | 12.8 | 13.8 | 23.1 | 20.3 | 21.4 |
| 9     | 7.8      | 7.2  | 7.6  | 12.5  | 11.7 | 12.1 | 15.4  | 13.4 | 14.7 | 23.7 | 21.6 | 22.4 |
| 10    | 7.8      | 7.3  | 7.5  | 12.1  | 10.4 | 11.2 | 16.3  | 13.9 | 15.2 | 24.1 | 21.8 | 23.0 |
| 11    | 8.4      | 7.7  | 7.9  | 11.0  | 9.6  | 10.6 | 16.7  | 15.2 | 16.0 | 23.8 | 20.9 | 22.1 |
| 12    | 8.4      | 7.7  | 8.0  | 12.3  | 10.3 | 10.9 | 16.7  | 16.0 | 16.3 | 23.6 | 21.3 | 22.5 |
| 13    | 8.3      | 7.7  | 7.9  | 12.0  | 10.6 | 11.2 | 17.6  | 15.8 | 16.6 | 23.4 | 21.2 | 22.1 |
| 14    | 8.2      | 7.6  | 7.8  | 11.7  | 11.0 | 11.5 | 17.0  | 16.1 | 16.6 | 23.8 | 21.1 | 21.9 |
| 15    | 8.2      | 7.7  | 7.9  | 11.8  | 10.8 | 11.4 | 16.2  | 15.2 | 15.9 | 23.4 | 21.6 | 22.1 |
| 16    | 7.8      | 6.9  | 7.3  | 12.5  | 10.8 | 11.3 | 16.4  | 15.2 | 15.9 | 23.5 | 21.9 | 22.6 |
| 17    | 7.0      | 6.3  | 6.5  | 12.5  | 11.4 | 12.1 | 16.7  | 15.9 | 16.1 | 24.3 | 22.4 | 23.1 |
| 18    | 6.5      | 5.9  | 6.3  | 12.2  | 11.3 | 11.8 | 17.3  | 16.0 | 16.6 | 24.1 | 22.2 | 22.8 |
| 19    | 6.9      | 5.9  | 6.4  | 12.8  | 11.7 | 12.3 | 18.0  | 16.1 | 16.9 | 22.9 | 22.1 | 22.4 |
| 20    | 7.5      | 6.6  | 7.0  | 12.5  | 11.6 | 12.1 | 18.5  | 16.7 | 17.6 | 24.7 | 22.2 | 23.0 |
| 21    | 8.7      | 7.3  | 8.0  | 13.6  | 12.2 | 12.8 | 19.7  | 16.4 | 18.0 | 24.3 | 22.9 | 23.4 |
| 22    | 8.9      | 8.0  | 8.3  | 12.8  | 12.0 | 12.3 | 19.8  | 16.7 | 18.5 | 24.9 | 22.9 | 23.3 |
| 23    | 9.0      | 8.2  | 8.6  | 12.5  | 11.4 | 11.8 | 20.4  | 17.3 | 18.8 | 24.9 | 23.1 | 23.8 |
| 24    | 9.0      | 8.7  | 8.9  | 12.8  | 11.4 | 12.0 | 21.4  | 16.8 | 19.7 | 25.5 | 24.0 | 24.4 |
| 25    | 9.0      | 8.6  | 8.8  | 13.0  | 11.8 | 12.3 | 20.2  | 19.4 | 19.8 | 25.7 | 24.4 | 25.0 |
| 26    | 8.6      | 7.0  | 7.8  | 13.3  | 12.1 | 12.4 | 21.6  | 18.8 | 20.3 | 27.1 | 25.0 | 25.9 |
| 27    | 7.4      | 6.7  | 7.2  | 14.1  | 11.9 | 12.5 | 20.8  | 20.2 | 20.6 | 28.2 | 26.4 | 27.0 |
| 28    | 7.8      | 6.7  | 7.1  | 15.4  | 12.0 | 13.9 | 20.5  | 19.6 | 19.9 | 28.0 | 26.6 | 27.2 |
| 29    | 7.8      | 7.1  | 7.5  | 14.6  | 13.3 | 14.1 | 20.5  | 19.7 | 20.0 | 27.6 | 26.8 | 27.1 |
| 30    | ---      | ---  | ---  | 14.0  | 12.8 | 13.5 | 21.2  | 19.8 | 20.1 | 27.1 | 25.9 | 26.4 |
| 31    | ---      | ---  | ---  | 14.2  | 12.6 | 13.2 | ---   | ---  | ---  | 27.0 | 25.9 | 26.2 |
| MONTH | 9.2      | 2.8  | 7.0  | 15.4  | 7.0  | 11.7 | 21.6  | 12.0 | 16.5 | 28.2 | 19.0 | 23.0 |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |     |      |
|-------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|-----|------|
|       |      |      |      | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN | MEAN |
| 1     | 27.2 | 25.9 | 26.4 | 28.6 | 27.8 | 28.1 | 29.7 | 28.6 | 29.1 | 27.6   | 26.8 | 27.4 |           |     |      |
| 2     | 27.2 | 26.3 | 26.6 | 28.2 | 27.7 | 27.9 | 29.5 | 28.6 | 29.1 | 27.3   | 26.2 | 26.8 |           |     |      |
| 3     | 27.1 | 26.2 | 26.6 | 28.1 | 27.5 | 27.8 | 29.1 | 28.0 | 28.5 | 26.9   | 25.9 | 26.4 |           |     |      |
| 4     | 26.9 | 26.2 | 26.6 | 28.1 | 27.4 | 27.7 | 28.9 | 27.6 | 28.1 | 27.0   | 26.1 | 26.5 |           |     |      |
| 5     | 27.2 | 26.1 | 26.7 | 28.6 | 27.3 | 27.7 | 29.2 | 28.0 | 28.5 | 27.9   | 25.9 | 26.9 |           |     |      |
| 6     | 27.1 | 26.4 | 26.7 | 29.6 | 27.4 | 28.1 | 28.8 | 27.4 | 28.1 | 27.3   | 26.6 | 26.9 |           |     |      |
| 7     | 27.2 | 26.4 | 26.7 | 29.1 | 27.5 | 28.0 | 27.5 | 26.3 | 26.7 | 26.8   | 26.4 | 26.7 |           |     |      |
| 8     | 27.2 | 26.5 | 26.8 | 29.0 | 27.7 | 28.2 | 27.1 | 26.6 | 26.8 | 27.0   | 26.6 | 26.7 |           |     |      |
| 9     | 27.8 | 26.6 | 27.0 | 29.0 | 27.9 | 28.3 | 27.2 | 26.8 | 27.0 | 26.9   | 26.4 | 26.7 |           |     |      |
| 10    | 27.9 | 26.5 | 27.2 | 29.4 | 28.2 | 28.6 | 27.3 | 27.0 | 27.1 | 26.8   | 26.5 | 26.7 |           |     |      |
| 11    | 27.8 | 26.8 | 27.3 | 29.6 | 28.4 | 28.8 | 27.3 | 27.0 | 27.1 | 26.5   | 25.4 | 26.1 |           |     |      |
| 12    | 28.3 | 27.0 | 27.3 | 29.5 | 28.4 | 28.9 | 27.7 | 27.0 | 27.2 | 26.1   | 25.2 | 25.7 |           |     |      |
| 13    | 27.1 | 25.5 | 26.4 | 29.4 | 28.3 | 28.7 | 27.4 | 26.6 | 27.1 | 25.6   | 24.9 | 25.2 |           |     |      |
| 14    | 26.8 | 25.8 | 26.2 | 29.3 | 28.3 | 28.7 | 27.4 | 26.3 | 26.9 | 25.4   | 24.4 | 24.9 |           |     |      |
| 15    | 27.0 | 26.1 | 26.4 | 29.3 | 28.5 | 28.9 | 26.6 | 25.7 | 26.2 | 25.5   | 24.1 | 24.9 |           |     |      |
| 16    | 27.0 | 26.4 | 26.6 | 29.5 | 28.6 | 28.9 | 26.4 | 25.2 | 26.0 | 25.3   | 24.6 | 24.9 |           |     |      |
| 17    | 27.1 | 26.3 | 26.8 | 29.0 | 28.7 | 28.9 | 26.6 | 26.0 | 26.3 | 25.6   | 24.7 | 24.9 |           |     |      |
| 18    | 28.3 | 26.6 | 27.1 | 28.9 | 28.5 | 28.7 | 26.7 | 26.2 | 26.3 | 25.6   | 24.1 | 24.8 |           |     |      |
| 19    | 29.5 | 26.9 | 27.9 | 28.8 | 28.2 | 28.6 | 26.6 | 26.2 | 26.3 | 24.4   | 22.9 | 23.7 |           |     |      |
| 20    | 28.1 | 27.2 | 27.8 | 28.7 | 28.0 | 28.4 | 26.5 | 26.1 | 26.2 | 22.9   | 21.1 | 22.0 |           |     |      |
| 21    | 27.7 | 26.9 | 27.3 | 28.9 | 28.2 | 28.4 | 27.9 | 26.1 | 26.4 | 23.2   | 21.1 | 22.1 |           |     |      |
| 22    | 27.8 | 27.1 | 27.3 | 30.0 | 28.0 | 28.9 | 27.2 | 26.3 | 26.7 | 22.7   | 21.9 | 22.2 |           |     |      |
| 23    | 28.7 | 27.3 | 27.6 | 29.8 | 28.7 | 29.0 | 27.2 | 26.1 | 26.6 | 23.0   | 21.9 | 22.3 |           |     |      |
| 24    | 28.7 | 27.2 | 27.7 | 29.2 | 28.2 | 28.7 | 26.8 | 25.7 | 26.3 | 23.5   | 22.2 | 22.9 |           |     |      |
| 25    | 28.4 | 27.3 | 27.6 | 29.3 | 28.6 | 28.9 | 26.7 | 26.1 | 26.4 | 23.8   | 22.8 | 23.3 |           |     |      |
| 26    | 28.4 | 27.3 | 27.9 | 28.9 | 28.5 | 28.7 | 26.6 | 26.0 | 26.4 | 23.7   | 23.0 | 23.4 |           |     |      |
| 27    | 28.0 | 27.7 | 27.8 | 28.9 | 28.4 | 28.7 | 27.1 | 26.0 | 26.5 | 23.7   | 23.3 | 23.4 |           |     |      |
| 28    | 28.6 | 27.8 | 28.0 | 29.0 | 28.3 | 28.6 | 27.0 | 26.6 | 26.8 | 24.2   | 23.1 | 23.6 |           |     |      |
| 29    | 28.3 | 27.4 | 27.9 | 28.6 | 27.5 | 28.1 | 27.6 | 26.6 | 27.0 | 24.0   | 23.8 | 23.9 |           |     |      |
| 30    | 28.4 | 27.8 | 28.0 | 29.3 | 27.7 | 28.4 | 27.9 | 26.8 | 27.3 | 24.4   | 23.8 | 24.1 |           |     |      |
| 31    | ---  | ---  | ---  | 29.5 | 28.1 | 28.8 | 27.6 | 27.1 | 27.3 | ---    | ---  | ---  |           |     |      |
| MONTH | 29.5 | 25.5 | 27.1 | 30.0 | 27.3 | 28.5 | 29.7 | 25.2 | 27.0 | 27.9   | 21.1 | 24.9 |           |     |      |

## NEUSE RIVER BASIN

0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 9.5  | 7.3  | 8.4  | 14.6 | 9.7  | 11.2 | 10.9 | 9.3  | 9.9  | 12.4 | 10.3 | 11.2 |
| 2     | 9.1  | 7.4  | 7.9  | 13.9 | 10.0 | 12.2 | 10.2 | 9.4  | 9.9  | 13.4 | 10.9 | 11.7 |
| 3     | 9.8  | 7.4  | 8.2  | 12.8 | 10.4 | 11.7 | 10.3 | 9.5  | 9.8  | 12.0 | 10.1 | 11.1 |
| 4     | ---  | ---  | ---  | 11.7 | 8.3  | 10.5 | 10.5 | 9.8  | 10   | 11.7 | 7.5  | 10.3 |
| 5     | ---  | ---  | ---  | 11.6 | 7.3  | 10.0 | 10.0 | 9.5  | 9.8  | 9.8  | 6.3  | 8.2  |
| 6     | ---  | ---  | ---  | 9.9  | 6.7  | 8.7  | 10.1 | 9.3  | 9.6  | 9.6  | 8.5  | 9.1  |
| 7     | 9.4  | 5.9  | 8.1  | 8.0  | 6.6  | 7.4  | 10.3 | 9.7  | 9.9  | 9.9  | 8.9  | 9.4  |
| 8     | 8.3  | 3.2  | 6.5  | 8.3  | 7.0  | 7.7  | 11.1 | 9.7  | 10.3 | 11.4 | 9.4  | 10.1 |
| 9     | 7.3  | 5.9  | 6.6  | 8.7  | 7.7  | 8.2  | 11.1 | 10.2 | 10.7 | 11.2 | 10.0 | 10.5 |
| 10    | 7.6  | 6.7  | 7.1  | 9.4  | 8.2  | 9.0  | 11.0 | 9.2  | 10.5 | 11.9 | 10.2 | 10.9 |
| 11    | 7.9  | 6.6  | 7.2  | 9.6  | 8.8  | 9.2  | 9.9  | 9.2  | 9.6  | 12.9 | 10.8 | 11.8 |
| 12    | 9.2  | 6.9  | 7.9  | 9.8  | 8.6  | 9.1  | 10.7 | 9.6  | 9.9  | 13.5 | 11.9 | 12.5 |
| 13    | 9.8  | 5.5  | 7.8  | 9.0  | 8.1  | 8.6  | 10.7 | 9.9  | 10.1 | 13.7 | 11.9 | 12.6 |
| 14    | 8.2  | 6.0  | 6.9  | ---  | ---  | ---  | 10.2 | 9.9  | 10.0 | 13.0 | 12.0 | 12.5 |
| 15    | 7.8  | 6.3  | 7.0  | 11.2 | 9.1  | 9.8  | 10.3 | 9.9  | 10.1 | 12.7 | 12.1 | 12.4 |
| 16    | 9.3  | 6.7  | 7.3  | ---  | ---  | ---  | 10.4 | 9.4  | 9.9  | 12.9 | 12.0 | 12.4 |
| 17    | 10.4 | 6.6  | 8.2  | ---  | ---  | ---  | 10.1 | 9.3  | 9.7  | 13.8 | 12.0 | 12.7 |
| 18    | 8.8  | 7.5  | 8.3  | ---  | ---  | ---  | 9.7  | 9.1  | 9.5  | 13.3 | 11.8 | 12.6 |
| 19    | 10.8 | 7.8  | 9.0  | 9.0  | 6.2  | 7.6  | 9.9  | 9.3  | 9.7  | 13.1 | 11.5 | 12.2 |
| 20    | ---  | ---  | ---  | 8.1  | 7.2  | 7.6  | 10.1 | 9.4  | 9.7  | 13.0 | 12.0 | 12.4 |
| 21    | ---  | ---  | ---  | 10.3 | 7.4  | 8.4  | 10.7 | 9.7  | 10.0 | 13.3 | 12.1 | 12.7 |
| 22    | 9.5  | 7.3  | 8.2  | 11.1 | 7.8  | 9.4  | 10.6 | 9.8  | 10.2 | 13.3 | 12.4 | 12.9 |
| 23    | 10.1 | 7.9  | 8.9  | 10.4 | 8.1  | 9.3  | 10.7 | 9.9  | 10.3 | 13.2 | 11.9 | 12.6 |
| 24    | 10.1 | 8.6  | 9.2  | 10.4 | 7.7  | 9.3  | 10.6 | 9.8  | 10.3 | 13.7 | 11.9 | 12.5 |
| 25    | 9.6  | 7.5  | 9.0  | 9.3  | 8.0  | 8.7  | 10.4 | 9.6  | 10.1 | 12.7 | 11.7 | 12.2 |
| 26    | 11.2 | 7.7  | 9.3  | 10.2 | 8.3  | 9.2  | 10.2 | 9.3  | 9.8  | 12.4 | 11.7 | 12.0 |
| 27    | 10.4 | 7.8  | 9.1  | 10.0 | 9.2  | 9.5  | 11.3 | 9.8  | 10.3 | 12.6 | 11.7 | 12.1 |
| 28    | 9.9  | 6.8  | 9.1  | 10.2 | 6.1  | 9.0  | 12.4 | 10.1 | 10.6 | 12.8 | 11.8 | 12.2 |
| 29    | 10.4 | 8.2  | 9.1  | 8.9  | 6.7  | 8.2  | 12.5 | 10.5 | 11.1 | 13.6 | 11.7 | 12.5 |
| 30    | 11.3 | 8.2  | 9.6  | 10.8 | 8.5  | 9.2  | 11.9 | 9.7  | 10.9 | 13.9 | 12.8 | 13.4 |
| 31    | 11.2 | 8.9  | 10   | ---  | ---  | ---  | 11.5 | 10.1 | 10.6 | 13.6 | 12.3 | 12.9 |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | 12.5 | 9.1  | 10.1 | 13.9 | 6.3  | 11.8 |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 13.7 | 12.4 | 12.7 | 12.4 | 11.1 | 11.7 | 10.0 | 7.7  | 9.2  | 6.6  | 2.3  | 4.8  |
| 2     | 12.9 | 12.2 | 12.6 | 11.3 | 10.2 | 10.8 | 11.0 | 8.6  | 9.5  | 7.0  | 4.0  | 5.7  |
| 3     | 13.5 | 12.0 | 13.0 | 12.4 | 9.5  | 10.7 | 10.7 | 9.1  | 9.9  | 7.4  | 4.9  | 6.3  |
| 4     | 13.3 | 12.6 | 12.9 | 12.4 | 9.5  | 11.1 | 10.7 | 9.8  | 10.3 | 8.6  | 5.9  | 6.9  |
| 5     | 12.9 | 11.8 | 12.3 | 11.5 | 8.6  | 10.2 | 9.9  | 9.4  | 9.6  | 8.6  | 7.2  | 8.0  |
| 6     | 12.8 | 10.9 | 12.2 | 10.5 | 7.4  | 8.8  | 11.9 | 9.3  | 10.2 | 10.0 | 5.9  | 8.3  |
| 7     | 12.1 | 10.4 | 11.3 | 9.3  | 7.2  | 8.5  | 11.9 | 9.2  | 10.7 | 11.4 | 6.8  | 9.4  |
| 8     | 11.0 | 10.2 | 10.6 | 8.1  | 7.1  | 7.5  | 11.5 | 9.3  | 10.7 | 10.0 | 7.5  | 8.9  |
| 9     | 11.2 | 10.5 | 10.9 | 8.4  | 6.7  | 7.5  | 11.4 | 9.9  | 10.6 | 11.6 | 6.6  | 9.3  |
| 10    | 11.8 | 10.6 | 11.2 | 9.1  | 7.2  | 8.1  | 10.6 | 9.0  | 9.9  | 11.8 | 8.4  | 9.8  |
| 11    | 12.7 | 11.2 | 12.0 | 9.5  | 8.6  | 9.1  | 10.8 | 9.0  | 9.9  | 12.4 | 6.6  | 9.3  |
| 12    | 12.1 | 10.4 | 11.2 | 10.9 | 8.5  | 9.5  | 9.8  | 8.3  | 8.9  | 10.9 | 6.0  | 8.0  |
| 13    | 11.7 | 10.5 | 11.0 | 10.7 | 9.5  | 10.0 | 9.4  | 7.5  | 8.3  | 9.5  | 5.4  | 7.5  |
| 14    | 12.6 | 11.4 | 12.0 | 11.1 | 9.9  | 10.4 | 10.4 | 7.8  | 8.7  | 9.2  | 4.2  | 7.1  |
| 15    | 11.8 | 9.9  | 11.1 | 10.3 | 9.4  | 9.9  | 9.5  | 8.2  | 8.9  | 10.0 | 2.8  | 6.2  |
| 16    | 10.9 | 9.9  | 10.5 | 10.0 | 8.4  | 9.4  | 10.8 | 8.6  | 9.6  | 10.0 | 3.1  | 6.7  |
| 17    | 11.5 | 10.7 | 11.0 | 10.2 | 8.7  | 9.2  | 11.0 | 8.1  | 10.1 | 11.4 | 4.2  | 7.5  |
| 18    | 11.5 | 10.7 | 11.0 | 10.9 | 8.6  | 9.8  | 10.8 | 8.5  | 9.9  | 9.9  | 5.8  | 7.7  |
| 19    | 12.6 | 10.3 | 11.4 | 10.0 | 8.3  | 9.5  | 10.6 | 7.7  | 9.5  | 9.2  | 5.7  | 7.7  |
| 20    | 13.9 | 10.1 | 12.0 | 10.3 | 8.3  | 9.1  | 11.1 | 7.6  | 9.6  | 10.5 | 1.7  | 6.8  |
| 21    | 11.7 | 9.8  | 10.9 | 9.8  | 7.8  | 8.7  | 10.8 | 8.8  | 9.6  | 11.3 | 3.7  | 7.1  |
| 22    | 13.2 | 10.8 | 11.8 | 9.6  | 7.8  | 8.6  | 9.3  | 7.8  | 8.6  | 7.6  | 2.8  | 6.0  |
| 23    | 12.5 | 10.4 | 11.9 | 10.2 | 8.0  | 9.0  | 9.9  | 7.5  | 8.8  | 8.2  | 0.8  | 4.7  |
| 24    | 12.1 | 10.4 | 11.5 | 10.9 | 8.6  | 9.6  | 9.1  | 6.2  | 8.0  | 7.5  | 3.5  | 5.3  |
| 25    | 12.2 | 10.4 | 11.3 | 13.8 | 8.7  | 10.8 | 7.3  | 5.8  | 6.6  | 9.6  | 3.5  | 6.7  |
| 26    | 11.3 | 10.2 | 10.6 | 13.4 | 10.4 | 11.9 | 7.7  | 4.9  | 6.5  | 9.6  | 5.2  | 7.3  |
| 27    | 10.9 | 10.2 | 10.6 | 13.1 | 10.2 | 11.9 | 7.9  | 5.5  | 7.1  | 8.5  | 5.4  | 7.0  |
| 28    | 11.8 | 10.2 | 10.8 | 11.4 | 9.3  | 10.5 | 8.5  | 6.1  | 7.3  | 7.4  | 5.5  | 6.7  |
| 29    | 14.0 | 10.7 | 12.0 | 9.9  | 8.9  | 9.4  | 8.5  | 5.0  | 7.6  | 6.7  | 5.0  | 5.9  |
| 30    | ---  | ---  | ---  | 10.7 | 9.1  | 9.9  | 7.8  | 4.9  | 6.4  | 5.8  | 4.0  | 5.0  |
| 31    | ---  | ---  | ---  | 11.2 | 8.4  | 9.8  | ---  | ---  | ---  | 5.8  | 4.2  | 4.9  |
| MONTH | 14.0 | 9.8  | 11.5 | 13.8 | 6.7  | 9.7  | 11.9 | 4.9  | 9.0  | 12.4 | 0.8  | 7.0  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 7.8  | 3.9 | 6.0  | 10.1 | 5.2 | 7.7  | 5.0    | 2.0 | 4.1  | 8.6       | 5.5 | 7.2  |
| 2     | 7.8  | 5.7 | 6.7  | 8.9  | 4.5 | 7.1  | 4.7    | 2.5 | 3.8  | 7.9       | 6.2 | 6.9  |
| 3     | 8.8  | 5.5 | 6.9  | 9.8  | 4.1 | 7.1  | 5.2    | 2.6 | 3.9  | 9.0       | 6.5 | 7.7  |
| 4     | 6.7  | 3.2 | 5.3  | 8.3  | 2.4 | 5.5  | 6.6    | 2.1 | 4.2  | 9.9       | 7.4 | 8.2  |
| 5     | 9.1  | 4.4 | 6.4  | 9.6  | 2.3 | 5.7  | 6.5    | 3.1 | 4.6  | 9.2       | 7.3 | 7.9  |
| 6     | 7.5  | 4.8 | 6.6  | 7.1  | 4.3 | 6.1  | 6.8    | 3.1 | 4.6  | 7.9       | 6.5 | 7.2  |
| 7     | 9.2  | 5.6 | 7.0  | 8.9  | 4.7 | 6.5  | 8.1    | 5.3 | 6.5  | 7.6       | 5.0 | 6.3  |
| 8     | 8.4  | 4.3 | 6.9  | 5.8  | 1.4 | 4.0  | 10.4   | 5.6 | 7.5  | 6.4       | 3.4 | 5.3  |
| 9     | 9.1  | 4.1 | 6.7  | 9.8  | 3.3 | 6.5  | 10.4   | 4.8 | 7.6  | 7.8       | 3.6 | 6.3  |
| 10    | 8.1  | 4.8 | 6.6  | 8.8  | 4.2 | 7.2  | 9.6    | 5.4 | 7.2  | 8.3       | 5.9 | 7.0  |
| 11    | 8.2  | 5.8 | 6.9  | 6.9  | 3.7 | 6.1  | 9.7    | 4.4 | 6.9  | 8.4       | 7.1 | 7.7  |
| 12    | 7.0  | 4.7 | 5.7  | 7.4  | 4.8 | 6.2  | 7.2    | 3.4 | 5.4  | 9.0       | 7.3 | 8.1  |
| 13    | 7.0  | 5.2 | 6.0  | 11.3 | 4.7 | 7.4  | 6.2    | 3.2 | 5.3  | 8.3       | 7.2 | 7.8  |
| 14    | 6.5  | 4.5 | 6.0  | 8.0  | 5.8 | 6.6  | 6.0    | 4.8 | 5.2  | 8.2       | 7.2 | 7.7  |
| 15    | 6.5  | 4.6 | 5.7  | 10.0 | 5.0 | 6.9  | 5.8    | 3.4 | 4.9  | 9.0       | 6.5 | 7.7  |
| 16    | 6.1  | 4.3 | 5.4  | 6.9  | 5.2 | 6.1  | 9.6    | 4.4 | 6.7  | 10.0      | 7.5 | 8.5  |
| 17    | 6.3  | 4.8 | 5.9  | 7.0  | 4.5 | 6.3  | 9.5    | 5.0 | 7.3  | 8.5       | 5.3 | 7.2  |
| 18    | 7.4  | 4.7 | 5.8  | 6.4  | 4.0 | 5.5  | 8.8    | 1.7 | 6.5  | 7.3       | 6.0 | 6.7  |
| 19    | 8.3  | 4.9 | 6.5  | 8.5  | 3.3 | 5.8  | 11.8   | 5.6 | 8.0  | 7.6       | 6.3 | 6.9  |
| 20    | 7.7  | 5.0 | 6.0  | 6.3  | 4.2 | 5.3  | 8.0    | 2.6 | 6.1  | 8.2       | 6.9 | 7.5  |
| 21    | 7.1  | 4.3 | 5.5  | 10.0 | 4.8 | 6.4  | 6.5    | 3.0 | 5.4  | 9.0       | 7.1 | 7.9  |
| 22    | 5.9  | 4.2 | 5.1  | 8.8  | 6.3 | 8.0  | 6.4    | 3.6 | 5.6  | 10.6      | 7.3 | 8.5  |
| 23    | 8.5  | 4.8 | 6.1  | 8.4  | 1.4 | 6.6  | 7.4    | 5.3 | 6.3  | 10.3      | 8.2 | 9.1  |
| 24    | 9.0  | 5.5 | 7.3  | 7.6  | 4.2 | 6.2  | 7.0    | 4.2 | 6.1  | 9.5       | 8.2 | 8.8  |
| 25    | 10.8 | 6.3 | 8.2  | 8.2  | 4.9 | 6.2  | 6.6    | 4.3 | 5.2  | 8.3       | 7.4 | 7.9  |
| 26    | 7.2  | 4.4 | 6.4  | 7.0  | 5.4 | 6.3  | 6.2    | 4.4 | 5.7  | 7.9       | 6.4 | 7.4  |
| 27    | 9.9  | 5.5 | 7.2  | 7.8  | 2.7 | 5.9  | 7.7    | 5.3 | 6.6  | 7.9       | 6.3 | 7.0  |
| 28    | 8.7  | 4.2 | 5.9  | 6.2  | 3.3 | 4.9  | 9.5    | 6.7 | 7.6  | 7.3       | 5.2 | 6.5  |
| 29    | 9.8  | 3.9 | 6.4  | 5.4  | 1.5 | 4.2  | 8.9    | 4.7 | 7.1  | 8.8       | 5.6 | 7.2  |
| 30    | 9.5  | 4.8 | 7.4  | 5.4  | 2.2 | 4.1  | 7.3    | 2.6 | 6.1  | 8.5       | 5.2 | 7.1  |
| 31    | ---  | --- | ---  | 5.2  | 3.3 | 3.9  | 10.4   | 5.9 | 7.7  | ---       | --- | ---  |
| MONTH | 10.8 | 3.2 | 6.3  | 11.3 | 1.4 | 6.1  | 11.8   | 1.7 | 6.0  | 10.6      | 3.4 | 7.4  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN |
|-------|------|------|------|------|-----|------|------|------|------|------|-----|------|
|       |      |      |      |      |     |      |      |      |      |      |     |      |
| 1     | 9.7  | 3.5  | 6.3  | 10.5 | 4.7 | 7.6  | 11.3 | 9.0  | 10.1 | 13.0 | 5.2 | 8.2  |
| 2     | 9.5  | 6.0  | 8.2  | 10.4 | 4.5 | 7.5  | 10.6 | 9.5  | 10.3 | 6.6  | 4.2 | 5.1  |
| 3     | 9.7  | 6.6  | 8.2  | 10.1 | 5.0 | 7.8  | 11.0 | 9.8  | 10.4 | 7.7  | 3.8 | 5.2  |
| 4     | ---  | ---  | ---  | 10.2 | 2.1 | 7.7  | 11.0 | 10.2 | 10.6 | 5.8  | 4.3 | 5.0  |
| 5     | ---  | ---  | ---  | 7.5  | 0.2 | 4.3  | 10.6 | 10.1 | 10.4 | ---  | --- | ---  |
| 6     | ---  | ---  | ---  | 5.3  | 0.5 | 2.8  | 10.7 | 10.0 | 10.2 | ---  | --- | ---  |
| 7     | 6.0  | 0.4  | 3.0  | 7.6  | 0.2 | 3.3  | 10.8 | 10.3 | 10.5 | ---  | --- | ---  |
| 8     | 7.8  | 0.6  | 4.5  | 8.4  | 1.6 | 7.0  | 11.0 | 9.8  | 10.3 | ---  | --- | ---  |
| 9     | 7.8  | 6.3  | 7.1  | 9.2  | 6.6 | 8.5  | 11.8 | 8.4  | 10.1 | ---  | --- | ---  |
| 10    | 8.1  | 7.3  | 7.6  | 9.7  | 8.0 | 8.8  | 11.6 | 9.1  | 11.0 | ---  | --- | ---  |
| 11    | 8.4  | 7.1  | 7.5  | 9.6  | 7.1 | 8.5  | 10.8 | 9.9  | 10.6 | ---  | --- | ---  |
| 12    | 7.7  | 4.8  | 6.5  | 9.6  | 6.1 | 8.1  | 11.1 | 10.2 | 10.8 | ---  | --- | ---  |
| 13    | 7.4  | 3.9  | 5.8  | 9.5  | 8.1 | 8.9  | 11.7 | 10.4 | 11.1 | ---  | --- | ---  |
| 14    | 7.2  | 3.8  | 5.7  | ---  | --- | ---  | 11.4 | 10.7 | 11.1 | ---  | --- | ---  |
| 15    | 7.0  | 5.2  | 6.2  | 11.6 | 8.1 | 9.8  | 11.4 | 10.7 | 11.1 | ---  | --- | ---  |
| 16    | 8.4  | 5.2  | 6.3  | ---  | --- | ---  | 11.3 | 10.1 | 10.6 | ---  | --- | ---  |
| 17    | 9.0  | 5.0  | 6.4  | ---  | --- | ---  | 11.3 | 9.6  | 10.5 | ---  | --- | ---  |
| 18    | 9.2  | 4.0  | 7.9  | ---  | --- | ---  | 11.2 | 9.1  | 10.6 | ---  | --- | ---  |
| 19    | 10.3 | 4.3  | 8.0  | 7.9  | 5.3 | 6.5  | 11.4 | 9.8  | 10.9 | ---  | --- | ---  |
| 20    | 9.3  | 2.2  | 6.1  | 7.9  | 6.8 | 7.5  | 11.9 | 10.2 | 11.3 | ---  | --- | ---  |
| 21    | 8.7  | 2.9  | 5.8  | 9.0  | 6.2 | 7.5  | 12.2 | 10.9 | 11.6 | ---  | --- | ---  |
| 22    | 9.7  | 6.6  | 8.3  | 9.2  | 5.6 | 7.6  | 12.1 | 7.3  | 10.9 | ---  | --- | ---  |
| 23    | 10.3 | 6.7  | 8.7  | 8.3  | 5.8 | 7.2  | 10.8 | 7.0  | 8.3  | ---  | --- | ---  |
| 24    | 10.0 | 6.9  | 8.8  | 8.9  | 4.9 | 6.5  | 9.8  | 7.0  | 8.0  | ---  | --- | ---  |
| 25    | 9.4  | 6.3  | 8.5  | 8.9  | 5.0 | 7.5  | 10.4 | 6.9  | 8.5  | ---  | --- | ---  |
| 26    | 9.0  | 5.6  | 7.4  | 10.0 | 5.3 | 8.7  | 9.7  | 7.3  | 8.7  | ---  | --- | ---  |
| 27    | 8.0  | 5.2  | 6.6  | 10.1 | 4.8 | 8.5  | 11.7 | 6.9  | 9.2  | ---  | --- | ---  |
| 28    | 9.2  | 4.2  | 6.4  | 9.7  | 5.0 | 7.8  | 11.6 | 7.8  | 9.0  | ---  | --- | ---  |
| 29    | 9.6  | 4.5  | 8.2  | 9.3  | 7.0 | 8.6  | 10.0 | 6.5  | 8.3  | ---  | --- | ---  |
| 30    | 9.2  | 5.4  | 7.7  | 11.2 | 8.6 | 9.4  | 11.5 | 6.3  | 8.4  | ---  | --- | ---  |
| 31    | 9.6  | 5.6  | 8.0  | ---  | --- | ---  | 11.4 | 6.7  | 9.2  | 11.6 | 8.9 | 10.7 |
| MONTH | ---  | ---  | ---  | ---  | --- | ---  | 12.2 | 6.3  | 10.1 | ---  | --- | ---  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN |
|       |      |      |      |      |     |      |      |      |      |      |     |      |
| 1     | 12.0 | 9.3  | 11.0 | 11.9 | 7.7 | 10.2 | 9.7  | 5.9  | 8.6  | 5.0  | 1.5 | 3.3  |
| 2     | 11.7 | 10.2 | 11.2 | 11.8 | 8.4 | 10.1 | 10.2 | 8.3  | 9.0  | 7.7  | 2.5 | 5.3  |
| 3     | 12.3 | 8.8  | 11.5 | 14.2 | 9.2 | 11.0 | 10.1 | 6.2  | 9.0  | 8.2  | 4.1 | 6.7  |
| 4     | 12.2 | 10.2 | 11.6 | 12.4 | 8.2 | 10.2 | 10.1 | 7.6  | 9.5  | 8.2  | 5.1 | 7.1  |
| 5     | 12.3 | 10.4 | 11.4 | 10.3 | 6.0 | 7.7  | 9.5  | 8.5  | 9.1  | 9.2  | 3.0 | 6.5  |
| 6     | 12.2 | 9.8  | 11.4 | 11.7 | 6.0 | 8.9  | 10.0 | 6.0  | 8.7  | 7.5  | 2.2 | 5.5  |
| 7     | 11.8 | 10.3 | 11.1 | 10.4 | 8.0 | 9.0  | 10.3 | 4.2  | 8.6  | 6.0  | 0.9 | 3.1  |
| 8     | 11.4 | 10.4 | 10.8 | 9.0  | 7.9 | 8.3  | 10.5 | 4.4  | 7.8  | 7.0  | 1.0 | 3.6  |
| 9     | 11.4 | 10.2 | 11.0 | 9.3  | 6.0 | 7.8  | 10.0 | 4.9  | 8.2  | 6.3  | 1.8 | 4.1  |
| 10    | 12.0 | 9.0  | 11.0 | 10.2 | 8.1 | 9.2  | 9.8  | 4.5  | 7.9  | 7.3  | 0.6 | 4.1  |
| 11    | 12.4 | 8.2  | 10.8 | 10.4 | 8.5 | 9.5  | 9.5  | 4.9  | 7.9  | 4.9  | 0.1 | 1.3  |
| 12    | 12.8 | 8.1  | 10.9 | 11.4 | 8.8 | 9.5  | 9.1  | 7.5  | 8.2  | 2.8  | 0.1 | 0.9  |
| 13    | 12.4 | 8.6  | 11.4 | 11.1 | 7.0 | 9.5  | 8.8  | 4.0  | 7.1  | 2.3  | 0.1 | 0.5  |
| 14    | 12.7 | 8.0  | 10.1 | 12.5 | 8.9 | 11.2 | 9.5  | 6.5  | 7.9  | 1.0  | 0.1 | 0.2  |
| 15    | 12.8 | 8.8  | 10.8 | 11.2 | 4.6 | 8.9  | 8.7  | 7.5  | 8.0  | 1.1  | 0.1 | 0.2  |
| 16    | ---  | ---  | ---  | 10.5 | 4.4 | 6.4  | 8.4  | 5.9  | 7.2  | 1.1  | 0.1 | 0.2  |
| 17    | ---  | ---  | ---  | 11.0 | 6.2 | 9.2  | 7.8  | 3.4  | 6.0  | 1.3  | 0.1 | 0.2  |
| 18    | ---  | ---  | ---  | 10.6 | 5.7 | 8.7  | 7.8  | 3.7  | 5.9  | 1.3  | 0.1 | 0.1  |
| 19    | ---  | ---  | ---  | 11.2 | 6.6 | 10   | 8.2  | 3.4  | 5.7  | 0.3  | 0.1 | 0.1  |
| 20    | ---  | ---  | ---  | 10.6 | 6.9 | 9.5  | 8.7  | 3.9  | 6.8  | 4.3  | 0.1 | 0.6  |
| 21    | 13.8 | 11.6 | 12.7 | 10.9 | 8.0 | 9.4  | 8.2  | 1.8  | 5.8  | 1.7  | 0.0 | 0.4  |
| 22    | 14.7 | 10.6 | 12.9 | 10.1 | 7.6 | 8.8  | 8.1  | 1.4  | 5.6  | 3.8  | 0.0 | 0.3  |
| 23    | 14.7 | 10.6 | 13.2 | 8.8  | 6.4 | 7.6  | 8.1  | 2.1  | 4.8  | 4.0  | 0.0 | 1.5  |
| 24    | 13.9 | 11.4 | 13.1 | 10.5 | 5.7 | 7.5  | 8.6  | 0.9  | 5.5  | 5.6  | 0.6 | 3.2  |
| 25    | 14.4 | 11.8 | 13.2 | 10.0 | 5.4 | 7.6  | 7.0  | 4.3  | 5.7  | 6.6  | 0.3 | 4.5  |
| 26    | 13.3 | 12.3 | 12.7 | 10.1 | 3.7 | 6.6  | 7.4  | 1.2  | 5.4  | 7.9  | 0.6 | 5.1  |
| 27    | 13.1 | 12.3 | 12.7 | 9.7  | 2.4 | 5.0  | 8.0  | 4.7  | 6.9  | 7.9  | 4.0 | 6.4  |
| 28    | 14.1 | 11.4 | 12.5 | 10.5 | 1.1 | 6.7  | 7.6  | 3.8  | 6.4  | 7.2  | 4.0 | 5.9  |
| 29    | 14.6 | 10.9 | 12.7 | 9.6  | 5.2 | 8.6  | 6.8  | 3.1  | 5.1  | 6.3  | 3.4 | 5.1  |
| 30    | ---  | ---  | ---  | 9.8  | 6.0 | 8.2  | 6.8  | 1.8  | 3.9  | 5.4  | 2.4 | 4.3  |
| 31    | ---  | ---  | ---  | 9.0  | 4.6 | 6.5  | ---  | ---  | ---  | 5.1  | 2.0 | 4.0  |
| MONTH | ---  | ---  | ---  | 14.2 | 1.1 | 8.6  | 10.5 | 0.9  | 7.1  | 9.2  | 0.0 | 3.0  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 7.4  | 4.2 | 5.7  | 5.8  | 0.2 | 2.8  | 3.8    | 1.1 | 2.8  | 7.1       | 2.3 | 4.0  |
| 2     | 6.7  | 2.9 | 5.6  | 4.2  | 0.0 | 1.0  | 3.9    | 1.6 | 2.7  | 7.9       | 2.5 | 5.9  |
| 3     | 6.4  | 2.1 | 5.2  | 4.0  | 0.1 | 0.8  | 5.0    | 2.8 | 3.9  | 7.8       | 4.4 | 6.4  |
| 4     | 5.2  | 1.0 | 3.4  | 2.8  | 0.3 | 0.9  | 4.6    | 2.3 | 3.4  | 8.5       | 1.9 | 5.7  |
| 5     | 7.8  | 3.3 | 5.2  | 3.0  | 0.0 | 0.9  | 6.3    | 0.9 | 3.2  | 7.9       | 2.8 | 6.7  |
| 6     | 6.8  | 2.4 | 5.2  | 5.5  | 0.1 | 1.4  | 6.8    | 1.6 | 5.0  | 6.4       | 2.0 | 4.9  |
| 7     | 7.2  | 1.3 | 4.7  | 3.4  | 0.1 | 0.7  | 6.2    | 2.5 | 4.7  | 3.2       | 0.4 | 1.9  |
| 8     | 4.4  | 1.1 | 2.9  | 3.5  | 0.3 | 1.0  | 4.2    | 0.1 | 2.3  | 5.3       | 0.3 | 2.3  |
| 9     | 6.3  | 0.8 | 3.0  | 1.9  | 0.1 | 0.5  | 4.4    | 0.1 | 1.7  | 5.9       | 1.4 | 4.5  |
| 10    | 6.4  | 0.4 | 3.9  | 2.8  | 0.1 | 0.6  | 4.9    | 0.0 | 1.4  | 7.0       | 1.2 | 3.7  |
| 11    | 6.3  | 2.4 | 4.8  | 3.9  | 0.2 | 0.9  | 3.8    | 0.8 | 1.2  | 8.6       | 5.2 | 7.5  |
| 12    | 6.2  | 2.9 | 5.0  | 3.4  | 0.3 | 1.1  | 5.4    | 0.3 | 2.3  | 9.2       | 5.5 | 7.7  |
| 13    | 6.4  | 4.2 | 5.3  | 6.2  | 0.4 | 1.9  | 5.2    | 0.2 | 3.6  | 8.3       | 5.9 | 7.7  |
| 14    | 5.9  | 2.1 | 4.7  | 4.8  | 0.1 | 1.3  | 5.4    | 2.1 | 4.1  | 8.2       | 4.6 | 7.2  |
| 15    | 5.6  | 1.8 | 3.6  | 6.9  | 0.1 | 2.9  | 4.9    | 2.6 | 3.8  | 7.7       | 1.7 | 5.2  |
| 16    | 4.7  | 1.8 | 3.2  | 5.7  | 0.9 | 3.6  | 6.1    | 1.9 | 3.8  | 5.4       | 2.3 | 3.6  |
| 17    | 5.0  | 0.8 | 3.2  | 3.5  | 0.1 | 2.1  | 6.3    | 1.2 | 3.4  | 5.8       | 2.5 | 3.5  |
| 18    | 5.8  | 1.6 | 4.3  | 2.3  | 0.1 | 0.8  | 4.6    | 0.1 | 1.1  | 7.3       | 4.2 | 6.2  |
| 19    | 5.7  | 2.0 | 4.0  | 5.8  | 0.1 | 1.0  | 1.1    | 0.1 | 0.2  | 7.3       | 4.4 | 5.9  |
| 20    | 5.4  | 1.9 | 3.9  | 4.8  | 1.0 | 3.2  | 1.3    | 0.0 | 0.3  | 8.3       | 6.7 | 7.3  |
| 21    | 5.7  | 2.2 | 4.1  | 5.4  | 0.1 | 4.1  | 4.5    | 0.0 | 0.3  | 7.5       | 4.3 | 5.9  |
| 22    | 4.1  | 0.3 | 2.4  | 7.6  | 2.0 | 5.6  | 5.2    | 0.1 | 1.8  | 8.2       | 4.3 | 5.8  |
| 23    | 5.4  | 1.8 | 3.0  | 6.6  | 0.1 | 2.0  | 6.9    | 0.5 | 3.4  | 8.0       | 4.0 | 5.2  |
| 24    | 5.8  | 0.9 | 3.6  | 5.8  | 0.1 | 1.9  | 7.1    | 0.9 | 5.5  | 8.7       | 4.6 | 6.8  |
| 25    | 5.6  | 1.7 | 3.4  | 6.1  | 2.1 | 5.1  | 6.6    | 4.5 | 5.5  | 8.1       | 5.4 | 7.2  |
| 26    | 6.8  | 1.9 | 5.2  | 5.6  | 0.1 | 2.8  | 6.2    | 3.0 | 5.0  | 7.4       | 6.0 | 7.1  |
| 27    | 5.9  | 1.6 | 4.3  | 2.2  | 0.1 | 0.7  | 7.2    | 1.9 | 5.3  | 6.6       | 4.3 | 5.5  |
| 28    | 5.8  | 0.7 | 2.7  | 4.5  | 0.0 | 1.1  | 7.6    | 1.3 | 5.7  | 6.4       | 1.9 | 4.7  |
| 29    | 6.1  | 1.9 | 4.0  | 3.1  | 0.0 | 0.9  | 6.2    | 1.2 | 3.4  | 6.4       | 4.3 | 5.3  |
| 30    | 4.8  | 1.5 | 3.2  | 5.2  | 0.0 | 2.3  | 7.1    | 1.5 | 4.8  | 7.5       | 4.1 | 5.3  |
| 31    | ---  | --- | ---  | 4.6  | 1.7 | 2.9  | 6.1    | 3.4 | 4.2  | ---       | --- | ---  |
| MONTH | 7.8  | 0.3 | 4.1  | 7.6  | 0.0 | 1.9  | 7.6    | 0.0 | 3.2  | 9.2       | 0.3 | 5.6  |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 110 | 85  | 97   | 156 | 103 | 119  | 102 | 85  | 91   | 107 | 89  | 96   |
| 2     | 105 | 85  | 91   | 152 | 108 | 132  | 92  | 85  | 90   | 118 | 93  | 101  |
| 3     | 110 | 83  | 91   | 141 | 114 | 128  | 91  | 85  | 88   | 107 | 87  | 97   |
| 4     | --- | --- | ---  | 129 | 90  | 115  | 92  | 86  | 87   | 107 | 66  | 94   |
| 5     | --- | --- | ---  | 131 | 80  | 111  | 88  | 84  | 86   | 90  | 56  | 75   |
| 6     | --- | --- | ---  | 112 | 74  | 97   | 88  | 82  | 84   | 87  | 79  | 84   |
| 7     | 107 | 67  | 92   | 89  | 73  | 82   | 89  | 83  | 85   | 87  | 80  | 83   |
| 8     | 94  | 36  | 74   | 89  | 77  | 84   | 95  | 83  | 87   | 97  | 80  | 86   |
| 9     | 82  | 66  | 74   | 90  | 81  | 86   | 94  | 86  | 91   | 93  | 84  | 87   |
| 10    | 86  | 75  | 80   | 96  | 84  | 91   | 96  | 82  | 91   | 94  | 85  | 88   |
| 11    | 89  | 74  | 81   | 97  | 89  | 92   | 88  | 82  | 86   | 99  | 85  | 91   |
| 12    | 104 | 77  | 88   | 102 | 88  | 93   | 95  | 84  | 87   | 106 | 92  | 96   |
| 13    | 111 | 62  | 88   | 92  | 83  | 88   | 94  | 86  | 88   | 110 | 92  | 99   |
| 14    | 94  | 68  | 78   | --- | --- | ---  | 89  | 86  | 87   | 104 | 95  | 99   |
| 15    | 87  | 71  | 78   | 108 | 87  | 94   | 89  | 85  | 87   | 102 | 97  | 99   |
| 16    | 102 | 73  | 80   | --- | --- | ---  | 89  | 81  | 85   | 104 | 95  | 99   |
| 17    | 116 | 73  | 90   | --- | --- | ---  | 90  | 81  | 85   | 111 | 94  | 100  |
| 18    | 97  | 81  | 91   | --- | --- | ---  | 84  | 78  | 82   | 111 | 96  | 101  |
| 19    | 117 | 84  | 97   | 90  | 62  | 76   | 84  | 79  | 82   | 107 | 94  | 100  |
| 20    | --- | --- | ---  | 80  | 72  | 75   | 85  | 79  | 81   | 105 | 96  | 100  |
| 21    | --- | --- | ---  | 104 | 73  | 83   | 89  | 79  | 83   | 105 | 95  | 100  |
| 22    | 104 | 79  | 89   | 113 | 77  | 93   | 88  | 81  | 84   | 106 | 98  | 102  |
| 23    | 109 | 84  | 95   | 106 | 81  | 93   | 89  | 82  | 85   | 105 | 95  | 100  |
| 24    | 107 | 90  | 97   | 104 | 76  | 94   | 92  | 83  | 88   | 112 | 94  | 100  |
| 25    | 101 | 79  | 94   | 93  | 80  | 87   | 90  | 81  | 86   | 101 | 91  | 95   |
| 26    | 121 | 82  | 98   | 101 | 81  | 90   | 86  | 77  | 82   | 95  | 90  | 92   |
| 27    | 112 | 83  | 97   | 98  | 90  | 93   | 95  | 82  | 86   | 98  | 90  | 93   |
| 28    | 106 | 72  | 98   | 101 | 61  | 89   | 104 | 84  | 89   | 96  | 90  | 93   |
| 29    | 113 | 88  | 97   | 86  | 67  | 80   | 105 | 87  | 93   | 105 | 88  | 96   |
| 30    | 121 | 88  | 103  | 100 | 79  | 86   | 102 | 82  | 94   | 107 | 98  | 103  |
| 31    | 120 | 95  | 106  | --- | --- | ---  | 99  | 86  | 91   | 104 | 94  | 98   |
| MONTH | --- | --- | ---  | --- | --- | ---  | 105 | 77  | 87   | 118 | 56  | 95   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 104 | 93  | 96   | 107 | 93  | 100  | 99  | 74  | 89   | 74  | 25  | 54   |
| 2     | 98  | 93  | 95   | 99  | 90  | 95   | 106 | 83  | 90   | 81  | 44  | 64   |
| 3     | 105 | 93  | 101  | 115 | 84  | 97   | 103 | 87  | 95   | 83  | 55  | 71   |
| 4     | 107 | 99  | 102  | 118 | 86  | 104  | 104 | 94  | 99   | 96  | 64  | 76   |
| 5     | 103 | 92  | 97   | 111 | 84  | 98   | 94  | 89  | 91   | 96  | 79  | 88   |
| 6     | 103 | 94  | 99   | 101 | 66  | 84   | 114 | 86  | 96   | 115 | 65  | 93   |
| 7     | 104 | 91  | 97   | 89  | 68  | 82   | 119 | 86  | 103  | 132 | 77  | 108  |
| 8     | 94  | 87  | 90   | 77  | 66  | 70   | 115 | 90  | 105  | 116 | 87  | 103  |
| 9     | 95  | 88  | 91   | 79  | 63  | 70   | 117 | 99  | 107  | 139 | 76  | 110  |
| 10    | 100 | 89  | 95   | 81  | 66  | 74   | 107 | 90  | 100  | 144 | 99  | 117  |
| 11    | 110 | 95  | 103  | 87  | 78  | 82   | 112 | 91  | 102  | 149 | 78  | 112  |
| 12    | 104 | 88  | 96   | 104 | 76  | 88   | 101 | 85  | 91   | 134 | 71  | 96   |
| 13    | 100 | 89  | 94   | 101 | 87  | 93   | 99  | 77  | 86   | 117 | 64  | 91   |
| 14    | 108 | 97  | 102  | 102 | 91  | 96   | 106 | 80  | 89   | 114 | 50  | 86   |
| 15    | 101 | 84  | 95   | 96  | 87  | 92   | 97  | 83  | 91   | 123 | 33  | 74   |
| 16    | 90  | 83  | 87   | 94  | 78  | 88   | 113 | 87  | 98   | 124 | 37  | 80   |
| 17    | 94  | 88  | 91   | 95  | 81  | 86   | 116 | 83  | 104  | 142 | 50  | 91   |
| 18    | 94  | 86  | 90   | 103 | 79  | 91   | 116 | 88  | 104  | 122 | 70  | 95   |
| 19    | 105 | 84  | 93   | 95  | 78  | 90   | 114 | 80  | 101  | 113 | 69  | 93   |
| 20    | 118 | 84  | 100  | 98  | 77  | 85   | 122 | 80  | 103  | 131 | 20  | 83   |
| 21    | 101 | 82  | 93   | 95  | 74  | 82   | 119 | 96  | 105  | 141 | 45  | 87   |
| 22    | 115 | 92  | 101  | 90  | 73  | 80   | 103 | 85  | 94   | 96  | 34  | 74   |
| 23    | 108 | 89  | 102  | 94  | 74  | 83   | 113 | 82  | 99   | 104 | 10  | 58   |
| 24    | 105 | 90  | 99   | 103 | 79  | 89   | 104 | 68  | 90   | 93  | 42  | 64   |
| 25    | 106 | 89  | 97   | 134 | 82  | 102  | 81  | 64  | 73   | 121 | 42  | 82   |
| 26    | 97  | 84  | 90   | 132 | 101 | 115  | 89  | 54  | 72   | 123 | 63  | 91   |
| 27    | 90  | 84  | 88   | 129 | 101 | 118  | 89  | 61  | 79   | 110 | 68  | 88   |
| 28    | 99  | 84  | 89   | 115 | 92  | 105  | 96  | 67  | 81   | 94  | 70  | 85   |
| 29    | 122 | 87  | 101  | 97  | 87  | 92   | 93  | 55  | 84   | 86  | 64  | 75   |
| 30    | --- | --- | ---  | 105 | 88  | 96   | 88  | 55  | 71   | 72  | 49  | 63   |
| 31    | --- | --- | ---  | 111 | 82  | 96   | --- | --- | ---  | 73  | 52  | 61   |
| MONTH | 122 | 82  | 96   | 134 | 63  | 91   | 122 | 54  | 93   | 149 | 10  | 84   |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 99   | 48  | 76   | 132  | 67  | 100  | 66     | 26  | 53   | 110       | 70  | 91   |
| 2     | 99   | 71  | 84   | 115  | 58  | 92   | 62     | 32  | 49   | 99        | 77  | 86   |
| 3     | 114  | 69  | 88   | 128  | 53  | 92   | 67     | 33  | 50   | 113       | 80  | 95   |
| 4     | 85   | 40  | 67   | 109  | 31  | 72   | 87     | 27  | 54   | 126       | 91  | 103  |
| 5     | 115  | 55  | 81   | 129  | 30  | 75   | 86     | 40  | 61   | 116       | 91  | 100  |
| 6     | 95   | 60  | 83   | 96   | 57  | 81   | 86     | 40  | 59   | 99        | 82  | 91   |
| 7     | 118  | 71  | 89   | 121  | 63  | 87   | 101    | 66  | 82   | 95        | 62  | 78   |
| 8     | 107  | 54  | 88   | 78   | 18  | 53   | 131    | 71  | 93   | 79        | 42  | 66   |
| 9     | 119  | 52  | 86   | 134  | 43  | 86   | 130    | 61  | 95   | 98        | 45  | 79   |
| 10    | 105  | 60  | 84   | 117  | 56  | 96   | 124    | 67  | 91   | 104       | 73  | 87   |
| 11    | 107  | 73  | 89   | 91   | 49  | 80   | 123    | 56  | 88   | 104       | 87  | 95   |
| 12    | 91   | 60  | 72   | 97   | 63  | 81   | 92     | 43  | 69   | 111       | 89  | 99   |
| 13    | 87   | 65  | 74   | 150  | 61  | 97   | 78     | 40  | 67   | 101       | 88  | 95   |
| 14    | 81   | 56  | 74   | 105  | 76  | 87   | 75     | 60  | 65   | 99        | 87  | 93   |
| 15    | 82   | 57  | 72   | 133  | 65  | 91   | 71     | 42  | 60   | 110       | 79  | 93   |
| 16    | 77   | 54  | 68   | 91   | 68  | 80   | 120    | 54  | 83   | 124       | 91  | 104  |
| 17    | 80   | 60  | 74   | 92   | 59  | 83   | 120    | 62  | 91   | 105       | 65  | 89   |
| 18    | 95   | 59  | 74   | 84   | 52  | 71   | 110    | 21  | 81   | 88        | 73  | 81   |
| 19    | 110  | 62  | 84   | 110  | 43  | 75   | 149    | 70  | 101  | 90        | 75  | 81   |
| 20    | 102  | 64  | 77   | 83   | 54  | 68   | 103    | 33  | 78   | 94        | 79  | 86   |
| 21    | 90   | 54  | 70   | 135  | 62  | 84   | 83     | 38  | 69   | 104       | 81  | 90   |
| 22    | 76   | 53  | 65   | 117  | 81  | 105  | 81     | 45  | 70   | 124       | 83  | 97   |
| 23    | 111  | 61  | 79   | 110  | 18  | 86   | 93     | 66  | 79   | 122       | 93  | 106  |
| 24    | 119  | 71  | 94   | 102  | 54  | 81   | 88     | 53  | 76   | 112       | 96  | 104  |
| 25    | 143  | 81  | 106  | 108  | 64  | 81   | 83     | 53  | 65   | 98        | 86  | 93   |
| 26    | 93   | 56  | 82   | 91   | 70  | 82   | 77     | 55  | 71   | 93        | 75  | 87   |
| 27    | 129  | 70  | 93   | 104  | 35  | 78   | 97     | 66  | 82   | 94        | 74  | 82   |
| 28    | 111  | 54  | 75   | 81   | 43  | 63   | 122    | 84  | 96   | 87        | 61  | 76   |
| 29    | 127  | 50  | 82   | 71   | 19  | 55   | 113    | 59  | 90   | 107       | 66  | 86   |
| 30    | 123  | 62  | 96   | 70   | 29  | 53   | 93     | 33  | 76   | 102       | 62  | 84   |
| 31    | ---  | --- | ---  | 68   | 42  | 51   | 135    | 75  | 98   | ---       | --- | ---  |
| MONTH | 143  | 40  | 81   | 150  | 18  | 80   | 149    | 21  | 76   | 126       | 42  | 90   |



## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |     |      |       |     |      |       |     |      |     |     |      |
| 1     | 113      | 41  | 74   | 112   | 50  | 81   | 105   | 84  | 93   | 111 | 45  | 70   |
| 2     | 109      | 70  | 94   | 111   | 48  | 81   | 97    | 87  | 94   | 57  | 36  | 44   |
| 3     | 109      | 75  | 92   | 110   | 54  | 84   | 97    | 89  | 93   | 66  | 33  | 45   |
| 4     | ---      | --- | ---  | 112   | 23  | 84   | 94    | 91  | 92   | 50  | 37  | 43   |
| 5     | ---      | --- | ---  | 83    | 2   | 47   | 93    | 89  | 91   | --- | --- | ---  |
| 6     | ---      | --- | ---  | 58    | 5   | 31   | 93    | 88  | 89   | --- | --- | ---  |
| 7     | 68       | 5   | 34   | 84    | 2   | 36   | 93    | 88  | 91   | --- | --- | ---  |
| 8     | 88       | 7   | 51   | 92    | 17  | 76   | 93    | 85  | 89   | --- | --- | ---  |
| 9     | 88       | 70  | 80   | 95    | 71  | 89   | 102   | 74  | 87   | --- | --- | ---  |
| 10    | 92       | 82  | 86   | 98    | 82  | 90   | 100   | 79  | 95   | --- | --- | ---  |
| 11    | 94       | 80  | 85   | 97    | 73  | 86   | 96    | 88  | 94   | --- | --- | ---  |
| 12    | 87       | 54  | 73   | 99    | 63  | 83   | 97    | 90  | 94   | --- | --- | ---  |
| 13    | 84       | 44  | 65   | 96    | 83  | 91   | 102   | 91  | 97   | --- | --- | ---  |
| 14    | 82       | 43  | 65   | ---   | --- | ---  | 99    | 93  | 96   | --- | --- | ---  |
| 15    | 78       | 58  | 69   | 112   | 79  | 95   | 99    | 92  | 96   | --- | --- | ---  |
| 16    | 92       | 58  | 70   | ---   | --- | ---  | 98    | 88  | 92   | --- | --- | ---  |
| 17    | 99       | 55  | 70   | ---   | --- | ---  | 101   | 84  | 92   | --- | --- | ---  |
| 18    | 101      | 44  | 86   | ---   | --- | ---  | 96    | 79  | 91   | --- | --- | ---  |
| 19    | 112      | 47  | 86   | 79    | 52  | 65   | 97    | 84  | 93   | --- | --- | ---  |
| 20    | 101      | 24  | 66   | 79    | 68  | 74   | 100   | 87  | 95   | --- | --- | ---  |
| 21    | 95       | 32  | 63   | 89    | 62  | 74   | 101   | 90  | 96   | --- | --- | ---  |
| 22    | 106      | 72  | 90   | 91    | 56  | 75   | 99    | 63  | 90   | --- | --- | ---  |
| 23    | 111      | 72  | 94   | 82    | 58  | 71   | 90    | 61  | 71   | --- | --- | ---  |
| 24    | 105      | 74  | 93   | 89    | 49  | 65   | 83    | 60  | 68   | --- | --- | ---  |
| 25    | 98       | 67  | 89   | 89    | 50  | 75   | 89    | 60  | 73   | --- | --- | ---  |
| 26    | 96       | 59  | 79   | 99    | 53  | 85   | 82    | 63  | 74   | --- | --- | ---  |
| 27    | 85       | 55  | 70   | 99    | 48  | 84   | 98    | 59  | 78   | --- | --- | ---  |
| 28    | 99       | 44  | 68   | 95    | 50  | 78   | 97    | 66  | 75   | --- | --- | ---  |
| 29    | 104      | 48  | 87   | 90    | 70  | 83   | 84    | 55  | 70   | --- | --- | ---  |
| 30    | 99       | 58  | 83   | 104   | 81  | 88   | 100   | 54  | 72   | --- | --- | ---  |
| 31    | 102      | 60  | 85   | ---   | --- | ---  | 97    | 57  | 79   | 88  | 68  | 81   |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 105   | 54  | 87   | --- | --- | ---  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | 91       | 71  | 83   | 99    | 64  | 85   | 95    | 56  | 83   | 56  | 17  | 37   |
| 2     | 89       | 78  | 85   | 104   | 70  | 86   | 97    | 78  | 86   | 88  | 28  | 59   |
| 3     | 96       | 67  | 88   | 131   | 78  | 97   | 97    | 59  | 86   | 92  | 46  | 75   |
| 4     | 96       | 79  | 90   | 115   | 72  | 92   | 97    | 73  | 91   | 90  | 57  | 78   |
| 5     | 97       | 81  | 89   | 95    | 51  | 69   | 90    | 81  | 86   | 102 | 33  | 72   |
| 6     | 96       | 77  | 92   | 111   | 51  | 82   | 96    | 57  | 82   | 82  | 24  | 61   |
| 7     | 102      | 89  | 95   | 100   | 75  | 86   | 99    | 40  | 81   | 68  | 10  | 35   |
| 8     | 96       | 88  | 91   | 86    | 74  | 78   | 104   | 42  | 75   | 81  | 11  | 42   |
| 9     | 96       | 86  | 92   | 87    | 56  | 73   | 100   | 47  | 81   | 74  | 20  | 47   |
| 10    | 101      | 75  | 92   | 91    | 75  | 84   | 99    | 44  | 79   | 87  | 7   | 48   |
| 11    | 106      | 69  | 91   | 93    | 76  | 85   | 98    | 49  | 80   | 58  | 1   | 16   |
| 12    | 109      | 68  | 92   | 106   | 79  | 86   | 94    | 76  | 84   | 33  | 1   | 11   |
| 13    | 106      | 72  | 96   | 103   | 63  | 87   | 92    | 40  | 73   | 27  | 1   | 6    |
| 14    | 108      | 67  | 85   | 115   | 81  | 103  | 97    | 67  | 81   | 12  | 1   | 2    |
| 15    | 109      | 74  | 91   | 103   | 42  | 81   | 89    | 76  | 81   | 13  | 1   | 2    |
| 16    | ---      | --- | ---  | 99    | 40  | 59   | 86    | 60  | 73   | 13  | 1   | 2    |
| 17    | ---      | --- | ---  | 103   | 57  | 86   | 80    | 35  | 61   | 15  | 1   | 3    |
| 18    | ---      | --- | ---  | 98    | 52  | 80   | 81    | 38  | 60   | 16  | 1   | 2    |
| 19    | ---      | --- | ---  | 106   | 61  | 93   | 87    | 35  | 59   | 3   | 1   | 1    |
| 20    | ---      | --- | ---  | 100   | 64  | 88   | 93    | 40  | 71   | 52  | 1   | 7    |
| 21    | 118      | 97  | 108  | 105   | 75  | 89   | 90    | 19  | 61   | 20  | 0   | 5    |
| 22    | 127      | 90  | 110  | 94    | 71  | 82   | 89    | 14  | 60   | 46  | 0   | 3    |
| 23    | 127      | 91  | 114  | 81    | 60  | 71   | 90    | 22  | 52   | 48  | 0   | 18   |
| 24    | 120      | 98  | 114  | 99    | 53  | 70   | 98    | 9   | 60   | 68  | 7   | 38   |
| 25    | 125      | 101 | 114  | 95    | 50  | 72   | 78    | 47  | 62   | 81  | 4   | 55   |
| 26    | 114      | 102 | 107  | 95    | 34  | 62   | 84    | 13  | 61   | 100 | 7   | 63   |
| 27    | 109      | 102 | 105  | 95    | 22  | 47   | 90    | 52  | 78   | 101 | 50  | 80   |
| 28    | 119      | 94  | 103  | 105   | 10  | 66   | 85    | 42  | 70   | 91  | 50  | 74   |
| 29    | 123      | 90  | 106  | 94    | 50  | 84   | 75    | 34  | 57   | 80  | 43  | 64   |
| 30    | ---      | --- | ---  | 95    | 57  | 79   | 77    | 20  | 43   | 68  | 30  | 53   |
| 31    | ---      | --- | ---  | 88    | 43  | 62   | ---   | --- | ---  | 64  | 25  | 50   |
| MONTH | ---      | --- | ---  | 131   | 10  | 79   | 104   | 9   | 72   | 102 | 0   | 36   |

## 0209265810 NEUSE RIVER AT CHANNEL LIGHT 9—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 94   | 52  | 71   | 75   | 3   | 36   | 50     | 14  | 37   | 89        | 29  | 51   |
| 2     | 85   | 36  | 71   | 54   | 0   | 12   | 51     | 21  | 36   | 99        | 32  | 74   |
| 3     | 81   | 26  | 65   | 51   | 1   | 11   | 64     | 36  | 51   | 97        | 55  | 80   |
| 4     | 65   | 12  | 43   | 36   | 4   | 11   | 59     | 30  | 44   | 107       | 24  | 71   |
| 5     | 99   | 41  | 66   | 39   | 0   | 12   | 82     | 12  | 41   | 101       | 35  | 85   |
| 6     | 85   | 30  | 66   | 73   | 1   | 19   | 87     | 21  | 64   | 81        | 25  | 61   |
| 7     | 91   | 16  | 59   | 44   | 1   | 9    | 77     | 31  | 59   | 40        | 5   | 24   |
| 8     | 55   | 14  | 36   | 46   | 4   | 13   | 53     | 1   | 29   | 67        | 4   | 29   |
| 9     | 80   | 10  | 38   | 25   | 1   | 6    | 55     | 1   | 22   | 74        | 18  | 56   |
| 10    | 82   | 5   | 50   | 37   | 1   | 8    | 62     | 0   | 18   | 87        | 15  | 46   |
| 11    | 80   | 30  | 61   | 51   | 3   | 11   | 48     | 10  | 15   | 107       | 65  | 93   |
| 12    | 80   | 37  | 63   | 44   | 4   | 15   | 68     | 4   | 29   | 114       | 68  | 95   |
| 13    | 80   | 53  | 66   | 81   | 5   | 24   | 66     | 3   | 46   | 101       | 72  | 94   |
| 14    | 74   | 26  | 58   | 63   | 1   | 17   | 67     | 27  | 51   | 100       | 56  | 87   |
| 15    | 70   | 22  | 45   | 90   | 1   | 38   | 61     | 32  | 47   | 93        | 21  | 63   |
| 16    | 59   | 22  | 41   | 74   | 12  | 47   | 76     | 24  | 48   | 65        | 28  | 44   |
| 17    | 63   | 10  | 40   | 46   | 1   | 27   | 78     | 15  | 42   | 71        | 30  | 43   |
| 18    | 74   | 20  | 54   | 30   | 1   | 10   | 58     | 1   | 14   | 88        | 51  | 75   |
| 19    | 75   | 25  | 51   | 75   | 1   | 13   | 14     | 1   | 3    | 86        | 53  | 70   |
| 20    | 69   | 24  | 50   | 62   | 13  | 41   | 16     | 0   | 3    | 95        | 77  | 84   |
| 21    | 73   | 28  | 52   | 70   | 1   | 53   | 58     | 0   | 4    | 87        | 50  | 68   |
| 22    | 52   | 4   | 31   | 101  | 26  | 73   | 66     | 1   | 22   | 95        | 49  | 66   |
| 23    | 70   | 23  | 39   | 87   | 1   | 26   | 86     | 6   | 42   | 94        | 46  | 60   |
| 24    | 75   | 11  | 46   | 75   | 1   | 25   | 89     | 11  | 68   | 103       | 53  | 79   |
| 25    | 72   | 22  | 43   | 80   | 27  | 66   | 83     | 56  | 69   | 96        | 63  | 85   |
| 26    | 87   | 24  | 66   | 73   | 1   | 36   | 78     | 37  | 63   | 88        | 71  | 83   |
| 27    | 76   | 20  | 54   | 29   | 1   | 9    | 90     | 24  | 66   | 78        | 51  | 65   |
| 28    | 75   | 9   | 35   | 58   | 0   | 14   | 96     | 16  | 72   | 76        | 22  | 55   |
| 29    | 78   | 24  | 52   | 40   | 0   | 12   | 79     | 15  | 43   | 76        | 51  | 63   |
| 30    | 62   | 19  | 41   | 68   | 0   | 29   | 90     | 19  | 61   | 90        | 49  | 63   |
| 31    | ---  | --- | ---  | 60   | 22  | 38   | 77     | 43  | 53   | ---       | --- | ---  |
| MONTH | 99   | 4   | 52   | 101  | 0   | 25   | 96     | 0   | 41   | 114       | 4   | 67   |

## 02093000 NEW RIVER NEAR GUM BRANCH, NC

LOCATION.--Lat 34°50'57", long 77°31'10", Onslow County, Hydrologic Unit 03030001, on right bank 5 ft downstream of Secondary Road 1314, 0.7 mi downstream of Jenkins Swamp, 1.8 mi southwest of Gum Branch, and 3.8 mi southeast of Richlands.

DRAINAGE AREA.--94 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1949 to September 1973. July 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929 (levels by U.S. Army Corps of Engineers). Aug. 19, 1949, to Mar. 22, 1950, nonrecording gage and Mar. 23, 1950, to Mar. 25, 1969, water-stage recorder at site 0.2 mi upstream at 2.52 ft. Mar. 26, 1969, to Sept. 1973 water-stage recorder at present site and datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair except those below 150 ft<sup>3</sup>/s, which are poor. Maximum discharge for period of record from rating curve extended above 3,000 ft<sup>3</sup>/s by logarithmic plotting. Low flows affected by tide.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1908 reached a stage of about 18 ft at former site and datum, from information by local resident.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP   |
|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| 1     | 67     | 718   | 76    | 105   | 85    | 255   | 75    | 205   | 63    | 51    | 42     | 265   |
| 2     | 66     | 381   | 73    | 97    | 77    | 200   | 64    | 466   | 45    | 50    | 67     | 524   |
| 3     | 59     | 291   | 68    | 94    | 84    | 166   | 56    | 536   | 37    | 101   | 187    | 323   |
| 4     | 57     | 241   | 74    | 89    | 83    | 141   | 46    | 825   | 31    | 88    | 118    | 221   |
| 5     | 48     | 205   | 181   | 88    | 77    | 124   | 42    | 631   | 35    | 225   | 84     | 162   |
| 6     | 44     | 223   | 146   | 86    | 75    | 116   | 43    | 319   | 31    | 126   | 341    | 188   |
| 7     | 41     | 344   | 119   | 77    | 109   | 103   | 42    | 214   | 31    | 62    | 287    | 347   |
| 8     | 59     | 241   | 111   | 78    | 93    | 98    | 40    | 152   | 63    | 46    | 153    | 305   |
| 9     | 867    | 196   | 100   | 78    | 84    | 90    | 38    | 112   | 78    | 36    | 94     | 336   |
| 10    | 1,140  | 166   | 118   | 85    | 80    | 89    | 43    | 94    | 44    | 30    | 73     | 281   |
| 11    | 766    | 145   | 585   | 78    | 75    | 81    | 62    | 84    | 436   | 36    | 53     | 211   |
| 12    | 429    | 131   | 502   | 80    | 130   | 80    | 248   | 71    | 331   | 40    | 46     | 165   |
| 13    | 300    | 118   | 305   | 75    | 209   | 75    | 255   | 64    | 130   | 29    | 432    | 129   |
| 14    | 248    | 100   | 613   | 73    | 172   | 71    | 336   | 58    | 82    | 26    | 1,010  | 121   |
| 15    | 286    | 93    | 971   | 69    | 284   | 67    | 231   | 52    | 62    | 26    | 2,100  | 196   |
| 16    | 234    | 88    | 673   | 66    | 343   | 100   | 157   | 48    | 47    | 23    | 2,110  | 214   |
| 17    | 185    | 85    | 422   | 63    | 325   | 128   | 120   | 41    | 49    | 21    | 1,360  | 179   |
| 18    | 153    | 89    | 353   | 71    | 377   | 104   | 98    | 39    | 42    | 21    | 650    | 205   |
| 19    | 134    | 135   | 287   | 72    | 291   | 94    | 86    | 32    | 75    | 20    | 332    | 232   |
| 20    | 121    | 303   | 240   | 66    | 224   | 84    | 76    | 32    | 51    | 20    | 235    | 174   |
| 21    | 108    | 217   | 200   | 61    | 183   | 78    | 64    | 33    | 39    | 22    | 174    | 138   |
| 22    | 101    | 167   | 176   | 58    | 150   | 68    | 55    | 31    | 31    | 19    | 164    | 112   |
| 23    | 90     | 142   | 161   | 57    | 127   | 65    | 48    | 27    | 30    | 33    | 144    | 89    |
| 24    | 88     | 125   | 234   | 54    | 143   | 58    | 44    | 27    | 99    | 103   | 123    | 79    |
| 25    | 85     | 112   | 233   | 52    | 144   | 51    | 43    | 26    | 55    | 38    | 100    | 75    |
| 26    | 84     | 102   | 190   | 78    | 210   | 51    | 38    | 24    | 39    | 50    | 97     | 69    |
| 27    | 96     | 100   | 163   | 112   | 508   | 53    | 59    | 21    | 32    | 32    | 121    | 70    |
| 28    | 146    | 98    | 151   | 132   | 487   | 53    | 49    | 20    | 37    | 25    | 95     | 114   |
| 29    | 1,260  | 86    | 135   | 109   | 345   | 50    | 39    | 19    | 180   | 27    | 139    | 111   |
| 30    | 1,970  | 78    | 126   | 99    | ---   | 49    | 38    | 114   | 76    | 35    | 305    | 85    |
| 31    | 1,450  | ---   | 111   | 93    | ---   | 62    | ---   | 110   | ---   | 59    | 206    | ---   |
| TOTAL | 10,782 | 5,520 | 7,897 | 2,495 | 5,574 | 2,904 | 2,635 | 4,527 | 2,381 | 1,520 | 11,442 | 5,720 |
| MEAN  | 348    | 184   | 255   | 80.5  | 192   | 93.7  | 87.8  | 146   | 79.4  | 49.0  | 369    | 191   |
| MAX   | 1,970  | 718   | 971   | 132   | 508   | 255   | 336   | 825   | 436   | 225   | 2,110  | 524   |
| MIN   | 41     | 78    | 68    | 52    | 75    | 49    | 38    | 19    | 30    | 19    | 42     | 69    |
| CFSM  | 3.70   | 1.96  | 2.71  | 0.86  | 2.04  | 1.00  | 0.93  | 1.55  | 0.84  | 0.52  | 3.93   | 2.03  |
| IN.   | 4.27   | 2.18  | 3.13  | 0.99  | 2.21  | 1.15  | 1.04  | 1.79  | 0.94  | 0.60  | 4.53   | 2.26  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2004,® BY WATER YEAR (WY)

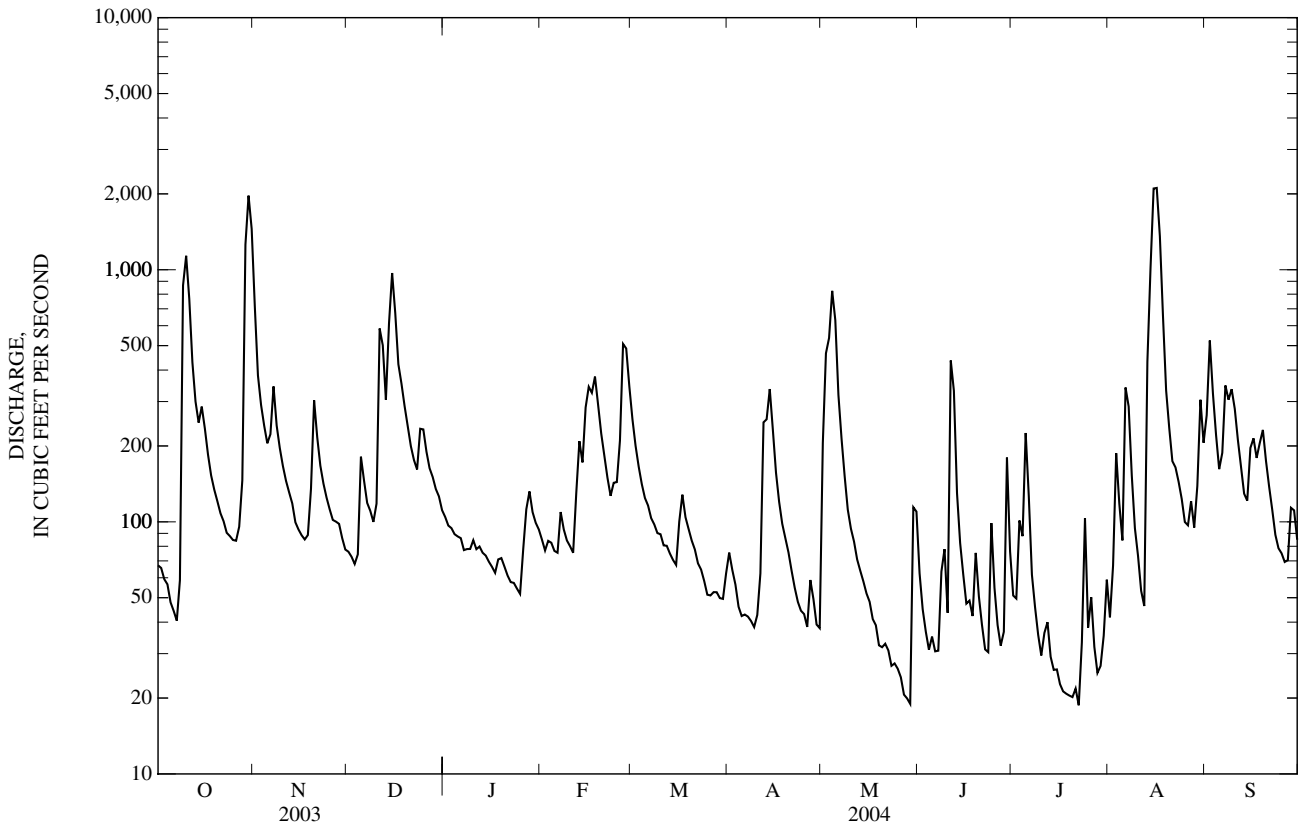
|      | 84.3   | 64.6   | 93.5   | 150    | 175    | 181    | 117    | 72.2   | 95.1   | 119    | 114    | 124    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 84.3   | 64.6   | 93.5   | 150    | 175    | 181    | 117    | 72.2   | 95.1   | 119    | 114    | 124    |
| MAX  | 553    | 190    | 277    | 374    | 584    | 418    | 377    | 188    | 423    | 717    | 734    | 1,110  |
| (WY) | (1972) | (1970) | (1958) | (1993) | (1998) | (1959) | (1973) | (1969) | (1961) | (1962) | (1955) | (1999) |
| MIN  | 2.01   | 4.30   | 13.3   | 32.4   | 33.1   | 27.7   | 21.0   | 16.4   | 11.3   | 7.21   | 6.25   | 4.25   |
| (WY) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1957) | (1970) | (1993) | (1954) | (1954) |

02093000 NEW RIVER NEAR GUM BRANCH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1949 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 83,640                 |        | 63,397              |        | 116                                  |              |
| ANNUAL MEAN              | 229                    |        | 173                 |        | 208                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 52.6                                 | 1972         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2.0                                  | 2002         |
| HIGHEST DAILY MEAN       | 1,970                  | Oct 30 | 2,110               | Aug 16 | 10,100                               | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 33                     | May 14 | 19                  | May 29 | 1.3                                  | Aug 18, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 36                     | May 12 | 21                  | Jul 16 | 2.0                                  | Oct 4, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 2,310               | Aug 15 | 15000*                               | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 15.86               | Aug 15 | 25.12                                | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 15*                 | Jul 20 | 0.62*                                | Aug 19, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.44                   |        | 1.84                |        | 1.23                                 |              |
| ANNUAL RUNOFF (INCHES)   | 33.10                  |        | 25.09               |        | 16.77                                |              |
| 10 PERCENT EXCEEDS       | 554                    |        | 338                 |        | 249                                  |              |
| 50 PERCENT EXCEEDS       | 125                    |        | 94                  |        | 55                                   |              |
| 90 PERCENT EXCEEDS       | 48                     |        | 37                  |        | 13                                   |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

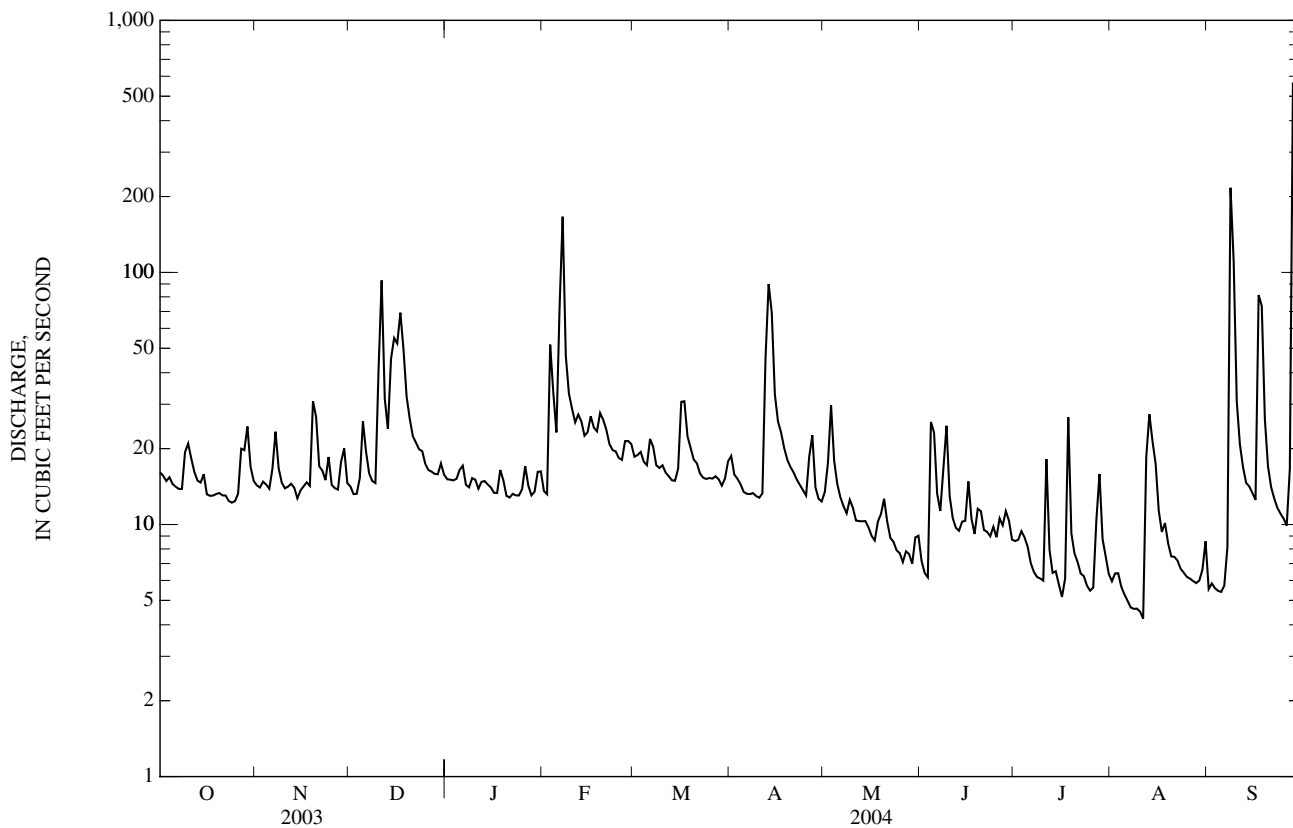




02093800 REEDY FORK NEAR OAK RIDGE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1956 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 14,741.5               |        | 7,141.7             |        | 24.0                    |              |
| ANNUAL MEAN              | 40.4                   |        | 19.5                |        | 44.8                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 8.39                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2002                    |              |
| HIGHEST DAILY MEAN       | 1,130                  | Mar 20 | 566                 | Sep 28 | 1,250                   | Jul 28, 1984 |
| LOWEST DAILY MEAN        | 8.5                    | Sep 17 | 4.2                 | Aug 11 | 0.61                    | Aug 14, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 9.6                    | Sep 11 | 4.7                 | Aug 5  | 0.70                    | Aug 9, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 1,190               | Sep 28 | 3950*                   | Oct 10, 1959 |
| MAXIMUM PEAK STAGE       |                        |        | 10.41               | Sep 28 | 12.41                   | Sep 22, 1979 |
| INSTANTANEOUS LOW FLOW   |                        |        | 3.7                 | Aug 11 | 0.50*                   | Aug 13, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.96                   |        | 0.947               |        | 1.16                    |              |
| ANNUAL RUNOFF (INCHES)   | 26.62                  |        | 12.90               |        | 15.81                   |              |
| 10 PERCENT EXCEEDS       | 72                     |        | 27                  |        | 39                      |              |
| 50 PERCENT EXCEEDS       | 20                     |        | 14                  |        | 14                      |              |
| 90 PERCENT EXCEEDS       | 13                     |        | 6.4                 |        | 6.8                     |              |

\* See REMARKS.



02093800 REEDY FORK NEAR OAK RIDGE, NC—Continued

PRECIPITATION RECORDS

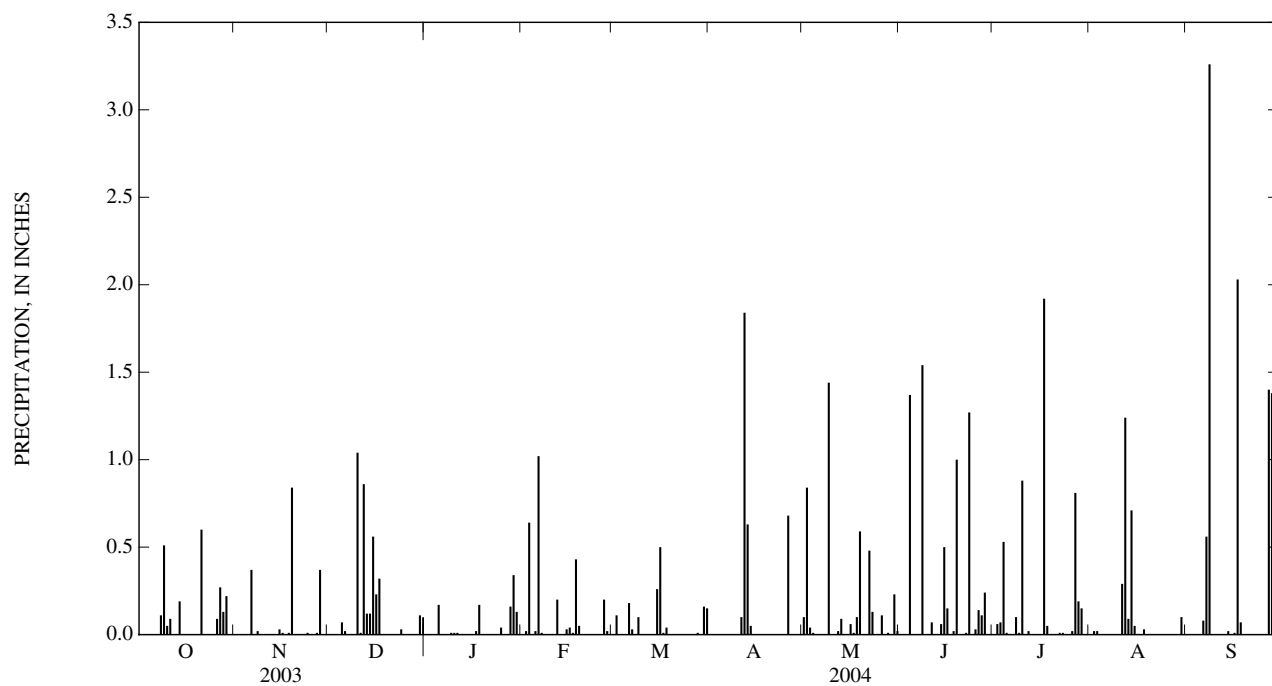
PERIOD OF RECORD.--November 1999 to current year. Records for November 1999 to September 2000 are unpublished and available in the USGS District Office in Raleigh, NC.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.11 | 0.00 | 0.84 | 0.00 | 0.06 | 0.02 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 0.00 | 0.04 | 0.00 | 0.07 | 0.02 | 0.00 |
| 4     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.37 | 0.53 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.07 | 0.17 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 6     | 0.00 | 0.37 | 0.02 | 0.00 | 1.02 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 |
| 8     | 0.11 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.54 | 0.10 | 0.00 | 3.26 |
| 9     | 0.51 | 0.00 | 0.00 | 0.01 | 0.00 | 0.10 | 0.00 | 1.44 | 0.00 | 0.01 | 0.00 | 0.00 |
| 10    | 0.05 | 0.00 | 1.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.88 | 0.00 | 0.00 |
| 11    | 0.09 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.10 | 0.00 | 0.07 | 0.00 | 0.29 | 0.00 |
| 12    | 0.00 | 0.00 | 0.86 | 0.00 | 0.20 | 0.00 | 1.84 | 0.02 | 0.00 | 0.02 | 1.24 | 0.00 |
| 13    | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.63 | 0.09 | 0.00 | 0.00 | 0.09 | 0.00 |
| 14    | 0.19 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.06 | 0.00 | 0.71 | 0.02 |
| 15    | 0.00 | 0.03 | 0.56 | 0.00 | 0.03 | 0.26 | 0.00 | 0.00 | 0.50 | 0.00 | 0.05 | 0.00 |
| 16    | 0.00 | 0.01 | 0.23 | 0.00 | 0.04 | 0.50 | 0.00 | 0.06 | 0.15 | 0.00 | 0.00 | 0.01 |
| 17    | 0.00 | 0.00 | 0.32 | 0.02 | 0.01 | 0.01 | 0.00 | 0.01 | 0.00 | 1.92 | 0.00 | 2.03 |
| 18    | 0.00 | 0.01 | 0.00 | 0.17 | 0.43 | 0.04 | 0.00 | 0.10 | 0.02 | 0.05 | 0.03 | 0.07 |
| 19    | 0.00 | 0.84 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.59 | 1.00 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.01 | 0.01 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.13 | 1.27 | 0.01 | 0.00 | 0.00 |
| 24    | 0.00 | 0.01 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 |
| 26    | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.68 | 0.11 | 0.14 | 0.02 | 0.00 | 0.00 |
| 27    | 0.27 | 0.01 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.11 | 0.81 | 0.00 | 1.40 |
| 28    | 0.13 | 0.37 | 0.00 | 0.16 | 0.02 | 0.01 | 0.00 | 0.01 | 0.24 | 0.19 | 0.00 | 1.38 |
| 29    | 0.22 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 |
| 30    | 0.00 | 0.00 | 0.11 | 0.13 | ---  | 0.16 | 0.00 | 0.23 | 0.00 | 0.00 | 0.10 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.15 | ---  | 0.02 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 2.26 | 1.67 | 3.49 | 1.06 | 2.69 | 1.55 | 3.30 | 4.28 | 6.51 | 4.84 | 2.55 | 8.81 |



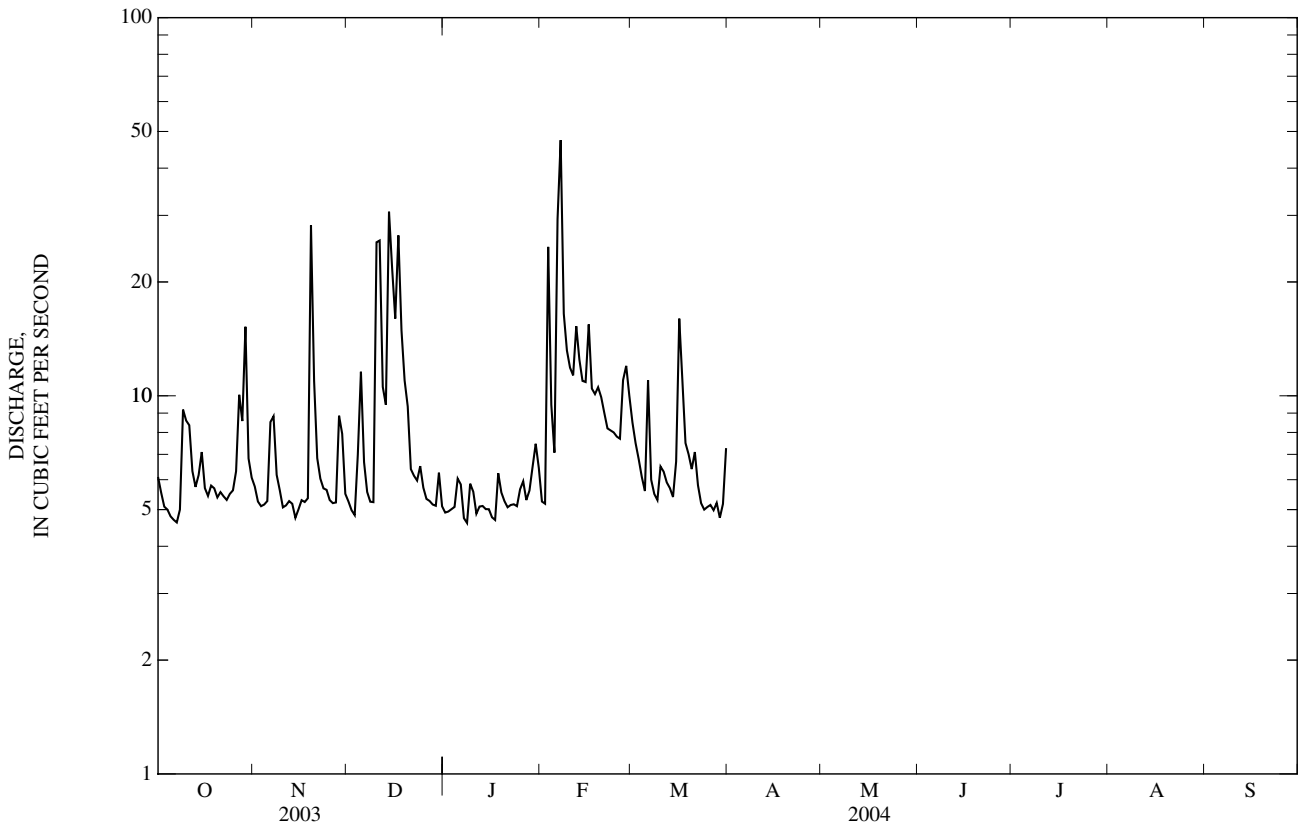




| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1999 - 2004 |  |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--|
| ANNUAL TOTAL             | 6,037.4                |        |                     |        | 9.27                    |  |
| ANNUAL MEAN              | 16.5                   |        |                     |        | 18.1 2003               |  |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 3.78 2002               |  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 600 Sep 23, 2003        |  |
| HIGHEST DAILY MEAN       | 600                    | Sep 23 | 47                  | Feb 7  | 0.22 Sep 12, 2002       |  |
| LOWEST DAILY MEAN        | 2.8                    | Jul 28 | 4.6                 | Oct 7  | 0.29 Jun 19, 2002       |  |
| ANNUAL SEVEN-DAY MINIMUM | 3.7                    | Jun 25 | 4.9                 | Jan 11 | NOT DETERMINED          |  |
| MAXIMUM PEAK FLOW        |                        |        | 123                 | Feb 7  | 9.57 Sep 23, 2003       |  |
| MAXIMUM PEAK STAGE       |                        |        | 5.24                | Feb 7  | 0.19* Jun 22, 2002      |  |
| INSTANTANEOUS LOW FLOW   |                        |        | NOT DETERMINED      |        | 1.25                    |  |
| ANNUAL RUNOFF (CFSM)     | 2.23                   |        |                     |        | 17.00                   |  |
| ANNUAL RUNOFF (INCHES)   | 30.31                  |        |                     |        | 18                      |  |
| 10 PERCENT EXCEEDS       | 27                     |        |                     |        | 4.1                     |  |
| 50 PERCENT EXCEEDS       | 7.5                    |        |                     |        | 1.2                     |  |
| 90 PERCENT EXCEEDS       | 4.2                    |        |                     |        |                         |  |

\* See REMARKS.

e Estimated.



0209399200 HORSE PEN CREEK AT US HIGHWAY 220 NEAR GREENSBORO, NC

LOCATION.--Lat 36°08'16", long 79°51'36", Guilford County, Hydrologic Unit 03030002, on right bank, 300 ft downstream of U.S. Highway 220 bridge on gravel road to city lift station, 2.9 mi above Lake Brandt dam and 6.3 mi northwest of Greensboro.

DRAINAGE AREA.--15.9 mi<sup>2</sup>

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 740 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 1     | 9.1   | 11    | 10    | 10    | 9.2   | 18    | 16    | 8.6   | 5.7   | 6.4   | 6.8   | 2.9     |
| 2     | 9.1   | 8.7   | 9.2   | 11    | 8.6   | 18    | 11    | 11    | 5.2   | 8.7   | 9.6   | 2.9     |
| 3     | 8.2   | 8.5   | 9.0   | 14    | 83    | 17    | 10    | 22    | 5.1   | 7.1   | 9.4   | 2.6     |
| 4     | 7.9   | 8.4   | 14    | 11    | 24    | 14    | 10    | 11    | 30    | 8.1   | 5.2   | 2.5     |
| 5     | 7.8   | 8.4   | 26    | 11    | 15    | 13    | 8.9   | 8.5   | 11    | 8.2   | 4.3   | 2.5     |
| 6     | 7.8   | 14    | 14    | 11    | 86    | 27    | 8.8   | 7.8   | 7.7   | 5.8   | 3.8   | 6.1     |
| 7     | 7.6   | 14    | 11    | 8.6   | 87    | 15    | 8.9   | 7.3   | 6.8   | 5.6   | 3.4   | 11      |
| 8     | 7.7   | 9.0   | 10    | 8.5   | 27    | 12    | 8.9   | 6.9   | 54    | 8.7   | 3.3   | 564     |
| 9     | 39    | 8.8   | 10    | 12    | 20    | 12    | 8.8   | 7.0   | 22    | 8.5   | 3.2   | 95      |
| 10    | 21    | 7.7   | 84    | 10    | 18    | 13    | 8.5   | 7.9   | 12    | 14    | 3.1   | 23      |
| 11    | 22    | 8.2   | 64    | 8.9   | 16    | 11    | 9.0   | 6.6   | 9.1   | 13    | 3.0   | 11      |
| 12    | 11    | 8.0   | 20    | 9.4   | 24    | 11    | 106   | 6.8   | 7.7   | 6.6   | 4.9   | 8.6     |
| 13    | 8.9   | 7.5   | 15    | 9.3   | 18    | 9.9   | 127   | 8.2   | 6.8   | 5.7   | 8.5   | 7.3     |
| 14    | 8.6   | 7.3   | 104   | 9.0   | 16    | 9.8   | 49    | 7.1   | 6.9   | 6.6   | 45    | 6.7     |
| 15    | 11    | 7.6   | 62    | 8.9   | 19    | 12    | 23    | 6.3   | 7.1   | 4.9   | 11    | 6.5     |
| 16    | 7.6   | 7.8   | 35    | 8.2   | 31    | 50    | 17    | 12    | 9.6   | 4.4   | 7.0   | 6.2     |
| 17    | 7.4   | 8.2   | 70    | 7.3   | 21    | 28    | 14    | 7.9   | 6.6   | 41    | 5.3   | 93      |
| 18    | 7.3   | 8.3   | 32    | 11    | 20    | 18    | 13    | 6.5   | 6.2   | 424   | 4.9   | 56      |
| 19    | 7.2   | 65    | 20    | 8.5   | 20    | 15    | 12    | 7.3   | 35    | 25    | 4.0   | 11      |
| 20    | 7.2   | 28    | 16    | 7.6   | 18    | 12    | 15    | 8.8   | 16    | 10    | 3.6   | 7.3     |
| 21    | 7.3   | 16    | 14    | 7.9   | 16    | 12    | 14    | 6.4   | 8.6   | 8.1   | 3.6   | 6.0     |
| 22    | 7.2   | 13    | 14    | 7.7   | 14    | 11    | 11    | 19    | 7.2   | 6.8   | 3.5   | 5.0     |
| 23    | 7.0   | 13    | 13    | 7.3   | 14    | 10    | 9.8   | 10    | 6.9   | 7.1   | 3.0   | 4.5     |
| 24    | 7.0   | 12    | 14    | 7.2   | 14    | 9.9   | 9.5   | 8.9   | 7.5   | 7.1   | 3.2   | 4.2     |
| 25    | 7.3   | 12    | 12    | 7.7   | 13    | 10    | 9.2   | 6.4   | 6.1   | 6.6   | 3.2   | 4.1     |
| 26    | 9.0   | 11    | 11    | 8.9   | 13    | 10    | 23    | 5.9   | 24    | 5.5   | 3.1   | 4.0     |
| 27    | 19    | 11    | 11    | 8.4   | 24    | 9.8   | 16    | 6.9   | 13    | 42    | 2.9   | 23      |
| 28    | 12    | 19    | 11    | 9.9   | 25    | 10    | 12    | 5.7   | 9.6   | 44    | 2.8   | 490     |
| 29    | 44    | 15    | 10    | 13    | 23    | 9.3   | 10    | 5.4   | 7.8   | 44    | 2.6   | 49      |
| 30    | 12    | 11    | 13    | 16    | ---   | 10    | 8.8   | 10    | 6.9   | 22    | 6.8   | 15      |
| 31    | 10    | ---   | 10    | 13    | ---   | 12    | ---   | 6.6   | ---   | 9.0   | 3.5   | ---     |
| TOTAL | 365.2 | 387.4 | 768.2 | 302.2 | 736.8 | 449.7 | 608.1 | 266.7 | 368.1 | 824.5 | 187.5 | 1,530.9 |
| MEAN  | 11.8  | 12.9  | 24.8  | 9.75  | 25.4  | 14.5  | 20.3  | 8.60  | 12.3  | 26.6  | 6.05  | 51.0    |
| MAX   | 44    | 65    | 104   | 16    | 87    | 50    | 127   | 22    | 54    | 424   | 45    | 564     |
| MIN   | 7.0   | 7.3   | 9.0   | 7.2   | 8.6   | 9.3   | 8.5   | 5.4   | 5.1   | 4.4   | 2.6   | 2.5     |
| CFSM  | 0.74  | 0.81  | 1.56  | 0.61  | 1.60  | 0.91  | 1.27  | 0.54  | 0.77  | 1.67  | 0.38  | 3.21    |
| IN.   | 0.85  | 0.91  | 1.80  | 0.71  | 1.72  | 1.05  | 1.42  | 0.62  | 0.86  | 1.93  | 0.44  | 3.58    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

|      | 1999   | 2000   | 2001   | 2002   | 2003   | 2004   |
|------|--------|--------|--------|--------|--------|--------|
| MEAN | 14.2   | 15.9   | 20.4   | 17.5   | 27.5   | 34.3   |
| MAX  | 31.8   | 43.6   | 45.7   | 21.9   | 45.0   | 74.3   |
| (WY) | (2003) | (2003) | (2003) | (2000) | (2003) | (2003) |
| MIN  | 6.74   | 5.08   | 8.86   | 9.75   | 9.21   | 13.2   |
| (WY) | (2001) | (2002) | (2001) | (2004) | (2002) | (2002) |

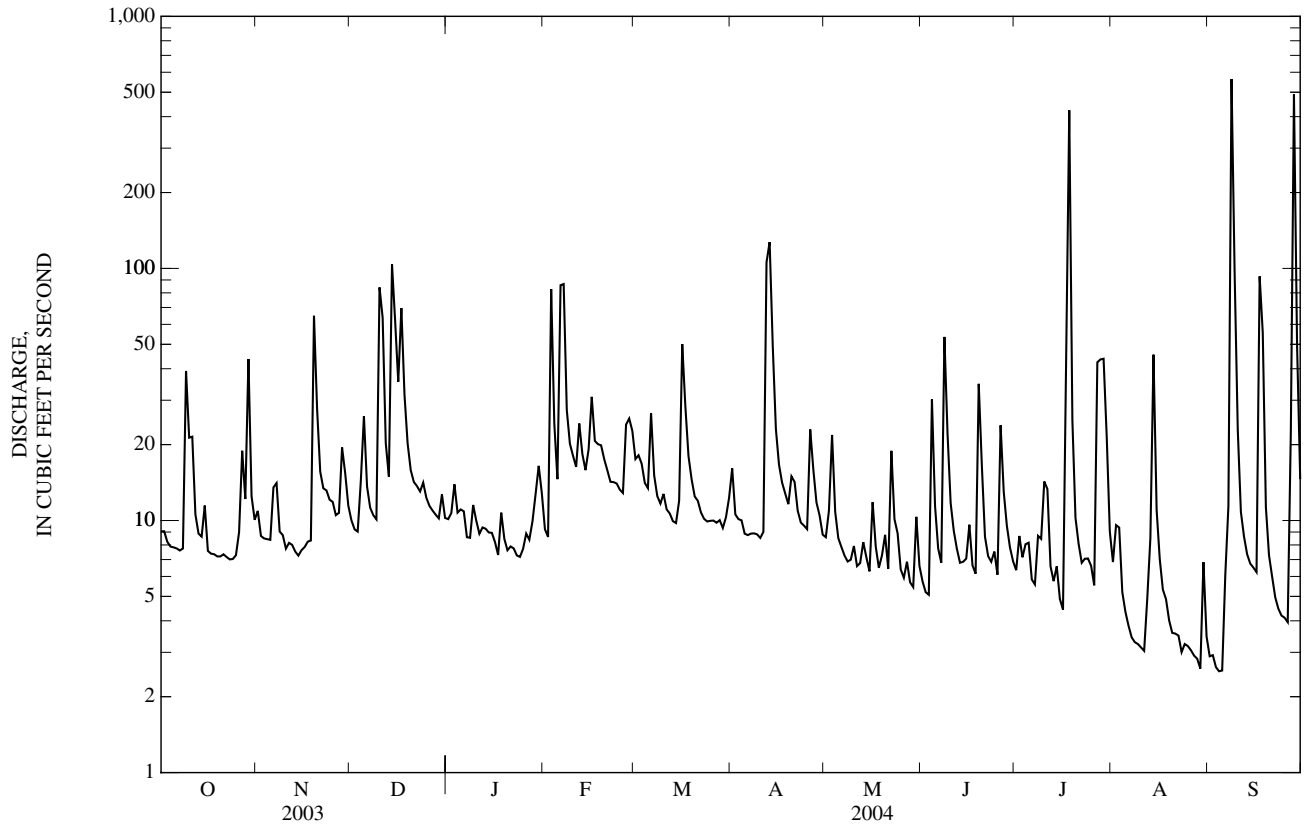
SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

FOR 2004 WATER YEAR

WATER YEARS 1999 - 2004

|                          |          |         |       |
|--------------------------|----------|---------|-------|
| ANNUAL TOTAL             | 14,798.5 | 6,795.3 |       |
| ANNUAL MEAN              | 40.5     | 18.6    | 22.3  |
| HIGHEST ANNUAL MEAN      |          |         | 46.5  |
| LOWEST ANNUAL MEAN       |          |         | 8.37  |
| HIGHEST DAILY MEAN       | 827      | 564     | 827   |
| LOWEST DAILY MEAN        | 5.6      | 2.5     | 0.14  |
| ANNUAL SEVEN-DAY MINIMUM | 5.8      | 3.0     | 0.38  |
| MAXIMUM PEAK FLOW        |          | 1,420   | 2,300 |
| MAXIMUM PEAK STAGE       |          | 9.57    | 10.66 |
| INSTANTANEOUS LOW FLOW   |          | 2.4     | 0.06  |
| ANNUAL RUNOFF (CFSM)     | 2.55     | 1.17    | 1.40  |
| ANNUAL RUNOFF (INCHES)   | 34.62    | 15.90   | 19.07 |
| 10 PERCENT EXCEEDS       | 90       | 27      | 43    |
| 50 PERCENT EXCEEDS       | 15       | 9.8     | 9.1   |
| 90 PERCENT EXCEEDS       | 7.6      | 5.3     | 2.9   |



0209399200 HORSE PEN CREEK AT US HIGHWAY 220 NEAR GREENSBORO, NC—Continued

PRECIPITATION RECORDS

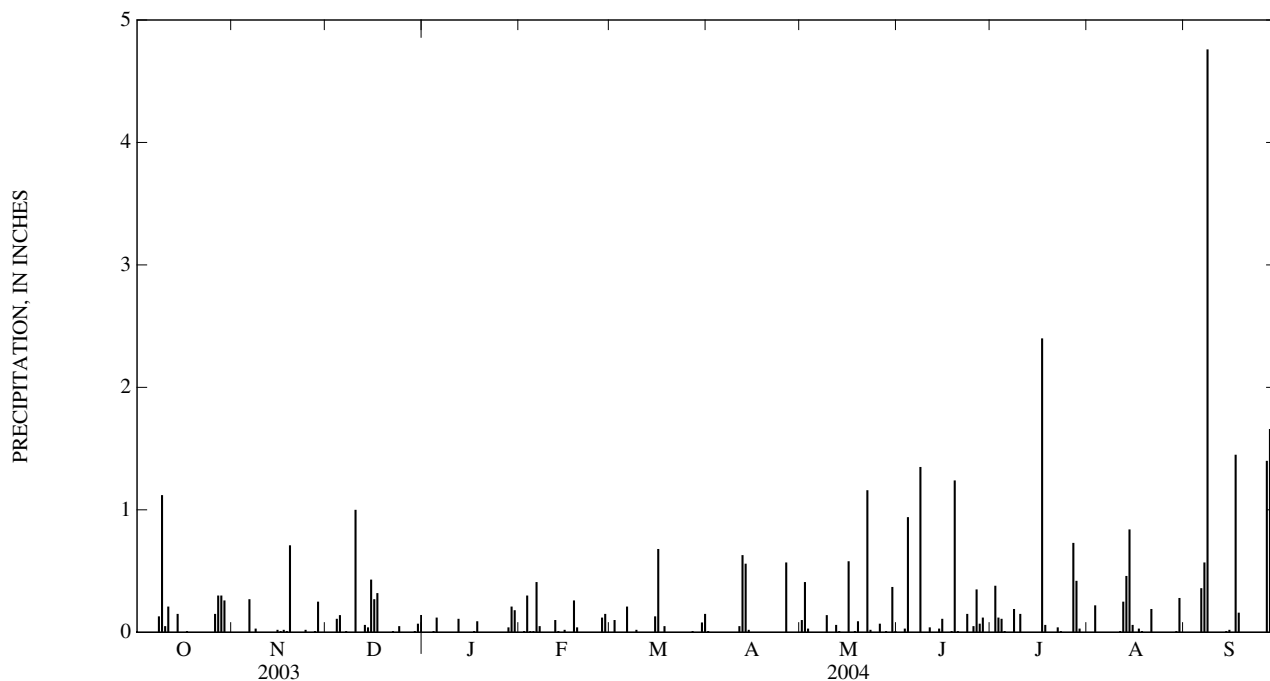
PERIOD OF RECORD.--August 1999 to current year.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP   |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00  |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.10 | 0.00 | 0.41 | 0.00 | 0.38 | 0.00 | 0.00  |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 0.00 | 0.00 | 0.03 | 0.03 | 0.12 | 0.22 | 0.00  |
| 4     | 0.00 | 0.00 | 0.11 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.94 | 0.11 | 0.00 | 0.00  |
| 5     | 0.00 | 0.00 | 0.14 | 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00  |
| 6     | 0.00 | 0.27 | 0.00 | 0.00 | 0.41 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36  |
| 7     | 0.00 | 0.00 | 0.01 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.57  |
| 8     | 0.13 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.35 | 0.19 | 0.00 | 4.76  |
| 9     | 1.12 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00  |
| 10    | 0.05 | 0.00 | 1.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00  |
| 11    | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.04 | 0.00 | 0.01 | 0.00  |
| 12    | 0.00 | 0.00 | 0.00 | 0.11 | 0.10 | 0.00 | 0.63 | 0.06 | 0.00 | 0.00 | 0.25 | 0.00  |
| 13    | 0.00 | 0.00 | 0.06 | 0.00 | 0.01 | 0.00 | 0.56 | 0.01 | 0.00 | 0.00 | 0.46 | 0.00  |
| 14    | 0.15 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.03 | 0.00 | 0.84 | 0.01  |
| 15    | 0.00 | 0.02 | 0.43 | 0.00 | 0.02 | 0.13 | 0.00 | 0.00 | 0.11 | 0.00 | 0.06 | 0.02  |
| 16    | 0.00 | 0.01 | 0.27 | 0.00 | 0.00 | 0.68 | 0.00 | 0.58 | 0.00 | 0.00 | 0.00 | 0.00  |
| 17    | 0.01 | 0.02 | 0.32 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.40 | 0.03 | 1.45  |
| 18    | 0.00 | 0.01 | 0.00 | 0.09 | 0.26 | 0.05 | 0.00 | 0.01 | 0.01 | 0.06 | 0.01 | 0.16  |
| 19    | 0.00 | 0.71 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.09 | 1.24 | 0.00 | 0.00 | 0.00  |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00  |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.19 | 0.00  |
| 22    | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 1.16 | 0.00 | 0.04 | 0.00 | 0.00  |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.15 | 0.01 | 0.00 | 0.00  |
| 24    | 0.00 | 0.02 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00  |
| 26    | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 | 0.07 | 0.35 | 0.00 | 0.00 | 0.00  |
| 27    | 0.30 | 0.01 | 0.00 | 0.00 | 0.12 | 0.01 | 0.00 | 0.00 | 0.07 | 0.73 | 0.00 | 1.40  |
| 28    | 0.30 | 0.25 | 0.00 | 0.04 | 0.15 | 0.00 | 0.00 | 0.01 | 0.12 | 0.42 | 0.00 | 1.66  |
| 29    | 0.26 | 0.00 | 0.01 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.01 | 0.00  |
| 30    | 0.00 | 0.00 | 0.07 | 0.18 | ---  | 0.08 | 0.00 | 0.37 | 0.00 | 0.00 | 0.28 | 0.00  |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.15 | ---  | 0.01 | ---  | 0.00 | 0.00 | ---   |
| TOTAL | 2.68 | 1.35 | 2.52 | 0.77 | 1.49 | 1.43 | 1.84 | 3.07 | 4.50 | 4.65 | 2.36 | 10.39 |



02094500 REEDY FORK NEAR GIBSONVILLE, NC

LOCATION.--Lat 36°10'23", long 79°36'51", Guilford County, Hydrologic Unit 03030002, on right bank 0.2 mi downstream of Huffines Mill on Secondary Road 2719, 1.2 mi upstream from Buffalo Creek, and 6 mi northwest of Gibsonville.

DRAINAGE AREA.--131 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1303: 1929-40 (monthly and yearly runoff). WSP 1383: 1929-30, 1933(M), 1934, 1937(M), 1939-42(M), 1948. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder and rock-masonry control. Datum of gage is 626.88 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Flow regulated since 1923 by Lake Brandt (station 02094117), 14 mi upstream; since 1957 by Lake Higgins (station 02093981) on Brush Creek, a tributary to Lake Brandt; since 1943 by Richland Lake 12 mi. upstream from station; and since 1968 by Lake Townsend (station 02094305), 9 mi upstream from station. City of Greensboro diverted a daily average of 21.9 ft<sup>3</sup>/s from Lake Brandt and a daily average of 32.2 ft<sup>3</sup>/s from Lake Townsend for municipal water supply. Prior to regulation, maximum discharge: 11,600 ft<sup>3</sup>/s, Sept. 25, 1947; gage height: 20.77 ft; minimum discharge not determined. Minimum discharge for current water year also occurred Sept. 6.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1916 reached a stage of 17.90 ft, from information by local resident; discharge, 8,640 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY  | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|------|-------|-------|-------|---------|
| 1     | 27    | 26    | 49    | 71    | 39    | 84    | 58    | 28   | 13    | 12    | 19    | 9.9     |
| 2     | 40    | 23    | 39    | 56    | 64    | 79    | 61    | 36   | 11    | 12    | 18    | 9.1     |
| 3     | 39    | 21    | 26    | 45    | 241   | 88    | 42    | 48   | 9.9   | 15    | 15    | 8.7     |
| 4     | 29    | 24    | 20    | 34    | 365   | 68    | 39    | 84   | 37    | 13    | 13    | 9.0     |
| 5     | 29    | 26    | 27    | 35    | 136   | 53    | 41    | 62   | 38    | 13    | 12    | 7.5     |
| 6     | 23    | 55    | 59    | 64    | 223   | 53    | 28    | 46   | 19    | 12    | 11    | 14      |
| 7     | 23    | 60    | 57    | 51    | 693   | 97    | 22    | 36   | 14    | 10    | 9.0   | 34      |
| 8     | 22    | 42    | 41    | 37    | 374   | 76    | 20    | 28   | 18    | 9.5   | 8.5   | 510     |
| 9     | 29    | 32    | 31    | 29    | 80    | 52    | 19    | 22   | 34    | 9.2   | 8.7   | 1,470   |
| 10    | 30    | 26    | 75    | 57    | 72    | 36    | 18    | 19   | 36    | 13    | 9.1   | 179     |
| 11    | 45    | 23    | 378   | 50    | 76    | 30    | 18    | 18   | 35    | 52    | 12    | 128     |
| 12    | 92    | 27    | 359   | 42    | 281   | 28    | 74    | 16   | 27    | 19    | 46    | 65      |
| 13    | 71    | 38    | 50    | 36    | 47    | 25    | 467   | 15   | 19    | 13    | 80    | 39      |
| 14    | 48    | 39    | 218   | 29    | 27    | 20    | 617   | 15   | 15    | 12    | 164   | 126     |
| 15    | 44    | 41    | 466   | 23    | 29    | 19    | 352   | 14   | 15    | 10    | 94    | 423     |
| 16    | 39    | 45    | 243   | 39    | 50    | 25    | 46    | 20   | 59    | 9.3   | 23    | 134     |
| 17    | 26    | 33    | 210   | 37    | 100   | 39    | 29    | 24   | 34    | 8.8   | 20    | 213     |
| 18    | 23    | 27    | 218   | 33    | 117   | 34    | 32    | 16   | 21    | 40    | 20    | 92      |
| 19    | 20    | 67    | 207   | 53    | 85    | 68    | 40    | 28   | 16    | 106   | 10    | 37      |
| 20    | 22    | 81    | 175   | 46    | 64    | 57    | 46    | 22   | 31    | 156   | 8.0   | 19      |
| 21    | 21    | 80    | 113   | 32    | 58    | 55    | 37    | 19   | 36    | 76    | 8.1   | 14      |
| 22    | 22    | 56    | 93    | 27    | 46    | 49    | 36    | 18   | 36    | 24    | 8.6   | 11      |
| 23    | 24    | 41    | 54    | 33    | 78    | 36    | 34    | 17   | 29    | 18    | 8.9   | 11      |
| 24    | 34    | 31    | 96    | 26    | 68    | 34    | 26    | 16   | 22    | 14    | 8.6   | 10      |
| 25    | 21    | 68    | 80    | 28    | 50    | 34    | 22    | 17   | 17    | 11    | 8.6   | 10      |
| 26    | 21    | 58    | 31    | 43    | 37    | 30    | 23    | 14   | 18    | 9.7   | 8.7   | 12      |
| 27    | 29    | 66    | 21    | 37    | 48    | 31    | 40    | 13   | 19    | 15    | 8.9   | 300     |
| 28    | 36    | 53    | 19    | 36    | 55    | 28    | 43    | 15   | 16    | 41    | 9.0   | 1,450   |
| 29    | 74    | 61    | 18    | 38    | 52    | 24    | 33    | 13   | 14    | 35    | 11    | 1,920   |
| 30    | 46    | 62    | 38    | 59    | ---   | 24    | 30    | 14   | 12    | 27    | 28    | 145     |
| 31    | 31    | ---   | 47    | 58    | ---   | 27    | ---   | 15   | ---   | 23    | 18    | ---     |
| TOTAL | 1,080 | 1,332 | 3,558 | 1,284 | 3,655 | 1,403 | 2,393 | 768  | 720.9 | 838.5 | 726.7 | 7,410.2 |
| MEAN  | 34.8  | 44.4  | 115   | 41.4  | 126   | 45.3  | 79.8  | 24.8 | 24.0  | 27.0  | 23.4  | 247     |
| MAX   | 92    | 81    | 466   | 71    | 693   | 97    | 617   | 84   | 59    | 156   | 164   | 1,920   |
| MIN   | 20    | 21    | 18    | 23    | 27    | 19    | 18    | 13   | 9.9   | 8.8   | 8.0   | 7.5     |

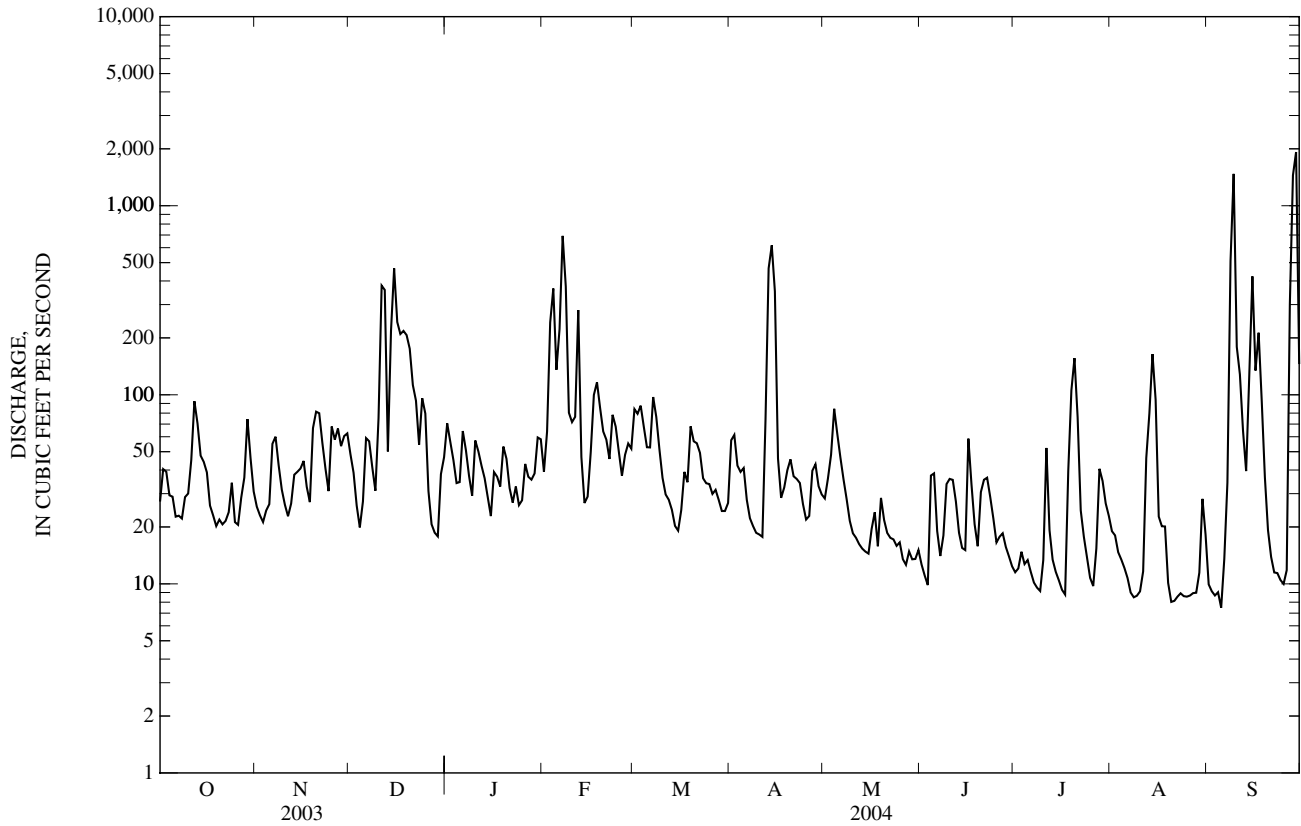
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2004,\* BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 51.5   | 45.7   | 88.3   | 165    | 153    | 173    | 146    | 93.5   | 64.7   | 60.1   | 45.2   | 83.3   |
| MAX  | 432    | 165    | 221    | 644    | 456    | 613    | 613    | 365    | 477    | 596    | 255    | 518    |
| (WY) | (1991) | (1993) | (1973) | (1978) | (1979) | (1993) | (1987) | (1978) | (1982) | (1984) | (2003) | (1996) |
| MIN  | 2.85   | 6.70   | 5.97   | 11.1   | 18.7   | 16.4   | 9.65   | 5.38   | 4.23   | 2.83   | 1.92   | 3.31   |
| (WY) | (1969) | (1970) | (1969) | (1981) | (2002) | (1976) | (2002) | (2002) | (2002) | (1986) | (2002) | (1983) |

02094500 REEDY FORK NEAR GIBSONVILLE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1969 - 2004* |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--------------|
| ANNUAL TOTAL             | 79,986                 |        | 25,169.3            |        | 97.2                     |              |
| ANNUAL MEAN              | 219                    |        | 68.8                |        | 239                      |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 15.6                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 0.27                     | 2002         |
| HIGHEST DAILY MEAN       | 3,910                  | Apr 11 | 1,920               | Sep 29 | 5,230                    | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 14                     | Jan 28 | 7.5                 | Sep 5  | 0.61                     | Aug 17, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 19                     | Jan 23 | 8.5                 | Aug 20 | 0.22                     | Aug 11, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 2,130               | Sep 29 | 6,330                    | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 7.64                | Sep 29 | 15.65                    | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 7.2*                | Sep 5  | 0.22                     | Aug 17, 2002 |
| 10 PERCENT EXCEEDS       | 562                    |        | 102                 |        | 263                      |              |
| 50 PERCENT EXCEEDS       | 68                     |        | 33                  |        | 22                       |              |
| 90 PERCENT EXCEEDS       | 25                     |        | 12                  |        | 5.8                      |              |

\* Regulated period only (1969-2004). See REMARKS.



02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC

LOCATION.--Lat 36°02'58", long 79°51'19", Guilford County, Hydrologic Unit 03030002, on right bank 300 ft upstream of culvert under Merritt Road, 0.7 mi south of post office at Pomona, and 1.0 mi below South Railway trestle.

DRAINAGE AREA.--7.33 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

REVISED RECORDS.--WDR NC-03-1B: 1999-03 (M)

GAGE.--Water-stage recorder. Datum of gage is 771.84 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Maximum discharge for period of record from rating curve extended above 500 ft<sup>3</sup>/s on basis of culvert computation of peak flow. Minimum discharge for period of record occurred several days in 2002.

REVISIONS.--The maximum peak stge for the period of record has been revised to 15.45 feet, superseding the figure published in WDR NC-03-1B.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG    | SEP      |
|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|--------|----------|
| 1     | 2.4   | 1.8   | 2.5   | 2.2  | 2.7   | 4.5   | 14    | 3.7   | 1.6   | 3.1   | 0.94   | 0.72     |
| 2     | 2.3   | 1.8   | 2.3   | 2.1  | 2.3   | 6.1   | 3.5   | 21    | 1.3   | 1.8   | 3.2    | 0.73     |
| 3     | 2.3   | 1.8   | 2.2   | 2.1  | 78    | 4.3   | 2.9   | 12    | 1.4   | 4.4   | 6.2    | 0.68     |
| 4     | 2.6   | 2.1   | 7.4   | 2.2  | 5.6   | 3.8   | 2.7   | 3.3   | 57    | 13    | 0.91   | 0.67     |
| 5     | 2.7   | 2.1   | 11    | 5.8  | 3.8   | 3.4   | 2.5   | 2.4   | 3.9   | 5.0   | 0.82   | 0.65     |
| 6     | 2.7   | 23    | 3.7   | 3.1  | 64    | 21    | 2.5   | 2.2   | 2.3   | 1.9   | 0.85   | 5.6      |
| 7     | 2.8   | 5.8   | 2.8   | 2.3  | 14    | 4.1   | 2.4   | 2.0   | 1.8   | 1.6   | 0.75   | 12       |
| 8     | 2.9   | 1.8   | 2.5   | 2.2  | 4.5   | 3.4   | 2.5   | 2.0   | 2.4   | 3.7   | 0.70   | 740      |
| 9     | 39    | 1.5   | 2.5   | 4.9  | 3.7   | 3.5   | 2.4   | 1.9   | 2.4   | 2.5   | 0.69   | 11       |
| 10    | 8.0   | 1.4   | 89    | 2.8  | 3.3   | 4.3   | 2.3   | 2.3   | 1.5   | 108   | 0.68   | 3.6      |
| 11    | 23    | 1.6   | 11    | 2.4  | 3.0   | 3.4   | 2.5   | 1.8   | 2.3   | 8.9   | 0.66   | 2.6      |
| 12    | 2.9   | 1.5   | 3.8   | 2.3  | 12    | 3.1   | 88    | 2.4   | 1.3   | 2.8   | 3.0    | 2.3      |
| 13    | 2.3   | 1.5   | 4.8   | 2.3  | 4.4   | 2.8   | 106   | 7.5   | 1.5   | 2.5   | 4.1    | 2.2      |
| 14    | 3.2   | 1.4   | 113   | 2.2  | 3.2   | 2.7   | 13    | 2.6   | 2.0   | 4.3   | 54     | 2.2      |
| 15    | 5.3   | 1.5   | 9.6   | 2.3  | 13    | 5.0   | 4.9   | 2.1   | 1.6   | 1.7   | 7.4    | 2.2      |
| 16    | 1.9   | 1.5   | 5.0   | 2.2  | 14    | 24    | 3.8   | 24    | 3.3   | 1.4   | 1.8    | 2.2      |
| 17    | 1.8   | 1.7   | 34    | 2.1  | 5.1   | 5.6   | 3.3   | 3.0   | 2.2   | 281   | 1.0    | 143      |
| 18    | 1.9   | 1.6   | 4.9   | 5.7  | 4.6   | 7.5   | 3.0   | 2.9   | 1.3   | 306   | 1.2    | 19       |
| 19    | 2.0   | 59    | 3.6   | 2.5  | 3.8   | 4.0   | 2.8   | 6.4   | 14    | 4.7   | 0.89   | 3.7      |
| 20    | 1.9   | 6.0   | 3.1   | 2.2  | 3.4   | 3.4   | 2.8   | 4.2   | 3.1   | 2.4   | 0.78   | 2.6      |
| 21    | 2.0   | 3.7   | 2.7   | 2.1  | 3.3   | 3.2   | 2.7   | 2.0   | 1.5   | 2.1   | 0.75   | 2.5      |
| 22    | 1.9   | 3.1   | 2.5   | 2.1  | 2.9   | 2.9   | 2.6   | 34    | 3.0   | 3.7   | 0.76   | 2.4      |
| 23    | 2.1   | 2.8   | 2.4   | 2.1  | 2.6   | 2.8   | 2.4   | 15    | 1.9   | 5.8   | 0.77   | 2.3      |
| 24    | 2.0   | 3.1   | 2.8   | 2.0  | 2.7   | 2.8   | 2.3   | 5.2   | 1.8   | 1.7   | 0.78   | 2.3      |
| 25    | 1.9   | 4.4   | 2.4   | 2.1  | 2.7   | 2.9   | 2.4   | 2.2   | 1.9   | 1.4   | 0.74   | 2.4      |
| 26    | 8.2   | 3.1   | 2.3   | 2.3  | 3.4   | 2.9   | 12    | 2.1   | 48    | 1.5   | 0.71   | 2.4      |
| 27    | 17    | 3.3   | 2.1   | 2.5  | 18    | 3.0   | 3.6   | 3.3   | 8.3   | 32    | 0.72   | 143      |
| 28    | 16    | 16    | 2.1   | 8.2  | 14    | 3.0   | 2.5   | 1.7   | 4.4   | 69    | 0.68   | 478      |
| 29    | 42    | 5.9   | 2.1   | 7.3  | 6.6   | 2.9   | 2.3   | 1.4   | 2.6   | 9.8   | 0.68   | 7.9      |
| 30    | 3.0   | 3.1   | 3.4   | 6.9  | ---   | 3.4   | 2.2   | 9.5   | 6.2   | 2.8   | 11     | 3.5      |
| 31    | 2.0   | ---   | 2.4   | 3.6  | ---   | 13    | ---   | 2.0   | ---   | 1.2   | 1.1    | ---      |
| TOTAL | 212.0 | 168.9 | 345.9 | 97.1 | 304.6 | 162.7 | 302.8 | 188.1 | 187.8 | 891.7 | 109.26 | 1,604.35 |
| MEAN  | 6.84  | 5.63  | 11.2  | 3.13 | 10.5  | 5.25  | 10.1  | 6.07  | 6.26  | 28.8  | 3.52   | 53.5     |
| MAX   | 42    | 59    | 113   | 8.2  | 78    | 24    | 106   | 34    | 57    | 306   | 54     | 740      |
| MIN   | 1.8   | 1.4   | 2.1   | 2.0  | 2.3   | 2.7   | 2.2   | 1.4   | 1.3   | 1.2   | 0.66   | 0.65     |
| CFSM  | 0.93  | 0.77  | 1.52  | 0.43 | 1.43  | 0.72  | 1.38  | 0.83  | 0.85  | 3.92  | 0.48   | 7.30     |
| IN.   | 1.08  | 0.86  | 1.76  | 0.49 | 1.55  | 0.83  | 1.54  | 0.95  | 0.95  | 4.53  | 0.55   | 8.14     |

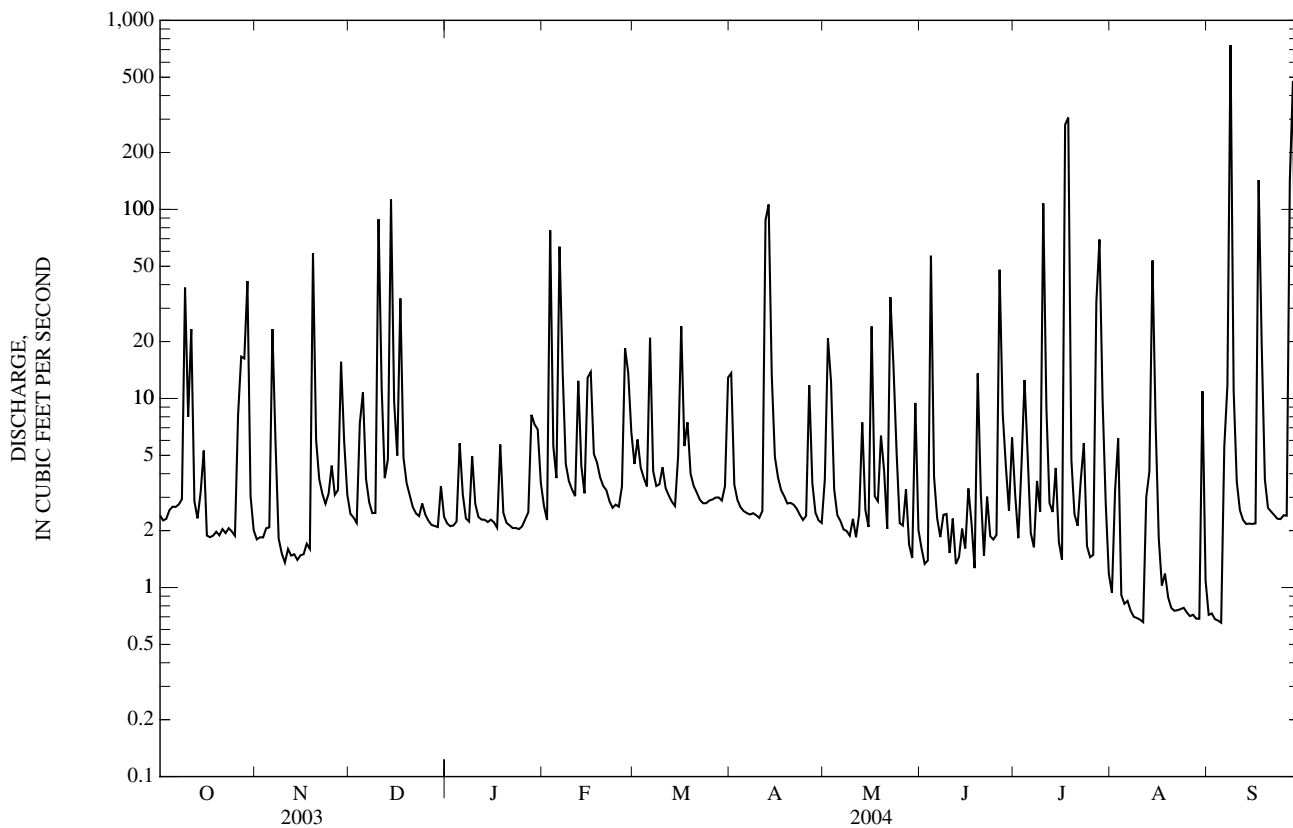
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 10.3   | 6.97   | 10.1   | 9.88   | 11.7   | 17.1   | 16.5   | 11.2   | 10.1   | 12.7   | 10.0   | 32.1   |
| MAX  | 28.3   | 20.0   | 24.2   | 17.5   | 21.4   | 41.0   | 46.8   | 32.8   | 26.9   | 28.8   | 19.1   | 53.5   |
| (WY) | (2003) | (2003) | (2003) | (2002) | (2003) | (2003) | (2003) | (2003) | (2003) | (2004) | (2003) | (2004) |
| MIN  | 1.90   | 1.09   | 2.56   | 3.13   | 4.18   | 5.25   | 2.12   | 3.69   | 2.34   | 5.27   | 3.52   | 9.46   |
| (WY) | (2001) | (2002) | (2001) | (2004) | (2002) | (2004) | (2002) | (2002) | (2002) | (2002) | (2004) | (2002) |

02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1999 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 8,589.1                |        | 4,575.21            |        |                         |              |
| ANNUAL MEAN              | 23.5                   |        | 12.5                |        | 13.5                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 27.6                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 6.22                    | 2002         |
| HIGHEST DAILY MEAN       | 676                    | Mar 20 | 740                 | Sep 8  | 740                     | Sep 8, 2004  |
| LOWEST DAILY MEAN        | 1.4                    | Nov 10 | 0.65                | Sep 5  | 0.11                    | Jun 22, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 1.5                    | Nov 9  | 0.73                | Aug 23 | 0.13                    | Aug 7, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 3,170               | Jul 18 | 3350*                   | Sep 23, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 14.61               | Jul 18 | 15.45                   | Sep 23, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.59*               | Aug 7  | 0.10*                   | Jun 22, 2002 |
| ANNUAL RUNOFF (CFSM)     | 3.21                   |        | 1.71                |        | 1.85                    |              |
| ANNUAL RUNOFF (INCHES)   | 43.59                  |        | 23.22               |        | 25.10                   |              |
| 10 PERCENT EXCEEDS       | 43                     |        | 14                  |        | 27                      |              |
| 50 PERCENT EXCEEDS       | 4.8                    |        | 2.8                 |        | 2.6                     |              |
| 90 PERCENT EXCEEDS       | 2.1                    |        | 1.4                 |        | 0.72                    |              |

\* See REMARKS.





02094659 SOUTH BUFFALO CREEK NEAR POMONA, NC—Continued

PRECIPITATION RECORDS

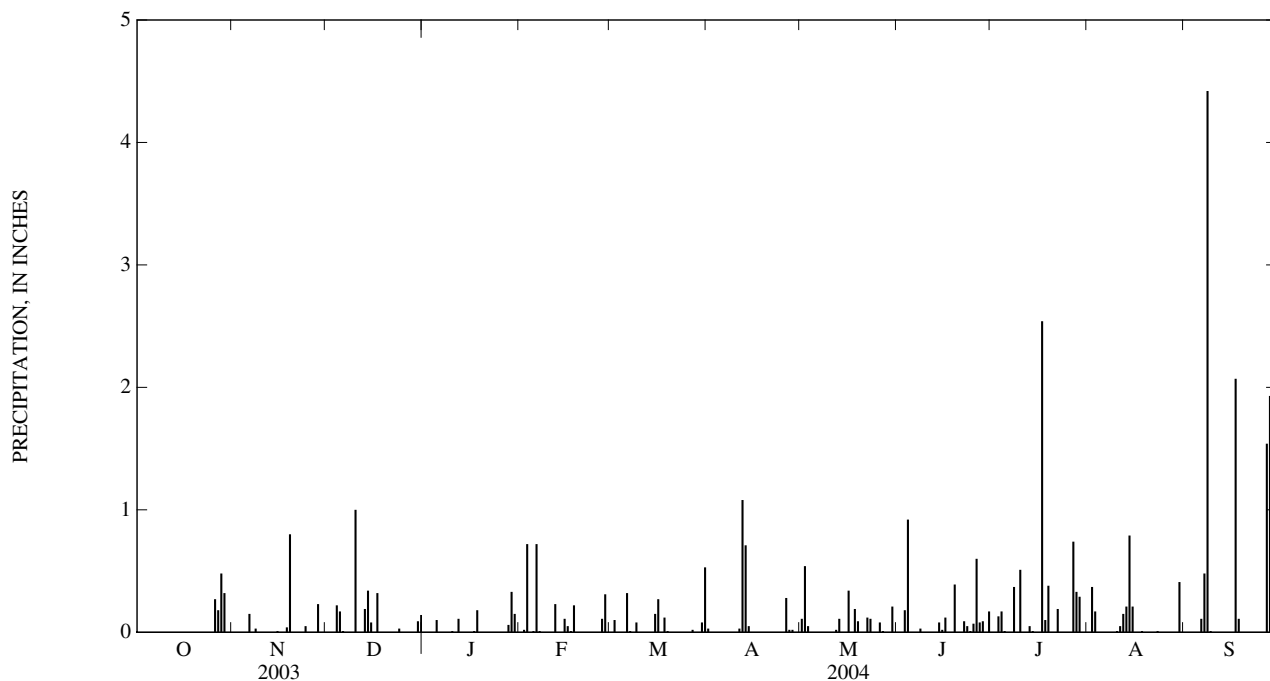
PERIOD OF RECORD.--January 2000 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP   |
|-------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.11 | 0.00 | 0.00 | 0.00 | 0.00  |
| 2     | ---  | 0.00 | 0.00 | 0.00 | 0.02 | 0.10 | 0.00 | 0.54 | 0.00 | 0.00 | 0.37 | 0.00  |
| 3     | ---  | 0.00 | 0.00 | 0.00 | 0.72 | 0.00 | 0.00 | 0.05 | 0.18 | 0.13 | 0.17 | 0.00  |
| 4     | ---  | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.92 | 0.17 | 0.00 | 0.00  |
| 5     | ---  | 0.00 | 0.17 | 0.10 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00  |
| 6     | ---  | 0.15 | 0.01 | 0.00 | 0.72 | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11  |
| 7     | ---  | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48  |
| 8     | ---  | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.37 | 0.00 | 4.42  |
| 9     | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01  |
| 10    | ---  | 0.00 | 1.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 0.01 | 0.00  |
| 11    | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00  |
| 12    | ---  | 0.00 | 0.00 | 0.11 | 0.23 | 0.00 | 1.08 | 0.02 | 0.00 | 0.00 | 0.15 | 0.00  |
| 13    | ---  | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.71 | 0.11 | 0.00 | 0.05 | 0.21 | 0.00  |
| 14    | ---  | 0.00 | 0.34 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.08 | 0.01 | 0.79 | 0.00  |
| 15    | 0.00 | 0.01 | 0.08 | 0.00 | 0.11 | 0.15 | 0.00 | 0.00 | 0.02 | 0.00 | 0.21 | 0.00  |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.27 | 0.00 | 0.34 | 0.12 | 0.00 | 0.00 | 0.00  |
| 17    | 0.00 | 0.00 | 0.32 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 2.54 | 0.00 | 2.07  |
| 18    | 0.00 | 0.04 | 0.00 | 0.18 | 0.22 | 0.12 | 0.00 | 0.19 | 0.00 | 0.10 | 0.01 | 0.11  |
| 19    | 0.00 | 0.80 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.09 | 0.39 | 0.38 | 0.00 | 0.00  |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00  |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.09 | 0.19 | 0.00 | 0.00  |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.05 | 0.00 | 0.01 | 0.00  |
| 24    | 0.00 | 0.05 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00  |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00  |
| 26    | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.08 | 0.60 | 0.00 | 0.00 | 0.00  |
| 27    | 0.18 | 0.00 | 0.00 | 0.00 | 0.11 | 0.02 | 0.02 | 0.01 | 0.08 | 0.74 | 0.00 | 1.54  |
| 28    | 0.48 | 0.23 | 0.00 | 0.06 | 0.31 | 0.00 | 0.02 | 0.00 | 0.09 | 0.33 | 0.00 | 1.93  |
| 29    | 0.32 | 0.00 | 0.00 | 0.33 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.00  |
| 30    | 0.00 | 0.00 | 0.09 | 0.15 | ---  | 0.08 | 0.00 | 0.21 | 0.17 | 0.00 | 0.41 | 0.00  |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.53 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---   |
| TOTAL | ---  | 1.31 | 2.45 | 0.95 | 2.52 | 1.69 | 2.22 | 1.98 | 2.90 | 5.82 | 2.39 | 10.67 |

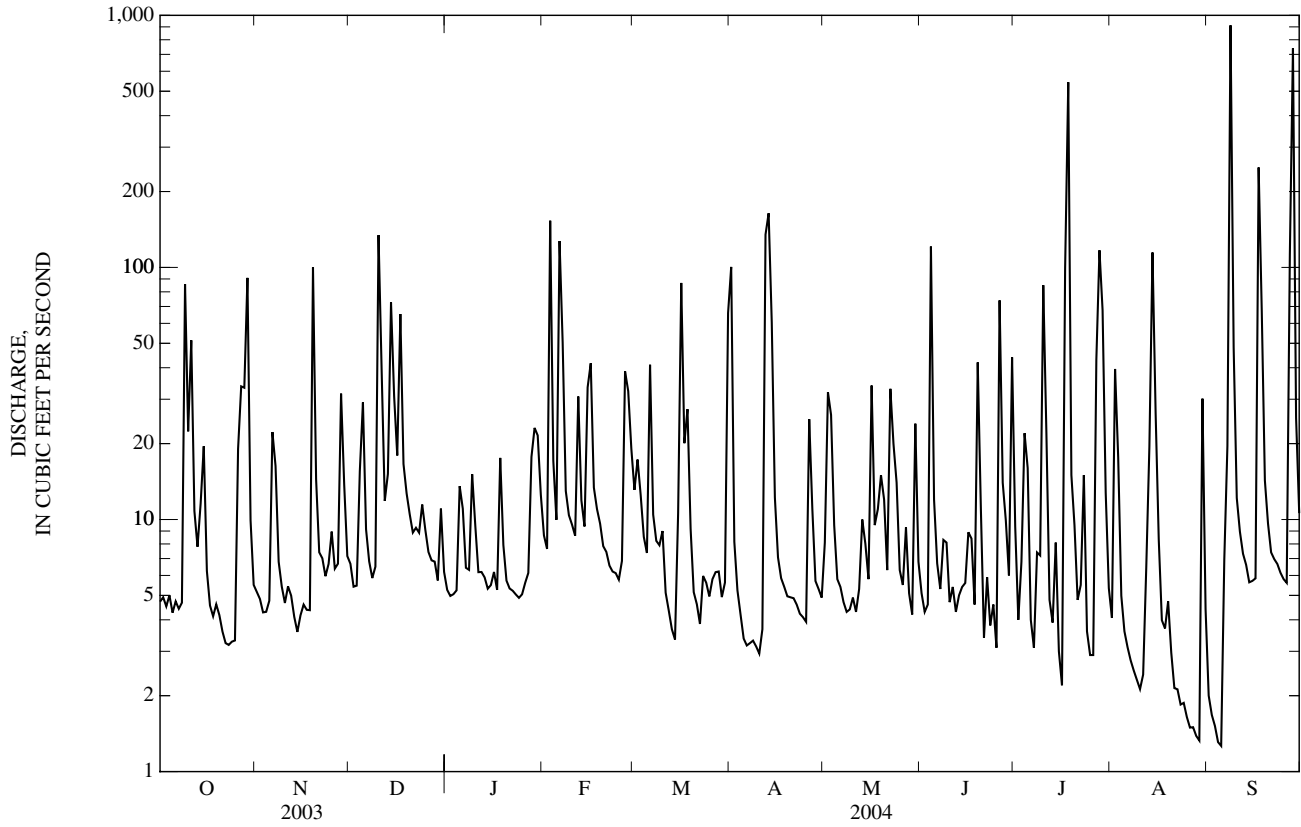




02094770 SOUTH BUFFALO CREEK AT US 220 AT GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1998 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 15,160.9               |        | 8,043.5             |        | 26.8                    |              |
| ANNUAL MEAN              | 41.5                   |        | 22.0                |        | 50.6                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 10.7                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 10.7                    | 2002         |
| HIGHEST DAILY MEAN       | 916                    | Apr 10 | 913                 | Sep 8  | 1,640                   | Sep 2, 2000  |
| LOWEST DAILY MEAN        | 3.2                    | Jan 28 | 1.3                 | Aug 29 | 0.10                    | Aug 14, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 3.6                    | Oct 19 | 1.6                 | Aug 23 | 0.19                    | Sep 13, 2001 |
| MAXIMUM PEAK FLOW        |                        |        | 2,250               | Sep 8  | 2,770                   | Sep 23, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 15.17               | Sep 8  | 16.44                   | Sep 23, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | NOT DETERMINED      |        | 0.08                    | Aug 14, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.70                   |        | 1.43                |        | 1.74                    |              |
| ANNUAL RUNOFF (INCHES)   | 36.62                  |        | 19.43               |        | 23.65                   |              |
| 10 PERCENT EXCEEDS       | 89                     |        | 39                  |        | 50                      |              |
| 50 PERCENT EXCEEDS       | 9.9                    |        | 6.6                 |        | 5.4                     |              |
| 90 PERCENT EXCEEDS       | 4.4                    |        | 3.3                 |        | 1.7                     |              |

e Estimated.



02094770 SOUTH BUFFALO CREEK AT US 220 AT GREENSBORO, NC—Continued

PRECIPITATION RECORDS

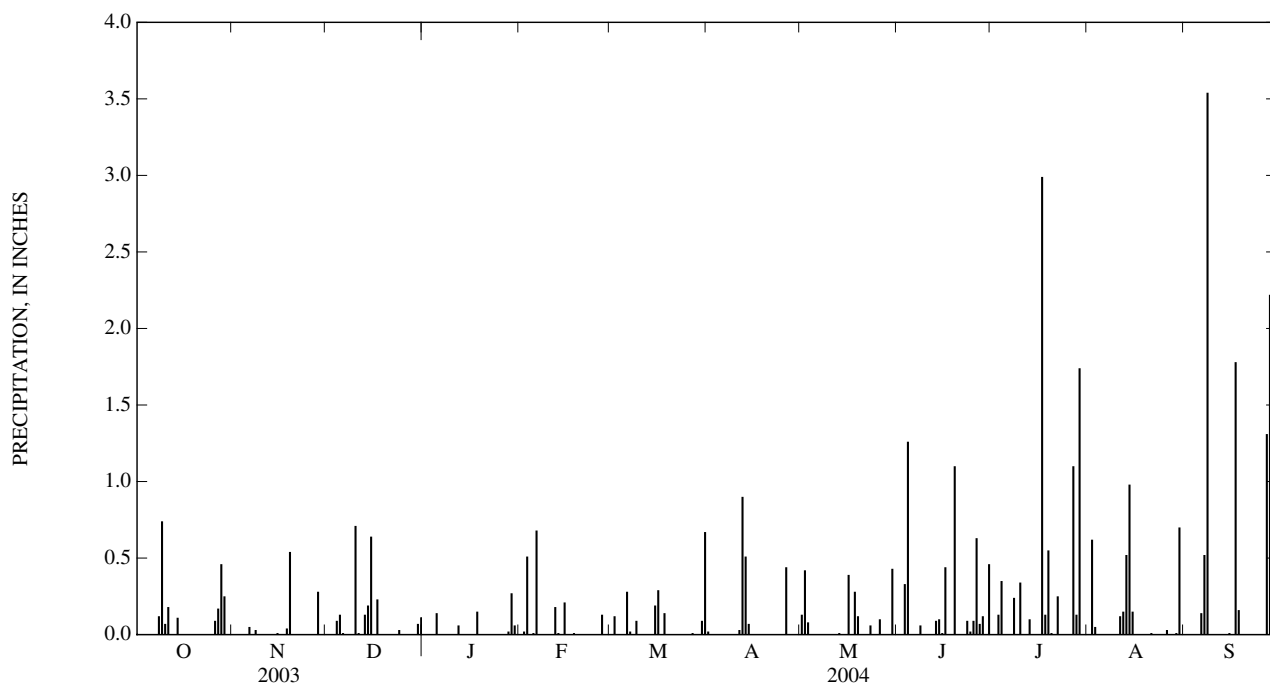
PERIOD OF RECORD.--August 1998 to current year. Records for August 1998 to December 1999 are unpublished and available in the USGS District Office in Raleigh, NC.

GAGE.--Tipping bucket raingage and data collection platform.

REMARKS.--Records poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.12 | 0.00 | 0.42 | 0.00 | 0.00 | 0.62 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 | 0.00 | 0.00 | 0.08 | 0.33 | 0.13 | 0.05 | 0.00 |
| 4     | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.26 | 0.35 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.13 | 0.14 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | 0.05 | 0.01 | 0.00 | 0.68 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.52 |
| 8     | 0.12 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.24 | 0.00 | 3.54 |
| 9     | 0.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10    | 0.07 | 0.00 | 0.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 |
| 11    | 0.18 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.12 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.06 | 0.18 | 0.00 | 0.90 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 |
| 13    | 0.00 | 0.00 | 0.13 | 0.00 | 0.01 | 0.00 | 0.51 | 0.01 | 0.09 | 0.10 | 0.52 | 0.00 |
| 14    | 0.11 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.10 | 0.00 | 0.98 | 0.00 |
| 15    | 0.00 | 0.01 | 0.64 | 0.00 | 0.21 | 0.19 | 0.00 | 0.00 | 0.01 | 0.00 | 0.15 | 0.01 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.39 | 0.44 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.99 | 0.00 | 1.78 |
| 18    | 0.00 | 0.04 | 0.00 | 0.15 | 0.01 | 0.14 | 0.00 | 0.28 | 0.00 | 0.13 | 0.00 | 0.16 |
| 19    | 0.00 | 0.54 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 1.10 | 0.55 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.09 | 0.00 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 26    | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.44 | 0.10 | 0.63 | 0.00 | 0.03 | 0.00 |
| 27    | 0.17 | 0.00 | 0.00 | 0.00 | 0.13 | 0.01 | 0.00 | 0.00 | 0.07 | 1.10 | 0.00 | 1.31 |
| 28    | 0.46 | 0.28 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.13 | 0.00 | 2.22 |
| 29    | 0.25 | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.74 | 0.01 | 0.00 |
| 30    | 0.00 | 0.00 | 0.07 | 0.06 | ---  | 0.09 | 0.00 | 0.43 | 0.46 | 0.00 | 0.70 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.67 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 2.19 | 0.95 | 2.24 | 0.70 | 1.76 | 1.90 | 1.97 | 2.02 | 4.87 | 8.06 | 3.34 | 9.68 |



## 02094775 RYAN CREEK BELOW US HIGHWAY 220 AT GREENSBORO, NC

LOCATION.--Lat 36°01'52", long 79°47'46", Guilford County, Hydrologic Unit 03030002, on left bank 0.6 mi upstream of South Buffalo Creek, and .2 mi below US Highway 220 in Greensboro.

DRAINAGE AREA.--4.12 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

REVISED RECORDS.--WDR NC-02-1B: 1999-2001(M).

GAGE.--Water-stage recorder. Elevation of gage is 730 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. No flow occurred several days in Aug. 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN  | FEB   | MAR  | APR   | MAY   | JUN   | JUL    | AUG   | SEP    |
|-------|-------|-------|--------|------|-------|------|-------|-------|-------|--------|-------|--------|
| 1     | 1.4   | 1.2   | 0.97   | 1.8  | 2.2   | 2.7  | 13    | 2.2   | 0.82  | 0.59   | 1.2   | 0.58   |
| 2     | 1.0   | 1.2   | 1.0    | 1.9  | 1.8   | 3.6  | 2.0   | 4.7   | 0.67  | 0.52   | 3.6   | 0.53   |
| 3     | 1.0   | 1.1   | 0.87   | 1.9  | 38    | 2.6  | 1.7   | 4.4   | 0.71  | 5.2    | 2.7   | 0.47   |
| 4     | 1.1   | 1.0   | 2.1    | 1.9  | 5.4   | 1.9  | 1.5   | 2.0   | 35    | 16     | 1.1   | 0.46   |
| 5     | 1.00  | 1.2   | 4.0    | 3.7  | 2.9   | 1.8  | 1.4   | 1.4   | 1.6   | 4.2    | 0.86  | 0.47   |
| 6     | 1.1   | 1.6   | 1.4    | 2.5  | 37    | 7.3  | 1.4   | 1.2   | 0.78  | 0.65   | 0.78  | 1.5    |
| 7     | 1.2   | 1.7   | 1.1    | 1.8  | 10    | 2.4  | 1.5   | 1.2   | 0.73  | 0.52   | 0.74  | 3.6    |
| 8     | 1.3   | 1.4   | 1.0    | 1.8  | 2.8   | 1.8  | 1.3   | 1.1   | 0.94  | 1.8    | 0.69  | 267    |
| 9     | 14    | 1.1   | 0.99   | 3.5  | 2.0   | 2.1  | 1.2   | 1.1   | 0.99  | 1.1    | 0.68  | 4.8    |
| 10    | 2.1   | 1.1   | 31     | 2.7  | 1.7   | 2.1  | 1.2   | 1.1   | 0.63  | 9.6    | 0.66  | 1.8    |
| 11    | 7.1   | 1.2   | 6.4    | 2.5  | 1.7   | 1.7  | 1.3   | 1.00  | 0.59  | 2.3    | 0.86  | 1.3    |
| 12    | 1.2   | 1.3   | 2.2    | 2.5  | 5.6   | 1.6  | 25    | 0.99  | 0.55  | 0.60   | 1.9   | 1.2    |
| 13    | 0.92  | 1.00  | 2.8    | 2.3  | 2.3   | 1.5  | 30    | 1.00  | 0.83  | 0.57   | 11    | 1.1    |
| 14    | 3.9   | 0.91  | 50     | 2.1  | 1.8   | 1.5  | 5.5   | 0.99  | 0.79  | 0.95   | 35    | 1.0    |
| 15    | 3.3   | 1.2   | 5.8    | 2.0  | 8.1   | 2.5  | 2.5   | 1.0   | 0.73  | 0.50   | 4.4   | 0.92   |
| 16    | 0.88  | 1.3   | 3.5    | 1.9  | 8.1   | 7.5  | 2.0   | 1.8   | 1.3   | 0.44   | 1.7   | 0.87   |
| 17    | 0.85  | 1.3   | 13     | 2.4  | 3.0   | 3.7  | 1.8   | 1.1   | 0.98  | 55     | 0.82  | 76     |
| 18    | 0.76  | 1.5   | 3.5    | 4.1  | 2.9   | 4.6  | 1.7   | 6.5   | 0.54  | 133    | 0.73  | 11     |
| 19    | 0.79  | 16    | 2.6    | 2.7  | 2.5   | 2.5  | 1.5   | 4.1   | 6.7   | 6.5    | 0.65  | 2.2    |
| 20    | 0.82  | 1.8   | 2.3    | 2.3  | 2.1   | 1.9  | 1.5   | 2.0   | 1.3   | 2.3    | 0.58  | 1.4    |
| 21    | 0.86  | 1.1   | 2.1    | 1.8  | 1.9   | 1.8  | 1.5   | 1.1   | 0.54  | 1.1    | 0.58  | 1.3    |
| 22    | 0.83  | 1.0   | 2.1    | 1.8  | 1.6   | 1.6  | 1.4   | 0.88  | 0.56  | 2.3    | 0.55  | 1.2    |
| 23    | 0.76  | 1.0   | 2.1    | 1.7  | 1.6   | 1.5  | 1.3   | 1.2   | 0.85  | 3.5    | 0.52  | 1.00   |
| 24    | 1.0   | 1.1   | 2.5    | 1.6  | 1.6   | 1.6  | 1.3   | 1.7   | 0.98  | 0.86   | 0.52  | 0.91   |
| 25    | 0.88  | 1.0   | 1.9    | 1.8  | 1.5   | 1.6  | 1.2   | 0.84  | 0.60  | 0.73   | 0.52  | 0.91   |
| 26    | 1.9   | 1.1   | 1.9    | 1.8  | 1.8   | 1.6  | 6.3   | 1.3   | 12    | 0.78   | 0.51  | 0.84   |
| 27    | 4.3   | 1.2   | 1.9    | 2.0  | 5.4   | 1.6  | 2.0   | 2.0   | 1.7   | 8.2    | 0.48  | 34     |
| 28    | 9.7   | 8.5   | 1.8    | 3.1  | 8.1   | 1.6  | 1.2   | 0.86  | 4.3   | 26     | 0.47  | 234    |
| 29    | 15    | 1.8   | 1.9    | 4.3  | 4.3   | 1.5  | 1.2   | 0.81  | 1.2   | 58     | 0.51  | 4.5    |
| 30    | 1.6   | 1.0   | 2.8    | 5.3  | ---   | 1.9  | 1.2   | 8.3   | 1.0   | 4.0    | 8.5   | 2.2    |
| 31    | 1.2   | ---   | 2.0    | 3.3  | ---   | 11   | ---   | 1.1   | ---   | 1.6    | 0.84  | ---    |
| TOTAL | 83.75 | 58.91 | 159.53 | 76.8 | 169.7 | 84.6 | 117.6 | 60.97 | 80.91 | 349.41 | 84.65 | 659.06 |
| MEAN  | 2.70  | 1.96  | 5.15   | 2.48 | 5.85  | 2.73 | 3.92  | 1.97  | 2.70  | 11.3   | 2.73  | 22.0   |
| MAX   | 15    | 16    | 50     | 5.3  | 38    | 11   | 30    | 8.3   | 35    | 133    | 35    | 267    |
| MIN   | 0.76  | 0.91  | 0.87   | 1.6  | 1.5   | 1.5  | 1.2   | 0.81  | 0.54  | 0.44   | 0.47  | 0.46   |
| CFSM  | 0.66  | 0.48  | 1.25   | 0.60 | 1.42  | 0.66 | 0.95  | 0.48  | 0.65  | 2.74   | 0.66  | 5.33   |
| IN.   | 0.76  | 0.53  | 1.44   | 0.69 | 1.53  | 0.76 | 1.06  | 0.55  | 0.73  | 3.15   | 0.76  | 5.95   |

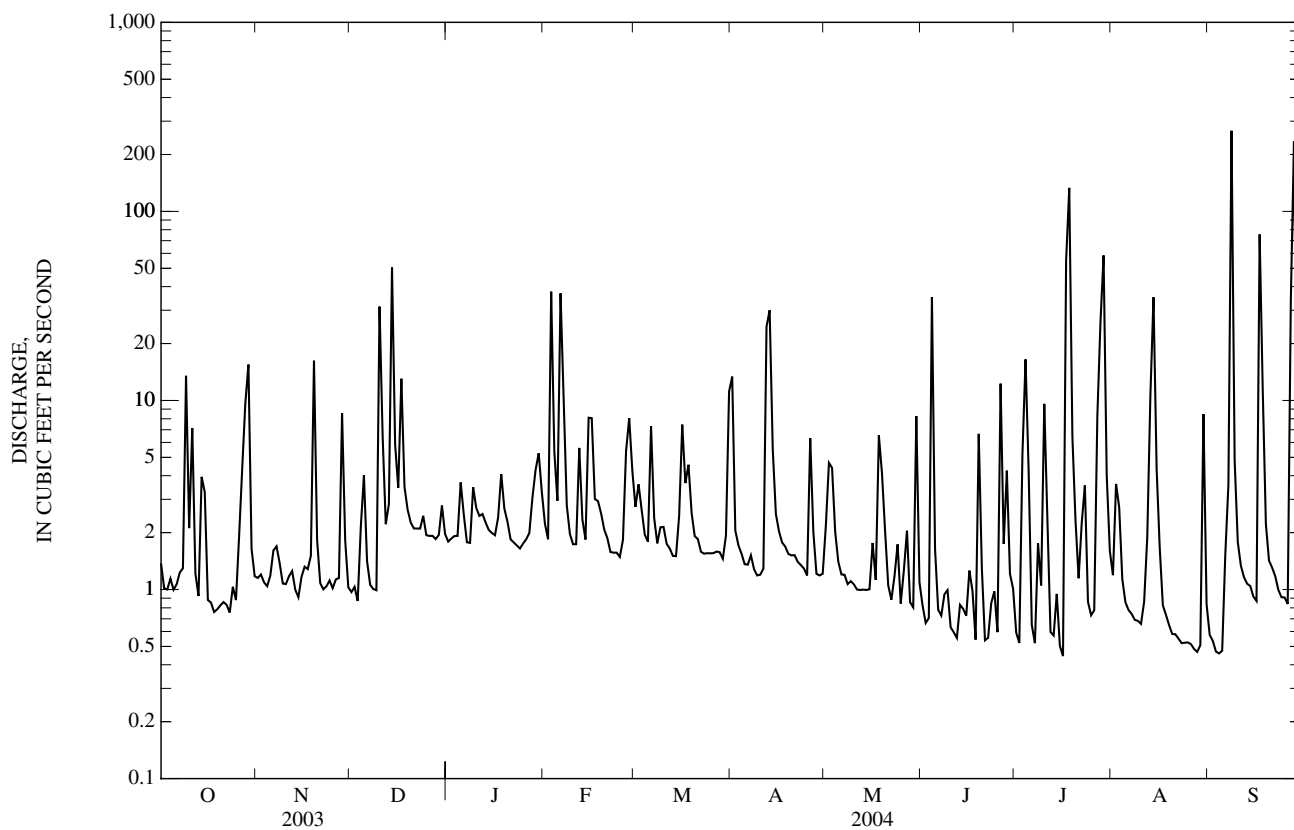
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 4.30   | 3.10   | 4.73   | 6.26   | 5.13   | 6.95   | 6.05   | 3.33   | 5.24   | 5.93   | 4.18   | 12.5   |
| MAX  | 17.9   | 12.7   | 13.6   | 12.9   | 10.4   | 17.5   | 20.4   | 11.4   | 17.5   | 14.1   | 11.1   | 29.9   |
| (WY) | (2003) | (2003) | (2003) | (2002) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2000) |
| MIN  | 0.31   | 0.42   | 1.35   | 2.48   | 2.13   | 2.73   | 0.76   | 1.05   | 0.14   | 0.89   | 1.66   | 1.14   |
| (WY) | (1999) | (1999) | (2001) | (2004) | (1999) | (2004) | (2002) | (1999) | (2002) | (1999) | (1998) | (1998) |

02094775 RYAN CREEK BELOW US HIGHWAY 220 AT GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1998 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 4,059.18               |        | 1,985.89            |        | 5.82                    |              |
| ANNUAL MEAN              | 11.1                   |        | 5.43                |        | 2.98                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 14.0                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2.98                    | 2002         |
| HIGHEST DAILY MEAN       | 256                    | Mar 20 | 267                 | Sep 8  | 393                     | Sep 15, 2000 |
| LOWEST DAILY MEAN        | 0.60                   | Jun 26 | 0.44                | Jul 16 | 0.00                    | Aug 6, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 0.81                   | Oct 17 | 0.50                | Aug 23 | 0.00                    | Aug 6, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 795                 | Jul 17 | 1,060                   | Jul 13, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 8.69                | Jul 17 | 12.53                   | Jul 13, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.30                | Jul 17 | 0.00*                   | Aug 6, 2002  |
| ANNUAL RUNOFF (CFSM)     | 2.70                   |        | 1.32                |        | 1.41                    |              |
| ANNUAL RUNOFF (INCHES)   | 36.65                  |        | 17.93               |        | 19.20                   |              |
| 10 PERCENT EXCEEDS       | 24                     |        | 7.7                 |        | 9.6                     |              |
| 50 PERCENT EXCEEDS       | 2.3                    |        | 1.6                 |        | 1.2                     |              |
| 90 PERCENT EXCEEDS       | 1.0                    |        | 0.72                |        | 0.25                    |              |

\* See REMARKS.



02094775 RYAN CREEK BELOW US 220 AT GREENSBORO, NC—Continued

PRECIPITATION RECORDS

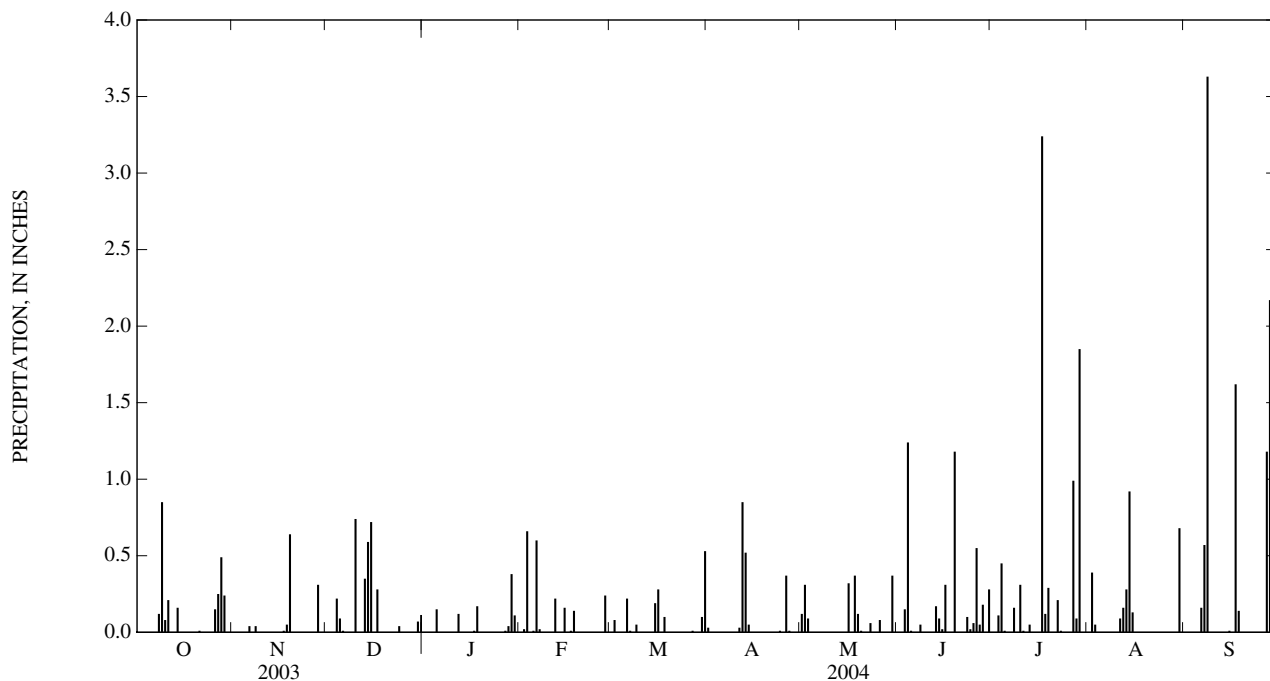
PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.08 | 0.00 | 0.31 | 0.00 | 0.00 | 0.39 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.66 | 0.00 | 0.00 | 0.09 | 0.15 | 0.11 | 0.05 | 0.00 |
| 4     | 0.00 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.24 | 0.45 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.09 | 0.15 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 |
| 6     | 0.00 | 0.04 | 0.01 | 0.00 | 0.60 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 |
| 8     | 0.12 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.16 | 0.00 | 3.63 |
| 9     | 0.85 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10    | 0.08 | 0.00 | 0.74 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.00 | 0.00 |
| 11    | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.01 | 0.09 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.12 | 0.22 | 0.00 | 0.85 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 |
| 13    | 0.00 | 0.00 | 0.35 | 0.00 | 0.00 | 0.00 | 0.52 | 0.00 | 0.17 | 0.05 | 0.28 | 0.00 |
| 14    | 0.16 | 0.00 | 0.59 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.09 | 0.00 | 0.92 | 0.00 |
| 15    | 0.00 | 0.00 | 0.72 | 0.00 | 0.16 | 0.19 | 0.00 | 0.00 | 0.02 | 0.00 | 0.13 | 0.01 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.00 | 0.32 | 0.31 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.01 | 0.28 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 3.24 | 0.00 | 1.62 |
| 18    | 0.00 | 0.05 | 0.00 | 0.17 | 0.14 | 0.10 | 0.00 | 0.37 | 0.00 | 0.12 | 0.00 | 0.14 |
| 19    | 0.00 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 1.18 | 0.29 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.10 | 0.01 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 26    | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.37 | 0.08 | 0.55 | 0.00 | 0.00 | 0.00 |
| 27    | 0.25 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.01 | 0.00 | 0.05 | 0.99 | 0.00 | 1.18 |
| 28    | 0.49 | 0.31 | 0.00 | 0.04 | 0.24 | 0.00 | 0.00 | 0.00 | 0.18 | 0.09 | 0.00 | 2.17 |
| 29    | 0.24 | 0.00 | 0.00 | 0.38 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.85 | 0.00 | 0.00 |
| 30    | 0.00 | 0.00 | 0.07 | 0.11 | ---  | 0.10 | 0.00 | 0.37 | 0.28 | 0.00 | 0.68 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.53 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 2.56 | 1.09 | 3.11 | 0.99 | 2.08 | 1.57 | 1.87 | 1.85 | 4.46 | 7.90 | 2.70 | 9.48 |



02095000 SOUTH BUFFALO CREEK NEAR GREENSBORO, NC

LOCATION.--Lat 36°03'36", long 79°43'33", Guilford County, Hydrologic Unit 03030002, on left bank at upstream side of bridge on Secondary Road 3000, 3.8 mi east of Greensboro, 4.0 mi downstream from Run Creek.

DRAINAGE AREA.--34.0 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to September 1958. August 1998 to current year. Prior to October 1952, published as "Buffalo Creek near Greensboro".

REVISIONS.--WSP 972: 1928-30, 1932-33, 1934(M), 1935-37, 1939, 1940(M). WSP 1303: 1934, 1938, 1940-42, monthly and yearly runoff. WSP 1383: Drainage area, 1931, 1941(M).

GAGE.--Water-stage recorder. Elevation of gage is 700 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. Maximum discharge 10,000 ft<sup>3</sup>/s July 15, 1949, gage-height 11.54 ft, from rating curve extended above 2,000 ft<sup>3</sup>/s based on contracted-opening measurement, site and datum then in use.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT     | NOV   | DEC     | JAN  | FEB   | MAR  | APR   | MAY  | JUN     | JUL     | AUG   | SEP     |
|-------|---------|-------|---------|------|-------|------|-------|------|---------|---------|-------|---------|
| 1     | 12      | 9.5   | 8.9     | 14   | 14    | 29   | 191   | 21   | 18      | 32      | 13    | 6.9     |
| 2     | 11      | 8.9   | 8.1     | 13   | 12    | 31   | 24    | 64   | 15      | 10      | 71    | 5.7     |
| 3     | 10      | 9.0   | 7.8     | 13   | 409   | 29   | 18    | 68   | 17      | 13      | 47    | 5.0     |
| 4     | e11     | 9.0   | 14      | 13   | 43    | 19   | 16    | 31   | 339     | 47      | 14    | 4.6     |
| 5     | e10     | 9.5   | 52      | 25   | 23    | 16   | 14    | 16   | 44      | 62      | 8.8   | 4.3     |
| 6     | e10     | 20    | 15      | 27   | 322   | 76   | 13    | 15   | 21      | 9.8     | 7.3   | 24      |
| 7     | e9.6    | 32    | 11      | 14   | 187   | 24   | 13    | 12   | 17      | 6.8     | 6.3   | 54      |
| 8     | e9.8    | 14    | 9.4     | 13   | 30    | 16   | 13    | 11   | 31      | 18      | 5.7   | 1,780   |
| 9     | 185     | 11    | 9.2     | 25   | 21    | 16   | 13    | 12   | 29      | 23      | 5.4   | 461     |
| 10    | 59      | 9.9   | 265     | 21   | 19    | 21   | 13    | 12   | 16      | 102     | 5.0   | 38      |
| 11    | 86      | 10    | 107     | 16   | 17    | 15   | 15    | 12   | 15      | 64      | 9.4   | 28      |
| 12    | 21      | 11    | 18      | 15   | 54    | 14   | 288   | 13   | 15      | 9.8     | 23    | 17      |
| 13    | 15      | 9.7   | 13      | 15   | 25    | 12   | 356   | 18   | 18      | 7.2     | 58    | 11      |
| 14    | 16      | 9.1   | 534     | 14   | 18    | 12   | 76    | 28   | 16      | 19      | 324   | 9.7     |
| 15    | 46      | 9.7   | 63      | 14   | 55    | 18   | 32    | 18   | 21      | 6.3     | 59    | 9.2     |
| 16    | 14      | 10    | 37      | 14   | 90    | 75   | e23   | 64   | 27      | 4.2     | 30    | 8.7     |
| 17    | 13      | 9.5   | 128     | 13   | 33    | 42   | e20   | 34   | 35      | 61      | 14    | 682     |
| 18    | 13      | 11    | 39      | 34   | 26    | 35   | e18   | 48   | 18      | 1,380   | 9.9   | 191     |
| 19    | 12      | 195   | 26      | 19   | 25    | 25   | e18   | 42   | 157     | 53      | 11    | 42      |
| 20    | 12      | 32    | 21      | 14   | 20    | 16   | e17   | 43   | 41      | 40      | 8.8   | 25      |
| 21    | 12      | 13    | 18      | 13   | 18    | 15   | e16   | 21   | 8.9     | 12      | 8.2   | 19      |
| 22    | 12      | 10    | 17      | 13   | 15    | 13   | e15   | 46   | 14      | 10      | 8.6   | 15      |
| 23    | 11      | 9.2   | 17      | 12   | 14    | 15   | e17   | 35   | 9.1     | 45      | 5.6   | 14      |
| 24    | 11      | 8.9   | 20      | 12   | 14    | 15   | e16   | 44   | 13      | 9.2     | 5.4   | 12      |
| 25    | 12      | 11    | 16      | 12   | 13    | 15   | e15   | 20   | 6.2     | 6.7     | 5.0   | 11      |
| 26    | 32      | 9.2   | 15      | 17   | 14    | e15  | 67    | 16   | 157     | 6.6     | 4.7   | 10      |
| 27    | 66      | 8.6   | 15      | 17   | 61    | e16  | 36    | 30   | 28      | 77      | 4.6   | 137     |
| 28    | 69      | 53    | 14      | 30   | 66    | e13  | 15    | 17   | 26      | 283     | 4.3   | 2,000   |
| 29    | 205     | 28    | 14      | 46   | 47    | e12  | 14    | 14   | 16      | 428     | 4.2   | 67      |
| 30    | 18      | 11    | 23      | 38   | ---   | e14  | 13    | 72   | 317     | 65      | 87    | 25      |
| 31    | 11      | ---   | 16      | 26   | ---   | 65   | ---   | 25   | ---     | 21      | 16    | ---     |
| TOTAL | 1,034.4 | 601.7 | 1,571.4 | 582  | 1,705 | 749  | 1,415 | 922  | 1,505.2 | 2,931.6 | 884.2 | 5,717.1 |
| MEAN  | 33.4    | 20.1  | 50.7    | 18.8 | 58.8  | 24.2 | 47.2  | 29.7 | 50.2    | 94.6    | 28.5  | 191     |
| MAX   | 205     | 195   | 534     | 46   | 409   | 76   | 356   | 72   | 339     | 1,380   | 324   | 2,000   |
| MIN   | 9.6     | 8.6   | 7.8     | 12   | 12    | 12   | 13    | 11   | 6.2     | 4.2     | 4.2   | 4.3     |
| CFSM  | 0.99    | 0.60  | 1.51    | 0.56 | 1.75  | 0.72 | 1.40  | 0.89 | 1.49    | 2.81    | 0.85  | 5.67    |
| IN.   | 1.15    | 0.67  | 1.74    | 0.64 | 1.89  | 0.83 | 1.57  | 1.02 | 1.67    | 3.25    | 0.98  | 6.33    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, @ BY WATER YEAR (WY)

|      | 26.1   | 30.0   | 40.9   | 57.8   | 65.5   | 62.1   | 53.0   | 28.7   | 31.2   | 37.6   | 25.8   | 46.4   |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 26.1   | 30.0   | 40.9   | 57.8   | 65.5   | 62.1   | 53.0   | 28.7   | 31.2   | 37.6   | 25.8   | 46.4   |
| MAX  | 142    | 109    | 130    | 179    | 135    | 197    | 210    | 129    | 166    | 307    | 131    | 218    |
| (WY) | (2003) | (1949) | (2003) | (1937) | (1953) | (2003) | (2003) | (2003) | (2003) | (1949) | (2003) | (2000) |
| MIN  | 1.82   | 3.53   | 6.86   | 7.87   | 14.0   | 22.5   | 8.68   | 6.19   | 4.40   | 2.64   | 2.33   | 2.26   |
| (WY) | (1931) | (1932) | (1934) | (1942) | (1931) | (1930) | (2002) | (2002) | (1933) | (1932) | (1932) | (1930) |



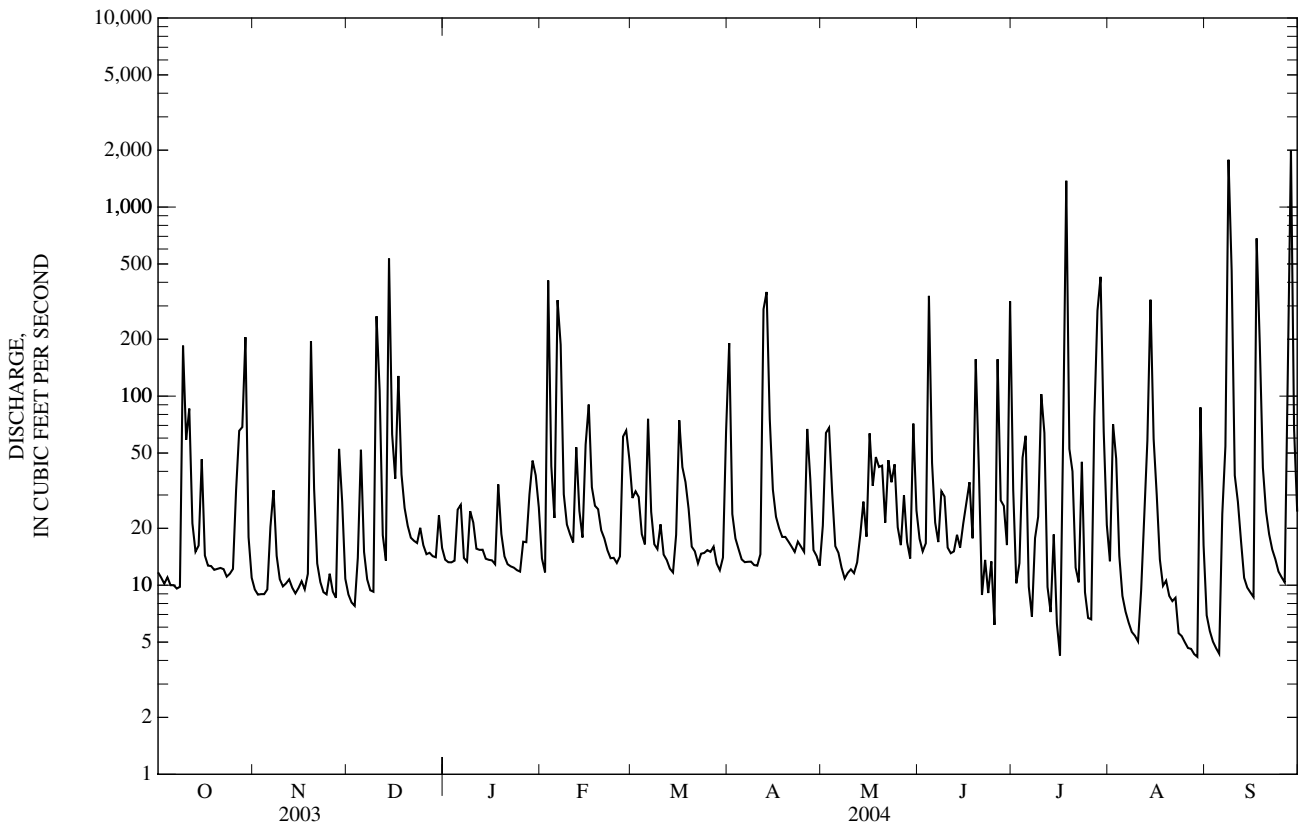
02095000 SOUTH BUFFALO CREEK NEAR GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1928 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 41,736.3               |        | 19,618.6            |        | 41.8                                 |              |
| ANNUAL MEAN              | 114                    |        | 53.6                |        | 137                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 21.0                                 |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1942                                 |              |
| HIGHEST DAILY MEAN       | 2,270                  | Mar 20 | 2,000               | Sep 28 | 5,460                                | Jul 15, 1949 |
| LOWEST DAILY MEAN        | 5.5                    | May 14 | 4.2                 | Jul 16 | 0.42                                 | Aug 4, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 6.9                    | Jan 21 | 4.8                 | Aug 23 | 0.57                                 | Jul 31, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 2,890               | Sep 8  | 10000*                               | Jul 15, 1945 |
| MAXIMUM PEAK STAGE       |                        |        | 13.83               | Sep 8  | 14.37                                | Mar 20, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 3.7                 | Jul 17 |                                      |              |
| ANNUAL RUNOFF (CFSM)     | 3.40                   |        | 1.60                |        | 1.24                                 |              |
| ANNUAL RUNOFF (INCHES)   | 46.21                  |        | 21.72               |        | 16.89                                |              |
| 10 PERCENT EXCEEDS       | 312                    |        | 71                  |        | 76                                   |              |
| 50 PERCENT EXCEEDS       | 25                     |        | 16                  |        | 14                                   |              |
| 90 PERCENT EXCEEDS       | 9.2                    |        | 9.0                 |        | 4.5                                  |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



02095000 SOUTH BUFFALO CREEK NEAR GREENSBORO, NC—Continued

PRECIPITATION RECORDS

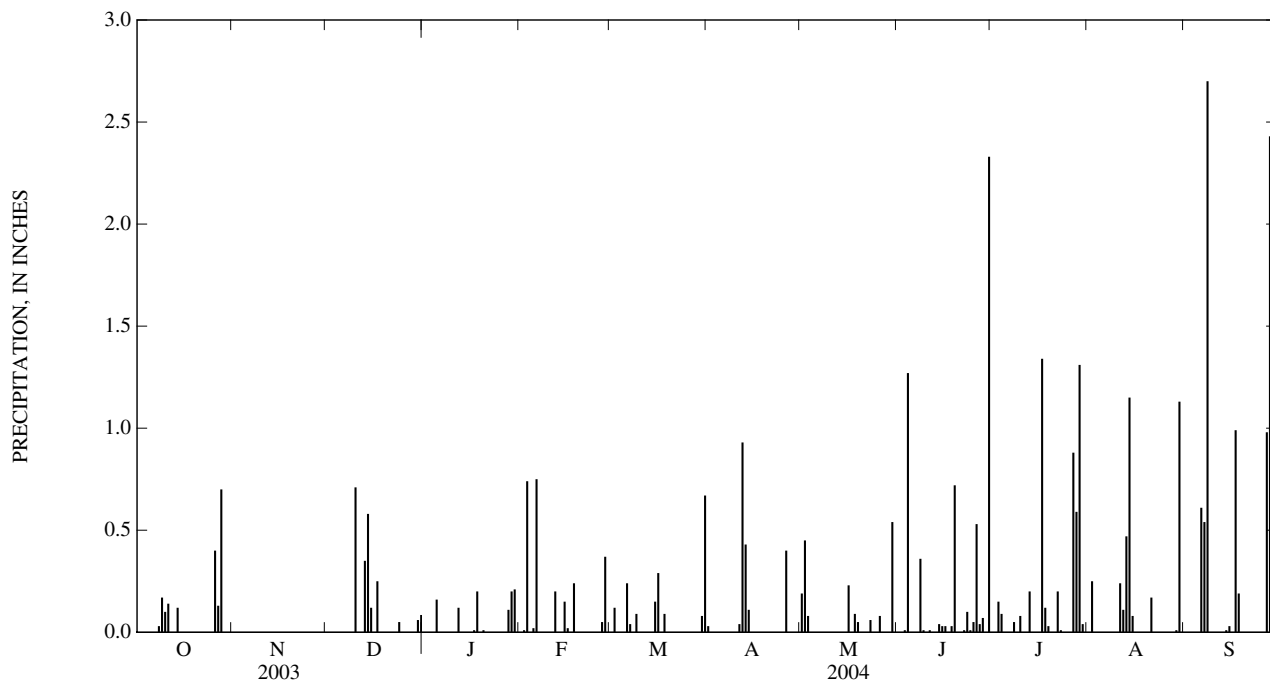
PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|-----|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | --- | ---  | 0.00 | 0.00 | 0.00 | 0.03 | 0.19 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | --- | ---  | 0.00 | 0.01 | 0.12 | 0.00 | 0.45 | 0.00 | 0.00 | 0.25 | 0.00 |
| 3     | 0.00 | --- | ---  | 0.00 | 0.74 | 0.00 | 0.00 | 0.08 | 0.01 | 0.15 | 0.00 | 0.00 |
| 4     | 0.00 | --- | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.27 | 0.09 | 0.00 | 0.00 |
| 5     | 0.00 | --- | ---  | 0.16 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | --- | ---  | 0.00 | 0.75 | 0.24 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 |
| 7     | 0.00 | --- | ---  | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.54 |
| 8     | 0.03 | --- | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 0.05 | 0.00 | 2.70 |
| 9     | 0.17 | --- | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 10    | 0.10 | --- | 0.71 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.00 | 0.00 |
| 11    | 0.14 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.01 | 0.00 | 0.24 | 0.00 |
| 12    | 0.00 | --- | 0.00 | 0.12 | 0.20 | 0.00 | 0.93 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 |
| 13    | 0.00 | --- | 0.35 | 0.00 | 0.00 | 0.00 | 0.43 | 0.00 | 0.00 | 0.20 | 0.47 | 0.00 |
| 14    | 0.12 | --- | 0.58 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.04 | 0.00 | 1.15 | 0.01 |
| 15    | 0.00 | --- | 0.12 | 0.00 | 0.15 | 0.15 | 0.00 | 0.00 | 0.03 | 0.00 | 0.08 | 0.03 |
| 16    | 0.00 | --- | 0.00 | 0.00 | 0.02 | 0.29 | 0.00 | 0.23 | 0.03 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | --- | 0.25 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.34 | 0.00 | 0.99 |
| 18    | 0.00 | --- | 0.00 | 0.20 | 0.24 | 0.09 | 0.00 | 0.09 | 0.03 | 0.12 | 0.00 | 0.19 |
| 19    | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.72 | 0.03 | 0.00 | 0.00 |
| 20    | 0.00 | --- | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 |
| 22    | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.20 | 0.00 | 0.00 |
| 23    | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.10 | 0.01 | 0.00 | 0.00 |
| 24    | 0.00 | --- | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 |
| 26    | 0.40 | --- | 0.00 | 0.00 | 0.00 | 0.00 | 0.40 | 0.08 | 0.53 | 0.00 | 0.00 | 0.00 |
| 27    | 0.13 | --- | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.04 | 0.88 | 0.00 | 0.98 |
| 28    | 0.70 | --- | 0.00 | 0.11 | 0.37 | 0.00 | 0.00 | 0.00 | 0.07 | 0.59 | 0.00 | 2.43 |
| 29    | ---  | --- | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.31 | 0.01 | 0.00 |
| 30    | ---  | --- | 0.06 | 0.21 | ---  | 0.08 | 0.00 | 0.54 | 2.33 | 0.04 | 1.13 | 0.00 |
| 31    | ---  | --- | 0.00 | 0.00 | ---  | 0.67 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | ---  | --- | ---  | 1.02 | 2.55 | 1.77 | 1.94 | 1.77 | 5.65 | 5.09 | 3.61 | 8.48 |



02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC

LOCATION.--Lat 36°04'45", long 79°48'46", Guilford County, Hydrologic Unit 03030002, on right bank at termination of Westover Terrace in Greensboro, 0.7 mi above Southern Railway.

DRAINAGE AREA.--9.55 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Water-stage recorder. Datum of gage is 736.25 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred on Aug. 11, 12, 2002. Minimum discharge for the current water year also occurred on Aug. 23, 25, Sept. 2, 3.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 1     | 2.9   | 2.4   | 3.1   | 3.2   | 3.1   | 5.9   | 15    | 8.6   | 2.3   | 4.9   | 2.7   | 1.4     |
| 2     | 2.9   | 2.5   | 2.8   | 3.3   | 2.8   | 9.2   | 3.3   | 22    | 2.0   | 15    | 7.7   | 1.4     |
| 3     | 2.7   | 2.7   | 2.7   | 3.4   | 90    | 5.7   | 2.9   | 14    | 2.2   | 7.9   | 10    | 1.5     |
| 4     | 2.9   | 2.9   | 12    | 3.6   | 7.4   | 4.7   | 2.8   | 3.9   | e90   | 11    | 2.6   | 1.6     |
| 5     | 2.8   | 3.2   | 11    | 7.5   | 5.1   | 4.6   | 2.6   | 3.1   | 4.5   | 5.8   | 2.4   | 1.7     |
| 6     | 2.6   | 22    | 3.9   | 3.8   | 71    | 23    | 2.6   | 2.9   | 2.5   | 3.4   | 2.3   | 20      |
| 7     | 2.6   | 5.5   | 3.3   | 2.8   | 17    | 5.1   | 2.6   | 2.9   | 2.3   | 3.8   | 2.2   | 14      |
| 8     | 3.2   | 2.6   | 3.0   | 2.7   | 6.0   | 4.4   | 2.7   | 2.7   | e103  | 7.7   | 2.3   | e400    |
| 9     | 59    | e2.4  | 3.0   | 7.3   | 4.8   | 5.2   | 2.6   | 2.7   | 8.7   | 4.1   | 1.7   | 15      |
| 10    | 6.0   | 2.2   | 93    | 3.5   | 4.6   | 5.5   | 2.5   | 2.8   | 3.6   | 17    | 1.7   | 12      |
| 11    | 23    | e2.1  | 12    | 2.9   | 4.2   | 4.0   | 3.3   | 2.7   | 2.9   | 7.5   | 3.3   | 8.9     |
| 12    | 3.3   | e1.9  | 4.1   | 3.1   | 14    | 4.0   | 83    | 2.6   | 2.8   | 3.8   | 6.5   | 7.5     |
| 13    | 2.8   | e1.9  | 6.1   | 2.9   | 5.0   | 3.8   | 91    | 5.8   | 3.4   | 2.3   | 7.6   | 6.9     |
| 14    | 4.7   | e2.0  | 120   | 2.7   | 4.4   | 3.7   | 13    | 3.1   | 3.6   | 3.6   | 63    | 3.4     |
| 15    | 5.6   | e2.2  | 13    | 2.9   | 15    | 7.2   | 5.6   | 2.6   | 4.2   | 1.5   | 15    | 3.0     |
| 16    | 2.9   | e2.1  | 6.8   | 2.8   | 18    | 34    | 4.5   | 8.4   | 9.0   | 1.3   | 3.7   | 2.7     |
| 17    | 2.9   | e2.4  | 34    | 2.7   | 6.5   | 7.8   | 4.0   | 2.6   | 5.1   | e60   | 2.3   | e120    |
| 18    | 2.9   | e2.3  | 6.7   | 8.3   | 6.9   | 7.8   | 3.7   | 9.5   | 3.0   | e215  | 2.7   | 27      |
| 19    | 2.9   | 68    | 4.8   | 2.7   | 5.7   | 4.8   | 3.6   | 7.3   | e92   | 13    | 2.1   | 5.4     |
| 20    | 3.7   | 7.1   | 4.1   | 2.3   | 5.1   | 4.1   | 3.6   | 3.6   | 7.3   | 9.6   | 1.8   | 3.9     |
| 21    | 2.6   | 3.5   | 3.7   | 2.5   | 5.0   | 4.2   | 3.5   | 2.1   | 3.3   | 7.3   | 2.4   | 5.8     |
| 22    | 2.8   | 3.2   | 3.7   | 2.5   | 4.3   | 3.9   | 3.3   | 34    | 5.2   | 10    | 1.8   | 3.3     |
| 23    | 2.7   | 3.3   | 3.5   | 2.4   | 4.2   | 3.8   | 3.3   | 13    | 5.8   | 7.6   | 1.6   | 2.6     |
| 24    | 2.7   | 4.6   | 4.8   | 2.4   | 4.4   | 3.9   | 3.2   | 5.7   | 5.8   | 2.5   | 1.5   | 2.3     |
| 25    | 2.7   | 4.4   | 3.3   | 3.3   | 4.3   | 4.0   | 3.3   | 2.1   | 6.3   | 2.4   | 1.4   | 2.3     |
| 26    | 12    | 3.0   | 3.0   | 3.7   | 5.0   | 4.0   | 19    | 2.3   | 54    | 2.6   | 1.5   | 2.2     |
| 27    | 14    | 3.1   | 3.0   | 3.8   | 19    | 4.0   | 4.8   | 3.9   | 17    | 35    | 2.6   | 65      |
| 28    | 14    | 16    | 3.1   | 8.1   | 15    | 4.1   | 2.9   | 2.1   | 7.0   | 66    | 4.5   | e300    |
| 29    | 34    | 5.2   | 3.2   | 9.1   | 7.9   | 3.7   | 2.8   | 2.3   | 4.8   | 19    | 3.8   | 13      |
| 30    | 3.0   | 3.2   | 6.1   | 10    | ---   | 5.6   | 3.0   | 13    | 11    | 5.1   | 24    | 6.3     |
| 31    | 2.6   | ---   | 3.2   | 4.7   | ---   | 16    | ---   | 2.5   | ---   | 2.9   | 1.9   | ---     |
| TOTAL | 235.4 | 189.9 | 390.0 | 126.9 | 365.7 | 211.7 | 304.0 | 196.8 | 474.6 | 558.6 | 190.6 | 1,060.1 |
| MEAN  | 7.59  | 6.33  | 12.6  | 4.09  | 12.6  | 6.83  | 10.1  | 6.35  | 15.8  | 18.0  | 6.15  | 35.3    |
| MAX   | 59    | 68    | 120   | 10    | 90    | 34    | 91    | 34    | 103   | 215   | 63    | 400     |
| MIN   | 2.6   | 1.9   | 2.7   | 2.3   | 2.8   | 3.7   | 2.5   | 2.1   | 2.0   | 1.3   | 1.4   | 1.4     |
| CFSM  | 0.80  | 0.66  | 1.32  | 0.43  | 1.32  | 0.72  | 1.06  | 0.66  | 1.66  | 1.89  | 0.64  | 3.70    |
| IN.   | 0.92  | 0.74  | 1.52  | 0.49  | 1.42  | 0.82  | 1.18  | 0.77  | 1.85  | 2.18  | 0.74  | 4.13    |

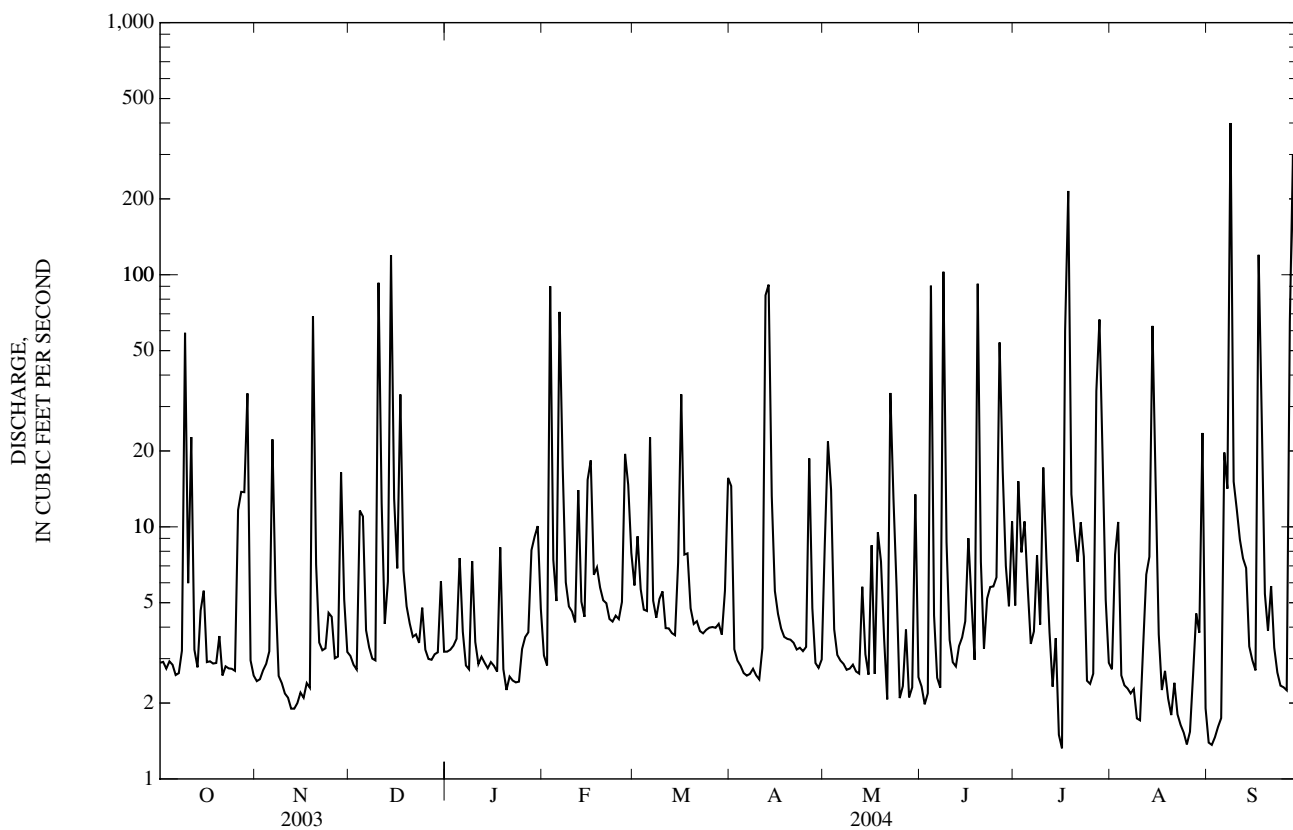
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1999 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 10.7   | 8.70   | 11.9   | 11.6   | 13.8   | 17.7   | 16.8   | 11.6   | 15.3   | 14.4   | 11.1   | 26.9   |
| MAX  | 33.2   | 24.2   | 28.3   | 17.7   | 22.8   | 37.2   | 41.1   | 29.6   | 27.0   | 25.6   | 17.8   | 46.4   |
| (WY) | (2003) | (2003) | (2003) | (2002) | (2003) | (2003) | (2003) | (2003) | (2003) | (2001) | (2003) | (2000) |
| MIN  | 2.67   | 2.09   | 5.02   | 4.09   | 6.37   | 6.83   | 3.06   | 3.50   | 3.49   | 5.11   | 5.95   | 6.19   |
| (WY) | (2001) | (2002) | (2001) | (2004) | (2002) | (2004) | (2002) | (2002) | (2002) | (2002) | (2001) | (2001) |

02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1999 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 8,084.1                |        | 4,304.3             |        | 14.4                    |              |
| ANNUAL MEAN              | 22.1                   |        | 11.8                |        | 27.1                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 6.77                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 0.01                    | 2002         |
| HIGHEST DAILY MEAN       | 500                    | Apr 10 | 400                 | Sep 8  | 500                     | Apr 10, 2003 |
| LOWEST DAILY MEAN        | 1.4                    | Sep 17 | 1.3                 | Jul 16 | 0.00                    | Aug 9, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 1.7                    | Sep 11 | 1.7                 | Aug 20 | 0.01                    | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | NOT DETERMINED      |        | NOT DETERMINED          |              |
| MAXIMUM PEAK STAGE       |                        |        | 12.00               | Jul 17 | 14.07                   | Sep 23, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.2*                | Aug 22 | 0.00*                   | Aug 10, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.32                   |        | 1.23                |        | 1.50                    |              |
| ANNUAL RUNOFF (INCHES)   | 31.49                  |        | 16.77               |        | 20.43                   |              |
| 10 PERCENT EXCEEDS       | 48                     |        | 17                  |        | 30                      |              |
| 50 PERCENT EXCEEDS       | 5.3                    |        | 3.8                 |        | 3.6                     |              |
| 90 PERCENT EXCEEDS       | 2.5                    |        | 2.3                 |        | 1.5                     |              |

\* See REMARKS.  
e Estimated.



02095181 NORTH BUFFALO CREEK AT WESTOVER TERRACE AT GREENSBORO, NC—Continued

PRECIPITATION RECORDS

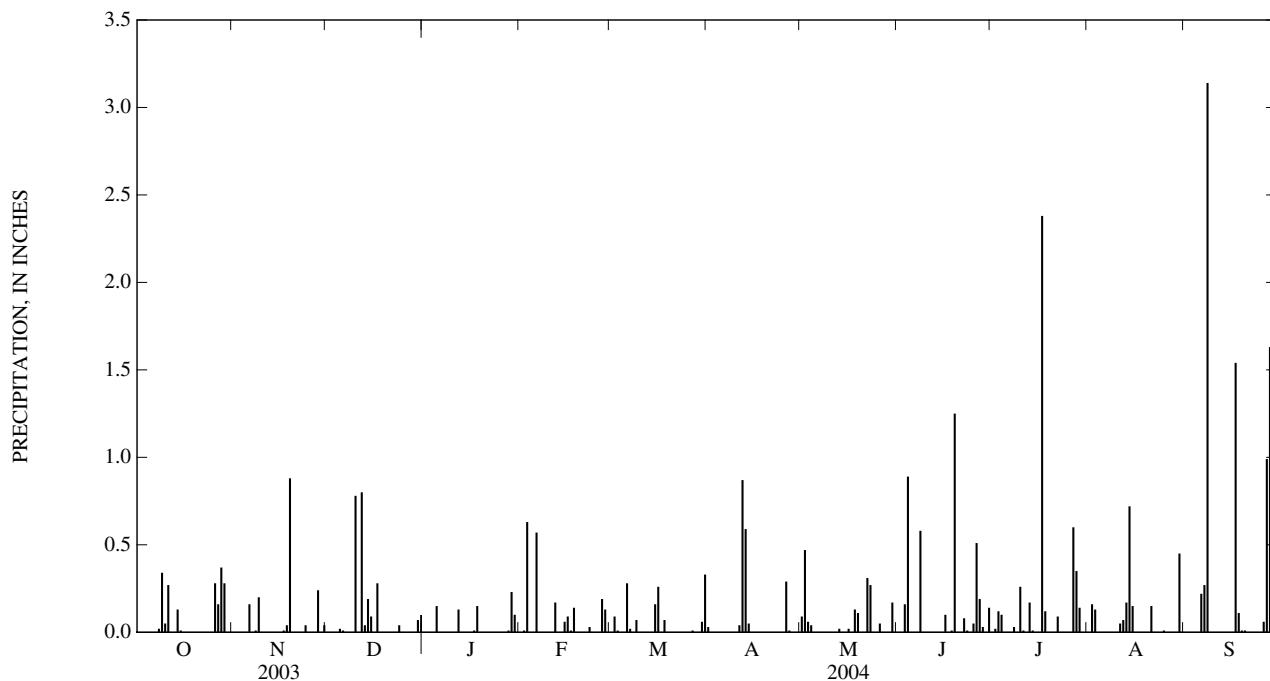
PERIOD OF RECORD.--June 1999 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.09 | 0.00 | 0.47 | 0.00 | 0.02 | 0.16 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 | 0.01 | 0.00 | 0.06 | 0.16 | 0.12 | 0.13 | 0.00 |
| 4     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.89 | 0.10 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.02 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | 0.16 | 0.01 | 0.00 | 0.57 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.22 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.27 |
| 8     | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.58 | 0.03 | 0.00 | 3.14 |
| 9     | 0.34 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10    | 0.05 | 0.00 | 0.78 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 |
| 11    | 0.27 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.01 | 0.05 | 0.00 |
| 12    | 0.00 | 0.00 | 0.80 | 0.13 | 0.17 | 0.00 | 0.87 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 |
| 13    | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.59 | 0.02 | 0.00 | 0.17 | 0.17 | 0.00 |
| 14    | 0.13 | 0.00 | 0.19 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.01 | 0.72 | 0.00 |
| 15    | 0.01 | 0.00 | 0.09 | 0.00 | 0.06 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.26 | 0.00 | 0.02 | 0.10 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.01 | 0.28 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 2.38 | 0.00 | 1.54 |
| 18    | 0.00 | 0.04 | 0.00 | 0.15 | 0.14 | 0.07 | 0.00 | 0.13 | 0.01 | 0.12 | 0.00 | 0.11 |
| 19    | 0.00 | 0.88 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 1.25 | 0.00 | 0.00 | 0.01 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.08 | 0.09 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.27 | 0.01 | 0.00 | 0.00 | 0.00 |
| 24    | 0.00 | 0.04 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.01 | 0.00 |
| 26    | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.05 | 0.51 | 0.00 | 0.00 | 0.06 |
| 27    | 0.16 | 0.00 | 0.00 | 0.00 | 0.19 | 0.01 | 0.01 | 0.00 | 0.19 | 0.60 | 0.00 | 0.99 |
| 28    | 0.37 | 0.24 | 0.00 | 0.01 | 0.13 | 0.00 | 0.00 | 0.00 | 0.03 | 0.35 | 0.00 | 1.63 |
| 29    | 0.28 | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.01 |
| 30    | 0.00 | 0.04 | 0.07 | 0.10 | ---  | 0.06 | 0.00 | 0.17 | 0.14 | 0.00 | 0.45 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.33 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 1.91 | 1.62 | 2.32 | 0.78 | 2.03 | 1.36 | 1.88 | 1.74 | 4.00 | 4.40 | 2.06 | 7.99 |



02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC

LOCATION.--Lat 36°05'52", long 79°46'57", Guilford County, Hydrologic Unit 03030002, on right bank at upstream side of Church Street, and .1 mi upstream of Southern Railway bridge in Greensboro.

DRAINAGE AREA.--14.2 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1998 to current year.

REVISED RECORDS.--WDR NC-98-1, WDR NC-99-1B, WDR NC-00-1B, WDR-01-1B: maximum discharges only.

GAGE.--Water-stage recorder. Datum of gage is 738.52 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Minimum discharge for period of record also occurred Aug. 2, 2002. Minimum discharge for current water year also occurred several days in Aug. and Sept.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| 1     | 6.9   | 4.3   | 4.1   | 5.9   | 6.5   | 11    | 34    | 13    | 4.7   | 7.1   | 2.6   | 2.3     |
| 2     | 7.1   | 4.3   | 4.1   | 6.0   | 6.0   | 17    | 8.0   | 39    | 4.0   | 16    | 39    | 2.5     |
| 3     | 6.5   | 4.2   | 3.9   | 6.1   | 126   | 11    | 7.0   | 28    | 4.1   | 11    | 29    | 2.4     |
| 4     | 6.2   | 4.2   | 15    | 5.9   | 15    | 9.6   | 6.3   | 8.6   | 127   | 14    | 3.8   | 2.4     |
| 5     | 6.0   | 4.3   | 16    | 13    | 11    | 9.3   | 6.1   | 6.7   | 8.9   | 9.5   | 2.9   | 2.3     |
| 6     | 5.4   | 24    | 4.7   | 7.9   | 99    | 39    | 6.2   | 6.3   | 5.9   | 4.9   | 2.5   | 35      |
| 7     | 4.9   | 8.8   | 4.0   | 5.7   | 34    | 11    | 6.3   | 6.0   | 5.6   | 4.8   | 2.4   | 22      |
| 8     | 5.4   | 4.8   | 4.3   | 5.8   | 12    | 9.7   | 6.0   | 6.2   | 135   | 8.0   | 2.7   | 779     |
| 9     | 75    | 4.1   | 4.1   | 12    | 10    | 9.9   | 6.0   | 6.4   | 14    | 6.0   | 2.1   | 21      |
| 10    | 10    | 4.3   | 114   | 6.9   | 9.3   | 11    | 5.6   | 6.2   | 5.0   | 18    | 2.4   | 12      |
| 11    | 35    | 4.3   | 25    | 5.7   | 8.8   | 7.1   | 5.8   | 5.8   | 4.4   | 10    | 17    | 8.8     |
| 12    | 5.5   | 3.6   | 9.6   | 6.6   | 26    | 7.2   | 122   | 5.8   | 4.5   | 5.8   | 19    | 7.7     |
| 13    | 4.4   | 3.7   | 10    | 6.1   | 10    | 7.4   | 111   | 8.3   | 4.1   | 4.2   | 23    | 6.8     |
| 14    | 7.4   | 4.1   | 162   | 6.0   | 9.0   | 6.9   | 23    | 6.8   | 4.3   | 6.3   | 99    | 4.4     |
| 15    | 11    | 4.6   | 21    | 6.1   | 29    | 11    | 9.7   | 5.8   | 4.8   | 4.0   | 24    | 3.9     |
| 16    | 4.2   | 4.0   | 13    | 5.7   | 33    | 50    | 8.4   | 20    | 8.2   | 3.7   | 6.6   | 3.8     |
| 17    | 4.4   | 4.0   | 50    | 5.4   | 13    | 13    | 7.4   | 6.2   | 9.8   | 114   | 4.2   | 234     |
| 18    | 4.7   | 5.7   | 12    | 14    | 13    | 12    | 7.1   | 26    | 4.9   | 361   | 3.9   | 54      |
| 19    | 4.5   | 91    | 9.6   | 6.1   | 12    | 7.8   | 7.4   | 12    | 125   | 12    | 3.4   | 10      |
| 20    | 5.3   | 9.8   | 8.1   | 5.8   | 11    | 7.2   | 6.5   | 8.1   | 12    | 9.2   | 3.1   | 6.9     |
| 21    | 5.3   | 4.7   | 7.8   | 5.6   | 10    | 7.6   | 6.6   | 5.2   | 5.2   | 6.9   | 5.3   | 7.6     |
| 22    | 4.1   | 4.1   | 8.2   | 5.5   | 9.1   | 6.8   | 6.2   | 47    | 8.2   | 13    | 3.9   | 6.5     |
| 23    | 3.6   | 4.4   | 8.0   | 5.4   | 9.5   | 6.7   | 6.2   | 24    | 6.4   | 14    | 2.8   | 5.1     |
| 24    | 4.0   | 5.2   | 11    | 5.2   | 9.8   | 6.8   | 6.0   | 11    | 6.8   | 3.2   | 2.5   | 5.1     |
| 25    | 3.8   | 5.9   | 7.2   | 5.5   | 9.3   | 6.6   | 6.4   | 5.1   | 6.3   | 3.4   | 2.1   | 4.6     |
| 26    | 21    | 4.2   | 6.7   | 7.1   | 8.9   | 6.7   | 31    | 5.8   | 68    | 3.3   | 2.3   | 4.6     |
| 27    | 22    | 4.2   | 6.8   | 7.1   | 34    | 6.4   | 8.6   | 7.8   | 23    | 47    | 2.3   | 81      |
| 28    | 24    | 28    | 7.5   | 13    | 25    | 7.2   | 5.9   | 4.7   | 8.7   | 91    | 4.0   | 543     |
| 29    | 56    | 6.5   | 7.4   | 15    | 14    | 6.9   | 5.5   | 4.9   | 6.3   | 33    | 4.1   | 23      |
| 30    | 5.3   | 4.6   | 12    | 16    | ---   | 8.8   | 5.5   | 23    | 32    | 6.5   | 47    | 12      |
| 31    | 4.5   | ---   | 6.3   | 8.8   | ---   | 27    | ---   | 5.0   | ---   | 3.3   | 3.3   | ---     |
| TOTAL | 373.4 | 273.9 | 583.4 | 236.9 | 623.2 | 365.6 | 487.7 | 374.7 | 667.1 | 854.1 | 372.2 | 1,913.7 |
| MEAN  | 12.0  | 9.13  | 18.8  | 7.64  | 21.5  | 11.8  | 16.3  | 12.1  | 22.2  | 27.6  | 12.0  | 63.8    |
| MAX   | 75    | 91    | 162   | 16    | 126   | 50    | 122   | 47    | 135   | 361   | 99    | 779     |
| MIN   | 3.6   | 3.6   | 3.9   | 5.2   | 6.0   | 6.4   | 5.5   | 4.7   | 4.0   | 3.2   | 2.1   | 2.3     |
| CFSM  | 0.85  | 0.64  | 1.33  | 0.54  | 1.51  | 0.83  | 1.14  | 0.85  | 1.57  | 1.94  | 0.85  | 4.49    |
| IN.   | 0.98  | 0.72  | 1.53  | 0.62  | 1.63  | 0.96  | 1.28  | 0.98  | 1.75  | 2.24  | 0.98  | 5.01    |

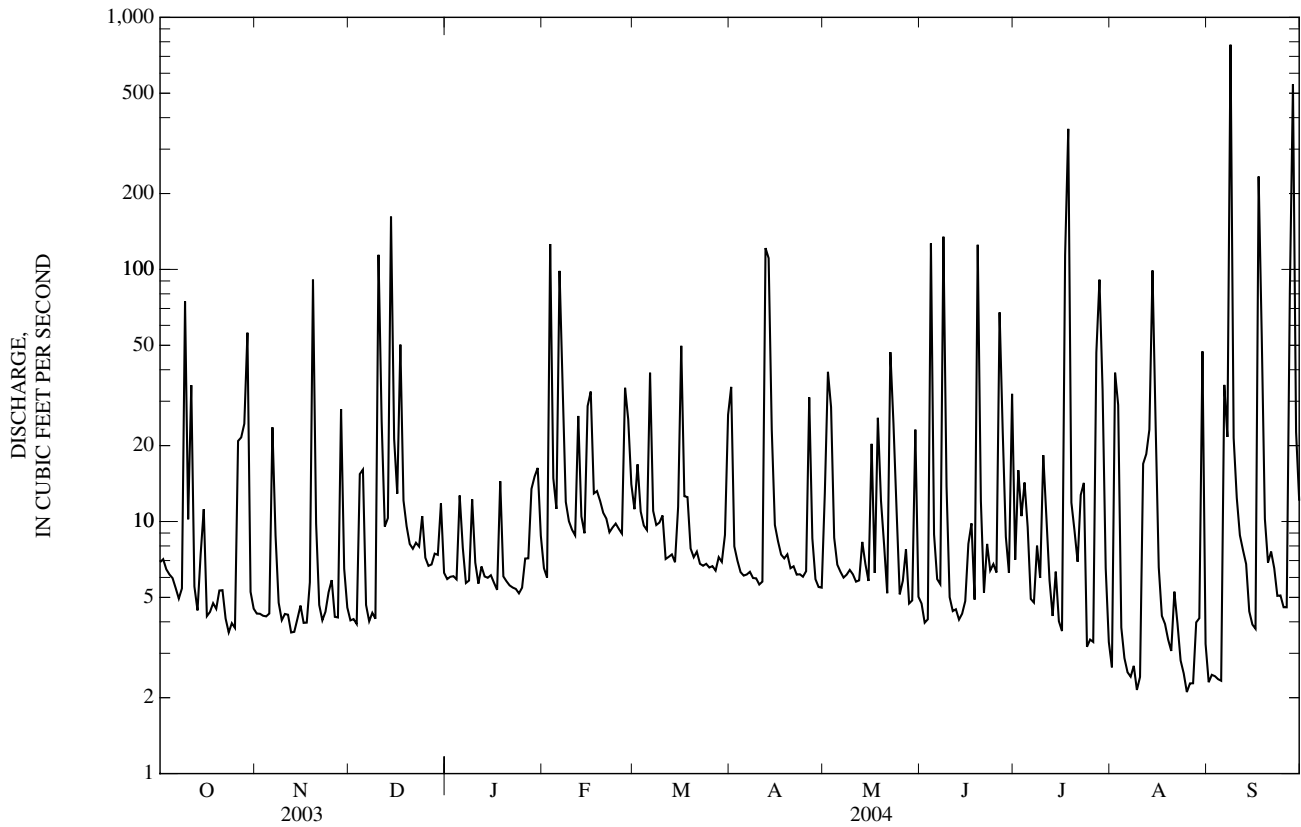
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1998 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 16.4   | 13.2   | 17.7   | 20.2   | 21.6   | 27.5   | 26.3   | 18.8   | 22.4   | 23.7   | 17.9   | 35.5   |
| MAX  | 52.1   | 34.7   | 33.8   | 29.4   | 38.2   | 67.5   | 65.5   | 47.6   | 40.3   | 36.8   | 37.0   | 63.8   |
| (WY) | (2003) | (2003) | (2003) | (1999) | (2003) | (2003) | (2003) | (2003) | (2003) | (2001) | (2003) | (2004) |
| MIN  | 4.71   | 3.99   | 10.1   | 7.64   | 10.3   | 11.8   | 6.20   | 10.5   | 9.73   | 12.9   | 11.2   | 8.72   |
| (WY) | (1999) | (2002) | (2001) | (2004) | (2002) | (2004) | (2002) | (1999) | (2002) | (2002) | (2001) | (1998) |

02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |       | WATER YEARS 1998 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|-------|-------------------------|--------------|
| ANNUAL TOTAL             | 13,418.9               |        | 7,125.9             |       | 22.2                    |              |
| ANNUAL MEAN              | 36.8                   |        | 19.5                |       | 13.3                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |       | 43.5                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |       | 13.3                    | 2002         |
| HIGHEST DAILY MEAN       | 850                    | Sep 23 | 779                 | Sep 8 | 850                     | Sep 23, 2003 |
| LOWEST DAILY MEAN        | 3.6                    | Oct 23 | 2.1                 | Aug 9 | 1.4                     | Aug 2, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 4.0                    | Nov 11 | 2.7                 | Aug 4 | 1.9                     | Aug 1, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 2,370               | Sep 8 | NOT DETERMINED          |              |
| MAXIMUM PEAK STAGE       |                        |        | 15.10               | Sep 8 | 17.81                   | Sep 23, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.8*                | Aug 9 | 1.2                     | Oct 17, 1998 |
| ANNUAL RUNOFF (CFSM)     | 2.59                   |        | 1.37                |       | 1.56                    |              |
| ANNUAL RUNOFF (INCHES)   | 35.15                  |        | 18.67               |       | 21.25                   |              |
| 10 PERCENT EXCEEDS       | 81                     |        | 33                  |       | 48                      |              |
| 50 PERCENT EXCEEDS       | 11                     |        | 6.8                 |       | 7.8                     |              |
| 90 PERCENT EXCEEDS       | 4.7                    |        | 4.0                 |       | 3.8                     |              |

\* See REMARKS.



02095271 NORTH BUFFALO CREEK AT CHURCH STREET AT GREENSBORO, NC—Continued

PRECIPITATION RECORDS

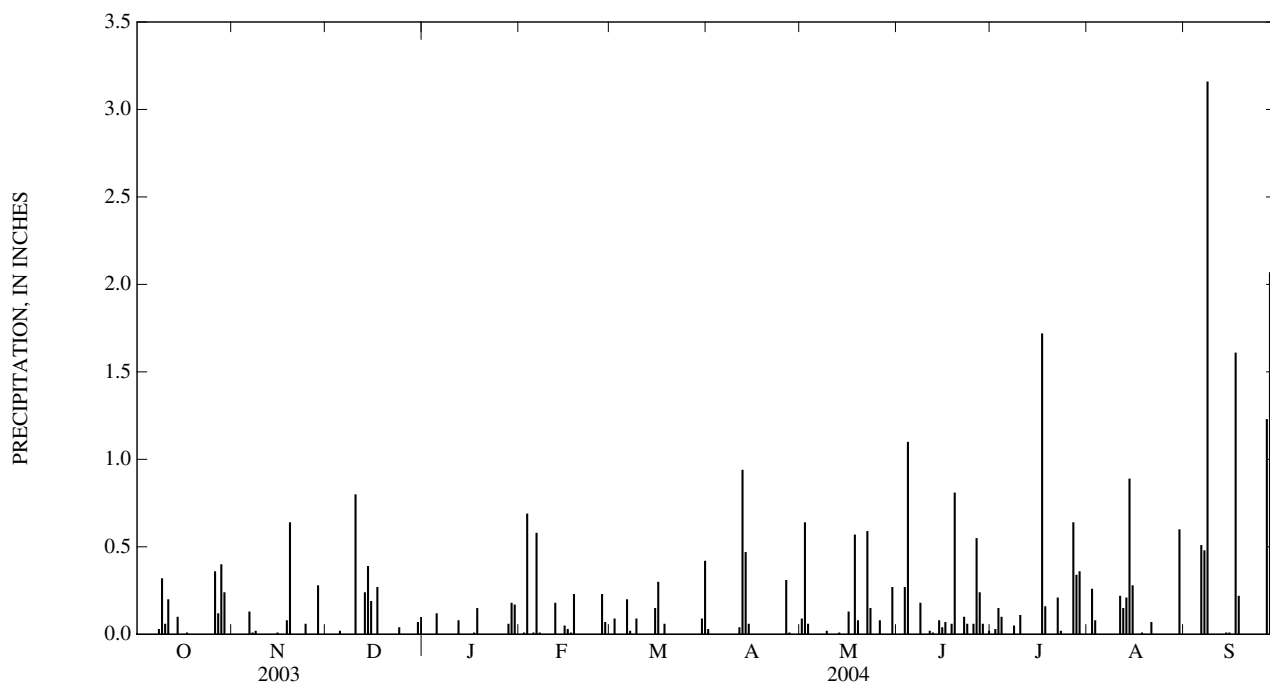
PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.09 | 0.00 | 0.64 | 0.00 | 0.03 | 0.26 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.69 | 0.00 | 0.00 | 0.06 | 0.27 | 0.15 | 0.08 | 0.00 |
| 4     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.10 | 0.10 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.02 | 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | 0.13 | 0.00 | 0.00 | 0.58 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 |
| 7     | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 |
| 8     | 0.03 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.05 | 0.00 | 3.16 |
| 9     | 0.32 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10    | 0.06 | 0.00 | 0.80 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 |
| 11    | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.02 | 0.00 | 0.22 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.08 | 0.18 | 0.00 | 0.94 | 0.00 | 0.01 | 0.00 | 0.15 | 0.00 |
| 13    | 0.00 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.47 | 0.01 | 0.00 | 0.00 | 0.21 | 0.00 |
| 14    | 0.10 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.08 | 0.00 | 0.89 | 0.01 |
| 15    | 0.00 | 0.01 | 0.19 | 0.00 | 0.05 | 0.15 | 0.00 | 0.00 | 0.04 | 0.00 | 0.28 | 0.01 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.30 | 0.00 | 0.13 | 0.07 | 0.00 | 0.00 | 0.00 |
| 17    | 0.01 | 0.00 | 0.27 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 1.72 | 0.00 | 1.61 |
| 18    | 0.00 | 0.08 | 0.00 | 0.15 | 0.23 | 0.06 | 0.00 | 0.57 | 0.06 | 0.16 | 0.01 | 0.22 |
| 19    | 0.00 | 0.64 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.81 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.59 | 0.10 | 0.21 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.06 | 0.02 | 0.00 | 0.00 |
| 24    | 0.00 | 0.06 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 26    | 0.36 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.31 | 0.08 | 0.55 | 0.00 | 0.00 | 0.00 |
| 27    | 0.12 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.01 | 0.00 | 0.24 | 0.64 | 0.00 | 1.23 |
| 28    | 0.40 | 0.28 | 0.00 | 0.06 | 0.07 | 0.00 | 0.00 | 0.00 | 0.06 | 0.34 | 0.00 | 2.07 |
| 29    | 0.24 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 0.00 | 0.00 |
| 30    | 0.00 | 0.00 | 0.07 | 0.17 | ---  | 0.09 | 0.00 | 0.27 | 0.02 | 0.00 | 0.60 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.42 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 1.84 | 1.23 | 2.02 | 0.77 | 2.10 | 1.42 | 1.86 | 2.69 | 3.73 | 3.89 | 2.77 | 9.30 |





02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC

LOCATION.--Lat 36°07'14", long 79°42'29", Guilford County, Hydrologic Unit 03030002, on left bank at downstream of bridge on Secondary Road 2832, 4.2 mi upstream from mouth, 5.8 mi northeast of post office in Greensboro.

DRAINAGE AREA.--37.1 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1928 to October 1990, August 1998 to current year.

REVISED RECORDS.--WSP 1303: 1929, 1931-42, monthly and yearly runoff. WSP 1383: 1928(M), 1929, 1933-34(M), 1936(M), 1941(M), 1943(M), 1945(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 678.02 ft above NGVD of 1929 (levels by U. S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Diurnal fluctuation at low flow caused by mills upstream from station. Diversions into basin from Greensboro and Proximity Mills enter upstream from the station. Maximum discharge for period of record, 9,140 ft<sup>3</sup>/s, from rating curve extended above 2,900 ft<sup>3</sup>/s on basis of contracted-opening measurements at gage heights 14.15 ft, 15.96 ft and 16.63 ft. Maximum gage height for period of record, from floodmarks. Minimum discharge for current water year also occurred on Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 27    | 27    | 29    | 28    | 33    | 41    | 117   | 31    | 25    | 32    | 22    | 19    |
| 2     | 26    | 25    | 29    | 28    | 32    | 45    | 35    | 80    | 23    | 30    | 62    | 18    |
| 3     | 27    | 25    | 27    | 29    | 264   | 44    | 33    | 79    | 24    | 33    | 45    | 18    |
| 4     | 26    | 25    | 38    | 29    | 62    | 36    | 30    | 37    | 234   | 35    | 23    | 17    |
| 5     | 25    | 24    | 69    | 34    | 42    | 35    | 31    | 30    | 41    | 30    | 22    | 17    |
| 6     | 24    | 43    | 36    | 37    | 185   | 75    | 32    | 27    | 27    | 23    | 20    | 57    |
| 7     | 24    | 46    | 32    | 28    | 144   | 40    | 32    | 26    | 27    | 22    | 19    | 64    |
| 8     | 23    | 28    | 30    | 28    | 51    | 35    | 31    | 27    | 139   | 24    | 19    | 1,220 |
| 9     | 117   | 25    | 30    | 38    | 41    | 33    | 30    | 27    | 53    | 29    | 20    | 110   |
| 10    | 54    | 24    | 176   | 34    | 38    | 39    | 28    | 27    | 27    | 32    | 19    | 39    |
| 11    | 68    | 25    | 115   | 30    | 36    | 32    | 28    | 28    | 25    | 45    | 22    | 30    |
| 12    | 32    | 24    | 42    | 32    | 59    | 31    | 219   | 27    | 25    | 25    | 37    | 27    |
| 13    | 27    | 23    | 36    | 31    | 42    | 30    | 218   | 26    | 24    | 22    | 31    | 26    |
| 14    | 25    | 24    | 332   | 31    | 35    | 30    | 90    | 28    | 25    | 25    | 174   | 24    |
| 15    | 39    | 26    | 87    | 29    | 53    | 35    | 46    | 26    | 25    | 22    | 50    | 22    |
| 16    | 25    | 24    | 56    | 29    | 87    | 90    | 37    | 86    | 26    | 20    | 32    | 22    |
| 17    | 25    | 24    | 115   | 29    | 48    | 58    | 33    | 36    | 31    | 46    | 23    | 359   |
| 18    | 25    | 26    | 54    | 43    | 45    | 42    | 32    | 58    | 23    | 427   | 22    | 176   |
| 19    | 24    | 150   | 41    | 32    | 44    | 37    | 32    | 44    | 145   | 38    | 21    | 41    |
| 20    | 25    | 54    | 36    | 31    | 40    | 33    | 31    | 36    | 54    | 31    | 21    | 29    |
| 21    | 25    | 33    | 33    | 30    | 37    | 33    | 30    | 27    | 25    | 26    | 23    | 26    |
| 22    | 23    | 32    | 33    | 29    | 34    | 32    | 29    | 75    | 28    | 27    | 26    | 25    |
| 23    | 24    | 29    | 32    | 29    | 33    | 30    | 29    | 43    | 24    | 42    | 19    | 24    |
| 24    | 24    | 29    | 35    | 29    | 34    | 30    | 28    | 41    | 28    | 23    | 19    | 22    |
| 25    | 25    | 32    | 30    | 29    | 32    | 31    | 28    | 26    | 25    | 21    | 18    | 22    |
| 26    | 43    | 28    | 30    | 32    | 32    | 31    | 62    | 24    | 121   | 21    | 19    | 20    |
| 27    | 54    | 28    | 30    | 32    | 68    | 30    | 41    | 30    | 51    | 66    | 18    | 67    |
| 28    | 45    | 61    | 30    | 45    | 68    | 30    | 29    | 25    | 31    | 163   | 19    | 1,320 |
| 29    | 135   | 43    | 30    | 50    | 55    | 32    | 27    | 24    | 28    | 148   | 20    | 94    |
| 30    | 32    | 31    | 37    | 56    | ---   | 32    | 28    | 50    | 62    | 44    | 96    | 50    |
| 31    | 28    | ---   | 30    | 44    | ---   | 42    | ---   | 27    | ---   | 24    | 25    | ---   |
| TOTAL | 1,146 | 1,038 | 1,760 | 1,035 | 1,774 | 1,194 | 1,496 | 1,178 | 1,446 | 1,596 | 1,006 | 4,005 |
| MEAN  | 37.0  | 34.6  | 56.8  | 33.4  | 61.2  | 38.5  | 49.9  | 38.0  | 48.2  | 51.5  | 32.5  | 134   |
| MAX   | 135   | 150   | 332   | 56    | 264   | 90    | 219   | 86    | 234   | 427   | 174   | 1,320 |
| MIN   | 23    | 23    | 27    | 28    | 32    | 30    | 27    | 24    | 23    | 20    | 18    | 17    |
| CFSM  | 1.00  | 0.93  | 1.53  | 0.90  | 1.65  | 1.04  | 1.34  | 1.02  | 1.30  | 1.39  | 0.87  | 3.60  |
| IN.   | 1.15  | 1.04  | 1.76  | 1.04  | 1.78  | 1.20  | 1.50  | 1.18  | 1.45  | 1.60  | 1.01  | 4.02  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1928 - 2004, @ BY WATER YEAR (WY)

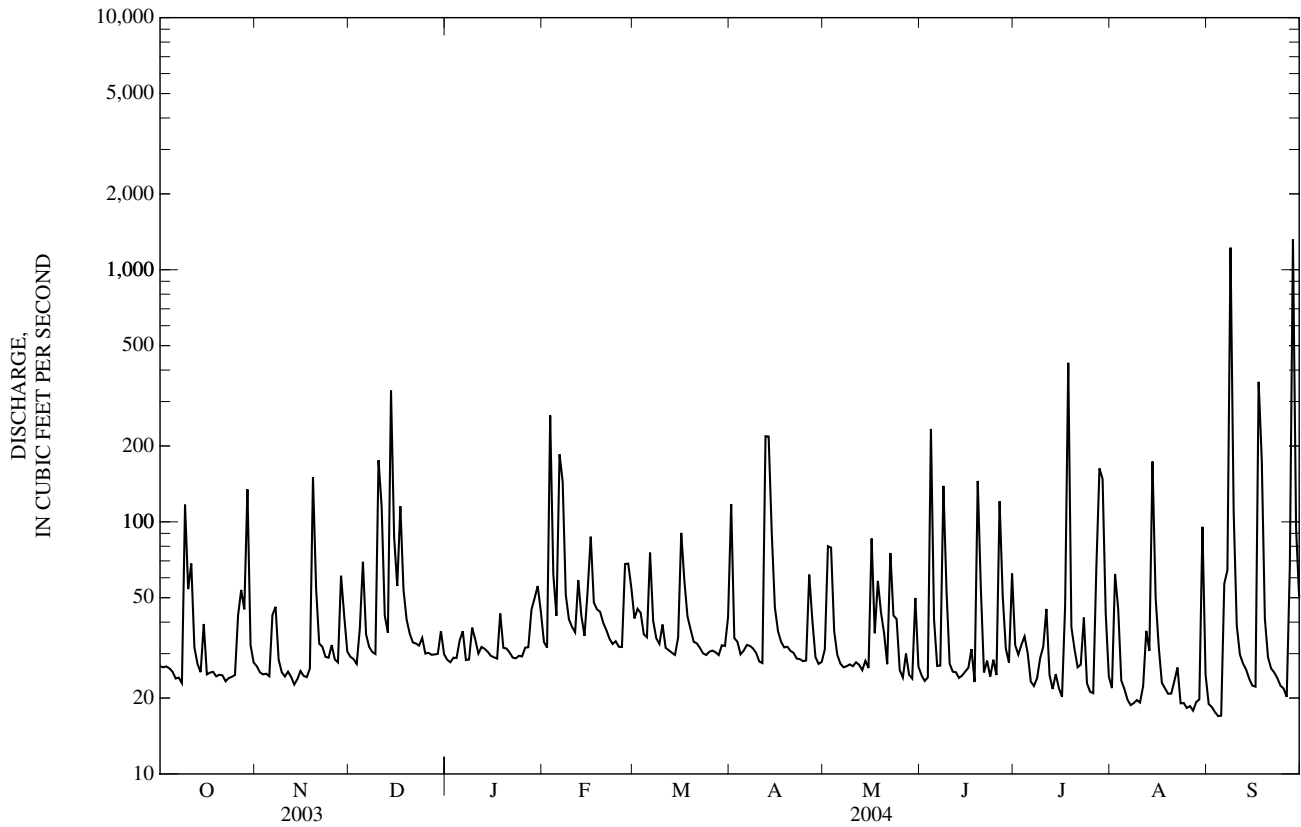
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 43.5   | 43.2   | 56.5   | 70.5   | 82.6   | 79.7   | 66.9   | 53.2   | 51.1   | 51.6   | 43.7   | 51.7   |
| MAX  | 154    | 120    | 129    | 205    | 185    | 231    | 206    | 177    | 192    | 231    | 112    | 247    |
| (WY) | (1960) | (1986) | (1973) | (1978) | (1979) | (1975) | (1987) | (1978) | (1982) | (1984) | (1984) | (1979) |
| MIN  | 7.71   | 8.73   | 13.1   | 17.3   | 22.0   | 31.4   | 20.3   | 16.2   | 10.2   | 11.2   | 7.82   | 8.63   |
| (WY) | (1931) | (1932) | (1934) | (1934) | (1931) | (1931) | (1942) | (1938) | (1933) | (1932) | (1932) | (1930) |

02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1928 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 33,124                 |        | 18,674              |        | 57.6                                 |              |
| ANNUAL MEAN              | 90.8                   |        | 51.0                |        | 109                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 30.6                                 | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1938                                 |              |
| HIGHEST DAILY MEAN       | 1,930                  | Mar 20 | 1,320               | Sep 28 | 4,400                                | Sep 22, 1979 |
| LOWEST DAILY MEAN        | 22                     | Sep 17 | 17                  | Sep 4  | 3.4                                  | Aug 28, 1932 |
| ANNUAL SEVEN-DAY MINIMUM | 24                     | Oct 18 | 19                  | Aug 23 | 6.2                                  | Aug 28, 1930 |
| MAXIMUM PEAK FLOW        |                        |        | 2,970               | Sep 28 | 9140*                                | Sep 22, 1979 |
| MAXIMUM PEAK STAGE       |                        |        | 12.03               | Sep 28 | 20.12*                               | Sep 22, 1979 |
| INSTANTANEOUS LOW FLOW   |                        |        | 14*                 | Aug 27 | 1.6                                  | Aug 28, 1932 |
| ANNUAL RUNOFF (CFSM)     | 2.45                   |        | 1.38                |        | 1.55                                 |              |
| ANNUAL RUNOFF (INCHES)   | 33.21                  |        | 18.72               |        | 21.10                                |              |
| 10 PERCENT EXCEEDS       | 174                    |        | 75                  |        | 100                                  |              |
| 50 PERCENT EXCEEDS       | 42                     |        | 31                  |        | 31                                   |              |
| 90 PERCENT EXCEEDS       | 25                     |        | 23                  |        | 16                                   |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.



02095500 NORTH BUFFALO CREEK NEAR GREENSBORO, NC—Continued

PRECIPITATION RECORDS

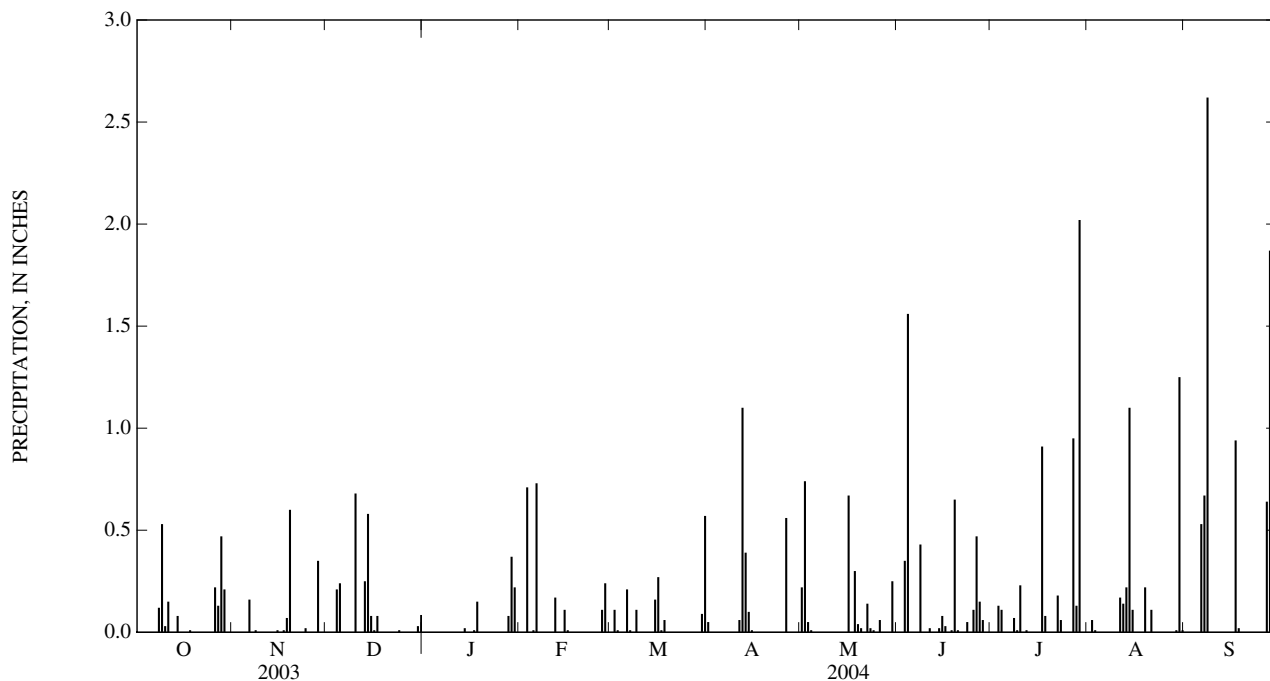
PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.74 | 0.00 | 0.00 | 0.06 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.71 | 0.01 | 0.00 | 0.05 | 0.35 | 0.13 | 0.01 | 0.00 |
| 4     | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.56 | 0.11 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.24 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | 0.16 | 0.00 | 0.00 | 0.73 | 0.21 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.67 |
| 8     | 0.12 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.43 | 0.07 | 0.00 | 2.62 |
| 9     | 0.53 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 |
| 10    | 0.03 | 0.00 | 0.68 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 | 0.00 | 0.00 |
| 11    | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.02 | 0.00 | 0.17 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.00 | 0.17 | 0.00 | 1.10 | 0.00 | 0.00 | 0.01 | 0.14 | 0.00 |
| 13    | 0.00 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.00 | 0.00 | 0.22 | 0.00 |
| 14    | 0.08 | 0.00 | 0.58 | 0.02 | 0.00 | 0.00 | 0.10 | 0.00 | 0.02 | 0.00 | 1.10 | 0.00 |
| 15    | 0.00 | 0.01 | 0.08 | 0.00 | 0.11 | 0.16 | 0.01 | 0.00 | 0.08 | 0.00 | 0.11 | 0.00 |
| 16    | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.27 | 0.00 | 0.67 | 0.03 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.01 | 0.08 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.91 | 0.00 | 0.94 |
| 18    | 0.01 | 0.07 | 0.00 | 0.15 | 0.00 | 0.06 | 0.00 | 0.30 | 0.01 | 0.08 | 0.00 | 0.02 |
| 19    | 0.00 | 0.60 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.65 | 0.00 | 0.22 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.18 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.05 | 0.06 | 0.00 | 0.00 |
| 24    | 0.00 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 |
| 26    | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 0.06 | 0.47 | 0.00 | 0.00 | 0.00 |
| 27    | 0.13 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.15 | 0.95 | 0.00 | 0.64 |
| 28    | 0.47 | 0.35 | 0.00 | 0.08 | 0.24 | 0.00 | 0.00 | 0.00 | 0.06 | 0.13 | 0.00 | 1.87 |
| 29    | 0.21 | 0.00 | 0.00 | 0.37 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.02 | 0.01 | 0.00 |
| 30    | 0.00 | 0.00 | 0.03 | 0.22 | ---  | 0.09 | 0.00 | 0.25 | 0.00 | 0.00 | 1.25 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.57 | ---  | 0.00 | ---  | 0.00 | 0.01 | ---  |
| TOTAL | 1.95 | 1.23 | 2.17 | 0.85 | 2.09 | 1.61 | 2.27 | 2.53 | 4.00 | 4.89 | 3.41 | 7.29 |

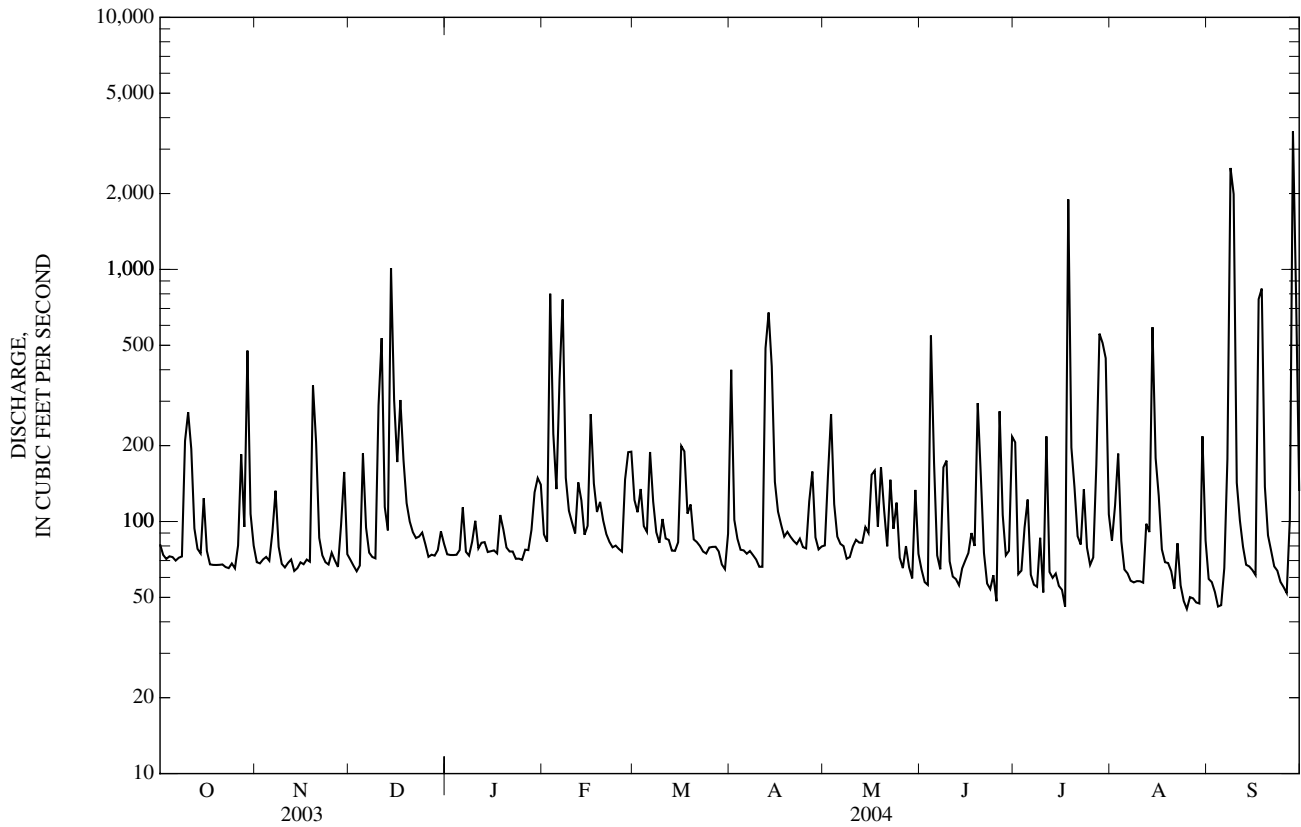




0209553650 BUFFALO CREEK AT SECONDARY ROAD 2819 NEAR McLEANSVILLE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1998 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 107,868                |        | 54,097              |        |                         |              |
| ANNUAL MEAN              | 296                    |        | 148                 |        | 174                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 349                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 100                     | 2002         |
| HIGHEST DAILY MEAN       | 4,550                  | Mar 20 | 3,530               | Sep 28 | 4,550                   | Mar 20, 2003 |
| LOWEST DAILY MEAN        | 43                     | Jun 26 | 45                  | Aug 25 | 37                      | Aug 10, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 57                     | Jun 21 | 49                  | Aug 23 | 40                      | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 5,490               | Sep 28 | 6,720                   | Mar 20, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 17.06               | Sep 28 | 19.35                   | Mar 20, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 28                  | Aug 25 | 22                      | Jul 21, 2002 |
| ANNUAL RUNOFF (CFSM)     | 3.34                   |        | 1.67                |        | 1.97                    |              |
| ANNUAL RUNOFF (INCHES)   | 45.34                  |        | 22.74               |        | 26.70                   |              |
| 10 PERCENT EXCEEDS       | 664                    |        | 207                 |        | 306                     |              |
| 50 PERCENT EXCEEDS       | 122                    |        | 80                  |        | 81                      |              |
| 90 PERCENT EXCEEDS       | 69                     |        | 60                  |        | 54                      |              |

e Estimated.



0209553650 BUFFALO CREEK AT SECONDARY ROAD 2819 NEAR McLEANSVILLE, NC—Continued

PRECIPITATION RECORDS

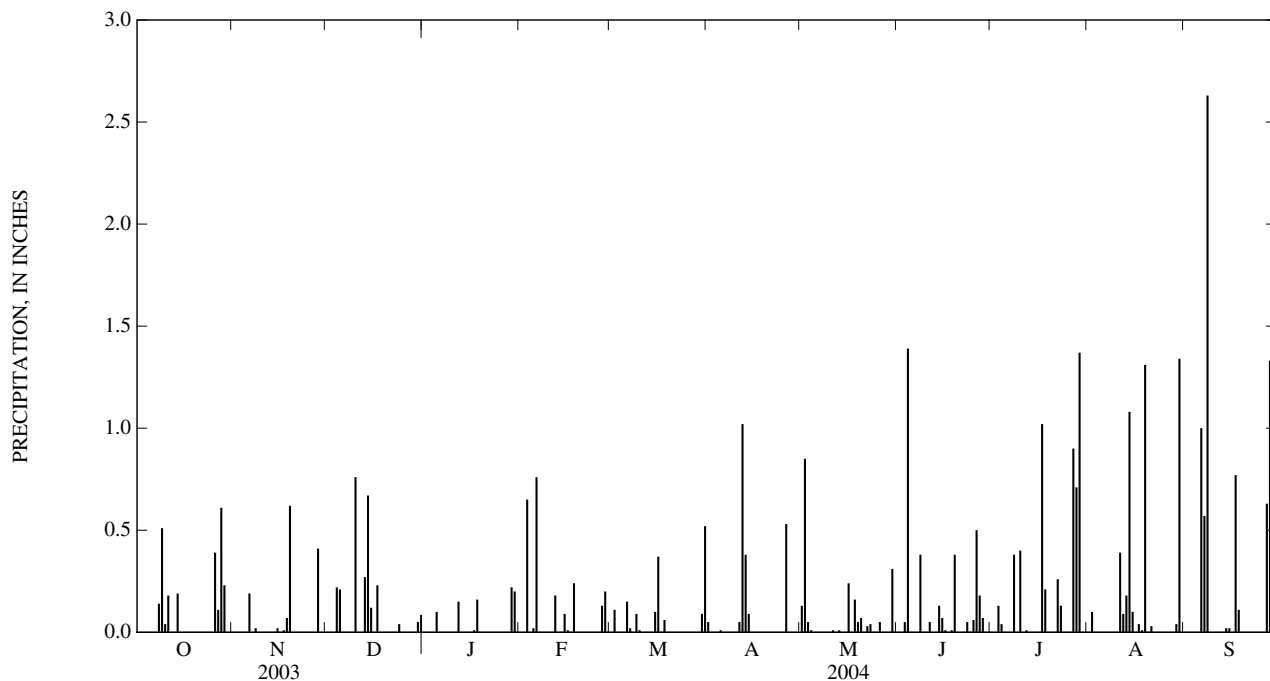
PERIOD OF RECORD.--August 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.00 | 0.85 | 0.00 | 0.00 | 0.10 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.65 | 0.00 | 0.00 | 0.05 | 0.05 | 0.13 | 0.00 | 0.00 |
| 4     | 0.00 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 1.39 | 0.04 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.21 | 0.10 | 0.02 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 6     | 0.00 | 0.19 | 0.00 | 0.00 | 0.76 | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.00 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.57 |
| 8     | 0.14 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.38 | 0.38 | 0.00 | 2.63 |
| 9     | 0.51 | 0.00 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 10    | 0.04 | 0.00 | 0.76 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 |
| 11    | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.01 | 0.05 | 0.00 | 0.39 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.15 | 0.18 | 0.00 | 1.02 | 0.00 | 0.00 | 0.01 | 0.09 | 0.00 |
| 13    | 0.00 | 0.00 | 0.27 | 0.00 | 0.00 | 0.00 | 0.38 | 0.01 | 0.00 | 0.00 | 0.18 | 0.00 |
| 14    | 0.19 | 0.00 | 0.67 | 0.00 | 0.00 | 0.00 | 0.09 | 0.00 | 0.13 | 0.00 | 1.08 | 0.02 |
| 15    | 0.00 | 0.02 | 0.12 | 0.00 | 0.09 | 0.10 | 0.00 | 0.00 | 0.07 | 0.00 | 0.10 | 0.02 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.37 | 0.00 | 0.24 | 0.01 | 0.00 | 0.00 | 0.00 |
| 17    | 0.00 | 0.01 | 0.23 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 | 0.04 | 0.77 |
| 18    | 0.00 | 0.07 | 0.00 | 0.16 | 0.24 | 0.06 | 0.00 | 0.16 | 0.01 | 0.21 | 0.01 | 0.11 |
| 19    | 0.00 | 0.62 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.38 | 0.00 | 1.31 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.00 | 0.26 | 0.00 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.05 | 0.13 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | 0.00 |
| 26    | 0.39 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 0.05 | 0.50 | 0.00 | 0.00 | 0.00 |
| 27    | 0.11 | 0.00 | 0.00 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.18 | 0.90 | 0.00 | 0.63 |
| 28    | 0.61 | 0.41 | 0.00 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 | 0.07 | 0.71 | 0.00 | 1.33 |
| 29    | 0.23 | 0.00 | 0.00 | 0.22 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.37 | 0.04 | 0.00 |
| 30    | 0.00 | 0.00 | 0.05 | 0.20 | ---  | 0.09 | 0.00 | 0.31 | 0.00 | 0.00 | 1.34 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.52 | ---  | 0.00 | ---  | 0.00 | 0.00 | ---  |
| TOTAL | 2.40 | 1.34 | 2.57 | 0.84 | 2.28 | 1.52 | 2.13 | 2.01 | 3.33 | 5.56 | 4.71 | 7.08 |



02096500 HAW RIVER AT HAW RIVER, NC

LOCATION.--Lat 36°05'14", long 79°21'58", Alamance County, Hydrologic unit 03030002, on left bank at Haw River, 650 ft downstream of Southern Railway bridge, 800 ft downstream of bridge on U.S. Highway 70 and State Highway 49, and 3 mi downstream of Stony Creek.

DRAINAGE AREA.--606 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 757: 1929 (M). WSP 782: 1934. WSP 1383: 1930,1932(M), 1933(m), 1936, 1943, 1944 (M), 1947(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 471.69 ft above NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Diurnal fluctuations and occasional regulation at low flows. City of Burlington diverted an average of 4.5 ft<sup>3</sup>/s from two Stony Creek Reservoirs (stations 02096003 and 02096432) for municipal water supply, about half of which was returned upstream of station as treated effluent, the remainder was returned downstream of station. Maximum discharge for period of record from rating curve extended above 38,000 ft<sup>3</sup>/s, by logarithmic plotting; maximum gage height, 32.83 ft, from flood mark.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV   | DEC    | JAN    | FEB    | MAR    | APR    | MAY   | JUN    | JUL    | AUG   | SEP    |
|-------|--------|-------|--------|--------|--------|--------|--------|-------|--------|--------|-------|--------|
| 1     | 337    | 328   | 333    | 347    | 398    | 609    | 741    | 280   | 165    | 456    | 234   | 235    |
| 2     | 317    | 286   | 303    | 352    | 344    | 574    | 604    | 373   | 141    | 210    | 245   | 167    |
| 3     | 302    | 267   | 272    | 331    | 1,520  | 584    | 375    | 890   | 127    | 167    | 346   | 139    |
| 4     | 274    | 255   | 247    | 321    | 2,050  | 531    | 321    | 705   | 406    | 178    | 256   | 124    |
| 5     | 262    | 258   | 348    | 328    | 1,180  | 448    | 289    | 566   | 1,030  | 194    | 166   | 116    |
| 6     | 253    | 265   | 467    | 385    | 897    | 433    | 261    | 396   | 297    | 191    | 147   | 472    |
| 7     | 247    | 375   | 416    | 376    | 3,730  | 595    | 244    | 304   | 227    | 134    | 130   | 1,220  |
| 8     | 247    | 358   | 362    | 308    | 2,120  | 451    | 251    | 258   | 307    | 258    | 117   | 4,920  |
| 9     | 266    | 293   | 321    | 312    | 1,460  | 391    | 248    | 226   | 500    | 181    | 186   | 6,430  |
| 10    | 601    | 258   | 445    | 348    | 1,140  | 357    | 236    | 208   | 295    | 151    | 115   | 2,420  |
| 11    | 388    | 252   | 2,090  | 344    | 893    | 342    | 234    | 197   | 286    | 261    | 107   | 1,690  |
| 12    | 512    | 256   | 1,420  | 312    | 932    | 315    | 426    | 190   | 297    | 223    | 187   | 988    |
| 13    | 397    | 266   | 772    | 325    | 773    | 306    | 2,150  | 184   | 205    | 160    | 347   | 543    |
| 14    | 343    | 254   | 2,470  | 312    | 523    | 289    | 2,600  | 176   | 175    | 136    | 868   | 360    |
| 15    | 383    | 237   | 2,640  | 300    | 470    | 283    | 1,660  | 174   | 171    | 127    | 1,180 | 617    |
| 16    | 373    | 261   | 1,560  | 288    | 641    | 343    | 950    | 161   | 1,030  | 110    | 478   | 574    |
| 17    | 292    | 253   | 1,280  | 294    | 733    | 663    | 682    | 264   | 1,010  | 102    | 326   | 752    |
| 18    | 269    | 258   | 1,510  | 303    | 631    | 499    | 518    | 203   | 480    | 917    | 758   | 2,560  |
| 19    | 252    | 317   | 1,140  | 367    | 668    | 473    | 431    | e200  | 293    | 1,280  | 321   | 997    |
| 20    | 239    | 928   | 980    | 339    | 599    | 423    | 406    | e240  | 560    | 410    | 254   | 551    |
| 21    | 236    | 490   | 763    | 299    | 545    | 376    | 369    | e280  | 291    | 308    | e190  | 421    |
| 22    | 231    | 413   | 600    | 271    | 498    | 346    | 340    | 239   | 250    | 176    | e180  | 309    |
| 23    | 218    | 355   | 508    | 264    | 454    | 310    | 316    | 295   | 242    | 143    | e165  | 241    |
| 24    | 222    | 315   | 485    | 262    | 465    | 288    | 301    | 242   | 271    | 191    | e140  | 208    |
| 25    | 209    | 308   | 506    | 265    | 415    | 272    | 281    | 217   | 239    | 121    | 127   | 175    |
| 26    | 207    | 331   | 400    | 297    | 375    | 269    | 279    | 172   | 240    | 106    | 117   | 166    |
| 27    | 284    | 301   | 344    | 313    | 412    | 274    | 445    | 154   | 466    | 116    | 118   | 162    |
| 28    | 375    | 333   | 329    | 309    | 587    | 281    | 385    | 154   | 253    | 677    | 122   | 4,770  |
| 29    | 827    | 483   | 321    | 345    | 712    | 265    | 333    | 145   | 230    | 1,020  | 133   | 5,860  |
| 30    | 742    | 386   | 326    | 405    | ---    | 252    | 293    | 168   | 218    | 1,200  | 908   | 2,370  |
| 31    | 393    | ---   | 373    | 513    | ---    | 275    | ---    | 233   | ---    | 363    | 726   | ---    |
| TOTAL | 10,498 | 9,940 | 24,331 | 10,135 | 26,165 | 12,117 | 16,969 | 8,494 | 10,702 | 10,267 | 9,694 | 40,557 |
| MEAN  | 339    | 331   | 785    | 327    | 902    | 391    | 566    | 274   | 357    | 331    | 313   | 1,352  |
| MAX   | 827    | 928   | 2,640  | 513    | 3,730  | 663    | 2,600  | 890   | 1,030  | 1,280  | 1,180 | 6,430  |
| MIN   | 207    | 237   | 247    | 262    | 344    | 252    | 234    | 145   | 127    | 102    | 107   | 116    |
| CFSM  | 0.56   | 0.55  | 1.30   | 0.54   | 1.49   | 0.65   | 0.93   | 0.45  | 0.59   | 0.55   | 0.52  | 2.23   |
| IN.   | 0.64   | 0.61  | 1.49   | 0.62   | 1.61   | 0.74   | 1.04   | 0.52  | 0.66   | 0.63   | 0.60  | 2.49   |

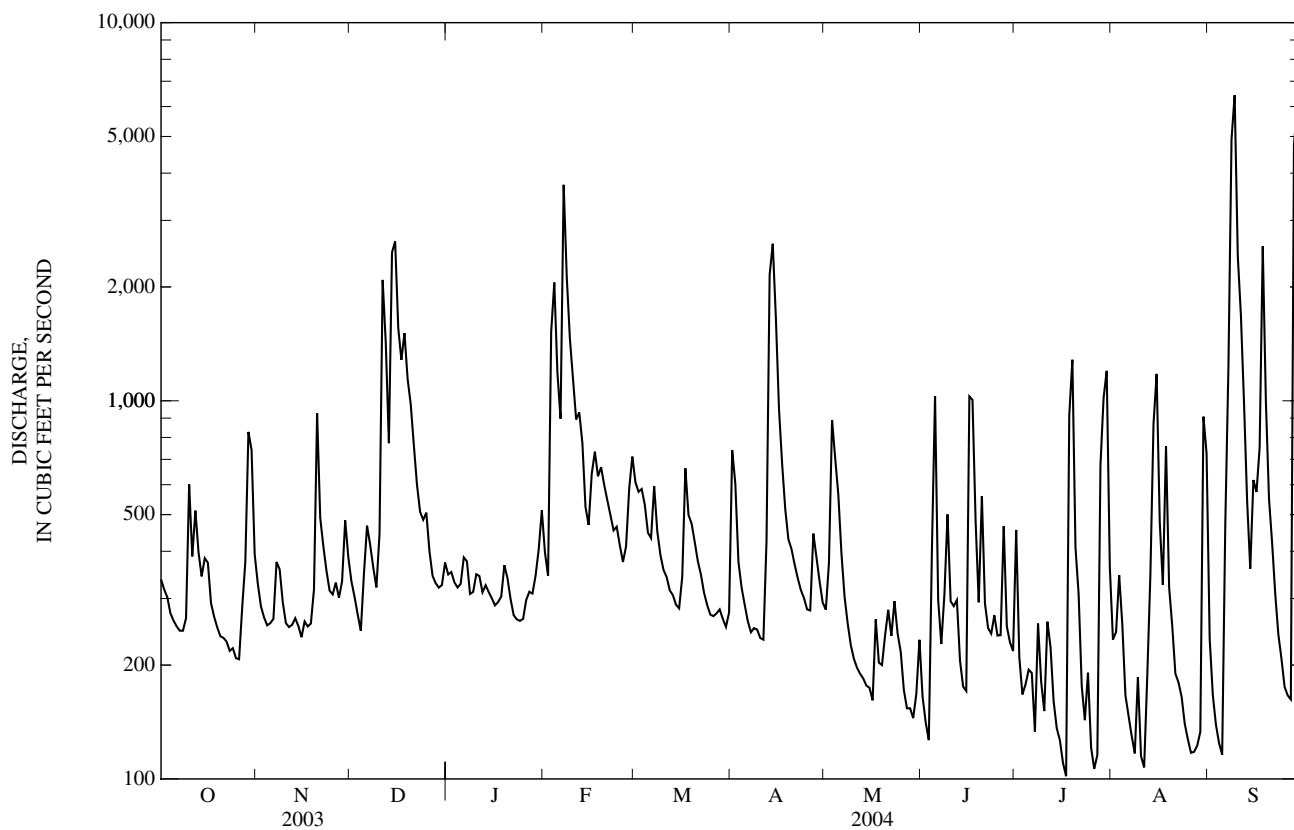
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 396    | 407    | 576    | 889    | 1,004  | 1,023  | 831    | 492    | 429    | 394    | 359    | 455    |
| MAX  | 2,480  | 1,286  | 1,553  | 2,977  | 2,492  | 3,276  | 2,771  | 1,948  | 2,145  | 2,348  | 1,662  | 4,373  |
| (WY) | (1960) | (1948) | (2003) | (1937) | (1998) | (1993) | (1987) | (1978) | (1982) | (1984) | (1939) | (1996) |
| MIN  | 48.9   | 61.1   | 118    | 172    | 236    | 289    | 164    | 107    | 74.5   | 70.9   | 57.2   | 33.4   |
| (WY) | (1942) | (1954) | (1934) | (1956) | (2002) | (1967) | (2002) | (2002) | (2002) | (1932) | (1953) | (1954) |

02096500 HAW RIVER AT HAW RIVER, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1929 - 2004 |             |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 469,487                |        | 189,869             |        | 602                     |             |
| ANNUAL MEAN              | 1,286                  |        | 519                 |        | 1,489                   |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2003                    |             |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2002                    |             |
| HIGHEST DAILY MEAN       | 13,800                 | Mar 21 | 6,430               | Sep 9  | 42,000                  | Sep 7, 1996 |
| LOWEST DAILY MEAN        | 207                    | Oct 26 | 102                 | Jul 17 | 5.0                     | Sep 6, 1930 |
| ANNUAL SEVEN-DAY MINIMUM | 223                    | Oct 20 | 132                 | Aug 23 | 16                      | Oct 7, 1954 |
| MAXIMUM PEAK FLOW        |                        |        | 7,760               | Sep 28 | 51400*                  | Sep 6, 1996 |
| MAXIMUM PEAK STAGE       |                        |        | 15.68               | Sep 28 | 32.83*                  | Sep 6, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 97                  | Jul 17 | 3.0                     | Sep 5, 1930 |
| ANNUAL RUNOFF (CFSM)     | 2.12                   |        | 0.856               |        | 0.994                   |             |
| ANNUAL RUNOFF (INCHES)   | 28.82                  |        | 11.66               |        | 13.51                   |             |
| 10 PERCENT EXCEEDS       | 2,940                  |        | 982                 |        | 1,260                   |             |
| 50 PERCENT EXCEEDS       | 655                    |        | 316                 |        | 296                     |             |
| 90 PERCENT EXCEEDS       | 258                    |        | 167                 |        | 101                     |             |

\* See REMARKS.  
e Estimated.





02096500 HAW RIVER AT HAW RIVER, NC—Continued

PRECIPITATION RECORDS

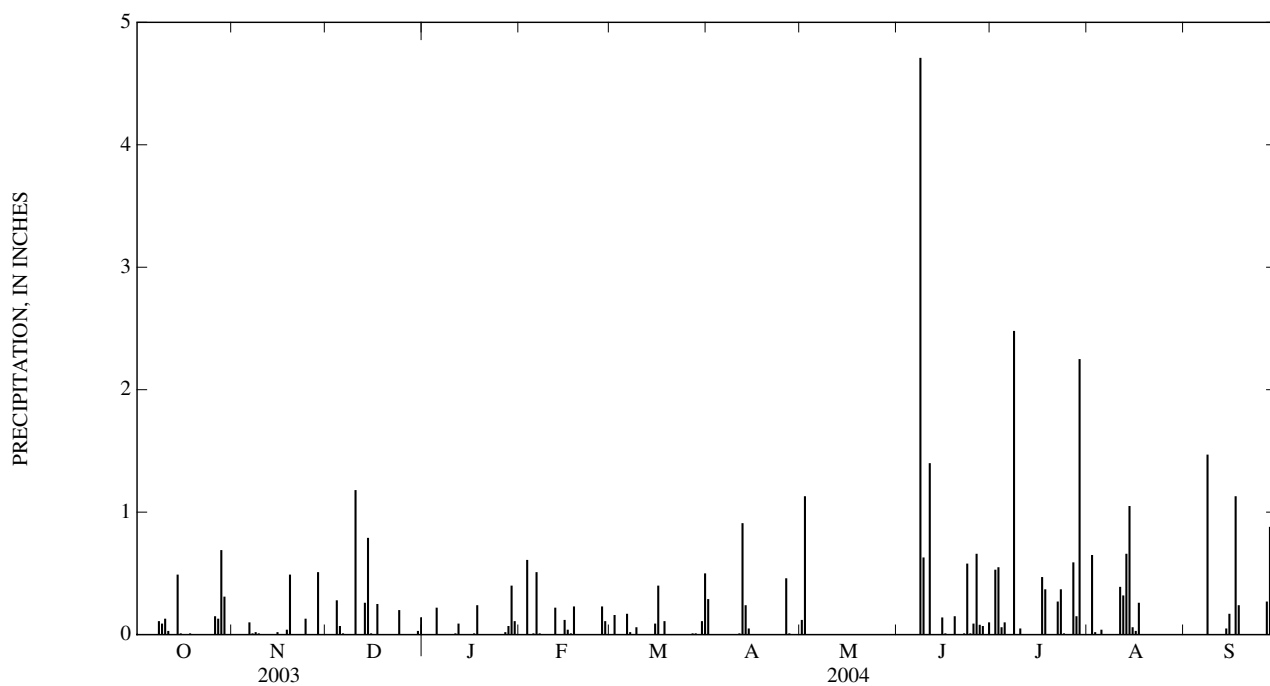
PERIOD OF RECORD.--August 1998 to current year. Records for August 1998 to September 2003 are unpublished and available in the USGS District Office in Raleigh, NC.

GAGE.--Tipping bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.12 | ---  | 0.00 | 0.00 | ---  |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 1.13 | ---  | 0.53 | 0.65 | ---  |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.61 | 0.00 | 0.00 | ---  | ---  | 0.55 | 0.02 | ---  |
| 4     | 0.00 | 0.00 | 0.28 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | ---  | 0.06 | 0.00 | ---  |
| 5     | 0.00 | 0.00 | 0.07 | 0.22 | 0.01 | 0.00 | 0.00 | ---  | ---  | 0.10 | 0.04 | ---  |
| 6     | 0.00 | 0.10 | 0.01 | 0.00 | 0.51 | 0.17 | 0.00 | ---  | ---  | 0.00 | 0.00 | ---  |
| 7     | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.02 | 0.00 | ---  | ---  | 0.00 | 0.00 | ---  |
| 8     | 0.11 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 4.71 | 2.48 | 0.00 | 1.47 |
| 9     | 0.09 | 0.01 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | ---  | 0.63 | 0.00 | 0.00 | 0.00 |
| 10    | 0.13 | 0.00 | 1.18 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.05 | 0.00 | 0.00 |
| 11    | 0.03 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | ---  | 1.40 | 0.00 | 0.39 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.09 | 0.22 | 0.00 | 0.91 | ---  | 0.00 | 0.00 | 0.32 | 0.00 |
| 13    | 0.00 | 0.00 | 0.26 | 0.00 | 0.00 | 0.00 | 0.24 | ---  | 0.00 | 0.00 | 0.66 | 0.00 |
| 14    | 0.49 | 0.00 | 0.79 | 0.00 | 0.00 | 0.00 | 0.05 | ---  | 0.00 | 0.00 | 1.05 | 0.05 |
| 15    | 0.01 | 0.02 | 0.01 | 0.00 | 0.12 | 0.09 | 0.00 | ---  | 0.14 | 0.00 | 0.06 | 0.17 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.40 | 0.00 | ---  | 0.01 | 0.00 | 0.03 | 0.00 |
| 17    | 0.00 | 0.00 | 0.25 | 0.01 | 0.01 | 0.00 | 0.00 | ---  | 0.00 | 0.47 | 0.26 | 1.13 |
| 18    | 0.01 | 0.04 | 0.00 | 0.24 | 0.23 | 0.11 | 0.00 | ---  | 0.00 | 0.37 | 0.00 | 0.24 |
| 19    | 0.00 | 0.49 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.15 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.01 | 0.27 | ---  | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.58 | 0.37 | ---  | 0.00 |
| 24    | 0.00 | 0.13 | 0.20 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.01 | 0.01 | ---  | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.09 | 0.00 | ---  | 0.00 |
| 26    | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.46 | ---  | 0.66 | 0.00 | ---  | 0.00 |
| 27    | 0.13 | 0.00 | 0.00 | 0.02 | 0.23 | 0.01 | 0.01 | ---  | 0.08 | 0.59 | ---  | 0.27 |
| 28    | 0.69 | 0.51 | 0.00 | 0.07 | 0.11 | 0.01 | 0.00 | ---  | 0.07 | 0.15 | ---  | 0.88 |
| 29    | 0.31 | 0.00 | 0.00 | 0.40 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 2.25 | ---  | 0.00 |
| 30    | 0.00 | 0.00 | 0.03 | 0.11 | ---  | 0.11 | 0.00 | ---  | 0.10 | 0.00 | ---  | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.50 | ---  | ---  | ---  | 0.00 | ---  | ---  |
| TOTAL | 2.15 | 1.33 | 3.08 | 1.17 | 2.10 | 1.64 | 1.97 | ---  | ---  | 8.25 | ---  | ---  |

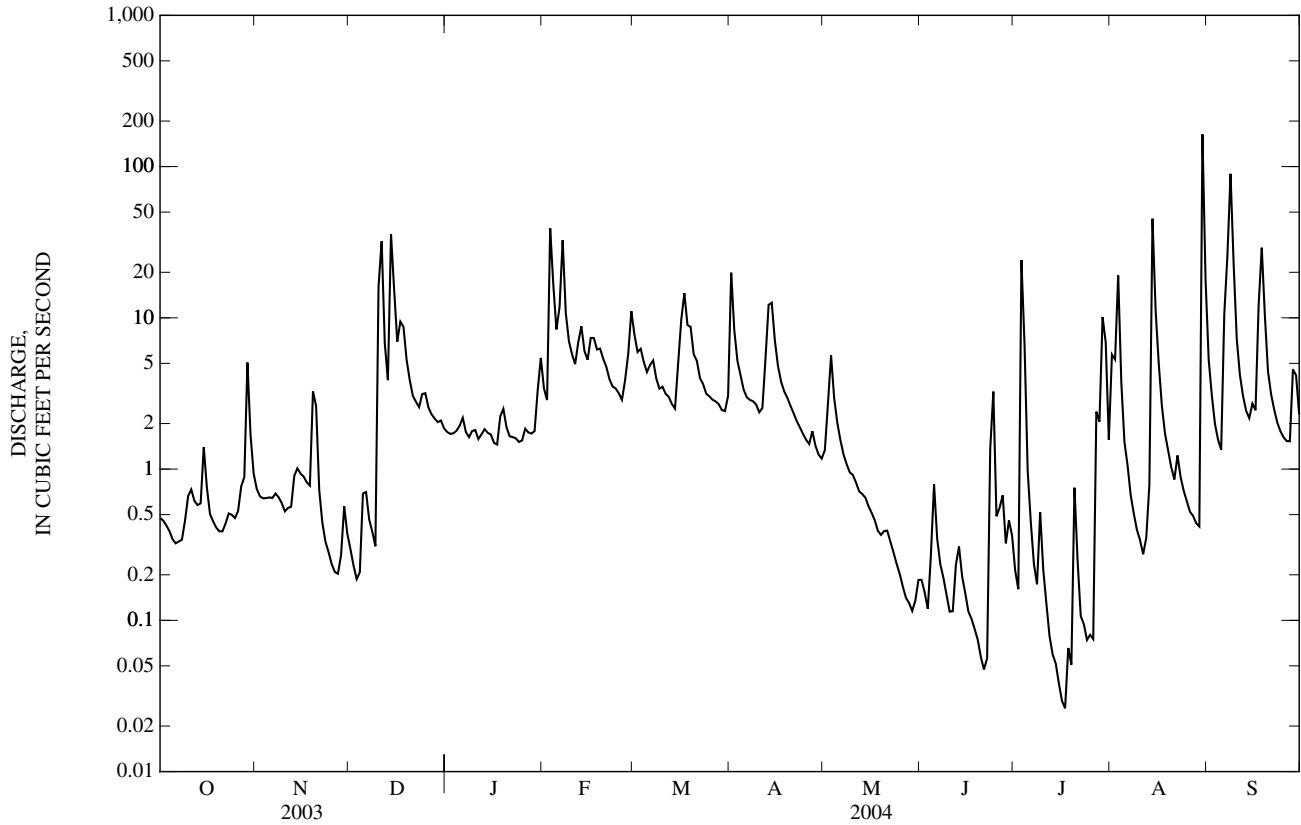




02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1989 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 4,152.03               |        | 1,466.35            |        |                         |              |
| ANNUAL MEAN              | 11.4                   |        | 4.01                |        | 6.78                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 14.3                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 0.99                    | 2002         |
| HIGHEST DAILY MEAN       | 406                    | Apr 10 | 163                 | Aug 30 | 516                     | Mar 4, 1993  |
| LOWEST DAILY MEAN        | 0.19                   | Dec 3  | 0.03                | Jul 16 | 0.00                    | Sep 17, 1990 |
| ANNUAL SEVEN-DAY MINIMUM | 0.28                   | Nov 22 | 0.05                | Jul 13 | 0.00                    | Sep 17, 1990 |
| MAXIMUM PEAK FLOW        |                        |        | 599                 | Aug 30 | 2060*                   | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 4.63                | Aug 30 | 7.90*                   | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.02*               | Jul 15 | 0.00*                   | Sep 17, 1990 |
| ANNUAL RUNOFF (CFSM)     | 1.51                   |        | 0.531               |        | 0.899                   |              |
| ANNUAL RUNOFF (INCHES)   | 20.48                  |        | 7.23                |        | 12.21                   |              |
| 10 PERCENT EXCEEDS       | 21                     |        | 7.8                 |        | 13                      |              |
| 50 PERCENT EXCEEDS       | 3.0                    |        | 1.6                 |        | 1.8                     |              |
| 90 PERCENT EXCEEDS       | 0.49                   |        | 0.19                |        | 0.08                    |              |

\* See REMARKS.



02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Color, water, fltrd, Pt-Co units (00080) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Potassium, water, fltrd, mg/L (00935) |
|-----------|------|--------------------------------------|--|------------------------------------|--------------------------------|---|---|---|-----------------------------------|--|------------------------------------|---------------------------------------|---------------------------------------|
| OCT 27... | 1200 | .78                                  | 38                                       | 745                                | 7.8                            | 80  | 7.0   | 102   | 15.6                              | 34                                     | 8.40                               | 3.26                                  | 2.32                                  |
| DEC 09... | 1015 | .30                                  | 25                                       | 755                                | 14.6                           | 110   | 7.4   | 85  | 3.0                               | 31                                     | 7.57                               | 2.96                                  | 1.40                                  |
| FEB 24... | 0915 | 3.5                                  | 35                                       | 750                                | 13.4                           | 114   | 7.5   | 80  | 7.3                               | 27                                     | 6.68                               | 2.48                                  | .82                                   |
| APR 01... | 0915 | 30                                   | 125                                      | 741                                | 10.8                           | 101   | 7.2   | 82  | 10.9                              | 28                                     | 6.90                               | 2.57                                  | 1.63                                  |
| JUN 22... | 1230 | .07                                  | 50                                       | 748                                | 6.8                            | 78  | 7.3   | 114   | 21.3                              | 41                                     | 10.7                               | 3.41                                  | 1.43                                  |
| AUG 17... | 1145 | 2.7                                  | 125                                      | 754                                | 7.3                            | 82  | 7.1   | 80  | 20.5                              | 26                                     | 6.54                               | 2.26                                  | 1.60                                  |
| AUG 30... | 1245 | 578                                  | 150                                      | 745                                | 6.9                            | 81  | 5.9   | 42  | 22.1                              | 14                                     | 3.60                               | 1.26                                  | 2.71                                  |

| Date      | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicarbonate, wat unfltrd, titr., mg/L (00450) | Chloride, water, fltrd, mg/L (00940) | Fluoride, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate water, fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) |
|-----------|------------------------------------|--|---|--------------------------------------|--------------------------------------|------------------------------------|------------------------------------|--|---|--|---|---|---|
| OCT 27... | 5.71                               | 32   | 39  | 6.69                                 | <.2                                  | 14.8                               | 2.1                                | 71   | .34   | <.010                                    | .186  | .002                                    | .010  |
| DEC 09... | 5.44                               | 27   | 33  | 7.27                                 | <.2                                  | 13.0                               | 3.4                                | 65   | .19   | <.010                                    | .417  | .003                                    | <.006   |
| FEB 24... | 5.77                               | 36   | 49  | 6.70                                 | <.2                                  | 9.34                               | 4.4                                | 58   | .22   | E.005                                    | .543  | .004                                    | E.005   |
| APR 01... | 5.82                               | 26   | 32  | 6.18                                 | <.2                                  | 10.9                               | 3.6                                | 70   | 1.1   | .074                                     | .372  | .008                                    | .013  |
| JUN 22... | 5.80                               | 42   | 51  | 5.80                                 | <.2                                  | 19.3                               | 1.9                                | 87   | .39   | .024                                     | .457  | .002                                    | .029  |
| AUG 17... | 4.84                               | 20   | 25  | 5.45                                 | <.2                                  | 12.8                               | 5.2                                | 69   | .53   | .017                                     | .655  | .004                                    | .022  |
| AUG 30... | 1.97                               | 8  | 9   | 2.54                                 | <.2                                  | 5.54                               | 3.2                                | 61   | 1.9   | .089                                     | .273  | .007                                    | .078  |

| Date      | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Aluminum, water, unfltrd recoverable, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recoverable, ug/L (01034) | Cobalt water, unfltrd recoverable, ug/L (01037) | Copper, water, unfltrd recoverable, ug/L (01042) | Iron, water, unfltrd recoverable, ug/L (01045) | Lead, water, unfltrd recoverable, ug/L (01051) | Manganese, water, unfltrd recoverable, ug/L (01055) | Mercury water, unfltrd recoverable, ug/L (71900) | Molybdenum, water, unfltrd recoverable, ug/L (01062) |
|-----------|---|---|--|------------------------------------|-------------------------------------|--|---|--|--|--|---|--|--|
| OCT 27... | .052                                    | 5.7   | 80   | <.2                                | <.04                                | <.8  | .210  | .9   | 450  | .09  | 78  | <.02   | <.2  |
| DEC 09... | .016                                    | 2.4   | --   | --                                 | --                                  | --   | --  | --   | --   | --   | --  | --   | --   |
| FEB 24... | .023                                    | 2.9   | --   | --                                 | --                                  | --   | --  | --   | --   | --   | --  | --   | --   |
| APR 01... | .125                                    | 9.3   | 401  | <.2                                | <.04                                | <.8  | .842  | 1.3  | 1,610  | .64  | 304   | <.02   | <.2  |
| JUN 22... | .088                                    | 5.6   | --   | --                                 | --                                  | --   | --  | --   | --   | --   | --  | --   | --   |
| AUG 17... | .081                                    | 11.0  | --   | --                                 | --                                  | --   | --  | --   | --   | --   | --  | --   | --   |
| AUG 30... | .46                                     | 29.3  | 3,470  | E1                                 | .07                                 | 2.1  | 5.64  | 7.4  | 6,330  | 5.32   | 738   | .03  | <.2  |

## CAPE FEAR RIVER BASIN

02096846 CANE CREEK NEAR ORANGE GROVE, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Nickel,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01067) | Selen-<br>ium,<br>water,<br>unfltrd<br>ug/L<br>(01147) | Silver,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01077) | Zinc,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01092) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) |
|--------------|--|--|--|--|--|
| OCT<br>27... | .36  | <.4  | <.16   | <2   | 7  |
| DEC<br>09... | --   | --   | --   | --   | 8  |
| FEB<br>24... | --   | --   | --   | --   | 5  |
| APR<br>01... | .35  | <.4  | <.16   | E1   | 47   |
| JUN<br>22... | --   | --   | --   | --   | 15   |
| AUG<br>17... | --   | --   | --   | --   | 14   |
| 30...        | 1.72   | .5   | <.16   | 22   | 558  |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC

LOCATION.--Lat 35°57'00", long 79°14'28", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, 0.7 mi above State Highway 54, and 3.6 mi northwest of White Cross.

DRAINAGE AREA.--31.4 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098) | Trans-parency Secchi disc, meters (00078) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|-------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|--|---|---|------------------------------------|---|------------------------------------|--|
| OCT   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 31... | 1015 | 25                                       | 1.0                             | 2.20                                      | 760                                  | 6.9                             | 70   | 7.0   | 75  | 16.5                               | 25                                      | 5.98                               | 2.46                                   |
| 31... | 1020 | --                                       | 7.0                             | --  | 760                                  | .1                              | .0   | 6.8   | 92  | 12.9                               | --                                      | --                                 | --                                     |
| 31... | 1025 | --                                       | 13.6                            | --  | 760                                  | .2                              | 2  | 7.5   | 208   | 10.5                               | --                                      | --                                 | --                                     |
| APR   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 08... | 1115 | 25                                       | 1.0                             | .80                                       | 744                                  | 6.8                             | 68   | 7.3   | 73  | 14.3                               | 27                                      | 6.36                               | 2.63                                   |
| 08... | 1120 | --                                       | 6.0                             | --  | 744                                  | 6.7                             | 61   | 6.8   | 73  | 10.0                               | --                                      | --                                 | --                                     |
| 08... | 1125 | --                                       | 13.0                            | --  | 744                                  | 5.6                             | 48   | 6.8   | 72  | 8.0                                | --                                      | --                                 | --                                     |
| JUN   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 25... | 0945 | 25                                       | 1.0                             | 1.10                                      | 751                                  | 7.0                             | 90   | 7.7   | 86  | 27.6                               | 27                                      | 6.35                               | 2.63                                   |
| 25... | 0950 | --                                       | 6.0                             | --  | 751                                  | .1                              | 1  | 6.6   | 80  | 11.7                               | --                                      | --                                 | --                                     |
| 25... | 0955 | --                                       | 11.0                            | --  | 751                                  | .2                              | 1  | 6.6   | 84  | 8.6                                | --                                      | --                                 | --                                     |
| AUG   |      |  |                                 |   |                                      |                                 |  |   |   |                                    |   |                                    |  |
| 19... | 1145 | 15                                       | 1.0                             | 1.50                                      | 754                                  | 5.5                             | 67   | 7.6   | 84  | 25.4                               | 27                                      | 6.85                               | 2.49                                   |
| 19... | 1150 | --                                       | 6.0                             | --  | 754                                  | .2                              | 2  | 6.5   | 90  | 14.4                               | --                                      | --                                 | --                                     |
| 19... | 1155 | --                                       | 12.0                            | --  | 754                                  | .4                              | 3  | 6.8   | 113   | 9.6                                | --                                      | --                                 | --                                     |

| Date  | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicar-bonate, wat unfltrd, titr., mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|-------|--|------------------------------------|--|--|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--|---|---|--|---|
| OCT   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 31... | 2.26                                   | 3.74                               | 26   | 32   | 4.74                                  | <.2                                   | 8.04                               | 2.4                                | 55   | .46   | .025                                    | .026   | E.001                                   |
| 31... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .54   | .075                                    | .071   | .003                                    |
| 31... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 2.3   | 1.48                                    | <.016  | .009                                    |
| APR   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 08... | 2.12                                   | 4.64                               | 20   | 25   | 5.58                                  | <.2                                   | 7.17                               | 4.4                                | 56   | .39   | E.008                                   | .352   | .003                                    |
| 08... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .39   | .032                                    | .431   | .002                                    |
| 08... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .89   | .067                                    | .431   | E.001                                   |
| JUN   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 25... | 1.95                                   | 4.89                               | 27   | 33   | 6.28                                  | <.2                                   | 6.74                               | 3.9                                | 69   | .42   | <.010                                   | <.016  | <.002                                   |
| 25... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .38   | .046                                    | .167   | .004                                    |
| 25... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .80   | .431                                    | .070   | .004                                    |
| AUG   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 19... | 1.90                                   | 4.14                               | 27   | 33   | 5.73                                  | <.2                                   | 6.52                               | 3.5                                | 49   | .56   | E.005                                   | <.016  | <.002                                   |
| 19... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .39   | .058                                    | <.016  | <.002                                   |
| 19... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.1   | .641                                    | <.016  | .002                                    |

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

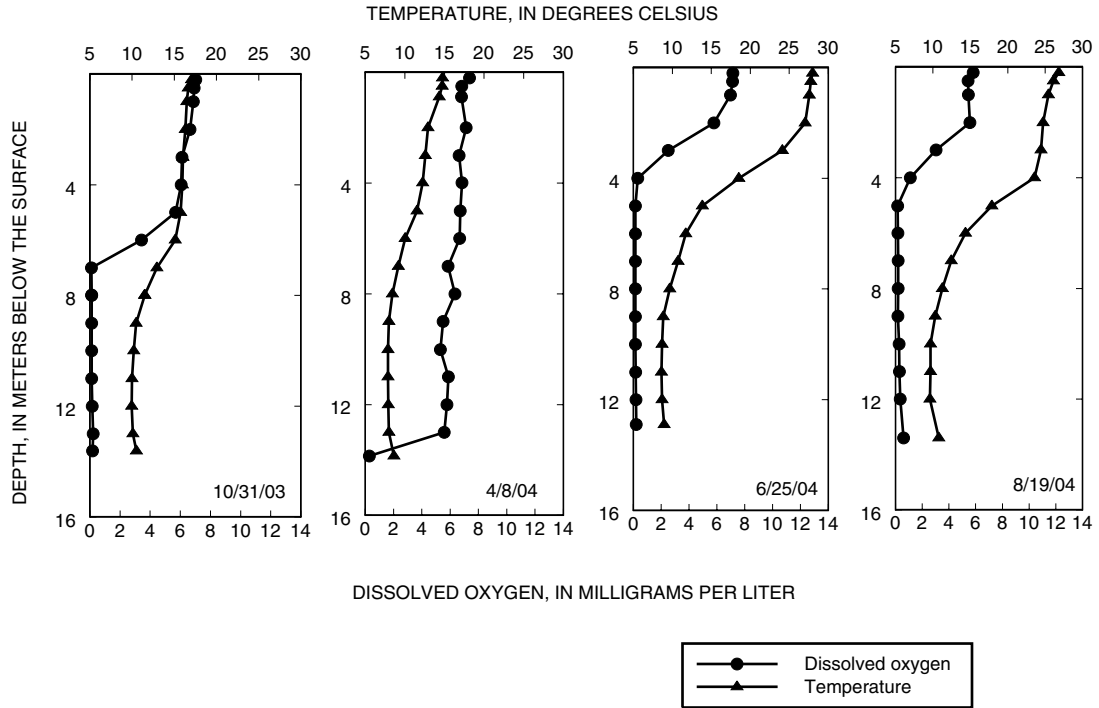
| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 31... | <.006  | .018                                    | 6.7   | E1.5  | <.1   | 60  | <2                                 | <.04                                | <.8   | .649   | .8  | 670   | .18   |
| 31... | <.006  | .024                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 2,380   | --  |
| 31... | .197   | .25                                     | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 12,200  | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 08... | <.006  | .015                                    | 5.5   | E1.0  | <.1   | 27  | <2                                 | <.04                                | <.8   | .138   | .9  | 390   | .08   |
| 08... | <.006  | .019                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 690   | --  |
| 08... | <.006  | .021                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 810   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 25... | <.006  | .014                                    | 7.0   | 4.0   | <.1   | --  | --                                 | --                                  | --  | --   | --  | 100   | --  |
| 25... | <.006  | .014                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 330   | --  |
| 25... | <.006  | .026                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 3,910   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 19... | <.006  | .024                                    | 6.7   | 12.1  | <.1   | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 19... | <.006  | .019                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 320   | --  |
| 19... | E.005  | .026                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 5,890   | --  |

| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 31... | 520  | E.02  | <.2   | .28   | <.4                                   | <.16  |
| 31... | 1,290  | --  | --  | --  | --                                    | --  |
| 31... | 2,640  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 08... | 35.8   | .04   | <.2   | .23   | <.4                                   | <.16  |
| 08... | 127  | --  | --  | --  | --                                    | --  |
| 08... | 297  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 25... | 121  | --  | --  | --  | --                                    | --  |
| 25... | 901  | --  | --  | --  | --                                    | --  |
| 25... | 2,420  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 19... | 57.2   | --  | --  | --  | --                                    | --  |
| 19... | 2,520  | --  | --  | --  | --                                    | --  |
| 19... | 2,910  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

0209684980 CANE CREEK RESERVOIR AT DAM NEAR WHITE CROSS, NC—Continued





## 02096960 HAW RIVER NEAR BYNUM, NC

LOCATION.--Lat 35°45'55", long 79°08'09", Chatham County, Hydrologic Unit 03030002, on right bank 500 ft upstream from Pokeberry Creek, 0.9 mi south of Bynum, and 1.1 mi downstream of U.S. Highways 15 and 501.

DRAINAGE AREA.--1,275 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1973 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 283.31 ft above NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Considerable regulation for short periods at low flow caused by power plant above station.

Maximum discharge for period of record, from rating curve extended above 36,000 ft<sup>3</sup>/s, on basis of slope-conveyance measurement of peak flow; maximum gage height, 21.76 ft, from floodmarks. Minimum discharge for period of record also occurred Sept. 27, 1983. Minimum discharge for each year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 668    | 720    | 695    | 693    | 931    | 1,480  | 994    | 478    | 331    | 395    | 603    | 1,260  |
| 2     | 616    | 616    | 625    | 664    | 769    | 1,440  | 1,540  | 723    | 275    | 598    | 306    | 645    |
| 3     | 566    | 556    | 574    | 645    | 1,740  | 1,460  | 1,010  | 2,150  | 237    | 380    | 971    | 476    |
| 4     | 535    | 541    | 535    | 626    | 3,800  | 1,310  | 805    | 1,750  | 221    | 468    | 697    | 342    |
| 5     | 481    | 513    | 580    | 643    | 2,210  | 1,070  | 711    | 1,150  | 1,430  | 504    | 445    | 299    |
| 6     | 478    | 515    | 736    | 719    | 1,540  | 969    | 643    | 855    | 998    | 479    | 341    | 269    |
| 7     | 492    | 563    | 731    | 774    | 4,670  | 1,030  | 592    | 682    | 371    | 426    | 240    | 1,690  |
| 8     | 494    | 699    | 683    | 681    | 3,630  | 1,030  | 570    | 573    | 398    | 262    | 218    | 8,120  |
| 9     | 519    | 614    | 636    | 622    | 2,310  | 850    | 570    | 477    | 748    | 674    | 188    | 10,700 |
| 10    | 614    | 544    | 770    | 650    | 1,790  | 791    | 539    | 414    | 679    | 355    | 205    | 4,600  |
| 11    | 911    | 492    | 4,380  | 665    | 1,500  | 757    | 516    | 427    | 450    | 259    | 184    | 2,430  |
| 12    | 764    | 486    | 3,170  | 630    | 1,360  | 707    | 582    | 413    | 490    | 324    | 195    | 1,620  |
| 13    | 763    | 494    | 2,080  | 622    | 1,690  | 676    | 2,240  | 344    | 502    | 333    | 334    | 1,060  |
| 14    | 658    | 476    | 3,540  | 636    | 1,270  | 638    | 3,540  | 335    | 236    | 271    | 1,400  | 722    |
| 15    | 683    | 455    | 5,510  | 618    | 1,070  | 660    | 2,630  | 321    | 251    | 201    | 2,490  | 660    |
| 16    | 702    | 405    | 3,310  | 591    | 1,150  | 831    | 1,770  | 312    | 303    | 187    | 1,280  | 928    |
| 17    | 613    | 415    | 2,560  | 548    | 1,400  | 1,460  | 1,250  | 273    | 1,160  | 174    | 786    | 780    |
| 18    | 535    | 426    | 2,770  | 558    | 1,270  | 1,360  | 1,040  | 413    | 803    | 202    | 952    | 2,840  |
| 19    | 510    | 487    | 2,270  | 668    | 1,170  | 1,330  | 769    | 312    | 515    | 2,210  | 912    | 2,240  |
| 20    | 469    | 1,090  | 1,860  | 708    | 1,150  | 1,160  | 763    | 402    | 447    | 884    | 480    | 1,150  |
| 21    | 452    | 1,100  | 1,560  | 650    | 1,060  | 961    | 716    | 390    | 783    | 608    | 415    | 841    |
| 22    | 410    | 781    | 1,290  | 597    | 968    | 840    | 644    | 384    | 345    | 476    | 658    | 672    |
| 23    | 388    | 681    | 1,130  | 572    | 879    | 749    | 605    | 364    | 404    | 258    | 435    | 543    |
| 24    | 354    | 612    | 1,010  | 532    | 845    | 688    | 544    | 450    | 539    | 219    | 283    | 418    |
| 25    | 367    | 588    | 1,020  | 523    | 824    | 652    | 499    | 390    | 502    | 373    | 266    | 371    |
| 26    | 386    | 588    | 940    | 585    | 770    | 633    | 478    | 310    | 445    | 183    | 251    | 340    |
| 27    | 416    | 561    | 789    | 619    | 782    | 625    | 578    | 280    | 767    | 194    | 235    | 318    |
| 28    | 604    | 513    | 727    | 645    | 903    | 624    | 735    | 239    | 606    | 479    | 212    | 2,960  |
| 29    | 1,110  | 747    | 684    | 637    | 1,250  | 625    | 582    | 241    | 468    | 1,220  | 208    | 8,130  |
| 30    | 1,710  | 870    | 682    | 728    | ---    | 589    | 514    | 246    | 437    | 2,320  | 4,190  | 3,710  |
| 31    | 989    | ---    | 686    | 914    | ---    | 600    | ---    | 344    | ---    | 1,280  | 3,710  | ---    |
| TOTAL | 19,257 | 18,148 | 48,533 | 19,963 | 44,701 | 28,595 | 28,969 | 16,442 | 16,141 | 17,196 | 24,090 | 61,134 |
| MEAN  | 621    | 605    | 1,566  | 644    | 1,541  | 922    | 966    | 530    | 538    | 555    | 777    | 2,038  |
| MAX   | 1,710  | 1,100  | 5,510  | 914    | 4,670  | 1,480  | 3,540  | 2,150  | 1,430  | 2,320  | 4,190  | 10,700 |
| MIN   | 354    | 405    | 535    | 523    | 769    | 589    | 478    | 239    | 221    | 174    | 184    | 269    |
| CFSM  | 0.49   | 0.47   | 1.23   | 0.51   | 1.21   | 0.72   | 0.76   | 0.42   | 0.42   | 0.44   | 0.61   | 1.60   |
| IN.   | 0.56   | 0.53   | 1.42   | 0.58   | 1.30   | 0.83   | 0.85   | 0.48   | 0.47   | 0.50   | 0.70   | 1.78   |

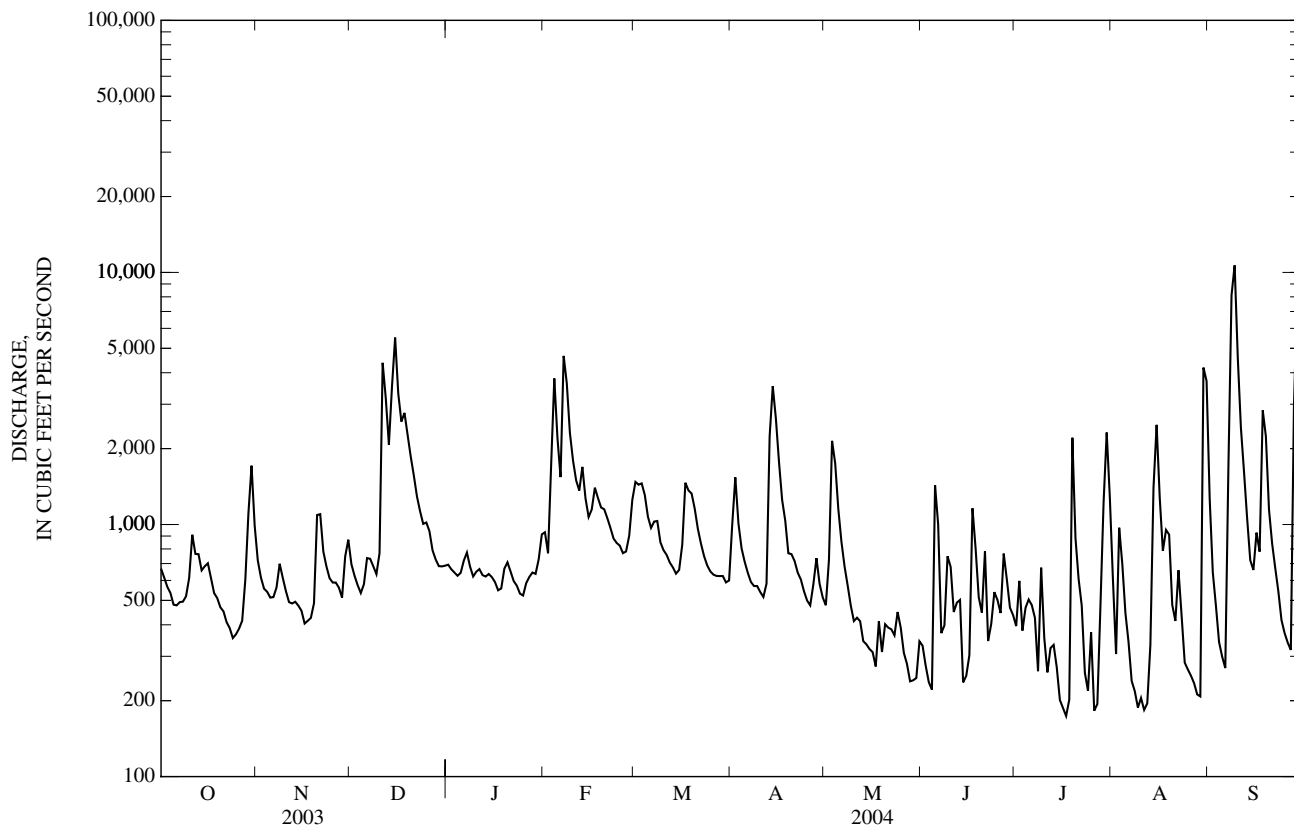
## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1973 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 690    | 739    | 1,145  | 2,103  | 2,118  | 2,529  | 1,759  | 1,141  | 917    | 798    | 614    | 976    |
| MAX  | 2,906  | 2,888  | 2,929  | 5,895  | 5,465  | 6,110  | 5,363  | 3,936  | 4,632  | 4,477  | 2,422  | 4,904  |
| (WY) | (1991) | (1986) | (2003) | (1978) | (1979) | (1975) | (2003) | (1978) | (1982) | (1975) | (2003) | (1996) |
| MIN  | 129    | 109    | 218    | 262    | 537    | 648    | 380    | 171    | 109    | 135    | 113    | 111    |
| (WY) | (2002) | (2002) | (2002) | (1981) | (2002) | (1988) | (2002) | (2002) | (2002) | (1986) | (2002) | (1983) |

02096960 HAW RIVER NEAR BYNUM, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1973 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 934,786                |        | 343,169             |        | 1,290                   |              |
| ANNUAL MEAN              | 2,561                  |        | 938                 |        | 2,948                   |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 370                     | 2002         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 58,000                  | Sep 6, 1996  |
| HIGHEST DAILY MEAN       | 33,300                 | Apr 11 | 10,700              | Sep 9  | 0.18                    | Sep 10, 1983 |
| LOWEST DAILY MEAN        | 354                    | Oct 24 | 174                 | Jul 17 | 46                      | Sep 7, 1983  |
| ANNUAL SEVEN-DAY MINIMUM | 396                    | Oct 21 | 223                 | Aug 7  | 76700*                  | Sep 6, 1996  |
| MAXIMUM PEAK FLOW        |                        |        | 13,400              | Sep 9  | 21.76*                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 10.89               | Sep 9  | 0.18*                   | Sep 10, 1983 |
| INSTANTANEOUS LOW FLOW   |                        |        | 137                 | Jul 27 | 1.01                    |              |
| ANNUAL RUNOFF (CFSM)     | 2.01                   |        | 0.735               |        | 13.75                   |              |
| ANNUAL RUNOFF (INCHES)   | 27.27                  |        | 10.01               |        |                         |              |
| 10 PERCENT EXCEEDS       | 5,580                  |        | 1,740               |        | 2,800                   |              |
| 50 PERCENT EXCEEDS       | 1,350                  |        | 636                 |        | 579                     |              |
| 90 PERCENT EXCEEDS       | 532                    |        | 305                 |        | 161                     |              |

\* See REMARKS.



02096960 HAW RIVER NEAR BYNUM, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1982-86, 1989-1996, 1998, 2002, to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1981 to September 1984.

WATER TEMPERATURE: October 1981 to September 1984.

INSTRUMENTATION.-- Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated in cooperation with the Upper Cape Fear River Basin Association to assess constituent loads.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 514 microsiemens, Sept. 19, 1983; minimum, 46 microsiemens, March 21, 1983.

WATER TEMPERATURE: Maximum, 35.0°C, July 21, 1983; minimum, 0.0°C, on several days during winter months in water years 1982 and 1984.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Instantaneous discharge, cfs (00061) | Color, water, fltrd, Pt-Co units (00080) | Turbidity, wat unflab, Hach 2100AN NTU (99872) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfl uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Hardness, water, mg/L as CaCO3 (00900) | Calcium, water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) |
|-------|------|--------------------------------------|--|--|------------------------------------|--------------------------------|---|---|--|-----------------------------------|--|-------------------------------------|---------------------------------------|
| OCT   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 01... | 0915 | 676                                  | --                                       | --   | 761                                | 8.9                            | 95  | 7.6   | 130  | 18.3                              | --                                     | --                                  | --                                    |
| 07... | 0900 | 525                                  | --                                       | --   | 760                                | 9.5                            | 99  | 7.8   | 196  | 17.4                              | --                                     | --                                  | --                                    |
| 15... | 1030 | 638                                  | --                                       | --   | 753                                | 9.3                            | 101   | 8.0   | 156  | 18.8                              | --                                     | --                                  | --                                    |
| 20... | 1030 | 559                                  | --                                       | --   | --                                 | 9.5                            | --  | 8.3   | 198  | 16.6                              | --                                     | --                                  | --                                    |
| 31... | 1245 | 958                                  | --                                       | --   | 765                                | 11.3                           | 112   | 7.7   | 178  | 14.8                              | --                                     | --                                  | --                                    |
| NOV   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 12... | 0900 | 482                                  | --                                       | --   | 757                                | 11.2                           | 109   | 8.0   | 224  | 13.8                              | --                                     | --                                  | --                                    |
| 21... | 1000 | 1,110                                | --                                       | --   | 759                                | 10.7                           | 102   | 7.7   | 240  | 13.1                              | --                                     | --                                  | --                                    |
| 28... | 1100 | 503                                  | --                                       | --   | 750                                | 12.2                           | 115   | 7.7   | 193  | 12.0                              | --                                     | --                                  | --                                    |
| DEC   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 11... | 1330 | 4,540                                | --                                       | --   | 749                                | 13.1                           | 113   | 7.3   | 136  | 7.9                               | --                                     | --                                  | --                                    |
| 23... | 1100 | 1,140                                | --                                       | --   | 760                                | 14.2                           | 110   | 7.3   | 126  | 4.4                               | --                                     | --                                  | --                                    |
| JAN   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 06... | 0900 | 716                                  | --                                       | --   | --                                 | 11.7                           | --  | 7.8   | 160  | 10.3                              | --                                     | --                                  | --                                    |
| 20... | 0930 | 736                                  | --                                       | --   | 760                                | 13.6                           | 105   | 7.9   | 226  | 4.3                               | --                                     | --                                  | --                                    |
| FEB   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 03... | 0930 | 875                                  | --                                       | --   | 756                                | 13.0                           | 100   | 7.2   | 312  | 3.8                               | --                                     | --                                  | --                                    |
| 18... | 1100 | 1,280                                | --                                       | --   | 761                                | 14.0                           | 107   | 7.4   | 190  | 3.9                               | --                                     | --                                  | --                                    |
| MAR   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 08... | 0915 | 999                                  | --                                       | --   | 754                                | 11.8                           | 114   | 7.4   | 178  | 13.3                              | --                                     | --                                  | --                                    |
| 18... | 0900 | 1,400                                | --                                       | --   | 760                                | 11.9                           | 107   | 7.5   | 186  | 10.7                              | --                                     | --                                  | --                                    |
| 30... | 0930 | 589                                  | --                                       | --   | 760                                | 10.6                           | 106   | 8.0   | 220  | 15.2                              | --                                     | --                                  | --                                    |
| APR   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 13... | 1000 | 1,990                                | --                                       | --   | 746                                | 10.8                           | 107   | 7.5   | 217  | 13.9                              | --                                     | --                                  | --                                    |
| MAY   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 12... | 1030 | 421                                  | --                                       | --   | 763                                | 8.7                            | 104   | 7.8   | 190  | 24.4                              | --                                     | --                                  | --                                    |
| 27... | 0900 | 281                                  | --                                       | --   | 752                                | 7.7                            | 99  | 7.9   | 276  | 27.8                              | --                                     | --                                  | --                                    |
| JUN   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 10... | 0915 | 782                                  | --                                       | --   | 757                                | 8.6                            | 105   | 7.5   | 175  | 24.6                              | --                                     | --                                  | --                                    |
| 22... | 0915 | 187                                  | --                                       | --   | 756                                | 7.4                            | 91  | 7.6   | 195  | 25.4                              | --                                     | --                                  | --                                    |
| JUL   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 09... | 0930 | 1,460                                | --                                       | --   | 759                                | 7.7                            | 99  | 7.5   | 186  | 28.3                              | --                                     | --                                  | --                                    |
| 15... | 0945 | 204                                  | --                                       | --   | 751                                | 6.9                            | 89  | 7.6   | 189  | 28.0                              | --                                     | --                                  | --                                    |
| 20... | 0930 | 916                                  | --                                       | 32   | 753                                | 7.5                            | 92  | 7.3   | 160  | 25.2                              | 23                                     | 5.60                                | 2.26                                  |
| 27... | 1415 | 137                                  | --                                       | 7.6  | 756                                | 8.1                            | 107   | 8.1   | 188  | 29.1                              | 33                                     | 7.20                                | 3.58                                  |
| 30... | 1015 | 2,520                                | --                                       | 84   | 760                                | 8.0                            | 98  | 7.6   | 259  | 25.7                              | 37                                     | 9.30                                | 3.31                                  |
| 30... | 1030 | 2,500                                | 88                                       | --   | 760                                | 8.0                            | 98  | 7.6   | 295  | 25.7                              | 37                                     | 9.18                                | 3.36                                  |
| AUG   |      |                                      |  |  |                                    |                                |   |   |  |                                   |  |                                     |                                       |
| 03... | 0945 | 1,230                                | --                                       | 52   | 752                                | 7.5                            | 96  | 7.5   | 132  | 26.9                              | 28                                     | 6.77                                | 2.77                                  |
| 06... | 1015 | 353                                  | --                                       | --   | 754                                | 8.1                            | 103   | 7.6   | 143  | 26.9                              | --                                     | --                                  | --                                    |
| 15... | 0845 | 2,200                                | --                                       | 89   | 762                                | 8.0                            | 92  | 7.6   | 242  | 22.1                              | 34                                     | 8.54                                | 3.10                                  |

## 02096960 HAW RIVER NEAR BYNUM, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Potas-<br>sium,<br>water,<br>fltrd,<br>mg/L<br>(00935) | Sodium,<br>water,<br>fltrd,<br>mg/L<br>(00930) | ANC,<br>wat un-<br>fincrm.<br>titr.,<br>field,<br>mg/L as<br>CaCO <sub>3</sub><br>(00419) | Bicar-<br>bonate,<br>wat un-<br>fincrm.<br>titr.,<br>field,<br>mg/L<br>(00450) | Chlor-<br>ide,<br>water,<br>fltrd,<br>mg/L<br>(00940) | Fluor-<br>ide,<br>water,<br>fltrd,<br>mg/L<br>(00950) | Silica,<br>water,<br>fltrd,<br>mg/L<br>(00955) | Sulfate<br>water,<br>fltrd,<br>mg/L<br>(00945) | Residue<br>on<br>evap.<br>at<br>180degC<br>wat flt<br>mg/L<br>(70300) | Ammonia<br>+<br>org-N,<br>water,<br>unfltrd<br>mg/L<br>as N<br>(00625) | Ammonia<br>water,<br>fltrd,<br>mg/L<br>as N<br>(00608) | Nitrite<br>+<br>nitrate<br>water<br>fltrd,<br>mg/L<br>as N<br>(00631) | Nitrite<br>water,<br>fltrd,<br>mg/L<br>as N<br>(00613) |
|-------|--|--|---|--|---|---|--|--|---|--|--|---|--|
| OCT   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 01... | --   | --   | 37  | 45   | --  | --  | --   | --   | --  | .52  | <.015  | .55   | E.002  |
| 07... | --   | --   | 47  | 57   | --  | --  | --   | --   | --  | .52  | <.010  | 1.20  | .003   |
| 15... | --   | --   | 38  | 46   | --  | --  | --   | --   | --  | .42  | <.010  | .67   | .003   |
| 20... | --   | --   | 44  | 54   | --  | --  | --   | --   | --  | .51  | <.010  | .74   | .003   |
| 31... | --   | --   | 42  | 52   | --  | --  | --   | --   | --  | .52  | .023   | .94   | .005   |
| NOV   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 12... | --   | --   | 52  | 63   | --  | --  | --   | --   | --  | .45  | <.010  | 1.12  | .004   |
| 21... | --   | --   | 56  | 69   | --  | --  | --   | --   | --  | .54  | .023   | 1.23  | .005   |
| 28... | --   | --   | 42  | 51   | --  | --  | --   | --   | --  | .46  | E.009  | .91   | .003   |
| DEC   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 11... | --   | --   | 31  | 38   | --  | --  | --   | --   | --  | 1.0  | .042   | 1.18  | .007   |
| 23... | --   | --   | 27  | 33   | --  | --  | --   | --   | --  | .48  | .044   | .69   | .005   |
| JAN   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 06... | --   | --   | 42  | 51   | --  | --  | --   | --   | --  | .41  | E.005  | 1.29  | .005   |
| 20... | --   | --   | 63  | 77   | --  | --  | --   | --   | --  | .53  | <.010  | 1.28  | .006   |
| FEB   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 03... | --   | --   | 74  | 90   | --  | --  | --   | --   | --  | .55  | E.007  | 1.45  | .014   |
| 18... | --   | --   | 62  | 76   | --  | --  | --   | --   | --  | .48  | .063   | .86   | .015   |
| MAR   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 08... | --   | --   | 35  | 42   | --  | --  | --   | --   | --  | .64  | .013   | .76   | .013   |
| 18... | --   | --   | 47  | 57   | --  | --  | --   | --   | --  | .64  | .038   | .84   | .008   |
| 30... | --   | --   | 44  | 54   | --  | --  | --   | --   | --  | .56  | .023   | .84   | .006   |
| APR   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 13... | --   | --   | 47  | 57   | --  | --  | --   | --   | --  | .64  | .106   | .97   | .013   |
| MAY   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 12... | --   | --   | 40  | 49   | --  | --  | --   | --   | --  | .65  | .035   | .72   | .008   |
| 27... | --   | --   | 49  | 60   | --  | --  | --   | --   | --  | .57  | .048   | 1.02  | .010   |
| JUN   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 10... | --   | --   | 34  | 42   | --  | --  | --   | --   | --  | .50  | .030   | .83   | .007   |
| 22... | --   | --   | 35  | 43   | --  | --  | --   | --   | --  | .56  | .041   | 1.10  | .010   |
| JUL   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 09... | --   | --   | 42  | 52   | --  | --  | --   | --   | --  | .54  | .094   | .56   | .006   |
| 15... | --   | --   | 39  | 47   | --  | --  | --   | --   | --  | .50  | .029   | 1.03  | .007   |
| 20... | --   | 21.9   | 30  | 37   | 11.6  | --  | --   | 19.2   | --  | .64  | .141   | 1.33  | .015   |
| 27... | --   | 21.5   | 31  | 38   | 18.3  | --  | --   | 16.7   | --  | .60  | .025   | .94   | .005   |
| 30... | --   | 40.8   | 60  | 73   | 23.7  | --  | --   | 28.5   | --  | .94  | .080   | 2.77  | .017   |
| 30... | 6.27   | 41.4   | 60  | 73   | 24.3  | .3  | 11.8   | 29.1   | 188   | .93  | .078   | 2.73  | .017   |
| AUG   |  |  |   |  |   |   |  |  |   |  |  |   |  |
| 03... | --   | 12.4   | 26  | 32   | 10.4  | --  | --   | 10.0   | --  | .62  | .024   | .63   | .006   |
| 06... | --   | --   | 33  | 41   | --  | --  | --   | --   | --  | .58  | .035   | .75   | .006   |
| 15... | --   | 31.1   | 46  | 56   | 21.3  | --  | --   | 26.2   | --  | .82  | .079   | 2.01  | .013   |

02096960 HAW RIVER NEAR BYNUM, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Aluminum, water, fltrd, ug/L (01106) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water, fltrd, ug/L (01000) | Arsenic water unfltrd ug/L (01002) | Cadmium water, fltrd, ug/L (01025) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, fltrd, ug/L (01030) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, fltrd, ug/L (01040) |
|-------|--|---|---|--------------------------------------|---|------------------------------------|------------------------------------|------------------------------------|-------------------------------------|--------------------------------------|---|--|------------------------------------|
| OCT   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 01... | .062   | .12                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 07... | .198   | .25                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 15... | .082   | .13                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 20... | .069   | .10                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 31... | .152   | .20                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| NOV   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 12... | .165   | .22                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 21... | .165   | .23                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 28... | .087   | .13                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| DEC   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 11... | .075   | .28                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 23... | .055   | .12                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| JAN   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 06... | .084   | .13                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 20... | .056   | .11                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| FEB   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 03... | .048   | .09                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 18... | .059   | .12                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| MAR   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 08... | .063   | .14                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 18... | .065   | .13                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 30... | .307   | .37                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| APR   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 13... | .152   | .20                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| MAY   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 12... | .074   | .13                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 27... | .266   | .33                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| JUN   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 10... | .099   | .16                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 22... | .103   | .17                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| JUL   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 09... | .060   | .11                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 15... | .100   | .14                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 20... | .102   | .17                                     | --  | 12                                   | --  | .5                                 | --                                 | .09                                | --                                  | <.8                                  | --  | --   | 2.3                                |
| 27... | .095   | .14                                     | --  | 13                                   | --  | .5                                 | --                                 | .04                                | --                                  | <.8                                  | --  | --   | 2.1                                |
| 30... | .138   | .28                                     | --  | 10                                   | --  | .5                                 | --                                 | .24                                | --                                  | E.5                                  | --  | --   | 3.0                                |
| 30... | .138   | .26                                     | 10.0  | --                                   | 800   | --                                 | <2                                 | --                                 | .27                                 | --                                   | 2.1   | 2.15   | --                                 |
| AUG   |  |   |   |                                      |   |                                    |                                    |                                    |                                     |                                      |   |  |                                    |
| 03... | .060   | .15                                     | --  | 9                                    | --  | .3                                 | --                                 | E.04                               | --                                  | <.8                                  | --  | --   | 2.4                                |
| 06... | .066   | .14                                     | --  | --                                   | --  | --                                 | --                                 | --                                 | --                                  | --                                   | --  | --   | --                                 |
| 15... | .090   | .21                                     | --  | 24                                   | --  | .6                                 | --                                 | .34                                | --                                  | <.8                                  | --  | --   | 3.5                                |

02096960 HAW RIVER NEAR BYNUM, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, fltrd, ug/L (01046) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, fltrd, ug/L (01049) | Lead, water, unfltrd recover-able, ug/L (01051) | Mangan-ese, water, fltrd, ug/L (01056) | Mangan-ese, water, unfltrd recover-able, ug/L (01055) | Mercury water, fltrd, ug/L (71890) | Mercury water, unfltrd recover-able, ug/L (71900) | Molyb-denum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, fltrd, ug/L (01065) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selen-ium, water, unfltrd ug/L (01147) |
|-------|---|----------------------------------|---|----------------------------------|---|--|---|------------------------------------|---|--|------------------------------------|---|--|
| OCT   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 01... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 07... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 15... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 20... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 31... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| NOV   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 12... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 21... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 28... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| DEC   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 11... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 23... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| JAN   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 06... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 20... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| FEB   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 03... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 18... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| MAR   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 08... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 18... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 30... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| APR   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 13... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| MAY   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 12... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 27... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| JUN   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 10... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 22... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| JUL   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 09... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 15... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 20... | --  | 79                               | --  | .18                              | --  | 15.2                                   | --  | <.02                               | --  | --   | 2.09                               | --  | --                                     |
| 27... | --  | 175                              | --  | .15                              | --  | 56.5                                   | --  | <.02                               | --  | --   | 1.46                               | --  | --                                     |
| 30... | --  | 101                              | --  | .20                              | --  | 29.4                                   | --  | <.02                               | --  | --   | 2.87                               | --  | --                                     |
| 30... | 5.3   | --                               | 1,590   | --                               | 2.02  | --                                     | 235   | --                                 | <.02  | 6.1  | --                                 | 3.63  | 1.1                                    |
| AUG   |   |                                  |   |                                  |   |  |   |                                    |   |  |                                    |   |  |
| 03... | --  | 141                              | --  | .12                              | --  | 28.7                                   | --  | <.02                               | --  | --   | 1.12                               | --  | --                                     |
| 06... | --  | --                               | --  | --                               | --  | --                                     | --  | --                                 | --  | --   | --                                 | --  | --                                     |
| 15... | --  | 181                              | --  | .41                              | --  | 25.7                                   | --  | <.02                               | --  | --   | 3.19                               | --  | --                                     |

## CAPE FEAR RIVER BASIN

02096960 HAW RIVER NEAR BYNUM, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Silver,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01077) | Zinc,<br>water,<br>fltrd,<br>ug/L<br>(01090) | Zinc,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01092) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) | Sus-<br>pended<br>sedi-<br>ment<br>dis-<br>charge,<br>tons/d<br>(80155) |
|-------|--|--|--|--|---|
| OCT   |  |  |  |  |   |
| 01... | --   | --   | --   | 12   | 22  |
| 07... | --   | --   | --   | 6  | 8.5   |
| 15... | --   | --   | --   | 11   | 19  |
| 20... | --   | --   | --   | 3  | 4.5   |
| 31... | --   | --   | --   | 12   | 31  |
| NOV   |  |  |  |  |   |
| 12... | --   | --   | --   | 6  | 7.8   |
| 21... | --   | --   | --   | 8  | 24  |
| 28... | --   | --   | --   | 4  | 5.4   |
| DEC   |  |  |  |  |   |
| 11... | --   | --   | --   | 77   | 944   |
| 23... | --   | --   | --   | 9  | 28  |
| JAN   |  |  |  |  |   |
| 06... | --   | --   | --   | 5  | 9.7   |
| 20... | --   | --   | --   | 4  | 7.9   |
| FEB   |  |  |  |  |   |
| 03... | --   | --   | --   | 11   | 26  |
| 18... | --   | --   | --   | 12   | 41  |
| MAR   |  |  |  |  |   |
| 08... | --   | --   | --   | 22   | 59  |
| 18... | --   | --   | --   | 15   | 57  |
| 30... | --   | --   | --   | 8  | 13  |
| APR   |  |  |  |  |   |
| 13... | --   | --   | --   | 17   | 91  |
| MAY   |  |  |  |  |   |
| 12... | --   | --   | --   | 35   | 40  |
| 27... | --   | --   | --   | 8  | 6.1   |
| JUN   |  |  |  |  |   |
| 10... | --   | --   | --   | 20   | 42  |
| 22... | --   | --   | --   | 16   | 8.1   |
| JUL   |  |  |  |  |   |
| 09... | --   | --   | --   | 12   | 47  |
| 15... | --   | --   | --   | 9  | 5.0   |
| 20... | --   | 8.8  | --   | 28   | 69  |
| 27... | --   | 3.2  | --   | 8  | 3.0   |
| 30... | --   | 16.5   | --   | 69   | 469   |
| 30... | <.16   | --   | 25   | 67   | 452   |
| AUG   |  |  |  |  |   |
| 03... | --   | 2.9  | --   | 26   | 86  |
| 06... | --   | --   | --   | 15   | 14  |
| 15... | --   | 13.5   | --   | 51   | 303   |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

0209719700 B. EVERETT JORDAN LAKE, HAW RIVER ARM, ABOVE B. EVERETT JORDAN DAM, NC

LOCATION.--Lat 35°39'40", long 79°04'22", Chatham County, Hydrologic Unit 03030002, 0.5 mi above B. Everett Jordan Dam, and 1.4 mi southwest of Merry Oaks.

PERIOD OF RECORD.--Water years 1989 to current year. Prior to October 1993, published as Haw River at U.S. Highway 64 near Pittsboro (station 0209699980).

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098) | Trans-parency Secchi disc, meters (00078) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of sat-uration (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unf uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|-------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|---|---|---|------------------------------------|---|------------------------------------|--|
| OCT   |      |  |                                 |   |                                      |                                 |   |   |   |                                    |   |                                    |  |
| 30... | 1430 | 50                                       | 1.0                             | .70                                       | 763                                  | 12.1                            | 129   | 8.9   | 159   | 18.7                               | 33                                      | 7.91                               | 3.15                                   |
| 30... | 1435 | --                                       | 3.0                             | --  | 763                                  | 10.7                            | 105   | 7.8   | 230   | 14.6                               | --                                      | --                                 | --                                     |
| 30... | 1440 | --                                       | 5.0                             | --  | 763                                  | 10.6                            | 103   | 7.7   | 227   | 14.1                               | --                                      | --                                 | --                                     |
| APR   |      |  |                                 |   |                                      |                                 |   |   |   |                                    |   |                                    |  |
| 22... | 1000 | 50                                       | 1.0                             | 1.00                                      | 760                                  | 7.1                             | --  | 7.9   | --  | 21.8                               | 33                                      | 7.25                               | 3.58                                   |
| 22... | 1005 | --                                       | 3.0                             | --  | 760                                  | 6.7                             | --  | 7.5   | --  | 19.9                               | --                                      | --                                 | --                                     |
| 22... | 1010 | --                                       | 5.0                             | --  | 760                                  | 3.9                             | --  | 6.9   | --  | 15.7                               | --                                      | --                                 | --                                     |
| JUN   |      |  |                                 |   |                                      |                                 |   |   |   |                                    |   |                                    |  |
| 24... | 1130 | 62                                       | 1.0                             | .60                                       | 758                                  | 7.6                             | 98  | 8.4   | 216   | 27.9                               | 40                                      | 10.7                               | 3.30                                   |
| 24... | 1135 | --                                       | 2.0                             | --  | 758                                  | 5.9                             | 75  | 8.0   | 218   | 27.5                               | --                                      | --                                 | --                                     |
| 24... | 1140 | --                                       | 5.0                             | --  | 758                                  | 2.1                             | 26  | 7.0   | 211   | 25.4                               | --                                      | --                                 | --                                     |
| AUG   |      |  |                                 |   |                                      |                                 |   |   |   |                                    |   |                                    |  |
| 24... | 1030 | 38                                       | 1.0                             | .60                                       | 760                                  | 7.1                             | 91  | 8.3   | 147   | 27.5                               | 32                                      | 7.54                               | 3.11                                   |
| 24... | 1035 | --                                       | 2.5                             | --  | 760                                  | 5.7                             | 73  | 7.6   | 150   | 27.2                               | --                                      | --                                 | --                                     |
| 24... | 1040 | --                                       | 5.0                             | --  | 760                                  | 5.5                             | 67  | 7.0   | 141   | 25.7                               | --                                      | --                                 | --                                     |

| Date  | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unf incrm. titr., mg/L as CaCO3 (00419) | Bicar-bonate, wat unf incrm. titr., mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|-------|--|------------------------------------|--|--|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--|---|---|--|---|
| OCT   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 30... | 3.69                                   | 15.5                               | 37   | 45   | 12.8                                  | <.2                                   | 9.45                               | 10.4                               | 100  | .86   | E.005                                   | .298   | .007                                    |
| 30... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .85   | <.010                                   | .800   | .008                                    |
| 30... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .61   | .019                                    | 1.62   | .007                                    |
| APR   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 22... | 2.99                                   | 15.5                               | 36   | 44   | 12.7                                  | <.2                                   | 9.78                               | 12.2                               | 101  | .54   | .046                                    | .424   | .005                                    |
| 22... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .57   | .059                                    | .435   | .006                                    |
| 22... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .72   | .099                                    | .370   | .010                                    |
| JUN   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 24... | 4.00                                   | 21.9                               | 43   | 52   | 20.1                                  | .2                                    | 1.91                               | 20.4                               | 134  | .86   | .036                                    | .556   | .014                                    |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .74   | .086                                    | .645   | .027                                    |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .65   | .091                                    | .950   | .008                                    |
| AUG   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 24... | 3.40                                   | 15.8                               | 32   | 40   | 12.2                                  | <.2                                   | 8.65                               | 11.7                               | 89   | .72   | E.006                                   | .210   | .006                                    |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .78   | <.010                                   | .209   | .006                                    |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .67   | .028                                    | .327   | .007                                    |



0209719700 B. EVERETT JORDAN LAKE, HAW RIVER ARM, ABOVE B. EVERETT JORDAN DAM, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 30... | <.006  | .094                                    | 9.8   | 34.1  | 1.4   | 118   | <2                                 | E.03                                | E.5   | .424   | 1.8   | 300   | .37   |
| 30... | .054   | .144                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 370   | --  |
| 30... | .179   | .23                                     | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 720   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 22... | .082   | .144                                    | 6.1   | 1.8   | <.1   | 133   | <2                                 | E.04                                | E.4   | .742   | 2.2   | 600   | .36   |
| 22... | .075   | .146                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 740   | --  |
| 22... | .035   | .116                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 620   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | .040   | .156                                    | 8.7   | 20.3  | E.7   | --  | --                                 | --                                  | --  | --   | --  | 570   | --  |
| 24... | .042   | .132                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 580   | --  |
| 24... | .082   | .168                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 970   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | E.004  | .110                                    | 8.8   | 16.7  | E1.1  | --  | --                                 | --                                  | --  | --   | --  | 430   | --  |
| 24... | E.005  | .083                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 410   | --  |
| 24... | .017   | .089                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 560   | --  |

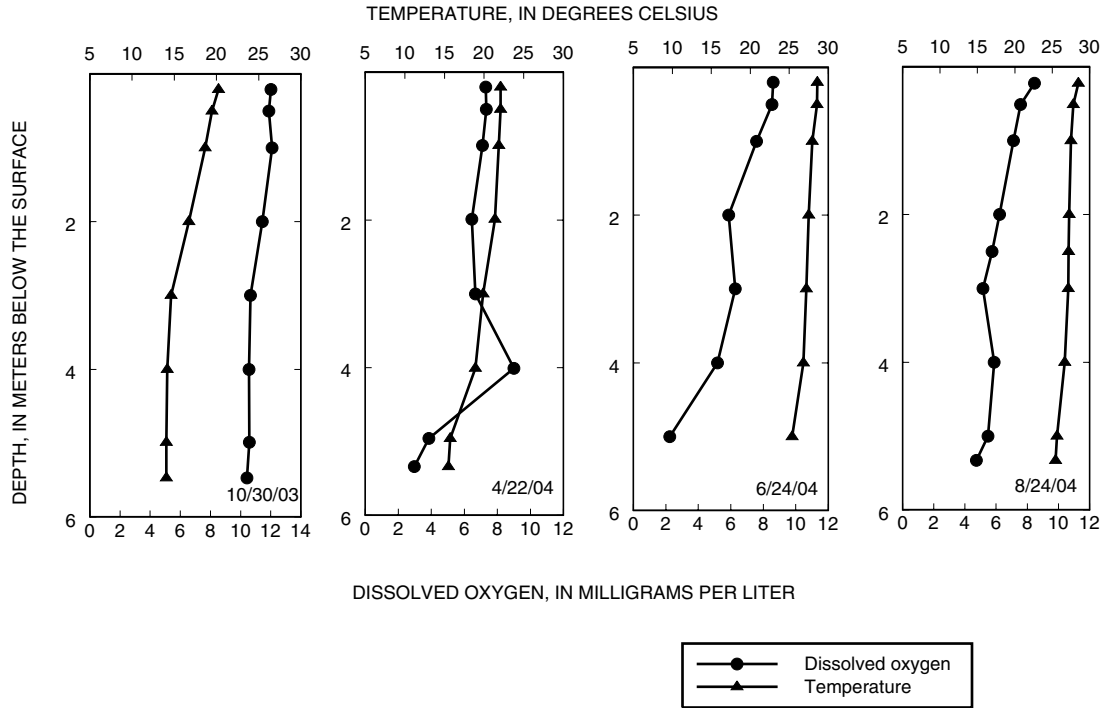
| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 30... | 78   | <.02  | 2.5   | E1.10   | .5                                    | <.16  |
| 30... | 66   | --  | --  | --  | --                                    | --  |
| 30... | 49   | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 22... | 129  | .07   | 1.3   | 1.05  | E.2                                   | <.16  |
| 22... | 163  | --  | --  | --  | --                                    | --  |
| 22... | 148  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 24... | 70.1   | --  | --  | --  | --                                    | --  |
| 24... | 86.6   | --  | --  | --  | --                                    | --  |
| 24... | 184  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 24... | 59.0   | --  | --  | --  | --                                    | --  |
| 24... | 56.4   | --  | --  | --  | --                                    | --  |
| 24... | 92.8   | --  | --  | --  | --                                    | --  |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

0209719700 B. EVERETT JORDAN LAKE, HAW RIVER ARM, ABOVE B. EVERETT JORDAN DAM, NC—Continued



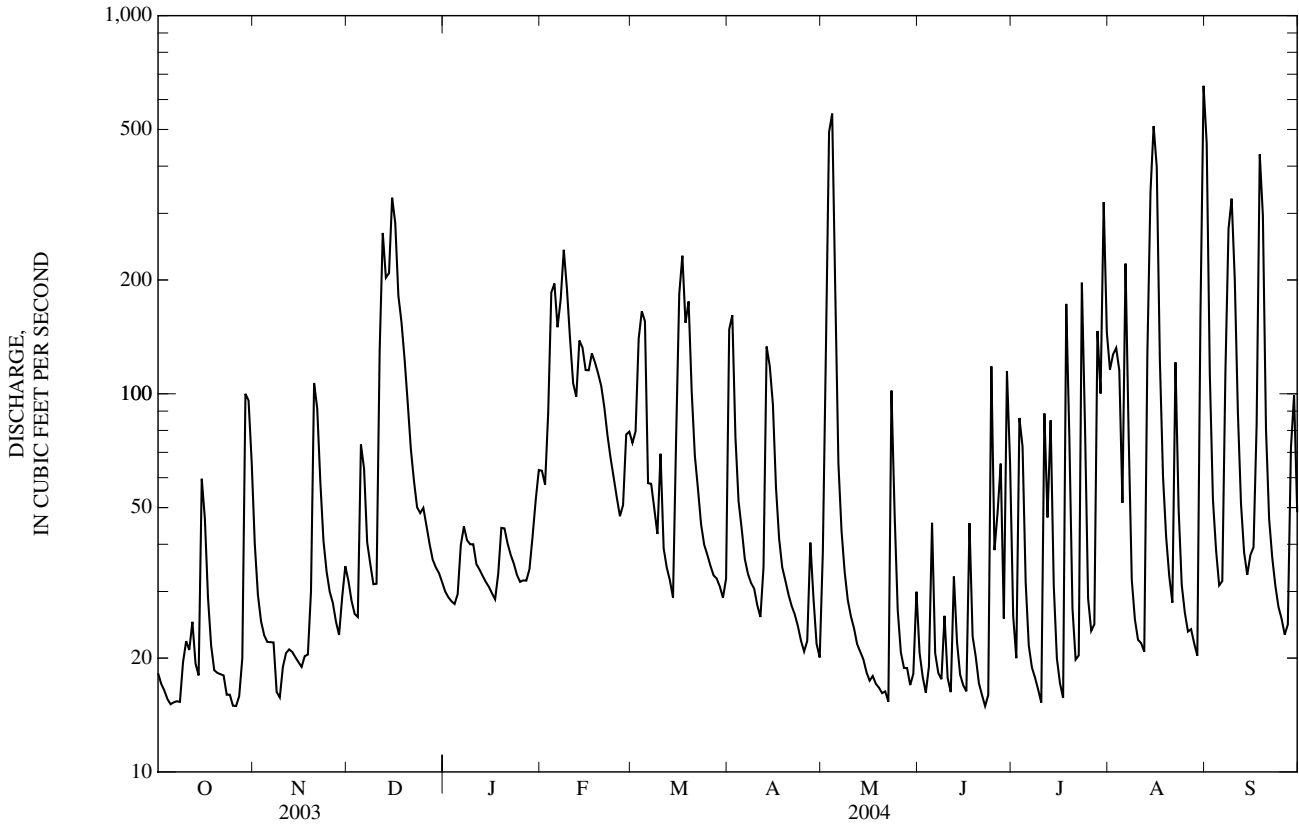


02097314 NEW HOPE CREEK NEAR BLANDS, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 52,882                 |        | 25,034              |        | 99.9                    |              |
| ANNUAL MEAN              | 145                    |        | 68.4                |        | 180                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 38.3                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 6,300                   | Sep 6, 1996  |
| HIGHEST DAILY MEAN       | 6,000                  | Apr 11 | 652                 | Aug 31 | 4.1                     | Dec 20, 2001 |
| LOWEST DAILY MEAN        | 14                     | Sep 13 | 15                  | Oct 5  | 18.96*                  | Apr 15, 2003 |
| ANNUAL SEVEN-DAY MINIMUM | 15                     | Sep 11 | 16                  | Oct 2  | NOT DETERMINED          |              |
| MAXIMUM PEAK FLOW        |                        |        | 757                 | Aug 31 |                         |              |
| MAXIMUM PEAK STAGE       |                        |        | 9.29                | Aug 31 |                         |              |
| INSTANTANEOUS LOW FLOW   |                        |        | 11*                 | Oct 8  |                         |              |
| ANNUAL RUNOFF (CFSM)     | 1.91                   |        | 0.901               |        | 1.32                    |              |
| ANNUAL RUNOFF (INCHES)   | 25.92                  |        | 12.27               |        | 17.88                   |              |
| 10 PERCENT EXCEEDS       | 292                    |        | 154                 |        | 220                     |              |
| 50 PERCENT EXCEEDS       | 50                     |        | 35                  |        | 34                      |              |
| 90 PERCENT EXCEEDS       | 19                     |        | 18                  |        | 13                      |              |

\* See REMARKS.

e Estimated.



02097314 NEW HOPE CREEK NEAR BLANDS, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-86, 1989-1995, 1997-1999, 2001, 2004.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: December 1982 to September 1985.

WATER TEMPERATURE: December 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum, 535 microsiemens, Sept. 30, 1984; minimum, 38 microsiemens, Mar. 6, 7, 1984.

WATER TEMPERATURE: Maximum, 27.5°C, Aug. 23, 1983; minimum, 0.0°C, Jan. 21, 22, 1985.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time  | Instantaneous discharge, cfs (00061)                    | Color, water, fltrd, Pt-Co units (00080)               | Barometric pressure, mm Hg (00025)              | Dissolved oxygen, mg/L (00300)                 | Dissolved oxygen, percent of saturation (00301)     | pH, water, unfltrd field, std units (00400)       | Specific conductance, wat unf uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                 | Hardness, water, mg/L as CaCO3 (00900)          | Calcium, water, fltrd, mg/L (00915)                  | Magnesium, water, fltrd, mg/L (00925)              | Potassium, water, fltrd, mg/L (00935)                 |
|-----------|---|---|--|---|--|---|---|---|---|---|--|--|---|
| AUG 13... | 1000  | 159   | 125  | 757   | 5.5  | 64  | 6.8   | 152   | 22.6  | 39  | 11.2   | 2.61   | 3.63  |
| Date      | Sodium, water, fltrd, mg/L (00930)                | ANC, wat unf incrm. titr., field, mg/L as CaCO3 (00419) | Bicarbonate, wat unf incrm. titr., field, mg/L (00450) | Chloride, water, fltrd, mg/L (00940)            | Fluoride, water, fltrd, mg/L (00950)           | Silica, water, fltrd, mg/L (00955)                  | Sulfate, water, fltrd, mg/L (00945)               | Residue on evap. at 180degC wat flt mg/L (70300)    | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608)        | Nitrite + nitrate, water, fltrd, mg/L as N (00631)   | Nitrite, water, fltrd, mg/L as N (00613)           | Orthophosphate, water, fltrd, mg/L as P (00671)       |
| AUG 13... | 12.7  | 33  | 40   | 12.6  | .2   | 7.19  | 11.8  | 100   | .91   | .052  | .972   | .017   | .040  |
| Date      | Phosphorus, water, unfltrd mg/L (00665)           | Organic carbon, water, unfltrd mg/L (00680)             | Aluminum, water, unfltrd recover-able, ug/L (01105)    | Arsenic, water, unfltrd ug/L (01002)            | Cadmium, water, unfltrd ug/L (01027)           | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt, water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042)   | Iron, water, unfltrd recover-able, ug/L (01045)   | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury, water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) |
| AUG 13... | .21   | 10.6  | 4,460  | E1  | .05  | 4.8   | 2.65  | 9.5   | 3,780   | 10.6  | 194  | .03  | 3.4   |
| Date      | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147)                   | Silver, water, unfltrd recover-able, ug/L (01077)      | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration, mg/L (80154) |   |   |   |   |   |  |  |   |
| AUG 13... | 5.41  | E.3   | E.09   | 28  | 182  |   |   |   |   |   |  |  |   |

Remark codes used in this table:  
E -- Estimated value

0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC

LOCATION.--Lat 35°52'20", long 78°54'47", Durham County, Hydrologic Unit 03030002, on left bank at downstream side of bridge on Secondary Road 1100, 1.3 mi west of Genlee, and 1.6 mi downstream of Burdens Creek.

DRAINAGE AREA.--21.1 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1982 to January 1994, August 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 229.01 ft above NGVD of 1929, by levels. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. An average of 41.3 ft<sup>3</sup>/s was diverted from the Neuse River basin for municipal water supply; 16.0 ft<sup>3</sup>/s was returned to the Cape Fear River basin, of which 0.19 ft<sup>3</sup>/s entered upstream from station as treated effluent. About 13.2 ft<sup>3</sup>/s was returned to the Neuse River basin as treated effluent. Maximum discharge for period of record from rating curve extended above 2,000 ft<sup>3</sup>/s, by logarithmic plotting.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC     | JAN   | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|---------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 6.4   | 5.3   | e9.4    | 10    | 16   | 16    | 92    | 17    | 7.8   | 8.8   | e25   | e55   |
| 2     | 6.5   | 4.3   | e8.7    | 9.9   | 14   | 14    | 40    | e70   | 7.5   | 8.3   | e26   | e13   |
| 3     | 6.5   | 4.6   | e8.8    | 9.6   | 80   | 14    | 19    | e152  | 7.3   | 14    | e27   | e9.4  |
| 4     | 5.9   | 4.7   | e10     | 9.6   | 84   | 13    | 15    | e78   | 24    | 21    | e17   | e8.2  |
| 5     | 6.2   | 4.8   | 66      | 11    | 24   | 12    | 14    | e23   | 16    | 9.7   | e17   | e8.6  |
| 6     | 6.3   | 5.1   | 14      | 21    | 21   | 12    | 14    | 15    | 8.7   | 8.1   | e51   | e14   |
| 7     | 6.3   | 6.1   | 8.8     | 14    | 121  | 14    | 13    | 12    | 8.2   | 7.8   | e10   | e51   |
| 8     | 6.8   | 5.3   | 10      | 11    | 33   | 13    | 13    | 11    | 9.8   | 7.3   | e7.2  | e74   |
| 9     | 9.0   | 5.2   | 12      | 12    | 20   | 12    | 14    | 10    | 13    | 7.1   | e6.3  | e59   |
| 10    | 9.1   | 4.7   | 32      | 14    | 17   | 12    | 11    | 9.9   | 9.3   | 6.7   | e6.5  | e30   |
| 11    | 7.7   | 4.6   | 266     | 11    | 15   | 11    | 11    | 9.1   | 8.5   | 30    | e7.0  | e13   |
| 12    | 6.7   | 5.1   | 69      | 11    | 47   | 11    | 24    | 9.2   | 15    | 36    | e13   | e9.6  |
| 13    | 6.3   | 5.5   | 20      | 12    | 66   | 10    | 47    | 8.8   | 9.0   | e33   | e80   | e8.8  |
| 14    | 6.6   | 5.9   | 194     | 11    | 25   | 9.7   | 33    | 8.4   | 8.6   | e7.8  | e113  | e9.2  |
| 15    | 24    | 5.3   | 190     | 11    | 21   | 59    | 22    | 8.0   | 8.3   | e7.3  | e104  | e11   |
| 16    | 9.6   | 5.2   | 30      | 11    | 48   | 167   | 16    | 7.7   | 8.5   | e6.7  | e43   | e14   |
| 17    | 6.5   | 5.4   | 73      | 10    | 38   | 155   | 14    | 7.7   | 8.5   | e15   | e13   | e49   |
| 18    | 6.3   | 5.3   | 64      | 23    | 27   | 53    | 13    | 8.0   | 8.6   | e65   | e9.5  | e114  |
| 19    | e5.0  | 24    | 24      | 20    | 27   | 71    | 13    | 8.1   | 7.5   | e12   | e8.4  | e33   |
| 20    | 4.7   | 35    | 18      | 13    | 21   | 28    | 13    | 7.7   | 6.7   | e6.4  | e8.2  | e11   |
| 21    | 4.8   | e21   | 14      | 11    | 16   | 21    | 13    | 8.0   | 6.6   | e5.8  | e12   | e9.0  |
| 22    | 4.9   | e10   | 14      | 11    | 14   | 17    | 12    | 7.8   | 7.5   | e16   | e32   | e8.3  |
| 23    | 5.0   | e9.5  | 13      | 11    | 13   | 15    | 12    | 59    | 9.7   | e77   | e9.6  | e8.3  |
| 24    | 4.6   | e8.9  | 17      | 9.5   | 12   | 14    | 11    | 19    | 21    | e13   | e8.6  | e8.4  |
| 25    | 3.8   | e8.6  | 18      | 9.3   | 12   | 13    | 9.6   | 11    | 11    | e6.4  | e7.2  | e7.4  |
| 26    | 4.3   | e8.3  | 13      | 9.8   | 11   | 13    | 11    | 9.2   | 19    | e6.6  | e7.4  | e7.4  |
| 27    | 5.9   | e7.8  | 12      | 10    | 23   | 12    | 24    | 8.4   | 16    | e15   | e8.4  | e12   |
| 28    | 7.2   | e8.8  | 11      | 13    | 36   | 12    | 14    | 8.0   | 10    | e55   | e7.2  | e31   |
| 29    | 70    | e10   | 11      | 19    | 22   | 13    | 11    | 7.1   | 15    | e38   | e14   | e22   |
| 30    | 23    | e10   | 11      | 26    | ---  | 13    | 9.5   | 10    | 11    | e76   | e123  | e10   |
| 31    | 7.4   | ---   | 11      | 26    | ---  | 15    | ---   | 9.1   | ---   | e21   | e177  | ---   |
| TOTAL | 293.3 | 254.3 | 1,272.7 | 410.7 | 924  | 864.7 | 578.1 | 637.2 | 327.6 | 647.8 | 998.5 | 718.6 |
| MEAN  | 9.46  | 8.48  | 41.1    | 13.2  | 31.9 | 27.9  | 19.3  | 20.6  | 10.9  | 20.9  | 32.2  | 24.0  |
| MAX   | 70    | 35    | 266     | 26    | 121  | 167   | 92    | 152   | 24    | 77    | 177   | 114   |
| MIN   | 3.8   | 4.3   | 8.7     | 9.3   | 11   | 9.7   | 9.5   | 7.1   | 6.6   | 5.8   | 6.3   | 7.4   |
| CFSM  | 0.45  | 0.40  | 1.95    | 0.63  | 1.51 | 1.32  | 0.91  | 0.97  | 0.52  | 0.99  | 1.53  | 1.14  |
| IN.   | 0.52  | 0.45  | 2.24    | 0.72  | 1.63 | 1.52  | 1.02  | 1.12  | 0.58  | 1.14  | 1.76  | 1.27  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, @ BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 21.0   | 24.9   | 32.7   | 52.6   | 56.6   | 58.6   | 35.6   | 19.2   | 12.7   | 14.8   | 17.2   | 32.7   |
| MAX  | 83.8   | 82.7   | 86.7   | 134    | 111    | 128    | 84.5   | 59.1   | 44.4   | 48.6   | 66.7   | 247    |
| (WY) | (2003) | (1993) | (2003) | (1998) | (1998) | (1998) | (1993) | (1990) | (1992) | (1989) | (1986) | (1999) |
| MIN  | 3.27   | 3.89   | 4.31   | 12.6   | 10.8   | 8.18   | 4.00   | 4.57   | 4.55   | 3.33   | 3.50   | 2.49   |
| (WY) | (1986) | (1985) | (2002) | (1986) | (1991) | (1985) | (1985) | (2002) | (1987) | (1983) | (1983) | (1983) |

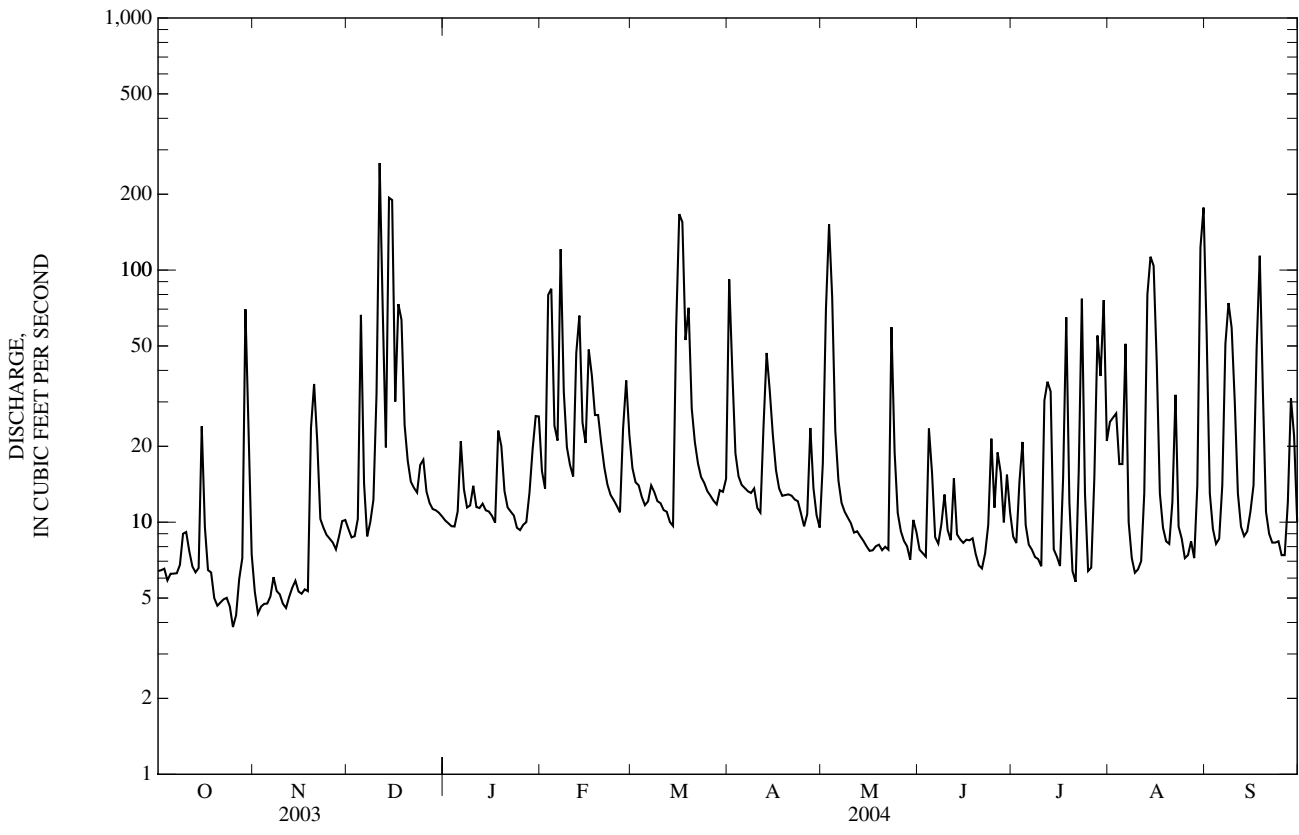
0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 12,854.6               |        | 7,927.5             |        | 31.8                    |              |
| ANNUAL MEAN              | 35.2                   |        | 21.7                |        | 49.1                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 12.4                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 12.4                    |              |
| HIGHEST DAILY MEAN       | 576                    | Apr 10 | 266                 | Dec 11 | 3,350                   | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 3.8                    | Oct 25 | 3.8                 | Oct 25 | 0.74                    | Jul 16, 1991 |
| ANNUAL SEVEN-DAY MINIMUM | 4.6                    | Oct 20 | 4.6                 | Oct 20 | 1.5                     | Oct 7, 1985  |
| MAXIMUM PEAK FLOW        |                        |        | NOT DETERMINED      |        | 5,140*                  | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | NOT DETERMINED      |        | 13.92                   | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | NOT DETERMINED      |        | 0.76                    | Oct 7, 1985  |
| ANNUAL RUNOFF (CFSM)     | 1.67                   |        | 1.03                |        | 1.51                    |              |
| ANNUAL RUNOFF (INCHES)   | 22.66                  |        | 13.98               |        | 20.46                   |              |
| 10 PERCENT EXCEEDS       | 76                     |        | 51                  |        | 60                      |              |
| 50 PERCENT EXCEEDS       | 12                     |        | 11                  |        | 9.2                     |              |
| 90 PERCENT EXCEEDS       | 6.4                    |        | 6.4                 |        | 4.0                     |              |

@ See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



0209741955 NORTHEAST CREEK AT SECONDARY ROAD 1100 NEAR GENLEE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1983-86, 1988-1995, 1999, 2001, 2004.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1982 to September 1985.

WATER TEMPERATURE: October 1982 to September 1985.

INSTRUMENTATION.--Water-quality monitor from October 1982 to September 1985.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment.

COOPERATION.--Sample for October 1994 and April 1995 were collected by the North Carolina Department of Environment, Health, and Natural Resources.

A GC/FID scan for trace organic compounds was performed on these samples by the U.S. Geological Survey Water Quality Lab. Results may be obtained from the District Office in Raleigh, NC. Instantaneous discharge is not available for April and August 1994.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 872 microsiemens, Oct. 15, 1984; minimum, 29 microsiemens, Jan. 11, Apr. 5, 1984.

WATER TEMPERATURE: Maximum, 29.0°C, Aug. 23, 1983; minimum, 0.0°C, Dec. 28, 1983, Jan. 2, 22, 23, 1984.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time   | Color, water, fltrd, Pt-Co units (00080)            | Barometric pressure, mm Hg (00025)              | Dissolved oxygen, mg/L (00300)                 | Dissolved oxygen, percent of saturation (00301)     | pH, water, unfltrd field, std units (00400)       | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                 | Hardness, water, mg/L as CaCO3 (00900)          | Calcium, water, fltrd, mg/L (00915)                  | Magnesium, water, fltrd, mg/L (00925)              | Potassium, water, fltrd, mg/L (00935)                 | Sodium, water, fltrd, mg/L (00930)                |
|-----------|--|---|---|--|---|---|---|---|---|--|--|---|---|
| AUG 15... | 1130   | 125   | 757   | 5.8  | 65  | 6.8   | 91  | 20.7  | 28  | 7.56   | 2.12   | 2.31  | 6.51  |
| Date      | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicarbonate, wat unfltrd, titr., mg/L (00450)       | Chloride, water, fltrd, mg/L (00940)            | Fluoride, water, fltrd, mg/L (00950)           | Silica, water, fltrd, mg/L (00955)                  | Sulfate, water, fltrd, mg/L (00945)               | Residue on evap. at 180degC wat fltrd mg/L (70300)      | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608)        | Nitrite + nitrate, water, fltrd, mg/L as N (00631)   | Nitrite, water, fltrd, mg/L as N (00613)           | Orthophosphate, water, fltrd, mg/L as P (00671)       | Phosphorus, water, unfltrd mg/L (00665)           |
| AUG 15... | 25   | 30  | 6.47  | <.2  | 7.94  | 6.5   | 86  | .80   | .035  | .336   | .007   | .039  | .120  |
| Date      | Organic carbon, water, unfltrd mg/L (00680)    | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic, water, unfltrd ug/L (01002)            | Cadmium, water, unfltrd ug/L (01027)           | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt, water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042)       | Iron, water, unfltrd recover-able, ug/L (01045)   | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury, water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) |
| AUG 15... | 15.2   | 997   | E1  | E.02   | 5.0   | .759  | 14.4  | 1,250   | 1.70  | 50   | E.01   | 1.9   | 2.55  |
| Date      | Selenium, water, unfltrd ug/L (01147)          | Silver, water, unfltrd recover-able, ug/L (01077)   | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration, mg/L (80154) |   |   |   |   |   |  |  |   |   |
| AUG 15... | <.4  | <.16  | 9   | 40   |   |   |   |   |   |  |  |   |   |

Remark codes used in this table:

- < -- Less than
- E -- Estimated value

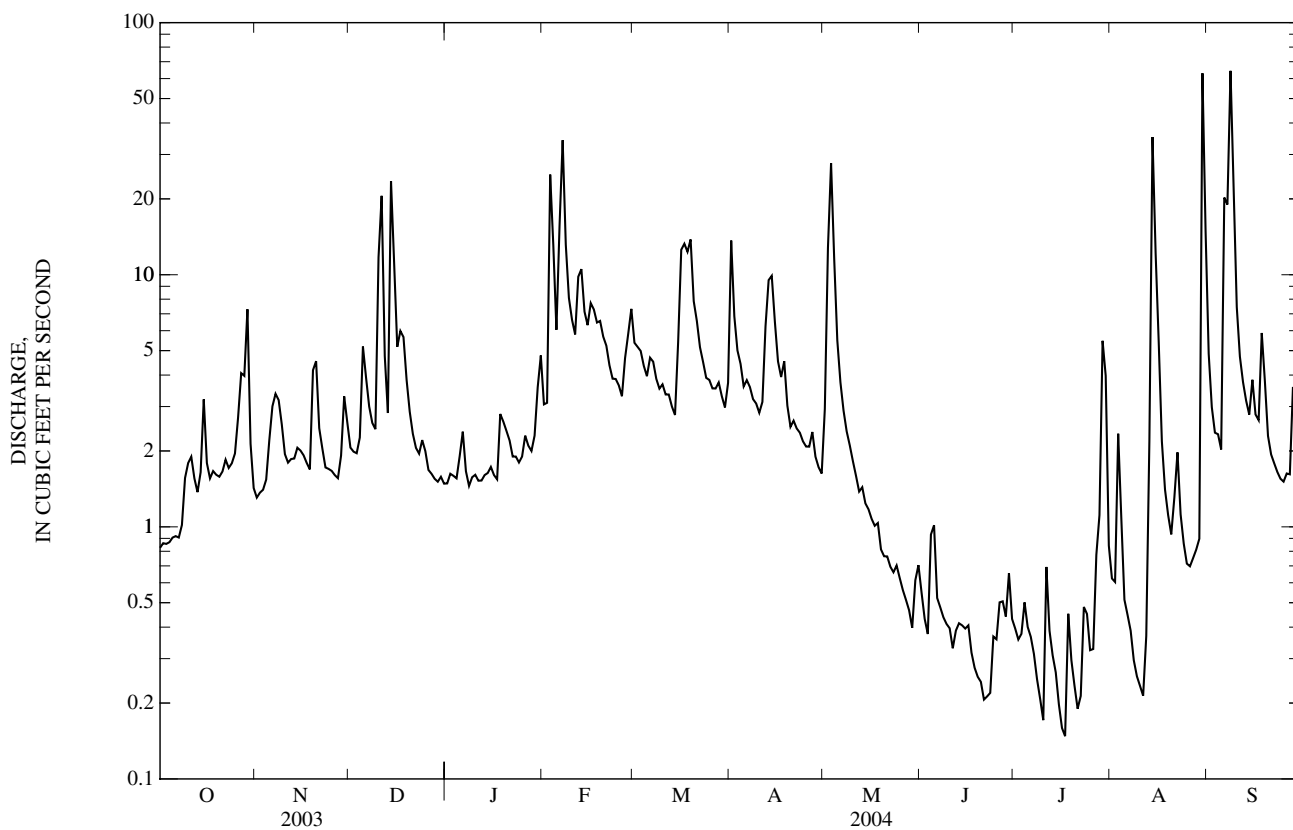




02097464 MORGAN CREEK NEAR WHITE CROSS, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1989 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 4,040.64               |        | 1,352.86            |        | 7.42                    |              |
| ANNUAL MEAN              | 11.1                   |        | 3.70                |        | 12.5                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1.46                    | 1998         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 737                     | 2002         |
| HIGHEST DAILY MEAN       | 462                    | Apr 10 | 64                  | Sep 8  | 0.00                    | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 0.64                   | Sep 12 | 0.15                | Jul 17 | 0.00                    | Jun 16, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.69                   | Sep 11 | 0.24                | Jul 15 | 0.00                    | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 176                 | Aug 30 | 3100*                   | Aug 27, 1995 |
| MAXIMUM PEAK STAGE       |                        |        | 5.12                | Aug 30 | 11.20                   | Aug 27, 1995 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.15*               | Jul 16 | 0.00*                   | Jun 16, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.33                   |        | 0.443               |        | 0.889                   |              |
| ANNUAL RUNOFF (INCHES)   | 18.00                  |        | 6.03                |        | 12.07                   |              |
| 10 PERCENT EXCEEDS       | 21                     |        | 7.2                 |        | 14                      |              |
| 50 PERCENT EXCEEDS       | 4.5                    |        | 2.0                 |        | 2.7                     |              |
| 90 PERCENT EXCEEDS       | 1.1                    |        | 0.39                |        | 0.24                    |              |

\* See REMARKS.  
e Estimated.



02097464 MORGAN CREEK NEAR WHITE CROSS, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1989 to current year.

PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: August 2002 to November 2003.

INSTRUMENTATION.--Logging pressure transducer with water temperature probe.

REMARKS.--Station operated as part of a six county regional surface-water quality assessment and the NAWQA Urban Land Use Gradient study.

EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 27.6°C, Aug. 30, 2003; minimum recorded, 0.0°C, Jan. 19, 23-26, 28, 2003.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Instantaneous discharge, cfs (00061) | Color, water, fltrd, Pt-Co units (00080)       | Barometric pressure, mm Hg (00025)            | Dissolved oxygen, mg/L (00300)       | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, water, deg C (00010)                  | Hardness, water, mg/L as CaCO3 (00900)            | Calcium, water, fltrd, mg/L (00915)      | Magnesium, water, fltrd, mg/L (00925)              | Potassium, water, fltrd, mg/L (00935)    |   |
|-----------|------|--------------------------------------|--|---|--------------------------------------|---|---|---|--|---|--|--|--|---|
| Date      |      | Sodium, water, fltrd, mg/L (00930)   | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicarbonate, wat unfltrd, titr., mg/L (00450) | Chloride, water, fltrd, mg/L (00940) | Fluoride, water, fltrd, mg/L (00950)            | Silica, water, fltrd, mg/L (00955)          | Sulfate, water, fltrd, mg/L (00945)                     | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608) | Nitrite + nitrate, water, fltrd, mg/L as N (00631) | Nitrite, water, fltrd, mg/L as N (00613) | Orthophosphate, water, fltrd, mg/L as P (00671) |
| OCT 27... | 1300 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| DEC 09... | 1130 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| FEB 24... | 1115 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| APR 01... | 1030 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| JUN 25... | 1115 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| AUG 23... | 1130 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| AUG 30... | 1400 |                                      |  |   |                                      |   |   |   |  |   |  |  |  |   |
| OCT 27... | 5.93 | 40                                   | 49   | 6.84  | <.2                                  | 14.5  | 3.0   | 78  | .23  | <.010   | .152                                     | .002   | .012                                     |   |
| DEC 09... | 5.92 | 36                                   | 44   | 7.57  | <.2                                  | 12.9  | 4.4   | 71  | .17  | <.010   | .414                                     | .003   | E.004                                    |   |
| FEB 24... | 6.40 | 52                                   | 63   | 7.82  | <.2                                  | 10.2  | 5.1   | 71  | .27  | E.005   | .488                                     | .006   | .010                                     |   |
| APR 01... | 5.69 | 30                                   | 36   | 6.66  | <.2                                  | 9.06  | 3.9   | 66  | .81  | .020  | .294                                     | .007   | .008                                     |   |
| JUN 25... | 6.64 | 52                                   | 63   | 7.23  | <.2                                  | 19.2  | 2.7   | 107   | .40  | .085  | .500                                     | .004   | .032                                     |   |
| AUG 23... | 5.77 | 39                                   | 48   | 7.48  | <.2                                  | 15.3  | 5.9   | 93  | .49  | .023  | .894                                     | .009   | .036                                     |   |
| AUG 30... | 3.19 | 15                                   | 18   | 4.14  | <.2                                  | 7.23  | 4.5   | 61  | 2.0  | .066  | .459                                     | .011   | .075                                     |   |

02097464 MORGAN CREEK NEAR WHITE CROSS, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date      | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) |
|-----------|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|--|---|---|
| OCT 27... | .057                                    | 4.2   | 58  | <2                                 | <.04                                | <.8   | .225   | E.6   | 410   | .11   | 56   | <.02  | E.1   |
| DEC 09... | .030                                    | 2.2   | --  | --                                 | --                                  | --  | --   | --  | --  | --  | --   | --  | --  |
| FEB 24... | .039                                    | 3.1   | --  | --                                 | --                                  | --  | --   | --  | --  | --  | --   | --  | --  |
| APR 01... | .107                                    | 8.7   | 311   | <2                                 | <.04                                | E.4   | .765   | 1.4   | 1,600   | .66   | 190  | <.02  | E.1   |
| JUN 25... | .115                                    | 5.0   | --  | --                                 | --                                  | --  | --   | --  | --  | --  | --   | --  | --  |
| AUG 23... | .136                                    | 7.9   | --  | --                                 | --                                  | --  | --   | --  | --  | --  | --   | --  | --  |
| 30...     | .48                                     | 25.5  | 2,130   | E1                                 | .05                                 | 2.8   | 4.12   | 6.2   | 4,910   | 3.86  | 718  | .02   | <.2   |

| Date      | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) | Zinc, water, unfltrd recover-able, ug/L (01092) | Suspended sediment concentration mg/L (80154) |
|-----------|---|---------------------------------------|---|---|---|
| OCT 27... | .45   | <.4                                   | <.16  | 2   | 4   |
| DEC 09... | --  | --                                    | --  | --  | 8   |
| FEB 24... | --  | --                                    | --  | --  | 5   |
| APR 01... | .57   | <.4                                   | <.16  | E2  | 37  |
| JUN 25... | --  | --                                    | --  | --  | 7   |
| AUG 23... | --  | --                                    | --  | --  | 7   |
| 30...     | 2.39  | E.4                                   | <.16  | 16  | 287   |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value

0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'49", long 79°05'32", Orange County, Hydrologic Unit 03030002, at Orange Water and Sewage Authority intakes, and 1.8 mi southwest of Chapel Hill.

DRAINAGE AREA.--30 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1989 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098)    | Trans-parency Secchi disc, meters (00078)      | Baro-metric pres-sure, mm Hg (00025)           | Dis-solved oxygen, mg/L (00300)       | Dis-solved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat unfltrd uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010)                 | Hard-ness, water, mg/L as CaCO3 (00900)           | Calcium water, fltrd, mg/L (00915)      | Magnes-ium, water, fltrd, mg/L (00925)           |   |
|-------|------|--|------------------------------------|--|--|---------------------------------------|--|---|---|--|---|---|--|---|
| Date  |      | Potas-sium, water, fltrd, mg/L (00935)   | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfltrd, titr., mg/L as CaCO3 (00419) | Bicar-bonate, wat unfltrd, titr., mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950)            | Silica, water, fltrd, mg/L (00955)          | Sulfate water, fltrd, mg/L (00945)                      | Residue on evap. at 180degC wat fltrd mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
| OCT   |      |  |                                    |  |  |                                       |  |   |   |  |   |   |  |   |
| 27... | 1015 | 50                                       | 1.0                                | .60  | 750  | 6.6                                   | 69   | 7.1   | 103   | 17.2   | 35  | 8.97                                    | 3.04   |   |
| 27... | 1020 | --                                       | 4.0                                | --   | 750  | .2                                    | 2  | 6.9   | 111   | 16.3   | --  | --                                      | --   |   |
| 27... | 1025 | --                                       | 8.5                                | --   | 750  | .1                                    | 1  | 7.5   | 434   | 13.1   | --  | --                                      | --   |   |
| APR   |      |  |                                    |  |  |                                       |  |   |   |  |   |   |  |   |
| 05... | 0945 | 62                                       | 1.0                                | .70  | 753  | 9.6                                   | 92   | 7.3   | 99  | 12.9   | 33  | 8.39                                    | 3.02   |   |
| 05... | 0950 | --                                       | 4.0                                | --   | 753  | 9.4                                   | 90   | 7.2   | 99  | 12.8   | --  | --                                      | --   |   |
| 05... | 0955 | --                                       | 8.3                                | --   | 753  | .5                                    | 4  | 7.1   | 146   | 9.9  | --  | --                                      | --   |   |
| JUN   |      |  |                                    |  |  |                                       |  |   |   |  |   |   |  |   |
| 25... | 1200 | 30                                       | 1.0                                | .60  | 758  | 9.7                                   | 125  | 9.0   | 112   | 28.3   | 34  | 8.60                                    | 3.11   |   |
| 25... | 1205 | --                                       | 4.0                                | --   | 758  | .1                                    | 2  | 7.1   | 151   | 17.1   | --  | --                                      | --   |   |
| 25... | 1210 | --                                       | 7.0                                | --   | 758  | .2                                    | 2  | 7.3   | 224   | 12.0   | --  | --                                      | --   |   |
| AUG   |      |  |                                    |  |  |                                       |  |   |   |  |   |   |  |   |
| 23... | 0945 | 25                                       | 1.0                                | .80  | 756  | 6.5                                   | 82   | 7.5   | 103   | 26.6   | 30  | 7.92                                    | 2.59   |   |
| 23... | 0950 | --                                       | 4.0                                | --   | 756  | .2                                    | 2  | 6.8   | 156   | 20.5   | --  | --                                      | --   |   |
| 23... | 0955 | --                                       | 8.0                                | --   | 756  | .1                                    | 1  | 7.2   | 371   | 12.8   | --  | --                                      | --   |   |

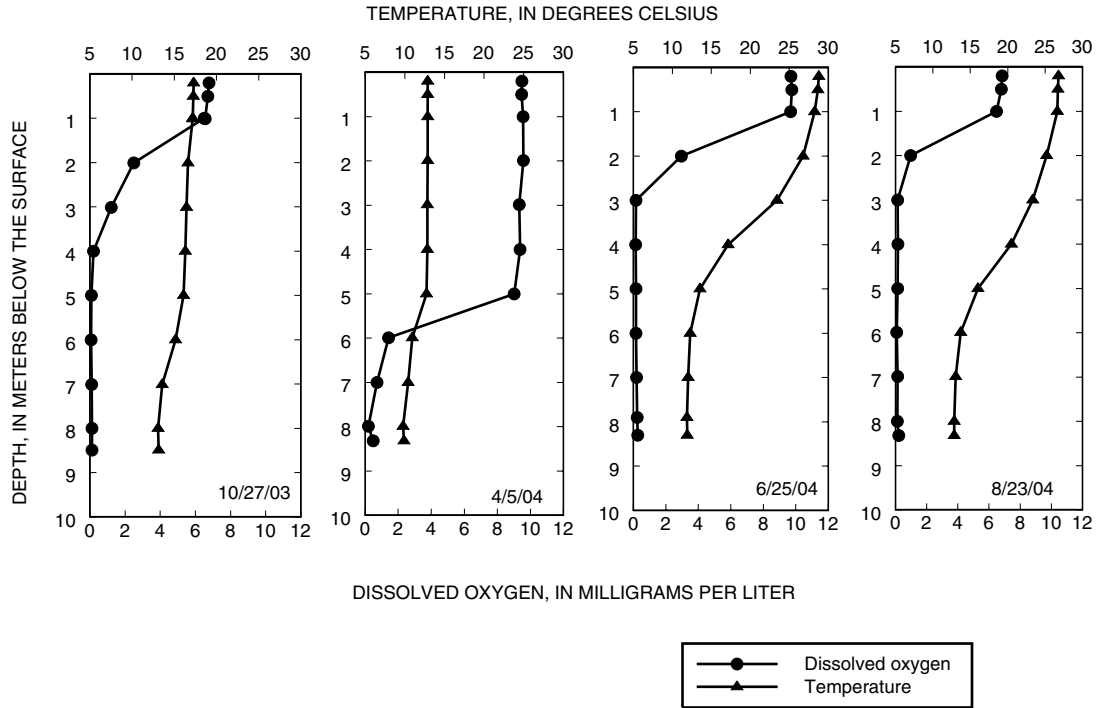
0209749990 UNIVERSITY LAKE AT INTAKES NEAR CHAPEL HILL, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 27... | <.006  | .042                                    | 7.1   | 12.1  | .9  | 34  | <2                                 | <.04                                | <.8   | .222   | E.3   | 530   | .09   |
| 27... | <.006  | .046                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 1,150   | --  |
| 27... | <.006  | .071                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 3,160   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 05... | <.006  | .044                                    | 6.7   | 6.8   | E.4   | 64  | <2                                 | <.04                                | <.8   | .264   | 1.1   | 480   | .19   |
| 05... | <.006  | .045                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 480   | --  |
| 05... | <.006  | .044                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 540   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 25... | <.006  | .040                                    | 10.0  | 40.5  | <.1   | --  | --                                 | --                                  | --  | --   | --  | 140   | --  |
| 25... | <.006  | .043                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 2,420   | --  |
| 25... | .044   | .099                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 14,200  | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 23... | <.006  | .049                                    | 9.3   | 9.1   | E.5   | --  | --                                 | --                                  | --  | --   | --  | 210   | --  |
| 23... | <.006  | .055                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 1,160   | --  |
| 23... | E.005  | .167                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 56,100  | --  |

| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 27... | 329  | E.02  | .3  | .33   | E.2                                   | <.16  |
| 27... | 910  | --  | --  | --  | --                                    | --  |
| 27... | 2,740  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 05... | 194  | .04   | E.2   | .27   | <.4                                   | <.16  |
| 05... | 197  | --  | --  | --  | --                                    | --  |
| 05... | 402  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 25... | 62.3   | --  | --  | --  | --                                    | --  |
| 25... | 4,040  | --  | --  | --  | --                                    | --  |
| 25... | 4,680  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 23... | 80.0   | --  | --  | --  | --                                    | --  |
| 23... | 2,830  | --  | --  | --  | --                                    | --  |
| 23... | 9,740  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value



02097517 MORGAN CREEK NEAR CHAPEL HILL, NC

LOCATION.--Lat 35°53'36", long 79°01'11", Orange County, Hydrologic Unit 03030002, on left bank 2.5 mi southeast of Chapel Hill, and 3.8 mi downstream of U.S. Highway 501.

DRAINAGE AREA.--41.0 mi<sup>2</sup>

PERIOD OF RECORD.--November 1982 to current year.

GAGE.--Water-stage recorder. Datum of gage is 239.02 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. The City of Chapel Hill diverted an average of 12.6 ft<sup>3</sup>/s for water supply upstream of station, and an average of 12.4 ft<sup>3</sup>/s was returned as treated effluent upstream of station. Considerable diurnal fluctuation and occasional slight regulation caused by small reservoir and treated effluent outfall upstream from station. Maximum discharge for period of record from rating curve extended above 1,700 ft<sup>3</sup>/s, by logarithmic plotting; maximum gage height, 16.18 ft, from floodmark. Minimum discharge for current water year also occurred June 21.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB   | MAR   | APR  | MAY  | JUN  | JUL   | AUG     | SEP   |
|-------|------|------|------|------|-------|-------|------|------|------|-------|---------|-------|
| 1     | 18   | 24   | 16   | 12   | 13    | 32    | 53   | 37   | 15   | 16    | 19      | 75    |
| 2     | 18   | 22   | 16   | 12   | 13    | 32    | 41   | 175  | 12   | 14    | 18      | 39    |
| 3     | 18   | 22   | 16   | 12   | 65    | 31    | 33   | 142  | 12   | 15    | 20      | 30    |
| 4     | 17   | 22   | 20   | 12   | 58    | 30    | 31   | 79   | 35   | 16    | 14      | 24    |
| 5     | 17   | 23   | 34   | 15   | 35    | 29    | 29   | 45   | 22   | 11    | 17      | 21    |
| 6     | 17   | 25   | 19   | 16   | 46    | 31    | 27   | 32   | 18   | 11    | 18      | 41    |
| 7     | 18   | 25   | 17   | 13   | 130   | 29    | 27   | 25   | 18   | 10    | 12      | 67    |
| 8     | 20   | 25   | 17   | 13   | 58    | 29    | 27   | 19   | 17   | 12    | 11      | 286   |
| 9     | 27   | 23   | 17   | 14   | 45    | 28    | 25   | 17   | 16   | 11    | 11      | 147   |
| 10    | 25   | 22   | 116  | 14   | 39    | 30    | 24   | 17   | 14   | 9.4   | 10      | 54    |
| 11    | 27   | 21   | 75   | 13   | 36    | 27    | 24   | 16   | 13   | 13    | 8.7     | 36    |
| 12    | 23   | 22   | 35   | 13   | 56    | 26    | 40   | 18   | 16   | 29    | 25      | 29    |
| 13    | 22   | 24   | 23   | 13   | 56    | 26    | 36   | 21   | 14   | 25    | 39      | 26    |
| 14    | 26   | 22   | 140  | 13   | 44    | 26    | 37   | 20   | 14   | 17    | 102     | 25    |
| 15    | 31   | 20   | 64   | 13   | 42    | 49    | 29   | 20   | 14   | 14    | 50      | 31    |
| 16    | 22   | 21   | 32   | 12   | 48    | 73    | 23   | 19   | 20   | 12    | 50      | 27    |
| 17    | 19   | 23   | 31   | 12   | 42    | 78    | 20   | 21   | 20   | 12    | 31      | 36    |
| 18    | 19   | 23   | 28   | 17   | 39    | 64    | 18   | 19   | 16   | 33    | 23      | 42    |
| 19    | 19   | 53   | 23   | 14   | 37    | 66    | 18   | 19   | 12   | 17    | 16      | 27    |
| 20    | 19   | 28   | 20   | 13   | 35    | 47    | 17   | 19   | 10   | 15    | 17      | 21    |
| 21    | 19   | 20   | 17   | 13   | 34    | 41    | 15   | 18   | 11   | 13    | 36      | 19    |
| 22    | 19   | 18   | 15   | 13   | 31    | 36    | 15   | 16   | 13   | 15    | 59      | 18    |
| 23    | 18   | 16   | 15   | 12   | 30    | 32    | 15   | 27   | 14   | 21    | 27      | 17    |
| 24    | 17   | 17   | 16   | 12   | 29    | 31    | 15   | 17   | 22   | 15    | 19      | 17    |
| 25    | 17   | 17   | 15   | 12   | 29    | 30    | 14   | 16   | 16   | 13    | 16      | 17    |
| 26    | 21   | 16   | 14   | 12   | 28    | 29    | 16   | 15   | 30   | 13    | 15      | 17    |
| 27    | 25   | 15   | 13   | 13   | 38    | 28    | 19   | 16   | 20   | 32    | 15      | 19    |
| 28    | 29   | 19   | 13   | 14   | 33    | 28    | 16   | 14   | 18   | 42    | 15      | 33    |
| 29    | 66   | 20   | 13   | 15   | 33    | 27    | 13   | 14   | 35   | 97    | 15      | 21    |
| 30    | 35   | 16   | 13   | 16   | ---   | 27    | 13   | 19   | 21   | 33    | 377     | 18    |
| 31    | 26   | ---  | 13   | 15   | ---   | 32    | ---  | 14   | ---  | 24    | 133     | ---   |
| TOTAL | 714  | 664  | 916  | 413  | 1,222 | 1,124 | 730  | 966  | 528  | 630.4 | 1,238.7 | 1,280 |
| MEAN  | 23.0 | 22.1 | 29.5 | 13.3 | 42.1  | 36.3  | 24.3 | 31.2 | 17.6 | 20.3  | 40.0    | 42.7  |
| MAX   | 66   | 53   | 140  | 17   | 130   | 78    | 53   | 175  | 35   | 97    | 377     | 286   |
| MIN   | 17   | 15   | 13   | 12   | 13    | 26    | 13   | 14   | 10   | 9.4   | 8.7     | 17    |
| CFM   | 0.56 | 0.54 | 0.72 | 0.32 | 1.03  | 0.88  | 0.59 | 0.76 | 0.43 | 0.50  | 0.97    | 1.04  |
| IN.   | 0.65 | 0.60 | 0.83 | 0.37 | 1.11  | 1.02  | 0.66 | 0.88 | 0.48 | 0.57  | 1.12    | 1.16  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1983 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 25.6   | 34.4   | 37.5   | 64.9   | 77.1   | 95.8   | 60.0   | 33.3   | 25.7   | 22.0   | 23.1   | 34.3   |
| MAX  | 54.9   | 141    | 105    | 184    | 206    | 226    | 194    | 91.2   | 84.9   | 53.8   | 65.0   | 272    |
| (WY) | (2003) | (1986) | (1984) | (1998) | (1998) | (1993) | (2003) | (1990) | (1992) | (2003) | (1985) | (1999) |
| MIN  | 12.9   | 10.5   | 12.9   | 13.3   | 17.2   | 18.0   | 17.5   | 14.5   | 11.1   | 8.93   | 12.1   | 8.77   |
| (WY) | (1999) | (1983) | (1989) | (2004) | (1991) | (1988) | (1986) | (1986) | (1986) | (1988) | (1988) | (1983) |

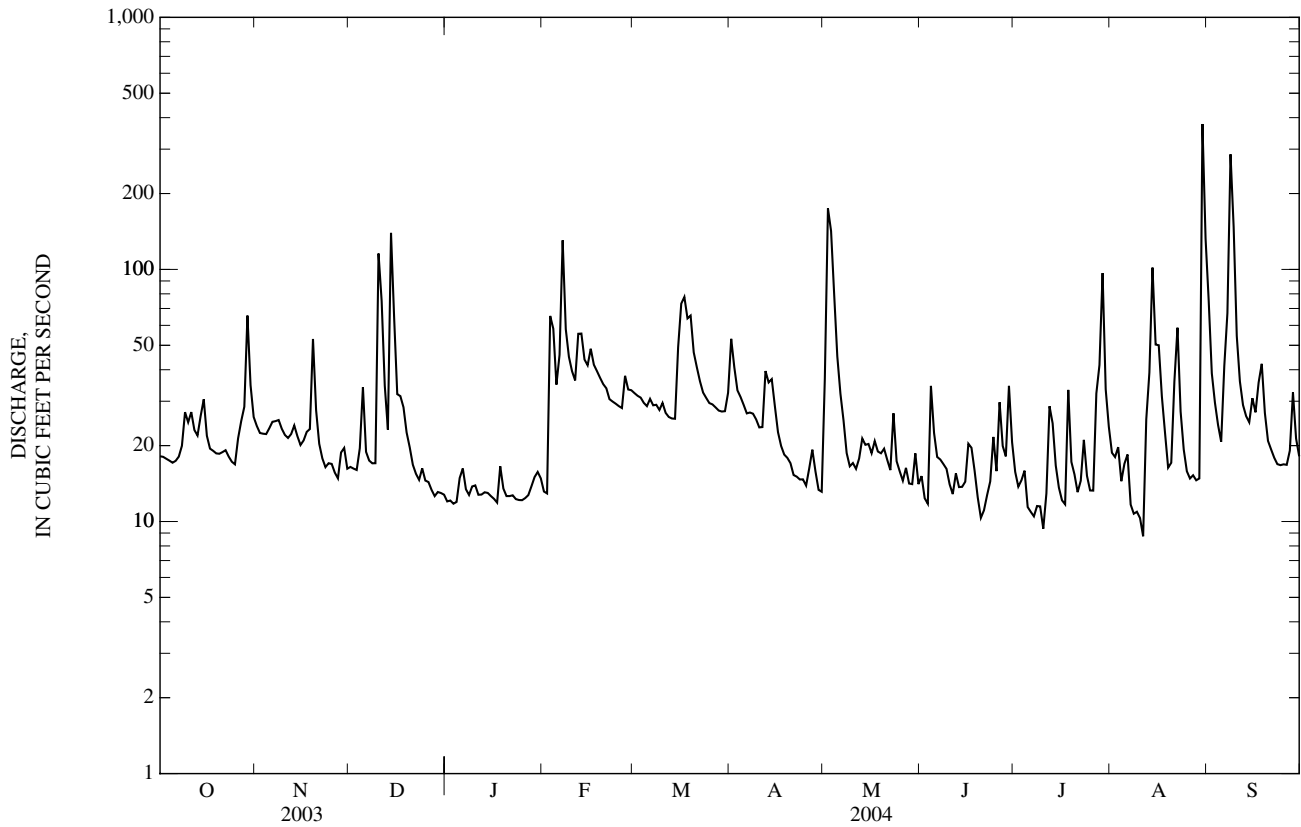


CAPE FEAR RIVER BASIN

02097517 MORGAN CREEK NEAR CHAPEL HILL, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1983 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 25,478                 |        | 10,426.1            |        | 43.7                    |              |
| ANNUAL MEAN              | 69.8                   |        | 28.5                |        | 80.2                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 21.7                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1988                    |              |
| HIGHEST DAILY MEAN       | 1,600                  | Apr 10 | 377                 | Aug 30 | 2,600                   | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 13                     | Dec 27 | 8.7                 | Aug 11 | 0.60                    | Nov 26, 1982 |
| ANNUAL SEVEN-DAY MINIMUM | 13                     | Dec 25 | 11                  | Jul 5  | 2.1                     | Nov 22, 1982 |
| MAXIMUM PEAK FLOW        |                        |        | 799                 | May 2  | 4210*                   | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 8.93                | May 2  | 16.18*                  | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 3.8*                | Jun 3  | NOT DETERMINED          |              |
| ANNUAL RUNOFF (CFSM)     | 1.70                   |        | 0.695               |        | 1.07                    |              |
| ANNUAL RUNOFF (INCHES)   | 23.12                  |        | 9.46                |        | 14.47                   |              |
| 10 PERCENT EXCEEDS       | 122                    |        | 45                  |        | 80                      |              |
| 50 PERCENT EXCEEDS       | 32                     |        | 20                  |        | 20                      |              |
| 90 PERCENT EXCEEDS       | 19                     |        | 13                  |        | 12                      |              |

\* See REMARKS.



0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC

LOCATION.--Lat 35°47'56", long 79°00'21", Chatham County, Hydrologic Unit 03030002, .02 mi above Secondary Road 1008, and 0.2 mi east of Farrington.

PERIOD OF RECORD.--Water years 1992 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098) | Trans-parency Secchi disc, meters (00078) | Baro-metric pres-sure, mm Hg (00025) | Dis-solved oxygen, mg/L (00300) | Dis-solved oxygen, percent of sat-uration (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat un-f uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010) | Hard-ness, water, mg/L as CaCO3 (00900) | Calcium water, fltrd, mg/L (00915) | Magnes-ium, water, fltrd, mg/L (00925) |
|-------|------|--|---------------------------------|---|--------------------------------------|---------------------------------|---|---|--|------------------------------------|---|------------------------------------|--|
| OCT   |      |  |                                 |   |                                      |                                 |   |   |  |                                    |   |                                    |  |
| 30... | 1200 | 25                                       | 1.0                             | .60                                       | 763                                  | 9.5                             | 98  | 8.1   | 152  | 16.7                               | 33                                      | 8.40                               | 2.86                                   |
| 30... | 1205 | --                                       | 3.0                             | --  | 763                                  | 8.6                             | 87  | 7.6   | 158  | 16.3                               | --                                      | --                                 | --                                     |
| 30... | 1210 | --                                       | 5.0                             | --  | 763                                  | .2                              | 3   | 7.2   | 230  | 16.7                               | --                                      | --                                 | --                                     |
| APR   |      |  |                                 |   |                                      |                                 |   |   |  |                                    |   |                                    |  |
| 22... | 1230 | 50                                       | 1.0                             | .50                                       | 760                                  | 6.9                             | --  | 8.2   | --   | 18.7                               | 36                                      | 9.29                               | 3.18                                   |
| 22... | 1235 | --                                       | 3.0                             | --  | 760                                  | 6.9                             | --  | 7.3   | --   | 17.8                               | --                                      | --                                 | --                                     |
| 22... | 1240 | --                                       | 5.0                             | --  | 760                                  | 5.1                             | --  | 7.1   | --   | 17.0                               | --                                      | --                                 | --                                     |
| JUN   |      |  |                                 |   |                                      |                                 |   |   |  |                                    |   |                                    |  |
| 24... | 0930 | 50                                       | 1.0                             | .60                                       | 758                                  | 5.4                             | 68  | 7.6   | 198  | 27.4                               | 39                                      | 10.3                               | 3.22                                   |
| 24... | 0935 | --                                       | 2.0                             | --  | 758                                  | 5.2                             | 67  | 7.5   | 198  | 27.4                               | --                                      | --                                 | --                                     |
| 24... | 0940 | --                                       | 4.0                             | --  | 758                                  | 2.2                             | 27  | 7.2   | 202  | 27.0                               | --                                      | --                                 | --                                     |
| AUG   |      |  |                                 |   |                                      |                                 |   |   |  |                                    |   |                                    |  |
| 24... | 1230 | 50                                       | 1.0                             | .40                                       | 760                                  | 6.2                             | 79  | 7.6   | 150  | 27.3                               | 33                                      | 8.43                               | 2.79                                   |
| 24... | 1235 | --                                       | 2.0                             | --  | 760                                  | 4.6                             | 57  | 7.0   | 147  | 26.9                               | --                                      | --                                 | --                                     |
| 24... | 1240 | --                                       | 4.0                             | --  | 760                                  | 1.6                             | 20  | 6.7   | 153  | 26.1                               | --                                      | --                                 | --                                     |

| Date  | Potas-sium, water, fltrd, mg/L (00935) | Sodium, water, fltrd, mg/L (00930) | ANC, wat un-f incrm. titr., field, mg/L as CaCO3 (00419) | Bicar-bonate, wat un-f incrm. titr., field, mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950) | Silica, water, fltrd, mg/L (00955) | Sulfate water, fltrd, mg/L (00945) | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
|-------|--|------------------------------------|--|--|---------------------------------------|---------------------------------------|------------------------------------|------------------------------------|--|---|---|--|---|
| OCT   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 30... | 3.62                                   | 16.2                               | 38   | 46   | 12.8                                  | .2                                    | 4.91                               | 11.5                               | 95   | .95   | .042                                    | E.008  | .002                                    |
| 30... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .84   | .027                                    | E.011  | E.001                                   |
| 30... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .90   | .038                                    | E.008  | .002                                    |
| APR   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 22... | 3.47                                   | 20.1                               | 35   | 42   | 23.7                                  | .2                                    | .07                                | 12.5                               | 109  | 1.1   | .017                                    | <.016  | .002                                    |
| 22... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.1   | .068                                    | E.010  | .002                                    |
| 22... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.3   | .148                                    | E.014  | .003                                    |
| JUN   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 24... | 3.97                                   | 22.2                               | 40   | 49   | 21.4                                  | .2                                    | 1.86                               | 12.1                               | 113  | 1.1   | <.010                                   | <.016  | <.002                                   |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | .92   | <.010                                   | <.016  | <.002                                   |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.0   | E.006                                   | <.016  | <.002                                   |
| AUG   |  |                                    |  |  |                                       |                                       |                                    |                                    |  |   |   |  |   |
| 24... | 3.63                                   | 16.5                               | 34   | 41   | 15.1                                  | .2                                    | 5.69                               | 10.9                               | 93   | 1.2   | E.007                                   | <.016  | E.001                                   |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.1   | E.006                                   | <.016  | E.001                                   |
| 24... | --                                     | --                                 | --   | --   | --                                    | --                                    | --                                 | --                                 | --   | 1.3   | .147                                    | E.013  | .008                                    |

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 30... | <.006  | .070                                    | 9.9   | 32.8  | 1.2   | 114   | <2                                 | <.04                                | <.8   | .270   | 1.0   | 210   | .37   |
| 30... | <.006  | .065                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 240   | --  |
| 30... | <.006  | .075                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 320   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 22... | <.006  | .088                                    | 10.7  | 39.6  | 3.3   | 99  | E1                                 | <.04                                | <.8   | .475   | 1.3   | 250   | .31   |
| 22... | <.006  | .089                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 330   | --  |
| 22... | <.006  | .107                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 490   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | <.006  | .074                                    | 10.7  | 62.2  | 2.5   | --  | --                                 | --                                  | --  | --   | --  | 230   | --  |
| 24... | <.006  | .073                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 230   | --  |
| 24... | <.006  | .081                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 300   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | E.003  | .089                                    | 15.5  | 39.2  | E1.7  | --  | --                                 | --                                  | --  | --   | --  | 390   | --  |
| 24... | E.004  | .091                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 350   | --  |
| 24... | <.006  | .096                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 480   | --  |

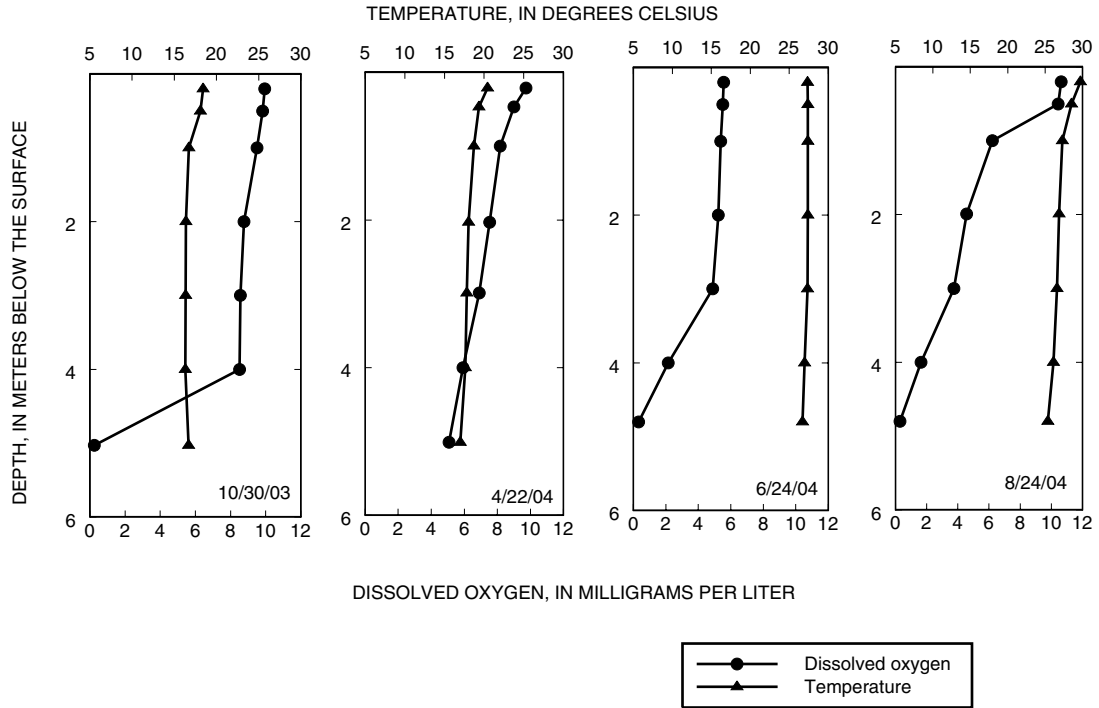
| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 30... | 157  | E.01  | 3.5   | E.78  | <.4                                   | <.16  |
| 30... | 170  | --  | --  | --  | --                                    | --  |
| 30... | 190  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 22... | 180  | .02   | 2.7   | 1.07  | E.2                                   | <.16  |
| 22... | 206  | --  | --  | --  | --                                    | --  |
| 22... | 331  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 24... | 248  | --  | --  | --  | --                                    | --  |
| 24... | 250  | --  | --  | --  | --                                    | --  |
| 24... | 347  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 24... | 139  | --  | --  | --  | --                                    | --  |
| 24... | 140  | --  | --  | --  | --                                    | --  |
| 24... | 223  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

0209768310 B. EVERETT JORDAN LAKE AT BUOY 12 AT FARRINGTON, NC—Continued



0209782609 WHITE OAK CREEK AT MOUTH NEAR GREEN LEVEL, NC

LOCATION.--Lat 35°45'37", long 78°55'13", Wake County, Hydrologic Unit 03030002, on left bank on Secondary Road 1603, 1.8 mi south-southwest of Green Level.

DRAINAGE AREA.--11.9 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1999 to current year. October 1999 to September 2003 published as "0209782520, White Oak Creek at Green Level, NC".

GAGE.--Water-stage recorder. Elevation of gage is 245 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. No flow occurs at times most years.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN   | FEB   | MAR   | APR   | MAY    | JUN  | JUL   | AUG    | SEP   |
|-------|--------|--------|--------|-------|-------|-------|-------|--------|------|-------|--------|-------|
| 1     | 1.2    | 2.6    | 1.6    | 3.1   | 7.0   | 11    | 19    | 13     | 0.04 | 0.15  | 1.7    | 65    |
| 2     | 1.1    | 1.9    | 1.2    | 3.0   | 5.5   | 9.5   | 9.9   | 81     | 0.03 | 0.10  | 25     | 18    |
| 3     | 0.93   | 1.5    | 0.97   | 3.1   | 60    | 8.6   | 6.6   | 136    | 0.03 | 0.11  | 33     | 8.4   |
| 4     | 0.85   | 1.3    | 1.1    | 3.2   | 28    | 7.5   | 5.1   | 30     | 0.04 | 0.05  | 1.2    | 5.1   |
| 5     | 0.78   | 1.3    | 15     | 3.8   | 13    | 6.8   | 3.8   | 12     | 0.29 | 0.02  | 0.26   | 3.5   |
| 6     | 0.72   | 1.4    | 6.9    | 8.0   | 24    | 7.2   | 3.2   | 7.3    | 0.21 | 0.00  | 59     | 29    |
| 7     | 0.69   | 3.6    | 3.2    | 3.7   | 106   | 7.8   | 3.1   | 4.4    | 0.11 | 0.00  | 1.9    | 162   |
| 8     | 0.79   | 3.2    | 2.1    | 2.9   | 25    | 6.0   | 3.0   | 3.0    | 0.08 | 0.00  | 0.20   | 149   |
| 9     | 1.2    | 2.8    | 1.7    | 3.2   | 16    | 6.2   | 2.8   | 2.3    | 0.08 | 0.00  | 0.09   | 68    |
| 10    | 2.1    | 1.9    | 14     | 5.7   | 13    | 9.4   | 2.4   | 1.6    | 0.08 | 0.00  | 0.06   | 19    |
| 11    | 2.1    | 1.4    | 121    | 3.0   | 11    | 5.9   | 2.7   | 1.3    | 0.08 | 0.00  | 0.05   | 10    |
| 12    | 2.4    | 1.2    | 22     | 3.3   | 46    | 4.9   | 11    | 1.4    | 0.06 | 0.00  | 0.33   | 6.4   |
| 13    | 1.6    | 1.2    | 11     | 4.0   | 38    | 3.8   | 24    | 0.82   | 0.04 | 0.00  | 38     | 4.0   |
| 14    | 1.5    | 1.0    | 135    | 3.3   | 19    | 3.3   | 17    | 0.66   | 0.03 | 0.01  | 207    | 2.9   |
| 15    | 5.2    | 0.84   | 58     | 3.0   | 23    | 55    | 9.8   | 0.55   | 0.02 | 0.05  | 130    | 7.7   |
| 16    | 3.2    | 0.72   | 22     | 2.4   | 44    | 159   | 5.6   | 0.75   | 0.02 | 0.01  | 99     | 5.3   |
| 17    | 1.6    | 0.68   | 40     | 2.3   | 29    | 115   | 4.2   | 0.43   | 0.02 | 0.00  | 22     | 5.7   |
| 18    | 1.3    | 0.70   | 29     | 11    | 23    | 47    | 3.4   | 0.36   | 0.01 | 0.97  | 10     | 72    |
| 19    | 1.1    | 17     | 16     | 8.0   | 21    | 54    | 3.0   | 0.29   | 0.01 | 0.65  | 7.0    | 29    |
| 20    | 1.0    | 30     | 11     | 4.1   | 16    | 23    | 2.7   | 0.52   | 0.01 | 0.09  | 3.6    | 7.7   |
| 21    | 1.00   | 5.8    | 8.9    | 3.2   | 13    | 19    | 2.3   | 0.66   | 0.00 | 0.03  | 2.1    | 3.6   |
| 22    | 0.94   | 2.7    | 8.1    | 2.8   | 9.9   | 13    | 2.0   | 0.33   | 0.00 | 0.04  | 70     | 2.5   |
| 23    | 0.86   | 2.0    | 7.3    | 2.7   | 8.6   | 10    | 1.7   | 0.29   | 0.00 | 14    | 10     | 1.9   |
| 24    | 0.81   | 1.6    | 11     | 2.5   | 8.2   | 8.4   | 1.6   | 0.36   | 0.00 | 0.63  | 5.0    | 1.7   |
| 25    | 0.73   | 1.3    | 9.1    | 2.3   | 7.6   | 7.2   | 1.4   | 0.27   | 0.00 | 0.13  | 2.5    | 1.4   |
| 26    | 0.72   | 1.2    | 6.1    | 4.0   | 6.7   | 6.6   | 1.7   | 0.17   | 0.00 | 0.08  | 1.8    | 1.3   |
| 27    | 0.79   | 1.1    | 5.1    | 3.4   | 15    | 6.9   | 6.2   | 0.13   | 0.00 | 0.07  | 1.5    | 1.9   |
| 28    | 0.97   | 1.7    | 4.6    | 4.5   | 19    | 6.3   | 3.1   | 0.09   | 0.00 | 1.3   | 1.4    | 80    |
| 29    | 47     | 7.3    | 4.1    | 8.0   | 16    | 5.4   | 1.8   | 0.07   | 0.01 | 1.1   | 1.4    | 40    |
| 30    | 14     | 2.5    | 4.1    | 12    | ---   | 4.1   | 1.6   | 0.06   | 0.34 | 33    | 139    | 11    |
| 31    | 5.2    | ---    | 3.5    | 12    | ---   | 6.0   | ---   | 0.05   | ---  | 0.69  | 61     | ---   |
| TOTAL | 104.38 | 103.44 | 584.67 | 141.5 | 671.5 | 643.8 | 165.7 | 300.16 | 1.64 | 53.28 | 935.09 | 823.0 |
| MEAN  | 3.37   | 3.45   | 18.9   | 4.56  | 23.2  | 20.8  | 5.52  | 9.68   | 0.05 | 1.72  | 30.2   | 27.4  |
| MAX   | 47     | 30     | 135    | 12    | 106   | 159   | 24    | 136    | 0.34 | 33    | 207    | 162   |
| MIN   | 0.69   | 0.68   | 0.97   | 2.3   | 5.5   | 3.3   | 1.4   | 0.05   | 0.00 | 0.00  | 0.05   | 1.3   |
| CFSM  | 0.48   | 0.49   | 2.71   | 0.65  | 3.32  | 2.98  | 0.79  | 1.39   | 0.01 | 0.25  | 4.33   | 3.94  |
| IN.   | 0.56   | 0.55   | 3.12   | 0.76  | 3.58  | 3.44  | 0.88  | 1.60   | 0.01 | 0.28  | 4.99   | 4.39  |

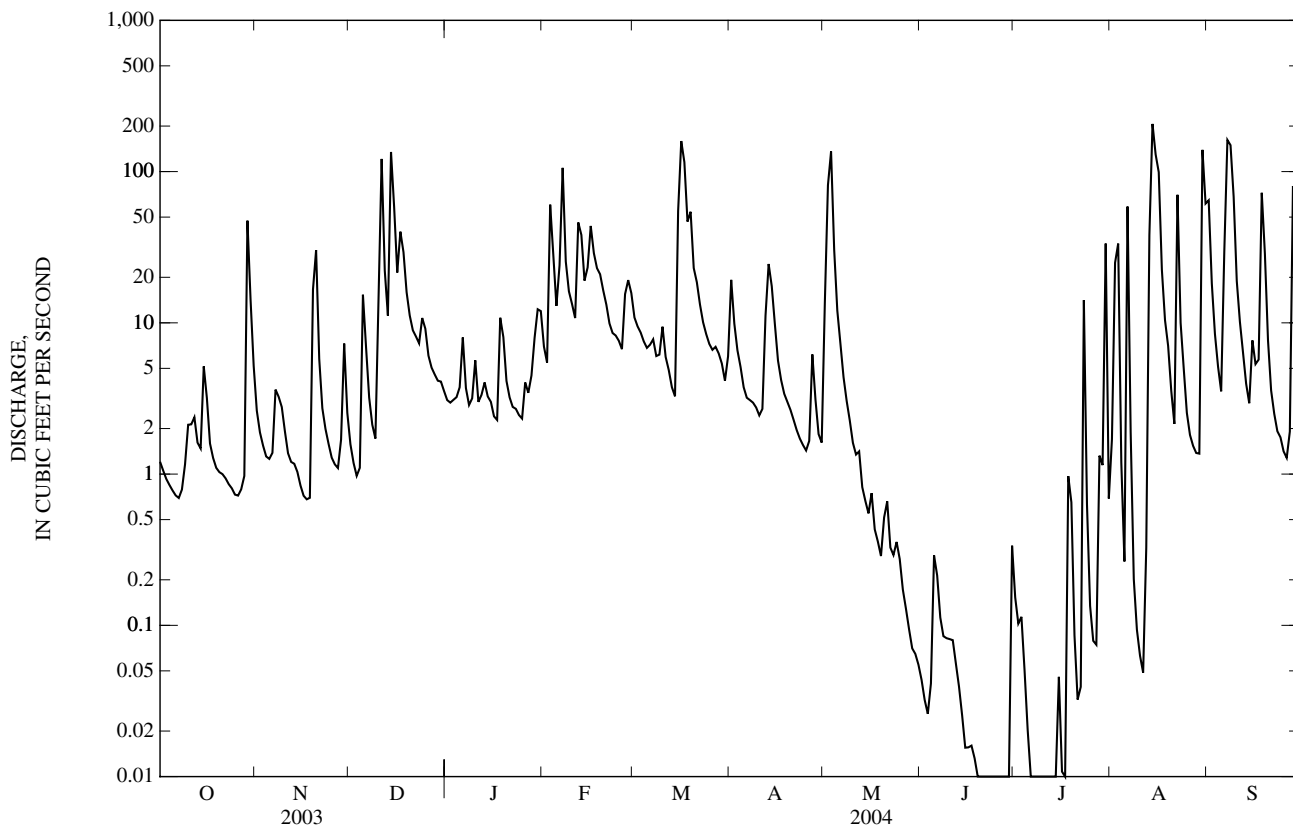
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 8.03   | 7.29   | 15.4   | 15.0   | 24.6   | 26.1   | 18.7   | 3.97   | 7.04   | 3.02   | 12.3   | 11.9   |
| MAX  | 23.8   | 25.1   | 43.5   | 28.6   | 51.4   | 56.4   | 44.8   | 9.68   | 17.6   | 5.19   | 30.2   | 27.4   |
| (WY) | (2003) | (2003) | (2003) | (2000) | (2003) | (2003) | (2003) | (2004) | (2003) | (2001) | (2004) | (2004) |
| MIN  | 0.77   | 0.21   | 2.35   | 3.26   | 7.77   | 7.49   | 5.52   | 0.20   | 0.00   | 0.01   | 0.84   | 0.61   |
| (WY) | (2002) | (2002) | (2001) | (2001) | (2002) | (2000) | (2004) | (2002) | (2002) | (2002) | (2002) | (2001) |

0209782609 WHITE OAK CREEK AT MOUTH NEAR GREEN LEVEL, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 2000 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 7,201.30               |        | 4,528.16            |        |                         |              |
| ANNUAL MEAN              | 19.7                   |        | 12.4                |        | 12.7                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 25.3                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 5.51                    | 2002         |
| HIGHEST DAILY MEAN       | 472                    | Apr 10 | 207                 | Aug 14 | 472                     | Apr 10, 2003 |
| LOWEST DAILY MEAN        | 0.63                   | Aug 30 | 0.00                | Jun 21 | 0.00                    | May 28, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 0.83                   | Oct 22 | 0.00                | Jun 21 | 0.00                    | May 28, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 298                 | Aug 30 | 1,140                   | Oct 11, 2002 |
| MAXIMUM PEAK STAGE       |                        |        | 7.40                | Aug 30 | 10.51                   | Oct 11, 2002 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.00*               | Jun 21 | 0.00*                   | May 28, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.83                   |        | 1.78                |        | 1.82                    |              |
| ANNUAL RUNOFF (INCHES)   | 38.43                  |        | 24.17               |        | 24.79                   |              |
| 10 PERCENT EXCEEDS       | 47                     |        | 29                  |        | 28                      |              |
| 50 PERCENT EXCEEDS       | 5.6                    |        | 3.0                 |        | 2.9                     |              |
| 90 PERCENT EXCEEDS       | 1.0                    |        | 0.05                |        | 0.03                    |              |

\* See REMARKS.





0209782609 WHITE OAK CREEK AT MOUTH NEAR GREEN LEVEL, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date         | Nickel,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01067) | Selen-<br>ium,<br>water,<br>unfltrd<br>ug/L<br>(01147) | Silver,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01077) | Zinc,<br>water,<br>unfltrd<br>recover-<br>able,<br>ug/L<br>(01092) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) |
|--------------|--|--|--|--|--|
| OCT<br>30... | <.78   | E.3  | <.16   | 2  | 27   |
| DEC<br>09... | --   | --   | --   | --   | 10   |
| FEB<br>24... | --   | --   | --   | --   | 9  |
| APR<br>01... | 1.05   | <.4  | <.16   | 2  | 35   |
| JUL<br>15... | .93  | <.4  | <.16   | 3  | 6  |
| AUG<br>17... | --   | --   | --   | --   | 23   |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value





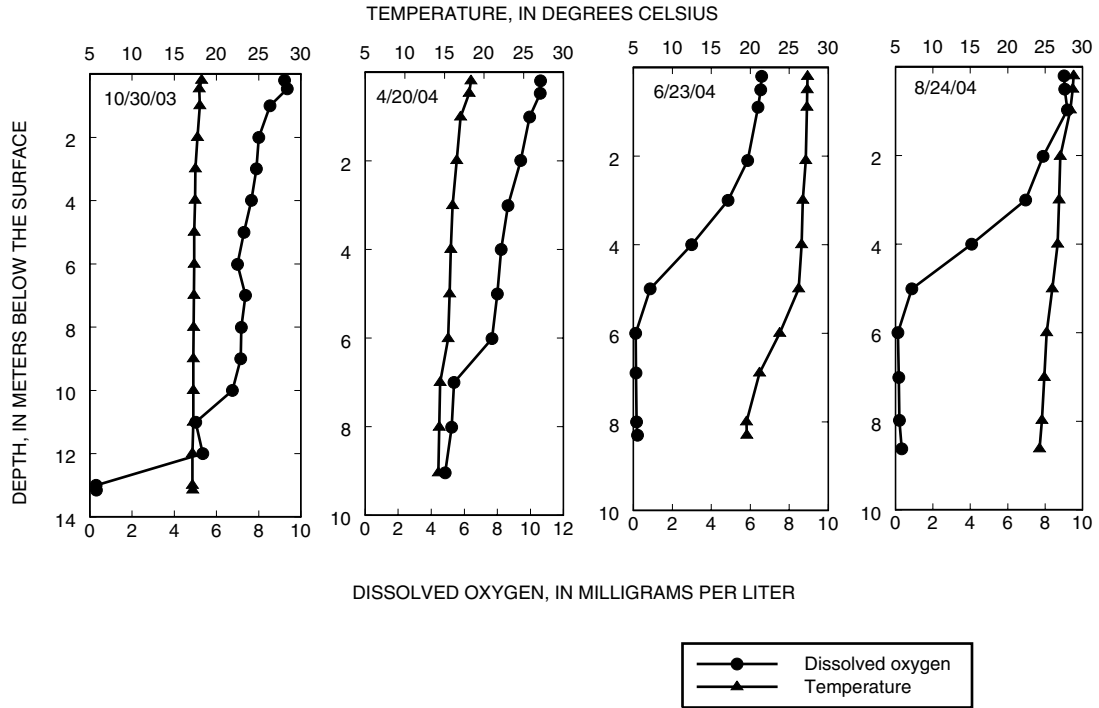
0209799150 B. EVERETT JORDAN LAKE ABOVE U.S. HIGHWAY 64 NEAR WILSONVILLE, NC—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 30... | <.006  | .044                                    | 8.1   | 16.9  | E.5   | 100   | <2                                 | <.04                                | 5.1   | .187   | 1.0   | 170   | .32   |
| 30... | E.003  | .042                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 160   | --  |
| 30... | <.006  | .048                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 250   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 20... | <.006  | .044                                    | 9.8   | 17.1  | E.9   | 47  | <2                                 | <.04                                | <.8   | .243   | 1.1   | 110   | .16   |
| 20... | <.006  | .054                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 130   | --  |
| 20... | E.003  | .074                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 410   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 23... | <.006  | .038                                    | 8.0   | 14.1  | <.2   | --  | --                                 | --                                  | --  | --   | --  | 70  | --  |
| 23... | <.006  | .037                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 23... | .038   | .122                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 2,370   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | <.006  | .058                                    | 10.9  | 28.9  | E1.1  | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 24... | <.006  | .046                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 90  | --  |
| 24... | .008   | .127                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 1,390   | --  |

| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 30... | 131  | E.01  | 2.2   | <.78  | <.4                                   | <.16  |
| 30... | 134  | --  | --  | --  | --                                    | --  |
| 30... | 179  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 20... | 63   | E.01  | 1.7   | .79   | <.4                                   | <.16  |
| 20... | 75.0   | --  | --  | --  | --                                    | --  |
| 20... | 274  | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 23... | 90.1   | --  | --  | --  | --                                    | --  |
| 23... | 174  | --  | --  | --  | --                                    | --  |
| 23... | 4,020  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 24... | 69.0   | --  | --  | --  | --                                    | --  |
| 24... | 87.1   | --  | --  | --  | --                                    | --  |
| 24... | 2,100  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value



0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC

LOCATION.--Lat 35°43'39", long 79°02'34", Chatham County, Hydrologic Unit 03030002, at Bells Landing and 2.0 mi southeast of Griffins Crossroads.

PERIOD OF RECORD.--Water years 1991-1995, 1999 to current year.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. A GC/FID scan for trace organic compounds was performed on samples collected in November 1994 and May 1995. Results may be obtained from the District office in Raleigh. Samples for nutrient and chlorophyll a and b analyses were collected through a sampling zone equal to double the secchi disk depth using the depth-integration sampling technique.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Color, water, fltrd, Pt-Co units (00080) | Sam-pling depth, meters (00098)    | Trans-parency Secchi disc, meters (00078)                | Baro-metric pres-sure, mm Hg (00025)                     | Dis-solved oxygen, mg/L (00300)       | Dis-solved oxygen, percent of sat-uration (00301) | pH, water, unfltrd field, std units (00400) | Specif. conduc-tance, wat un-f uS/cm 25 degC (00095) | Temper-ature, water, deg C (00010)               | Hard-ness, water, mg/L as CaCO3 (00900)           | Calcium water, fltrd, mg/L (00915)      | Magnes-ium, water, fltrd, mg/L (00925)           |   |
|-------|------|--|------------------------------------|--|--|---------------------------------------|---|---|--|--|---|---|--|---|
| OCT   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 28... | 1130 | 50                                       | 1.0                                | .60  | 756  | 8.4                                   | 90  | 7.6   | 117  | 18.3   | 29  | 7.12                                    | 2.69   |   |
| 28... | 1135 | --                                       | 4.0                                | --   | 756  | 8.4                                   | 90  | 7.6   | 117  | 18.3   | --  | --                                      | --   |   |
| 28... | 1140 | --                                       | 7.0                                | --   | 756  | 8.6                                   | 92  | 7.5   | 117  | 18.2   | --  | --                                      | --   |   |
| APR   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 20... | 1000 | 25                                       | 1.0                                | .80  | 761  | 11.1                                  | --  | 8.9   | --   | 18.7   | 28  | 6.87                                    | 2.57   |   |
| 20... | 1005 | --                                       | 3.0                                | --   | 761  | 10.4                                  | --  | 8.4   | --   | 17.3   | --  | --                                      | --   |   |
| 20... | 1010 | --                                       | 7.2                                | --   | 761  | 4.6                                   | --  | 7.0   | --   | 14.4   | --  | --                                      | --   |   |
| JUN   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 23... | 0945 | 20                                       | 1.0                                | 1.00   | 757  | 7.9                                   | 101   | 8.6   | 169  | 27.5   | 31  | 7.68                                    | 2.92   |   |
| 23... | 0950 | --                                       | 3.0                                | --   | 757  | 7.1                                   | 91  | 8.1   | 170  | 27.3   | --  | --                                      | --   |   |
| 23... | 0955 | --                                       | 6.0                                | --   | 757  | .2                                    | 3   | 7.0   | 166  | 25.4   | --  | --                                      | --   |   |
| AUG   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 24... | 1130 | 18                                       | 1.0                                | .80  | 760  | 8.7                                   | 112   | 8.9   | 173  | 28.1   | 35  | 8.80                                    | 3.06   |   |
| 24... | 1135 | --                                       | 3.0                                | --   | 760  | 2.4                                   | 30  | 6.9   | 170  | 26.6   | --  | --                                      | --   |   |
| 24... | 1140 | --                                       | 6.0                                | --   | 760  | .2                                    | 2   | 6.7   | 175  | 25.6   | --  | --                                      | --   |   |
| Date  |      | Potas-sium, water, fltrd, mg/L (00935)   | Sodium, water, fltrd, mg/L (00930) | ANC, wat un-f incrm. titr., field, mg/L as CaCO3 (00419) | Bicar-bonate, wat un-f incrm. titr., field, mg/L (00450) | Chlor-ide, water, fltrd, mg/L (00940) | Fluor-ide, water, fltrd, mg/L (00950)             | Silica, water, fltrd, mg/L (00955)          | Sulfate water, fltrd, mg/L (00945)                   | Residue on evap. at 180degC wat flt mg/L (70300) | Ammonia + org-N, water, unfltrd mg/L as N (00625) | Ammonia water, fltrd, mg/L as N (00608) | Nitrite + nitrate water fltrd, mg/L as N (00631) | Nitrite water, fltrd, mg/L as N (00613) |
| OCT   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 28... | 3.19 | 10.6                                     | 28                                 | 35   | 8.65   | <.2                                   | 7.59  | 8.5   | 80   | .70  | .017  | .096                                    | .006   |   |
| 28... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .73  | .010  | .093                                    | .005   |   |
| 28... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .63  | E.009   | .094                                    | .006   |   |
| APR   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 20... | 3.16 | 14.5                                     | 32                                 | 39   | 13.8   | <.2                                   | .06   | 10.8  | 84   | .71  | E.009   | <.016                                   | .002   |   |
| 20... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .70  | E.009   | E.011                                   | .003   |   |
| 20... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .70  | .029  | .025                                    | .004   |   |
| JUN   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 23... | 3.26 | 17.4                                     | 37                                 | 45   | 16.9   | .2                                    | 1.17  | 10.3  | 102  | .55  | <.010   | <.016                                   | <.002  |   |
| 23... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .54  | <.010   | <.016                                   | <.002  |   |
| 23... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .59  | <.010   | <.016                                   | <.002  |   |
| AUG   |      |  |                                    |  |  |                                       |   |   |  |  |   |   |  |   |
| 24... | 3.56 | 17.9                                     | 36                                 | 44   | 17.8   | .2                                    | 3.01  | 10.0  | 89   | .77  | E.007   | <.016                                   | <.002  |   |
| 24... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .80  | E.006   | <.016                                   | <.002  |   |
| 24... | --   | --                                       | --                                 | --   | --   | --                                    | --  | --  | --   | .86  | .192  | <.016                                   | <.002  |   |

## 0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Ortho-phosphate, water, fltrd, mg/L as P (00671) | Phosphorus, water, unfltrd mg/L (00665) | Organic carbon, water, unfltrd mg/L (00680) | Chlorophyll a phytoplankton, fluoro, ug/L (70953) | Chlorophyll b phytoplankton, fluoro, ug/L (70954) | Aluminum, water, unfltrd recover-able, ug/L (01105) | Arsenic water unfltrd ug/L (01002) | Cadmium water, unfltrd ug/L (01027) | Chromium, water, unfltrd recover-able, ug/L (01034) | Cobalt water, unfltrd recover-able, ug/L (01037) | Copper, water, unfltrd recover-able, ug/L (01042) | Iron, water, unfltrd recover-able, ug/L (01045) | Lead, water, unfltrd recover-able, ug/L (01051) |
|-------|--|---|---|---|---|---|------------------------------------|-------------------------------------|---|--|---|---|---|
| OCT   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 28... | <.006  | .043                                    | 7.7   | 16.4  | <.1   | 122   | <2                                 | <.04                                | E.6   | .239   | 1.1   | 190   | .32   |
| 28... | <.006  | .043                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 180   | --  |
| 28... | <.006  | .042                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 170   | --  |
| APR   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 20... | <.006  | .042                                    | 9.0   | 15.2  | E.7   | 47  | <2                                 | <.04                                | <.8   | .237   | 1.3   | 100   | .12   |
| 20... | <.006  | .047                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 100   | --  |
| 20... | <.006  | .046                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 160   | --  |
| JUN   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 23... | <.006  | .029                                    | 8.2   | 11.3  | <.1   | --  | --                                 | --                                  | --  | --   | --  | 50  | --  |
| 23... | <.006  | .028                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 50  | --  |
| 23... | <.006  | .046                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 270   | --  |
| AUG   |  |   |   |   |   |   |                                    |                                     |   |  |   |   |   |
| 24... | <.006  | .038                                    | 9.0   | 21.9  | E.8   | --  | --                                 | --                                  | --  | --   | --  | 60  | --  |
| 24... | <.006  | .037                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 100   | --  |
| 24... | <.006  | .044                                    | --  | --  | --  | --  | --                                 | --                                  | --  | --   | --  | 300   | --  |

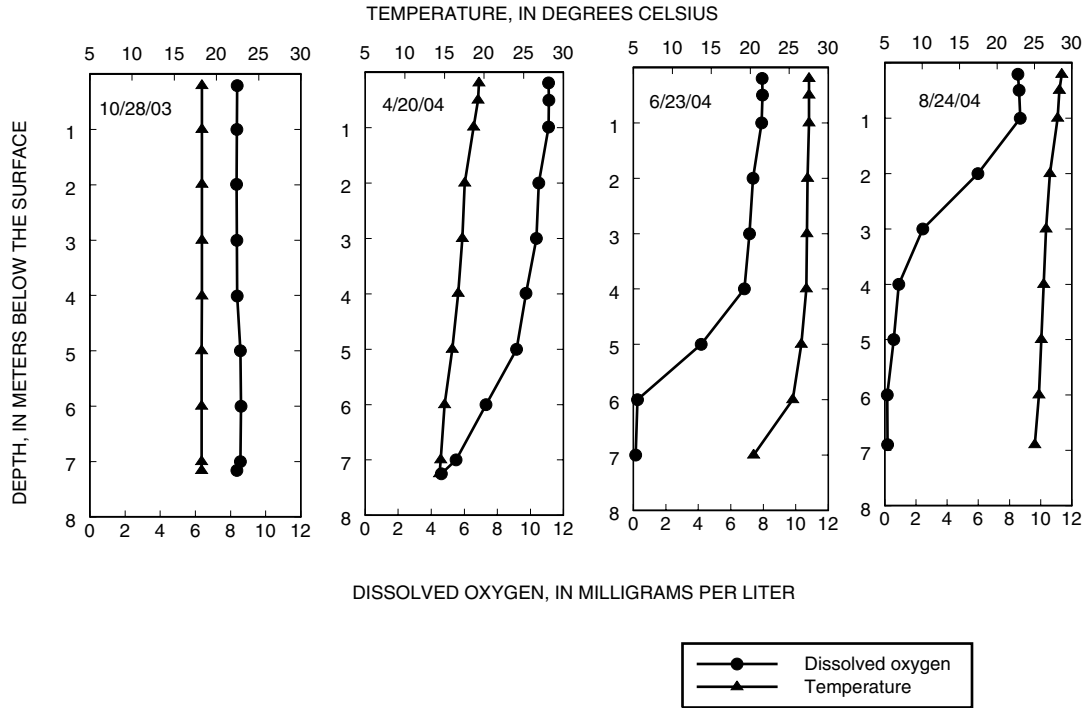
| Date  | Manganese, water, unfltrd recover-able, ug/L (01055) | Mercury water, unfltrd recover-able, ug/L (71900) | Molybdenum, water, unfltrd recover-able, ug/L (01062) | Nickel, water, unfltrd recover-able, ug/L (01067) | Selenium, water, unfltrd ug/L (01147) | Silver, water, unfltrd recover-able, ug/L (01077) |
|-------|--|---|---|---|---------------------------------------|---|
| OCT   |  |   |   |   |                                       |   |
| 28... | 117  | <.02  | 1.8   | E.70  | .5                                    | <.16  |
| 28... | 117  | --  | --  | --  | --                                    | --  |
| 28... | 116  | --  | --  | --  | --                                    | --  |
| APR   |  |   |   |   |                                       |   |
| 20... | 46   | .03   | 1.5   | .77   | <.4                                   | <.16  |
| 20... | 41.0   | --  | --  | --  | --                                    | --  |
| 20... | 84.2   | --  | --  | --  | --                                    | --  |
| JUN   |  |   |   |   |                                       |   |
| 23... | 47.7   | --  | --  | --  | --                                    | --  |
| 23... | 49.1   | --  | --  | --  | --                                    | --  |
| 23... | 565  | --  | --  | --  | --                                    | --  |
| AUG   |  |   |   |   |                                       |   |
| 24... | 49.5   | --  | --  | --  | --                                    | --  |
| 24... | 120  | --  | --  | --  | --                                    | --  |
| 24... | 735  | --  | --  | --  | --                                    | --  |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

0209801100 B. EVERETT JORDAN LAKE AT BELLS LANDING NEAR GRIFFINS CROSSROADS, NC—Continued



## 02098197 B. EVERETT JORDAN LAKE AT DAM NEAR MONCURE, NC

LOCATION.--Lat 35°39'17", long 79°04'06", Chatham County, Hydrologic Unit 03030002, at B. Everett Jordan Dam on Haw River, 0.3 mi downstream of mouth of New Hope River, 2.5 mi north of Moncure, 4.2 mi upstream from mouth of Haw River, and 202.2 mi upstream from mouth of Cape Fear River.

DRAINAGE AREA.--1,689 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1987 to current year.

GAGE.--Water-stage recorder. Datum of gage is at NGVD of 1929. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Lake elevations controlled by reservoir operations at B. Everett Jordan Dam. Lake is used for flood control, water supply, low-flow augmentation, and recreation. Some storage was affected during construction and then operated temporarily as a "dry reservoir" January 1975 to August 1981. Reservoir began filling September 1981 and reached normal pool elevation, 216 ft, Feb. 4, 1982. Total capacity is 32,825,074,000 ft<sup>3</sup> at 240.0 ft, of which 23,454,011,000 ft<sup>3</sup> is controlled flood storage. (See station 02098198.)

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded elevation, 233.83 ft, Apr. 15, 2003; minimum recorded elevation, 207.85 ft, Nov. 12, 1986.

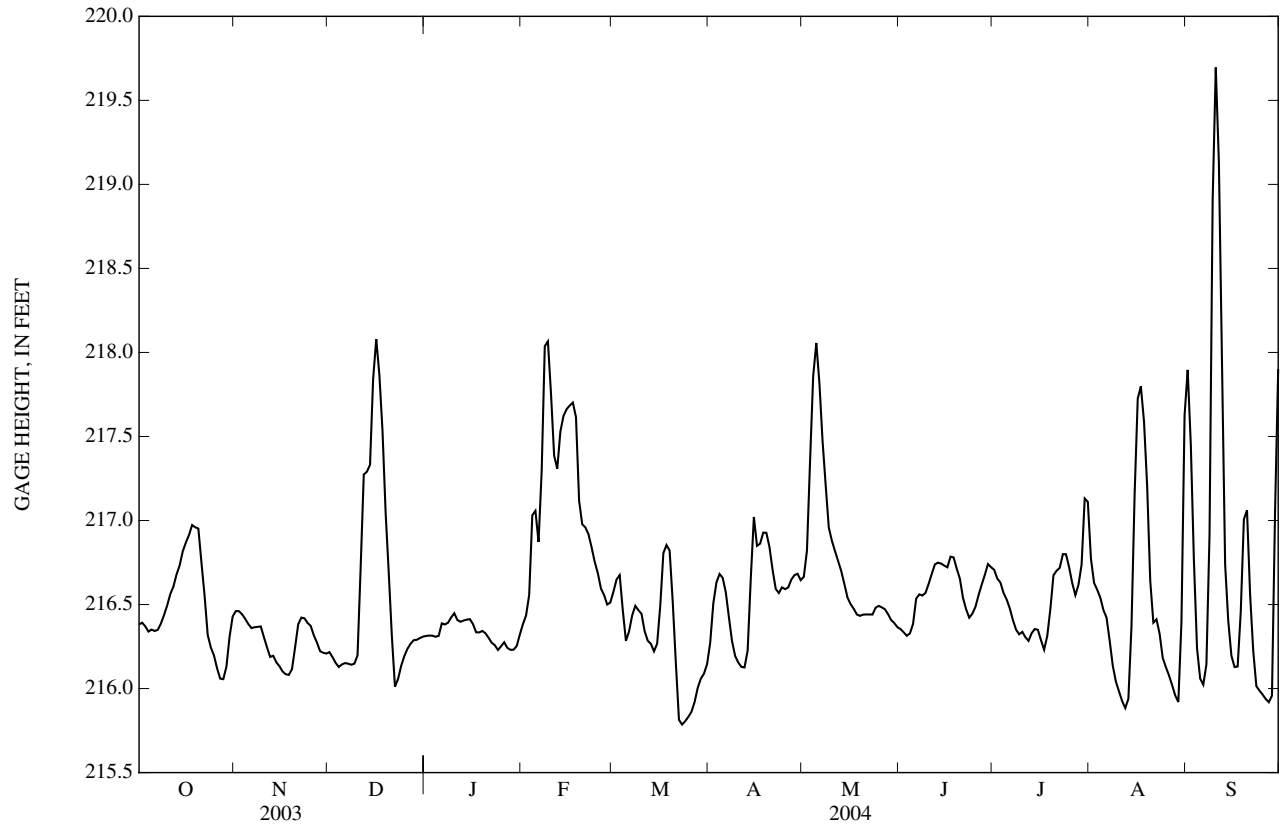
EXTREMES FOR CURRENT YEAR.--Maximum recorded elevation, 219.81 ft, Sep. 10; minimum recorded elevation, 215.76 ft, Mar. 22.

COOPERATION.--Some records furnished by U.S. Army Corps of Engineers.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1    | 216.38 | 216.46 | 216.22 | 216.31 | 216.38 | 216.58 | 216.27 | 216.67 | 216.35 | 216.71 | 216.77 | 217.90 |
| 2    | 216.39 | 216.46 | 216.19 | 216.32 | 216.43 | 216.65 | 216.51 | 216.82 | 216.33 | 216.65 | 216.63 | 217.45 |
| 3    | 216.37 | 216.44 | 216.15 | 216.31 | 216.56 | 216.68 | 216.63 | 217.35 | 216.31 | 216.63 | 216.59 | 216.76 |
| 4    | 216.34 | 216.41 | 216.13 | 216.31 | 217.03 | 216.47 | 216.68 | 217.86 | 216.33 | 216.57 | 216.54 | 216.24 |
| 5    | 216.35 | 216.38 | 216.14 | 216.31 | 217.06 | 216.28 | 216.66 | 218.06 | 216.38 | 216.53 | 216.47 | 216.06 |
| 6    | 216.34 | 216.36 | 216.15 | 216.39 | 216.87 | 216.34 | 216.57 | 217.82 | 216.53 | 216.48 | 216.42 | 216.02 |
| 7    | 216.35 | 216.36 | 216.15 | 216.38 | 217.29 | 216.44 | 216.42 | 217.47 | 216.56 | 216.41 | 216.29 | 216.14 |
| 8    | 216.39 | 216.37 | 216.14 | 216.39 | 218.04 | 216.49 | 216.28 | 217.21 | 216.55 | 216.35 | 216.14 | 216.92 |
| 9    | 216.44 | 216.37 | 216.15 | 216.42 | 218.07 | 216.47 | 216.19 | 216.96 | 216.57 | 216.32 | 216.04 | 218.91 |
| 10   | 216.49 | 216.31 | 216.20 | 216.45 | 217.75 | 216.44 | 216.16 | 216.88 | 216.62 | 216.34 | 215.98 | 219.70 |
| 11   | 216.56 | 216.25 | 216.72 | 216.41 | 217.39 | 216.34 | 216.13 | 216.82 | 216.68 | 216.31 | 215.93 | 219.13 |
| 12   | 216.61 | 216.19 | 217.27 | 216.40 | 217.31 | 216.28 | 216.13 | 216.76 | 216.74 | 216.28 | 215.88 | 217.92 |
| 13   | 216.68 | 216.19 | 217.29 | 216.41 | 217.53 | 216.27 | 216.23 | 216.70 | 216.75 | 216.33 | 215.94 | 216.74 |
| 14   | 216.73 | 216.16 | 217.33 | 216.41 | 217.62 | 216.22 | 216.65 | 216.62 | 216.74 | 216.35 | 216.37 | 216.40 |
| 15   | 216.82 | 216.13 | 217.84 | 216.41 | 217.66 | 216.27 | 217.02 | 216.54 | 216.73 | 216.35 | 217.16 | 216.20 |
| 16   | 216.87 | 216.10 | 218.08 | 216.38 | 217.68 | 216.49 | 216.85 | 216.50 | 216.72 | 216.29 | 217.73 | 216.13 |
| 17   | 216.91 | 216.09 | 217.87 | 216.33 | 217.70 | 216.81 | 216.86 | 216.47 | 216.78 | 216.23 | 217.80 | 216.13 |
| 18   | 216.97 | 216.08 | 217.54 | 216.33 | 217.62 | 216.85 | 216.93 | 216.44 | 216.78 | 216.31 | 217.59 | 216.46 |
| 19   | 216.96 | 216.12 | 217.05 | 216.34 | 217.12 | 216.82 | 216.93 | 216.43 | 216.71 | 216.47 | 217.21 | 217.01 |
| 20   | 216.95 | 216.25 | 216.69 | 216.33 | 216.98 | 216.52 | 216.84 | 216.44 | 216.65 | 216.67 | 216.64 | 217.06 |
| 21   | 216.75 | 216.38 | 216.31 | 216.30 | 216.96 | 216.15 | 216.71 | 216.44 | 216.54 | 216.70 | 216.39 | 216.56 |
| 22   | 216.55 | 216.42 | 216.01 | 216.27 | 216.92 | 215.81 | 216.59 | 216.44 | 216.47 | 216.72 | 216.41 | 216.22 |
| 23   | 216.32 | 216.42 | 216.06 | 216.26 | 216.84 | 215.79 | 216.57 | 216.44 | 216.42 | 216.80 | 216.33 | 216.01 |
| 24   | 216.24 | 216.39 | 216.14 | 216.23 | 216.75 | 215.81 | 216.60 | 216.48 | 216.45 | 216.80 | 216.18 | 215.99 |
| 25   | 216.20 | 216.37 | 216.19 | 216.25 | 216.69 | 215.83 | 216.59 | 216.49 | 216.49 | 216.72 | 216.13 | 215.96 |
| 26   | 216.12 | 216.32 | 216.24 | 216.28 | 216.60 | 215.86 | 216.60 | 216.48 | 216.56 | 216.63 | 216.08 | 215.94 |
| 27   | 216.06 | 216.27 | 216.27 | 216.24 | 216.56 | 215.92 | 216.65 | 216.47 | 216.62 | 216.56 | 216.02 | 215.92 |
| 28   | 216.06 | 216.22 | 216.29 | 216.23 | 216.50 | 216.00 | 216.67 | 216.44 | 216.68 | 216.62 | 215.96 | 215.96 |
| 29   | 216.13 | 216.21 | 216.29 | 216.23 | 216.51 | 216.06 | 216.68 | 216.41 | 216.74 | 216.74 | 215.92 | 217.06 |
| 30   | 216.31 | 216.21 | 216.30 | 216.25 | ---    | 216.09 | 216.65 | 216.39 | 216.72 | 217.13 | 216.40 | 217.90 |
| 31   | 216.43 | ---    | 216.31 | 216.32 | ---    | 216.15 | ---    | 216.37 | ---    | 217.11 | 217.62 | ---    |
| MEAN | 216.49 | 216.29 | 216.57 | 216.33 | 217.12 | 216.30 | 216.57 | 216.76 | 216.58 | 216.55 | 216.50 | 216.83 |
| MAX  | 216.97 | 216.46 | 218.08 | 216.45 | 218.07 | 216.85 | 217.02 | 218.06 | 216.78 | 217.13 | 217.80 | 219.70 |
| MIN  | 216.06 | 216.08 | 216.01 | 216.23 | 216.38 | 215.79 | 216.13 | 216.37 | 216.31 | 216.23 | 215.88 | 215.92 |

02098197 B. EVERETT JORDAN LAKE AT DAM NEAR MONCURE, NC—Continued





## 02098198 HAW RIVER BELOW B. EVERETT JORDAN LAKE DAM NEAR MONCURE, NC

LOCATION.--Lat 35°39'07", long 79°04'02", Chatham County, Hydrologic Unit 0303002, on right bank 300 ft downstream from B. Everett Jordan Lake Dam, 2.5 mi north of Moncure, and 4.2 mi upstream from mouth.

DRAINAGE AREA.--1,689 mi<sup>2</sup>.

## GAGE-HEIGHT RECORDS

PERIOD OF RECORD.--October 1965 to current year. Discharge records, October 1965 to September 1992. Gage height records only, October 1992 to current year. October 1965 to September 1978, published as "Haw River nr Haywood, NC" (02098200).

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

GAGE.--Water-stage recorder. Datum of gage is 155.00 ft above NGVD of 1929 (U.S. Corps of Engineers bench mark). Prior to Oct. 1, 1978, water-stage recorder at site 0.3 mi. downstream at same datum. U.S. Army Corps of Engineers satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum, 22.41 ft, Oct. 25, 1971 at site 0.3 mi downstream; minimum not determined.

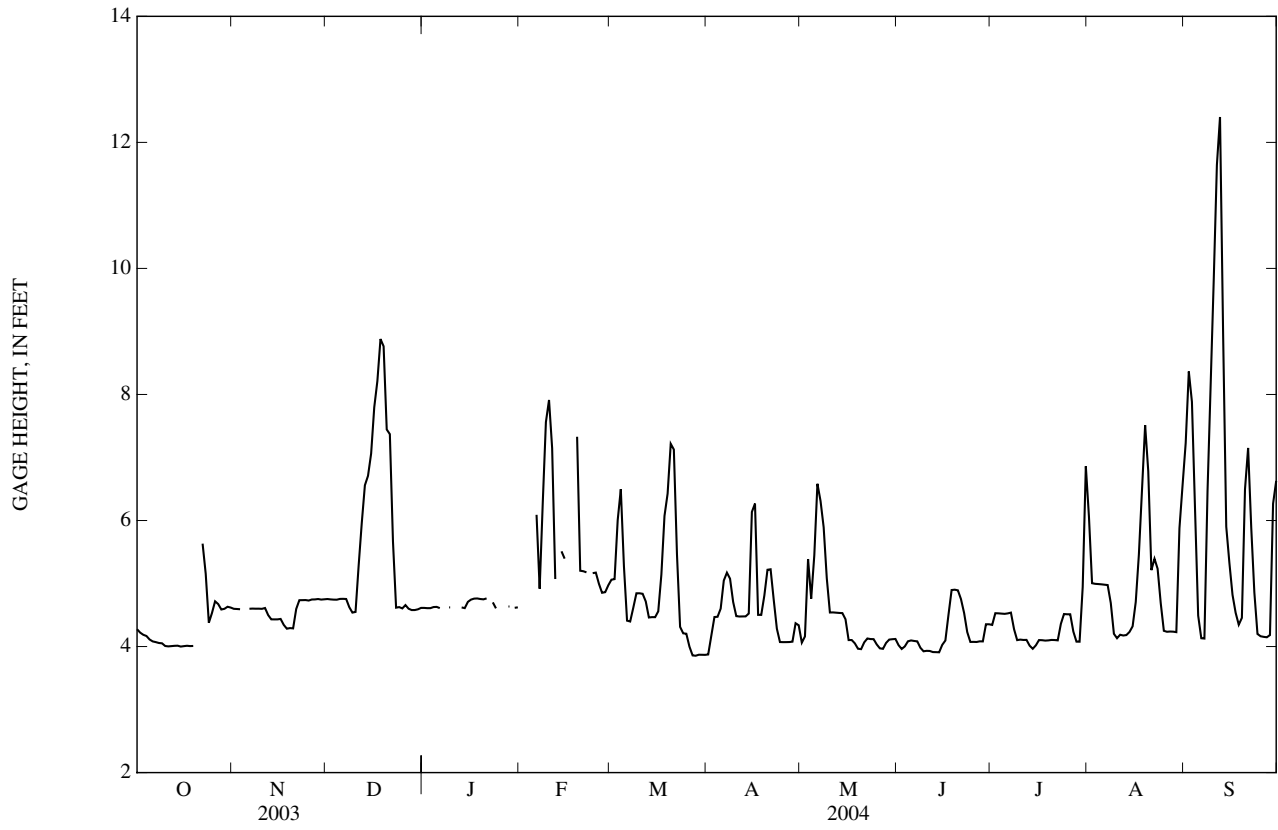
EXTREMES FOR CURRENT YEAR.--Maximum, 12.83 ft, Sep. 11; minimum, 3.28 ft, Apr. 30.

REMARKS.--Stage regulated by B. Everett Jordan Lake Dam (Station 02098197).

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP   |
|------|------|------|------|------|------|------|------|------|------|------|------|-------|
| 1    | 4.27 | 4.60 | 4.75 | 4.61 | ---  | 5.06 | 3.87 | 4.06 | 4.02 | 4.34 | 6.06 | 7.23  |
| 2    | 4.22 | 4.60 | 4.75 | 4.61 | ---  | 5.07 | 4.17 | 4.16 | 3.96 | 4.53 | 5.00 | 8.36  |
| 3    | 4.19 | 4.59 | 4.74 | 4.61 | ---  | 6.01 | 4.47 | 5.39 | 4.00 | 4.53 | 5.00 | 7.88  |
| 4    | 4.17 | ---  | 4.74 | 4.63 | ---  | 6.50 | 4.47 | 4.76 | 4.08 | 4.52 | 4.99 | 6.17  |
| 5    | 4.11 | ---  | 4.76 | 4.63 | ---  | 5.27 | 4.60 | 5.45 | 4.10 | 4.52 | 4.99 | 4.49  |
| 6    | 4.08 | 4.60 | 4.76 | 4.61 | 6.09 | 4.41 | 5.05 | 6.58 | 4.09 | 4.53 | 4.98 | 4.13  |
| 7    | 4.07 | 4.60 | 4.75 | ---  | 4.92 | 4.40 | 5.17 | 6.31 | 4.08 | 4.54 | 4.98 | 4.13  |
| 8    | 4.06 | 4.60 | 4.62 | ---  | 6.29 | 4.62 | 5.08 | 5.89 | 3.98 | 4.28 | 4.69 | 6.47  |
| 9    | 4.05 | 4.60 | 4.54 | 4.62 | 7.56 | 4.84 | 4.71 | 5.08 | 3.92 | 4.10 | 4.20 | 8.15  |
| 10   | 4.01 | 4.60 | 4.55 | ---  | 7.91 | 4.85 | 4.48 | 4.54 | 3.93 | 4.11 | 4.13 | 9.84  |
| 11   | 4.00 | 4.61 | 5.29 | ---  | 7.15 | 4.84 | 4.48 | 4.54 | 3.93 | 4.10 | 4.19 | 11.64 |
| 12   | 4.01 | 4.50 | 5.96 | ---  | 5.07 | 4.72 | 4.48 | 4.54 | 3.91 | 4.11 | 4.18 | 12.40 |
| 13   | 4.01 | 4.43 | 6.56 | 4.62 | ---  | 4.46 | 4.48 | 4.53 | 3.91 | 4.01 | 4.18 | 8.95  |
| 14   | 4.01 | 4.43 | 6.71 | 4.61 | 5.51 | 4.47 | 4.52 | 4.53 | 3.91 | 3.96 | 4.23 | 5.90  |
| 15   | 4.00 | 4.43 | 7.06 | 4.71 | 5.40 | 4.47 | 6.14 | 4.43 | 4.03 | 4.02 | 4.32 | 5.33  |
| 16   | 4.01 | 4.44 | 7.80 | 4.74 | ---  | 4.56 | 6.27 | 4.10 | 4.10 | 4.10 | 4.71 | 4.82  |
| 17   | 4.01 | 4.34 | 8.21 | 4.76 | ---  | 5.14 | 4.50 | 4.10 | 4.51 | 4.10 | 5.46 | 4.54  |
| 18   | 4.01 | 4.28 | 8.88 | 4.76 | ---  | 6.07 | 4.50 | 4.05 | 4.90 | 4.09 | 6.49 | 4.35  |
| 19   | 4.01 | 4.29 | 8.76 | 4.75 | 7.33 | 6.43 | 4.81 | 3.97 | 4.90 | 4.10 | 7.51 | 4.46  |
| 20   | ---  | 4.29 | 7.44 | 4.75 | 5.20 | 7.22 | 5.22 | 3.96 | 4.89 | 4.11 | 6.78 | 6.50  |
| 21   | ---  | 4.60 | 7.37 | 4.76 | 5.19 | 7.13 | 5.23 | 4.07 | 4.75 | 4.10 | 5.21 | 7.15  |
| 22   | 5.63 | 4.74 | 5.67 | ---  | 5.18 | 5.46 | 4.74 | 4.13 | 4.53 | 4.10 | 5.39 | 5.89  |
| 23   | 5.15 | 4.74 | 4.62 | 4.70 | ---  | 4.31 | 4.28 | 4.12 | 4.23 | 4.36 | 5.23 | 4.86  |
| 24   | 4.38 | 4.74 | 4.63 | 4.61 | 5.16 | 4.21 | 4.07 | 4.12 | 4.07 | 4.52 | 4.69 | 4.20  |
| 25   | 4.53 | 4.73 | 4.61 | ---  | 5.17 | 4.20 | 4.07 | 4.03 | 4.07 | 4.51 | 4.25 | 4.16  |
| 26   | 4.72 | 4.75 | 4.66 | ---  | 5.00 | 4.00 | 4.07 | 3.97 | 4.07 | 4.51 | 4.23 | 4.15  |
| 27   | 4.67 | 4.75 | 4.60 | ---  | 4.85 | 3.86 | 4.07 | 3.96 | 4.08 | 4.24 | 4.24 | 4.15  |
| 28   | 4.59 | 4.75 | 4.58 | 4.64 | 4.86 | 3.85 | 4.08 | 4.06 | 4.08 | 4.08 | 4.24 | 4.18  |
| 29   | 4.60 | 4.75 | 4.58 | ---  | 4.97 | 3.87 | 4.37 | 4.11 | 4.35 | 4.08 | 4.23 | 6.27  |
| 30   | 4.63 | 4.75 | 4.59 | 4.61 | ---  | 3.87 | 4.34 | 4.12 | 4.35 | 4.95 | 5.88 | 6.63  |
| 31   | 4.62 | ---  | 4.61 | 4.62 | ---  | 3.87 | ---  | 4.12 | ---  | 6.86 | 6.56 | ---   |
| MEAN | ---  | ---  | 5.62 | ---  | ---  | 4.90 | 4.63 | 4.51 | 4.19 | 4.36 | 5.01 | 6.25  |
| MAX  | ---  | ---  | 8.88 | ---  | ---  | 7.22 | 6.27 | 6.58 | 4.90 | 6.86 | 7.51 | 12.40 |
| MIN  | ---  | ---  | 4.54 | ---  | ---  | 3.85 | 3.87 | 3.96 | 3.91 | 3.96 | 4.13 | 4.13  |

02098198 HAW RIVER BELOW B. EVERETT JORDAN LAKE DAM NEAR MONCURE, NC—Continued



02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC—Continued

PRECIPITATION RECORDS

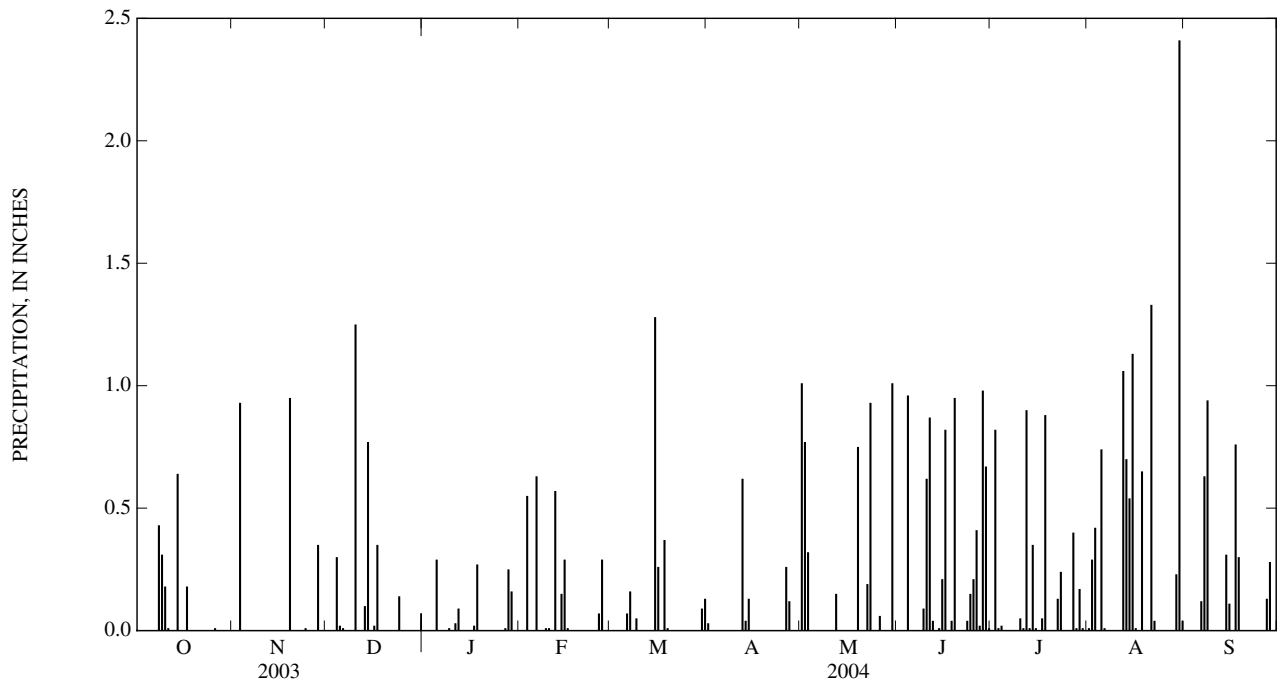
PERIOD OF RECORD.--October 1998 to current year.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Record poor. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 1.01 | 0.00 | 0.00 | 0.01 | 0.00 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | 0.00 | 0.82 | 0.29 | 0.00 |
| 3     | 0.00 | 0.93 | 0.00 | 0.00 | 0.55 | 0.00 | 0.00 | 0.32 | 0.00 | 0.01 | 0.42 | 0.00 |
| 4     | 0.00 | 0.00 | 0.30 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.96 | 0.02 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | 0.02 | 0.29 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.74 | 0.00 |
| 6     | 0.00 | 0.00 | 0.01 | 0.00 | 0.63 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.12 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.63 |
| 8     | 0.43 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.94 |
| 9     | 0.31 | 0.00 | 0.00 | 0.01 | 0.01 | 0.05 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 |
| 10    | 0.18 | 0.00 | 1.25 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.62 | 0.05 | 0.00 | 0.00 |
| 11    | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.87 | 0.01 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.09 | 0.57 | 0.00 | 0.62 | 0.15 | 0.04 | 0.90 | 1.06 | 0.00 |
| 13    | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.01 | 0.70 | 0.00 |
| 14    | 0.64 | 0.00 | 0.77 | 0.00 | 0.15 | 0.00 | 0.13 | 0.00 | 0.01 | 0.35 | 0.54 | 0.31 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 1.28 | 0.00 | 0.00 | 0.21 | 0.01 | 1.13 | 0.11 |
| 16    | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.26 | 0.00 | 0.00 | 0.82 | 0.00 | 0.01 | 0.00 |
| 17    | 0.18 | 0.00 | 0.35 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.76 |
| 18    | 0.00 | 0.00 | 0.00 | 0.27 | ---  | 0.37 | 0.00 | 0.00 | 0.04 | 0.88 | 0.65 | 0.30 |
| 19    | 0.00 | 0.95 | 0.00 | 0.00 | ---  | 0.01 | 0.00 | 0.75 | 0.95 | 0.00 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.33 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.19 | 0.00 | 0.13 | 0.04 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.93 | 0.04 | 0.24 | 0.00 | 0.00 |
| 24    | 0.00 | 0.01 | 0.14 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.21 | 0.00 | 0.00 | 0.00 |
| 26    | 0.01 | 0.00 | 0.00 | 0.00 | 0.07 | 0.00 | 0.26 | 0.06 | 0.41 | 0.00 | 0.00 | 0.00 |
| 27    | 0.00 | 0.00 | 0.00 | 0.01 | 0.29 | 0.00 | 0.12 | 0.00 | 0.02 | 0.40 | 0.00 | 0.13 |
| 28    | 0.00 | 0.35 | 0.00 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.98 | 0.01 | 0.00 | 0.28 |
| 29    | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 0.67 | 0.17 | 0.23 | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.09 | 0.00 | 1.01 | 0.01 | 0.01 | 2.41 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.13 | ---  | 0.00 | ---  | 0.00 | 0.04 | ---  |
| TOTAL | 1.76 | 2.24 | 2.96 | 1.13 | ---  | 2.42 | 1.20 | 5.19 | 7.10 | 4.07 | 9.61 | 3.58 |



02098198 HAW RIVER BELOW B. EVERETT JORDAN DAM NEAR MONCURE, NC—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1973-75, 1980-86, 1989-1995, 2004.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: July 1973 to September 1975, April 1980 to September 1984.

WATER TEMPERATURE: July 1973 to September 1975, April 1980 to September 1984.

INSTRUMENTATION.--Water-quality monitor from October 1981 to September 1984.

REMARKS.--Station operated to define water quality as part of a six-county regional surface-water quality assessment. Instantaneous discharge values were obtained from the U.S. Army Corps of Engineers. These discharge values are based on the 2400 release from the B. Everett Jordan Lake.

COOPERATION.--Samples for October 1994 and April 1995 were collected by the North Carolina Department of Environment, Health and Natural Resources. A GC/FID scan for trace organic compounds was performed on these samples by the U.S. Geological Survey National Water Quality Lab. Results may be obtained from the District office in Raleigh.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum daily, 572 microsiemens, Nov. 11, 1973; minimum daily, 23 microsiemens, July 29, 1982.

WATER TEMPERATURE: Maximum daily, 33.0°C, Aug. 8, 1980; minimum daily, 1.0°C, Dec. 27, 29, 1980, Jan. 5, 6, 13-18, 1981.

WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date      | Time | Color, water, fltrd, Pt-Co units (00080)       | Barometric pressure, mm Hg (00025)                  | Dissolved oxygen, mg/L (00300)        | Dissolved oxygen, percent of saturation (00301) | pH, water, unfltrd field, std units (00400)         | Specific conductance, wat unfltrd uS/cm 25 degC (00095) | Temperature, deg C (00010)                        | Hardness, water, mg/L as CaCO3 (00900)             | Calcium, water, fltrd, mg/L (00915)             | Magnesium, water, fltrd, mg/L (00925)                | Potassium, water, fltrd, mg/L (00935)              | Sodium, water, fltrd, mg/L (00930)                    |   |
|-----------|------|--|---|---------------------------------------|---|---|---|---|--|---|--|--|---|---|
| Date      |      | ANC, wat unfltrd, field, mg/L as CaCO3 (00419) | Bicarbonate, wat unfltrd, field, mg/L (00450)       | Chloride, water, fltrd, mg/L (00940)  | Fluoride, water, fltrd, mg/L (00950)            | Silica, water, fltrd, mg/L (00955)                  | Sulfate, water, fltrd, mg/L (00945)                     | Residue at evap., wat fltrd (70300)               | Ammonia + org-N, water, unfltrd, mg/L as N (00625) | Ammonia, water, fltrd, mg/L as N (00608)        | Nitrite + nitrate, water, fltrd, mg/L as N (00631)   | Nitrite, water, fltrd, mg/L as N (00613)           | Orthophosphate, water, fltrd, mg/L as P (00671)       | Phosphorus, water, unfltrd, mg/L (00665)          |
| Date      |      | Organic carbon, water, unfltrd, mg/L (00680)   | Aluminum, water, unfltrd, recoverable, ug/L (01105) | Arsenic, water, unfltrd, ug/L (01002) | Cadmium, water, unfltrd, ug/L (01027)           | Chromium, water, unfltrd, recoverable, ug/L (01034) | Cobalt, water, unfltrd, recoverable, ug/L (01037)       | Copper, water, unfltrd, recoverable, ug/L (01042) | Iron, water, unfltrd, recoverable, ug/L (01045)    | Lead, water, unfltrd, recoverable, ug/L (01051) | Manganese, water, unfltrd, recoverable, ug/L (01055) | Mercury, water, unfltrd, recoverable, ug/L (71900) | Molybdenum, water, unfltrd, recoverable, ug/L (01062) | Nickel, water, unfltrd, recoverable, ug/L (01067) |
| Date      |      |  |   |                                       |   |   | Selenium, water, unfltrd, ug/L (01147)                  | Silver, water, unfltrd, recoverable, ug/L (01077) | Zinc, water, unfltrd, recoverable, ug/L (01092)    | Suspended sediment concentration, mg/L (80154)  |  |  |   |   |
| SEP 09... | 0900 | 150  | 754   | 8.7                                   | 104   | 7.0   | 110   | 23.9  | 26   | 6.21  | 2.55   | 3.95   | 10.0  |   |
| SEP 09... | 26   | 32   | 8.05  | <.2                                   | 10.3  | 9.1   | 85  | .93   | .101   | .544  | .009   | .067   | .23   |   |
| SEP 09... | 14.1 | 899  | E1  | .05                                   | 1.6   | 1.49  | 4.5   | 1,670   | 1.95   | 249   | <.02   | 1.2  | 1.83  |   |
| SEP 09... |      |  |   |                                       |   |   | <.4   | <.16  | 9  | 59  |  |  |   |   |

Remark codes used in this table:  
 < -- Less than  
 E -- Estimated value

02099000 EAST FORK DEEP RIVER NEAR HIGH POINT, NC

LOCATION.--Lat 36°02'14", long 79°56'44", Guilford County, Hydrologic Unit 03030003, on right bank on downstream side of culvert on Secondary Road 1541, 3.3 mi upstream from High Point Dam, and 5.2 mi northeast of High Point College, High Point.

DRAINAGE AREA.--14.8 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1928 to March 1994, October 1997 to current year.

REVISED RECORDS.--WSP 1723: 1929(M). WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 764.02 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge, 6,300 ft<sup>3</sup>/s, gage height, 10.87 ft, from floodmark, from rating curve extended above 1,600 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow. Minimum discharge for period of record also occurred on Aug. 8, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL     | AUG   | SEP     |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|-------|---------|
| 1     | 9.0   | 7.6   | 7.8   | 7.1   | 8.3   | 23    | 11    | 4.4   | 3.0   | 3.2     | 6.7   | 5.2     |
| 2     | 8.1   | 6.5   | 7.0   | 7.0   | 6.7   | 17    | 6.0   | 9.9   | 2.4   | 2.9     | 8.8   | 4.2     |
| 3     | 7.5   | 7.1   | 9.5   | 6.9   | 7.5   | 15    | 5.3   | 34    | 2.4   | 3.2     | 23    | 3.2     |
| 4     | 7.5   | 5.9   | 12    | 7.1   | 28    | 11    | 4.6   | 10    | 42    | 9.0     | 15    | 1.9     |
| 5     | 7.4   | 6.2   | 36    | 9.3   | 15    | 11    | 4.3   | 6.6   | 19    | 11      | 8.6   | 2.0     |
| 6     | 7.1   | 14    | 16    | 10    | 85    | 27    | 4.4   | 6.3   | 7.1   | 4.0     | 6.8   | 4.3     |
| 7     | 6.5   | 16    | 10    | 6.5   | 65    | 18    | 4.6   | 5.9   | 4.9   | 2.8     | 5.6   | 16      |
| 8     | 6.7   | 9.1   | 8.0   | 6.2   | 25    | 9.9   | 5.1   | 5.3   | 4.6   | 10      | 5.5   | 461     |
| 9     | 17    | 7.5   | 8.7   | 10    | 15    | 8.1   | 4.5   | 4.8   | 5.0   | 17      | 5.8   | 59      |
| 10    | 18    | 6.6   | 79    | 9.7   | 13    | 8.9   | 4.3   | 5.2   | 3.6   | 8.4     | 6.0   | 23      |
| 11    | 17    | 6.3   | 58    | e7.3  | 11    | 7.2   | 4.6   | 4.0   | 3.3   | 22      | 5.5   | 16      |
| 12    | 10    | 6.3   | 22    | 7.4   | 21    | 6.5   | 125   | 6.8   | 3.0   | 5.1     | 11    | 10      |
| 13    | 8.2   | 5.5   | 15    | 7.5   | 17    | 6.2   | 112   | 11    | 3.2   | 3.5     | 25    | 7.6     |
| 14    | 8.0   | 5.1   | 102   | 6.5   | 11    | 5.4   | 42    | 7.3   | 3.9   | 5.1     | 72    | 5.4     |
| 15    | 11    | 5.4   | 57    | 6.4   | 15    | 8.9   | 19    | 3.7   | 4.7   | 2.5     | 24    | 5.1     |
| 16    | 7.3   | 6.1   | 38    | 5.8   | 32    | 42    | 13    | 3.1   | 11    | 1.8     | 12    | 4.6     |
| 17    | 7.0   | 6.4   | 64    | 5.6   | 20    | 27    | 11    | 3.0   | 4.4   | 142     | 8.2   | 119     |
| 18    | 6.9   | 6.3   | 35    | 11    | 16    | 17    | 8.2   | 3.1   | 3.3   | 511     | 9.0   | 57      |
| 19    | 6.7   | 68    | 20    | 8.1   | 17    | 14    | 7.1   | 5.4   | 3.7   | 40      | 6.6   | 18      |
| 20    | 6.5   | 31    | 15    | 6.0   | 12    | 9.7   | 6.2   | 8.6   | 4.4   | 22      | 5.2   | 11      |
| 21    | 7.0   | 13    | 12    | 5.6   | 11    | 8.5   | 5.7   | 3.8   | 2.7   | 12      | 4.5   | 11      |
| 22    | 7.1   | 9.5   | 12    | 5.6   | 9.0   | 6.8   | 5.1   | 20    | 2.8   | 7.9     | 4.7   | 8.5     |
| 23    | 6.9   | 8.2   | 11    | 5.3   | 7.9   | 5.9   | 4.8   | 9.6   | 2.7   | 6.9     | 4.4   | 7.6     |
| 24    | 7.0   | 8.9   | 12    | 5.3   | 7.9   | 5.6   | 4.7   | 12    | 4.5   | 5.4     | 4.1   | 4.9     |
| 25    | 7.0   | 8.9   | 9.4   | e6.0  | 7.4   | 5.7   | 4.5   | 4.7   | 2.9   | 4.5     | 3.8   | 4.3     |
| 26    | 8.4   | 7.3   | 8.1   | e6.5  | 7.9   | 5.8   | 12    | 3.6   | 28    | 4.9     | 3.4   | 4.2     |
| 27    | 17    | 7.2   | 7.8   | e7.0  | 19    | 5.9   | 14    | 5.7   | 17    | 48      | 3.4   | 100     |
| 28    | 14    | 17    | 7.6   | 9.5   | 29    | 6.8   | 5.4   | 3.3   | 9.5   | 63      | 3.6   | 662     |
| 29    | 39    | 21    | 7.6   | 14    | 36    | 4.9   | 4.6   | 2.8   | 5.6   | 33      | 4.1   | 47      |
| 30    | 12    | 9.1   | 12    | 20    | ---   | 6.2   | 4.2   | 9.3   | 3.5   | 26      | 6.1   | 23      |
| 31    | 8.0   | ---   | 8.4   | 17    | ---   | 8.9   | ---   | 4.4   | ---   | 9.7     | 10    | ---     |
| TOTAL | 316.8 | 343.0 | 727.9 | 253.2 | 643.1 | 363.8 | 467.2 | 227.6 | 218.1 | 1,047.8 | 322.4 | 1,706.0 |
| MEAN  | 10.2  | 11.4  | 23.5  | 8.17  | 22.2  | 11.7  | 15.6  | 7.34  | 7.27  | 33.8    | 10.4  | 56.9    |
| MAX   | 39    | 68    | 102   | 20    | 85    | 42    | 125   | 34    | 42    | 511     | 72    | 662     |
| MIN   | 6.5   | 5.1   | 7.0   | 5.3   | 6.7   | 4.9   | 4.2   | 2.8   | 2.4   | 1.8     | 3.4   | 1.9     |
| CFSM  | 0.69  | 0.77  | 1.59  | 0.55  | 1.50  | 0.79  | 1.05  | 0.50  | 0.49  | 2.28    | 0.70  | 3.84    |
| IN.   | 0.80  | 0.86  | 1.83  | 0.64  | 1.62  | 0.91  | 1.17  | 0.57  | 0.55  | 2.63    | 0.81  | 4.29    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004,® BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 12.1   | 11.9   | 16.5   | 24.2   | 27.6   | 26.8   | 21.4   | 15.6   | 12.6   | 13.0   | 12.8   | 15.6   |
| MAX  | 79.5   | 39.2   | 48.6   | 82.9   | 83.0   | 106    | 71.6   | 58.8   | 61.5   | 97.5   | 55.9   | 124    |
| (WY) | (1960) | (1980) | (1933) | (1978) | (1979) | (1975) | (1987) | (1978) | (1969) | (1975) | (1949) | (2000) |
| MIN  | 1.88   | 2.35   | 3.53   | 4.32   | 6.48   | 6.76   | 5.52   | 4.57   | 3.41   | 2.93   | 2.87   | 1.74   |
| (WY) | (1942) | (1942) | (1942) | (1942) | (1931) | (1967) | (1942) | (1941) | (1986) | (1977) | (1941) | (1954) |

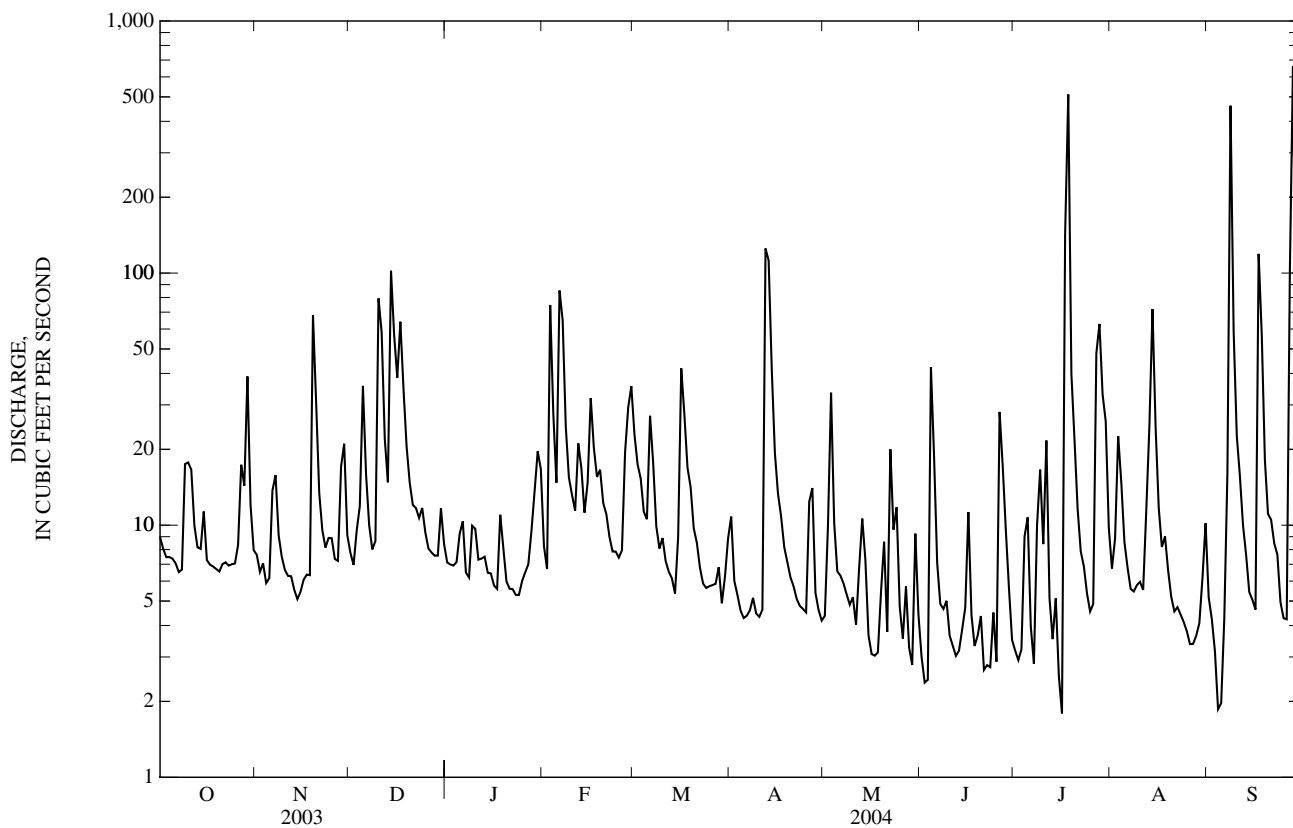
02099000 EAST FORK DEEP RIVER NEAR HIGH POINT, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1929 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 12,769.2               |        | 6,636.9             |        | 17.4                                 |              |
| ANNUAL MEAN              | 35.0                   |        | 18.1                |        | 7.28                                 |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 40.4                                 | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 7.28                                 | 1967         |
| HIGHEST DAILY MEAN       | 896                    | Mar 20 | 662                 | Sep 28 | 1,670                                | Sep 24, 1947 |
| LOWEST DAILY MEAN        | 5.1                    | Nov 14 | 1.8                 | Jul 16 | 0.61                                 | Aug 8, 2002  |
| ANNUAL SEVEN-DAY MINIMUM | 5.9                    | Nov 11 | 3.4                 | Jun 19 | 0.65                                 | Aug 7, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 2,230               | Jul 18 | 6300*                                | Sep 24, 1947 |
| MAXIMUM PEAK STAGE       |                        |        | 13.21               | Jul 18 | 13.46                                | Sep 23, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.5                 | Jul 17 | 0.41*                                | Aug 7, 2002  |
| ANNUAL RUNOFF (CFSM)     | 2.36                   |        | 1.23                |        | 1.18                                 |              |
| ANNUAL RUNOFF (INCHES)   | 32.10                  |        | 16.68               |        | 16.01                                |              |
| 10 PERCENT EXCEEDS       | 69                     |        | 30                  |        | 26                                   |              |
| 50 PERCENT EXCEEDS       | 15                     |        | 7.6                 |        | 7.1                                  |              |
| 90 PERCENT EXCEEDS       | 7.1                    |        | 3.9                 |        | 3.6                                  |              |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.

e Estimated.



02099500 DEEP RIVER NEAR RANDLEMAN, NC

LOCATION.--Lat 35°54'13", long 79°51'10". Randolph County, Hydrologic Unit 03030003, on left bank 500 ft downstream of bridge on Secondary Road 1929, 0.2 mi downstream of Coltranés Mill, 0.5 mi south of Guilford County line, 4.8 mi upstream from Muddy Creek, and 7 mi north of Randleman.

DRAINAGE AREA.--125 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1928 to September 2004 (discontinued).

REVISED RECORDS.--WSP 782: 1929-30. WSP 1383: 1934-35, 1941. WSP 1723: 1929(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 638.11 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Diurnal fluctuation at times during periods of low flow caused by Coltranés Mill. Some regulation by Oak Hollow Reservoir (station 02098495) and High Point Lake (station 02099096). City of High Point diverted an average of 21.1 ft<sup>3</sup>/s for municipal water supply, 21.2 ft<sup>3</sup>/s was discharged as treated effluent into Richland Creek upstream from station and 6.2 ft<sup>3</sup>/s into Rich Fork Creek in Pee Dee River basin. Maximum discharge for period of record from rating curve extended above 7,100 ft<sup>3</sup>/s on basis of contracted-opening measurement of peak flow at bridge 1.5 mi upstream; maximum gage height for period of record from floodmarks. Minimum discharge for current water year also occurred July 17, Sept. 4, 5, 6.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1     | 80    | 66    | 56    | 65    | 78    | 392   | 193   | 51    | 31    | 44    | 50    | 30     |
| 2     | 78    | 60    | 52    | 60    | 66    | 353   | 101   | 59    | 29    | 33    | 111   | 26     |
| 3     | 75    | 57    | 50    | 60    | 471   | 236   | 81    | 126   | 27    | 70    | 67    | 24     |
| 4     | 68    | 55    | 48    | 60    | 247   | 158   | 72    | 94    | 137   | 124   | 48    | 23     |
| 5     | 66    | 55    | 96    | 63    | 134   | 129   | 67    | 62    | 71    | 316   | 38    | 22     |
| 6     | 65    | 56    | 93    | 82    | 243   | 151   | 61    | 53    | 39    | 60    | 51    | 23     |
| 7     | 67    | 99    | 76    | 64    | 812   | 175   | 58    | 50    | 39    | 42    | 31    | 48     |
| 8     | 63    | 84    | 68    | 63    | 302   | 127   | 59    | 48    | 45    | 35    | 27    | 2,860  |
| 9     | 69    | 66    | 64    | 64    | 175   | 103   | 58    | 47    | 50    | 34    | 25    | 1,820  |
| 10    | 81    | 57    | 178   | 75    | 140   | 95    | 56    | 45    | 33    | 30    | 26    | 308    |
| 11    | 82    | 54    | 510   | 63    | 117   | 86    | 59    | 50    | 29    | 38    | 25    | 135    |
| 12    | 70    | 51    | 179   | 59    | 143   | 78    | 296   | 44    | 27    | 40    | 26    | 86     |
| 13    | 60    | 49    | 113   | 64    | 163   | 74    | 677   | 39    | 26    | 32    | 47    | 65     |
| 14    | 58    | 51    | 699   | 61    | 122   | 74    | 560   | 46    | 28    | 28    | 404   | 64     |
| 15    | 81    | 48    | 451   | 59    | 117   | 82    | 231   | 37    | 36    | 28    | 179   | 69     |
| 16    | 58    | 44    | 276   | 59    | 245   | 134   | 143   | 33    | 32    | 24    | 98    | 100    |
| 17    | 53    | 45    | 373   | 56    | 188   | 203   | 102   | 35    | 41    | 23    | 55    | 487    |
| 18    | 49    | 45    | 379   | 65    | 140   | 206   | 86    | 31    | 31    | 1,150 | 48    | 575    |
| 19    | 46    | 148   | 117   | 73    | 129   | 189   | 79    | 44    | 28    | 231   | 40    | 168    |
| 20    | 45    | 204   | 98    | 60    | 112   | 121   | 74    | 42    | 27    | 89    | 33    | 87     |
| 21    | 44    | 101   | 99    | 53    | 104   | 100   | 69    | 35    | 25    | 56    | 30    | 66     |
| 22    | 44    | 71    | 86    | 52    | 97    | 90    | 63    | 33    | 25    | 44    | 27    | 56     |
| 23    | 41    | 61    | 81    | 53    | 84    | 79    | 59    | 32    | 32    | 38    | 26    | 50     |
| 24    | 40    | 57    | 81    | 54    | 81    | 73    | 53    | 32    | 60    | 32    | 27    | 46     |
| 25    | 40    | 57    | 78    | 53    | 78    | 71    | 50    | 31    | 31    | 27    | 26    | 43     |
| 26    | 43    | 53    | 69    | 58    | 73    | 70    | 61    | 30    | 137   | 26    | 24    | 39     |
| 27    | 71    | 49    | 67    | 60    | 106   | 70    | 94    | 42    | 61    | 62    | 23    | 75     |
| 28    | 61    | 50    | 65    | 58    | 152   | 69    | 68    | 34    | 68    | 265   | 24    | 4,490  |
| 29    | 237   | 81    | 63    | 72    | 294   | 67    | 59    | 28    | 96    | 260   | 24    | 1,300  |
| 30    | 132   | 69    | 70    | 92    | ---   | 64    | 55    | 39    | 62    | 185   | 39    | 307    |
| 31    | 83    | ---   | 71    | 112   | ---   | 77    | ---   | 38    | ---   | 75    | 43    | ---    |
| TOTAL | 2,150 | 2,043 | 4,806 | 1,992 | 5,213 | 3,996 | 3,744 | 1,410 | 1,403 | 3,541 | 1,742 | 13,492 |
| MEAN  | 69.4  | 68.1  | 155   | 64.3  | 180   | 129   | 125   | 45.5  | 46.8  | 114   | 56.2  | 450    |
| MAX   | 237   | 204   | 699   | 112   | 812   | 392   | 677   | 126   | 137   | 1,150 | 404   | 4,490  |
| MIN   | 40    | 44    | 48    | 52    | 66    | 64    | 50    | 28    | 25    | 23    | 23    | 22     |
| CFSM  | 0.55  | 0.54  | 1.24  | 0.51  | 1.44  | 1.03  | 1.00  | 0.36  | 0.37  | 0.91  | 0.45  | 3.60   |
| IN.   | 0.64  | 0.61  | 1.43  | 0.59  | 1.55  | 1.19  | 1.11  | 0.42  | 0.42  | 1.05  | 0.52  | 4.02   |

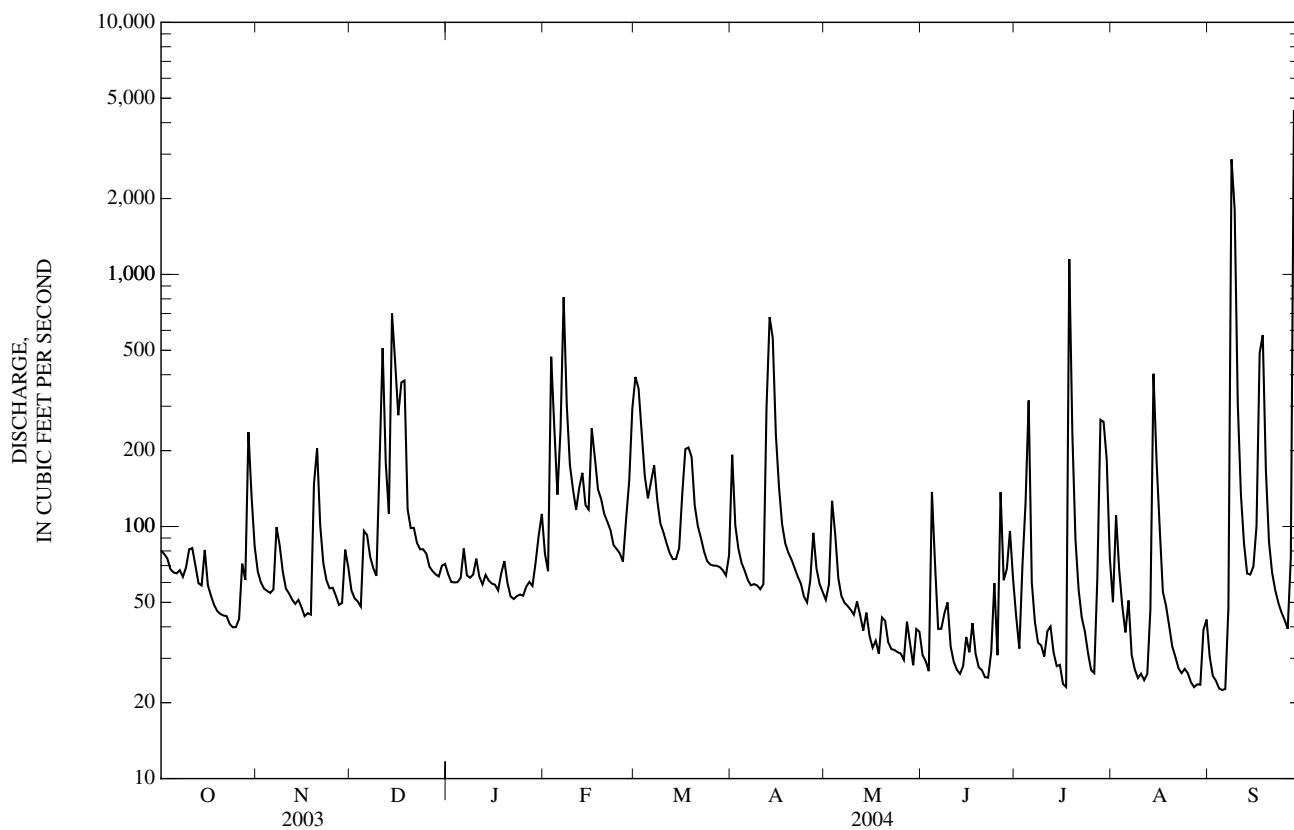
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 78.6   | 81.8   | 126    | 195    | 227    | 227    | 178    | 106    | 79.7   | 81.4   | 76.6   | 96.0   |
| MAX  | 474    | 354    | 389    | 645    | 584    | 697    | 565    | 445    | 373    | 465    | 328    | 831    |
| (WY) | (1991) | (1986) | (1933) | (1937) | (1960) | (1975) | (2003) | (1978) | (2003) | (1975) | (2003) | (1996) |
| MIN  | 5.78   | 9.56   | 16.8   | 15.8   | 38.7   | 54.4   | 27.6   | 23.5   | 16.7   | 17.2   | 17.1   | 10.5   |
| (WY) | (1931) | (1932) | (1934) | (1942) | (1986) | (1967) | (1985) | (1977) | (1933) | (1947) | (1945) | (1941) |

02099500 DEEP RIVER NEAR RANDLEMAN, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1929 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 108,383                |        | 45,532              |        |                         |              |
| ANNUAL MEAN              | 297                    |        | 124                 |        | 129                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 342                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 42.8                    | 2002         |
| HIGHEST DAILY MEAN       | 5,330                  | Sep 23 | 4,490               | Sep 28 | 12,000                  | Sep 25, 1947 |
| LOWEST DAILY MEAN        | 40                     | Oct 24 | 22                  | Sep 5  | 1.2                     | Nov 12, 1933 |
| ANNUAL SEVEN-DAY MINIMUM | 42                     | Oct 20 | 25                  | Aug 23 | 3.9                     | Sep 30, 1930 |
| MAXIMUM PEAK FLOW        |                        |        | 6,560               | Sep 8  | 20000*                  | Sep 25, 1947 |
| MAXIMUM PEAK STAGE       |                        |        | 21.35               | Sep 8  | 32.20*                  | Sep 25, 1947 |
| INSTANTANEOUS LOW FLOW   |                        |        | 22*                 | Jul 16 | 0.50                    | Nov 28, 1931 |
| ANNUAL RUNOFF (CFSM)     | 2.38                   |        | 0.995               |        | 1.03                    |              |
| ANNUAL RUNOFF (INCHES)   | 32.25                  |        | 13.55               |        | 14.02                   |              |
| 10 PERCENT EXCEEDS       | 701                    |        | 205                 |        | 243                     |              |
| 50 PERCENT EXCEEDS       | 123                    |        | 63                  |        | 52                      |              |
| 90 PERCENT EXCEEDS       | 54                     |        | 30                  |        | 17                      |              |

\* See REMARKS.





02100500 DEEP RIVER AT RAMSEUR, NC

LOCATION.--Lat 35°43'35", long 79°39'20", Randolph County, Hydrologic Unit 03030003, on right bank 0.2 mi downstream of Main Street bridge in Ramseur, 0.5 mi downstream of mill dam, and 1.5 mi downstream of Sandy Creek.

DRAINAGE AREA.--349 mi<sup>2</sup>.

PERIOD OF RECORD.--November 1922 to current year.

REVISED RECORDS.--WSP 1032: 1923-24, 1925(M), 1926, 1927-28(M), 1929, 1930(M), 1932-33, 1934(M), 1935, 1936-37(M), 1944(M). WSP 1383: 1923(m), 1925, 1927, 1930, 1936. WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 419.50 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Flow slightly regulated by Oak Hollow Reservoir (station 02098495), High Point Municipal Lake (station 02099096), and small power plant reservoirs. Prior to January 1963, diurnal fluctuation caused by power plant immediately upstream from station. Town of Asheboro diverted an average of 7.3 ft<sup>3</sup>/s from Yadkin River Basin for water supply and discharged an average of 7.1 ft<sup>3</sup>/s of treated effluent upstream from the station. Maximum discharge for period of record from rating curve extended above 18,000 ft<sup>3</sup>/s, on basis of slope-area measurement of peak flow; gage height, 34.04 ft. Minimum discharge for period of record occurred frequently in 1941. Minimum discharge for current water year also occurred Aug. 6, 14.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in August 1901 reached a stage of 28.75 ft, from floodmarks, 0.2 mi upstream; discharge, 30,000 ft<sup>3</sup>/s.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC    | JAN   | FEB    | MAR    | APR   | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|--------|-------|--------|--------|-------|-------|-------|-------|-------|--------|
| 1     | 187   | 180   | 159    | 162   | 248    | 999    | 419   | 158   | 79    | 281   | 142   | 93     |
| 2     | 170   | 156   | 140    | 153   | 195    | 1,270  | 406   | 199   | 81    | 212   | 110   | 65     |
| 3     | 166   | 145   | 126    | 150   | 896    | 799    | 262   | 718   | 73    | 99    | 160   | 51     |
| 4     | 159   | 136   | 127    | 151   | 891    | 510    | 220   | 434   | 125   | 213   | 122   | 45     |
| 5     | 152   | 130   | 134    | 159   | 427    | 400    | 207   | 267   | 333   | 648   | 89    | 41     |
| 6     | 147   | 134   | 203    | 216   | 350    | 344    | 193   | 194   | 178   | 321   | 50    | 41     |
| 7     | 145   | 171   | 192    | 193   | 2,130  | 383    | 185   | 164   | 113   | 154   | 73    | 58     |
| 8     | 148   | 207   | 136    | 163   | 836    | 346    | 180   | 155   | 87    | 112   | 56    | 2,840  |
| 9     | 159   | 172   | 146    | 141   | 474    | 279    | 178   | 146   | 130   | 86    | 48    | 4,400  |
| 10    | 177   | 144   | 154    | 167   | 367    | 259    | 173   | 108   | 132   | 76    | 42    | 2,200  |
| 11    | 209   | 125   | 893    | 168   | 312    | 242    | 168   | 140   | 90    | 73    | 41    | 339    |
| 12    | 209   | 134   | 474    | 153   | 342    | 226    | 214   | 133   | 73    | 72    | 44    | 196    |
| 13    | 177   | 131   | 291    | 155   | 528    | 201    | 1,050 | 111   | 76    | 79    | 75    | 147    |
| 14    | 153   | 113   | 1,130  | 160   | 390    | 209    | 1,480 | 86    | 70    | 71    | 355   | 118    |
| 15    | 170   | 105   | 1,200  | 156   | 313    | 205    | 629   | 134   | 78    | 56    | 674   | 110    |
| 16    | 183   | 116   | 589    | 149   | 520    | 266    | 408   | 120   | 91    | 57    | 255   | 112    |
| 17    | 151   | 113   | 465    | 144   | 515    | 549    | 300   | 76    | 103   | 53    | 155   | 188    |
| 18    | 139   | 108   | 752    | 157   | 399    | 426    | 250   | 73    | 117   | 779   | 102   | 1,400  |
| 19    | 122   | 130   | 441    | 207   | 345    | 610    | 223   | 82    | 89    | 645   | 92    | 455    |
| 20    | 121   | 430   | 271    | 179   | 312    | 411    | 218   | 104   | 77    | 224   | 79    | 224    |
| 21    | 118   | 285   | 234    | 150   | 291    | 319    | 208   | 95    | 84    | 134   | 62    | 146    |
| 22    | 119   | 178   | 199    | 140   | 267    | 263    | 189   | 91    | 65    | 96    | 74    | 116    |
| 23    | 123   | 151   | 198    | 137   | 237    | 248    | 169   | 93    | 65    | 49    | 58    | 108    |
| 24    | 113   | 134   | 206    | 139   | 238    | 218    | 166   | 74    | 230   | 68    | 49    | 66     |
| 25    | 110   | 143   | 206    | 142   | 218    | 194    | 167   | 104   | 194   | 59    | 50    | 75     |
| 26    | 112   | 135   | 185    | 148   | 199    | 204    | 145   | 79    | 139   | 51    | 43    | 77     |
| 27    | 122   | 127   | 164    | 152   | 245    | 205    | 189   | 77    | 278   | 48    | 41    | 92     |
| 28    | 167   | 126   | 159    | 155   | 310    | 203    | 204   | 74    | 169   | 169   | 37    | 5,440  |
| 29    | 448   | 181   | 159    | 159   | 556    | 193    | 171   | 78    | 305   | 345   | 36    | 4,390  |
| 30    | 445   | 192   | 159    | 235   | ---    | 197    | 157   | 268   | 231   | 656   | 62    | 2,430  |
| 31    | 235   | ---   | 166    | 260   | ---    | 220    | ---   | 148   | ---   | 235   | 99    | ---    |
| TOTAL | 5,356 | 4,732 | 10,058 | 5,100 | 13,351 | 11,398 | 9,128 | 4,783 | 3,955 | 6,221 | 3,375 | 26,063 |
| MEAN  | 173   | 158   | 324    | 165   | 460    | 368    | 304   | 154   | 132   | 201   | 109   | 869    |
| MAX   | 448   | 430   | 1,200  | 260   | 2,130  | 1,270  | 1,480 | 718   | 333   | 779   | 674   | 5,440  |
| MIN   | 110   | 105   | 126    | 137   | 195    | 193    | 145   | 73    | 65    | 48    | 36    | 41     |
| CFSM  | 0.50  | 0.45  | 0.93   | 0.47  | 1.32   | 1.05   | 0.87  | 0.44  | 0.38  | 0.58  | 0.31  | 2.49   |
| IN.   | 0.57  | 0.50  | 1.07   | 0.54  | 1.42   | 1.21   | 0.97  | 0.51  | 0.42  | 0.66  | 0.36  | 2.78   |

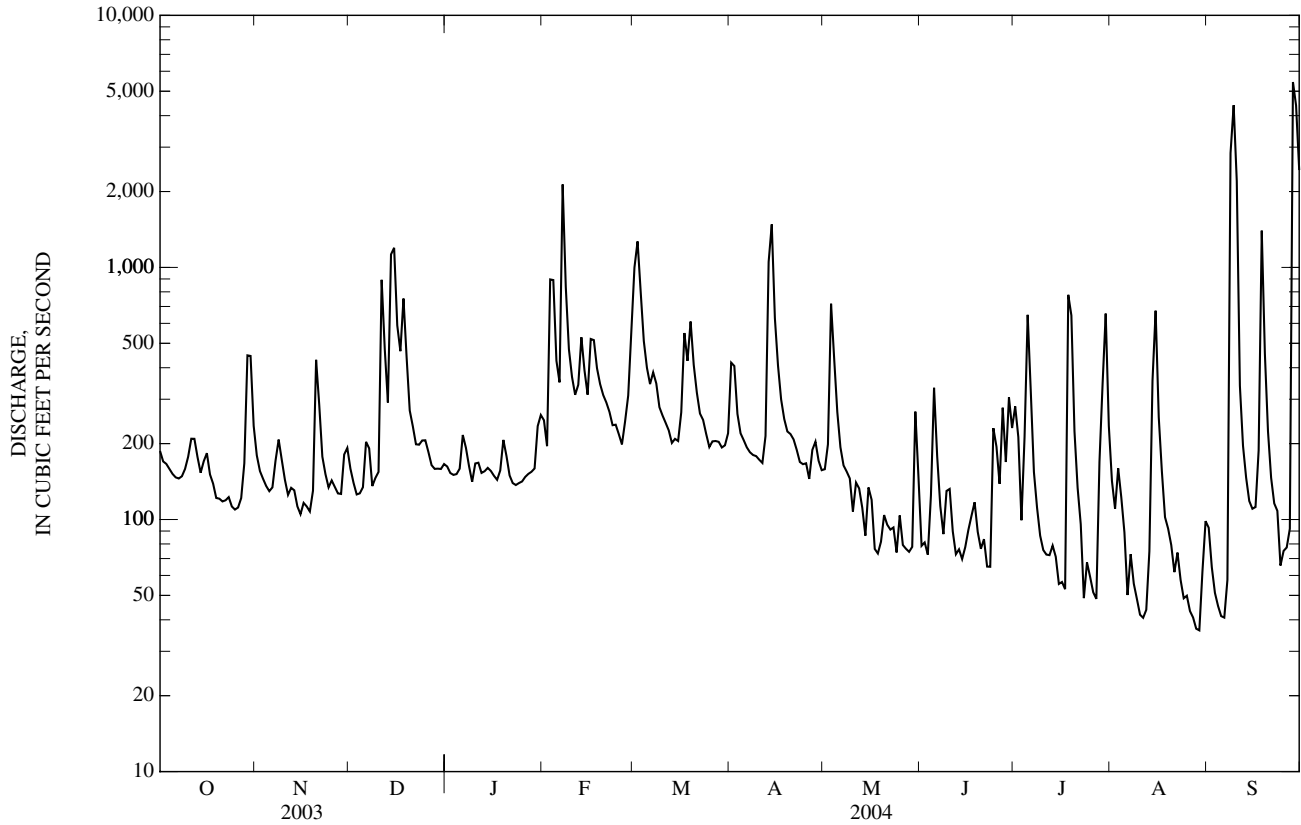
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1923 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 212    | 216    | 343    | 545    | 647    | 646    | 499    | 290    | 217    | 221    | 206    | 257    |
| MAX  | 1,193  | 1,237  | 1,050  | 1,660  | 1,642  | 1,842  | 1,493  | 944    | 978    | 1,434  | 896    | 1,934  |
| (WY) | (1991) | (1986) | (1933) | (1937) | (1979) | (1975) | (2003) | (1978) | (1982) | (1975) | (1939) | (1928) |
| MIN  | 8.69   | 14.1   | 39.1   | 40.8   | 119    | 144    | 97.8   | 45.6   | 48.1   | 36.5   | 32.4   | 17.7   |
| (WY) | (1942) | (1942) | (1934) | (1942) | (2002) | (1967) | (2002) | (2002) | (1933) | (1986) | (1956) | (1954) |

02100500 DEEP RIVER AT RAMSEUR, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1923 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 263,406                |        | 103,520             |        |                         |              |
| ANNUAL MEAN              | 722                    |        | 283                 |        | 357                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 875                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 116                     | 2002         |
| HIGHEST DAILY MEAN       | 9,830                  | Apr 10 | 5,440               | Sep 28 | 27,800                  | Sep 18, 1945 |
| LOWEST DAILY MEAN        | 105                    | Nov 15 | 36                  | Aug 29 | 0.70                    | Nov 29, 1941 |
| ANNUAL SEVEN-DAY MINIMUM | 117                    | Oct 20 | 45                  | Aug 23 | 3.6                     | Oct 19, 1941 |
| MAXIMUM PEAK FLOW        |                        |        | 7,380               | Sep 28 | 43000*                  | Sep 18, 1945 |
| MAXIMUM PEAK STAGE       |                        |        | 12.53               | Sep 28 | 34.04*                  | Sep 18, 1945 |
| INSTANTANEOUS LOW FLOW   |                        |        | 31*                 | Aug 5  | 0.40*                   | May 27, 1941 |
| ANNUAL RUNOFF (CFSM)     | 2.07                   |        | 0.810               |        | 1.02                    |              |
| ANNUAL RUNOFF (INCHES)   | 28.08                  |        | 11.03               |        | 13.90                   |              |
| 10 PERCENT EXCEEDS       | 1,730                  |        | 474                 |        | 688                     |              |
| 50 PERCENT EXCEEDS       | 332                    |        | 160                 |        | 151                     |              |
| 90 PERCENT EXCEEDS       | 139                    |        | 73                  |        | 37                      |              |

\* See REMARKS.



0210166029 ROCKY RIVER NEAR CRUTCHFIELD CROSSROADS, NC

LOCATION.--Lat 35°48'25", long 79°31'39", Chatham County, Hydrologic Unit 03030003, on right bank at downstream side of culvert on Secondary Road 1300, and 5.5 mi west of Crutchfield Crossroads.

DRAINAGE AREA.--7.42 mi<sup>2</sup>.

REVISIONS.--WDR NC-98-1(M).

PERIOD OF RECORD.--May 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 620 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--Records poor. No flow occurred several days in Aug. 1988, July, Aug. 2002. Minimum discharge for current water year also occurred Aug. 27, Sept. 6.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT  | NOV  | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN   | JUL   | AUG    | SEP    |
|-------|------|------|-------|-------|-------|-------|-------|--------|-------|-------|--------|--------|
| 1     | 1.7  | 2.2  | 2.0   | 4.9   | 4.2   | 9.9   | 4.8   | 1.7    | 1.1   | 20    | 1.3    | 4.2    |
| 2     | 1.8  | 2.0  | 2.1   | 4.4   | 4.0   | 6.6   | 4.1   | 19     | 0.84  | 4.5   | 3.4    | 2.5    |
| 3     | 1.5  | 3.0  | 2.1   | 4.1   | 22    | 6.0   | 3.6   | 33     | 0.63  | 2.5   | 6.9    | 1.1    |
| 4     | 1.6  | 2.5  | 2.1   | 3.9   | 7.8   | 5.4   | 3.3   | 11     | 18    | 2.6   | 2.5    | 0.62   |
| 5     | 1.6  | 3.1  | 1.9   | 4.4   | 4.2   | 5.6   | 3.6   | 4.7    | 5.5   | 2.1   | 1.6    | 0.56   |
| 6     | 1.6  | 4.4  | 1.4   | 5.9   | 11    | 6.1   | 3.7   | 3.1    | 2.1   | 1.5   | 1.6    | 0.42   |
| 7     | 1.2  | 5.3  | 2.0   | 4.4   | 18    | 5.6   | 3.6   | 2.5    | 1.5   | 1.2   | 1.7    | 0.78   |
| 8     | 1.2  | 4.7  | e2.2  | 4.1   | 5.0   | 4.6   | 3.6   | 2.1    | 1.1   | 1.0   | 1.2    | 88     |
| 9     | 1.9  | 3.8  | 2.1   | 3.9   | 4.3   | 4.4   | 3.6   | 1.9    | 1.1   | 0.92  | 1.0    | 31     |
| 10    | 1.5  | 3.1  | 13    | 4.3   | 3.9   | 4.7   | 3.5   | 1.8    | 1.0   | 0.93  | 0.99   | 5.0    |
| 11    | 2.0  | 2.6  | 16    | 3.7   | 4.4   | 5.0   | 3.5   | 1.6    | 0.84  | 0.79  | 0.92   | 2.6    |
| 12    | e1.7 | 2.5  | 5.5   | 4.2   | 17    | 5.9   | 8.2   | 1.4    | 0.85  | 0.85  | 1.0    | 1.6    |
| 13    | e1.5 | 1.8  | 4.3   | 4.4   | 11    | 6.1   | 13    | 1.3    | 0.60  | 0.88  | 2.7    | 0.78   |
| 14    | e1.8 | 1.8  | 30    | 3.6   | 7.4   | 5.0   | 10    | 1.2    | 0.40  | 1.1   | 10     | 0.53   |
| 15    | 7.7  | 2.0  | 12    | 3.7   | 7.7   | 5.6   | 4.9   | 1.4    | 1.4   | 1.0   | 2.6    | 0.49   |
| 16    | e3.0 | 1.9  | 6.3   | 3.4   | 12    | 8.5   | 4.5   | 1.5    | 0.76  | 0.75  | 2.5    | 0.52   |
| 17    | 2.2  | 2.2  | 9.0   | 3.1   | 8.0   | 14    | 4.0   | 1.4    | 2.2   | 0.72  | 1.6    | 17     |
| 18    | e2.1 | 2.4  | 6.8   | 5.8   | 6.8   | 9.8   | 3.4   | 1.2    | 0.99  | 1.0   | 1.0    | 18     |
| 19    | e2.1 | 4.5  | 5.2   | 4.8   | 5.2   | 9.7   | 2.9   | 1.0    | 3.5   | 1.4   | 0.79   | 3.5    |
| 20    | e1.9 | 3.8  | 4.5   | 3.8   | 5.0   | 5.6   | 2.5   | 1.0    | 8.0   | 0.98  | 0.58   | 1.8    |
| 21    | e1.8 | 1.9  | 4.2   | 3.4   | 6.0   | 6.8   | 2.2   | 0.92   | 1.6   | 0.81  | 0.51   | 1.0    |
| 22    | e1.9 | 2.2  | 5.4   | 3.3   | 6.4   | 5.7   | 2.1   | 0.90   | 1.4   | 0.75  | 0.41   | 0.77   |
| 23    | e1.8 | 2.3  | 6.3   | 3.5   | 6.2   | 4.4   | 2.1   | 0.94   | 1.1   | 0.69  | 0.35   | 0.59   |
| 24    | e1.7 | 2.4  | 6.9   | 3.5   | 6.2   | 3.9   | 2.0   | 2.9    | 0.73  | 0.71  | 0.68   | 0.48   |
| 25    | e2.0 | 2.4  | 7.9   | 2.8   | 6.0   | 3.7   | 1.9   | 1.3    | 1.6   | 0.68  | 0.53   | 0.43   |
| 26    | e2.2 | 2.2  | 7.4   | 3.3   | 4.6   | 4.6   | 2.0   | 0.99   | 2.5   | 0.93  | 0.41   | 0.61   |
| 27    | 2.6  | 2.0  | 6.4   | 3.4   | 6.4   | 4.2   | 2.6   | 0.94   | 2.1   | 0.75  | 0.37   | 0.77   |
| 28    | 2.7  | 2.7  | 5.6   | 3.7   | 11    | 4.2   | 2.0   | 0.85   | 1.5   | 1.4   | 0.39   | 79     |
| 29    | 12   | 3.6  | 5.3   | 4.9   | 13    | 3.6   | 1.7   | 0.82   | 2.0   | 1.5   | 0.44   | 28     |
| 30    | 2.7  | 2.2  | 5.8   | 6.7   | ---   | 2.9   | 1.5   | 4.6    | 12    | 2.7   | 55     | 6.3    |
| 31    | 2.6  | ---  | 5.5   | 6.1   | ---   | 3.5   | ---   | 1.8    | ---   | 1.7   | 9.6    | ---    |
| TOTAL | 75.6 | 83.5 | 197.2 | 129.4 | 234.7 | 181.6 | 114.4 | 110.76 | 78.94 | 59.34 | 114.57 | 298.95 |
| MEAN  | 2.44 | 2.78 | 6.36  | 4.17  | 8.09  | 5.86  | 3.81  | 3.57   | 2.63  | 1.91  | 3.70   | 9.96   |
| MAX   | 12   | 5.3  | 30    | 6.7   | 22    | 14    | 13    | 33     | 18    | 20    | 55     | 88     |
| MIN   | 1.2  | 1.8  | 1.4   | 2.8   | 3.9   | 2.9   | 1.5   | 0.82   | 0.40  | 0.68  | 0.35   | 0.42   |
| CFSM  | 0.33 | 0.38 | 0.86  | 0.56  | 1.09  | 0.79  | 0.51  | 0.48   | 0.35  | 0.26  | 0.50   | 1.34   |
| IN.   | 0.38 | 0.42 | 0.99  | 0.65  | 1.18  | 0.91  | 0.57  | 0.56   | 0.40  | 0.30  | 0.57   | 1.50   |

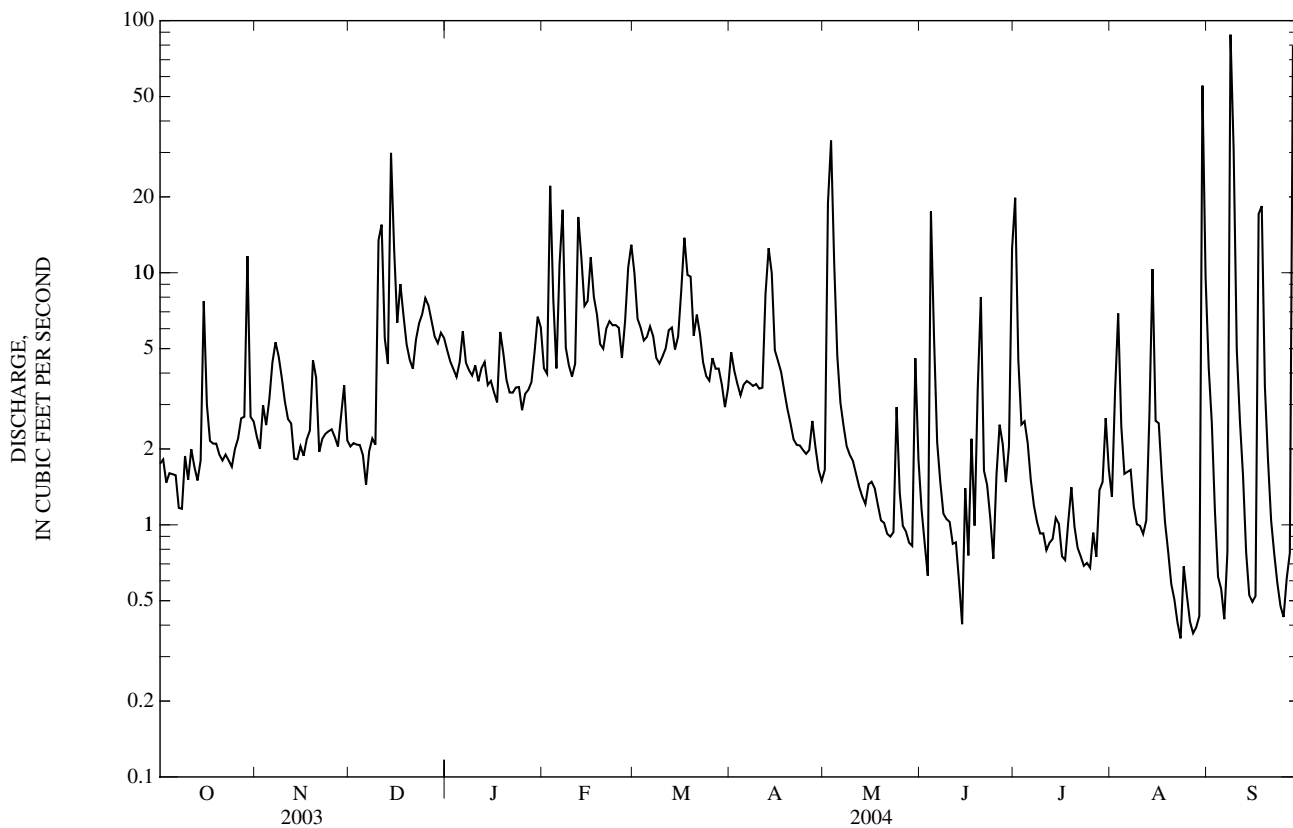
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 5.77   | 4.99   | 6.06   | 12.6   | 13.1   | 16.7   | 10.4   | 5.49   | 3.87   | 3.58   | 3.44   | 5.45   |
| MAX  | 18.7   | 18.2   | 25.3   | 37.3   | 32.9   | 42.4   | 36.9   | 19.2   | 20.5   | 14.8   | 28.7   | 23.7   |
| (WY) | (2003) | (1996) | (2003) | (1998) | (1998) | (2003) | (2003) | (1990) | (1995) | (1989) | (2003) | (1996) |
| MIN  | 0.28   | 0.17   | 0.46   | 2.33   | 2.26   | 4.46   | 1.80   | 0.54   | 0.37   | 0.10   | 0.33   | 0.25   |
| (WY) | (1999) | (2002) | (2002) | (2001) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (1998) | (2001) |

0210166029 ROCKY RIVER NEAR CRUTCHFIELD CROSSROADS, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1988 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 6,084.12               |        | 1,678.96            |        | 7.67                    |              |
| ANNUAL MEAN              | 16.7                   |        | 4.59                |        | 2.06                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 20.5                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 2.06                    | 2002         |
| HIGHEST DAILY MEAN       | 425                    | Mar 20 | 88                  | Sep 8  | 531                     | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 0.33                   | Sep 17 | 0.35                | Aug 23 | 0.00                    | Aug 20, 1988 |
| ANNUAL SEVEN-DAY MINIMUM | 0.48                   | Sep 11 | 0.45                | Aug 22 | 0.00                    | Jul 17, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 158                 | Aug 30 | 1,670                   | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 4.37                | Aug 30 | 11.91                   | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.31*               | Aug 23 | 0.00*                   | Aug 19, 1988 |
| ANNUAL RUNOFF (CFSM)     | 2.25                   |        | 0.618               |        | 1.03                    |              |
| ANNUAL RUNOFF (INCHES)   | 30.50                  |        | 8.42                |        | 14.04                   |              |
| 10 PERCENT EXCEEDS       | 44                     |        | 8.3                 |        | 14                      |              |
| 50 PERCENT EXCEEDS       | 4.1                    |        | 2.6                 |        | 2.3                     |              |
| 90 PERCENT EXCEEDS       | 1.7                    |        | 0.79                |        | 0.32                    |              |

\* See REMARKS.  
e Estimated.



02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC

LOCATION.--Lat 35°39'35", long 79°24'06", Chatham County, Hydrologic Unit 03030003, on right bank 200 ft upstream from bridge on U.S. Highway 421, 1.5 mi east of Mount Vernon Springs, and 4 mi upstream from mouth.

DRAINAGE AREA.--15.5 mi<sup>2</sup>

PERIOD OF RECORD.--June 1958 to September 1981, January 1994 to current year.

GAGE.--Water-stage recorder and v-notch sharp-crested weir. Datum of gage is 455 ft above NGVD of 1929, by barometer. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Maximum discharge for period of record from rating curve extended above 2,200 ft<sup>3</sup>/s, on basis of contracted-opening measurement of peak flow. No flow occurs at times most years. Minimum discharge for current water year also occurred Aug. 10, 11, 12.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY    | JUN   | JUL  | AUG    | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|------|--------|-------|
| 1     | 2.4   | 2.4   | 2.6   | 5.0   | 8.9   | 11    | 13    | 5.4    | 1.3   | 1.2  | 0.14   | 8.3   |
| 2     | 2.3   | 2.2   | 2.4   | 5.0   | 7.6   | 9.5   | 8.2   | 119    | 0.98  | 0.90 | 0.11   | 6.0   |
| 3     | 2.2   | 2.0   | 1.9   | 5.0   | 61    | 8.8   | 6.5   | 86     | 0.74  | 0.68 | 0.16   | 3.4   |
| 4     | 2.2   | 2.0   | 2.1   | 5.1   | 26    | 7.9   | 5.9   | 22     | 0.79  | 0.55 | 0.16   | 2.4   |
| 5     | 2.4   | 2.0   | 5.5   | 6.0   | 14    | 7.5   | 5.3   | 10     | 1.6   | 0.42 | 0.09   | 2.1   |
| 6     | 2.0   | 2.5   | 4.4   | 9.0   | 21    | 7.5   | 5.0   | 6.7    | 1.1   | 0.32 | 0.04   | 2.5   |
| 7     | 2.1   | 6.4   | 3.4   | 5.8   | 54    | 7.3   | 4.9   | 5.0    | 0.96  | 0.28 | 0.02   | 4.9   |
| 8     | 2.2   | 3.7   | 2.9   | 5.0   | 19    | 7.7   | 4.9   | 3.9    | 0.82  | 0.29 | 0.02   | 372   |
| 9     | 3.5   | 3.1   | 2.7   | 5.5   | 13    | 6.6   | 4.8   | 3.3    | 0.64  | 0.26 | 0.01   | 46    |
| 10    | 3.1   | 2.5   | 65    | 6.0   | 11    | 6.2   | 4.2   | 2.9    | 0.55  | 0.22 | 0.01   | 14    |
| 11    | 4.2   | 2.4   | 76    | 5.5   | 10    | 5.9   | 4.3   | 2.4    | 0.48  | 0.33 | 0.01   | 8.0   |
| 12    | 3.6   | 2.2   | 18    | 5.7   | 39    | 5.6   | 11    | 2.2    | 0.47  | 0.57 | 0.01   | 5.5   |
| 13    | 3.0   | 2.5   | 11    | 6.6   | 32    | 5.4   | 19    | 2.0    | 0.56  | 0.21 | 0.36   | 4.2   |
| 14    | 3.7   | 2.1   | 75    | 5.7   | 19    | 5.1   | 16    | 1.8    | 0.52  | 0.19 | 9.4    | 3.8   |
| 15    | 8.0   | 2.0   | 33    | 5.6   | 21    | 7.8   | 9.5   | 1.5    | 0.55  | 0.22 | 2.9    | 3.6   |
| 16    | 3.3   | 2.0   | 18    | 5.0   | 26    | 21    | 6.9   | 1.3    | 0.37  | 0.18 | 2.1    | 3.4   |
| 17    | 2.7   | 2.2   | 23    | 4.7   | 16    | 43    | 5.7   | 1.1    | 0.53  | 0.15 | 0.90   | 7.8   |
| 18    | 2.8   | 2.4   | 19    | 9.3   | 13    | 20    | 5.0   | 1.0    | 0.46  | 0.20 | 0.54   | 19    |
| 19    | 2.8   | 13    | 13    | 8.9   | 11    | 28    | 4.4   | 0.97   | 0.44  | 0.24 | 1.7    | 7.8   |
| 20    | 2.6   | 11    | 10    | 6.4   | 10    | 14    | 3.9   | 0.90   | 0.67  | 0.22 | 0.99   | 4.2   |
| 21    | 2.6   | 5.0   | 8.6   | 5.5   | 9.6   | 12    | 3.6   | 1.00   | 0.42  | 0.12 | 2.4    | 3.3   |
| 22    | 2.6   | 3.8   | 7.9   | 5.5   | 7.9   | 8.8   | 3.3   | 0.82   | 0.37  | 0.08 | 34     | 2.9   |
| 23    | 2.3   | 3.2   | 7.5   | 5.4   | 7.2   | 7.5   | 3.0   | 0.81   | 0.41  | 0.07 | 3.1    | 2.6   |
| 24    | 2.2   | 3.2   | 8.6   | 5.1   | 7.3   | 6.9   | 2.7   | 1.5    | 0.32  | 0.07 | 1.4    | 2.3   |
| 25    | 3.0   | 2.8   | 8.0   | 5.1   | 7.0   | 6.4   | 2.5   | 1.4    | 1.2   | 0.06 | 1.0    | 2.3   |
| 26    | 3.1   | 2.5   | 6.6   | 5.7   | 6.5   | 6.1   | 2.6   | 1.3    | 3.6   | 0.05 | 0.76   | 1.9   |
| 27    | 4.6   | 2.4   | 6.2   | 5.5   | 8.5   | 6.4   | 3.9   | 1.1    | 2.3   | 0.06 | 0.47   | 2.3   |
| 28    | 4.1   | 2.6   | 5.8   | 5.7   | 13    | 5.7   | 2.9   | 1.0    | 3.1   | 0.07 | 0.30   | 135   |
| 29    | 16    | 3.3   | 5.7   | 7.2   | 16    | 5.4   | 2.4   | 0.93   | 9.3   | 0.09 | 0.27   | 31    |
| 30    | 5.4   | 2.7   | 5.6   | 13    | ---   | 5.3   | 2.2   | 8.2    | 2.1   | 0.40 | 258    | 12    |
| 31    | 3.1   | ---   | 5.2   | 14    | ---   | 6.7   | ---   | 2.4    | ---   | 0.24 | 24     | ---   |
| TOTAL | 110.1 | 102.1 | 464.6 | 198.5 | 515.5 | 313.0 | 177.5 | 299.83 | 37.65 | 8.94 | 345.37 | 724.5 |
| MEAN  | 3.55  | 3.40  | 15.0  | 6.40  | 17.8  | 10.1  | 5.92  | 9.67   | 1.25  | 0.29 | 11.1   | 24.1  |
| MAX   | 16    | 13    | 76    | 14    | 61    | 43    | 19    | 119    | 9.3   | 1.2  | 258    | 372   |
| MIN   | 2.0   | 2.0   | 1.9   | 4.7   | 6.5   | 5.1   | 2.2   | 0.81   | 0.32  | 0.05 | 0.01   | 1.9   |
| CFSM  | 0.23  | 0.22  | 0.97  | 0.41  | 1.15  | 0.65  | 0.38  | 0.62   | 0.08  | 0.02 | 0.72   | 1.56  |
| IN.   | 0.26  | 0.25  | 1.12  | 0.48  | 1.24  | 0.75  | 0.43  | 0.72   | 0.09  | 0.02 | 0.83   | 1.74  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1958 - 2004,<sup>@</sup> BY WATER YEAR (WY)

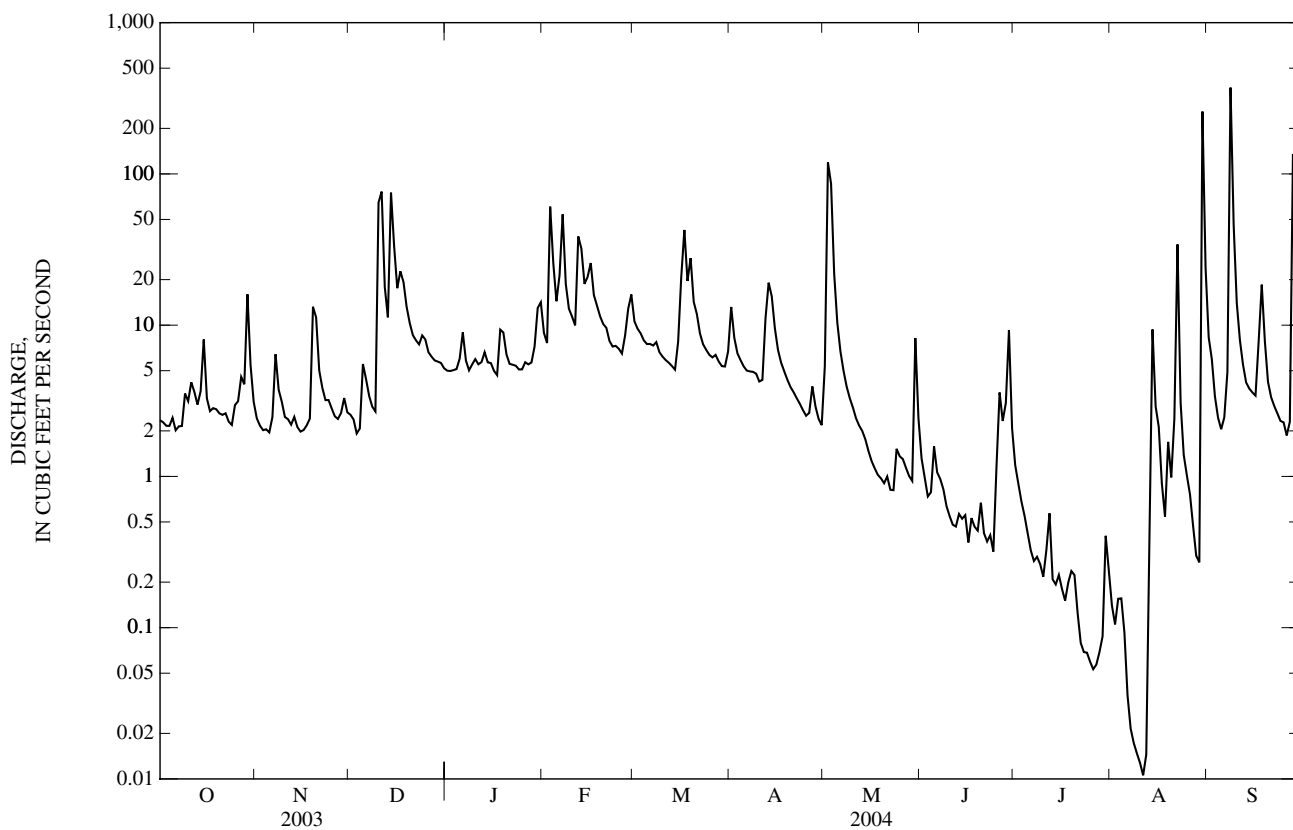
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 7.63   | 6.71   | 11.5   | 25.1   | 31.6   | 29.9   | 18.5   | 9.31   | 7.21   | 8.16   | 7.81   | 7.76   |
| MAX  | 56.6   | 33.0   | 53.4   | 80.4   | 81.0   | 74.8   | 67.1   | 39.1   | 48.0   | 66.6   | 55.3   | 75.2   |
| (WY) | (1972) | (1980) | (1973) | (1978) | (1960) | (1998) | (2003) | (1978) | (1973) | (1975) | (1964) | (1996) |
| MIN  | 0.00   | 0.16   | 0.59   | 1.27   | 5.11   | 4.80   | 2.45   | 0.38   | 0.02   | 0.04   | 0.00   | 0.00   |
| (WY) | (1964) | (1974) | (2002) | (1981) | (2001) | (1981) | (1981) | (2002) | (2002) | (2002) | (1977) | (1980) |

02101800 TICK CREEK NEAR MOUNT VERNON SPRINGS, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |       | WATER YEARS 1958 - 2004 <sup>@</sup> |             |
|--------------------------|------------------------|--------|---------------------|-------|--------------------------------------|-------------|
| ANNUAL TOTAL             | 9,360.9                |        | 3,297.59            |       |                                      |             |
| ANNUAL MEAN              | 25.6                   |        | 9.01                |       | 14.4                                 |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |       | 29.5                                 | 2003        |
| LOWEST ANNUAL MEAN       |                        |        |                     |       | 3.84                                 | 1981        |
| HIGHEST DAILY MEAN       | 895                    | Apr 10 | 372                 | Sep 8 | 1,570                                | Sep 6, 1996 |
| LOWEST DAILY MEAN        | 1.3                    | Sep 13 | 0.01                | Aug 9 | 0.00                                 | Sep 2, 1962 |
| ANNUAL SEVEN-DAY MINIMUM | 1.5                    | Sep 11 | 0.02                | Aug 6 | 0.00                                 | Sep 2, 1962 |
| MAXIMUM PEAK FLOW        |                        |        | 1,050               | Sep 8 | 4010*                                | Sep 6, 1996 |
| MAXIMUM PEAK STAGE       |                        |        | 6.49                | Sep 8 | 13.41                                | Sep 6, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.01*               | Aug 9 | 0.00*                                | Sep 2, 1962 |
| ANNUAL RUNOFF (CFSM)     | 1.65                   |        | 0.581               |       | 0.927                                |             |
| ANNUAL RUNOFF (INCHES)   | 22.47                  |        | 7.91                |       | 12.60                                |             |
| 10 PERCENT EXCEEDS       | 43                     |        | 16                  |       | 26                                   |             |
| 50 PERCENT EXCEEDS       | 6.4                    |        | 3.6                 |       | 3.7                                  |             |
| 90 PERCENT EXCEEDS       | 2.3                    |        | 0.31                |       | 0.11                                 |             |

<sup>@</sup> See PERIOD OF RECORD.

\* See REMARKS.



02102000 DEEP RIVER AT MONCURE, NC

LOCATION.--Lat 35°37'37", long 79°06'58", Lee County, 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>.

WATER-DISCHARGE 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.--WSP 1082: (1930-46 not previously published). 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.--Records fair except those for estimated daily discharges, which are poor. Diurnal fluctuation and some regulation at low flow caused by small power plants upstream from station. Minimum discharge for current water year, due to regulation.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1     | 524    | 873    | 585    | 561    | 1,200  | 3,210  | 878    | 495    | 683    | 899    | 673    | 2,740  |
| 2     | 458    | 596    | 535    | 499    | 912    | 3,350  | 1,050  | 1,910  | 375    | 605    | 418    | 1,030  |
| 3     | e402   | 510    | 425    | 527    | 1,660  | 3,050  | 1,280  | 6,880  | 235    | 649    | 381    | 694    |
| 4     | 396    | 451    | 405    | 518    | 3,860  | 2,230  | 958    | 4,460  | 306    | 447    | 452    | 387    |
| 5     | 385    | 408    | 504    | 541    | 2,850  | 1,670  | 752    | 2,090  | 499    | 317    | 360    | 229    |
| 6     | 425    | 423    | 586    | 593    | 1,700  | 1,340  | 658    | 1,230  | 340    | 392    | 290    | 219    |
| 7     | 325    | 425    | 624    | 739    | 4,450  | 1,190  | 635    | 833    | 447    | 706    | 213    | 294    |
| 8     | 309    | 502    | 749    | 766    | 5,450  | 1,070  | 557    | 561    | 334    | 404    | 157    | 9,980  |
| 9     | 402    | 487    | 532    | 629    | 2,660  | 1,090  | 509    | 490    | 265    | 261    | 127    | 13,000 |
| 10    | 367    | 581    | 619    | 575    | 1,700  | 935    | 503    | 500    | 247    | 201    | 113    | 9,100  |
| 11    | 401    | 521    | 4,950  | 555    | 1,330  | 821    | 501    | 413    | 330    | 224    | 111    | 3,840  |
| 12    | 470    | 459    | 3,470  | 546    | 1,590  | 769    | 578    | 335    | 334    | 299    | 105    | 1,340  |
| 13    | 559    | 400    | 1,990  | 554    | 4,070  | 729    | 962    | 374    | 248    | 380    | 185    | 710    |
| 14    | 537    | 388    | 2,940  | 554    | 2,980  | 704    | 2,070  | 307    | 207    | 222    | 1,070  | 506    |
| 15    | 504    | 472    | 4,910  | 545    | 2,260  | 585    | 2,790  | 312    | 184    | 199    | 2,050  | 440    |
| 16    | 679    | 308    | 3,490  | 512    | 2,800  | 2,110  | 1,760  | 266    | 200    | 176    | 2,080  | 368    |
| 17    | 601    | 348    | 2,160  | 616    | 2,860  | 3,090  | 1,170  | 274    | 262    | 144    | 963    | 354    |
| 18    | 399    | e450   | 2,150  | 385    | 2,220  | 2,640  | 905    | 346    | 238    | 140    | 584    | 914    |
| 19    | 402    | e625   | 2,160  | 632    | 1,780  | 2,400  | 728    | 169    | 263    | 142    | 358    | 2,350  |
| 20    | 379    | e825   | 1,620  | 817    | 1,450  | 2,260  | 635    | 203    | 254    | 968    | 269    | 1,360  |
| 21    | 321    | e1,100 | 1,150  | 711    | 1,270  | 1,720  | 542    | 204    | 216    | 534    | 249    | 722    |
| 22    | 308    | 975    | 907    | 614    | 1,100  | 1,290  | 570    | 205    | 192    | 324    | 2,540  | 478    |
| 23    | 307    | 674    | 765    | 541    | 954    | 1,050  | 540    | 264    | 204    | 230    | 1,070  | 384    |
| 24    | 302    | 522    | 795    | 402    | 904    | 880    | 445    | 312    | 180    | 175    | 469    | 289    |
| 25    | 292    | 543    | 773    | 489    | 827    | 803    | 425    | 660    | 196    | 142    | 272    | 258    |
| 26    | 290    | 357    | 777    | 498    | 796    | 756    | 433    | 381    | 354    | 117    | 189    | 225    |
| 27    | 293    | 383    | 716    | 509    | 828    | 610    | 466    | 194    | 533    | 107    | 164    | 186    |
| 28    | 322    | 403    | 644    | 524    | 1,280  | 661    | 476    | 224    | 515    | 201    | 144    | 1,050  |
| 29    | 663    | 413    | 533    | 625    | 2,550  | 707    | 371    | 199    | 621    | 224    | 137    | 9,720  |
| 30    | 1,690  | 421    | 576    | 579    | ---    | 673    | 439    | 481    | 911    | 649    | 7,560  | 8,000  |
| 31    | 1,470  | ---    | 558    | 994    | ---    | 644    | ---    | 731    | ---    | 794    | e7,400 | ---    |
| TOTAL | 15,182 | 15,843 | 43,598 | 18,150 | 60,291 | 45,037 | 24,586 | 26,303 | 10,173 | 11,272 | 31,153 | 71,167 |
| MEAN  | 490    | 528    | 1,406  | 585    | 2,079  | 1,453  | 820    | 848    | 339    | 364    | 1,005  | 2,372  |
| MAX   | 1,690  | 1,100  | 4,950  | 994    | 5,450  | 3,350  | 2,790  | 6,880  | 911    | 968    | 7,560  | 13,000 |
| MIN   | 290    | 308    | 405    | 385    | 796    | 585    | 371    | 169    | 180    | 107    | 105    | 186    |
| CFSM  | 0.34   | 0.37   | 0.98   | 0.41   | 1.45   | 1.01   | 0.57   | 0.59   | 0.24   | 0.25   | 0.70   | 1.65   |
| IN.   | 0.39   | 0.41   | 1.13   | 0.47   | 1.56   | 1.17   | 0.64   | 0.68   | 0.26   | 0.29   | 0.81   | 1.85   |

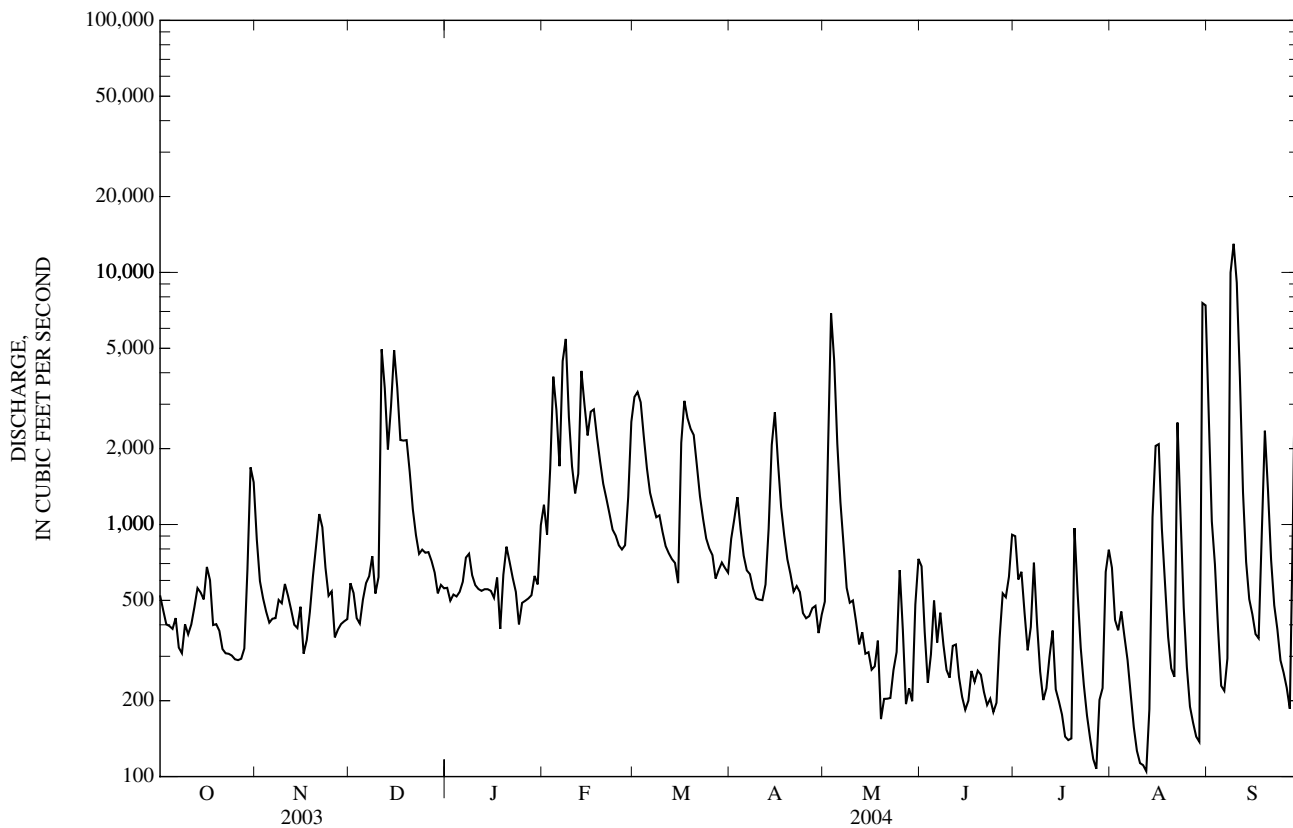
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2004, BY WATER YEAR (WY)

|      | 739    | 837    | 1,309  | 2,359  | 2,843  | 2,860  | 2,065  | 1,112  | 789    | 834    | 831    | 839    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 739    | 837    | 1,309  | 2,359  | 2,843  | 2,860  | 2,065  | 1,112  | 789    | 834    | 831    | 839    |
| MAX  | 3,590  | 4,789  | 4,765  | 7,182  | 7,945  | 7,582  | 6,455  | 3,590  | 4,147  | 5,528  | 3,861  | 10,580 |
| (WY) | (1965) | (1986) | (1973) | (1978) | (1960) | (1998) | (1936) | (1989) | (1982) | (1975) | (1931) | (1945) |
| MIN  | 28.2   | 14.1   | 34.6   | 130    | 424    | 566    | 393    | 125    | 68.6   | 79.7   | 46.9   | 24.1   |
| (WY) | (1931) | (1942) | (1934) | (1934) | (1931) | (1981) | (1981) | (2002) | (2002) | (1986) | (2002) | (1968) |

02102000 DEEP RIVER AT MONCURE, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1930 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 930,622                |        | 372,755             |        | 1,446                   |              |
| ANNUAL MEAN              | 2,550                  |        | 1,018               |        | 2,999                   |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 391                     | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 391                     | 2002         |
| HIGHEST DAILY MEAN       | 29,000                 | Apr 11 | 13,000              | Sep 9  | 66,400                  | Sep 18, 1945 |
| LOWEST DAILY MEAN        | 273                    | Jun 29 | 105                 | Aug 12 | 6.0                     | Oct 9, 1954  |
| ANNUAL SEVEN-DAY MINIMUM | 302                    | Oct 21 | 144                 | Aug 7  | 6.6                     | Oct 8, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 17,900              | Sep 8  | 80,300                  | Sep 18, 1945 |
| MAXIMUM PEAK STAGE       |                        |        | 8.14                | Sep 8  | 17.20                   | Sep 18, 1945 |
| INSTANTANEOUS LOW FLOW   |                        |        | 99                  | Jul 27 | 5.5                     | Oct 10, 1954 |
| ANNUAL RUNOFF (CFSM)     | 1.78                   |        | 0.710               |        | 1.01                    |              |
| ANNUAL RUNOFF (INCHES)   | 24.14                  |        | 9.67                |        | 13.70                   |              |
| 10 PERCENT EXCEEDS       | 6,390                  |        | 2,260               |        | 3,300                   |              |
| 50 PERCENT EXCEEDS       | 1,080                  |        | 542                 |        | 534                     |              |
| 90 PERCENT EXCEEDS       | 402                    |        | 215                 |        | 98                      |              |

e Estimated.





## 02102000 DEEP RIVER AT MONCURE, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1957 to 1965, 1968 to 1970, 1972, 1976 to 1978, 1981 to 1983, 2002, to current year.

REMARKS.--Station operated in cooperation with the Upper Cape Fear River Basin Association to assess constituent loads.

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| Date  | Time | Instantaneous discharge, cfs (00061) | Turbidity, wat unflab, Hach 2100AN NTU (99872) | Barometric pressure, mm Hg (00025) | Dissolved oxygen, mg/L (00300) | pH, water, unfltrd field, std units (00400) | Specific conductance, wat unfl uS/cm 25 degC (00095) | Temperature, water, deg C (00010) | Calcium water, fltrd, mg/L (00915) | Magnesium, water, fltrd, mg/L (00925) | Sodium, water, fltrd, mg/L (00930) | ANC, wat unfl incrm. titr., field, mg/L as CaCO3 (00419) | Chloride, water, fltrd, mg/L (00940) |
|-------|------|--------------------------------------|--|------------------------------------|--------------------------------|---|--|-----------------------------------|------------------------------------|---------------------------------------|------------------------------------|--|--------------------------------------|
| OCT   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 01... | 1100 | 529                                  | --   | 763                                | 8.8                            | 7.3   | 80   | 18.4                              | --                                 | --                                    | --                                 | 21   | --                                   |
| 07... | 1030 | 360                                  | --   | 763                                | 9.3                            | 7.4   | 103  | 17.9                              | --                                 | --                                    | --                                 | 28   | --                                   |
| 15... | 1200 | 461                                  | --   | 761                                | 9.4                            | 7.6   | 133  | 18.4                              | --                                 | --                                    | --                                 | 32   | --                                   |
| 20... | 1200 | 360                                  | --   | 764                                | 10.2                           | 7.8   | 145  | 16.7                              | --                                 | --                                    | --                                 | 34   | --                                   |
| 31... | 1430 | 1,380                                | --   | --                                 | 10.8                           | 7.4   | 142  | 15.6                              | --                                 | --                                    | --                                 | 36   | --                                   |
| NOV   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 12... | 1030 | 461                                  | --   | 760                                | 10.7                           | 7.6   | 142  | 14.4                              | --                                 | --                                    | --                                 | 36   | --                                   |
| 21... | 1200 | 1,010                                | --   | 761                                | 10.8                           | 7.5   | 147  | 12.8                              | --                                 | --                                    | --                                 | 36   | --                                   |
| 28... | 1215 | 385                                  | --   | 751                                | 12.1                           | 7.5   | 176  | 11.8                              | --                                 | --                                    | --                                 | 38   | --                                   |
| DEC   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 11... | 1500 | 5,090                                | --   | 753                                | 11.9                           | 7.1   | 99   | 9.1                               | --                                 | --                                    | --                                 | 17   | --                                   |
| 23... | 1230 | 706                                  | --   | 762                                | 14.9                           | 7.2   | 117  | 4.6                               | --                                 | --                                    | --                                 | 26   | --                                   |
| JAN   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 06... | 1045 | 587                                  | --   | --                                 | 11.8                           | 7.6   | 127  | 8.3                               | --                                 | --                                    | --                                 | 32   | --                                   |
| 20... | 1100 | 828                                  | --   | 762                                | 13.2                           | 7.4   | 144  | 3.8                               | --                                 | --                                    | --                                 | 61   | --                                   |
| FEB   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 03... | 1100 | 976                                  | --   | 759                                | 13.1                           | 7.5   | 155  | 3.1                               | --                                 | --                                    | --                                 | 59   | --                                   |
| 18... | 1300 | 2,190                                | --   | 762                                | 12.5                           | 7.2   | 102  | 5.6                               | --                                 | --                                    | --                                 | 34   | --                                   |
| MAR   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 08... | 1045 | 1,000                                | --   | 758                                | 11.4                           | 7.3   | 111  | 13.1                              | --                                 | --                                    | --                                 | 20   | --                                   |
| 18... | 1100 | 2,680                                | --   | 762                                | 11.3                           | 7.2   | 121  | 12.1                              | --                                 | --                                    | --                                 | 25   | --                                   |
| 30... | 1100 | 605                                  | --   | 762                                | 10.4                           | 7.5   | 123  | 14.3                              | --                                 | --                                    | --                                 | 27   | --                                   |
| APR   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 13... | 1200 | 906                                  | --   | --                                 | 9.9                            | 7.1   | 134  | 14.9                              | --                                 | --                                    | --                                 | 33   | --                                   |
| MAY   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 12... | 1145 | 313                                  | --   | 765                                | 8.4                            | 7.3   | 114  | 23.3                              | --                                 | --                                    | --                                 | 22   | --                                   |
| 27... | 1030 | 180                                  | --   | 755                                | 6.6                            | 7.6   | 159  | 27.4                              | --                                 | --                                    | --                                 | 34   | --                                   |
| JUN   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 10... | 1115 | 245                                  | --   | 761                                | 7.9                            | 7.3   | 197  | 26.1                              | --                                 | --                                    | --                                 | 31   | --                                   |
| 22... | 1045 | 192                                  | --   | 756                                | 7.6                            | 7.5   | 205  | 26.2                              | --                                 | --                                    | --                                 | 36   | --                                   |
| JUL   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 09... | 1115 | 260                                  | --   | 762                                | 7.0                            | 7.3   | 169  | 28.5                              | --                                 | --                                    | --                                 | 32   | --                                   |
| 15... | 1115 | 196                                  | --   | 754                                | 7.5                            | 7.7   | 170  | 29.7                              | --                                 | --                                    | --                                 | 32   | --                                   |
| 20... | 1115 | 1,160                                | 12   | 758                                | 7.2                            | 7.3   | 180  | 27.0                              | 8.55                               | 4.07                                  | 16.6                               | 32   | 16.0                                 |
| 27... | 1530 | 99                                   | 4.0  | 758                                | 7.0                            | 7.3   | 214  | 28.8                              | 9.97                               | 5.14                                  | 20.3                               | 42   | 22.5                                 |
| 30... | 1130 | 883                                  | 31   | 762                                | 6.6                            | 7.3   | 242  | 26.6                              | 10.9                               | 4.62                                  | 24.6                               | 38   | 27.2                                 |
| AUG   |      |                                      |  |                                    |                                |   |  |                                   |                                    |                                       |                                    |  |                                      |
| 03... | 1045 | 324                                  | 21   | 754                                | 7.0                            | 7.3   | 144  | 27.5                              | 7.76                               | 3.32                                  | 11.7                               | 32   | 13.2                                 |
| 06... | 1130 | 285                                  | --   | 756                                | 7.9                            | 7.3   | 227  | 26.7                              | --                                 | --                                    | --                                 | 38   | --                                   |
| 10... | 1015 | 113                                  | --   | 755                                | 7.4                            | 7.5   | 218  | 26.1                              | --                                 | --                                    | --                                 | 38   | --                                   |
| 15... | 0945 | 1,830                                | 76   | 764                                | 7.7                            | 7.2   | 122  | 22.4                              | 7.12                               | 2.78                                  | 8.46                               | 29   | 10.1                                 |

## 02102000 DEEP RIVER AT MONCURE, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Sulfate<br>water,<br>fltrd,<br>mg/L<br>(00945) | Ammonia<br>+<br>org-N,<br>water,<br>unfltrd<br>mg/L<br>as N<br>(00625) | Ammonia<br>water,<br>fltrd,<br>mg/L<br>as N<br>(00608) | Nitrite<br>+<br>nitrate<br>water<br>fltrd,<br>mg/L<br>as N<br>(00631) | Nitrite<br>water,<br>fltrd,<br>mg/L<br>as N<br>(00613) | Ortho-<br>phos-<br>phate,<br>water,<br>fltrd,<br>mg/L<br>as P<br>(00671) | Phos-<br>phorus,<br>water,<br>unfltrd<br>mg/L<br>(00665) | Alum-<br>inum,<br>water,<br>fltrd,<br>ug/L<br>(01106) | Arsenic<br>water,<br>fltrd,<br>ug/L<br>(01000) | Cadmium<br>water,<br>fltrd,<br>ug/L<br>(01025) | Chrom-<br>ium,<br>water,<br>fltrd,<br>ug/L<br>(01030) | Copper,<br>water,<br>fltrd,<br>ug/L<br>(01040) | Iron,<br>water,<br>fltrd,<br>ug/L<br>(01046) |
|-------|--|--|--|---|--|--|--|---|--|--|---|--|--|
| OCT   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 01... | --   | .61  | <.015  | .58   | .004   | .126   | .23  | --  | --   | --   | --  | --   | --   |
| 07... | --   | .50  | <.010  | .79   | .004   | .133   | .21  | --  | --   | --   | --  | --   | --   |
| 15... | --   | .34  | E.007  | .91   | .004   | .096   | .15  | --  | --   | --   | --  | --   | --   |
| 20... | --   | .47  | E.007  | 1.18  | .004   | .149   | .20  | --  | --   | --   | --  | --   | --   |
| 31... | --   | .45  | E.009  | .82   | .004   | .074   | .11  | --  | --   | --   | --  | --   | --   |
| NOV   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 12... | --   | .45  | <.010  | .88   | .003   | .137   | .19  | --  | --   | --   | --  | --   | --   |
| 21... | --   | .47  | E.005  | .95   | .003   | .109   | .18  | --  | --   | --   | --  | --   | --   |
| 28... | --   | .44  | <.010  | 1.58  | .004   | .241   | .33  | --  | --   | --   | --  | --   | --   |
| DEC   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 11... | --   | 1.6  | .099   | 1.27  | .011   | .168   | .46  | --  | --   | --   | --  | --   | --   |
| 23... | --   | .54  | .022   | 1.07  | .006   | .091   | .16  | --  | --   | --   | --  | --   | --   |
| JAN   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 06... | --   | .31  | E.009  | 1.23  | .002   | .091   | .14  | --  | --   | --   | --  | --   | --   |
| 20... | --   | .36  | <.010  | 1.08  | .002   | .071   | .13  | --  | --   | --   | --  | --   | --   |
| FEB   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 03... | --   | .36  | <.010  | 1.12  | .002   | .051   | .09  | --  | --   | --   | --  | --   | --   |
| 18... | --   | .52  | .034   | .79   | .007   | .060   | .12  | --  | --   | --   | --  | --   | --   |
| MAR   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 08... | --   | .49  | .022   | .80   | .008   | .084   | .15  | --  | --   | --   | --  | --   | --   |
| 18... | --   | .74  | .040   | .79   | .007   | .057   | .14  | --  | --   | --   | --  | --   | --   |
| 30... | --   | .38  | <.010  | .64   | .003   | .068   | .12  | --  | --   | --   | --  | --   | --   |
| APR   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 13... | --   | .43  | .026   | .55   | .003   | .076   | .11  | --  | --   | --   | --  | --   | --   |
| MAY   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 12... | --   | .60  | .024   | 1.07  | .011   | .133   | .21  | --  | --   | --   | --  | --   | --   |
| 27... | --   | .42  | .027   | .71   | .008   | .136   | .21  | --  | --   | --   | --  | --   | --   |
| JUN   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 10... | --   | .57  | .024   | 1.52  | .011   | .231   | .31  | --  | --   | --   | --  | --   | --   |
| 22... | --   | .50  | .019   | 1.40  | .006   | .351   | .40  | --  | --   | --   | --  | --   | --   |
| JUL   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 09... | --   | .60  | .013   | 1.26  | .006   | .198   | .26  | --  | --   | --   | --  | --   | --   |
| 15... | --   | .60  | .021   | 1.01  | .008   | .236   | .31  | --  | --   | --   | --  | --   | --   |
| 20... | 13.6   | .59  | .012   | 1.03  | .005   | .316   | .39  | 19  | 1.0  | <.04   | <.8   | 2.5  | 276  |
| 27... | 16.7   | .57  | .022   | 1.40  | .009   | .334   | .39  | 11  | 1.0  | E.02   | E.6   | 2.2  | 186  |
| 30... | 19.5   | .68  | .039   | 1.96  | .014   | .354   | .43  | 7   | .9   | E.02   | <.8   | 2.5  | 97   |
| AUG   |  |  |  |   |  |  |  |   |  |  |   |  |  |
| 03... | 9.9  | .58  | .022   | .82   | .006   | .223   | .29  | 13  | .9   | E.02   | <.8   | 2.3  | 228  |
| 06... | --   | .73  | .026   | 1.61  | .015   | .244   | .33  | --  | --   | --   | --  | --   | --   |
| 10... | --   | .58  | .027   | 1.68  | .009   | .304   | .35  | --  | --   | --   | --  | --   | --   |
| 15... | 9.2  | 1.4  | .405   | .81   | .014   | .205   | .33  | 51  | 1.0  | <.04   | <.8   | 3.6  | 415  |

## CAPE FEAR RIVER BASIN

02102000 DEEP RIVER AT MONCURE, NC—Continued

## WATER-QUALITY DATA, WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004—CONTINUED

| Date  | Lead,<br>water,<br>fltrd,<br>ug/L<br>(01049) | Mangan-<br>ese,<br>water,<br>fltrd,<br>ug/L<br>(01056) | Mercury<br>water,<br>fltrd,<br>ug/L<br>(71890) | Nickel,<br>water,<br>fltrd,<br>ug/L<br>(01065) | Sus-<br>pended<br>sedi-<br>ment<br>concen-<br>tration<br>mg/L<br>(80154) | Sus-<br>pended<br>sedi-<br>ment<br>dis-<br>charge,<br>tons/d<br>(80155) |
|-------|--|--|--|--|--|---|
| OCT   |  |  |  |  |  |   |
| 01... | --   | --   | --   | --   | --   | --  |
| 07... | --   | --   | --   | --   | --   | --  |
| 15... | --   | --   | --   | --   | --   | --  |
| 20... | --   | --   | --   | --   | 7  | 6.8   |
| 31... | --   | --   | --   | --   | 13   | 48  |
| NOV   |  |  |  |  |  |   |
| 12... | --   | --   | --   | --   | 6  | 7.5   |
| 21... | --   | --   | --   | --   | 9  | 25  |
| 28... | --   | --   | --   | --   | 10   | 10  |
| DEC   |  |  |  |  |  |   |
| 11... | --   | --   | --   | --   | 162  | 2,230   |
| 23... | --   | --   | --   | --   | 10   | 19  |
| JAN   |  |  |  |  |  |   |
| 06... | --   | --   | --   | --   | 7  | 11  |
| 20... | --   | --   | --   | --   | 9  | 20  |
| FEB   |  |  |  |  |  |   |
| 03... | --   | --   | --   | --   | 5  | 13  |
| 18... | --   | --   | --   | --   | 16   | 95  |
| MAR   |  |  |  |  |  |   |
| 08... | --   | --   | --   | --   | 10   | 27  |
| 18... | --   | --   | --   | --   | 32   | 232   |
| 30... | --   | --   | --   | --   | 8  | 13  |
| APR   |  |  |  |  |  |   |
| 13... | --   | --   | --   | --   | 10   | 24  |
| MAY   |  |  |  |  |  |   |
| 12... | --   | --   | --   | --   | 12   | 10  |
| 27... | --   | --   | --   | --   | 9  | 4.4   |
| JUN   |  |  |  |  |  |   |
| 10... | --   | --   | --   | --   | 12   | 7.9   |
| 22... | --   | --   | --   | --   | 8  | 4.1   |
| JUL   |  |  |  |  |  |   |
| 09... | --   | --   | --   | --   | 12   | 8.4   |
| 15... | --   | --   | --   | --   | 8  | 4.2   |
| 20... | .12  | 76.2   | <.02   | 1.22   | 23   | 72  |
| 27... | E.08   | 58.7   | <.02   | 1.40   | 5  | 1.3   |
| 30... | E.06   | 48.1   | <.02   | 1.54   | 19   | 45  |
| AUG   |  |  |  |  |  |   |
| 03... | .10  | 47.9   | <.02   | .94  | 9  | 7.9   |
| 06... | --   | --   | --   | --   | 9  | 6.9   |
| 10... | --   | --   | --   | --   | 2  | .61   |
| 15... | .19  | 49.4   | <.02   | 1.21   | 57   | 282   |

Remark codes used in this table:

&lt; -- Less than

E -- Estimated value

02102192 BUCKHORN CREEK NEAR CORINTH, NC

LOCATION.--Lat 35°33'35", long 78°58'25", Chatham County, Hydrologic Unit 03030004, on left bank at upstream side of bridge on State Highway 42, 0.2 mi downstream of White Oak Creek, 1.2 mi downstream of Harris Lake, and 2 mi east of Corinth.

DRAINAGE AREA.--76.3 mi<sup>2</sup>.

PERIOD OF RECORD.--June 1972 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 154.63 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Since Dec. 1, 1980, considerable regulation by Harris Lake (station 02102190). Maximum discharge prior to regulation: 6,920 ft<sup>3</sup>/s, Feb. 2, 1973; gage height: 20.02 ft. Minimum discharge prior to regulation: 0.01 ft<sup>3</sup>/s, Sept. 2, 1976. Minimum discharge for period of record also occurred June 22, 23, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC     | JAN  | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG     | SEP   |
|-------|-------|-------|---------|------|-------|-------|-------|-------|-------|-------|---------|-------|
| 1     | 27    | 4.7   | 3.5     | 36   | 19    | 120   | 33    | 16    | 35    | 29    | 6.6     | 184   |
| 2     | 24    | 4.2   | 3.9     | 33   | 19    | 113   | 30    | 89    | 28    | 26    | 6.8     | 162   |
| 3     | 18    | 3.8   | 2.6     | 30   | 35    | 105   | 28    | 200   | 24    | 23    | 7.5     | 140   |
| 4     | 15    | 3.6   | 3.0     | 28   | 45    | 95    | 27    | 176   | 46    | 20    | 3.9     | 120   |
| 5     | 13    | 3.4   | 5.5     | 27   | 45    | 87    | 23    | 155   | 58    | 17    | 4.5     | 102   |
| 6     | 11    | 3.7   | 4.5     | 31   | 47    | 82    | 21    | 138   | 49    | 14    | 21      | 91    |
| 7     | 10    | 5.8   | 3.4     | 26   | 94    | 80    | 18    | 125   | 43    | 11    | 8.6     | 86    |
| 8     | 11    | 7.3   | 2.8     | 24   | 97    | 78    | 17    | 114   | 37    | 8.0   | 6.1     | 116   |
| 9     | 14    | 8.8   | 2.6     | e25  | 91    | 71    | 16    | 98    | 35    | 5.9   | 4.1     | 120   |
| 10    | 16    | 5.2   | 8.7     | e26  | 86    | 70    | 15    | 82    | 33    | 5.9   | 3.1     | 105   |
| 11    | 15    | 3.7   | 33      | e23  | 80    | 58    | 15    | 72    | 29    | 19    | 2.3     | 90    |
| 12    | 12    | 3.1   | 31      | e21  | 105   | 53    | 20    | 66    | 37    | 34    | 3.1     | 76    |
| 13    | 11    | 4.5   | 33      | 19   | 128   | 47    | 25    | 62    | 30    | 40    | 6.9     | 65    |
| 14    | 11    | 2.6   | 84      | 18   | 125   | 41    | 30    | 53    | 25    | 31    | 54      | 58    |
| 15    | 14    | 2.2   | 104     | 18   | 133   | 42    | 30    | 46    | 22    | 26    | 110     | 61    |
| 16    | 10    | 2.2   | 104     | 16   | 149   | 67    | 27    | 41    | 20    | 21    | 147     | 54    |
| 17    | 8.9   | 2.2   | 114     | 15   | 148   | 87    | 24    | 36    | 21    | 17    | 131     | 90    |
| 18    | 11    | 2.2   | 120     | 18   | 143   | 90    | 22    | 32    | 18    | 19    | 117     | 169   |
| 19    | 7.2   | 5.6   | 112     | 21   | 136   | 111   | 20    | 31    | 17    | 16    | 150     | 170   |
| 20    | 6.1   | 9.9   | 103     | 19   | 126   | 105   | 19    | 45    | 18    | 13    | 141     | 143   |
| 21    | 5.1   | 8.7   | 92      | 17   | 118   | 101   | 16    | 34    | 13    | 10    | 122     | 122   |
| 22    | 5.3   | 8.7   | 83      | 16   | 107   | 91    | 14    | 30    | 10    | 7.8   | 162     | 104   |
| 23    | 4.0   | 7.6   | 76      | 15   | 96    | 78    | 12    | 25    | 8.6   | 16    | 147     | 92    |
| 24    | 3.0   | 7.0   | 74      | 14   | 88    | 69    | 11    | 42    | 7.9   | 15    | 128     | 79    |
| 25    | 2.8   | 8.4   | 68      | 15   | 83    | 62    | 9.0   | 35    | 9.9   | 10    | 108     | 69    |
| 26    | 3.0   | 5.4   | 62      | 19   | 75    | 57    | 7.9   | 30    | 15    | 7.0   | 91      | 60    |
| 27    | 3.8   | 4.9   | 56      | 17   | 95    | 51    | 11    | 25    | 16    | 5.6   | 77      | 54    |
| 28    | 5.9   | 4.9   | 51      | 16   | 103   | 48    | 7.9   | 21    | 16    | 4.5   | 65      | 59    |
| 29    | 12    | 5.0   | 47      | e17  | 118   | 43    | 6.2   | 18    | 32    | 3.9   | 58      | 61    |
| 30    | 6.1   | 3.7   | 44      | e19  | ---   | 38    | 5.1   | 39    | 31    | 5.4   | 153     | 55    |
| 31    | 5.1   | ---   | 40      | 21   | ---   | 36    | ---   | 39    | ---   | 4.4   | 200     | ---   |
| TOTAL | 321.3 | 153.0 | 1,571.5 | 660  | 2,734 | 2,276 | 560.1 | 2,015 | 784.4 | 485.4 | 2,245.5 | 2,957 |
| MEAN  | 10.4  | 5.10  | 50.7    | 21.3 | 94.3  | 73.4  | 18.7  | 65.0  | 26.1  | 15.7  | 72.4    | 98.6  |
| MAX   | 27    | 9.9   | 120     | 36   | 149   | 120   | 33    | 200   | 58    | 40    | 200     | 184   |
| MIN   | 2.8   | 2.2   | 2.6     | 14   | 19    | 36    | 5.1   | 16    | 7.9   | 3.9   | 2.3     | 54    |
| CFSM  | 0.14  | 0.07  | 0.66    | 0.28 | 1.24  | 0.96  | 0.24  | 0.85  | 0.34  | 0.21  | 0.95    | 1.29  |
| IN.   | 0.16  | 0.07  | 0.77    | 0.32 | 1.33  | 1.11  | 0.27  | 0.98  | 0.38  | 0.24  | 1.09    | 1.44  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2004,® BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 19.7   | 23.2   | 37.0   | 66.3   | 104    | 132    | 92.6   | 40.9   | 28.1   | 27.3   | 35.5   | 31.9   |
| MAX  | 137    | 146    | 154    | 241    | 348    | 421    | 312    | 184    | 138    | 182    | 242    | 335    |
| (WY) | (2000) | (1996) | (2003) | (1984) | (1998) | (1998) | (1993) | (1989) | (1984) | (2001) | (2003) | (1996) |
| MIN  | 0.70   | 0.81   | 1.40   | 2.07   | 1.37   | 1.66   | 1.13   | 1.48   | 0.67   | 0.34   | 0.33   | 0.70   |
| (WY) | (1982) | (1992) | (1992) | (2001) | (1992) | (1992) | (1992) | (2002) | (1981) | (1981) | (2002) | (2002) |

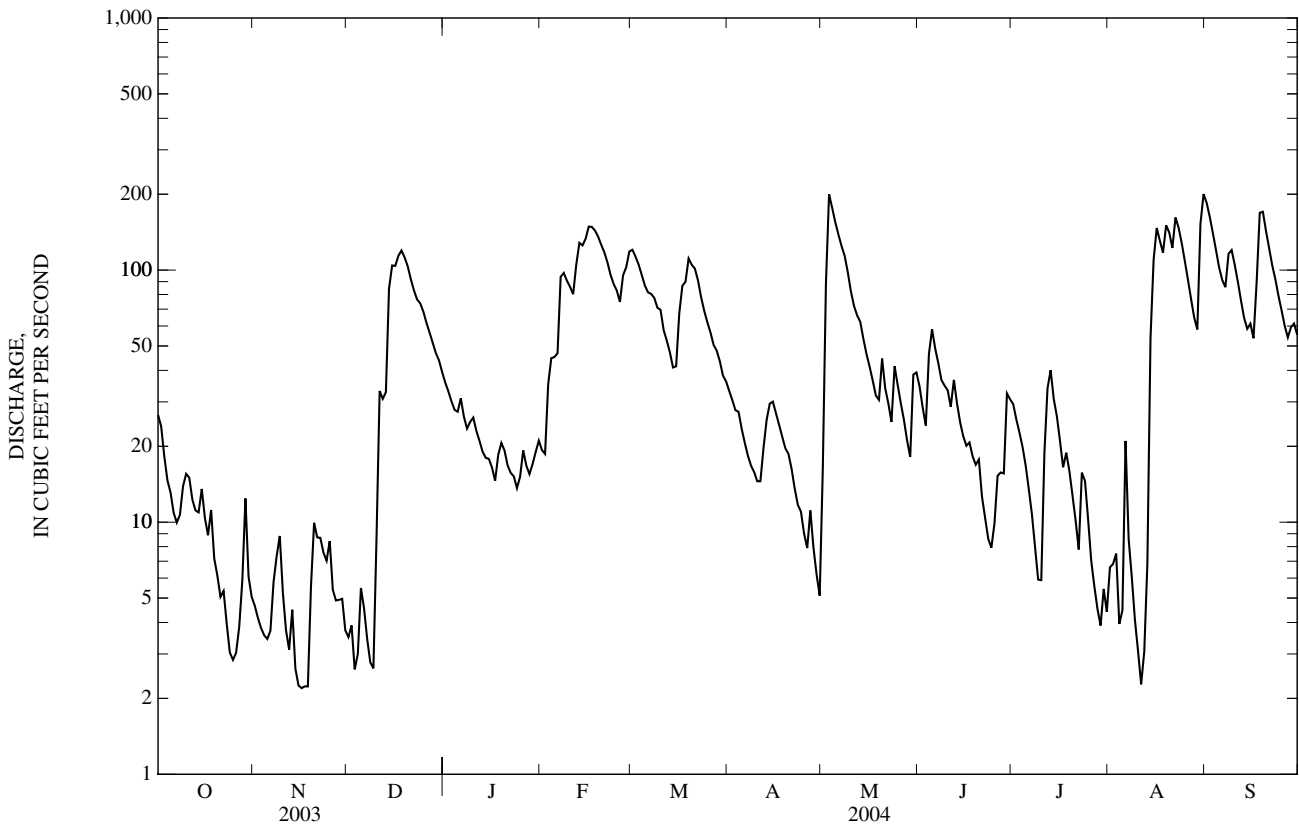
02102192 BUCKHORN CREEK NEAR CORINTH, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1981 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 45,520.2               |        | 16,763.2            |        | 52.9                                 |              |
| ANNUAL MEAN              | 125                    |        | 45.8                |        | 137                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 2.47                                 | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,940                                | 1981         |
| HIGHEST DAILY MEAN       | 982                    | Apr 11 | 200                 | May 3  | 0.06                                 | Sep 6, 1996  |
| LOWEST DAILY MEAN        | 2.2                    | Nov 15 | 2.2                 | Nov 15 | 0.07                                 | Jun 22, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 2.7                    | Nov 12 | 2.7                 | Nov 12 | 0.07                                 | Jun 18, 2002 |
| MAXIMUM PEAK FLOW        |                        |        | 335                 | May 2  | 4,300                                | Sep 6, 1996  |
| MAXIMUM PEAK STAGE       |                        |        | 4.40                | May 2  | 16.79                                | Sep 6, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 1.8                 | Aug 12 | 0.05*                                | May 10, 1988 |
| ANNUAL RUNOFF (CFSM)     | 1.63                   |        | 0.600               |        | 0.694                                |              |
| ANNUAL RUNOFF (INCHES)   | 22.19                  |        | 8.17                |        | 9.43                                 |              |
| 10 PERCENT EXCEEDS       | 359                    |        | 117                 |        | 157                                  |              |
| 50 PERCENT EXCEEDS       | 61                     |        | 27                  |        | 9.3                                  |              |
| 90 PERCENT EXCEEDS       | 5.5                    |        | 4.6                 |        | 0.71                                 |              |

<sup>@</sup> Regulated period only (1981-2004). See REMARKS.

\* See REMARKS.

e Estimated.



02102500 CAPE FEAR RIVER AT LILLINGTON, NC

LOCATION.--Lat 35°24'22", long 78°48'48", Harnett County, Hydrologic Unit 03030004, on right bank 60 ft downstream of downstream bridge on U.S. Highway 401, 1,860 ft downstream of Southern Railway bridge, 0.5 mi north of Lillington, 1 mile downstream of Neal Creek, and at mile 178.

DRAINAGE AREA.--3,464 mi<sup>2</sup>.

PERIOD OF RECORD.--December 1923 to current year.

REVISED RECORDS.--WSP 1002: 1930(M). WSP 1032: 1942(m). WSP 1303: 1944(M). WSP 1333: 1945. WSP 1383:

GAGE.--Water-stage recorder. Datum of gage is 104.62 ft above NGVD of 1929. Dec. 6, 1923, to Oct. 7, 1927, nonrecording gage and Oct. 8, 1927, to Dec. 2, 1975, water-stage recorder at site 60 ft upstream in bridge pier at same datum. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Some regulation at high flows, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since Sept. 1981 by B. Everett Jordan Lake (station 02098197). Diurnal fluctuation and slight regulation at low flow caused by power plants upstream from station. Fluctuation and regulation by Buckhorn Reservoir, 13 mi upstream from station, ended in December 1962. Prior to regulation, maximum discharge: 150,000 ft<sup>3</sup>/s, Sept. 19, 1945, from rating curve extended above 76,000 ft<sup>3</sup>/s; gage height: 33.19 ft, from floodmark; minimum discharge: 11 ft<sup>3</sup>/s, Oct. 14, 15, 1954; gage height: -0.17 ft. Minimum discharge for period of record also occurred on Aug. 7, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC     | JAN    | FEB     | MAR    | APR    | MAY    | JUN    | JUL    | AUG    | SEP     |
|-------|--------|--------|---------|--------|---------|--------|--------|--------|--------|--------|--------|---------|
| 1     | 1,210  | 1,840  | 1,360   | 1,320  | 1,950   | 5,280  | 1,190  | 891    | 1,270  | 1,670  | 4,560  | 7,800   |
| 2     | 1,070  | 1,460  | 1,430   | 1,350  | 1,830   | 5,280  | 1,430  | 2,220  | 936    | 1,590  | 1,970  | 7,160   |
| 3     | 996    | 1,320  | 1,330   | 1,310  | 1,970   | 5,630  | 2,060  | 7,940  | 688    | 1,510  | 1,780  | 6,850   |
| 4     | 910    | 1,280  | 1,280   | 1,310  | 5,480   | 6,100  | 1,920  | 6,960  | 751    | 1,440  | 1,820  | 4,570   |
| 5     | 900    | 1,190  | 1,400   | 1,290  | 7,740   | 4,820  | 1,680  | 3,910  | 1,700  | 1,240  | 1,730  | 1,850   |
| 6     | 814    | 1,180  | 1,450   | 1,390  | 6,120   | 2,490  | 2,000  | 5,220  | 1,080  | 1,110  | 1,930  | 927     |
| 7     | 846    | 1,230  | 1,440   | 1,380  | 4,450   | 2,280  | 2,320  | 4,640  | 900    | 1,430  | 1,670  | 1,000   |
| 8     | 705    | 1,230  | 1,560   | 1,570  | 7,710   | 2,180  | 2,250  | 3,420  | 905    | 1,280  | 1,420  | 6,510   |
| 9     | 902    | 1,300  | 1,290   | 1,460  | 7,520   | 2,600  | 1,840  | 2,830  | 829    | 752    | 853    | 16,200  |
| 10    | 800    | 1,310  | 1,290   | 1,390  | 7,170   | 2,480  | 1,380  | 1,440  | 915    | 644    | 526    | 15,100  |
| 11    | 790    | 1,310  | 5,330   | 1,330  | 6,490   | 2,310  | 1,410  | 1,380  | 722    | 764    | 587    | 14,000  |
| 12    | 820    | 1,240  | 5,750   | 1,330  | 4,070   | 2,230  | 1,500  | 1,210  | 1,030  | 806    | 617    | 13,600  |
| 13    | 931    | 1,040  | 5,650   | 1,350  | 5,130   | 1,790  | 1,820  | 1,300  | 841    | 1,240  | 876    | 10,300  |
| 14    | 929    | 934    | 6,030   | 1,330  | 5,760   | 1,700  | 2,480  | 1,160  | 667    | 792    | 1,490  | 3,420   |
| 15    | 1,000  | 999    | 8,570   | 1,360  | 4,660   | 1,690  | 4,540  | 1,170  | 581    | 646    | 3,570  | 3,170   |
| 16    | 1,010  | 978    | 8,140   | 1,400  | 5,070   | 2,730  | 6,160  | 880    | 694    | 612    | 4,410  | 1,860   |
| 17    | 1,050  | 905    | 7,840   | 1,470  | 5,360   | 4,510  | 2,360  | 731    | 1,170  | 588    | 3,490  | 1,920   |
| 18    | 887    | 843    | 8,000   | 1,460  | 5,670   | 5,830  | 1,790  | 814    | 1,530  | 592    | 3,690  | 2,650   |
| 19    | 733    | 958    | 8,810   | 1,480  | 7,760   | 5,690  | 1,680  | 635    | 1,500  | 585    | 5,360  | 3,430   |
| 20    | 836    | 1,340  | 6,370   | 1,710  | 3,770   | 6,830  | 2,310  | 750    | 1,510  | 927    | 5,510  | 4,060   |
| 21    | 2,000  | 1,580  | 5,750   | 1,640  | 3,360   | 6,410  | 2,280  | 645    | 1,430  | 1,170  | 2,260  | 6,090   |
| 22    | 2,230  | 1,940  | 4,470   | 1,580  | 3,100   | 4,920  | 1,930  | 685    | 1,080  | 836    | 4,410  | 3,540   |
| 23    | 2,140  | 1,660  | 1,690   | 1,470  | 2,960   | 2,110  | 1,400  | 1,020  | 947    | 818    | 3,630  | 2,730   |
| 24    | 1,000  | 1,440  | 1,730   | 1,230  | 2,850   | 1,690  | 959    | 1,550  | 648    | 1,010  | 2,350  | 1,130   |
| 25    | 841    | 1,440  | 1,700   | 1,220  | 2,790   | 1,580  | 855    | 1,260  | 666    | 942    | 1,150  | 969     |
| 26    | 1,120  | 1,340  | 1,600   | 1,310  | 2,660   | 1,490  | 895    | 1,000  | 873    | 905    | 942    | 926     |
| 27    | 1,110  | 1,240  | 1,570   | 1,300  | 2,730   | 1,180  | 1,010  | 718    | 1,070  | 838    | 881    | 860     |
| 28    | 1,080  | 1,290  | 1,500   | 1,320  | 3,270   | 1,110  | 959    | 615    | 933    | 593    | 816    | 958     |
| 29    | 1,810  | 1,260  | 1,390   | 1,390  | 4,400   | 1,140  | 883    | 678    | 1,420  | 664    | 791    | 7,420   |
| 30    | 2,320  | 1,220  | 1,380   | 1,470  | ---     | 1,170  | 1,270  | 992    | 1,720  | 859    | 5,220  | 10,200  |
| 31    | 2,490  | ---    | 1,400   | 1,680  | ---     | 1,140  | ---    | 1,690  | ---    | 4,450  | 13,000 | ---     |
| TOTAL | 36,280 | 38,297 | 108,500 | 43,600 | 133,800 | 98,390 | 56,561 | 60,354 | 31,006 | 33,303 | 83,309 | 161,200 |
| MEAN  | 1,170  | 1,277  | 3,500   | 1,406  | 4,614   | 3,174  | 1,885  | 1,947  | 1,034  | 1,074  | 2,687  | 5,373   |
| MAX   | 2,490  | 1,940  | 8,810   | 1,710  | 7,760   | 6,830  | 6,160  | 7,940  | 1,720  | 4,450  | 13,000 | 16,200  |
| MIN   | 705    | 843    | 1,280   | 1,220  | 1,830   | 1,110  | 855    | 615    | 581    | 585    | 526    | 860     |
| CFSM  | 0.34   | 0.37   | 1.01    | 0.41   | 1.33    | 0.92   | 0.54   | 0.56   | 0.30   | 0.31   | 0.78   | 1.55    |
| IN.   | 0.39   | 0.41   | 1.17    | 0.47   | 1.44    | 1.06   | 0.61   | 0.65   | 0.33   | 0.36   | 0.89   | 1.73    |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004,\* BY WATER YEAR (WY)

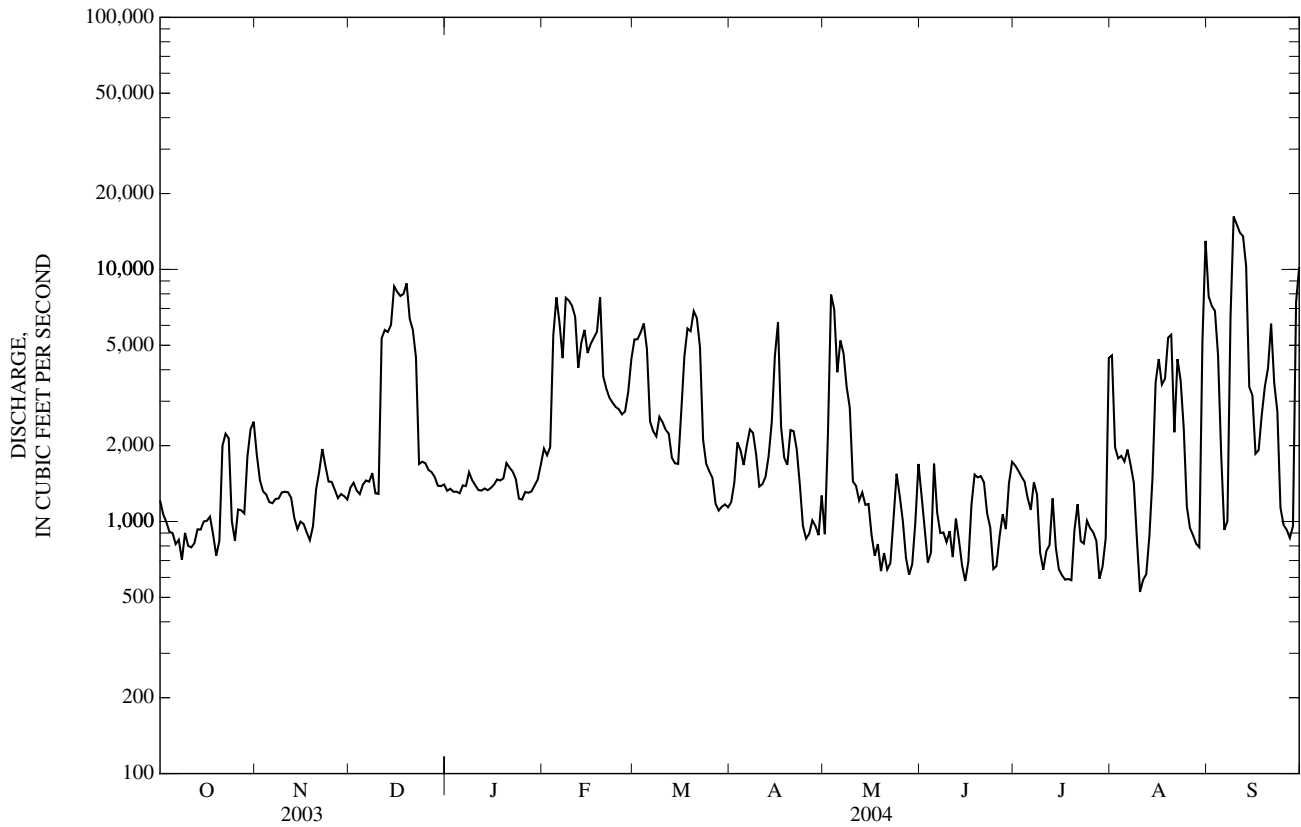
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 2,010  | 2,030  | 2,793  | 4,952  | 6,164  | 7,282  | 5,091  | 2,603  | 2,300  | 1,759  | 1,819  | 2,160  |
| MAX  | 6,442  | 7,919  | 8,595  | 11,750 | 16,440 | 15,710 | 14,780 | 7,784  | 12,510 | 5,694  | 7,075  | 13,920 |
| (WY) | (1990) | (1986) | (1984) | (1998) | (1998) | (1993) | (2003) | (1989) | (1982) | (1995) | (2003) | (1996) |
| MIN  | 621    | 522    | 612    | 707    | 1,617  | 1,628  | 969    | 642    | 551    | 360    | 274    | 596    |
| (WY) | (1999) | (1999) | (2002) | (2001) | (2002) | (1988) | (1985) | (2002) | (1999) | (2002) | (2002) | (1990) |

CAPE FEAR RIVER BASIN

02102500 CAPE FEAR RIVER AT LILLINGTON, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1982 - 2004* |             |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|-------------|
| ANNUAL TOTAL             | 2,220,497              |        | 884,600             |        | 3,398                    |             |
| ANNUAL MEAN              | 6,084                  |        | 2,417               |        | 7,146                    |             |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1,013                    | 2003        |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,013                    | 2002        |
| HIGHEST DAILY MEAN       | 38,300                 | Apr 11 | 16,200              | Sep 9  | 41,400                   | Sep 6, 1996 |
| LOWEST DAILY MEAN        | 705                    | Oct 8  | 526                 | Aug 10 | 155                      | Aug 6, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 811                    | Oct 6  | 677                 | Jul 14 | 223                      | Oct 2, 1981 |
| MAXIMUM PEAK FLOW        |                        |        | 18,900              | Sep 9  | 51,800                   | Sep 7, 1996 |
| MAXIMUM PEAK STAGE       |                        |        | 10.83               | Sep 9  | 18.97                    | Sep 7, 1996 |
| INSTANTANEOUS LOW FLOW   |                        |        | 509                 | Aug 10 | 141*                     | Aug 6, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.76                   |        | 0.698               |        | 0.981                    |             |
| ANNUAL RUNOFF (INCHES)   | 23.85                  |        | 9.50                |        | 13.33                    |             |
| 10 PERCENT EXCEEDS       | 15,000                 |        | 5,750               |        | 9,900                    |             |
| 50 PERCENT EXCEEDS       | 3,760                  |        | 1,430               |        | 1,270                    |             |
| 90 PERCENT EXCEEDS       | 1,090                  |        | 812                 |        | 598                      |             |

\* Regulated period only (1981-2004). See REMARKS.





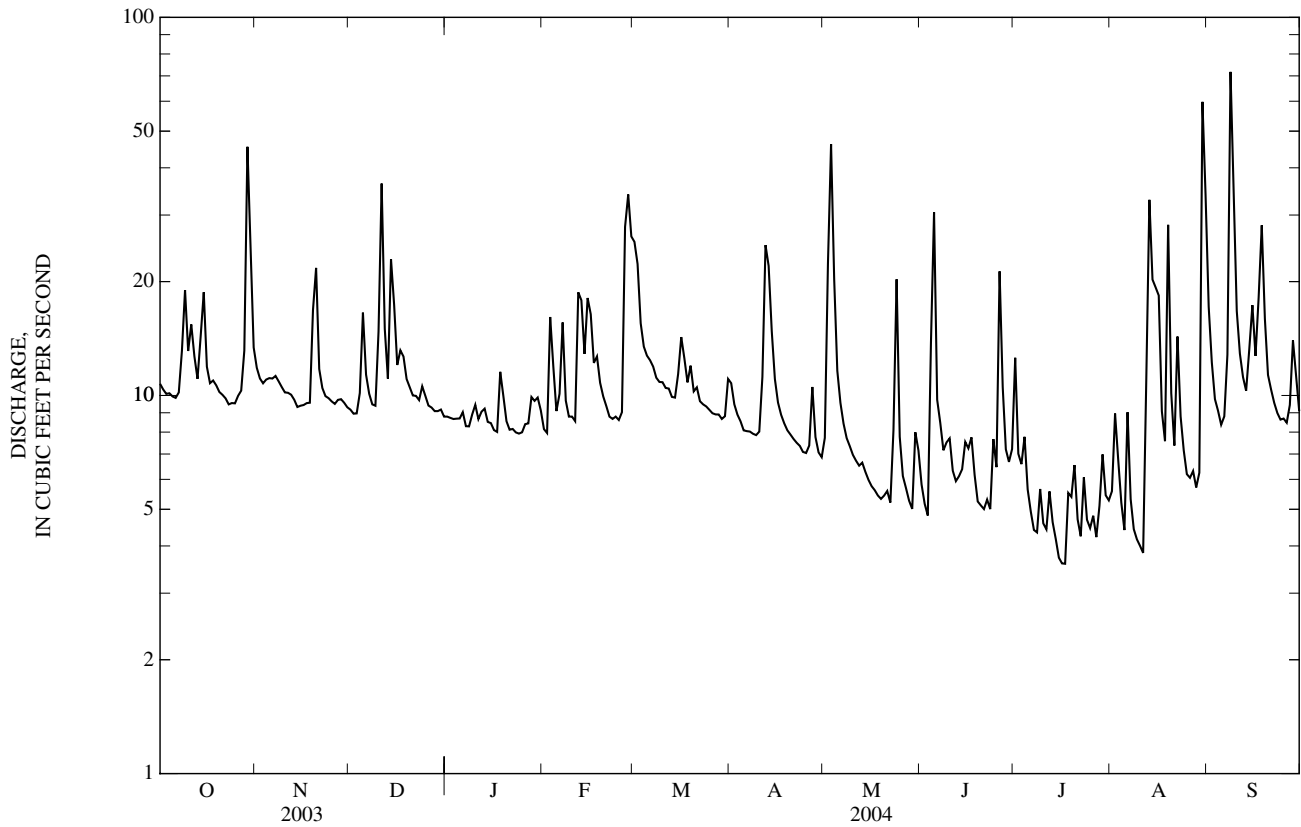


CAPE FEAR RIVER BASIN

02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1968 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 5,545.8                |        | 3,954.6             |        | 11.9                    |              |
| ANNUAL MEAN              | 15.2                   |        | 10.8                |        | 5.00                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 20.2                    | 1973         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 5.00                    | 2002         |
| HIGHEST DAILY MEAN       | 131                    | Aug 10 | 72                  | Sep 8  | 200                     | Apr 1, 1973  |
| LOWEST DAILY MEAN        | 5.8                    | Jan 29 | 3.6                 | Jul 16 | 0.94                    | Aug 13, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 6.1                    | Jan 23 | 4.2                 | Jul 11 | 1.3                     | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 100                 | Sep 8  | 394                     | Apr 1, 1973  |
| MAXIMUM PEAK STAGE       |                        |        | 2.63                | Sep 8  | 7.30                    | Apr 1, 1973  |
| INSTANTANEOUS LOW FLOW   |                        |        | 3.0*                | Jul 16 | 0.38*                   | Aug 14, 2002 |
| ANNUAL RUNOFF (CFSM)     | 1.99                   |        | 1.42                |        | 1.55                    |              |
| ANNUAL RUNOFF (INCHES)   | 27.04                  |        | 19.28               |        | 21.12                   |              |
| 10 PERCENT EXCEEDS       | 25                     |        | 17                  |        | 20                      |              |
| 50 PERCENT EXCEEDS       | 11                     |        | 9.4                 |        | 9.7                     |              |
| 90 PERCENT EXCEEDS       | 8.0                    |        | 5.4                 |        | 5.4                     |              |

\* See REMARKS.



02102908 FLAT CREEK NEAR INVERNESS, NC—Continued

PRECIPITATION RECORDS

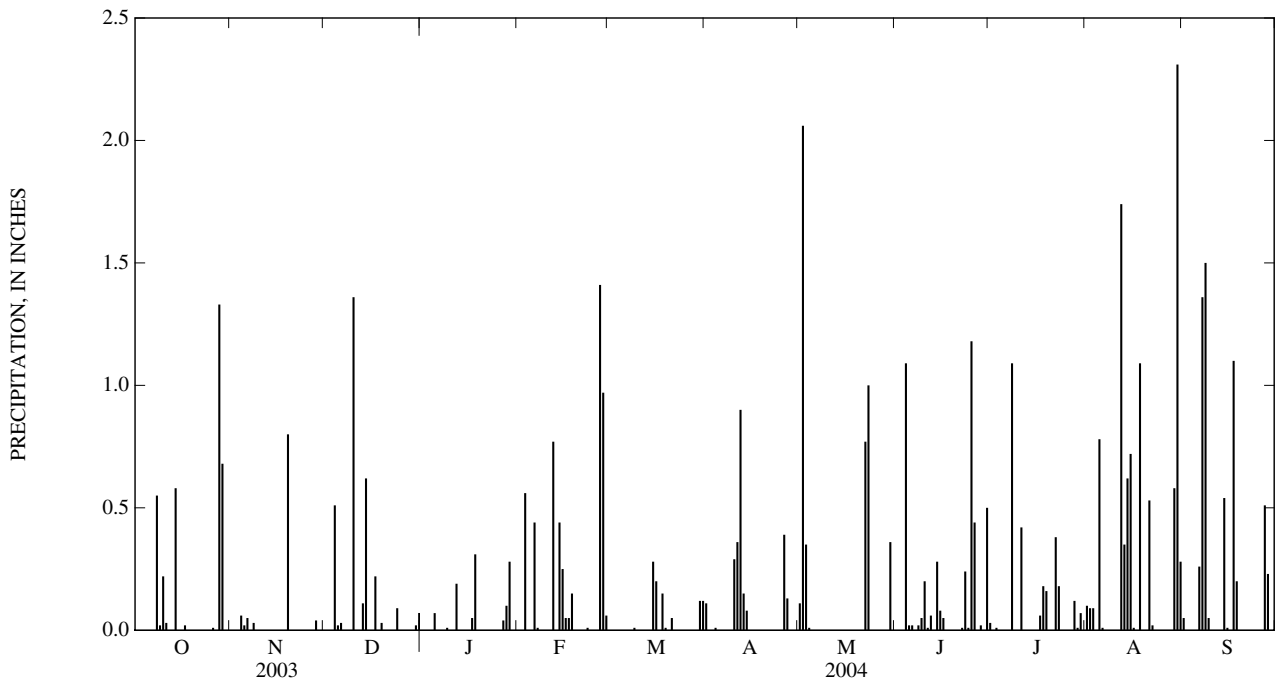
PERIOD OF RECORD.--April 2000 to current year.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.11 | 0.11 | 0.00 | 0.03 | 0.10 | 0.05 |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 2.06 | 0.00 | 0.00 | 0.09 | 0.00 |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.56 | 0.00 | 0.00 | 0.35 | 0.00 | 0.01 | 0.09 | 0.00 |
| 4     | 0.00 | 0.06 | 0.51 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 1.09 | 0.00 | 0.00 | 0.00 |
| 5     | 0.00 | 0.02 | 0.02 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.78 | 0.00 |
| 6     | 0.00 | 0.05 | 0.03 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.01 | 0.26 |
| 7     | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.36 |
| 8     | 0.55 | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 1.09 | 0.00 | 1.50 |
| 9     | 0.02 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.05 |
| 10    | 0.22 | 0.00 | 1.36 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | 0.20 | 0.00 | 0.00 | 0.00 |
| 11    | 0.03 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.36 | 0.00 | 0.01 | 0.42 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.19 | 0.77 | 0.00 | 0.90 | 0.00 | 0.06 | 0.00 | 1.74 | 0.00 |
| 13    | 0.00 | 0.00 | 0.11 | 0.00 | 0.00 | 0.00 | 0.15 | 0.00 | 0.00 | 0.00 | 0.35 | 0.00 |
| 14    | 0.58 | 0.00 | 0.62 | 0.00 | 0.44 | 0.00 | 0.08 | 0.00 | 0.28 | 0.00 | 0.62 | 0.54 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.25 | 0.28 | 0.00 | 0.00 | 0.08 | 0.00 | 0.72 | 0.01 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.20 | 0.00 | 0.00 | 0.05 | 0.00 | 0.01 | 0.00 |
| 17    | 0.02 | 0.00 | 0.22 | 0.05 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 1.10 |
| 18    | 0.00 | 0.00 | 0.00 | 0.31 | 0.15 | 0.15 | 0.00 | 0.00 | 0.00 | 0.18 | 1.09 | 0.20 |
| 19    | 0.00 | 0.80 | 0.03 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.16 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.77 | 0.01 | 0.38 | 0.02 | 0.00 |
| 23    | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 1.00 | 0.24 | 0.18 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.18 | 0.00 | 0.00 | 0.00 |
| 26    | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.44 | 0.00 | 0.00 | 0.00 |
| 27    | 0.00 | 0.00 | 0.00 | 0.04 | 1.41 | 0.00 | 0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.51 |
| 28    | 1.33 | 0.04 | 0.00 | 0.10 | 0.97 | 0.00 | 0.00 | 0.00 | 0.02 | 0.12 | 0.00 | 0.23 |
| 29    | 0.68 | 0.00 | 0.00 | 0.28 | 0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.58 | 0.00 |
| 30    | 0.00 | 0.00 | 0.02 | 0.00 | ---  | 0.12 | 0.00 | 0.36 | 0.50 | 0.07 | 2.31 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.12 | ---  | 0.00 | ---  | 0.00 | 0.28 | ---  |
| TOTAL | 3.44 | 1.00 | 3.01 | 1.05 | 5.17 | 0.94 | 2.42 | 4.66 | 4.28 | 2.71 | 9.32 | 5.81 |



02103000 LITTLE RIVER AT MANCHESTER, NC

LOCATION.--Lat 35°11'36", long 78°59'08", Cumberland County, Hydrologic Unit 03030004, on left bank 5 ft downstream from bridge on Secondary Road 1451 (East Manchester Road), 0.3 mi above Tank Creek and 0.2 mi downstream from bridge on Highway 87/24 North of Manchester.

DRAINAGE AREA.--348 mi<sup>2</sup>.

PERIOD OF RECORD.--October 1938 to September 1950, July 2002 to current year. Occasional discharge measurements September 1968 to June 2002.

GAGE.--Water-stage recorder. Elevation of gage is 122.16 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR   | MAY   | JUN   | JUL   | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|-------|-------|-------|-------|--------|--------|
| 1     | 377    | 609    | 285    | 272    | 315    | 1,610  | 303   | 178   | 106   | 125   | 165    | e1,010 |
| 2     | 348    | 481    | 274    | 267    | 294    | 1,370  | 318   | 341   | 95    | 137   | 163    | e980   |
| 3     | 314    | 388    | 268    | 266    | 371    | 847    | 308   | 829   | 91    | 121   | 173    | 550    |
| 4     | 293    | 348    | 275    | 274    | 414    | 820    | 289   | 1,190 | 138   | e110  | e166   | 400    |
| 5     | 285    | 353    | 349    | 433    | 399    | 735    | 268   | 1,560 | 252   | e92   | 126    | 295    |
| 6     | 277    | 347    | 368    | 594    | 410    | 945    | 248   | 738   | 178   | e78   | 139    | 235    |
| 7     | 274    | 352    | 361    | 455    | 581    | 738    | 239   | 479   | 160   | e68   | 116    | 233    |
| 8     | 298    | 350    | 328    | 401    | 547    | 517    | 233   | 370   | 147   | 84    | 91     | 1,320  |
| 9     | 380    | 339    | 304    | 351    | 526    | 456    | 225   | 298   | 132   | e150  | 78     | 2,030  |
| 10    | 426    | 332    | 376    | 333    | 489    | 434    | 299   | 251   | 130   | 131   | 67     | 2,630  |
| 11    | 437    | e328   | 670    | e310   | 430    | 415    | 477   | 224   | 122   | 90    | 65     | 1,740  |
| 12    | 418    | e324   | 751    | 304    | 415    | 406    | 481   | 206   | 120   | 105   | 65     | 895    |
| 13    | 400    | 320    | 1,150  | 358    | 520    | 393    | 553   | 199   | 112   | e96   | 197    | 658    |
| 14    | 405    | 296    | 1,080  | 387    | 563    | 381    | 595   | 179   | 106   | e94   | 283    | 718    |
| 15    | 446    | 283    | 917    | e360   | 635    | 385    | 681   | 165   | 108   | 82    | 452    | 514    |
| 16    | 434    | 271    | 700    | e340   | 623    | 414    | 544   | 158   | 117   | 63    | 531    | 498    |
| 17    | 422    | 269    | 648    | e320   | 574    | 511    | 339   | 151   | 115   | 55    | 350    | 809    |
| 18    | 362    | 269    | 602    | e340   | 564    | 699    | 293   | 145   | 121   | 60    | 260    | 1,020  |
| 19    | 327    | 357    | 553    | e420   | 508    | 482    | 265   | 138   | 108   | 72    | 519    | 712    |
| 20    | 311    | 471    | 509    | e350   | 454    | 417    | 246   | 142   | 93    | 78    | 415    | 609    |
| 21    | 297    | 474    | 458    | e300   | 414    | 397    | 227   | 137   | 86    | 74    | 292    | 630    |
| 22    | 285    | 448    | 429    | e280   | 380    | 369    | 216   | 129   | 84    | 61    | 544    | 406    |
| 23    | 268    | 394    | 410    | 270    | e360   | 340    | 204   | 154   | 81    | 68    | 264    | 344    |
| 24    | 255    | 349    | 338    | 268    | e340   | 349    | 192   | 263   | 92    | 69    | 182    | 400    |
| 25    | 257    | 326    | 325    | 350    | 331    | 458    | 183   | 238   | 102   | 60    | 149    | 385    |
| 26    | 250    | 309    | 316    | 359    | 336    | 422    | 180   | 171   | 446   | 59    | 133    | 277    |
| 27    | 260    | 298    | 301    | 369    | e700   | 296    | 213   | 134   | e260  | 53    | 124    | 291    |
| 28    | 319    | 301    | 290    | 377    | 845    | 277    | 208   | 111   | e190  | 149   | e112   | 568    |
| 29    | 769    | 301    | 283    | 387    | 1,350  | 269    | 195   | 98    | 140   | 130   | 124    | 386    |
| 30    | 750    | 292    | 283    | 396    | ---    | 266    | 182   | 145   | 121   | 122   | 963    | 409    |
| 31    | 723    | ---    | 279    | 330    | ---    | 281    | ---   | 123   | ---   | 148   | e1,020 | ---    |
| TOTAL | 11,667 | 10,579 | 14,480 | 10,821 | 14,688 | 16,699 | 9,204 | 9,644 | 4,153 | 2,884 | 8,328  | 21,952 |
| MEAN  | 376    | 353    | 467    | 349    | 506    | 539    | 307   | 311   | 138   | 93.0  | 269    | 732    |
| MAX   | 769    | 609    | 1,150  | 594    | 1,350  | 1,610  | 681   | 1,560 | 446   | 150   | 1,020  | 2,630  |
| MIN   | 250    | 269    | 268    | 266    | 294    | 266    | 180   | 98    | 81    | 53    | 65     | 233    |
| CFSM  | 1.08   | 1.01   | 1.34   | 1.00   | 1.46   | 1.55   | 0.88  | 0.89  | 0.40  | 0.27  | 0.77   | 2.10   |
| IN.   | 1.25   | 1.13   | 1.55   | 1.16   | 1.57   | 1.79   | 0.98  | 1.03  | 0.44  | 0.31  | 0.89   | 2.35   |

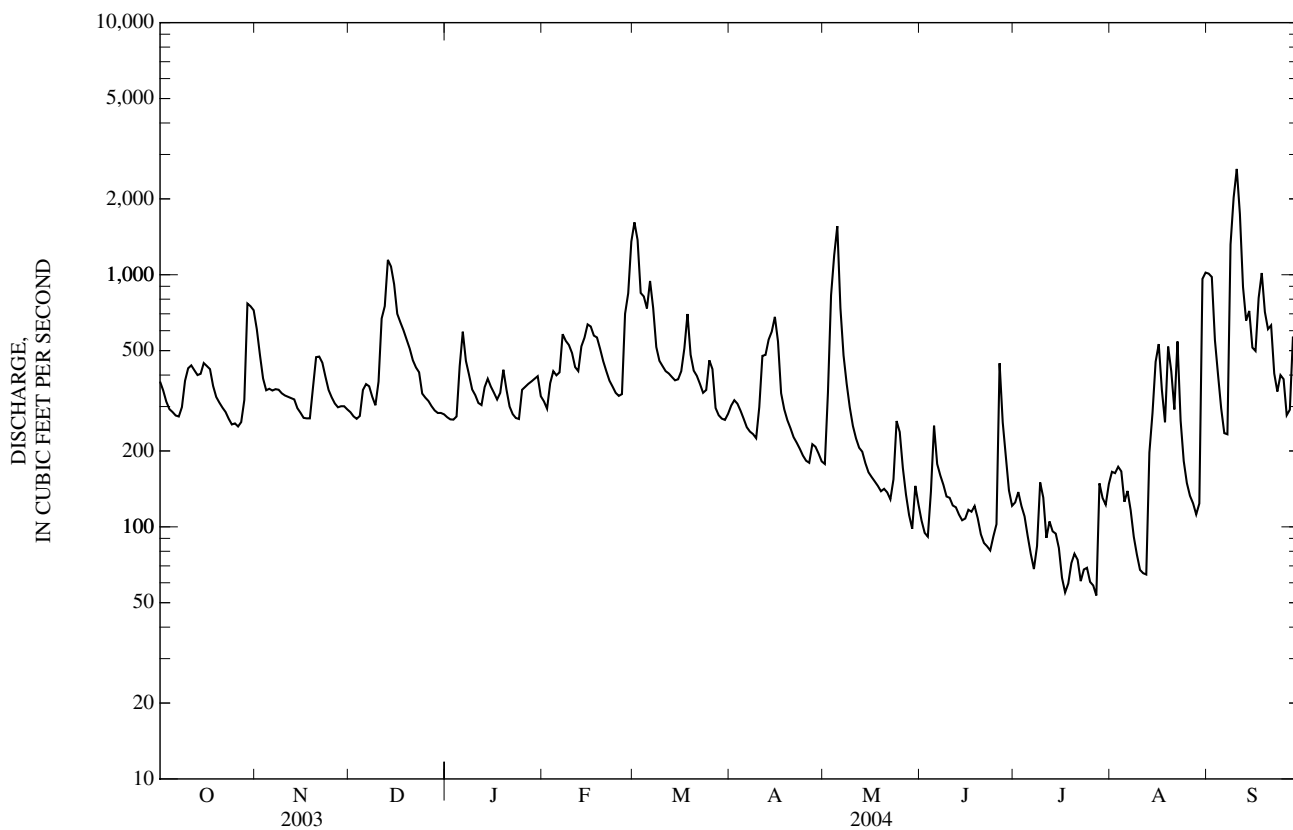
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2004, @ BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 275    | 355    | 463    | 524    | 657    | 727    | 567    | 353    | 215    | 397    | 436    | 386    |
| MAX  | 547    | 946    | 942    | 949    | 1,340  | 1,420  | 1,135  | 693    | 784    | 845    | 1,556  | 1,532  |
| (WY) | (1946) | (1948) | (1949) | (1946) | (1948) | (1944) | (1944) | (2003) | (2003) | (2003) | (2003) | (1945) |
| MIN  | 33.7   | 70.2   | 166    | 192    | 218    | 402    | 265    | 145    | 91.1   | 39.2   | 37.6   | 46.2   |
| (WY) | (1941) | (1942) | (1941) | (1942) | (1941) | (1941) | (1950) | (1941) | (1941) | (2002) | (2002) | (1940) |

02103000 LITTLE RIVER AT MANCHESTER, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1939 - 2004 <sup>@</sup> |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------------------|--------------|
| ANNUAL TOTAL             | 280,273                |        | 135,099             |        | 452                                  |              |
| ANNUAL MEAN              | 768                    |        | 369                 |        | 229                                  |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 774                                  | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 229                                  | 1941         |
| HIGHEST DAILY MEAN       | 5,010                  | Aug 11 | 2,630               | Sep 10 | 9,000                                | Sep 18, 1945 |
| LOWEST DAILY MEAN        | 250                    | Oct 26 | 53                  | Jul 27 | 19                                   | Aug 11, 2002 |
| ANNUAL SEVEN-DAY MINIMUM | 267                    | Oct 21 | 63                  | Jul 21 | 21                                   | Aug 8, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 2,850               | Sep 10 | 5,090                                | Aug 11, 2003 |
| MAXIMUM PEAK STAGE       |                        |        | 18.33               | Sep 10 | 24.72                                | Aug 11, 2003 |
| INSTANTANEOUS LOW FLOW   |                        |        | 49                  | Jul 17 | 16                                   | Aug 13, 2002 |
| ANNUAL RUNOFF (CFSM)     | 2.21                   |        | 1.06                |        | 1.30                                 |              |
| ANNUAL RUNOFF (INCHES)   | 29.96                  |        | 14.44               |        | 17.65                                |              |
| 10 PERCENT EXCEEDS       | 1,440                  |        | 686                 |        | 932                                  |              |
| 50 PERCENT EXCEEDS       | 576                    |        | 312                 |        | 336                                  |              |
| 90 PERCENT EXCEEDS       | 303                    |        | 106                 |        | 100                                  |              |

<sup>@</sup> See PERIOD OF RECORD.  
 e Estimated.



## 02104000 CAPE FEAR RIVER AT FAYETTEVILLE, NC

LOCATION.--Lat 35°03'02", long 78°51'30", Cumberland County, Hydrologic Unit 03030004, at State Highway 24 bridge at Fayetteville, 0.3 mi upstream of Atlantic Coast Railroad bridge, 0.1 mi downstream of Cross Creek.

DRAINAGE AREA.--4,395 mi<sup>2</sup>.

PERIOD OF RECORD.-- Discharge records January 1889 to September 1917, and October 1928 to September 1940. October 1986 to current year.

GAGE.--Water-stage recorder. Datum of gage is 20.52 ft above NGVD of 1929. Prior to March 4, 2003, at site 0.2 mi downstream at same datum. Satellite telemetry at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum, 48.3 ft, Sept. 24, 1945.

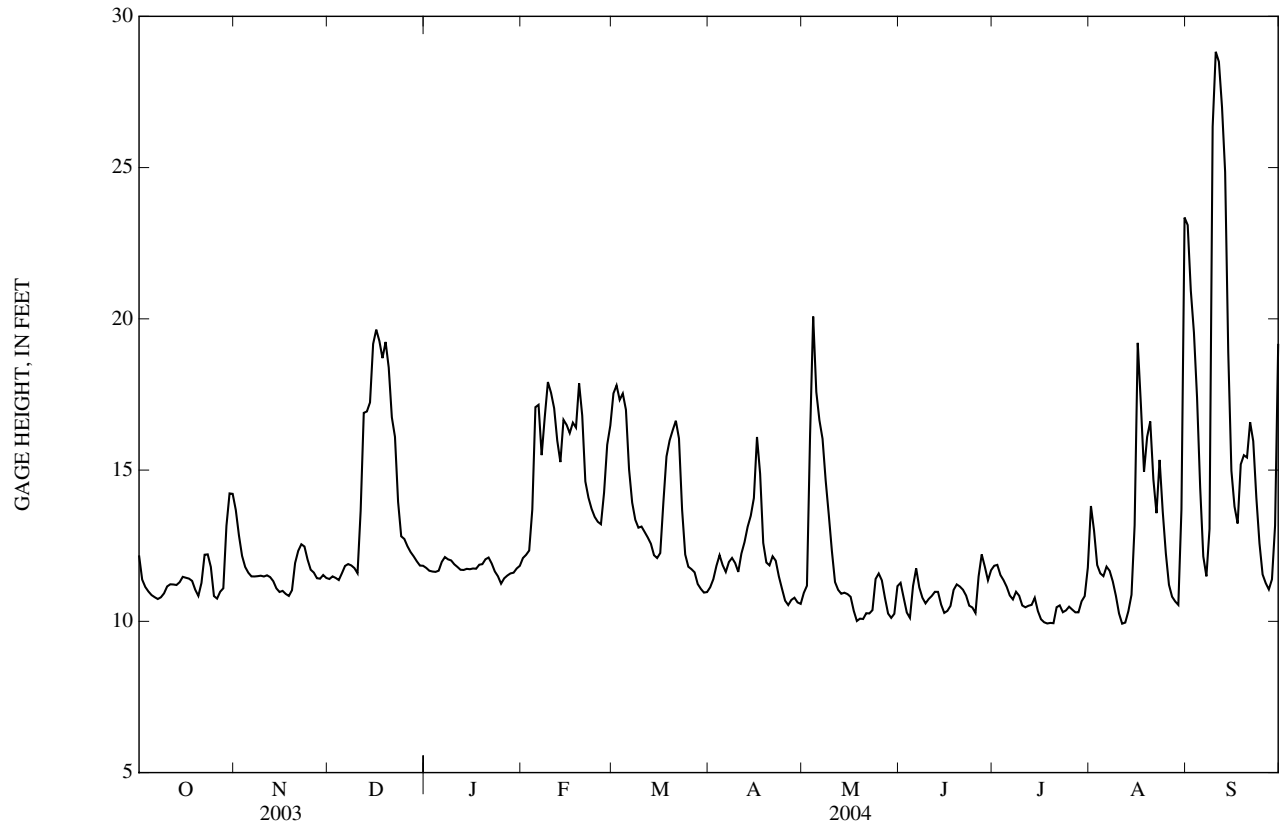
EXTREMES FOR PERIOD OF RECORD.--Maximum, 46.17 ft, Sept. 7, 1996; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum, 29.01 ft, Sept. 11; minimum, 9.89 ft, Aug. 11, 12.

GAGE HEIGHT, FEET  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY  | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1    | 12.18 | 13.68 | 11.40 | 11.77 | 12.09 | 17.54 | 11.13 | 10.94 | 11.27 | 11.84 | 13.81 | 23.10 |
| 2    | 11.38 | 12.84 | 11.49 | 11.67 | 12.20 | 17.80 | 11.39 | 11.18 | 10.78 | 11.87 | 12.99 | 20.93 |
| 3    | 11.14 | 12.16 | 11.43 | 11.65 | 12.34 | 17.32 | 11.84 | 16.14 | 10.29 | 11.53 | 11.86 | 19.55 |
| 4    | 10.99 | 11.80 | 11.36 | 11.64 | 13.70 | 17.53 | 12.19 | 20.08 | 10.11 | 11.36 | 11.59 | 17.40 |
| 5    | 10.87 | 11.61 | 11.59 | 11.67 | 17.08 | 16.99 | 11.86 | 17.58 | 11.17 | 11.14 | 11.49 | 14.43 |
| 6    | 10.80 | 11.49 | 11.83 | 11.97 | 17.16 | 15.03 | 11.63 | 16.65 | 11.75 | 10.86 | 11.81 | 12.15 |
| 7    | 10.74 | 11.48 | 11.89 | 12.13 | 15.49 | 13.93 | 11.96 | 16.03 | 11.12 | 10.72 | 11.67 | 11.49 |
| 8    | 10.80 | 11.49 | 11.85 | 12.05 | 16.76 | 13.36 | 12.10 | 14.66 | 10.78 | 10.98 | 11.32 | 13.06 |
| 9    | 10.93 | 11.51 | 11.76 | 12.01 | 17.91 | 13.10 | 11.93 | 13.52 | 10.59 | 10.85 | 10.84 | 26.35 |
| 10   | 11.15 | 11.48 | 11.59 | 11.89 | 17.56 | 13.13 | 11.63 | 12.32 | 10.74 | 10.52 | 10.26 | 28.83 |
| 11   | 11.22 | 11.52 | 13.65 | 11.80 | 17.05 | 12.95 | 12.24 | 11.30 | 10.84 | 10.46 | 9.92  | 28.50 |
| 12   | 11.22 | 11.46 | 16.89 | 11.70 | 15.97 | 12.77 | 12.62 | 11.04 | 10.98 | 10.52 | 9.96  | 27.00 |
| 13   | 11.20 | 11.33 | 16.94 | 11.70 | 15.26 | 12.56 | 13.12 | 10.91 | 10.97 | 10.54 | 10.34 | 24.85 |
| 14   | 11.30 | 11.09 | 17.24 | 11.74 | 16.66 | 12.19 | 13.49 | 10.95 | 10.55 | 10.78 | 10.88 | 18.89 |
| 15   | 11.47 | 10.97 | 19.17 | 11.72 | 16.49 | 12.09 | 14.08 | 10.90 | 10.28 | 10.34 | 13.18 | 14.98 |
| 16   | 11.44 | 11.01 | 19.64 | 11.75 | 16.22 | 12.26 | 16.09 | 10.81 | 10.34 | 10.07 | 19.21 | 13.80 |
| 17   | 11.41 | 10.91 | 19.27 | 11.74 | 16.57 | 13.93 | 14.88 | 10.35 | 10.51 | 9.97  | 17.18 | 13.23 |
| 18   | 11.34 | 10.84 | 18.70 | 11.87 | 16.41 | 15.45 | 12.59 | 10.01 | 11.04 | 9.93  | 14.94 | 15.19 |
| 19   | 11.05 | 11.03 | 19.24 | 11.89 | 17.87 | 15.98 | 11.95 | 10.09 | 11.22 | 9.95  | 16.10 | 15.49 |
| 20   | 10.84 | 11.93 | 18.39 | 12.05 | 16.80 | 16.32 | 11.85 | 10.08 | 11.15 | 9.94  | 16.61 | 15.42 |
| 21   | 11.27 | 12.33 | 16.74 | 12.11 | 14.62 | 16.63 | 12.15 | 10.27 | 11.04 | 10.47 | 14.69 | 16.58 |
| 22   | 12.20 | 12.55 | 16.10 | 11.91 | 14.09 | 16.05 | 12.01 | 10.26 | 10.85 | 10.53 | 13.58 | 15.96 |
| 23   | 12.21 | 12.47 | 13.95 | 11.65 | 13.72 | 13.69 | 11.49 | 10.37 | 10.52 | 10.30 | 15.34 | 14.08 |
| 24   | 11.80 | 12.04 | 12.81 | 11.49 | 13.45 | 12.21 | 11.08 | 11.40 | 10.46 | 10.36 | 13.63 | 12.58 |
| 25   | 10.84 | 11.71 | 12.72 | 11.24 | 13.29 | 11.81 | 10.69 | 11.58 | 10.28 | 10.48 | 12.24 | 11.55 |
| 26   | 10.75 | 11.61 | 12.48 | 11.42 | 13.21 | 11.73 | 10.54 | 11.35 | 11.48 | 10.39 | 11.21 | 11.26 |
| 27   | 10.98 | 11.43 | 12.29 | 11.51 | 14.25 | 11.62 | 10.71 | 10.77 | 12.21 | 10.30 | 10.81 | 11.05 |
| 28   | 11.09 | 11.41 | 12.15 | 11.58 | 15.84 | 11.23 | 10.78 | 10.26 | 11.80 | 10.30 | 10.66 | 11.39 |
| 29   | 13.16 | 11.53 | 11.99 | 11.61 | 16.48 | 11.07 | 10.63 | 10.11 | 11.36 | 10.66 | 10.54 | 13.17 |
| 30   | 14.23 | 11.43 | 11.84 | 11.75 | ---   | 10.95 | 10.58 | 10.25 | 11.69 | 10.83 | 13.70 | 19.17 |
| 31   | 14.21 | ---   | 11.84 | 11.84 | ---   | 10.97 | ---   | 11.16 | ---   | 11.77 | 23.35 | ---   |
| MEAN | 11.49 | 11.67 | 14.20 | 11.76 | 15.40 | 13.88 | 12.04 | 12.04 | 10.94 | 10.66 | 13.09 | 17.05 |
| MAX  | 14.23 | 13.68 | 19.64 | 12.13 | 17.91 | 17.80 | 16.09 | 20.08 | 12.21 | 11.87 | 23.35 | 28.83 |
| MIN  | 10.74 | 10.84 | 11.36 | 11.24 | 12.09 | 10.95 | 10.54 | 10.01 | 10.11 | 9.93  | 9.92  | 11.05 |

02104000 CAPE FEAR RIVER AT FAYETTEVILLE, NC—Continued



02104220 ROCKFISH CREEK AT RAEFORD, NC

LOCATION.--Lat 34°59'59", long 79°12'53", Hoke County, Hydrologic Unit 03030004, at upstream side of bridge on U.S. Highway 401, 1.0 mi downstream of Nicholson's Creek, and 1.0 mile north of Raeford.

DRAINAGE AREA.--93.1 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 178 ft above NGVD of 1929, from topographic map. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Minimum discharge for period of record also occurred July 23, 2002.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 134   | 237   | 101   | 102   | 103   | 281   | 119   | 79    | 73    | 105   | 97    | 455   |
| 2     | 128   | 168   | 99    | 101   | 97    | 263   | 117   | 107   | 65    | 95    | 111   | 295   |
| 3     | 123   | 126   | 97    | 101   | 117   | 232   | 108   | 174   | 59    | 77    | 127   | 203   |
| 4     | 121   | 116   | 99    | 101   | 138   | 196   | 103   | 224   | 64    | 80    | 95    | 129   |
| 5     | 120   | 115   | 121   | 104   | 132   | 160   | 98    | 270   | 121   | 70    | 73    | 112   |
| 6     | 118   | 117   | 129   | 128   | 120   | 140   | 94    | 201   | 111   | 60    | 70    | 107   |
| 7     | 120   | 123   | 124   | 124   | 163   | 135   | 92    | 114   | 97    | 54    | 66    | 132   |
| 8     | 130   | 122   | 112   | 108   | 150   | 129   | 92    | 93    | 87    | 50    | 58    | 577   |
| 9     | 164   | 117   | 105   | 105   | 120   | 122   | 92    | 85    | 89    | 50    | 56    | 820   |
| 10    | 178   | 112   | 112   | 111   | 109   | 120   | 96    | 80    | 106   | 59    | 55    | 505   |
| 11    | 183   | 108   | 171   | 108   | 105   | 117   | 169   | 76    | 89    | 59    | 53    | 327   |
| 12    | 171   | 108   | 210   | 104   | 122   | 115   | 184   | 74    | 77    | 65    | 67    | 242   |
| 13    | 153   | 107   | 216   | 106   | 162   | 114   | 220   | 80    | 71    | 67    | 159   | 182   |
| 14    | 145   | 103   | 218   | 104   | 168   | 111   | 213   | 77    | 69    | 62    | 192   | 149   |
| 15    | 168   | 101   | 195   | 101   | 181   | 112   | 176   | 73    | 73    | 54    | 221   | 156   |
| 16    | 167   | 101   | 175   | 99    | 177   | 122   | 129   | 70    | 82    | 49    | 234   | 165   |
| 17    | 154   | 102   | 160   | 96    | 165   | 133   | 109   | 68    | 105   | 47    | 201   | 168   |
| 18    | 139   | 103   | 144   | 107   | 153   | 135   | 101   | 66    | 103   | 60    | 158   | 193   |
| 19    | 132   | 115   | 137   | 122   | 136   | 126   | 97    | 66    | 83    | 70    | 97    | 212   |
| 20    | 127   | 148   | 129   | 114   | 123   | 119   | 93    | 84    | 67    | 115   | 84    | 199   |
| 21    | 123   | 159   | 120   | 102   | 115   | 116   | 89    | 83    | 60    | 95    | 74    | 165   |
| 22    | 120   | 154   | 114   | 98    | 109   | 114   | 86    | 81    | 61    | 72    | 138   | 128   |
| 23    | 118   | 130   | 111   | 97    | 105   | 107   | 84    | 97    | 60    | 127   | 205   | 117   |
| 24    | 116   | 112   | 113   | 96    | 104   | 105   | 82    | 127   | 74    | 111   | 151   | 111   |
| 25    | 114   | 107   | 117   | 95    | 104   | 104   | 80    | 130   | 84    | 76    | 92    | 109   |
| 26    | 118   | 104   | 113   | 99    | 104   | 104   | 83    | 99    | 157   | 68    | 78    | 108   |
| 27    | 121   | 103   | 108   | 100   | 152   | 102   | 103   | 76    | 193   | 65    | 77    | 108   |
| 28    | 131   | 105   | 106   | 107   | 237   | 102   | 102   | 69    | 145   | 84    | 74    | 126   |
| 29    | 221   | 107   | 105   | 111   | 271   | 100   | 87    | 63    | 98    | 144   | 83    | 140   |
| 30    | 285   | 103   | 105   | 112   | ---   | 99    | 80    | 72    | 79    | 105   | 380   | 136   |
| 31    | 299   | ---   | 104   | 110   | ---   | 108   | ---   | 86    | ---   | 97    | 520   | ---   |
| TOTAL | 4,641 | 3,633 | 4,070 | 3,273 | 4,042 | 4,143 | 3,378 | 3,144 | 2,702 | 2,392 | 4,146 | 6,576 |
| MEAN  | 150   | 121   | 131   | 106   | 139   | 134   | 113   | 101   | 90.1  | 77.2  | 134   | 219   |
| MAX   | 299   | 237   | 218   | 128   | 271   | 281   | 220   | 270   | 193   | 144   | 520   | 820   |
| MIN   | 114   | 101   | 97    | 95    | 97    | 99    | 80    | 63    | 59    | 47    | 53    | 107   |
| CFSM  | 1.61  | 1.30  | 1.41  | 1.13  | 1.50  | 1.44  | 1.21  | 1.09  | 0.97  | 0.83  | 1.44  | 2.35  |
| IN.   | 1.85  | 1.45  | 1.63  | 1.31  | 1.62  | 1.66  | 1.35  | 1.26  | 1.08  | 0.96  | 1.66  | 2.63  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2004, BY WATER YEAR (WY)

|      | 1988   | 1989   | 1990   | 1991   | 1992   | 1993   | 1994   | 1995   | 1996   | 1997   | 1998   | 1999   | 2000 | 2001 | 2002 | 2003 | 2004 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|------|------|------|------|------|
| MEAN | 115    | 115    | 115    | 137    | 141    | 152    | 135    | 106    | 92.6   | 94.0   | 101    | 117    |      |      |      |      |      |
| MAX  | 207    | 169    | 186    | 209    | 291    | 289    | 305    | 182    | 175    | 224    | 203    | 247    |      |      |      |      |      |
| (WY) | (2000) | (1990) | (1990) | (1998) | (1998) | (1998) | (1998) | (1989) | (1989) | (1989) | (2003) | (1996) |      |      |      |      |      |
| MIN  | 60.0   | 62.4   | 68.0   | 90.4   | 84.7   | 78.4   | 72.0   | 51.9   | 31.2   | 28.8   | 39.1   | 47.4   |      |      |      |      |      |
| (WY) | (2002) | (2002) | (2002) | (2003) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) |      |      |      |      |      |

SUMMARY STATISTICS

FOR 2003 CALENDAR YEAR

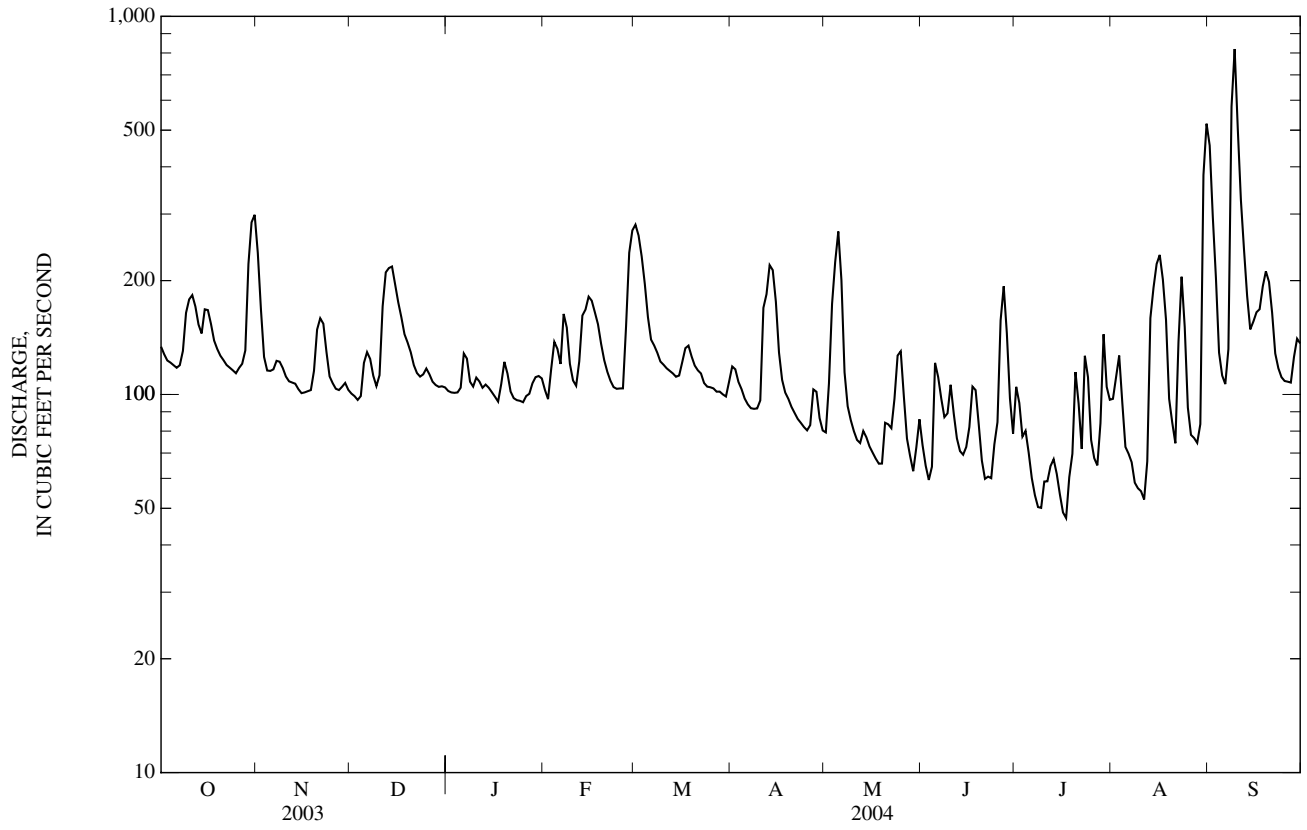
FOR 2004 WATER YEAR

WATER YEARS 1988 - 2004

|                          |        |        |       |
|--------------------------|--------|--------|-------|
| ANNUAL TOTAL             | 56,076 | 46,140 |       |
| ANNUAL MEAN              | 154    | 126    | 119   |
| HIGHEST ANNUAL MEAN      |        |        | 167   |
| LOWEST ANNUAL MEAN       |        |        | 60.8  |
| HIGHEST DAILY MEAN       | 586    | Sep 20 | 884   |
| LOWEST DAILY MEAN        | 76     | May 15 | 20    |
| ANNUAL SEVEN-DAY MINIMUM | 82     | Jan 23 | 22    |
| MAXIMUM PEAK FLOW        |        |        | 1,030 |
| MAXIMUM PEAK STAGE       |        |        | 8.05  |
| INSTANTANEOUS LOW FLOW   |        |        | 47    |
| ANNUAL RUNOFF (CFSM)     | 1.65   | 1.35   | 1.28  |
| ANNUAL RUNOFF (INCHES)   | 22.41  | 18.44  | 17.33 |
| 10 PERCENT EXCEEDS       | 238    | 193    | 198   |
| 50 PERCENT EXCEEDS       | 129    | 109    | 100   |
| 90 PERCENT EXCEEDS       | 93     | 70     | 57    |

\* See REMARKS.

02104220 ROCKFISH CREEK AT RAEFORD, NC—Continued





02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC

LOCATION.--Lat 34°50'45", long 78°49'14", Bladen County, Hydrologic Unit 03030005, on right bank 100 ft upstream from William O. Huske Lock, 1 mi downstream of Cumberland-Bladen County line, 7 mi north of Tar Heel, 9 mi upstream from Phillips Creek, and at river mile 123.

DRAINAGE AREA.--4,852 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1937 to current year. Prior to October 1964, published as "Cape Fear River at Lock 3 near Tarheel".

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

GAGE.--Water-stage recorder and concrete lock and dam contro1. Datum of gage is 28.97 ft above NGVD of 1929. Prior to Jan. 8, 1939, nonrecording gage on upper lock wall 100 ft downstream at same datum. Auxiliary water-stage recorder 1.8 mi downstream of base gage; prior to Jan. 14, 1943, auxiliary nonrecording gage 400 ft downstream on lower end of lock wall; Jan. 14, 1943, to Sept. 30, 1953, auxiliary water-stage recorder at site 600 ft downstream. U.S. Army Corps of Engineers satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Slight regulation at high flow, December 1972 to August 1981, caused by temporary storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants above station. Prior to regulation, maximum discharge not determined; minimum discharge, 170 ft<sup>3</sup>/s, Sep. 20, 1950. Minimum discharge during regulation from unknown source.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC     | JAN    | FEB     | MAR     | APR    | MAY    | JUN    | JUL    | AUG     | SEP     |
|-------|--------|--------|---------|--------|---------|---------|--------|--------|--------|--------|---------|---------|
| 1     | e3,600 | 4,880  | e2,260  | 2,490  | 2,780   | 8,970   | 1,950  | 1,890  | 2,270  | 2,910  | 5,170   | 20,800  |
| 2     | e2,500 | 3,890  | e2,200  | 2,400  | 2,920   | 9,340   | 2,190  | 1,980  | 1,760  | 2,990  | 4,430   | 12,900  |
| 3     | e2,200 | 3,130  | e2,250  | 2,380  | 3,060   | 8,780   | 2,650  | 7,130  | 1,340  | 2,600  | 2,990   | 9,610   |
| 4     | 1,860  | 2,730  | e2,200  | 2,360  | 4,260   | 8,850   | 3,050  | 12,900 | 1,130  | 2,370  | 2,620   | 7,800   |
| 5     | 1,760  | 2,520  | e2,510  | 2,390  | 7,980   | 8,330   | 2,680  | 9,890  | 1,990  | 2,180  | 2,520   | 5,920   |
| 6     | 1,700  | 2,400  | 2,650   | 2,710  | 8,430   | 6,260   | 2,370  | 7,990  | 2,800  | 1,920  | 2,810   | 3,210   |
| 7     | 1,650  | 2,390  | 2,720   | 2,880  | 6,620   | 4,870   | 2,610  | 7,360  | 2,210  | 1,720  | 2,710   | 2,430   |
| 8     | 1,700  | 2,410  | 2,660   | 2,780  | 7,550   | 4,230   | 2,780  | 5,940  | 1,850  | 1,910  | 2,330   | 3,820   |
| 9     | 1,820  | e2,380 | 2,590   | 2,760  | 9,180   | 3,810   | 2,720  | 4,540  | 1,660  | 1,910  | 1,890   | 23,400  |
| 10    | 2,000  | e2,330 | 2,410   | 2,660  | 8,780   | 3,880   | 2,500  | 3,260  | 1,670  | 1,570  | 1,350   | 23,300  |
| 11    | 2,120  | e2,250 | 4,350   | 2,560  | 8,190   | 3,650   | 3,170  | 2,090  | 1,910  | 1,510  | 1,020   | 22,200  |
| 12    | 2,120  | 2,360  | 8,300   | 2,450  | 7,140   | 3,490   | 3,590  | 1,850  | 1,930  | 1,550  | 1,060   | 20,100  |
| 13    | 2,090  | 2,270  | 8,150   | 2,450  | 6,190   | 3,380   | 4,170  | 1,730  | 2,080  | 1,550  | 1,400   | 17,100  |
| 14    | 2,120  | e2,020 | 8,500   | 2,480  | 7,710   | 2,990   | 4,550  | 1,810  | 1,660  | 1,800  | 1,910   | 6,540   |
| 15    | 2,280  | e1,900 | 10,800  | 2,480  | 7,810   | 2,900   | 5,080  | 1,850  | 1,360  | 1,430  | 4,140   | 6,450   |
| 16    | 2,270  | e1,820 | 12,000  | 2,500  | 7,400   | 3,020   | 7,220  | 1,790  | 1,390  | 1,180  | 11,800  | 5,060   |
| 17    | 2,240  | 1,870  | 11,300  | 2,480  | 7,740   | 4,700   | 6,400  | 1,340  | 1,510  | 1,060  | 9,630   | 4,140   |
| 18    | 2,260  | 1,800  | 10,400  | 2,580  | 7,640   | 6,420   | 3,600  | 985    | 1,870  | 1,030  | 6,490   | 6,430   |
| 19    | 1,990  | 1,950  | 10,900  | 2,640  | 8,980   | 7,140   | 2,770  | 1,070  | 2,230  | 1,050  | 7,260   | 6,980   |
| 20    | 1,770  | 2,870  | 10,200  | 2,740  | 8,330   | 7,370   | 2,560  | 1,100  | 2,160  | 1,050  | 8,000   | 6,850   |
| 21    | 2,000  | e3,300 | 7,860   | 2,810  | 5,560   | 7,830   | 2,860  | 1,310  | 2,070  | 1,440  | 6,130   | 7,640   |
| 22    | 2,990  | 3,480  | 7,070   | 2,650  | 4,930   | 7,100   | 2,740  | 1,320  | 1,950  | 1,580  | 4,500   | 7,520   |
| 23    | 3,020  | 3,440  | 4,930   | 2,450  | 4,480   | 4,600   | 2,340  | 1,390  | 1,650  | 1,380  | 6,730   | 5,260   |
| 24    | 2,710  | 2,990  | 3,470   | 2,320  | 4,140   | 2,890   | 2,080  | 2,290  | 1,540  | 1,430  | 4,870   | 3,750   |
| 25    | 1,840  | e2,760 | 3,380   | 2,120  | 3,960   | 2,470   | 1,690  | 2,500  | 1,380  | 1,540  | 3,330   | 2,530   |
| 26    | 1,660  | e2,560 | 3,160   | 2,260  | 3,890   | 2,430   | 1,460  | 2,290  | 2,260  | 1,460  | 2,220   | 2,230   |
| 27    | 1,860  | e2,370 | 2,970   | 2,340  | 5,170   | 2,500   | 1,580  | 1,760  | 3,370  | 1,350  | 1,820   | 2,050   |
| 28    | 1,960  | 2,310  | 2,840   | 2,390  | 7,250   | 2,170   | 1,660  | 1,300  | 2,940  | 1,350  | 1,670   | 2,270   |
| 29    | 4,210  | e2,300 | 2,680   | 2,370  | 7,870   | 1,930   | 1,520  | 1,200  | 2,450  | 1,730  | 1,570   | 3,520   |
| 30    | e5,710 | e2,340 | 2,560   | 2,480  | ---     | 1,730   | 1,460  | 1,280  | 2,690  | 1,940  | 4,720   | 10,400  |
| 31    | 5,520  | ---    | 2,540   | 2,570  | ---     | 1,750   | ---    | 2,030  | ---    | 2,670  | 17,800  | ---     |
| TOTAL | 75,530 | 78,020 | 162,810 | 77,930 | 185,940 | 149,780 | 88,000 | 97,165 | 59,080 | 53,160 | 136,890 | 262,210 |
| MEAN  | 2,436  | 2,601  | 5,252   | 2,514  | 6,412   | 4,832   | 2,933  | 3,134  | 1,969  | 1,715  | 4,416   | 8,740   |
| MAX   | 5,710  | 4,880  | 12,000  | 2,880  | 9,180   | 9,340   | 7,220  | 12,900 | 3,370  | 2,990  | 17,800  | 23,400  |
| MIN   | 1,650  | 1,800  | 2,200   | 2,120  | 2,780   | 1,730   | 1,460  | 985    | 1,130  | 1,030  | 1,020   | 2,050   |

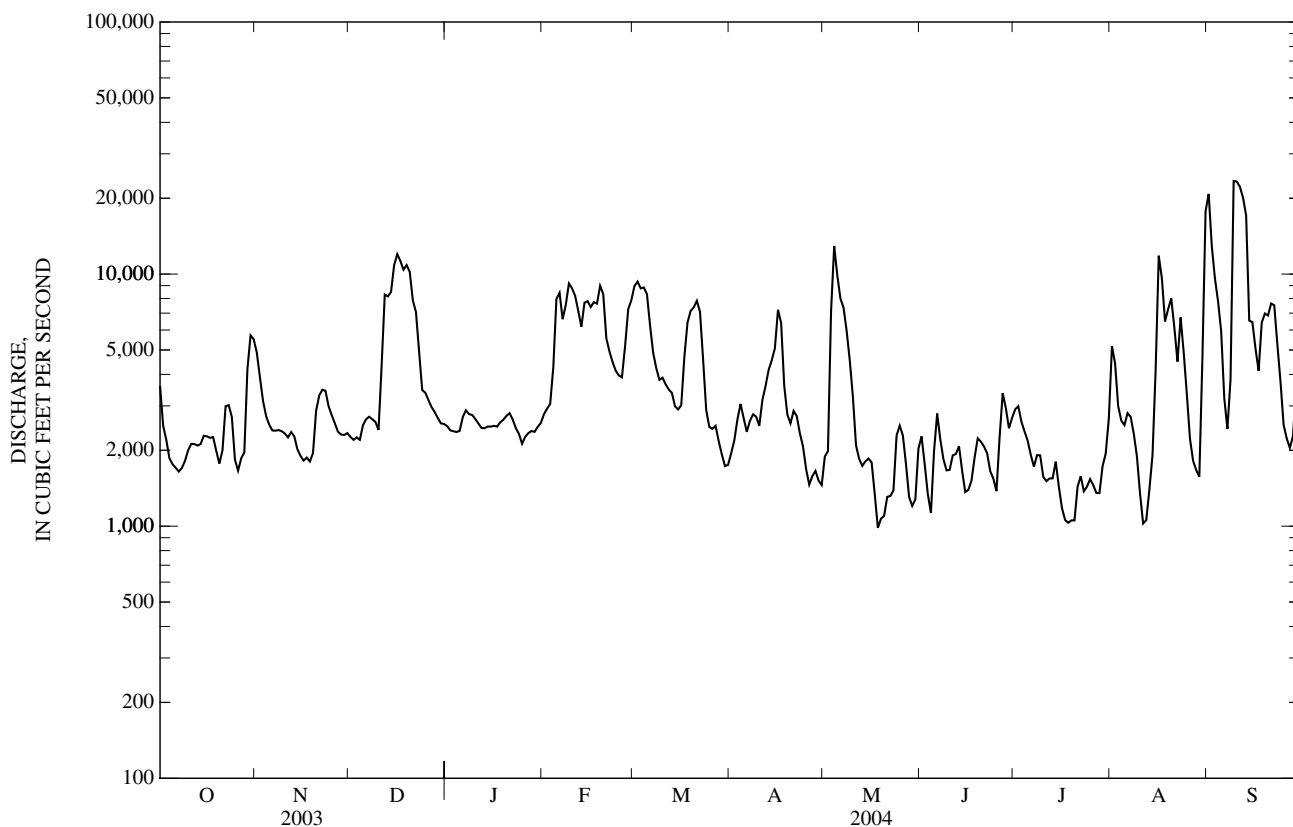
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004,\* BY WATER YEAR (WY)

|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 3,074  | 3,112  | 4,169  | 7,098  | 8,472  | 9,889  | 6,916  | 3,729  | 3,361  | 2,912  | 2,984  | 3,367  |
| MAX  | 10,230 | 10,190 | 11,360 | 17,240 | 24,770 | 21,520 | 18,510 | 11,770 | 14,200 | 9,262  | 12,430 | 18,950 |
| (WY) | (2000) | (1996) | (1984) | (1998) | (1998) | (1998) | (2003) | (1989) | (1982) | (1995) | (2003) | (1996) |
| MIN  | 979    | 978    | 1,004  | 1,633  | 2,799  | 2,510  | 1,508  | 882    | 846    | 699    | 701    | 935    |
| (WY) | (1987) | (2002) | (2002) | (2001) | (1986) | (2002) | (1986) | (2002) | (2002) | (2002) | (2002) | (1990) |

02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1982 - 2004* |              |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--------------|
| ANNUAL TOTAL             | 3,159,050              |        | 1,426,515           |        |                          |              |
| ANNUAL MEAN              | 8,655                  |        | 3,898               |        | 4,905                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 9,689                    | 2003         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 1,636                    | 2002         |
| HIGHEST DAILY MEAN       | 40,200                 | Apr 12 | 23,400              | Sep 9  | 60,000                   | Sep 8, 1996  |
| LOWEST DAILY MEAN        | 1,440                  | May 16 | 985                 | May 18 | 154                      | Aug 13, 1999 |
| ANNUAL SEVEN-DAY MINIMUM | 1,750                  | May 13 | 1,180               | Jul 15 | 408                      | Aug 7, 2002  |
| MAXIMUM PEAK FLOW        |                        |        | 22,700              | Sep 11 | NOT DETERMINED           |              |
| MAXIMUM PEAK STAGE       |                        |        | 13.97               | Sep 11 | 26.75                    | Sep 8, 1996  |
| INSTANTANEOUS LOW FLOW   |                        |        | 926                 | May 18 | 36*                      | Aug 13, 1999 |
| 10 PERCENT EXCEEDS       | 20,200                 |        | 7,980               |        | 13,000                   |              |
| 50 PERCENT EXCEEDS       | 6,000                  |        | 2,560               |        | 2,380                    |              |
| 90 PERCENT EXCEEDS       | 2,030                  |        | 1,530               |        | 983                      |              |

\* Regulated period only (1982-2004). See REMARKS.  
 e Estimated.



02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC—Continued

PRECIPITATION RECORDS

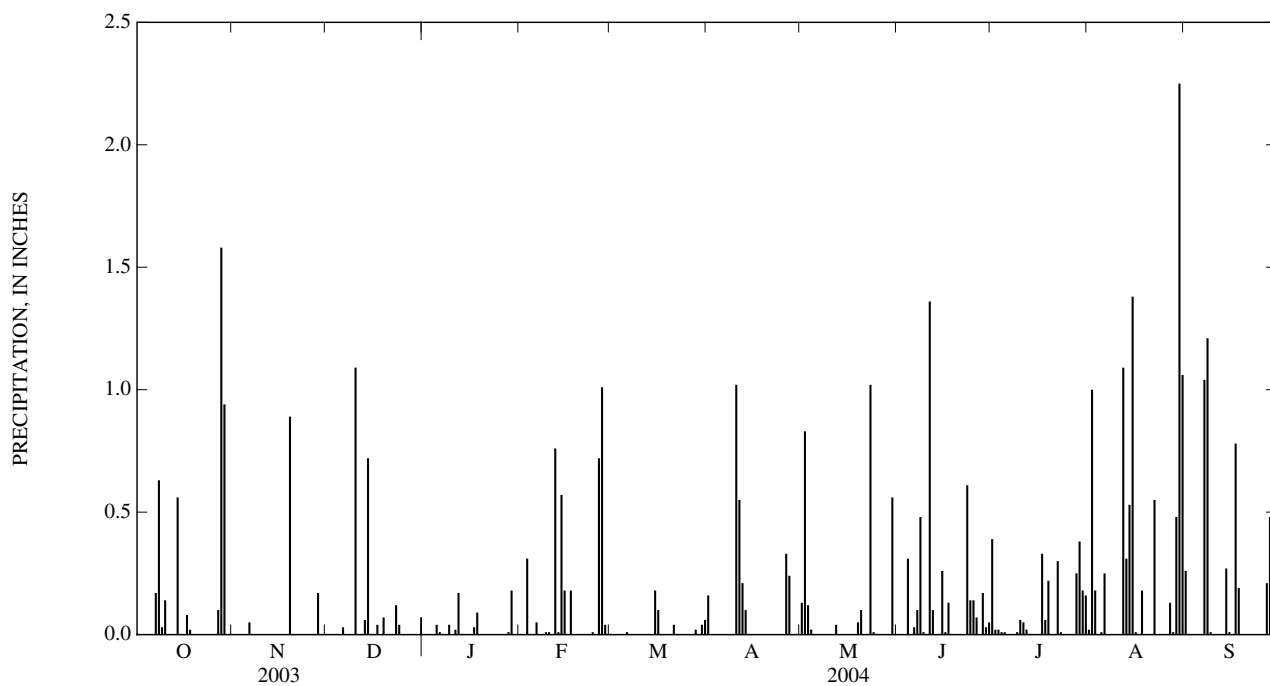
PERIOD OF RECORD.--October 2003 to September 2004. Prior precipitation records are unreliable and should not be used.

GAGE.--Tipping-bucket raingage and data collection platform. Satellite telemetry at station.

REMARKS.--Gage is operated in cooperation with the U.S. Army Corps of Engineers. Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG  | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.16 | 0.13 | 0.00 | 0.39 | 0.02 | 0.26 |
| 2     | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.83 | 0.00 | 0.02 | 1.00 | 0.00 |
| 3     | 0.00 | 0.00 | ---  | 0.00 | 0.31 | 0.00 | 0.00 | 0.12 | 0.00 | 0.02 | 0.18 | 0.00 |
| 4     | 0.00 | 0.00 | ---  | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.31 | 0.01 | 0.00 | 0.00 |
| 5     | 0.00 | 0.00 | ---  | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 |
| 6     | 0.00 | 0.05 | 0.03 | 0.01 | 0.05 | 0.01 | 0.00 | 0.00 | 0.03 | 0.00 | 0.25 | 0.00 |
| 7     | 0.17 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 1.04 |
| 8     | 0.63 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.48 | 0.00 | 0.00 | 1.21 |
| 9     | 0.03 | 0.00 | 0.00 | 0.04 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 | 0.00 | 0.01 |
| 10    | 0.14 | 0.00 | 1.09 | 0.00 | 0.01 | 0.00 | 1.02 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 |
| 11    | 0.00 | 0.00 | 0.00 | 0.02 | 0.00 | 0.00 | 0.55 | 0.00 | 1.36 | 0.05 | 0.00 | 0.00 |
| 12    | 0.00 | 0.00 | 0.00 | 0.17 | 0.76 | 0.00 | 0.21 | 0.04 | 0.10 | 0.02 | 1.09 | 0.00 |
| 13    | 0.00 | 0.00 | 0.06 | 0.00 | 0.01 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.31 | 0.00 |
| 14    | 0.56 | 0.00 | 0.72 | 0.00 | 0.57 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.53 | 0.27 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.18 | 0.18 | 0.00 | 0.00 | 0.26 | 0.00 | 1.38 | 0.01 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 |
| 17    | 0.08 | 0.00 | 0.04 | 0.03 | 0.18 | 0.00 | 0.00 | 0.00 | 0.13 | 0.33 | 0.00 | 0.78 |
| 18    | 0.02 | 0.00 | 0.00 | 0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.18 | 0.19 |
| 19    | 0.00 | 0.89 | 0.07 | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.00 | 0.22 | 0.00 | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.10 | 0.00 | 0.00 | 0.00 | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.30 | 0.55 | 0.00 |
| 23    | 0.00 | 0.00 | 0.12 | 0.00 | 0.00 | 0.00 | 0.00 | 1.02 | 0.61 | 0.01 | 0.00 | 0.00 |
| 24    | 0.00 | 0.00 | 0.04 | 0.00 | 0.01 | 0.00 | 0.00 | 0.01 | 0.14 | 0.00 | 0.00 | 0.00 |
| 25    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 |
| 26    | 0.00 | 0.00 | 0.00 | 0.00 | 0.72 | 0.00 | 0.33 | 0.00 | 0.07 | 0.00 | 0.00 | 0.00 |
| 27    | 0.10 | 0.00 | 0.00 | 0.00 | 1.01 | 0.00 | 0.24 | 0.00 | 0.00 | 0.00 | 0.13 | 0.21 |
| 28    | 1.58 | 0.17 | 0.00 | 0.01 | 0.04 | 0.02 | 0.00 | 0.00 | 0.17 | 0.25 | 0.01 | 0.48 |
| 29    | 0.94 | 0.00 | 0.00 | 0.18 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | 0.38 | 0.48 | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.04 | 0.00 | 0.56 | 0.05 | 0.18 | 2.25 | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.06 | ---  | 0.00 | ---  | 0.16 | 1.06 | ---  |
| TOTAL | 4.25 | 1.11 | ---  | 0.59 | 3.86 | 0.45 | 2.61 | 2.88 | 4.00 | 2.48 | 9.44 | 4.46 |



02105500 CAPE FEAR RIVER AT WILLIAM O. HUSKE LOCK NEAR TARHEEL, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1947, 1955, 2000 to February 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: June 2000 to February 2004.

pH: June 2000 to February 2004.

WATER TEMPERATURE: June 2000 to February 2004.

DISSOLVED OXYGEN: June 2000 to February 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: June 2000 to February 2004.

TURBIDITY: October 2000 to February 2003.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from June 2000 to February 2004.

REMARKS.--Station operated in cooperation with the Middle Cape Fear River Association. The constituents were monitored at approximately 10 ft above the streambed. On June 28, 2002 the data sonde was raised to approximately 16 ft above the streambed. Beginning October 1, 2000 dissolved oxygen, percent saturation was computed using a barometric pressure of 760mm Hg. Daily records of water temperature for water years 1947 and 1955 are available in the files of the District Office in Raleigh, NC.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                            | MAXIMUM RECORDED                             | MINIMUM RECORDED           |
|--|--|----------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 291, September 3, 2002                       | 38, April 12, 13, 14, 2003 |
| pH, standard units                     | 9.6, August 25, 2002                         | 5.6, August 13, 14, 2003   |
| WATER TEMPERATURE, °C                  | 32.3, July 31, 2002                          | 2.5, January 28, 2003      |
| DISSOLVED OXYGEN, mg/L                 | 13.4, January 30, 2001, January 28, 29, 2003 | 1.3, June 14, 2002         |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 130, July 16, 2000                           | 17, June 14, 2002          |
| TURBIDITY, NTU                         | 420, January 24, 2002                        | 0.9, May 19, 2002          |

EXTREMES FOR CURRENT YEAR.--

| CONSTITUENT                            | MAXIMUM RECORDED       | MINIMUM RECORDED                        |
|--|------------------------|---|
| SPECIFIC CONDUCTANCE, microsiemens     | 132, December 7, 8     | 82, October 14, 16                      |
| pH, standard units                     | 7.6, February 3        | 5.9, October 31, November 1             |
| WATER TEMPERATURE, °C                  | 21.4, October 1        | 3.4, January 30                         |
| DISSOLVED OXYGEN, mg/L                 | 13.3, February 2, 3, 4 | 6.1, October 12, 13                     |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 104, February 3, 4     | 64, November 22, 26, 27, 29, December 1 |













02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC

LOCATION.--Lat 34°24'16", long 78°17'37", Bladen County, Hydrologic Unit 03030005, on right bank near upstream end of Lock 1, 1.3 mi upstream from Natmore Creek, 2.0 mi upstream from bridge on State Highway 11, 4.6 mi southeast of Kelly, and at river mile 67.

DRAINAGE AREA.--5,255 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1969 to current year.

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

GAGE.--Water-stage recorder with concrete lock and dam control. Datum of gage is 2.90 ft below NGVD of 1929 (U.S. Army Corps of Engineers bench mark). Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records fair. Slight regulation at high flow December 1972 to August 1981, caused by storage in B. Everett Jordan Lake. Flow regulated since September 1981 by B. Everett Jordan Lake (station 02098197). Slight diurnal fluctuation and some regulation for short periods at low flow caused by power plants upstream from station. The City of Wilmington diverted an average of 26.3 ft<sup>3</sup>/s for municipal water supply, most of which was returned downstream of station as treated effluent. Prior to regulation, maximum discharge: 57,000 ft<sup>3</sup>/s, March 3, 1979; gage height: 24.92 ft, from floodmarks. Minimum discharge prior to regulation, 406 ft<sup>3</sup>/s, July 1, 1981. Minimum discharge for period of record not determined due to fish lockage.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC     | JAN    | FEB     | MAR     | APR     | MAY     | JUN    | JUL    | AUG     | SEP     |
|-------|--------|--------|---------|--------|---------|---------|---------|---------|--------|--------|---------|---------|
| 1     | 6,370  | 6,420  | 2,550   | 3,190  | 3,180   | 9,320   | 2,300   | 1,870   | 2,360  | 2,840  | 3,940   | 14,600  |
| 2     | 3,640  | 5,540  | 2,530   | 3,100  | 3,400   | 9,970   | 2,390   | 1,990   | 2,280  | 3,280  | 5,470   | 16,100  |
| 3     | 2,540  | 4,460  | 2,580   | 3,010  | 3,510   | 10,300  | 2,620   | 4,190   | 1,800  | 3,060  | 4,310   | 15,700  |
| 4     | 2,230  | 3,610  | 2,570   | 2,960  | 3,930   | 10,000  | 3,110   | 9,180   | 1,330  | 2,680  | 3,260   | 14,400  |
| 5     | 2,040  | 3,140  | 2,760   | 2,930  | 5,870   | 9,920   | 3,330   | 11,300  | 1,370  | 2,460  | 2,880   | 11,600  |
| 6     | 1,880  | 2,930  | 3,040   | 3,080  | 8,390   | 9,240   | 3,030   | 10,400  | 2,420  | 2,140  | 2,860   | 7,480   |
| 7     | 1,630  | 2,920  | 3,230   | 3,350  | 8,560   | 7,330   | 2,920   | 9,140   | 2,700  | 1,720  | 3,090   | 4,530   |
| 8     | 1,720  | 3,030  | 3,200   | 3,430  | 7,330   | 5,970   | 3,190   | 8,050   | 2,150  | 1,630  | 2,810   | 4,060   |
| 9     | 1,870  | 2,990  | 3,160   | 3,410  | 8,430   | 5,250   | 3,280   | 6,460   | 1,820  | 1,790  | 2,400   | 8,800   |
| 10    | 1,980  | 2,890  | 3,030   | 3,370  | 9,320   | 5,120   | 3,070   | 5,270   | 1,580  | 1,730  | 1,830   | 16,400  |
| 11    | 2,150  | 2,660  | 3,800   | 3,230  | 9,230   | 4,770   | 3,140   | 3,750   | 1,870  | 1,680  | 1,300   | 19,100  |
| 12    | 2,190  | 2,620  | 6,730   | 3,090  | 8,880   | 4,490   | 4,720   | 2,730   | 2,110  | 1,680  | 1,080   | 20,600  |
| 13    | 2,150  | 2,540  | 8,830   | 3,000  | 7,960   | 4,320   | 5,610   | 2,420   | 2,230  | 1,700  | 1,570   | 21,200  |
| 14    | 2,210  | 2,290  | 9,580   | 2,990  | 7,620   | 3,940   | 6,170   | 2,310   | 2,070  | 1,820  | 2,740   | 20,600  |
| 15    | 2,370  | 2,050  | 10,400  | 3,020  | 8,790   | 3,640   | 6,200   | 2,130   | 1,880  | 1,800  | 5,120   | 16,900  |
| 16    | 2,480  | 1,950  | 11,700  | 3,000  | 8,830   | 3,560   | 6,800   | 2,030   | 1,640  | 1,460  | 9,200   | 10,700  |
| 17    | 2,440  | 1,960  | 12,200  | 3,000  | 8,650   | 4,080   | 7,920   | 1,850   | 1,690  | 1,220  | 12,800  | 6,820   |
| 18    | 2,410  | 1,930  | 12,100  | 3,030  | 8,870   | 5,690   | 6,410   | 1,490   | 1,960  | 1,180  | 11,200  | 6,300   |
| 19    | 2,230  | 1,930  | 11,700  | 3,150  | 8,840   | 7,040   | 4,500   | 1,250   | 2,440  | 1,140  | 8,830   | 7,760   |
| 20    | 1,910  | 2,610  | 11,800  | 3,190  | 9,800   | 7,480   | 3,620   | 1,200   | 2,530  | 1,150  | 9,390   | 8,030   |
| 21    | 1,760  | 3,530  | 11,000  | 3,400  | 8,640   | 7,970   | 3,550   | 1,260   | 2,400  | 1,230  | 9,400   | 7,920   |
| 22    | 2,390  | 3,860  | 9,360   | 3,420  | 6,700   | 8,080   | 3,670   | 1,320   | 2,250  | 1,610  | 7,140   | 8,870   |
| 23    | 3,050  | 4,030  | 8,090   | 3,230  | 5,860   | 7,360   | 3,390   | 1,310   | 1,980  | 1,610  | 6,840   | 7,850   |
| 24    | 3,130  | 3,790  | 5,850   | 2,950  | 5,430   | 5,170   | 2,710   | 1,790   | 1,760  | 1,520  | 7,460   | 5,900   |
| 25    | 2,490  | 3,290  | 4,770   | 2,740  | 5,160   | 3,650   | 2,160   | 2,730   | 1,600  | 1,560  | 5,800   | 3,940   |
| 26    | 1,770  | 2,950  | 4,400   | 2,680  | 5,150   | 3,130   | 1,870   | 2,800   | 1,670  | 1,590  | 4,010   | 2,900   |
| 27    | 1,710  | 2,770  | 4,050   | 2,880  | 5,800   | 3,010   | 2,180   | 2,470   | 2,990  | 1,480  | 2,980   | 2,520   |
| 28    | 1,910  | 2,580  | 3,810   | 3,010  | 7,510   | 2,760   | 2,300   | 1,950   | 3,540  | 1,370  | 2,520   | 2,410   |
| 29    | 3,660  | 2,580  | 3,590   | 3,120  | 8,680   | 2,490   | 2,200   | 1,430   | 2,880  | 1,510  | 2,280   | 2,870   |
| 30    | 6,300  | 2,630  | 3,390   | 3,090  | ---     | 2,360   | 1,950   | 1,280   | 2,550  | 1,870  | 2,900   | 6,310   |
| 31    | 6,770  | ---    | 3,230   | 3,080  | ---     | 2,320   | ---     | 1,530   | ---    | 2,070  | 8,480   | ---     |
| TOTAL | 83,380 | 92,480 | 189,030 | 96,130 | 208,320 | 179,730 | 110,310 | 108,880 | 63,850 | 55,580 | 155,890 | 303,170 |
| MEAN  | 2,690  | 3,083  | 6,098   | 3,101  | 7,183   | 5,798   | 3,677   | 3,512   | 2,128  | 1,793  | 5,029   | 10,110  |
| MAX   | 6,770  | 6,420  | 12,200  | 3,430  | 9,800   | 10,300  | 7,920   | 11,300  | 3,540  | 3,280  | 12,800  | 21,200  |
| MIN   | 1,630  | 1,930  | 2,530   | 2,680  | 3,180   | 2,320   | 1,870   | 1,200   | 1,330  | 1,140  | 1,080   | 2,410   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1982 - 2004,\* BY WATER YEAR (WY)

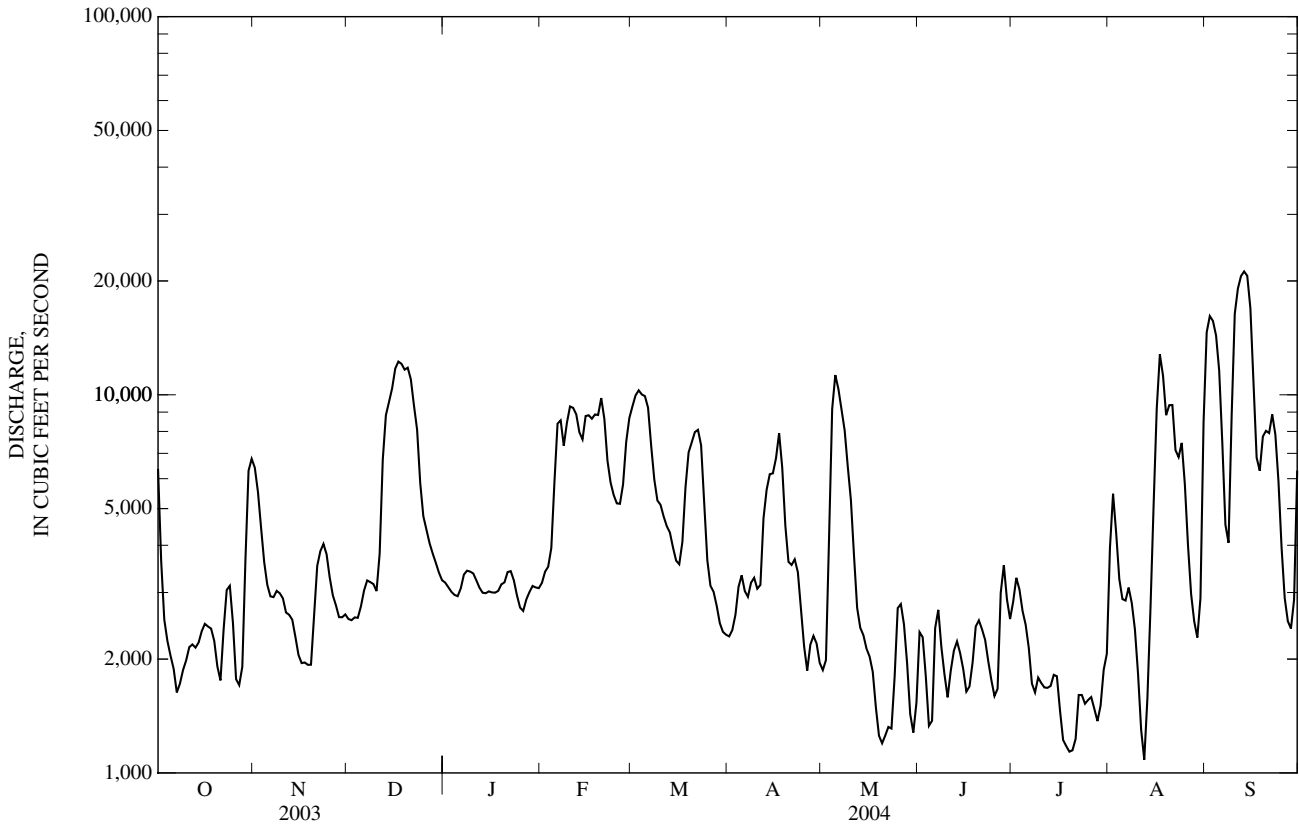
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 3,560  | 3,443  | 4,751  | 7,895  | 9,450  | 10,960 | 8,144  | 4,117  | 3,861  | 3,175  | 3,385  | 4,126  |
| MAX  | 15,080 | 11,390 | 11,050 | 17,180 | 27,780 | 23,830 | 21,650 | 12,110 | 15,070 | 10,860 | 13,400 | 22,580 |
| (WY) | (2000) | (1996) | (1984) | (1998) | (1998) | (1998) | (2003) | (1989) | (1982) | (1995) | (2003) | (1996) |
| MIN  | 1,023  | 1,062  | 1,111  | 1,717  | 2,992  | 3,016  | 1,667  | 968    | 874    | 802    | 776    | 985    |
| (WY) | (1999) | (2002) | (2002) | (2001) | (2001) | (2002) | (1986) | (2002) | (2002) | (2002) | (2002) | (1990) |

CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1982 - 2004* |  |
|--------------------------|------------------------|--------|---------------------|--------|--------------------------|--|
| ANNUAL TOTAL             | 3,546,260              |        | 1,646,750           |        | 5,551                    |  |
| ANNUAL MEAN              | 9,716                  |        | 4,499               |        | 10,740                   |  |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1,833                    |  |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 47,600                   |  |
| HIGHEST DAILY MEAN       | 42,800                 | Apr 15 | 21,200              | Sep 13 | 2003                     |  |
| LOWEST DAILY MEAN        | 1,630                  | Oct 7  | 1,080               | Aug 12 | 2002                     |  |
| ANNUAL SEVEN-DAY MINIMUM | 1,900                  | Oct 5  | 1,280               | Jul 16 | 179                      |  |
| MAXIMUM PEAK FLOW        |                        |        |                     |        | 350                      |  |
| MAXIMUM PEAK STAGE       |                        |        |                     |        | 48,300                   |  |
| INSTANTANEOUS LOW FLOW   |                        |        |                     |        | 24.29                    |  |
| 10 PERCENT EXCEEDS       | 21,400                 |        | 1,030               | Aug 12 | NOT DETERMINED*          |  |
| 50 PERCENT EXCEEDS       | 7,330                  |        | 9,210               |        | 14,800                   |  |
| 90 PERCENT EXCEEDS       | 2,200                  |        | 3,080               |        | 2,840                    |  |
|                          |                        |        | 1,690               |        | 1,050                    |  |

\* Regulated period only (1982-2004). See REMARKS.



02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956 to 1996, September 1999, 2003 to December 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: January 1973 to September 1984, September 2003 to December 2004.

SALINITY: September 2003 to December 2004.

pH: September 2003 to December 2004.

WATER TEMPERATURE: January 1973 to September 1984, September 2003 to December 2004.

DISSOLVED OXYGEN: September 2003 to December 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: September 2003 to December 2004.

INSTRUMENTATION.--Water-quality monitor from May 1973 to September 1984 and September 2003 to December 2004.

REMARKS.--Station operated as part of NASQAN network from January 1973 to 1995. Station currently operated in cooperation with the North Carolina Department of Environment and Natural Resources. Daily records of specific conductance for period October 1956 to September 1961 are available in the files of the District office in Raleigh. During period 1956-73, data were collected at bridge on State Highway 11 located 2 mi downstream and published as Cape Fear River near Acme (station 02105771). Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water-Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                            | MAXIMUM RECORDED                                | MINIMUM RECORDED                          |
|--|---|---|
| SPECIFIC CONDUCTANCE, microsiemens     | 317, October 19, 20, 1976                       | 40, June 26, 1973                         |
| SALINITY, ppt                          | 0.07, on several days during the period         | 0.02, September 3, 11, 12, 22, 2004       |
| pH, standard units                     | 7.4, April 12, 13, 2004                         | 6.0, June 16, 2004                        |
| WATER TEMPERATURE, °C                  | 32.0, July 9, 19, 20, 21, 1977, August 10, 1979 | 0.5, January 24, 1976                     |
| DISSOLVED OXYGEN, mg/L                 | 11.9, December 13, 2003                         | 4.7, June 3, 2004, September 15, 16, 2004 |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 101, December 13, 2003                          | 5.6, September 15, 16, 2004               |

EXTREMES FOR CURRENT PERIOD.--

| CONSTITUENT                            | MAXIMUM RECORDED                        | MINIMUM RECORDED                          |
|--|---|---|
| SPECIFIC CONDUCTANCE, microsiemens     | 178, August 7, 2004                     | 61, September 3, 11, 2004                 |
| SALINITY, ppt                          | 0.07, on several days during the period | 0.02, September 3, 11, 12, 22, 2004       |
| pH, standard units                     | 7.4, April 12, 13, 2003                 | 6.0, June 16, 2004                        |
| WATER TEMPERATURE, °C                  | 31.2, July 15, 16, 2004                 | 3.9, February 2, 2004                     |
| DISSOLVED OXYGEN, mg/L                 | 11.9, December 13, 2003                 | 4.7, June 3, 2004, September 15, 16, 2004 |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 101, December 13, 2003                  | 56, September 15, 16, 2004                |





## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 112  | 107 | 110  | ---  | --- | ---  | 153    | 150 | 152  | 114       | 74  | 90   |
| 2     | 113  | 108 | 112  | ---  | --- | ---  | 153    | 146 | 151  | 98        | 64  | 79   |
| 3     | 113  | 104 | 107  | ---  | --- | ---  | 146    | 127 | 135  | 66        | 61  | 63   |
| 4     | 105  | 102 | 104  | ---  | --- | ---  | 147    | 127 | 136  | 75        | 66  | 71   |
| 5     | 103  | 100 | 101  | ---  | --- | ---  | 157    | 146 | 151  | 85        | 71  | 78   |
| 6     | 108  | 100 | 103  | ---  | --- | ---  | 176    | 157 | 168  | 94        | 85  | 89   |
| 7     | 110  | 108 | 109  | ---  | --- | ---  | 178    | 166 | 173  | 98        | 94  | 96   |
| 8     | 117  | 110 | 113  | ---  | --- | ---  | 167    | 157 | 161  | 101       | 97  | 99   |
| 9     | ---  | --- | ---  | ---  | --- | ---  | 158    | 147 | 151  | 103       | 100 | 101  |
| 10    | ---  | --- | ---  | ---  | --- | ---  | 149    | 147 | 148  | 104       | 69  | 84   |
| 11    | ---  | --- | ---  | ---  | --- | ---  | 152    | 149 | 150  | 84        | 61  | 66   |
| 12    | ---  | --- | ---  | ---  | --- | ---  | 153    | 148 | 151  | 79        | 62  | 69   |
| 13    | ---  | --- | ---  | ---  | --- | ---  | 153    | 144 | 149  | 75        | 69  | 70   |
| 14    | ---  | --- | ---  | ---  | --- | ---  | 146    | 120 | 133  | 85        | 71  | 79   |
| 15    | ---  | --- | ---  | 149  | 144 | 146  | 122    | 108 | 116  | 90        | 85  | 87   |
| 16    | ---  | --- | ---  | 154  | 145 | 150  | 134    | 105 | 115  | 98        | 90  | 94   |
| 17    | ---  | --- | ---  | 156  | 154 | 155  | 139    | 101 | 126  | 102       | 97  | 100  |
| 18    | ---  | --- | ---  | 156  | 154 | 155  | 101    | 68  | 83   | 102       | 95  | 99   |
| 19    | ---  | --- | ---  | 156  | 153 | 155  | 74     | 67  | 70   | 96        | 91  | 94   |
| 20    | ---  | --- | ---  | 154  | 149 | 151  | 79     | 74  | 77   | 91        | 78  | 85   |
| 21    | ---  | --- | ---  | 152  | 149 | 150  | 92     | 78  | 82   | 78        | 74  | 75   |
| 22    | ---  | --- | ---  | 153  | 148 | 151  | 108    | 92  | 102  | 74        | 62  | 67   |
| 23    | ---  | --- | ---  | 148  | 133 | 141  | 126    | 106 | 113  | 78        | 73  | 77   |
| 24    | ---  | --- | ---  | 133  | 127 | 130  | 137    | 126 | 133  | 88        | 78  | 83   |
| 25    | ---  | --- | ---  | 141  | 129 | 135  | 137    | 116 | 127  | 105       | 88  | 98   |
| 26    | ---  | --- | ---  | 145  | 140 | 142  | 118    | 116 | 117  | 110       | 105 | 108  |
| 27    | ---  | --- | ---  | 149  | 144 | 147  | 120    | 116 | 117  | 110       | 108 | 109  |
| 28    | ---  | --- | ---  | 150  | 148 | 149  | 124    | 120 | 122  | 108       | 106 | 107  |
| 29    | ---  | --- | ---  | 150  | 147 | 148  | 125    | 124 | 124  | 111       | 106 | 109  |
| 30    | ---  | --- | ---  | 148  | 142 | 145  | 125    | 118 | 122  | 114       | 109 | 112  |
| 31    | ---  | --- | ---  | 153  | 144 | 150  | 119    | 110 | 114  | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | ---  | --- | ---  | 178    | 67  | 128  | 114       | 61  | 88   |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 109     | 93  | 99   | 120      | 120 | 120  | 122      | 122 | 122  | ---     | --- | ---  |
| 2     | 124     | 93  | 113  | 120      | 120 | 120  | 123      | 112 | 115  | ---     | --- | ---  |
| 3     | 106     | 80  | 89   | 120      | 120 | 120  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 93      | 80  | 88   | 120      | 120 | 120  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 102     | 93  | 97   | 120      | 120 | 120  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 102     | 99  | 101  | 130      | 120 | 128  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 100     | 96  | 97   | 130      | 130 | 130  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 103     | 100 | 102  | 130      | 130 | 130  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 108     | 103 | 105  | 130      | 130 | 130  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 109     | 107 | 108  | 130      | 130 | 130  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 109     | 107 | 108  | 131      | 121 | 130  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 108     | 107 | 108  | 122      | 120 | 121  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 110     | 108 | 109  | 122      | 122 | 122  | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 109     | 106 | 108  | 123      | 122 | 122  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 107     | 103 | 105  | 123      | 123 | 123  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 108     | 105 | 107  | 124      | 123 | 124  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 109     | 107 | 108  | 124      | 94  | 119  | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 108     | 103 | 106  | 105      | 94  | 99   | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 104     | 100 | 102  | 136      | 105 | 118  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 103     | 100 | 101  | 176      | 136 | 161  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 110     | 100 | 103  | 176      | 156 | 162  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | ---     | --- | ---  | 157      | 147 | 150  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | ---     | --- | ---  | 148      | 137 | 147  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | ---     | --- | ---  | 148      | 138 | 142  | ---      | --- | ---  | ---     | --- | ---  |
| 25    | ---     | --- | ---  | 139      | 138 | 139  | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 110     | 110 | 110  | 139      | 139 | 139  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 110     | 110 | 110  | 140      | 130 | 135  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 110     | 110 | 110  | 130      | 120 | 127  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 120     | 110 | 119  | 121      | 121 | 121  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 120     | 120 | 120  | 122      | 111 | 118  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 120     | 120 | 120  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---     | --- | ---  | 176      | 94  | 129  | ---      | --- | ---  | ---     | --- | ---  |







## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.03 | 0.04 |
| 2     | 0.05 | 0.04 | 0.04 | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 |
| 3     | 0.05 | 0.04 | 0.04 | ---  | ---  | ---  | 0.06 | 0.05 | 0.05 | 0.03 | 0.02 | 0.03 |
| 4     | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | 0.06 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 |
| 5     | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 |
| 6     | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | 0.07 | 0.06 | 0.07 | 0.04 | 0.03 | 0.04 |
| 7     | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | 0.07 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 |
| 8     | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  | 0.07 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 |
| 9     | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 |
| 10    | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 |
| 11    | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.02 | 0.03 |
| 12    | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.02 | 0.03 |
| 13    | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | 0.06 | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 |
| 15    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.04 | 0.05 | 0.04 | 0.03 | 0.03 |
| 16    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 |
| 17    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.06 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 |
| 18    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 19    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 20    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 |
| 21    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 |
| 22    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.03 | 0.02 | 0.03 |
| 23    | ---  | ---  | ---  | 0.06 | 0.05 | 0.06 | 0.05 | 0.04 | 0.05 | 0.03 | 0.03 | 0.03 |
| 24    | ---  | ---  | ---  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.03 | 0.03 |
| 25    | ---  | ---  | ---  | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 26    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 27    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 28    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 29    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 30    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 |
| 31    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | 0.07 | 0.03 | 0.05 | 0.05 | 0.02 | 0.04 |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | --- | --- | ---  |
| 2     | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | --- | --- | ---  |
| 3     | 0.04 | 0.03 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 0.04 | 0.03 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 0.04 | 0.04 | 0.04 | 0.07 | 0.05 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 0.04 | 0.04 | 0.04 | 0.07 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | ---  | ---  | ---  | 0.06 | 0.05 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | ---  | ---  | ---  | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 0.04 | 0.04 | 0.04 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | ---  | ---  | ---  | 0.07 | 0.04 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |





## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.7 | 6.4 | 6.5  | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.6 | 6.4 | 6.5  |
| 2     | 6.6 | 6.3 | 6.5  | --- | --- | ---  | 6.9 | 6.7 | 6.8  | 6.5 | 6.2 | 6.4  |
| 3     | 6.5 | 6.3 | 6.4  | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.2 | 6.1 | 6.2  |
| 4     | 6.4 | 6.3 | 6.3  | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.3 | 6.2 | 6.3  |
| 5     | 6.4 | 6.2 | 6.3  | --- | --- | ---  | 7.0 | 6.7 | 6.9  | 6.4 | 6.2 | 6.3  |
| 6     | 6.4 | 6.2 | 6.3  | --- | --- | ---  | 7.1 | 6.9 | 7.0  | 6.4 | 6.2 | 6.3  |
| 7     | 6.5 | 6.4 | 6.4  | --- | --- | ---  | 7.0 | 6.8 | 7.0  | 6.5 | 6.3 | 6.3  |
| 8     | 6.5 | 6.4 | 6.4  | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.5 | 6.3 | 6.4  |
| 9     | --- | --- | ---  | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.8 | 6.3 | 6.6  |
| 10    | --- | --- | ---  | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.8 | 6.5 | 6.6  |
| 11    | --- | --- | ---  | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.6 | 6.3 | 6.4  |
| 12    | --- | --- | ---  | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.5 | 6.3 | 6.4  |
| 13    | --- | --- | ---  | --- | --- | ---  | 7.1 | 6.8 | 6.9  | 6.5 | 6.4 | 6.4  |
| 14    | --- | --- | ---  | --- | --- | ---  | 6.9 | 6.6 | 6.8  | 6.6 | 6.5 | 6.6  |
| 15    | --- | --- | ---  | 7.2 | 6.6 | 6.9  | 6.8 | 6.5 | 6.6  | 6.6 | 6.4 | 6.5  |
| 16    | --- | --- | ---  | 7.2 | 6.8 | 7.0  | 6.7 | 6.4 | 6.6  | 6.5 | 6.4 | 6.5  |
| 17    | --- | --- | ---  | 7.1 | 6.8 | 6.9  | 6.8 | 6.6 | 6.7  | 6.6 | 6.4 | 6.5  |
| 18    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.6 | 6.3 | 6.4  | 6.7 | 6.5 | 6.6  |
| 19    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.3 | 6.1 | 6.3  | 6.8 | 6.6 | 6.7  |
| 20    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | 6.4 | 6.3 | 6.3  | 6.8 | 6.6 | 6.7  |
| 21    | --- | --- | ---  | 7.0 | 6.7 | 6.8  | 6.6 | 6.4 | 6.5  | 6.6 | 6.5 | 6.6  |
| 22    | --- | --- | ---  | 7.0 | 6.7 | 6.8  | 6.7 | 6.5 | 6.5  | 6.7 | 6.4 | 6.6  |
| 23    | --- | --- | ---  | 6.9 | 6.7 | 6.8  | 6.7 | 6.5 | 6.6  | 6.7 | 6.5 | 6.6  |
| 24    | --- | --- | ---  | 6.9 | 6.6 | 6.7  | 6.8 | 6.6 | 6.8  | 6.8 | 6.6 | 6.7  |
| 25    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.9 | 6.6 | 6.7  | 6.8 | 6.6 | 6.7  |
| 26    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.8 | 6.6 | 6.7  | 6.8 | 6.7 | 6.8  |
| 27    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.8 | 6.6 | 6.6  | 6.8 | 6.7 | 6.8  |
| 28    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.8 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  |
| 29    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.8 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  |
| 30    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.7 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  |
| 31    | --- | --- | ---  | 6.9 | 6.6 | 6.7  | 6.7 | 6.5 | 6.6  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 7.1 | 6.1 | 6.7  | 6.8 | 6.1 | 6.5  |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.8 | 6.7 | 6.7  | 6.8 | 6.6 | 6.7  | 7.0 | 6.8 | 6.9  | --- | --- | ---  |
| 2     | 7.0 | 6.8 | 6.9  | 6.9 | 6.7 | 6.8  | 7.0 | 6.8 | 6.9  | --- | --- | ---  |
| 3     | 6.8 | 6.6 | 6.7  | 6.9 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 4     | 6.8 | 6.6 | 6.7  | 6.9 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 5     | 6.9 | 6.8 | 6.8  | 6.9 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 6     | 6.9 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 7     | 6.9 | 6.7 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 8     | 7.0 | 6.8 | 6.9  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 9     | 7.0 | 6.8 | 6.9  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 10    | 7.0 | 6.8 | 6.9  | 6.9 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 11    | 7.0 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 12    | 7.0 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 13    | 6.9 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 14    | 6.9 | 6.8 | 6.8  | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 15    | 6.9 | 6.8 | 6.8  | 6.9 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 16    | 6.9 | 6.8 | 6.8  | 6.9 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 17    | 7.0 | 6.8 | 6.8  | 6.9 | 6.5 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 18    | 6.9 | 6.8 | 6.8  | 6.8 | 6.5 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 19    | 6.9 | 6.8 | 6.8  | 7.0 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 20    | 6.9 | 6.8 | 6.8  | 7.1 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 21    | 6.9 | 6.7 | 6.8  | 7.1 | 7.0 | 7.1  | --- | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | 7.1 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | 7.1 | 6.8 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 25    | --- | --- | ---  | 7.0 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 26    | 7.0 | 6.7 | 6.9  | 7.0 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 27    | 7.0 | 6.6 | 6.8  | 7.0 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 28    | 6.9 | 6.6 | 6.8  | 7.0 | 6.7 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 29    | 6.8 | 6.6 | 6.8  | 6.9 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 30    | 6.8 | 6.6 | 6.7  | 6.9 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 31    | 6.8 | 6.6 | 6.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 7.1 | 6.5 | 6.8  | --- | --- | ---  | --- | --- | ---  |







## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 28.5 | 27.8 | 28.1 | ---  | ---  | ---  | 29.5 | 29.3 | 29.4 | 26.6 | 25.3 | 25.9 |
| 2     | 28.6 | 28.0 | 28.2 | ---  | ---  | ---  | 29.3 | 28.6 | 28.9 | 25.4 | 24.4 | 24.9 |
| 3     | 28.6 | 27.9 | 28.2 | ---  | ---  | ---  | 28.6 | 28.2 | 28.3 | 24.8 | 24.4 | 24.5 |
| 4     | 28.5 | 28.1 | 28.3 | ---  | ---  | ---  | 28.9 | 28.1 | 28.5 | 24.8 | 24.4 | 24.6 |
| 5     | 28.5 | 27.9 | 28.2 | ---  | ---  | ---  | 29.6 | 28.8 | 29.1 | 24.9 | 24.4 | 24.6 |
| 6     | 28.4 | 27.9 | 28.1 | ---  | ---  | ---  | 29.3 | 28.8 | 29.1 | 24.9 | 24.7 | 24.8 |
| 7     | 28.5 | 28.0 | 28.2 | ---  | ---  | ---  | 28.8 | 27.5 | 28.1 | 24.9 | 24.7 | 24.8 |
| 8     | 28.1 | 27.7 | 27.9 | ---  | ---  | ---  | 27.5 | 27.0 | 27.3 | 25.4 | 24.9 | 25.1 |
| 9     | ---  | ---  | ---  | ---  | ---  | ---  | 27.7 | 27.1 | 27.4 | 25.9 | 25.3 | 25.6 |
| 10    | ---  | ---  | ---  | ---  | ---  | ---  | 27.8 | 27.2 | 27.5 | 25.8 | 25.2 | 25.4 |
| 11    | ---  | ---  | ---  | ---  | ---  | ---  | 28.2 | 27.3 | 27.7 | 25.4 | 24.3 | 24.5 |
| 12    | ---  | ---  | ---  | ---  | ---  | ---  | 27.9 | 27.3 | 27.6 | 24.5 | 24.1 | 24.3 |
| 13    | ---  | ---  | ---  | ---  | ---  | ---  | 27.4 | 26.9 | 27.2 | 24.4 | 24.1 | 24.2 |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | 26.9 | 25.6 | 26.2 | 24.2 | 24.0 | 24.1 |
| 15    | ---  | ---  | ---  | 31.2 | 30.2 | 30.7 | 25.6 | 24.8 | 25.2 | 24.2 | 24.0 | 24.1 |
| 16    | ---  | ---  | ---  | 31.2 | 30.2 | 30.7 | 25.0 | 24.4 | 24.7 | 24.2 | 23.9 | 24.1 |
| 17    | ---  | ---  | ---  | 30.7 | 30.1 | 30.4 | 25.0 | 24.1 | 24.8 | 24.8 | 24.2 | 24.4 |
| 18    | ---  | ---  | ---  | 30.4 | 29.7 | 30.1 | 24.1 | 23.4 | 23.6 | 24.6 | 24.0 | 24.3 |
| 19    | ---  | ---  | ---  | 30.3 | 29.4 | 29.7 | 24.2 | 23.3 | 23.7 | 24.0 | 23.5 | 23.7 |
| 20    | ---  | ---  | ---  | 30.3 | 29.4 | 29.8 | 25.1 | 24.2 | 24.6 | 23.5 | 23.1 | 23.2 |
| 21    | ---  | ---  | ---  | 30.1 | 29.3 | 29.7 | 26.3 | 25.1 | 25.7 | 23.1 | 22.5 | 22.8 |
| 22    | ---  | ---  | ---  | 30.2 | 29.3 | 29.7 | 26.2 | 25.7 | 25.9 | 22.6 | 21.8 | 22.1 |
| 23    | ---  | ---  | ---  | 30.3 | 29.5 | 29.8 | 26.5 | 25.7 | 26.1 | 21.8 | 21.5 | 21.7 |
| 24    | ---  | ---  | ---  | 30.5 | 29.5 | 29.9 | 26.8 | 26.2 | 26.5 | 21.8 | 21.3 | 21.6 |
| 25    | ---  | ---  | ---  | 30.1 | 29.6 | 29.8 | 26.7 | 26.3 | 26.5 | 22.3 | 21.7 | 22.0 |
| 26    | ---  | ---  | ---  | 30.2 | 29.5 | 29.8 | 26.6 | 26.4 | 26.5 | 22.6 | 22.2 | 22.4 |
| 27    | ---  | ---  | ---  | 30.4 | 29.6 | 29.9 | 26.8 | 26.4 | 26.6 | 23.0 | 22.4 | 22.7 |
| 28    | ---  | ---  | ---  | 30.0 | 29.6 | 29.8 | 27.1 | 26.5 | 26.7 | 23.3 | 23.0 | 23.1 |
| 29    | ---  | ---  | ---  | 29.8 | 29.4 | 29.6 | 26.9 | 26.6 | 26.7 | 23.5 | 23.0 | 23.2 |
| 30    | ---  | ---  | ---  | 29.8 | 29.2 | 29.5 | 27.0 | 26.4 | 26.6 | 23.5 | 23.2 | 23.4 |
| 31    | ---  | ---  | ---  | 29.9 | 29.3 | 29.5 | 26.7 | 26.4 | 26.6 | ---  | ---  | ---  |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | 29.6 | 23.3 | 26.8 | 26.6 | 21.3 | 23.9 |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |     |      |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
|       | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | 23.4    | 23.1 | 23.3 | 19.6     | 18.9 | 19.2 | 13.2     | 12.1 | 12.7 | ---     | --- | ---  |
| 2     | 23.4    | 22.9 | 23.2 | 19.8     | 19.1 | 19.4 | 12.1     | 11.7 | 11.9 | ---     | --- | ---  |
| 3     | 22.9    | 22.5 | 22.7 | 19.9     | 19.3 | 19.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 4     | 23.0    | 22.5 | 22.7 | 20.0     | 19.5 | 19.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 5     | 22.9    | 22.4 | 22.7 | 19.8     | 19.2 | 19.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 6     | 22.8    | 22.1 | 22.4 | 19.3     | 18.8 | 19.0 | ---      | ---  | ---  | ---     | --- | ---  |
| 7     | 22.1    | 21.8 | 22.0 | 18.8     | 18.4 | 18.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 8     | 21.9    | 21.5 | 21.7 | 18.5     | 18.1 | 18.3 | ---      | ---  | ---  | ---     | --- | ---  |
| 9     | 21.8    | 21.5 | 21.7 | 18.1     | 17.4 | 17.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 10    | 22.1    | 21.5 | 21.8 | 17.4     | 16.8 | 17.0 | ---      | ---  | ---  | ---     | --- | ---  |
| 11    | 22.1    | 21.6 | 21.8 | 16.8     | 16.5 | 16.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 12    | 21.9    | 21.4 | 21.6 | 16.7     | 16.5 | 16.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 13    | 21.9    | 21.4 | 21.6 | 16.6     | 16.0 | 16.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 14    | 21.7    | 21.4 | 21.5 | 16.0     | 15.2 | 15.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 15    | 21.4    | 21.0 | 21.2 | 15.2     | 14.0 | 14.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 16    | 21.0    | 20.3 | 20.5 | 14.0     | 12.8 | 13.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 17    | 20.3    | 19.9 | 20.1 | 12.9     | 12.4 | 12.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 18    | 20.4    | 19.9 | 20.1 | 12.7     | 12.0 | 12.2 | ---      | ---  | ---  | ---     | --- | ---  |
| 19    | 20.6    | 20.0 | 20.2 | 12.2     | 11.7 | 11.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 20    | 20.8    | 20.3 | 20.5 | 12.7     | 12.2 | 12.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 21    | 20.6    | 20.4 | 20.5 | 13.2     | 12.6 | 12.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 22    | ---     | ---  | ---  | 13.7     | 13.2 | 13.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 23    | ---     | ---  | ---  | 14.0     | 13.6 | 13.8 | ---      | ---  | ---  | ---     | --- | ---  |
| 24    | ---     | ---  | ---  | 14.7     | 14.0 | 14.3 | ---      | ---  | ---  | ---     | --- | ---  |
| 25    | ---     | ---  | ---  | 15.1     | 14.7 | 14.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 26    | 18.8    | 18.4 | 18.7 | 15.0     | 14.6 | 14.8 | ---      | ---  | ---  | ---     | --- | ---  |
| 27    | 18.6    | 18.2 | 18.4 | 14.6     | 14.3 | 14.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 28    | 18.6    | 18.3 | 18.4 | 14.7     | 14.5 | 14.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 29    | 18.5    | 18.3 | 18.4 | 14.6     | 14.1 | 14.3 | ---      | ---  | ---  | ---     | --- | ---  |
| 30    | 18.8    | 18.3 | 18.5 | 14.1     | 13.2 | 13.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 31    | 19.3    | 18.5 | 18.9 | ---      | ---  | ---  | ---      | ---  | ---  | ---     | --- | ---  |
| MONTH | ---     | ---  | ---  | 20.0     | 11.7 | 15.7 | ---      | ---  | ---  | ---     | --- | ---  |





## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.6 | 5.3 | 6.2  | --- | --- | ---  | 6.8 | 5.7 | 6.4  | 7.3 | 6.1 | 6.8  |
| 2     | 6.0 | 4.8 | 5.2  | --- | --- | ---  | 7.0 | 6.6 | 6.8  | 6.1 | 5.4 | 5.9  |
| 3     | 6.3 | 4.7 | 5.3  | --- | --- | ---  | 6.8 | 6.3 | 6.6  | 6.1 | 5.8 | 5.9  |
| 4     | 5.9 | 4.9 | 5.2  | --- | --- | ---  | 6.7 | 6.0 | 6.4  | 6.4 | 6.1 | 6.3  |
| 5     | 6.4 | 5.0 | 5.4  | --- | --- | ---  | --- | --- | ---  | 6.5 | 6.0 | 6.3  |
| 6     | 6.4 | 5.1 | 5.7  | --- | --- | ---  | --- | --- | ---  | 6.4 | 5.9 | 6.1  |
| 7     | 6.8 | 5.9 | 6.3  | --- | --- | ---  | --- | --- | ---  | 6.7 | 5.5 | 6.0  |
| 8     | 6.6 | 5.9 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.7 | 5.5 | 6.0  |
| 9     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.2 | 6.1 | 6.9  |
| 10    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 7.0 | 5.6 | 6.4  |
| 11    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 5.7 | 5.3 | 5.4  |
| 12    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 5.4 | 5.2 | 5.3  |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 5.5 | 5.2 | 5.4  |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 5.4 | 5.2 | 5.4  |
| 15    | --- | --- | ---  | 6.9 | 5.4 | 6.4  | --- | --- | ---  | 5.3 | 4.7 | 4.9  |
| 16    | --- | --- | ---  | 7.3 | 6.2 | 6.8  | --- | --- | ---  | 5.4 | 4.7 | 5.1  |
| 17    | --- | --- | ---  | 6.8 | 6.4 | 6.7  | --- | --- | ---  | 6.0 | 5.4 | 5.7  |
| 18    | --- | --- | ---  | 6.7 | 6.2 | 6.5  | --- | --- | ---  | 7.0 | 6.0 | 6.5  |
| 19    | --- | --- | ---  | 6.9 | 6.1 | 6.5  | --- | --- | ---  | 7.4 | 6.9 | 7.1  |
| 20    | --- | --- | ---  | 7.3 | 6.2 | 6.7  | 7.2 | 6.8 | 7.1  | 7.5 | 7.1 | 7.3  |
| 21    | --- | --- | ---  | 7.4 | 6.4 | 6.9  | 7.2 | 6.8 | 7.1  | 7.5 | 7.1 | 7.3  |
| 22    | --- | --- | ---  | 7.3 | 6.4 | 6.9  | 6.9 | 6.7 | 6.8  | 8.0 | 7.4 | 7.8  |
| 23    | --- | --- | ---  | 7.1 | 6.2 | 6.7  | 7.0 | 6.7 | 6.8  | 8.0 | 7.7 | 7.9  |
| 24    | --- | --- | ---  | 7.0 | 6.2 | 6.6  | 7.2 | 6.9 | 7.1  | 8.0 | 7.8 | 7.9  |
| 25    | --- | --- | ---  | 7.0 | 6.2 | 6.5  | 7.2 | 7.0 | 7.1  | 8.0 | 7.7 | 7.8  |
| 26    | --- | --- | ---  | 7.0 | 6.1 | 6.5  | 7.2 | 6.7 | 7.0  | 7.9 | 7.6 | 7.8  |
| 27    | --- | --- | ---  | 6.8 | 5.9 | 6.3  | 7.0 | 6.4 | 6.8  | 7.8 | 7.4 | 7.6  |
| 28    | --- | --- | ---  | 6.4 | 5.4 | 6.0  | 6.9 | 6.2 | 6.5  | 7.6 | 7.4 | 7.5  |
| 29    | --- | --- | ---  | 6.7 | 5.4 | 6.1  | 6.8 | 6.1 | 6.4  | 7.8 | 7.4 | 7.6  |
| 30    | --- | --- | ---  | 7.1 | 5.6 | 6.4  | 7.0 | 6.2 | 6.5  | 7.8 | 7.5 | 7.7  |
| 31    | --- | --- | ---  | 7.2 | 5.6 | 6.5  | 7.3 | 6.6 | 7.1  | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 8.0 | 4.7 | 6.6  |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX  | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|------|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |      |     |      |     |     |      |
| 1     | 8.0 | 7.6 | 7.7  | 8.1 | 7.6 | 7.8  | 10.0 | 9.5 | 9.7  | --- | --- | ---  |
| 2     | 7.8 | 7.6 | 7.7  | 8.1 | 7.6 | 7.8  | 10.1 | 9.9 | 10.0 | --- | --- | ---  |
| 3     | 7.6 | 7.4 | 7.5  | 8.0 | 7.6 | 7.7  | ---  | --- | ---  | --- | --- | ---  |
| 4     | 7.8 | 7.5 | 7.7  | 8.0 | 7.6 | 7.7  | ---  | --- | ---  | --- | --- | ---  |
| 5     | 7.9 | 7.7 | 7.8  | 8.1 | 7.7 | 7.8  | ---  | --- | ---  | --- | --- | ---  |
| 6     | 8.0 | 7.7 | 7.9  | 8.1 | 7.7 | 7.8  | ---  | --- | ---  | --- | --- | ---  |
| 7     | 8.2 | 7.8 | 8.1  | 8.1 | 7.7 | 7.9  | ---  | --- | ---  | --- | --- | ---  |
| 8     | 8.4 | 8.1 | 8.2  | 8.2 | 7.7 | 7.9  | ---  | --- | ---  | --- | --- | ---  |
| 9     | 8.4 | 7.8 | 8.2  | 8.3 | 7.8 | 8.1  | ---  | --- | ---  | --- | --- | ---  |
| 10    | 8.2 | 7.8 | 8.0  | 8.4 | 7.7 | 8.0  | ---  | --- | ---  | --- | --- | ---  |
| 11    | 8.2 | 7.7 | 7.9  | 8.2 | 7.7 | 7.9  | ---  | --- | ---  | --- | --- | ---  |
| 12    | 8.1 | 7.7 | 7.8  | 8.2 | 7.8 | 7.9  | ---  | --- | ---  | --- | --- | ---  |
| 13    | 7.8 | 7.5 | 7.6  | 8.6 | 7.8 | 8.1  | ---  | --- | ---  | --- | --- | ---  |
| 14    | 7.8 | 7.4 | 7.5  | 8.8 | 8.2 | 8.5  | ---  | --- | ---  | --- | --- | ---  |
| 15    | 8.0 | 7.3 | 7.6  | 9.1 | 8.6 | 8.8  | ---  | --- | ---  | --- | --- | ---  |
| 16    | 8.3 | 7.9 | 8.1  | 9.5 | 9.0 | 9.3  | ---  | --- | ---  | --- | --- | ---  |
| 17    | 8.6 | 8.2 | 8.3  | 9.6 | 9.2 | 9.5  | ---  | --- | ---  | --- | --- | ---  |
| 18    | 8.6 | 8.0 | 8.3  | 9.7 | 9.3 | 9.5  | ---  | --- | ---  | --- | --- | ---  |
| 19    | 8.4 | 7.8 | 8.0  | 9.8 | 9.7 | 9.8  | ---  | --- | ---  | --- | --- | ---  |
| 20    | 8.2 | 7.6 | 7.9  | 9.8 | 9.6 | 9.6  | ---  | --- | ---  | --- | --- | ---  |
| 21    | 8.2 | 7.3 | 7.6  | 9.8 | 9.4 | 9.6  | ---  | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | 9.5 | 9.2 | 9.4  | ---  | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | 9.4 | 9.1 | 9.3  | ---  | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | 9.2 | 8.8 | 9.0  | ---  | --- | ---  | --- | --- | ---  |
| 25    | --- | --- | ---  | 9.0 | 8.8 | 8.9  | ---  | --- | ---  | --- | --- | ---  |
| 26    | 7.8 | 7.5 | 7.6  | 9.1 | 8.9 | 9.0  | ---  | --- | ---  | --- | --- | ---  |
| 27    | 7.9 | 7.6 | 7.8  | 9.2 | 8.9 | 9.0  | ---  | --- | ---  | --- | --- | ---  |
| 28    | 8.0 | 7.7 | 7.8  | 9.1 | 8.9 | 9.0  | ---  | --- | ---  | --- | --- | ---  |
| 29    | 8.0 | 7.7 | 7.8  | 9.2 | 9.0 | 9.1  | ---  | --- | ---  | --- | --- | ---  |
| 30    | 8.1 | 7.7 | 7.8  | 9.6 | 9.1 | 9.3  | ---  | --- | ---  | --- | --- | ---  |
| 31    | 8.1 | 7.7 | 7.8  | --- | --- | ---  | ---  | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 9.8 | 7.6 | 8.6  | ---  | --- | ---  | --- | --- | ---  |







## CAPE FEAR RIVER BASIN

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 85  | 68  | 79   | --- | --- | ---  | 89  | 75  | 84   | 91  | 74  | 84   |
| 2     | 77  | 62  | 67   | --- | --- | ---  | 91  | 86  | 89   | 74  | 66  | 71   |
| 3     | 81  | 60  | 69   | --- | --- | ---  | 88  | 81  | 85   | 74  | 70  | 72   |
| 4     | 76  | 63  | 67   | --- | --- | ---  | 87  | 78  | 82   | 77  | 74  | 75   |
| 5     | 82  | 64  | 69   | --- | --- | ---  | --- | --- | ---  | 78  | 73  | 76   |
| 6     | 82  | 65  | 74   | --- | --- | ---  | --- | --- | ---  | 77  | 71  | 74   |
| 7     | 88  | 76  | 81   | --- | --- | ---  | --- | --- | ---  | 81  | 67  | 73   |
| 8     | 85  | 75  | 78   | --- | --- | ---  | --- | --- | ---  | 82  | 67  | 74   |
| 9     | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 88  | 75  | 84   |
| 10    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 86  | 68  | 79   |
| 11    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 70  | 64  | 65   |
| 12    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 65  | 62  | 64   |
| 13    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 66  | 62  | 64   |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 65  | 62  | 64   |
| 15    | --- | --- | ---  | 93  | 72  | 86   | --- | --- | ---  | 63  | 56  | 58   |
| 16    | --- | --- | ---  | 99  | 83  | 91   | --- | --- | ---  | 65  | 56  | 60   |
| 17    | --- | --- | ---  | 91  | 85  | 89   | --- | --- | ---  | 73  | 65  | 69   |
| 18    | --- | --- | ---  | 90  | 82  | 86   | --- | --- | ---  | 83  | 72  | 77   |
| 19    | --- | --- | ---  | 92  | 80  | 86   | --- | --- | ---  | 88  | 82  | 85   |
| 20    | --- | --- | ---  | 96  | 81  | 88   | 88  | 81  | 86   | 88  | 83  | 86   |
| 21    | --- | --- | ---  | 98  | 84  | 92   | 88  | 84  | 87   | 87  | 83  | 85   |
| 22    | --- | --- | ---  | 97  | 84  | 92   | 85  | 82  | 84   | 92  | 86  | 89   |
| 23    | --- | --- | ---  | 94  | 82  | 88   | 87  | 83  | 85   | 91  | 88  | 90   |
| 24    | --- | --- | ---  | 93  | 82  | 87   | 90  | 86  | 88   | 91  | 88  | 90   |
| 25    | --- | --- | ---  | 93  | 82  | 86   | 90  | 87  | 89   | 92  | 89  | 90   |
| 26    | --- | --- | ---  | 93  | 80  | 86   | 90  | 84  | 87   | 92  | 88  | 90   |
| 27    | --- | --- | ---  | 91  | 78  | 84   | 88  | 80  | 84   | 90  | 87  | 89   |
| 28    | --- | --- | ---  | 85  | 71  | 79   | 87  | 78  | 82   | 89  | 87  | 88   |
| 29    | --- | --- | ---  | 88  | 71  | 81   | 85  | 76  | 81   | 92  | 87  | 89   |
| 30    | --- | --- | ---  | 94  | 74  | 84   | 88  | 77  | 81   | 92  | 88  | 91   |
| 31    | --- | --- | ---  | 95  | 74  | 86   | 91  | 83  | 88   | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 92  | 56  | 78   |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 94  | 89  | 91   | 88  | 83  | 85   | 93  | 90  | 92   | --- | --- | ---  |
| 2     | 91  | 89  | 90   | 88  | 82  | 85   | 94  | 92  | 93   | --- | --- | ---  |
| 3     | 89  | 86  | 87   | 88  | 83  | 85   | --- | --- | ---  | --- | --- | ---  |
| 4     | 91  | 87  | 89   | 88  | 83  | 84   | --- | --- | ---  | --- | --- | ---  |
| 5     | 92  | 89  | 90   | 89  | 84  | 85   | --- | --- | ---  | --- | --- | ---  |
| 6     | 92  | 89  | 91   | 88  | 83  | 85   | --- | --- | ---  | --- | --- | ---  |
| 7     | 94  | 90  | 93   | 87  | 82  | 84   | --- | --- | ---  | --- | --- | ---  |
| 8     | 96  | 92  | 94   | 88  | 82  | 85   | --- | --- | ---  | --- | --- | ---  |
| 9     | 96  | 89  | 93   | 88  | 83  | 85   | --- | --- | ---  | --- | --- | ---  |
| 10    | 94  | 89  | 91   | 87  | 80  | 83   | --- | --- | ---  | --- | --- | ---  |
| 11    | 94  | 88  | 90   | 85  | 79  | 81   | --- | --- | ---  | --- | --- | ---  |
| 12    | 92  | 87  | 89   | 84  | 80  | 81   | --- | --- | ---  | --- | --- | ---  |
| 13    | 88  | 85  | 87   | 88  | 80  | 83   | --- | --- | ---  | --- | --- | ---  |
| 14    | 89  | 84  | 86   | 88  | 83  | 86   | --- | --- | ---  | --- | --- | ---  |
| 15    | 90  | 83  | 86   | 88  | 85  | 86   | --- | --- | ---  | --- | --- | ---  |
| 16    | 92  | 88  | 90   | 90  | 87  | 89   | --- | --- | ---  | --- | --- | ---  |
| 17    | 95  | 91  | 92   | 91  | 87  | 89   | --- | --- | ---  | --- | --- | ---  |
| 18    | 95  | 88  | 91   | 90  | 87  | 89   | --- | --- | ---  | --- | --- | ---  |
| 19    | 93  | 87  | 89   | 91  | 90  | 91   | --- | --- | ---  | --- | --- | ---  |
| 20    | 92  | 85  | 88   | 92  | 90  | 91   | --- | --- | ---  | --- | --- | ---  |
| 21    | 92  | 81  | 85   | 92  | 90  | 91   | --- | --- | ---  | --- | --- | ---  |
| 22    | --- | --- | ---  | 91  | 89  | 90   | --- | --- | ---  | --- | --- | ---  |
| 23    | --- | --- | ---  | 91  | 88  | 90   | --- | --- | ---  | --- | --- | ---  |
| 24    | --- | --- | ---  | 90  | 87  | 89   | --- | --- | ---  | --- | --- | ---  |
| 25    | --- | --- | ---  | 89  | 87  | 88   | --- | --- | ---  | --- | --- | ---  |
| 26    | 84  | 81  | 82   | 90  | 88  | 89   | --- | --- | ---  | --- | --- | ---  |
| 27    | 85  | 81  | 83   | 90  | 88  | 88   | --- | --- | ---  | --- | --- | ---  |
| 28    | 86  | 82  | 84   | 90  | 88  | 89   | --- | --- | ---  | --- | --- | ---  |
| 29    | 85  | 82  | 83   | 90  | 88  | 89   | --- | --- | ---  | --- | --- | ---  |
| 30    | 86  | 83  | 84   | 92  | 88  | 90   | --- | --- | ---  | --- | --- | ---  |
| 31    | 87  | 82  | 84   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 92  | 79  | 87   | --- | --- | ---  | --- | --- | ---  |

02105769 CAPE FEAR RIVER AT LOCK 1 NEAR KELLY, NC—Continued

PRECIPITATION RECORDS

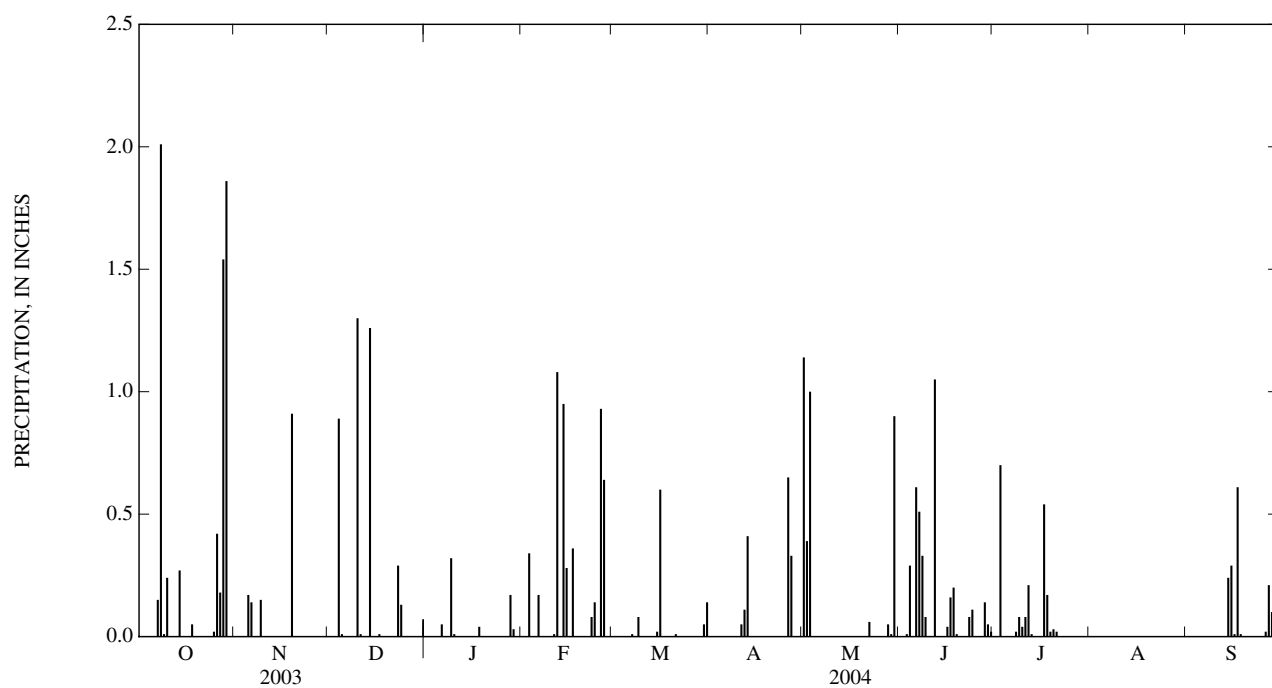
PERIOD OF RECORD.--November 1998 to current year. Records from November 1998 to September 1999 are unpublished and available in the USGS District Office, Raleigh, NC.

GAGE.--Tipping-bucket raingage and data collection platform.

REMARKS.--Precipitation data collected during freezing periods may not be accurately reflected in daily record; consequently, winter record is poor.

PRECIPITATION, TOTAL, INCHES  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY SUM VALUES

| DAY   | OCT  | NOV  | DEC  | JAN  | FEB  | MAR  | APR  | MAY  | JUN  | JUL  | AUG | SEP  |
|-------|------|------|------|------|------|------|------|------|------|------|-----|------|
| 1     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 1.14 | 0.00 | 0.00 | --- | ---  |
| 2     | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.39 | 0.00 | 0.00 | --- | ---  |
| 3     | 0.00 | 0.00 | 0.00 | 0.00 | 0.34 | 0.00 | 0.00 | 1.00 | 0.01 | 0.70 | --- | ---  |
| 4     | 0.00 | 0.00 | 0.89 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.00 | --- | ---  |
| 5     | 0.00 | 0.17 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | --- | ---  |
| 6     | 0.00 | 0.14 | 0.00 | 0.05 | 0.17 | 0.00 | 0.00 | 0.00 | 0.61 | 0.00 | --- | ---  |
| 7     | 0.15 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.51 | 0.00 | --- | ---  |
| 8     | 2.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.33 | 0.02 | --- | ---  |
| 9     | 0.01 | 0.15 | 0.00 | 0.32 | 0.00 | 0.08 | 0.00 | 0.00 | 0.08 | 0.08 | --- | ---  |
| 10    | 0.24 | 0.00 | 1.30 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.04 | --- | ---  |
| 11    | 0.00 | 0.00 | 0.01 | 0.00 | 0.01 | 0.00 | 0.05 | 0.00 | 0.00 | 0.08 | --- | ---  |
| 12    | 0.00 | 0.00 | 0.00 | 0.00 | 1.08 | 0.00 | 0.11 | 0.00 | 1.05 | 0.21 | --- | 0.00 |
| 13    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.41 | 0.00 | 0.00 | 0.01 | --- | 0.00 |
| 14    | 0.27 | 0.00 | 1.26 | 0.00 | 0.95 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.24 |
| 15    | 0.00 | 0.00 | 0.00 | 0.00 | 0.28 | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | --- | 0.29 |
| 16    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.60 | 0.00 | 0.00 | 0.04 | 0.00 | --- | 0.01 |
| 17    | 0.00 | 0.00 | 0.01 | 0.00 | 0.36 | 0.00 | 0.00 | 0.00 | 0.16 | 0.54 | --- | 0.61 |
| 18    | 0.05 | 0.00 | 0.00 | 0.04 | 0.00 | 0.00 | 0.00 | 0.00 | 0.20 | 0.17 | --- | 0.01 |
| 19    | 0.00 | 0.91 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.02 | --- | 0.00 |
| 20    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.03 | --- | 0.00 |
| 21    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.02 | --- | 0.00 |
| 22    | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.06 | 0.00 | 0.00 | --- | 0.00 |
| 23    | 0.00 | 0.00 | 0.29 | 0.00 | 0.08 | 0.00 | 0.00 | 0.00 | 0.08 | ---  | --- | 0.00 |
| 24    | 0.00 | 0.00 | 0.13 | 0.00 | 0.14 | 0.00 | 0.00 | 0.00 | 0.11 | ---  | --- | 0.00 |
| 25    | 0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | ---  | --- | 0.00 |
| 26    | 0.42 | 0.00 | 0.00 | 0.00 | 0.93 | 0.00 | 0.65 | 0.00 | 0.00 | ---  | --- | 0.02 |
| 27    | 0.18 | 0.00 | 0.00 | 0.00 | 0.64 | 0.00 | 0.33 | 0.00 | 0.00 | ---  | --- | 0.21 |
| 28    | 1.54 | 0.00 | 0.00 | 0.17 | 0.00 | 0.00 | 0.00 | 0.05 | 0.14 | ---  | --- | 0.10 |
| 29    | 1.86 | 0.00 | 0.00 | 0.03 | 0.00 | 0.00 | 0.00 | 0.01 | 0.05 | ---  | --- | 0.00 |
| 30    | 0.00 | 0.00 | 0.00 | 0.00 | ---  | 0.05 | 0.00 | 0.90 | 0.02 | ---  | --- | 0.00 |
| 31    | 0.00 | ---  | 0.00 | 0.00 | ---  | 0.14 | ---  | 0.00 | ---  | ---  | --- | ---  |
| TOTAL | 6.75 | 1.37 | 3.90 | 0.62 | 4.98 | 0.91 | 1.55 | 3.55 | 3.69 | ---  | --- | ---  |



## 02105900 HOOD CREEK NEAR LELAND, NC

LOCATION.--Lat 34°16'43", long 78°07'31", Brunswick County, Hydrologic Unit 03030005, on right bank at downstream side of bridge on U.S. Highway 74-76, 0.4 mi downstream from Pasture Pond Branch, 1 mi southeast of Maco, and 4.8 mi northwest of Leland.

DRAINAGE AREA.--21.6 mi<sup>2</sup>.

PERIOD OF RECORD.--Occasional low-flow measurements water years 1950-56, and annual maximum, water years 1953-56. October 1956 to September 1973. October 1993 to current year.

GAGE.--Water-stage recorder. Datum of gage is 12.22 ft above NGVD of 1929. Prior to Nov. 28, 1956, crest-stage gage at site 150 ft upstream at datum 9.60 ft lower. Nov. 29, 1956 to Apr. 24, 1969, water-stage recorder 150 ft upstream at datum 0.19 ft higher. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records poor. Maximum gage height for period of record from floodmark. Maximum gage height for current water year also occurred Aug. 16. Low flows possibly affected by tide. No flow, also occurred Sept. 11, 1997.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT     | NOV  | DEC   | JAN  | FEB   | MAR   | APR   | MAY    | JUN    | JUL   | AUG     | SEP   |
|-------|---------|------|-------|------|-------|-------|-------|--------|--------|-------|---------|-------|
| 1     | 4.1     | 71   | 15    | 24   | 32    | 88    | 8.5   | 20     | 3.9    | 7.8   | 14      | 42    |
| 2     | 3.6     | 52   | 14    | 23   | 29    | 66    | 8.5   | 71     | 3.0    | 14    | 14      | 59    |
| 3     | 3.0     | 41   | 14    | 22   | 30    | 54    | 8.3   | 90     | 3.7    | 15    | 15      | 64    |
| 4     | 2.5     | 34   | 15    | 21   | 32    | 45    | 7.7   | 103    | 8.2    | 12    | 15      | 46    |
| 5     | 1.8     | 31   | 22    | 20   | 30    | 40    | 7.1   | 56     | 10     | 11    | 15      | 35    |
| 6     | 1.3     | 28   | 24    | 19   | 28    | 35    | 6.5   | 32     | 9.0    | 10    | 18      | 32    |
| 7     | 1.1     | 25   | 21    | 18   | 36    | 31    | 6.1   | 21     | 7.9    | 8.5   | 16      | 54    |
| 8     | 24      | 23   | 19    | 17   | 37    | 28    | 6.1   | 16     | 6.4    | 7.3   | 15      | 100   |
| 9     | 97      | 21   | 17    | 18   | 31    | 24    | 5.9   | 12     | 5.3    | 7.7   | 13      | 159   |
| 10    | 71      | 21   | 25    | 20   | 27    | 24    | 5.6   | 9.6    | 4.4    | 7.1   | 11      | 128   |
| 11    | 46      | 19   | 88    | 20   | 25    | 23    | 5.5   | 8.0    | 3.4    | 8.5   | 9.3     | 93    |
| 12    | 37      | 18   | 76    | 20   | 45    | 22    | 5.6   | 6.8    | 7.8    | 15    | 9.6     | 121   |
| 13    | 28      | 16   | 49    | 19   | 95    | 20    | 5.9   | 5.9    | 7.7    | 20    | 206     | 87    |
| 14    | 24      | 14   | 122   | 18   | 85    | 18    | 5.8   | 6.0    | 6.7    | 17    | 200     | 59    |
| 15    | 32      | 14   | 186   | 17   | 158   | 17    | 5.6   | 5.8    | 6.0    | 13    | 262     | 45    |
| 16    | 39      | 14   | 105   | 16   | 129   | 20    | 5.3   | 5.6    | 5.0    | 11    | 296     | 42    |
| 17    | 27      | 14   | 78    | 15   | 102   | 23    | 4.8   | 5.3    | 5.4    | 10    | 166     | 50    |
| 18    | 22      | 13   | 67    | 16   | 120   | 21    | 4.3   | 5.5    | 7.0    | 13    | 98      | 64    |
| 19    | 19      | 23   | 56    | 16   | 94    | 17    | 3.6   | 5.3    | 4.9    | 17    | 65      | 59    |
| 20    | 17      | 58   | 47    | 15   | 69    | 15    | 3.2   | 5.1    | 3.1    | 17    | 45      | 46    |
| 21    | 15      | 49   | 40    | 15   | 55    | 13    | 2.7   | 4.6    | 2.5    | 14    | 48      | 35    |
| 22    | 14      | 33   | 37    | 14   | 46    | 11    | 2.4   | 3.6    | 2.3    | 13    | 155     | 27    |
| 23    | 12      | 27   | 33    | 14   | 39    | 10    | 2.4   | 2.9    | 1.9    | 11    | 110     | 21    |
| 24    | 12      | 23   | 48    | 14   | 36    | 9.3   | 2.4   | 2.3    | 1.2    | 10    | 63      | 18    |
| 25    | 11      | 20   | 58    | 13   | 34    | 9.1   | 2.4   | 1.8    | 0.89   | 8.9   | 41      | 16    |
| 26    | 12      | 18   | 48    | 28   | 41    | 8.7   | 2.9   | 1.4    | 0.69   | 8.5   | 33      | 14    |
| 27    | 18      | 18   | 38    | 91   | 127   | 8.5   | 4.1   | 0.99   | 0.63   | 8.3   | 37      | 16    |
| 28    | 52      | 17   | 33    | 84   | 227   | 8.3   | 5.2   | 0.87   | 1.5    | 8.7   | 59      | 17    |
| 29    | 298     | 16   | 30    | 60   | 135   | 8.0   | 5.9   | 1.4    | 1.3    | 15    | 58      | 17    |
| 30    | 228     | 15   | 28    | 46   | ---   | 7.8   | 6.4   | 3.6    | 2.1    | 13    | 56      | 17    |
| 31    | 109     | ---  | 26    | 38   | ---   | 8.1   | ---   | 4.6    | ---    | 13    | 56      | ---   |
| TOTAL | 1,281.4 | 786  | 1,479 | 791  | 1,974 | 732.8 | 156.7 | 517.96 | 133.81 | 365.3 | 2,218.9 | 1,583 |
| MEAN  | 41.3    | 26.2 | 47.7  | 25.5 | 68.1  | 23.6  | 5.22  | 16.7   | 4.46   | 11.8  | 71.6    | 52.8  |
| MAX   | 298     | 71   | 186   | 91   | 227   | 88    | 8.5   | 103    | 10     | 20    | 296     | 159   |
| MIN   | 1.1     | 13   | 14    | 13   | 25    | 7.8   | 2.4   | 0.87   | 0.63   | 7.1   | 9.3     | 14    |
| CFSM  | 1.91    | 1.21 | 2.21  | 1.18 | 3.15  | 1.09  | 0.24  | 0.77   | 0.21   | 0.55  | 3.31    | 2.44  |
| IN.   | 2.21    | 1.35 | 2.55  | 1.36 | 3.40  | 1.26  | 0.27  | 0.89   | 0.23   | 0.63  | 3.82    | 2.73  |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2004, BY WATER YEAR (WY)

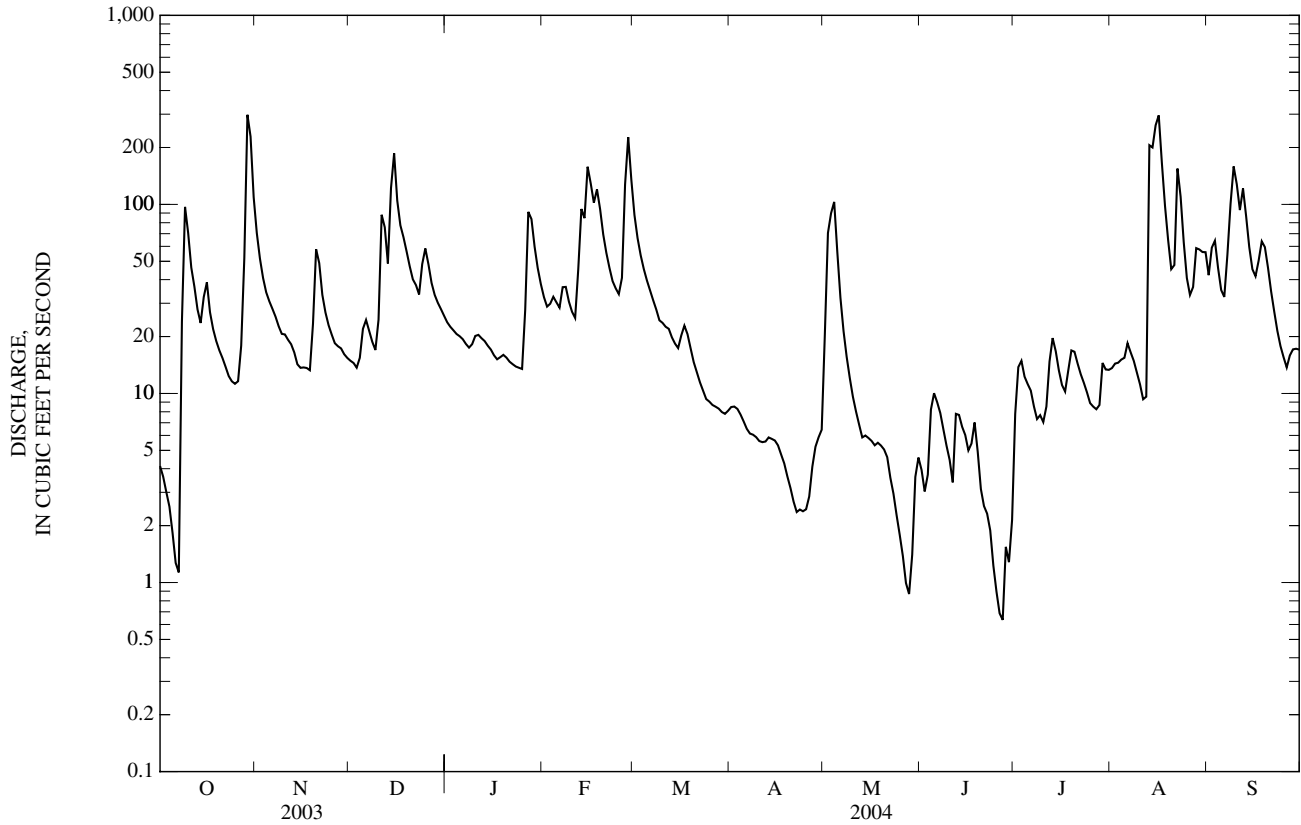
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 30.3   | 20.9   | 28.0   | 44.3   | 53.4   | 55.4   | 32.1   | 18.3   | 21.9   | 36.4   | 48.7   | 58.0   |
| MAX  | 115    | 52.6   | 74.5   | 93.8   | 177    | 111    | 115    | 137    | 143    | 133    | 153    | 534    |
| (WY) | (2000) | (1960) | (1973) | (1964) | (1998) | (1959) | (1961) | (1999) | (1961) | (1996) | (1969) | (1999) |
| MIN  | 1.11   | 0.53   | 1.53   | 3.20   | 3.54   | 8.27   | 3.69   | 1.67   | 0.32   | 0.73   | 0.15   | 0.51   |
| (WY) | (2002) | (2002) | (2002) | (2002) | (2002) | (2002) | (1967) | (1995) | (1960) | (1957) | (1957) | (1963) |

CAPE FEAR RIVER BASIN

02105900 HOOD CREEK NEAR LELAND, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1957 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 13,795.37              |        | 12,019.87           |        | 37.2                    |              |
| ANNUAL MEAN              | 37.8                   |        | 32.8                |        | 80.6                    |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1999                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 10.5                    |              |
| HIGHEST DAILY MEAN       | 842                    | Mar 21 | 298                 | Oct 29 | 3,000                   | Sep 16, 1999 |
| LOWEST DAILY MEAN        | 0.43                   | Sep 17 | 0.63                | Jun 27 | 0.00                    | Sep 10, 1997 |
| ANNUAL SEVEN-DAY MINIMUM | 0.52                   | Sep 11 | 1.2                 | Jun 23 | 0.02                    | Sep 4, 1997  |
| MAXIMUM PEAK FLOW        |                        |        | 448                 | Oct 29 | 4,800                   | Sep 16, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 7.35                | Aug 13 | 13.89*                  | Sep 16, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 0.58                | Jun 26 | 0.00*                   | Sep 10, 1997 |
| ANNUAL RUNOFF (CFSM)     | 1.75                   |        | 1.52                |        | 1.72                    |              |
| ANNUAL RUNOFF (INCHES)   | 23.76                  |        | 20.70               |        | 23.42                   |              |
| 10 PERCENT EXCEEDS       | 72                     |        | 84                  |        | 83                      |              |
| 50 PERCENT EXCEEDS       | 20                     |        | 17                  |        | 15                      |              |
| 90 PERCENT EXCEEDS       | 3.4                    |        | 3.7                 |        | 1.6                     |              |

\* See REMARKS.



02106500 BLACK RIVER NEAR TOMAHAWK, NC

LOCATION.--Lat 34°45'18", long 78°17'19", Sampson County, Hydrologic Unit 03030006, on left bank 30 ft upstream from bridge on State Highway 411, 0.2 mi downstream of Clear Run Swamp, and 3.8 mi northeast of Tomahawk.

DRAINAGE AREA.--676 mi<sup>2</sup>.

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

REVISED RECORDS.--WSP 1723: 1955(M). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 24.61 ft above NGVD of 1929. Nonrecording gage on downstream side of bridge Oct. 1, 1951 to June 29, 1961. Water-stage recorder was at present site at datum of 24.26 ft June 30, 1961 to Sept. 30, 1964. Satellite telemetry at station

REMARKS.--Records good, except those for estimated daily discharges, which are poor. Maximum gage height for period of record, from floodmarks.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1928 reached a stage of 22.0 ft, present datum; discharge, 14,500 ft<sup>3</sup>/s and floods in 1945 and 1948 reached a stage of 17.6 ft, present datum; discharge, 5,420 ft<sup>3</sup>/s, from information furnished by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 1     | 413    | 1,440  | 523    | 818    | 670    | 1,980  | 466    | 528    | 582    | 458   | 133    | 1,070  |
| 2     | 381    | 1,390  | 498    | 768    | 620    | 2,030  | 460    | e611   | 535    | 640   | 144    | 1,280  |
| 3     | 347    | 1,220  | 468    | 731    | 607    | 2,000  | 432    | e1,030 | 487    | 558   | 188    | 1,260  |
| 4     | 319    | 1,060  | 457    | 703    | 687    | 1,870  | 414    | e1,510 | 433    | 485   | 256    | 1,090  |
| 5     | 297    | 972    | 619    | 686    | 700    | 1,730  | 393    | 1,770  | 506    | 441   | 245    | 909    |
| 6     | 277    | 953    | 793    | 668    | 667    | 1,620  | 368    | 2,080  | 512    | 357   | 234    | 806    |
| 7     | 259    | 1,000  | 775    | 653    | 650    | 1,520  | 348    | 2,370  | 399    | 302   | 254    | 839    |
| 8     | 254    | 1,040  | 710    | 632    | 636    | 1,380  | 335    | 2,400  | 334    | 260   | 248    | 892    |
| 9     | 340    | 929    | 652    | 628    | 602    | 1,240  | 323    | 2,100  | 308    | 225   | 239    | 973    |
| 10    | 450    | 781    | 624    | 674    | 576    | 1,080  | 313    | 1,590  | 314    | 194   | 228    | 1,090  |
| 11    | 429    | 666    | 1,000  | 688    | 564    | 928    | 392    | 1,120  | 295    | 172   | 214    | 1,170  |
| 12    | 419    | 604    | 1,300  | 660    | 595    | 808    | 1,180  | 815    | 340    | 179   | 199    | 1,160  |
| 13    | 396    | 573    | 1,390  | 659    | 869    | 731    | 1,730  | 768    | 425    | 178   | 235    | 1,080  |
| 14    | 364    | 534    | 1,500  | 649    | 1,030  | 671    | 2,180  | 979    | 385    | 207   | 431    | 996    |
| 15    | 369    | 492    | 1,750  | 628    | 1,170  | 634    | 2,410  | 996    | 343    | 219   | 1,030  | 904    |
| 16    | 389    | 463    | 1,930  | 604    | 1,330  | 629    | 2,490  | 762    | 337    | 200   | 1,360  | 806    |
| 17    | 373    | 445    | 2,080  | e570   | 1,430  | 656    | 2,350  | 530    | 353    | 173   | 1,580  | 727    |
| 18    | 354    | 431    | 2,170  | 557    | 1,510  | 649    | 2,000  | 440    | 383    | 153   | 1,810  | 759    |
| 19    | 344    | 450    | 2,160  | 576    | 1,530  | 619    | 1,480  | 392    | 378    | 144   | 2,000  | 908    |
| 20    | 328    | 851    | 2,040  | 567    | 1,490  | 589    | 983    | 359    | 389    | e131  | 2,050  | 910    |
| 21    | 312    | 1,090  | 1,860  | 541    | 1,380  | 557    | 736    | 394    | 351    | e132  | 1,930  | 834    |
| 22    | 298    | 1,030  | 1,690  | 523    | 1,250  | 531    | 612    | 382    | 308    | e125  | 1,670  | 744    |
| 23    | 282    | 935    | 1,550  | 511    | 1,130  | 502    | 524    | 333    | e280   | e119  | 1,430  | 663    |
| 24    | 267    | 830    | 1,470  | 496    | 1,050  | 475    | 458    | 400    | e290   | e109  | 1,350  | 600    |
| 25    | 252    | 750    | 1,460  | 487    | 971    | 456    | 409    | 704    | 338    | e107  | 1,340  | 558    |
| 26    | 242    | 696    | 1,400  | 499    | 925    | 439    | 391    | 593    | 300    | e104  | 1,310  | 524    |
| 27    | 243    | 652    | 1,280  | 560    | 1,230  | 422    | 825    | 419    | 270    | e97   | 1,230  | 503    |
| 28    | 252    | 621    | 1,150  | 658    | 1,620  | 409    | 1,030  | 346    | 266    | e91   | 1,130  | 507    |
| 29    | e735   | 594    | 1,020  | 740    | 1,860  | 399    | 834    | 297    | 319    | 85    | 1,010  | 542    |
| 30    | e1,140 | 554    | 933    | 755    | ---    | 386    | 615    | 274    | 356    | 82    | 975    | 502    |
| 31    | 1,410  | ---    | 872    | 725    | ---    | 399    | ---    | 425    | ---    | 112   | 998    | ---    |
| TOTAL | 12,535 | 24,046 | 38,124 | 19,614 | 29,349 | 28,339 | 27,481 | 27,717 | 11,116 | 6,839 | 27,451 | 25,606 |
| MEAN  | 404    | 802    | 1,230  | 633    | 1,012  | 914    | 916    | 894    | 371    | 221   | 886    | 854    |
| MAX   | 1,410  | 1,440  | 2,170  | 818    | 1,860  | 2,030  | 2,490  | 2,400  | 582    | 640   | 2,050  | 1,280  |
| MIN   | 242    | 431    | 457    | 487    | 564    | 386    | 313    | 274    | 266    | 82    | 133    | 502    |
| CFSM  | 0.60   | 1.19   | 1.82   | 0.94   | 1.50   | 1.35   | 1.36   | 1.32   | 0.55   | 0.33  | 1.31   | 1.26   |
| IN.   | 0.69   | 1.32   | 2.10   | 1.08   | 1.62   | 1.56   | 1.51   | 1.53   | 0.61   | 0.38  | 1.51   | 1.41   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2004, BY WATER YEAR (WY)

|      | 525    | 500    | 711    | 1,123  | 1,310  | 1,418  | 1,062  | 542    | 488    | 533    | 714    | 717    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 525    | 500    | 711    | 1,123  | 1,310  | 1,418  | 1,062  | 542    | 488    | 533    | 714    | 717    |
| MAX  | 4,421  | 1,412  | 2,164  | 2,903  | 4,212  | 3,410  | 3,070  | 1,687  | 3,089  | 3,949  | 2,810  | 5,812  |
| (WY) | (2000) | (1963) | (1993) | (1993) | (1998) | (1983) | (1973) | (1978) | (1995) | (2003) | (1974) | (1999) |
| MIN  | 29.6   | 57.1   | 238    | 287    | 448    | 460    | 225    | 117    | 73.0   | 68.0   | 25.2   | 13.4   |
| (WY) | (1955) | (1974) | (1989) | (1986) | (1989) | (1981) | (1981) | (2001) | (2002) | (1998) | (1954) | (1954) |



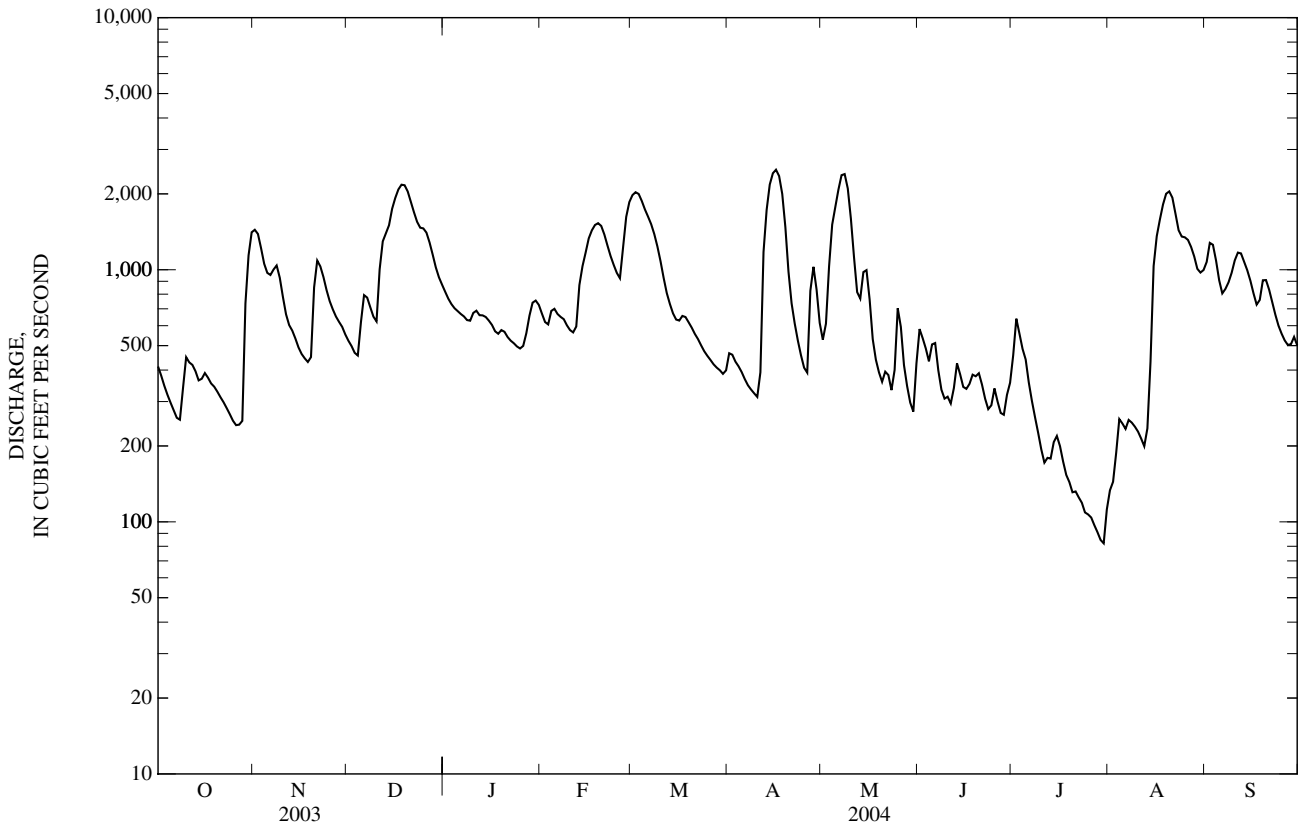
CAPE FEAR RIVER BASIN

02106500 BLACK RIVER NEAR TOMAHAWK, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1952 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 500,560                |        | 278,217             |        |                         |              |
| ANNUAL MEAN              | 1,371                  |        | 760                 |        | 801                     |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1,300                   | 1960         |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 327                     | 1986         |
| HIGHEST DAILY MEAN       | 7,990                  | Jul 17 | 2,490               | Apr 16 | 27,300                  | Sep 18, 1999 |
| LOWEST DAILY MEAN        | 242                    | Oct 26 | 82                  | Jul 30 | 8.9                     | Sep 13, 1954 |
| ANNUAL SEVEN-DAY MINIMUM | 262                    | Oct 22 | 96                  | Jul 24 | 9.9                     | Oct 9, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 2,510               | Apr 16 | 28,500                  | Sep 18, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 12.49               | Apr 16 | 27.14*                  | Sep 18, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 79                  | Jul 30 | 8.5                     | Oct 13, 1954 |
| ANNUAL RUNOFF (CFSM)     | 2.03                   |        | 1.12                |        | 1.18                    |              |
| ANNUAL RUNOFF (INCHES)   | 27.55                  |        | 15.31               |        | 16.10                   |              |
| 10 PERCENT EXCEEDS       | 2,920                  |        | 1,520               |        | 1,780                   |              |
| 50 PERCENT EXCEEDS       | 935                    |        | 612                 |        | 520                     |              |
| 90 PERCENT EXCEEDS       | 376                    |        | 251                 |        | 107                     |              |

\* See REMARKS.

e Estimated.



02107544 BLACK RIVER NEAR CURRIE, NC

LOCATION.--Lat 34°25'54", long 78°08'37", Pender County, Hydrologic Unit 03030005, at bridge on NC Highway 210, 3 mi above Moores Creek, and 3.25 mi southwest of Currie.

DRAINAGE AREA.--1,405 mi<sup>2</sup>.

PERIOD OF RECORD.--March 2004 to September 2004.

GAGE.--Water-stage recorder and acoustic velocity meter. Datum of gage is at NGVD of 1929 (approximate). Satellite telemetry at station.

REMARKS.--Records fair. This site is strongly affected by astronomical and wind tides. The astronomical tides occur at primary harmonic periods of 12.42 hours and 24.8 hours. Mean daily discharge data for this site may be affected by aliasing due to tides and can contain fluctuations that are not representative of net downstream discharge.

EXTREMES FOR CURRENT WATER YEAR.--Maximum discharge, 3,610 ft<sup>3</sup>/s, Mar. 8, maximum gage height, 5.20 ft, Mar. 8; minimum discharge, -1,030, Aug. 1.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

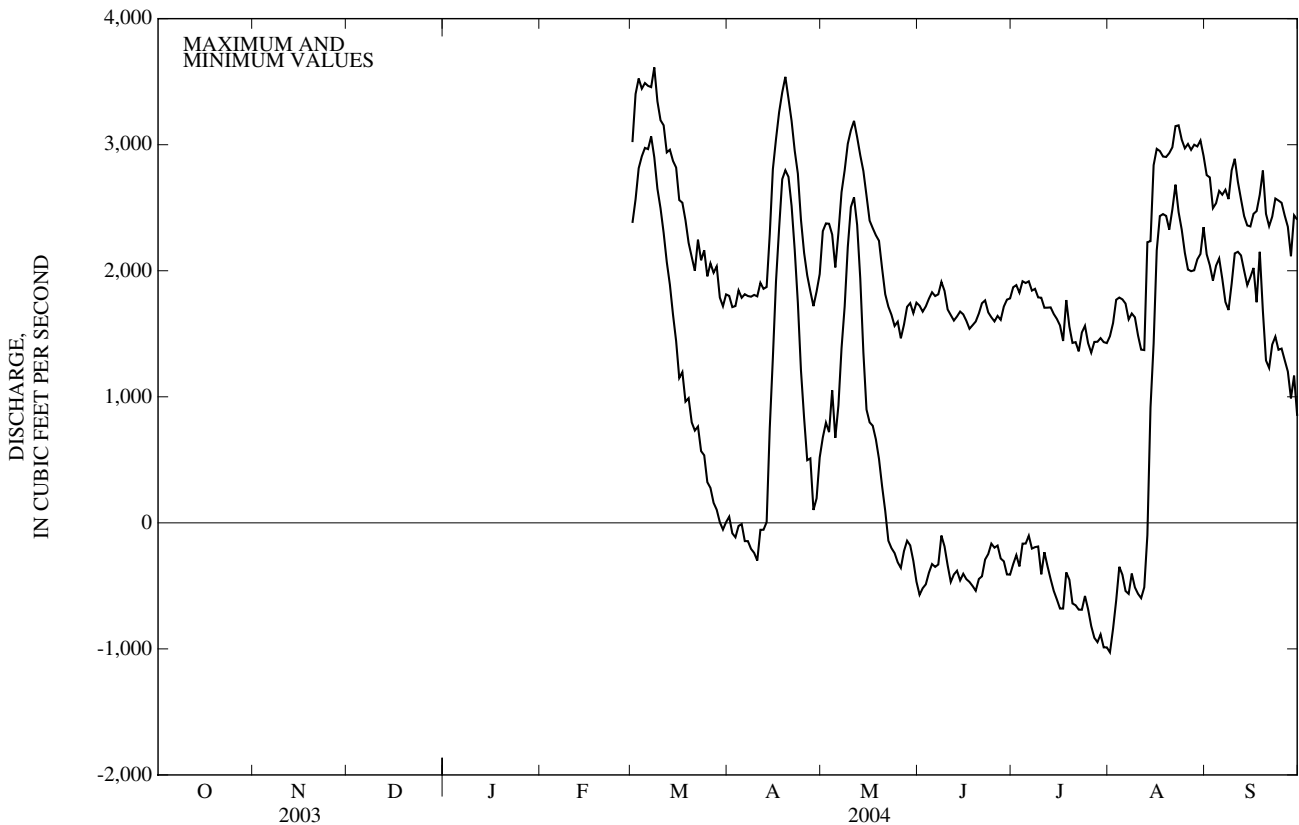
| DAY   | OCTOBER |     | NOVEMBER |     | DECEMBER |     | JANUARY |     | FEBRUARY |     | MARCH |       |
|-------|---------|-----|----------|-----|----------|-----|---------|-----|----------|-----|-------|-------|
|       | MAX     | MIN | MAX      | MIN | MAX      | MIN | MAX     | MIN | MAX      | MIN | MAX   | MIN   |
| 1     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,020 | 2,380 |
| 2     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,400 | 2,570 |
| 3     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,530 | 2,810 |
| 4     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,440 | 2,910 |
| 5     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,490 | 2,970 |
| 6     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,470 | 2,960 |
| 7     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,460 | 3,070 |
| 8     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,610 | 2,900 |
| 9     | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,340 | 2,650 |
| 10    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,190 | 2,500 |
| 11    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,150 | 2,300 |
| 12    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,940 | 2,070 |
| 13    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,960 | 1,890 |
| 14    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,870 | 1,650 |
| 15    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,820 | 1,440 |
| 16    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,560 | 1,150 |
| 17    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,540 | 1,200 |
| 18    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,400 | 962   |
| 19    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,220 | 989   |
| 20    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,110 | 797   |
| 21    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,000 | 732   |
| 22    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,250 | 764   |
| 23    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,080 | 569   |
| 24    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,160 | 536   |
| 25    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 1,960 | 323   |
| 26    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,060 | 277   |
| 27    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 1,980 | 159   |
| 28    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 2,030 | 104   |
| 29    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 1,790 | 5.2   |
| 30    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 1,720 | -53   |
| 31    | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 1,810 | 5.4   |
| MONTH | ---     | --- | ---      | --- | ---      | --- | ---     | --- | ---      | --- | 3,610 | -53   |

CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX   |       | MIN   |       | MAX    |           | MIN   |      | MAX   |        | MIN   |       |
|-------|-------|-------|-------|-------|--------|-----------|-------|------|-------|--------|-------|-------|
|       | APRIL | MAY   | JUNE  | JULY  | AUGUST | SEPTEMBER | MAX   | MIN  | MAX   | MIN    | MAX   | MIN   |
| 1     | 1,800 | 49    | 2,310 | 678   | 1,720  | -571      | 1,870 | -327 | 1,480 | -1,030 | 2,760 | 2,130 |
| 2     | 1,710 | -83   | 2,380 | 795   | 1,680  | -519      | 1,890 | -256 | 1,590 | -840   | 2,740 | 2,040 |
| 3     | 1,720 | -115  | 2,370 | 720   | 1,720  | -488      | 1,830 | -346 | 1,770 | -616   | 2,500 | 1,920 |
| 4     | 1,840 | -25   | 2,290 | 1,050 | 1,780  | -396      | 1,920 | -165 | 1,790 | -349   | 2,540 | 2,040 |
| 5     | 1,790 | -9.3  | 2,030 | 674   | 1,830  | -327      | 1,900 | -165 | 1,770 | -412   | 2,630 | 2,100 |
| 6     | 1,810 | -145  | 2,300 | 931   | 1,800  | -350      | 1,920 | -102 | 1,740 | -541   | 2,600 | 1,940 |
| 7     | 1,800 | -145  | 2,620 | 1,390 | 1,810  | -331      | 1,840 | -204 | 1,610 | -563   | 2,640 | 1,750 |
| 8     | 1,790 | -207  | 2,800 | 1,720 | 1,910  | -101      | 1,860 | -193 | 1,660 | -403   | 2,570 | 1,690 |
| 9     | 1,810 | -238  | 3,010 | 2,190 | 1,840  | -187      | 1,790 | -188 | 1,630 | -512   | 2,800 | 1,900 |
| 10    | 1,800 | -299  | 3,120 | 2,510 | 1,690  | -337      | 1,790 | -408 | 1,490 | -563   | 2,890 | 2,140 |
| 11    | 1,900 | -55   | 3,190 | 2,580 | 1,650  | -469      | 1,710 | -233 | 1,370 | -597   | 2,710 | 2,150 |
| 12    | 1,860 | -55   | 3,060 | 2,360 | 1,600  | -410      | 1,710 | -344 | 1,370 | -511   | 2,570 | 2,120 |
| 13    | 1,870 | 5.7   | 2,920 | 1,940 | 1,640  | -380      | 1,710 | -446 | 2,230 | -97    | 2,430 | 2,000 |
| 14    | 2,290 | 752   | 2,790 | 1,350 | 1,680  | -456      | 1,660 | -540 | 2,230 | 915    | 2,360 | 1,890 |
| 15    | 2,810 | 1,310 | 2,600 | 899   | 1,650  | -404      | 1,620 | -608 | 2,840 | 1,420  | 2,350 | 1,950 |
| 16    | 3,040 | 1,920 | 2,400 | 797   | 1,600  | -447      | 1,570 | -680 | 2,970 | 2,160  | 2,450 | 2,020 |
| 17    | 3,260 | 2,340 | 2,340 | 770   | 1,540  | -469      | 1,440 | -680 | 2,950 | 2,430  | 2,470 | 1,750 |
| 18    | 3,420 | 2,730 | 2,280 | 663   | 1,570  | -501      | 1,770 | -393 | 2,910 | 2,450  | 2,600 | 2,150 |
| 19    | 3,540 | 2,800 | 2,240 | 508   | 1,600  | -539      | 1,560 | -451 | 2,900 | 2,440  | 2,790 | 1,680 |
| 20    | 3,370 | 2,740 | 2,020 | 290   | 1,660  | -445      | 1,430 | -639 | 2,930 | 2,330  | 2,450 | 1,290 |
| 21    | 3,190 | 2,510 | 1,810 | 95    | 1,740  | -424      | 1,430 | -654 | 2,980 | 2,490  | 2,350 | 1,230 |
| 22    | 2,950 | 2,160 | 1,710 | -142  | 1,760  | -291      | 1,360 | -689 | 3,150 | 2,680  | 2,430 | 1,410 |
| 23    | 2,770 | 1,740 | 1,650 | -200  | 1,670  | -247      | 1,510 | -690 | 3,150 | 2,460  | 2,570 | 1,480 |
| 24    | 2,410 | 1,210 | 1,560 | -240  | 1,630  | -165      | 1,560 | -580 | 3,040 | 2,330  | 2,560 | 1,370 |
| 25    | 2,140 | 832   | 1,600 | -313  | 1,600  | -197      | 1,430 | -685 | 2,970 | 2,140  | 2,540 | 1,380 |
| 26    | 1,960 | 497   | 1,460 | -358  | 1,640  | -180      | 1,350 | -819 | 3,010 | 2,010  | 2,440 | 1,290 |
| 27    | 1,840 | 511   | 1,570 | -224  | 1,610  | -283      | 1,440 | -912 | 2,960 | 2,000  | 2,350 | 1,200 |
| 28    | 1,720 | 102   | 1,710 | -142  | 1,720  | -305      | 1,440 | -947 | 3,000 | 2,000  | 2,120 | 988   |
| 29    | 1,840 | 194   | 1,740 | -179  | 1,770  | -409      | 1,470 | -885 | 2,990 | 2,090  | 2,440 | 1,170 |
| 30    | 1,970 | 519   | 1,660 | -302  | 1,780  | -411      | 1,430 | -988 | 3,030 | 2,130  | 2,410 | 849   |
| 31    | ---   | ---   | 1,750 | -466  | ---    | ---       | 1,430 | -988 | 2,910 | 2,350  | ---   | ---   |
| MONTH | 3,540 | -299  | 3,190 | -466  | 1,910  | -571      | 1,920 | -988 | 3,150 | -1,030 | 2,890 | 849   |



02107544 BLACK RIVER NEAR CURRIE, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 2003 to December 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1955 to September 1956, September 2003 to December 2004.

SALINITY: October 1955 to September 1956, September 2003 to December 2004.

pH: September 2003 to December 2004.

WATER TEMPERATURE: October 1955 to September 1956, September 2003 to December 2004.

DISSOLVED OXYGEN: September 2003 to December 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: September 2003 to December 2004.

INSTRUMENTATION.--Water-quality monitor from September 2003 to February 2004. Water-quality monitor with satellite telemetry from February 2004 to December 2004.

REMARKS.--Station currently operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water-Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                            | MAXIMUM RECORDED                         | MINIMUM RECORDED                     |
|--|--|--------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 114, November 21, 22, 2004               | 38, May 11, 1956 (daily)             |
| SALINITY, ppt                          | 0.05, November 21, 22, 23, 2004          | 0.02, on many days during the period |
| pH, standard units                     | 6.7, August 13, 2004                     | 5.1, August 17, 18, 19, 20, 2004     |
| WATER TEMPERATURE, °C                  | 30.0, June 30, July 24, 28, 1956 (daily) | 2.8, January 28, February 2, 2004    |
| DISSOLVED OXYGEN, mg/L                 | 11.4, January 12, 13, 2004               | 2.4, September 28, 2003              |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 90, February 5, 2004                     | 28, September 28, 2003               |

EXTREMES FOR CURRENT PERIOD.--

| CONSTITUENT                            | MAXIMUM RECORDED                | MINIMUM RECORDED                     |
|--|---------------------------------|--------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 114, November 21, 22, 2004      | 45, August 17, 2004                  |
| SALINITY, ppt                          | 0.05, November 21, 22, 23, 2004 | 0.02, on many days during the period |
| pH, standard units                     | 6.7, August 13, 2004            | 5.1, August 17, 18, 19, 20, 2004     |
| WATER TEMPERATURE, °C                  | 29.8, July 15, 2004             | 2.8, January 28, February 2, 2004    |
| DISSOLVED OXYGEN, mg/L                 | 11.4, January 12, 13, 2004      | 2.4, September 28, 2003              |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 90, February 5, 2004            | 28, September 28, 2003               |



02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |     |      |       |     |      |       |     |      |     |     |      |
| 1     | ---      | --- | ---  | 66    | 63  | 64   | ---   | --- | ---  | --- | --- | ---  |
| 2     | ---      | --- | ---  | 70    | 64  | 67   | ---   | --- | ---  | --- | --- | ---  |
| 3     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
| 4     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
| 5     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
| 6     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | 77  | 72  | 75   |
| 7     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | 78  | 72  | 75   |
| 8     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | 80  | 73  | 76   |
| 9     | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | 80  | 72  | 75   |
| 10    | 78       | 72  | 74   | ---   | --- | ---  | ---   | --- | ---  | 78  | 72  | 75   |
| 11    | 76       | 70  | 73   | ---   | --- | ---  | ---   | --- | ---  | 80  | 73  | 76   |
| 12    | 79       | 72  | 75   | ---   | --- | ---  | ---   | --- | ---  | 80  | 73  | 76   |
| 13    | 81       | 74  | 77   | ---   | --- | ---  | ---   | --- | ---  | 81  | 73  | 77   |
| 14    | 83       | 75  | 78   | ---   | --- | ---  | ---   | --- | ---  | 81  | 73  | 77   |
| 15    | 82       | 74  | 78   | ---   | --- | ---  | ---   | --- | ---  | 82  | 72  | 77   |
| 16    | 84       | 76  | 79   | ---   | --- | ---  | ---   | --- | ---  | 82  | 73  | 77   |
| 17    | 85       | 78  | 80   | ---   | --- | ---  | ---   | --- | ---  | 82  | 73  | 77   |
| 18    | 84       | 76  | 79   | ---   | --- | ---  | ---   | --- | ---  | 82  | 73  | 77   |
| 19    | 85       | 78  | 80   | ---   | --- | ---  | ---   | --- | ---  | 82  | 73  | 77   |
| 20    | 85       | 78  | 80   | ---   | --- | ---  | ---   | --- | ---  | 83  | 74  | 78   |
| 21    | 85       | 77  | 80   | ---   | --- | ---  | ---   | --- | ---  | 83  | 74  | 79   |
| 22    | 86       | 78  | 81   | ---   | --- | ---  | ---   | --- | ---  | 85  | 74  | 80   |
| 23    | 86       | 78  | 81   | ---   | --- | ---  | ---   | --- | ---  | 86  | 76  | 81   |
| 24    | 86       | 77  | 80   | ---   | --- | ---  | ---   | --- | ---  | 86  | 77  | 81   |
| 25    | 85       | 77  | 80   | ---   | --- | ---  | ---   | --- | ---  | 86  | 75  | 81   |
| 26    | 86       | 78  | 80   | ---   | --- | ---  | ---   | --- | ---  | 85  | 72  | 79   |
| 27    | 86       | 77  | 80   | ---   | --- | ---  | ---   | --- | ---  | 80  | 71  | 75   |
| 28    | 85       | 75  | 80   | ---   | --- | ---  | ---   | --- | ---  | 77  | 72  | 75   |
| 29    | 78       | 60  | 67   | ---   | --- | ---  | ---   | --- | ---  | 78  | 73  | 76   |
| 30    | 64       | 60  | 62   | ---   | --- | ---  | ---   | --- | ---  | 80  | 74  | 76   |
| 31    | 65       | 62  | 64   | ---   | --- | ---  | ---   | --- | ---  | 80  | 74  | 77   |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | 80       | 73  | 76   | 60    | 60  | 60   | 80    | 70  | 71   | 60  | 60  | 60   |
| 2     | 81       | 74  | 77   | 60    | 60  | 60   | 80    | 70  | 70   | 60  | 60  | 60   |
| 3     | 82       | 74  | 77   | 60    | 60  | 60   | 80    | 70  | 71   | 60  | 50  | 59   |
| 4     | 80       | 73  | 76   | 70    | 60  | 66   | 80    | 70  | 71   | 60  | 50  | 53   |
| 5     | 82       | 74  | 77   | 70    | 70  | 70   | 80    | 70  | 72   | 60  | 60  | 60   |
| 6     | 83       | 74  | 78   | 70    | 70  | 70   | 80    | 70  | 71   | 60  | 54  | 57   |
| 7     | 81       | 74  | 77   | 70    | 60  | 70   | 80    | 70  | 71   | 58  | 54  | 55   |
| 8     | 82       | 75  | 78   | 70    | 60  | 66   | 80    | 70  | 71   | 57  | 53  | 55   |
| 9     | 83       | 75  | 79   | 60    | 60  | 60   | 80    | 70  | 72   | 56  | 53  | 55   |
| 10    | ---      | --- | ---  | 60    | 60  | 60   | 80    | 70  | 72   | 57  | 54  | 56   |
| 11    | ---      | --- | ---  | 60    | 60  | 60   | 80    | 70  | 71   | 63  | 55  | 59   |
| 12    | 90       | 70  | 78   | 60    | 60  | 60   | 70    | 70  | 70   | 63  | 60  | 61   |
| 13    | 80       | 70  | 74   | 60    | 60  | 60   | 70    | 60  | 68   | 64  | 60  | 62   |
| 14    | 80       | 70  | 72   | 70    | 60  | 60   | 70    | 60  | 68   | 64  | 60  | 62   |
| 15    | 70       | 70  | 70   | 70    | 60  | 62   | 60    | 60  | 60   | 65  | 60  | 62   |
| 16    | 70       | 70  | 70   | 70    | 60  | 62   | 60    | 60  | 60   | 66  | 61  | 64   |
| 17    | 70       | 60  | 70   | 70    | 60  | 61   | 60    | 60  | 60   | 66  | 60  | 62   |
| 18    | 70       | 60  | 70   | 70    | 60  | 62   | 60    | 60  | 60   | 64  | 59  | 62   |
| 19    | 70       | 70  | 70   | 70    | 60  | 64   | 60    | 60  | 60   | 65  | 58  | 62   |
| 20    | 70       | 70  | 70   | 70    | 60  | 65   | 60    | 60  | 60   | 67  | 61  | 64   |
| 21    | 70       | 70  | 70   | 70    | 60  | 66   | 60    | 60  | 60   | 70  | 63  | 67   |
| 22    | 70       | 70  | 70   | 70    | 60  | 67   | 60    | 60  | 60   | 73  | 66  | 70   |
| 23    | 70       | 70  | 70   | 70    | 60  | 70   | 60    | 60  | 60   | 76  | 68  | 71   |
| 24    | 70       | 70  | 70   | 70    | 70  | 70   | 60    | 60  | 60   | 79  | 71  | 74   |
| 25    | 70       | 70  | 70   | 70    | 70  | 70   | 60    | 60  | 60   | 81  | 74  | 76   |
| 26    | 70       | 70  | 70   | 70    | 70  | 70   | 60    | 60  | 60   | 82  | 75  | 77   |
| 27    | 70       | 60  | 69   | 70    | 70  | 70   | 60    | 60  | 60   | 83  | 76  | 79   |
| 28    | 70       | 60  | 62   | 70    | 70  | 70   | 60    | 60  | 60   | 85  | 80  | 82   |
| 29    | 60       | 60  | 60   | 80    | 70  | 70   | 70    | 60  | 63   | 85  | 79  | 82   |
| 30    | ---      | --- | ---  | 80    | 70  | 70   | 70    | 60  | 64   | 84  | 78  | 80   |
| 31    | ---      | --- | ---  | 80    | 70  | 70   | ---   | --- | ---  | 82  | 78  | 80   |
| MONTH | ---      | --- | ---  | 80    | 60  | 65   | 80    | 60  | 65   | 85  | 50  | 65   |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 85  | 79  | 82   | 75  | 65  | 72   | 90  | 81  | 85   | 59  | 55  | 58   |
| 2     | 89  | 83  | 86   | 73  | 65  | 69   | 91  | 83  | 87   | 59  | 55  | 57   |
| 3     | 92  | 86  | 89   | 78  | 70  | 75   | 92  | 86  | 89   | 62  | 59  | 61   |
| 4     | 93  | 89  | 91   | 79  | 74  | 76   | 88  | 80  | 84   | 62  | 60  | 61   |
| 5     | 91  | 82  | 88   | 80  | 75  | 78   | 84  | 80  | 81   | 62  | 60  | 61   |
| 6     | 88  | 82  | 85   | 79  | 75  | 77   | 86  | 80  | 82   | 64  | 60  | 62   |
| 7     | 89  | 83  | 85   | 79  | 74  | 77   | 87  | 81  | 83   | 65  | 61  | 63   |
| 8     | 88  | 77  | 83   | 80  | 76  | 78   | 91  | 85  | 87   | 65  | 61  | 63   |
| 9     | 85  | 77  | 81   | 80  | 75  | 78   | 89  | 84  | 85   | 64  | 60  | 62   |
| 10    | 84  | 78  | 80   | 78  | 71  | 73   | 87  | 84  | 85   | 61  | 57  | 59   |
| 11    | 85  | 80  | 81   | 74  | 71  | 73   | 89  | 85  | 86   | 59  | 56  | 57   |
| 12    | 84  | 76  | 79   | 73  | 67  | 68   | 88  | 84  | 86   | 57  | 56  | 56   |
| 13    | 83  | 76  | 80   | 69  | 67  | 68   | 85  | 48  | 62   | 59  | 57  | 58   |
| 14    | 87  | 80  | 84   | 70  | 67  | 68   | 52  | 49  | 51   | 60  | 58  | 59   |
| 15    | 88  | 84  | 86   | 73  | 68  | 71   | 50  | 47  | 48   | 61  | 59  | 60   |
| 16    | 88  | 84  | 86   | 76  | 71  | 74   | 48  | 46  | 47   | 61  | 59  | 60   |
| 17    | 87  | 84  | 85   | 79  | 75  | 77   | 46  | 45  | 45   | 63  | 59  | 61   |
| 18    | 87  | 83  | 85   | 79  | 72  | 75   | 49  | 46  | 47   | 62  | 59  | 60   |
| 19    | 87  | 83  | 85   | 79  | 72  | 76   | 53  | 49  | 51   | 62  | 59  | 60   |
| 20    | 89  | 84  | 86   | 87  | 77  | 82   | 57  | 53  | 56   | 63  | 59  | 61   |
| 21    | 89  | 85  | 87   | 88  | 84  | 85   | 58  | 56  | 57   | 64  | 60  | 62   |
| 22    | 87  | 81  | 85   | 88  | 84  | 86   | 60  | 56  | 58   | 65  | 61  | 62   |
| 23    | 83  | 81  | 82   | 88  | 85  | 86   | 60  | 58  | 59   | 66  | 61  | 64   |
| 24    | 84  | 81  | 82   | 86  | 76  | 81   | 61  | 58  | 60   | 66  | 63  | 64   |
| 25    | 81  | 79  | 80   | 78  | 73  | 76   | 62  | 59  | 60   | 67  | 63  | 65   |
| 26    | 80  | 77  | 78   | 80  | 78  | 79   | 62  | 59  | 60   | 67  | 62  | 64   |
| 27    | 78  | 76  | 77   | 81  | 79  | 80   | 61  | 58  | 59   | 66  | 62  | 64   |
| 28    | 77  | 75  | 76   | 83  | 79  | 81   | 62  | 58  | 60   | 66  | 61  | 64   |
| 29    | 77  | 73  | 75   | 85  | 80  | 81   | 61  | 56  | 58   | 65  | 61  | 63   |
| 30    | 75  | 73  | 74   | 84  | 79  | 81   | 59  | 56  | 58   | 66  | 62  | 64   |
| 31    | --- | --- | ---  | 87  | 80  | 83   | 58  | 56  | 57   | --- | --- | ---  |
| MONTH | 93  | 73  | 83   | 88  | 65  | 77   | 92  | 45  | 67   | 67  | 55  | 61   |

## 02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
| 1     | 66      | 62  | 64   | 92       | 81  | 87   | 89       | 83  | 87   | ---     | --- | ---  |
| 2     | 67      | 62  | 64   | 93       | 84  | 88   | 87       | 82  | 84   | ---     | --- | ---  |
| 3     | 68      | 63  | 65   | 94       | 84  | 89   | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 69      | 64  | 66   | 95       | 86  | 90   | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 70      | 65  | 67   | 96       | 88  | 92   | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 71      | 66  | 68   | 97       | 91  | 93   | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 70      | 65  | 67   | 99       | 91  | 94   | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 70      | 64  | 67   | 101      | 93  | 96   | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 71      | 65  | 68   | 103      | 95  | 99   | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 73      | 66  | 70   | 105      | 98  | 101  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 74      | 66  | 70   | 104      | 97  | 100  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 75      | 68  | 72   | 104      | 97  | 100  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 76      | 68  | 72   | 102      | 90  | 95   | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 76      | 68  | 72   | 100      | 92  | 96   | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 77      | 69  | 72   | 107      | 96  | 100  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 76      | 68  | 72   | 108      | 95  | 101  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 76      | 70  | 72   | 98       | 91  | 96   | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 78      | 70  | 73   | 102      | 93  | 99   | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 78      | 70  | 73   | 107      | 96  | 102  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 78      | 70  | 73   | 112      | 100 | 107  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 78      | 70  | 72   | 114      | 105 | 110  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 81      | 71  | 75   | 114      | 104 | 110  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | 82      | 74  | 76   | 113      | 92  | 103  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | 85      | 75  | 79   | 100      | 91  | 95   | ---      | --- | ---  | ---     | --- | ---  |
| 25    | 84      | 75  | 79   | 100      | 91  | 95   | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 85      | 76  | 79   | 97       | 90  | 94   | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 86      | 78  | 80   | 100      | 91  | 96   | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 88      | 78  | 81   | 98       | 84  | 90   | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 89      | 80  | 83   | 90       | 84  | 87   | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 90      | 82  | 85   | 90       | 83  | 87   | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 92      | 83  | 86   | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | 92      | 62  | 73   | 114      | 81  | 96   | ---      | --- | ---  | ---     | --- | ---  |





02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | ---      | ---  | ---  | 0.03  | 0.03 | 0.03 | ---   | ---  | ---  | ---  | ---  | ---  |
| 2     | ---      | ---  | ---  | 0.03  | 0.03 | 0.03 | ---   | ---  | ---  | ---  | ---  | ---  |
| 3     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 4     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 5     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 6     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 7     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 8     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 9     | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 10    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 11    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 12    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 13    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 14    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 15    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 16    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 17    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 18    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 19    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 20    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 21    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 22    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 23    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 24    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 25    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 26    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 27    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 28    | 0.03     | 0.03 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 29    | 0.03     | 0.02 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 30    | 0.03     | 0.02 | 0.02 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 31    | 0.03     | 0.02 | 0.03 | ---   | ---  | ---  | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 0.03     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 2     | 0.03     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 3     | 0.03     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 4     | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 5     | 0.03     | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 6     | 0.03     | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 7     | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 8     | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 9     | 0.03     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 10    | ---      | ---  | ---  | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02 | 0.02 | 0.02 |
| 11    | ---      | ---  | ---  | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| 12    | 0.04     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.03 | 0.02 | 0.02 |
| 13    | 0.03     | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03  | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 |
| 14    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.02 | 0.03  | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 |
| 15    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.02 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 |
| 16    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.02 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| 17    | 0.03     | 0.02 | 0.03 | 0.03  | 0.02 | 0.02 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 |
| 18    | 0.03     | 0.02 | 0.03 | 0.03  | 0.02 | 0.02 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 |
| 19    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.02 |
| 20    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.02 | 0.03 |
| 21    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 22    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 23    | 0.03     | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 24    | 0.03     | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 25    | 0.03     | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 26    | 0.03     | 0.03 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 27    | 0.03     | 0.02 | 0.03 | 0.03  | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 28    | 0.03     | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.02  | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 |
| 29    | 0.02     | 0.02 | 0.02 | 0.03  | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 |
| 30    | ---      | ---  | ---  | 0.03  | 0.03 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03 | 0.03 | 0.03 |
| 31    | ---      | ---  | ---  | 0.03  | 0.03 | 0.03 | ---   | ---  | ---  | 0.03 | 0.03 | 0.03 |
| MONTH | ---      | ---  | ---  | 0.03  | 0.02 | 0.03 | 0.03  | 0.02 | 0.03 | 0.03 | 0.02 | 0.02 |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       |      |      |      | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 2     | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 3     | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.04 | 0.02      | 0.02 | 0.02 |
| 4     | 0.04 | 0.04 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 5     | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 6     | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03   | 0.03 | 0.03 | 0.03      | 0.02 | 0.02 |
| 7     | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03   | 0.03 | 0.03 | 0.03      | 0.02 | 0.03 |
| 8     | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.03      | 0.02 | 0.03 |
| 9     | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.03      | 0.02 | 0.02 |
| 10    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 11    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 12    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.04   | 0.03 | 0.03 | 0.02      | 0.02 | 0.02 |
| 13    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 14    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 15    | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 16    | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 17    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.02 |
| 18    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 19    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.02      | 0.02 | 0.02 |
| 20    | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.02 |
| 21    | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.02 |
| 22    | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.02 |
| 23    | 0.03 | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 24    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.03 | 0.03 |
| 25    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.03 | 0.03 |
| 26    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 27    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 28    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 29    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 30    | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | 0.03      | 0.02 | 0.03 |
| 31    | ---  | ---  | ---  | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.03 | 0.02   | 0.02 | 0.02 | ---       | ---  | ---  |
| MONTH | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | 0.04 | 0.02 | 0.02   | 0.02 | 0.03 | 0.02      | 0.02 |      |

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | --- | --- | ---  |
| 2     | 0.03 | 0.02 | 0.03 | 0.04 | 0.03 | 0.04 | 0.03 | 0.03 | 0.03 | --- | --- | ---  |
| 3     | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 0.03 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 0.03 | 0.03 | 0.03 | 0.05 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 0.04 | 0.03 | 0.03 | 0.04 | 0.03 | 0.03 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 0.04 | 0.03 | 0.03 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | 0.04 | 0.02 | 0.03 | 0.05 | 0.03 | 0.04 | ---  | ---  | ---  | --- | --- | ---  |



02107544 BLACK RIVER NEAR CURRIE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.2 | 5.9 | 6.0  | 5.8 | 5.7 | 5.7  | --- | --- | ---  | --- | --- | ---  |
| 2     | 6.2 | 6.0 | 6.1  | 5.7 | 5.6 | 5.7  | --- | --- | ---  | --- | --- | ---  |
| 3     | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 4     | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 5     | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 6     | 6.3 | 6.1 | 6.1  | --- | --- | ---  | --- | --- | ---  | 5.8 | 5.6 | 5.7  |
| 7     | 6.3 | 6.1 | 6.1  | --- | --- | ---  | --- | --- | ---  | 5.9 | 5.7 | 5.8  |
| 8     | 6.3 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.7 | 5.8  |
| 9     | 6.3 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.7 | 5.8  |
| 10    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.7 | 5.8  |
| 11    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.8 | 5.9  |
| 12    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| 13    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| 14    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| 15    | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.8 | 6.0  |
| 16    | 6.3 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 17    | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 18    | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.8 | 6.0  |
| 19    | 6.4 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.8 | 6.0  |
| 20    | 6.4 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.8 | 6.0  |
| 21    | 6.4 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 22    | 6.4 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.1  |
| 23    | 6.4 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 24    | 6.4 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.1  |
| 25    | 6.4 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 26    | 6.4 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 27    | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.2 | 5.9 | 6.0  |
| 28    | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  | 6.0 | 5.9 | 6.0  |
| 29    | 6.2 | 5.7 | 6.0  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| 30    | 5.8 | 5.7 | 5.7  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| 31    | 5.8 | 5.7 | 5.8  | --- | --- | ---  | --- | --- | ---  | 6.1 | 5.9 | 6.0  |
| MONTH | 6.4 | 5.7 | 6.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
|       | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.1 | 5.9 | 6.0  | 5.9 | 5.7 | 5.8  | 6.4 | 6.1 | 6.2  | 6.0 | 5.7 | 5.9  |
| 2     | 6.2 | 5.9 | 6.0  | 5.8 | 5.7 | 5.8  | 6.5 | 6.1 | 6.3  | 5.9 | 5.7 | 5.8  |
| 3     | 6.1 | 5.8 | 5.9  | 5.8 | 5.7 | 5.7  | 6.5 | 6.2 | 6.3  | 5.9 | 5.7 | 5.8  |
| 4     | 6.0 | 5.8 | 5.9  | 5.8 | 5.6 | 5.8  | 6.5 | 6.1 | 6.3  | 5.8 | 5.7 | 5.8  |
| 5     | --- | --- | ---  | 5.8 | 5.7 | 5.7  | 6.4 | 6.1 | 6.3  | 5.9 | 5.6 | 5.7  |
| 6     | 6.4 | 6.1 | 6.2  | 5.8 | 5.7 | 5.7  | 6.4 | 6.1 | 6.2  | 5.8 | 5.6 | 5.7  |
| 7     | 6.3 | 6.0 | 6.1  | 5.8 | 5.6 | 5.7  | 6.4 | 6.1 | 6.2  | 5.8 | 5.6 | 5.7  |
| 8     | 6.3 | 6.0 | 6.1  | 6.0 | 5.7 | 5.8  | 6.4 | 6.0 | 6.2  | 5.8 | 5.6 | 5.7  |
| 9     | 6.3 | 6.0 | 6.2  | 6.1 | 5.8 | 6.0  | 6.3 | 6.0 | 6.1  | 5.7 | 5.5 | 5.6  |
| 10    | --- | --- | ---  | 6.1 | 5.9 | 6.0  | 6.3 | 6.0 | 6.1  | 5.7 | 5.6 | 5.6  |
| 11    | --- | --- | ---  | 6.2 | 5.9 | 6.0  | 6.2 | 5.9 | 6.1  | 5.8 | 5.6 | 5.7  |
| 12    | 6.4 | 6.1 | 6.2  | 6.2 | 6.0 | 6.1  | 6.2 | 5.9 | 6.0  | 5.8 | 5.6 | 5.7  |
| 13    | 6.2 | 6.0 | 6.1  | 6.3 | 6.0 | 6.2  | 6.2 | 5.8 | 6.0  | 5.8 | 5.6 | 5.7  |
| 14    | 6.2 | 6.0 | 6.1  | 6.4 | 6.1 | 6.2  | 6.2 | 5.9 | 6.0  | 5.8 | 5.6 | 5.7  |
| 15    | 6.2 | 6.0 | 6.0  | 6.4 | 6.2 | 6.3  | 6.1 | 5.8 | 6.0  | 5.9 | 5.6 | 5.7  |
| 16    | 6.0 | 5.9 | 6.0  | 6.3 | 6.1 | 6.2  | 6.0 | 5.7 | 5.8  | 6.0 | 5.7 | 5.8  |
| 17    | 6.0 | 5.9 | 5.9  | 6.3 | 6.1 | 6.2  | 5.9 | 5.7 | 5.8  | 6.0 | 5.7 | 5.9  |
| 18    | 6.0 | 5.8 | 5.9  | 6.3 | 6.1 | 6.2  | 5.9 | 5.7 | 5.8  | 6.0 | 5.7 | 5.9  |
| 19    | 6.0 | 5.8 | 5.9  | 6.4 | 6.1 | 6.3  | 5.9 | 5.6 | 5.8  | 6.0 | 5.7 | 5.9  |
| 20    | 5.9 | 5.8 | 5.9  | 6.4 | 6.1 | 6.3  | 5.8 | 5.6 | 5.7  | 6.3 | 5.8 | 6.1  |
| 21    | 5.9 | 5.8 | 5.9  | 6.4 | 6.1 | 6.2  | 5.8 | 5.6 | 5.7  | 6.4 | 6.1 | 6.3  |
| 22    | 6.0 | 5.7 | 5.8  | 6.3 | 6.0 | 6.2  | 5.9 | 5.7 | 5.8  | 6.3 | 6.1 | 6.2  |
| 23    | 6.0 | 5.8 | 5.9  | 6.4 | 6.1 | 6.3  | 5.9 | 5.6 | 5.7  | 6.4 | 6.2 | 6.3  |
| 24    | 5.9 | 5.8 | 5.9  | 6.4 | 6.2 | 6.3  | 5.8 | 5.6 | 5.7  | 6.5 | 6.2 | 6.3  |
| 25    | 5.9 | 5.8 | 5.9  | 6.5 | 6.3 | 6.4  | 5.8 | 5.7 | 5.8  | 6.4 | 6.2 | 6.3  |
| 26    | 5.9 | 5.8 | 5.9  | 6.4 | 6.2 | 6.3  | 5.9 | 5.7 | 5.8  | 6.4 | 6.2 | 6.3  |
| 27    | 6.0 | 5.8 | 5.9  | 6.5 | 6.2 | 6.3  | 5.9 | 5.7 | 5.8  | 6.4 | 6.2 | 6.3  |
| 28    | 5.9 | 5.8 | 5.9  | 6.5 | 6.2 | 6.4  | 5.9 | 5.5 | 5.8  | 6.5 | 6.2 | 6.3  |
| 29    | 5.9 | 5.8 | 5.8  | 6.6 | 6.2 | 6.4  | 6.1 | 5.7 | 5.9  | 6.3 | 6.2 | 6.2  |
| 30    | --- | --- | ---  | 6.6 | 6.1 | 6.3  | 6.1 | 5.9 | 6.0  | 6.3 | 6.2 | 6.2  |
| 31    | --- | --- | ---  | 6.4 | 6.1 | 6.2  | --- | --- | ---  | 6.3 | 6.0 | 6.2  |
| MONTH | --- | --- | ---  | 6.6 | 5.6 | 6.1  | 6.5 | 5.5 | 6.0  | 6.5 | 5.5 | 5.9  |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.2 | 6.0 | 6.1  | 6.3 | 6.0 | 6.2  | 6.2 | 6.2 | 6.2  | 5.9 | 5.7 | 5.8  |
| 2     | 6.3 | 6.1 | 6.2  | 6.1 | 5.9 | 6.0  | 6.3 | 6.2 | 6.2  | 5.8 | 5.7 | 5.8  |
| 3     | 6.3 | 6.1 | 6.2  | 6.1 | 5.9 | 6.0  | 6.2 | 6.1 | 6.2  | 5.9 | 5.8 | 5.8  |
| 4     | 6.3 | 6.1 | 6.2  | 6.2 | 6.0 | 6.1  | 6.1 | 6.0 | 6.1  | 5.9 | 5.8 | 5.8  |
| 5     | 6.3 | 6.0 | 6.2  | 6.2 | 6.0 | 6.1  | 6.2 | 6.0 | 6.1  | 5.9 | 5.8 | 5.8  |
| 6     | 6.2 | 6.0 | 6.1  | 6.2 | 6.0 | 6.2  | 6.4 | 6.1 | 6.2  | 5.9 | 5.8 | 5.8  |
| 7     | 6.2 | 6.0 | 6.1  | 6.3 | 6.1 | 6.2  | 6.4 | 6.2 | 6.3  | 5.9 | 5.7 | 5.8  |
| 8     | 6.3 | 6.0 | 6.1  | 6.3 | 6.2 | 6.2  | 6.5 | 6.2 | 6.3  | 5.9 | 5.8 | 5.8  |
| 9     | 6.2 | 6.0 | 6.1  | 6.3 | 6.2 | 6.2  | 6.5 | 6.2 | 6.3  | 5.9 | 5.7 | 5.8  |
| 10    | 6.2 | 6.0 | 6.1  | 6.3 | 6.1 | 6.2  | 6.5 | 6.3 | 6.3  | 5.8 | 5.6 | 5.7  |
| 11    | 6.2 | 6.0 | 6.1  | 6.3 | 6.1 | 6.2  | 6.5 | 6.3 | 6.4  | 5.8 | 5.5 | 5.6  |
| 12    | 6.3 | 6.0 | 6.1  | 6.3 | 6.0 | 6.1  | 6.6 | 6.4 | 6.5  | 5.6 | 5.5 | 5.6  |
| 13    | 6.2 | 6.0 | 6.1  | 6.2 | 6.1 | 6.1  | 6.7 | 5.8 | 6.2  | 5.6 | 5.5 | 5.5  |
| 14    | 6.3 | 6.1 | 6.1  | 6.3 | 6.1 | 6.2  | 5.9 | 5.7 | 5.8  | 5.6 | 5.5 | 5.6  |
| 15    | 6.3 | 6.1 | 6.2  | 6.3 | 6.2 | 6.2  | 5.8 | 5.4 | 5.5  | 5.7 | 5.5 | 5.6  |
| 16    | 6.5 | 6.2 | 6.4  | 6.3 | 6.2 | 6.3  | 5.5 | 5.2 | 5.3  | 5.7 | 5.5 | 5.6  |
| 17    | 6.5 | 6.3 | 6.4  | 6.4 | 6.2 | 6.3  | 5.3 | 5.1 | 5.2  | 5.8 | 5.6 | 5.7  |
| 18    | 6.4 | 6.3 | 6.4  | 6.4 | 6.1 | 6.2  | 5.3 | 5.1 | 5.2  | 5.7 | 5.6 | 5.7  |
| 19    | 6.4 | 6.3 | 6.4  | 6.2 | 6.1 | 6.1  | 5.3 | 5.1 | 5.2  | 5.8 | 5.6 | 5.7  |
| 20    | 6.4 | 6.3 | 6.3  | 6.3 | 6.1 | 6.2  | 5.4 | 5.1 | 5.2  | 5.9 | 5.7 | 5.8  |
| 21    | 6.4 | 6.3 | 6.4  | 6.3 | 6.2 | 6.2  | 5.5 | 5.2 | 5.3  | 5.9 | 5.7 | 5.8  |
| 22    | 6.4 | 6.3 | 6.4  | 6.3 | 6.2 | 6.3  | 5.6 | 5.3 | 5.4  | 5.9 | 5.7 | 5.8  |
| 23    | 6.4 | 6.3 | 6.3  | 6.3 | 6.2 | 6.3  | 5.6 | 5.4 | 5.5  | 5.9 | 5.5 | 5.7  |
| 24    | 6.4 | 6.2 | 6.3  | 6.3 | 6.1 | 6.2  | 5.7 | 5.5 | 5.6  | 5.8 | 5.6 | 5.6  |
| 25    | 6.3 | 6.2 | 6.3  | 6.1 | 6.0 | 6.0  | 5.8 | 5.6 | 5.7  | 5.8 | 5.5 | 5.7  |
| 26    | 6.3 | 6.2 | 6.3  | 6.2 | 6.1 | 6.1  | 5.9 | 5.6 | 5.7  | 5.8 | 5.5 | 5.7  |
| 27    | 6.3 | 6.2 | 6.2  | 6.2 | 6.1 | 6.1  | 5.9 | 5.7 | 5.8  | 5.8 | 5.6 | 5.7  |
| 28    | 6.3 | 6.2 | 6.3  | 6.2 | 6.1 | 6.2  | 5.9 | 5.8 | 5.8  | 5.8 | 5.5 | 5.7  |
| 29    | 6.3 | 6.2 | 6.3  | 6.3 | 6.2 | 6.2  | 5.9 | 5.8 | 5.9  | 5.8 | 5.5 | 5.6  |
| 30    | 6.4 | 6.2 | 6.3  | 6.2 | 6.1 | 6.2  | 5.9 | 5.8 | 5.8  | 5.8 | 5.5 | 5.7  |
| 31    | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 5.9 | 5.7 | 5.8  | --- | --- | ---  |
| MONTH | 6.5 | 6.0 | 6.2  | 6.4 | 5.9 | 6.2  | 6.7 | 5.1 | 5.8  | 5.9 | 5.5 | 5.7  |

## 02107544 BLACK RIVER NEAR CURRIE, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 5.8 | 5.6 | 5.7  | 6.3 | 6.0 | 6.2  | 6.1 | 5.9 | 6.0  | --- | --- | ---  |
| 2     | 5.8 | 5.5 | 5.6  | 6.2 | 6.0 | 6.1  | 6.1 | 5.9 | 6.0  | --- | --- | ---  |
| 3     | 5.8 | 5.5 | 5.6  | 6.3 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 4     | 5.8 | 5.5 | 5.7  | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 5     | 5.9 | 5.6 | 5.7  | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 6     | 5.9 | 5.6 | 5.8  | 6.3 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 7     | 5.9 | 5.6 | 5.8  | 6.4 | 6.2 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 8     | 6.0 | 5.6 | 5.8  | 6.4 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 9     | 6.0 | 5.7 | 5.8  | 6.5 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 10    | 6.0 | 5.7 | 5.9  | 6.4 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 11    | 6.0 | 5.7 | 5.9  | 6.4 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 12    | 6.0 | 5.8 | 5.9  | 6.4 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 13    | 6.1 | 5.8 | 5.9  | 6.4 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 14    | 6.0 | 5.7 | 5.9  | 6.4 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 15    | 6.1 | 5.8 | 5.9  | 6.5 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 16    | 6.1 | 5.8 | 5.9  | 6.5 | 6.2 | 6.4  | --- | --- | ---  | --- | --- | ---  |
| 17    | 6.1 | 5.8 | 5.9  | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 18    | 6.1 | 5.9 | 6.0  | 6.3 | 6.0 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 19    | 6.2 | 5.9 | 6.0  | 6.3 | 6.0 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 20    | 6.1 | 5.9 | 6.0  | 6.4 | 6.0 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 21    | 6.2 | 5.9 | 6.0  | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 22    | 6.2 | 6.0 | 6.1  | 6.3 | 6.1 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 23    | 6.3 | 6.0 | 6.1  | 6.4 | 6.0 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 24    | 6.2 | 6.0 | 6.1  | 6.2 | 5.9 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 25    | 6.2 | 5.9 | 6.0  | 6.1 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 26    | 6.1 | 5.9 | 5.9  | 6.1 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 27    | 6.1 | 5.9 | 6.0  | 6.2 | 5.9 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 28    | 6.2 | 6.0 | 6.0  | 6.2 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 29    | 6.2 | 6.0 | 6.1  | 6.1 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 30    | 6.3 | 6.0 | 6.1  | 6.1 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 31    | 6.3 | 6.1 | 6.1  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 6.3 | 5.5 | 5.9  | 6.5 | 5.9 | 6.2  | --- | --- | ---  | --- | --- | ---  |





02107544 BLACK RIVER NEAR CURRIE, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 20.3     | 19.2 | 19.6 | 16.6  | 15.5 | 16.1 | ---   | ---  | ---  | ---  | ---  | ---  |
| 2     | 19.8     | 19.2 | 19.6 | 16.7  | 15.6 | 16.2 | ---   | ---  | ---  | ---  | ---  | ---  |
| 3     | 19.6     | 17.9 | 18.4 | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 4     | 18.4     | 17.5 | 18.0 | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 5     | 19.0     | 17.9 | 18.5 | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
| 6     | 19.2     | 18.2 | 18.7 | ---   | ---  | ---  | ---   | ---  | ---  | 12.5 | 11.2 | 12.1 |
| 7     | 19.4     | 18.9 | 19.1 | ---   | ---  | ---  | ---   | ---  | ---  | 11.2 | 8.1  | 9.4  |
| 8     | 19.4     | 19.1 | 19.2 | ---   | ---  | ---  | ---   | ---  | ---  | 8.1  | 6.7  | 7.1  |
| 9     | 19.7     | 19.0 | 19.3 | ---   | ---  | ---  | ---   | ---  | ---  | 6.9  | 6.3  | 6.7  |
| 10    | 19.9     | 19.6 | 19.7 | ---   | ---  | ---  | ---   | ---  | ---  | 6.3  | 5.2  | 5.9  |
| 11    | 19.9     | 19.6 | 19.7 | ---   | ---  | ---  | ---   | ---  | ---  | 5.2  | 3.6  | 4.3  |
| 12    | 19.9     | 19.3 | 19.6 | ---   | ---  | ---  | ---   | ---  | ---  | 4.4  | 3.2  | 3.8  |
| 13    | 20.3     | 19.4 | 19.8 | ---   | ---  | ---  | ---   | ---  | ---  | 5.1  | 4.2  | 4.6  |
| 14    | 20.6     | 20.2 | 20.4 | ---   | ---  | ---  | ---   | ---  | ---  | 5.4  | 4.7  | 5.1  |
| 15    | 20.5     | 19.4 | 20.0 | ---   | ---  | ---  | ---   | ---  | ---  | 6.1  | 5.1  | 5.6  |
| 16    | 19.4     | 17.9 | 18.5 | ---   | ---  | ---  | ---   | ---  | ---  | 5.9  | 5.0  | 5.3  |
| 17    | 18.0     | 17.0 | 17.6 | ---   | ---  | ---  | ---   | ---  | ---  | 5.0  | 4.3  | 4.7  |
| 18    | 17.9     | 17.4 | 17.7 | ---   | ---  | ---  | ---   | ---  | ---  | 7.4  | 5.0  | 5.9  |
| 19    | 17.4     | 16.5 | 16.9 | ---   | ---  | ---  | ---   | ---  | ---  | 7.9  | 7.3  | 7.6  |
| 20    | 17.1     | 16.3 | 16.7 | ---   | ---  | ---  | ---   | ---  | ---  | 7.3  | 5.4  | 6.1  |
| 21    | 17.4     | 16.4 | 16.9 | ---   | ---  | ---  | ---   | ---  | ---  | 5.4  | 4.2  | 4.7  |
| 22    | 18.2     | 17.3 | 17.7 | ---   | ---  | ---  | ---   | ---  | ---  | 4.9  | 3.8  | 4.4  |
| 23    | 17.8     | 16.4 | 16.9 | ---   | ---  | ---  | ---   | ---  | ---  | 5.3  | 4.4  | 4.9  |
| 24    | 16.4     | 15.3 | 15.7 | ---   | ---  | ---  | ---   | ---  | ---  | 5.8  | 4.5  | 5.2  |
| 25    | 15.8     | 15.1 | 15.4 | ---   | ---  | ---  | ---   | ---  | ---  | 5.8  | 4.3  | 5.2  |
| 26    | 17.1     | 15.8 | 16.3 | ---   | ---  | ---  | ---   | ---  | ---  | 4.3  | 3.2  | 3.8  |
| 27    | 18.0     | 17.0 | 17.5 | ---   | ---  | ---  | ---   | ---  | ---  | 3.3  | 3.0  | 3.1  |
| 28    | 18.3     | 18.0 | 18.1 | ---   | ---  | ---  | ---   | ---  | ---  | 3.6  | 2.8  | 3.2  |
| 29    | 18.1     | 16.9 | 17.4 | ---   | ---  | ---  | ---   | ---  | ---  | 4.1  | 3.0  | 3.5  |
| 30    | 16.9     | 16.0 | 16.5 | ---   | ---  | ---  | ---   | ---  | ---  | 4.7  | 3.7  | 4.2  |
| 31    | 16.5     | 15.6 | 16.1 | ---   | ---  | ---  | ---   | ---  | ---  | 4.7  | 4.1  | 4.4  |
| MONTH | 20.6     | 15.1 | 18.1 | ---   | ---  | ---  | ---   | ---  | ---  | ---  | ---  | ---  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 4.1      | 3.2  | 3.5  | 9.5   | 7.7  | 8.5  | 16.8  | 15.7 | 16.2 | 19.8 | 19.4 | 19.6 |
| 2     | 4.2      | 2.8  | 3.4  | 11.5  | 9.2  | 10.3 | 16.2  | 14.8 | 15.1 | 21.0 | 19.5 | 20.1 |
| 3     | 6.1      | 4.2  | 5.1  | 13.0  | 11.1 | 11.9 | 15.4  | 13.6 | 14.5 | 20.8 | 20.1 | 20.5 |
| 4     | 6.3      | 5.2  | 5.8  | 14.5  | 12.6 | 13.5 | 16.1  | 14.4 | 15.3 | 20.1 | 18.4 | 19.1 |
| 5     | 6.8      | 5.5  | 6.1  | 15.6  | 14.1 | 14.8 | 15.9  | 14.0 | 15.0 | 19.1 | 17.6 | 18.5 |
| 6     | 9.5      | 6.6  | 7.6  | 16.8  | 15.4 | 16.1 | 15.2  | 13.4 | 14.4 | 20.4 | 18.4 | 19.4 |
| 7     | 11.1     | 9.5  | 10.3 | 17.5  | 16.2 | 16.8 | 16.3  | 14.1 | 15.0 | 21.4 | 19.5 | 20.4 |
| 8     | 10.4     | 8.5  | 9.2  | 16.9  | 15.4 | 16.2 | 17.0  | 15.9 | 16.4 | 22.0 | 20.4 | 21.1 |
| 9     | 8.5      | 7.4  | 7.8  | 15.4  | 14.2 | 14.8 | 18.2  | 16.7 | 17.3 | 22.4 | 21.0 | 21.7 |
| 10    | ---      | ---  | ---  | 14.2  | 13.0 | 13.7 | 18.1  | 17.6 | 17.9 | 22.5 | 21.2 | 21.9 |
| 11    | ---      | ---  | ---  | 13.5  | 12.0 | 12.8 | 19.0  | 17.6 | 18.2 | 22.6 | 21.4 | 22.0 |
| 12    | 9.3      | 8.2  | 8.9  | 13.9  | 12.2 | 13.0 | 19.1  | 18.5 | 18.7 | 23.0 | 21.9 | 22.4 |
| 13    | 8.7      | 7.8  | 8.3  | 13.8  | 12.3 | 13.0 | 19.2  | 18.4 | 18.7 | 23.6 | 22.4 | 22.9 |
| 14    | 8.7      | 8.4  | 8.5  | 13.5  | 12.1 | 12.7 | 19.1  | 16.2 | 17.7 | 24.0 | 22.5 | 23.2 |
| 15    | 8.8      | 8.4  | 8.5  | 14.4  | 12.8 | 13.5 | 16.8  | 15.0 | 15.9 | 23.6 | 22.5 | 23.1 |
| 16    | 8.4      | 7.5  | 7.9  | 14.8  | 14.0 | 14.4 | 17.1  | 15.0 | 16.0 | 23.7 | 22.3 | 23.1 |
| 17    | 7.6      | 6.2  | 6.8  | 14.8  | 14.0 | 14.4 | 17.8  | 15.8 | 16.7 | 24.2 | 22.4 | 23.3 |
| 18    | 7.1      | 5.7  | 6.3  | 14.4  | 13.0 | 13.7 | 18.8  | 17.0 | 17.8 | 23.7 | 22.5 | 23.2 |
| 19    | 7.7      | 6.0  | 6.8  | 15.9  | 13.8 | 14.8 | 19.7  | 17.9 | 18.7 | 24.4 | 22.6 | 23.5 |
| 20    | 8.8      | 7.0  | 7.9  | 15.6  | 13.8 | 14.8 | 20.4  | 18.6 | 19.4 | 24.7 | 23.3 | 24.1 |
| 21    | 10.4     | 8.5  | 9.4  | 16.0  | 14.9 | 15.4 | 21.0  | 19.5 | 20.2 | 25.2 | 23.7 | 24.5 |
| 22    | 10.4     | 9.2  | 9.8  | 15.3  | 13.3 | 14.0 | 21.5  | 19.9 | 20.6 | 26.2 | 24.6 | 25.4 |
| 23    | 10.4     | 9.0  | 9.7  | 13.5  | 11.5 | 12.5 | 22.2  | 20.3 | 21.2 | 27.0 | 25.4 | 26.1 |
| 24    | 10.3     | 9.8  | 10.0 | 13.2  | 11.2 | 12.2 | 22.9  | 21.2 | 22.0 | 27.1 | 25.8 | 26.4 |
| 25    | 10.4     | 9.5  | 10   | 14.0  | 12.1 | 13.1 | 22.3  | 21.4 | 21.9 | 27.5 | 26.1 | 26.7 |
| 26    | 9.8      | 8.0  | 8.8  | 15.2  | 13.4 | 14.3 | 22.6  | 21.2 | 21.9 | 28.0 | 26.7 | 27.3 |
| 27    | 8.0      | 6.7  | 7.3  | 16.5  | 14.4 | 15.4 | 22.3  | 21.0 | 21.6 | 28.2 | 27.2 | 27.7 |
| 28    | 7.8      | 6.0  | 6.8  | 17.5  | 16.2 | 16.9 | 21.1  | 19.4 | 20.2 | 28.1 | 27.1 | 27.6 |
| 29    | 8.4      | 6.6  | 7.5  | 16.9  | 15.9 | 16.4 | 20.0  | 18.5 | 19.3 | 27.8 | 26.9 | 27.4 |
| 30    | ---      | ---  | ---  | 16.4  | 15.3 | 15.7 | 20.0  | 18.6 | 19.3 | 27.4 | 26.3 | 26.6 |
| 31    | ---      | ---  | ---  | 16.8  | 15.1 | 15.9 | ---   | ---  | ---  | 26.4 | 25.7 | 26.1 |
| MONTH | ---      | ---  | ---  | 17.5  | 7.7  | 14.0 | 22.9  | 13.4 | 18.1 | 28.2 | 17.6 | 23.4 |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 27.0 | 25.7 | 26.3 | 27.2 | 25.9 | 26.3 | 28.9 | 28.0 | 28.5 | 25.6 | 25.0 | 25.3 |
| 2     | 27.5 | 26.3 | 26.8 | 26.7 | 25.7 | 26.1 | 28.6 | 28.0 | 28.3 | 25.4 | 24.5 | 25.0 |
| 3     | 27.6 | 26.6 | 27.0 | 26.8 | 26.0 | 26.2 | 28.3 | 27.4 | 27.8 | 24.9 | 24.1 | 24.4 |
| 4     | 27.1 | 26.5 | 26.8 | 27.2 | 25.7 | 26.4 | 28.0 | 27.0 | 27.5 | 24.9 | 24.0 | 24.4 |
| 5     | 26.6 | 25.8 | 26.3 | 28.9 | 27.0 | 27.6 | 28.9 | 27.6 | 28.1 | 24.9 | 24.2 | 24.5 |
| 6     | 26.3 | 25.9 | 26.1 | 29.1 | 28.0 | 28.5 | 28.4 | 27.0 | 27.8 | 24.7 | 24.3 | 24.5 |
| 7     | 26.7 | 25.7 | 26.2 | 29.5 | 28.5 | 28.9 | 27.0 | 25.7 | 26.3 | 24.4 | 24.1 | 24.3 |
| 8     | 26.4 | 26.1 | 26.3 | 29.6 | 28.8 | 29.1 | 25.9 | 24.6 | 25.0 | 25.3 | 24.2 | 24.7 |
| 9     | 26.4 | 25.9 | 26.1 | 28.8 | 28.1 | 28.3 | 25.6 | 24.2 | 24.9 | 25.8 | 24.8 | 25.3 |
| 10    | 27.2 | 25.8 | 26.4 | 28.9 | 27.4 | 28.1 | 26.0 | 24.5 | 25.3 | 25.6 | 25.1 | 25.4 |
| 11    | 28.3 | 26.6 | 27.4 | 29.2 | 28.1 | 28.6 | 26.2 | 25.0 | 25.6 | 25.2 | 24.2 | 24.7 |
| 12    | 28.1 | 27.0 | 27.4 | 28.6 | 27.3 | 27.7 | 26.1 | 25.4 | 25.6 | 24.7 | 23.7 | 24.2 |
| 13    | 27.0 | 25.6 | 26.0 | 28.8 | 27.3 | 28.0 | 25.5 | 23.5 | 24.2 | 24.2 | 23.5 | 23.8 |
| 14    | 25.8 | 24.9 | 25.4 | 29.5 | 28.2 | 28.8 | 23.5 | 23.0 | 23.2 | 23.6 | 23.1 | 23.3 |
| 15    | 26.5 | 25.2 | 25.8 | 29.8 | 28.7 | 29.3 | 23.0 | 22.4 | 22.6 | 23.8 | 23.0 | 23.3 |
| 16    | 26.8 | 25.8 | 26.3 | 29.6 | 28.5 | 29.0 | 22.8 | 22.3 | 22.5 | 23.9 | 23.3 | 23.6 |
| 17    | 26.7 | 26.1 | 26.4 | 29.0 | 27.4 | 28.1 | 23.1 | 22.1 | 22.6 | 24.6 | 23.7 | 24.1 |
| 18    | 28.1 | 26.2 | 26.9 | 27.4 | 26.2 | 26.7 | 23.4 | 22.6 | 23.0 | 24.4 | 23.0 | 23.8 |
| 19    | 29.2 | 27.5 | 28.2 | 27.5 | 26.0 | 26.5 | 24.6 | 23.1 | 23.8 | 23.0 | 21.8 | 22.4 |
| 20    | 28.8 | 27.9 | 28.3 | 28.3 | 26.5 | 27.2 | 25.3 | 24.2 | 24.7 | 21.8 | 20.6 | 21.1 |
| 21    | 27.9 | 26.8 | 27.3 | 28.8 | 27.1 | 27.7 | 25.9 | 24.8 | 25.3 | 21.2 | 20.0 | 20.7 |
| 22    | 27.4 | 26.6 | 27.0 | 29.0 | 27.5 | 28.2 | 25.6 | 25.2 | 25.4 | 21.4 | 20.0 | 20.7 |
| 23    | 28.6 | 27.1 | 27.7 | 29.1 | 28.0 | 28.4 | 25.7 | 24.8 | 25.2 | 21.7 | 20.3 | 21.0 |
| 24    | 28.4 | 27.5 | 27.9 | 28.5 | 27.5 | 27.9 | 25.6 | 24.6 | 25.1 | 21.9 | 20.8 | 21.4 |
| 25    | 28.6 | 27.1 | 27.8 | 28.0 | 27.1 | 27.4 | 25.3 | 24.4 | 24.9 | 22.4 | 21.2 | 21.8 |
| 26    | 28.1 | 27.2 | 27.6 | 28.6 | 27.1 | 27.7 | 25.0 | 24.6 | 24.8 | 22.0 | 21.2 | 21.6 |
| 27    | 27.2 | 26.1 | 26.6 | 28.9 | 27.8 | 28.3 | 25.1 | 24.5 | 24.8 | 22.7 | 21.5 | 22.1 |
| 28    | 26.8 | 26.0 | 26.4 | 29.0 | 28.2 | 28.6 | 25.5 | 24.5 | 24.9 | 23.1 | 22.7 | 22.9 |
| 29    | 27.2 | 25.9 | 26.6 | 28.8 | 27.9 | 28.3 | 25.3 | 24.8 | 25.0 | 23.6 | 22.6 | 23.1 |
| 30    | 27.2 | 25.4 | 26.7 | 28.5 | 27.5 | 28.1 | 25.5 | 24.6 | 25.1 | 23.5 | 22.7 | 23.2 |
| 31    | ---  | ---  | ---  | 28.9 | 27.6 | 28.3 | 25.9 | 25.1 | 25.5 | ---  | ---  | ---  |
| MONTH | 29.2 | 24.9 | 26.8 | 29.8 | 25.7 | 27.9 | 28.9 | 22.1 | 25.3 | 25.8 | 20.0 | 23.4 |

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 23.6 | 23.0 | 23.3 | 20.2 | 19.0 | 19.6 | 12.6 | 11.6 | 12.1 | --- | --- | ---  |
| 2     | 24.0 | 23.1 | 23.5 | 20.6 | 19.6 | 20.1 | 12.2 | 10.9 | 11.3 | --- | --- | ---  |
| 3     | 24.2 | 23.3 | 23.8 | 20.8 | 20.1 | 20.4 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 23.9 | 23.0 | 23.4 | 20.7 | 20.2 | 20.5 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 23.3 | 22.2 | 22.7 | 20.4 | 18.8 | 19.8 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 22.5 | 21.2 | 21.6 | 18.8 | 16.9 | 17.9 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 21.3 | 19.8 | 20.3 | 16.9 | 16.1 | 16.3 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 20.1 | 18.9 | 19.5 | 16.2 | 15.5 | 15.8 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 20.2 | 19.2 | 19.7 | 15.7 | 14.6 | 15.0 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 20.8 | 19.6 | 20.2 | 14.6 | 13.1 | 13.6 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 20.7 | 19.8 | 20.3 | 13.4 | 12.2 | 12.7 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 20.2 | 18.8 | 19.4 | 13.9 | 12.8 | 13.3 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 20.2 | 19.0 | 19.5 | 14.1 | 13.6 | 14.0 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 20.5 | 19.9 | 20.2 | 13.6 | 11.8 | 12.7 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 20.3 | 19.3 | 19.9 | 11.8 | 10.3 | 11.0 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 19.3 | 17.8 | 18.4 | 10.3 | 9.5  | 9.9  | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 18.0 | 17.1 | 17.6 | 10.1 | 9.2  | 9.7  | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 18.3 | 17.2 | 17.7 | 10.6 | 9.6  | 10.0 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 19.8 | 18.2 | 18.9 | 11.5 | 10.5 | 11.0 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 20.7 | 19.8 | 20.2 | 12.5 | 11.3 | 11.8 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 20.6 | 19.9 | 20.2 | 13.7 | 12.5 | 13.0 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 19.9 | 19.1 | 19.3 | 14.3 | 13.6 | 13.9 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 19.1 | 18.0 | 18.3 | 15.0 | 14.3 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 18.0 | 16.8 | 17.2 | 16.0 | 14.9 | 15.4 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 16.9 | 16.6 | 16.8 | 16.9 | 15.8 | 16.3 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 17.2 | 16.3 | 16.7 | 15.8 | 12.8 | 14.0 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 16.7 | 16.0 | 16.4 | 12.8 | 11.4 | 12.0 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 17.1 | 16.4 | 16.6 | 13.2 | 12.4 | 12.8 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 17.0 | 16.8 | 16.9 | 13.0 | 11.8 | 12.3 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 17.8 | 16.7 | 17.1 | 11.8 | 10.6 | 11.2 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 19.4 | 17.7 | 18.4 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | 24.2 | 16.0 | 19.5 | 20.8 | 9.2  | 14.4 | ---  | ---  | ---  | --- | --- | ---  |



02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|-----|------|-------|-----|------|------|------|------|
|       |          |      |      |       |     |      |       |     |      |      |      |      |
| 1     | 4.5      | 3.5  | 4.0  | 5.5   | 5.2 | 5.4  | ---   | --- | ---  | ---  | ---  | ---  |
| 2     | 5.2      | 4.1  | 4.6  | 5.5   | 5.3 | 5.4  | ---   | --- | ---  | ---  | ---  | ---  |
| 3     | 5.8      | 4.9  | 5.3  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 4     | 5.9      | 5.6  | 5.8  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 5     | 6.0      | 5.6  | 5.8  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 6     | 6.1      | 5.7  | 5.9  | ---   | --- | ---  | ---   | --- | ---  | 8.4  | 7.8  | 8.1  |
| 7     | 6.1      | 5.5  | 5.8  | ---   | --- | ---  | ---   | --- | ---  | 9.1  | 8.2  | 8.6  |
| 8     | 6.1      | 5.6  | 5.9  | ---   | --- | ---  | ---   | --- | ---  | 9.8  | 9.1  | 9.4  |
| 9     | 5.9      | 4.9  | 5.4  | ---   | --- | ---  | ---   | --- | ---  | 9.9  | 9.6  | 9.8  |
| 10    | 5.1      | 4.8  | 4.9  | ---   | --- | ---  | ---   | --- | ---  | 10.4 | 9.7  | 10   |
| 11    | 5.0      | 4.8  | 4.9  | ---   | --- | ---  | ---   | --- | ---  | 11.1 | 10.2 | 10.7 |
| 12    | 4.9      | 4.5  | 4.7  | ---   | --- | ---  | ---   | --- | ---  | 11.4 | 11.0 | 11.2 |
| 13    | 4.8      | 4.4  | 4.6  | ---   | --- | ---  | ---   | --- | ---  | 11.4 | 11.1 | 11.3 |
| 14    | 4.8      | 4.5  | 4.6  | ---   | --- | ---  | ---   | --- | ---  | 11.3 | 10.9 | 11.1 |
| 15    | 4.7      | 4.2  | 4.5  | ---   | --- | ---  | ---   | --- | ---  | 11.2 | 10.7 | 11.0 |
| 16    | 5.4      | 4.7  | 5.0  | ---   | --- | ---  | ---   | --- | ---  | 11.1 | 10.6 | 10.8 |
| 17    | 5.7      | 5.3  | 5.5  | ---   | --- | ---  | ---   | --- | ---  | 11.3 | 10.9 | 11.1 |
| 18    | 6.1      | 5.7  | 6.0  | ---   | --- | ---  | ---   | --- | ---  | 11.2 | 10.5 | 10.9 |
| 19    | 6.1      | 5.8  | 6.0  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 20    | 6.2      | 6.0  | 6.1  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 21    | 6.3      | 6.1  | 6.2  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 22    | 6.2      | 5.7  | 5.9  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 23    | 6.0      | 5.7  | 5.9  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 24    | 6.0      | 5.8  | 6.0  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 25    | 6.2      | 5.9  | 6.1  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 26    | 6.2      | 5.7  | 6.0  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 27    | 6.0      | 5.4  | 5.8  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 28    | 5.6      | 5.1  | 5.3  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 29    | 6.2      | 5.3  | 6.0  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 30    | 5.3      | 5.0  | 5.1  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| 31    | 5.4      | 5.0  | 5.2  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
| MONTH | 6.3      | 3.5  | 5.4  | ---   | --- | ---  | ---   | --- | ---  | ---  | ---  | ---  |
|       | FEBRUARY |      |      | MARCH |     |      | APRIL |     |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN  | MEAN |
| 1     | ---      | ---  | ---  | 9.9   | 9.3 | 9.6  | 7.1   | 6.5 | 6.8  | 6.3  | 5.6  | 5.9  |
| 2     | ---      | ---  | ---  | 9.4   | 8.8 | 9.2  | 7.1   | 6.6 | 6.9  | 5.7  | 5.1  | 5.3  |
| 3     | ---      | ---  | ---  | 9.0   | 8.3 | 8.7  | 7.3   | 6.8 | 7.0  | 5.5  | 5.0  | 5.2  |
| 4     | ---      | ---  | ---  | 8.5   | 7.8 | 8.2  | 7.3   | 6.9 | 7.1  | 5.3  | 4.8  | 5.1  |
| 5     | 11.2     | 10.3 | 10.6 | 8.0   | 7.2 | 7.7  | 7.6   | 6.9 | 7.2  | 5.5  | 5.2  | 5.3  |
| 6     | 10.6     | 9.6  | 10.1 | 7.4   | 6.6 | 7.1  | 7.7   | 7.2 | 7.4  | 5.5  | 5.2  | 5.3  |
| 7     | 9.7      | 8.7  | 9.0  | 7.2   | 6.4 | 6.7  | 7.8   | 7.2 | 7.5  | 5.5  | 5.1  | 5.2  |
| 8     | 9.3      | 8.6  | 8.9  | 7.1   | 6.1 | 6.5  | 7.6   | 6.9 | 7.2  | 5.4  | 5.1  | 5.2  |
| 9     | 9.6      | 9.2  | 9.3  | 7.1   | 6.0 | 6.5  | 7.1   | 6.6 | 6.9  | 5.3  | 5.0  | 5.2  |
| 10    | ---      | ---  | ---  | 7.4   | 6.5 | 6.9  | 7.0   | 6.5 | 6.8  | 5.4  | 5.1  | 5.2  |
| 11    | ---      | ---  | ---  | 8.1   | 6.9 | 7.4  | 6.6   | 6.0 | 6.2  | 5.3  | 5.0  | 5.2  |
| 12    | 9.4      | 9.0  | 9.2  | 8.2   | 7.3 | 7.6  | 6.1   | 5.8 | 6.0  | 5.2  | 5.0  | 5.1  |
| 13    | 9.3      | 8.8  | 9.1  | 8.3   | 7.3 | 7.7  | 5.8   | 5.5 | 5.6  | 5.1  | 4.8  | 5.0  |
| 14    | 9.3      | 8.9  | 9.1  | 8.4   | 7.6 | 7.9  | 6.0   | 5.1 | 5.5  | 5.0  | 4.8  | 4.9  |
| 15    | 9.1      | 8.7  | 8.9  | 8.1   | 7.4 | 7.8  | 6.8   | 5.9 | 6.3  | 5.1  | 4.7  | 4.9  |
| 16    | 9.4      | 8.8  | 9.0  | 7.6   | 6.9 | 7.2  | 6.8   | 6.5 | 6.6  | 5.3  | 4.8  | 5.1  |
| 17    | 9.6      | 9.2  | 9.4  | 7.5   | 6.5 | 6.9  | 6.6   | 6.3 | 6.5  | 5.5  | 5.0  | 5.3  |
| 18    | 9.9      | 9.5  | 9.7  | 7.9   | 6.9 | 7.3  | 6.5   | 6.1 | 6.3  | 5.5  | 5.2  | 5.4  |
| 19    | 9.9      | 9.5  | 9.7  | 7.7   | 6.9 | 7.3  | 6.3   | 5.9 | 6.1  | 5.5  | 5.2  | 5.4  |
| 20    | 9.7      | 9.2  | 9.5  | 7.7   | 6.8 | 7.3  | 6.1   | 5.6 | 5.9  | ---  | ---  | ---  |
| 21    | 9.3      | 8.8  | 9.1  | 7.6   | 6.6 | 7.0  | 5.8   | 5.4 | 5.6  | ---  | ---  | ---  |
| 22    | 9.1      | 8.6  | 8.8  | 7.9   | 6.7 | 7.2  | 5.6   | 5.2 | 5.4  | ---  | ---  | ---  |
| 23    | 9.2      | 8.6  | 8.9  | 8.4   | 7.6 | 7.9  | 5.3   | 5.0 | 5.1  | ---  | ---  | ---  |
| 24    | 8.9      | 8.4  | 8.7  | 8.7   | 8.1 | 8.4  | 5.0   | 4.7 | 4.9  | ---  | ---  | ---  |
| 25    | 9.0      | 8.3  | 8.6  | 8.7   | 8.2 | 8.4  | 5.0   | 4.7 | 4.8  | ---  | ---  | ---  |
| 26    | 9.2      | 8.5  | 8.8  | 8.5   | 8.0 | 8.2  | 5.0   | 4.7 | 4.8  | ---  | ---  | ---  |
| 27    | 9.7      | 9.0  | 9.4  | 8.1   | 7.6 | 7.9  | 5.1   | 4.8 | 4.9  | ---  | ---  | ---  |
| 28    | 10.1     | 9.5  | 9.8  | 7.8   | 7.2 | 7.5  | 5.5   | 5.0 | 5.2  | ---  | ---  | ---  |
| 29    | 10.1     | 9.7  | 9.8  | 7.4   | 7.1 | 7.3  | 5.9   | 5.3 | 5.6  | ---  | ---  | ---  |
| 30    | ---      | ---  | ---  | 7.4   | 7.2 | 7.3  | 6.0   | 5.7 | 5.8  | ---  | ---  | ---  |
| 31    | ---      | ---  | ---  | 7.4   | 7.0 | 7.2  | ---   | --- | ---  | ---  | ---  | ---  |
| MONTH | ---      | ---  | ---  | 9.9   | 6.0 | 7.6  | 7.8   | 4.7 | 6.1  | ---  | ---  | ---  |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|-----|-----|------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |     |     |      | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | --- | --- | ---  | 5.6  | 4.4 | 4.9  | 5.0  | 4.4 | 4.6  | 4.6    | 3.7 | 4.0  |           |     |      |
| 2     | --- | --- | ---  | 5.4  | 4.3 | 4.8  | 4.8  | 4.3 | 4.5  | 4.2    | 3.7 | 3.8  |           |     |      |
| 3     | --- | --- | ---  | 4.7  | 4.2 | 4.4  | 4.9  | 4.2 | 4.4  | 3.9    | 3.7 | 3.8  |           |     |      |
| 4     | 4.7 | 4.2 | 4.5  | ---  | --- | ---  | 4.4  | 4.0 | 4.3  | 4.0    | 3.8 | 3.9  |           |     |      |
| 5     | 4.7 | 4.3 | 4.5  | ---  | --- | ---  | 4.4  | 3.8 | 4.1  | 4.0    | 3.8 | 3.9  |           |     |      |
| 6     | 4.9 | 4.4 | 4.6  | ---  | --- | ---  | 4.6  | 4.0 | 4.3  | 4.1    | 3.8 | 3.9  |           |     |      |
| 7     | 4.7 | 4.2 | 4.5  | ---  | --- | ---  | 5.0  | 4.4 | 4.7  | 4.1    | 3.8 | 3.9  |           |     |      |
| 8     | 5.0 | 4.4 | 4.7  | ---  | --- | ---  | 5.3  | 4.9 | 5.1  | 4.2    | 3.8 | 4.0  |           |     |      |
| 9     | 4.8 | 4.5 | 4.6  | ---  | --- | ---  | 5.6  | 5.2 | 5.3  | 3.9    | 3.3 | 3.6  |           |     |      |
| 10    | 4.8 | 4.5 | 4.7  | ---  | --- | ---  | 5.6  | 5.2 | 5.4  | 3.5    | 3.2 | 3.4  |           |     |      |
| 11    | 4.8 | 4.6 | 4.7  | ---  | --- | ---  | 5.6  | 5.2 | 5.4  | 3.6    | 3.4 | 3.5  |           |     |      |
| 12    | 5.3 | 4.6 | 5.1  | ---  | --- | ---  | 5.7  | 5.2 | 5.5  | 3.6    | 3.4 | 3.5  |           |     |      |
| 13    | 5.1 | 4.8 | 4.9  | ---  | --- | ---  | 6.5  | 5.4 | 5.9  | 3.6    | 3.4 | 3.5  |           |     |      |
| 14    | 5.4 | 4.9 | 5.2  | ---  | --- | ---  | 5.7  | 5.2 | 5.4  | 3.7    | 3.5 | 3.6  |           |     |      |
| 15    | 5.6 | 5.2 | 5.4  | ---  | --- | ---  | 5.6  | 5.1 | 5.3  | 3.8    | 3.5 | 3.6  |           |     |      |
| 16    | 5.6 | 5.0 | 5.3  | 4.3  | 3.8 | 4.1  | 5.3  | 4.9 | 5.1  | 3.7    | 3.4 | 3.6  |           |     |      |
| 17    | 5.5 | 4.9 | 5.2  | 4.9  | 4.0 | 4.4  | 5.0  | 4.7 | 4.9  | 3.7    | 3.4 | 3.5  |           |     |      |
| 18    | 5.2 | 4.7 | 5.0  | 4.8  | 4.3 | 4.5  | 4.9  | 4.6 | 4.7  | 3.6    | 3.3 | 3.4  |           |     |      |
| 19    | 5.1 | 4.5 | 4.9  | 4.5  | 4.2 | 4.3  | 4.8  | 4.4 | 4.6  | 4.1    | 3.5 | 3.8  |           |     |      |
| 20    | 4.9 | 4.4 | 4.7  | 4.6  | 4.2 | 4.4  | 4.6  | 4.3 | 4.4  | 4.5    | 3.9 | 4.3  |           |     |      |
| 21    | 5.0 | 4.4 | 4.8  | 4.7  | 4.2 | 4.5  | 4.4  | 4.1 | 4.3  | 4.8    | 4.3 | 4.5  |           |     |      |
| 22    | 5.2 | 4.7 | 4.9  | 4.6  | 4.3 | 4.4  | 4.2  | 4.1 | 4.1  | 4.8    | 4.4 | 4.6  |           |     |      |
| 23    | 5.1 | 4.5 | 4.8  | 4.9  | 4.3 | 4.6  | 4.3  | 4.1 | 4.2  | 4.8    | 4.5 | 4.7  |           |     |      |
| 24    | 5.2 | 4.6 | 4.9  | 4.8  | 4.5 | 4.7  | 4.2  | 4.1 | 4.2  | 4.8    | 4.5 | 4.6  |           |     |      |
| 25    | 5.0 | 4.5 | 4.8  | 4.7  | 4.3 | 4.5  | 4.3  | 4.1 | 4.2  | 4.8    | 4.4 | 4.6  |           |     |      |
| 26    | 5.0 | 4.5 | 4.8  | 4.8  | 4.4 | 4.6  | 4.5  | 4.1 | 4.3  | 4.7    | 4.3 | 4.5  |           |     |      |
| 27    | 5.0 | 4.5 | 4.8  | 4.8  | 4.4 | 4.5  | 4.4  | 4.1 | 4.2  | 4.7    | 4.2 | 4.5  |           |     |      |
| 28    | 5.1 | 4.6 | 4.9  | 4.8  | 4.4 | 4.5  | 4.3  | 4.0 | 4.1  | 4.6    | 3.7 | 4.2  |           |     |      |
| 29    | 5.1 | 4.6 | 4.8  | 5.1  | 4.4 | 4.9  | 4.2  | 4.0 | 4.2  | 4.0    | 3.6 | 3.8  |           |     |      |
| 30    | 5.1 | 4.6 | 4.8  | 4.8  | 4.6 | 4.7  | 4.2  | 3.8 | 4.0  | 4.3    | 3.8 | 4.0  |           |     |      |
| 31    | --- | --- | ---  | 4.8  | 4.5 | 4.6  | 4.0  | 3.7 | 3.9  | ---    | --- | ---  |           |     |      |
| MONTH | --- | --- | ---  | ---  | --- | ---  | 6.5  | 3.7 | 4.6  | 4.8    | 3.2 | 4.0  |           |     |      |

## 02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 4.2 | 3.6 | 3.9  | 5.5 | 4.8 | 5.1  | 7.6 | 7.2 | 7.4  | --- | --- | ---  |
| 2     | 3.9 | 3.5 | 3.7  | 5.4 | 4.8 | 5.0  | 7.8 | 7.2 | 7.5  | --- | --- | ---  |
| 3     | 4.1 | 3.5 | 3.7  | 5.0 | 4.5 | 4.7  | --- | --- | ---  | --- | --- | ---  |
| 4     | 4.0 | 3.6 | 3.8  | 4.9 | 4.5 | 4.6  | --- | --- | ---  | --- | --- | ---  |
| 5     | 4.4 | 3.7 | 4.0  | 5.0 | 4.4 | 4.7  | --- | --- | ---  | --- | --- | ---  |
| 6     | 4.9 | 4.0 | 4.4  | 5.4 | 4.6 | 4.9  | --- | --- | ---  | --- | --- | ---  |
| 7     | 4.9 | 4.5 | 4.7  | 5.8 | 5.1 | 5.4  | --- | --- | ---  | --- | --- | ---  |
| 8     | 5.0 | 4.6 | 4.9  | 6.1 | 5.6 | 5.8  | --- | --- | ---  | --- | --- | ---  |
| 9     | 5.0 | 4.8 | 4.9  | 6.4 | 5.9 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 10    | 5.0 | 4.7 | 4.8  | 6.6 | 6.1 | 6.4  | --- | --- | ---  | --- | --- | ---  |
| 11    | 4.8 | 4.6 | 4.8  | 6.9 | 6.3 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 12    | 5.0 | 4.8 | 4.9  | 7.0 | 6.5 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 13    | 5.0 | 4.5 | 4.8  | 7.0 | 6.1 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 14    | 4.6 | 4.1 | 4.3  | 7.0 | 6.1 | 6.5  | --- | --- | ---  | --- | --- | ---  |
| 15    | 4.7 | 4.1 | 4.4  | 7.6 | 6.6 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 16    | 4.7 | 4.3 | 4.4  | 8.0 | 7.3 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 17    | 5.3 | 4.6 | 4.9  | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 18    | 5.6 | 5.2 | 5.4  | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 19    | 5.5 | 5.0 | 5.4  | 8.0 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 20    | 5.4 | 4.9 | 5.2  | 8.0 | 7.4 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 21    | 5.2 | 4.9 | 5.0  | 7.7 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 22    | 5.3 | 4.9 | 5.1  | 7.4 | 6.7 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 23    | 5.5 | 5.0 | 5.2  | 7.4 | 6.6 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 24    | 5.5 | 5.1 | 5.3  | 6.8 | 5.7 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 25    | 5.3 | 4.9 | 5.1  | 6.1 | 5.3 | 5.6  | --- | --- | ---  | --- | --- | ---  |
| 26    | 5.3 | 4.8 | 5.1  | 6.5 | 5.4 | 5.9  | --- | --- | ---  | --- | --- | ---  |
| 27    | 5.6 | 5.1 | 5.3  | 7.2 | 6.5 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 28    | 5.7 | 5.2 | 5.4  | 7.3 | 6.7 | 7.1  | --- | --- | ---  | --- | --- | ---  |
| 29    | 5.8 | 5.2 | 5.5  | 7.0 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 30    | 5.8 | 5.3 | 5.5  | 7.6 | 7.0 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 31    | 5.5 | 5.0 | 5.3  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 5.8 | 3.5 | 4.8  | 8.0 | 4.4 | 6.4  | --- | --- | ---  | --- | --- | ---  |





02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 49  | 39  | 43   | 56  | 53  | 54   | --- | --- | ---  | --- | --- | ---  |
| 2     | 57  | 45  | 51   | 57  | 54  | 55   | --- | --- | ---  | --- | --- | ---  |
| 3     | 62  | 52  | 57   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 4     | 63  | 59  | 61   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 5     | 64  | 59  | 62   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 6     | 65  | 61  | 64   | --- | --- | ---  | --- | --- | ---  | 79  | 73  | 75   |
| 7     | 66  | 60  | 63   | --- | --- | ---  | --- | --- | ---  | 77  | 73  | 75   |
| 8     | 66  | 61  | 64   | --- | --- | ---  | --- | --- | ---  | 81  | 75  | 78   |
| 9     | 64  | 54  | 59   | --- | --- | ---  | --- | --- | ---  | 81  | 78  | 80   |
| 10    | 56  | 53  | 54   | --- | --- | ---  | --- | --- | ---  | 82  | 78  | 80   |
| 11    | 55  | 53  | 54   | --- | --- | ---  | --- | --- | ---  | 84  | 80  | 82   |
| 12    | 53  | 49  | 52   | --- | --- | ---  | --- | --- | ---  | 88  | 83  | 85   |
| 13    | 53  | 48  | 51   | --- | --- | ---  | --- | --- | ---  | 89  | 86  | 88   |
| 14    | 53  | 50  | 51   | --- | --- | ---  | --- | --- | ---  | 89  | 86  | 88   |
| 15    | 52  | 46  | 49   | --- | --- | ---  | --- | --- | ---  | 89  | 86  | 87   |
| 16    | 57  | 51  | 54   | --- | --- | ---  | --- | --- | ---  | 88  | 84  | 86   |
| 17    | 60  | 56  | 58   | --- | --- | ---  | --- | --- | ---  | 88  | 85  | 86   |
| 18    | 64  | 60  | 63   | --- | --- | ---  | --- | --- | ---  | 89  | 86  | 88   |
| 19    | 63  | 60  | 62   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 20    | 64  | 61  | 63   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 21    | 66  | 63  | 65   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 22    | 65  | 60  | 62   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 23    | 62  | 60  | 61   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 24    | 61  | 59  | 60   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 25    | 63  | 59  | 61   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 26    | 63  | 59  | 61   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 27    | 62  | 57  | 60   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 28    | 60  | 54  | 56   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 29    | 65  | 55  | 63   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 30    | 55  | 51  | 53   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| 31    | 55  | 51  | 53   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 66  | 39  | 58   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
|       | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | 86  | 80  | 83   | 73  | 66  | 70   | 69  | 61  | 65   |
| 2     | --- | --- | ---  | 86  | 79  | 82   | 72  | 66  | 68   | 62  | 57  | 59   |
| 3     | --- | --- | ---  | 85  | 78  | 81   | 73  | 66  | 69   | 62  | 55  | 58   |
| 4     | --- | --- | ---  | 83  | 76  | 79   | 74  | 68  | 71   | 58  | 51  | 55   |
| 5     | 90  | 82  | 86   | 80  | 72  | 76   | 76  | 67  | 72   | 60  | 55  | 57   |
| 6     | 87  | 83  | 85   | 76  | 68  | 72   | 76  | 70  | 73   | 59  | 56  | 58   |
| 7     | 85  | 78  | 80   | 75  | 65  | 69   | 78  | 71  | 74   | 60  | 56  | 58   |
| 8     | 80  | 74  | 77   | 73  | 61  | 67   | 78  | 71  | 74   | 60  | 57  | 59   |
| 9     | 81  | 77  | 79   | 71  | 59  | 64   | 74  | 69  | 71   | 61  | 57  | 59   |
| 10    | --- | --- | ---  | 72  | 62  | 67   | 74  | 69  | 72   | 61  | 58  | 60   |
| 11    | --- | --- | ---  | 78  | 65  | 70   | 70  | 64  | 66   | 61  | 58  | 59   |
| 12    | 82  | 77  | 79   | 80  | 68  | 72   | 66  | 62  | 64   | 61  | 57  | 59   |
| 13    | 80  | 74  | 77   | 80  | 68  | 73   | 62  | 59  | 61   | 59  | 56  | 58   |
| 14    | 80  | 76  | 78   | 81  | 71  | 75   | 62  | 54  | 58   | 60  | 56  | 58   |
| 15    | 78  | 75  | 76   | 79  | 71  | 75   | 70  | 60  | 64   | 60  | 55  | 58   |
| 16    | 80  | 74  | 76   | 74  | 68  | 71   | 71  | 65  | 67   | 63  | 56  | 60   |
| 17    | 79  | 76  | 77   | 74  | 63  | 68   | 70  | 65  | 67   | 66  | 58  | 62   |
| 18    | 82  | 76  | 79   | 78  | 66  | 71   | 70  | 64  | 66   | 65  | 60  | 64   |
| 19    | 83  | 77  | 80   | 78  | 67  | 72   | 69  | 62  | 65   | 65  | 60  | 63   |
| 20    | 83  | 77  | 80   | 78  | 66  | 72   | 68  | 60  | 64   | --- | --- | ---  |
| 21    | 82  | 76  | 79   | 76  | 65  | 71   | 65  | 59  | 62   | --- | --- | ---  |
| 22    | 82  | 75  | 78   | 76  | 64  | 70   | 64  | 57  | 60   | --- | --- | ---  |
| 23    | 82  | 75  | 78   | 80  | 70  | 75   | 61  | 55  | 58   | --- | --- | ---  |
| 24    | 79  | 75  | 77   | 83  | 74  | 79   | 58  | 53  | 56   | --- | --- | ---  |
| 25    | 80  | 73  | 76   | 83  | 77  | 80   | 58  | 53  | 55   | --- | --- | ---  |
| 26    | 79  | 74  | 76   | 83  | 78  | 80   | 58  | 53  | 55   | --- | --- | ---  |
| 27    | 81  | 76  | 78   | 81  | 77  | 79   | 58  | 54  | 56   | --- | --- | ---  |
| 28    | 85  | 77  | 80   | 80  | 75  | 77   | 61  | 55  | 57   | --- | --- | ---  |
| 29    | 86  | 79  | 82   | 77  | 73  | 75   | 65  | 58  | 61   | --- | --- | ---  |
| 30    | --- | --- | ---  | 76  | 72  | 74   | 66  | 61  | 63   | --- | --- | ---  |
| 31    | --- | --- | ---  | 74  | 72  | 73   | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 86  | 59  | 74   | 78  | 53  | 65   | --- | --- | ---  |

## CAPE FEAR RIVER BASIN

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | 70  | 54  | 60   | 65  | 56  | 59   | 56  | 45  | 49   |
| 2     | --- | --- | ---  | 67  | 54  | 59   | 62  | 55  | 58   | 51  | 45  | 47   |
| 3     | --- | --- | ---  | 58  | 52  | 55   | 63  | 54  | 56   | 47  | 44  | 46   |
| 4     | 59  | 53  | 56   | --- | --- | ---  | 56  | 51  | 54   | 48  | 45  | 47   |
| 5     | 58  | 54  | 56   | --- | --- | ---  | 56  | 49  | 53   | 48  | 45  | 47   |
| 6     | 61  | 54  | 57   | --- | --- | ---  | 59  | 51  | 55   | 49  | 46  | 47   |
| 7     | 59  | 52  | 56   | --- | --- | ---  | 62  | 54  | 59   | 49  | 45  | 47   |
| 8     | 62  | 55  | 58   | --- | --- | ---  | 64  | 60  | 62   | 51  | 46  | 48   |
| 9     | 59  | 56  | 57   | --- | --- | ---  | 68  | 63  | 65   | 47  | 40  | 44   |
| 10    | 61  | 55  | 58   | --- | --- | ---  | 69  | 64  | 66   | 43  | 39  | 42   |
| 11    | 62  | 58  | 59   | --- | --- | ---  | 69  | 64  | 67   | 44  | 41  | 42   |
| 12    | 67  | 59  | 64   | --- | --- | ---  | 70  | 64  | 67   | 43  | 40  | 42   |
| 13    | 63  | 59  | 61   | --- | --- | ---  | 78  | 64  | 71   | 43  | 40  | 42   |
| 14    | 67  | 60  | 64   | --- | --- | ---  | 67  | 61  | 64   | 44  | 41  | 42   |
| 15    | 70  | 64  | 66   | --- | --- | ---  | 65  | 59  | 62   | 45  | 41  | 43   |
| 16    | 69  | 63  | 66   | 57  | 50  | 53   | 61  | 57  | 59   | 44  | 40  | 42   |
| 17    | 69  | 61  | 65   | 62  | 52  | 56   | 58  | 55  | 56   | 45  | 41  | 42   |
| 18    | 66  | 60  | 63   | 60  | 54  | 57   | 57  | 54  | 55   | 42  | 39  | 40   |
| 19    | 65  | 59  | 63   | 57  | 52  | 54   | 56  | 53  | 54   | 48  | 41  | 44   |
| 20    | 64  | 57  | 61   | 59  | 53  | 56   | 55  | 52  | 54   | 51  | 44  | 49   |
| 21    | 64  | 56  | 61   | 61  | 54  | 57   | 53  | 50  | 52   | 54  | 48  | 51   |
| 22    | 65  | 59  | 62   | 60  | 55  | 57   | 52  | 50  | 50   | 54  | 49  | 52   |
| 23    | 65  | 58  | 62   | 63  | 55  | 59   | 53  | 50  | 51   | 55  | 50  | 53   |
| 24    | 67  | 59  | 63   | 62  | 57  | 60   | 52  | 49  | 51   | 55  | 51  | 53   |
| 25    | 64  | 58  | 62   | 60  | 55  | 57   | 52  | 49  | 51   | 55  | 51  | 53   |
| 26    | 64  | 57  | 61   | 62  | 56  | 58   | 55  | 50  | 52   | 54  | 49  | 51   |
| 27    | 63  | 56  | 60   | 63  | 56  | 59   | 53  | 50  | 51   | 54  | 49  | 51   |
| 28    | 64  | 58  | 61   | 63  | 57  | 59   | 52  | 49  | 50   | 53  | 43  | 49   |
| 29    | 62  | 58  | 60   | 66  | 57  | 63   | 51  | 48  | 51   | 47  | 42  | 45   |
| 30    | 64  | 58  | 60   | 62  | 59  | 61   | 51  | 46  | 49   | 51  | 44  | 47   |
| 31    | --- | --- | ---  | 63  | 58  | 60   | 49  | 46  | 47   | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 78  | 46  | 56   | 56  | 39  | 47   |

02107544 BLACK RIVER NEAR CURRIE, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 49  | 42  | 46   | 60  | 53  | 56   | 71  | 67  | 69   | --- | --- | ---  |
| 2     | 46  | 42  | 44   | 59  | 53  | 56   | 71  | 67  | 69   | --- | --- | ---  |
| 3     | 49  | 41  | 44   | 56  | 50  | 53   | --- | --- | ---  | --- | --- | ---  |
| 4     | 47  | 42  | 45   | 55  | 50  | 51   | --- | --- | ---  | --- | --- | ---  |
| 5     | 51  | 43  | 47   | 55  | 48  | 52   | --- | --- | ---  | --- | --- | ---  |
| 6     | 56  | 46  | 51   | 56  | 49  | 52   | --- | --- | ---  | --- | --- | ---  |
| 7     | 54  | 49  | 52   | 59  | 52  | 55   | --- | --- | ---  | --- | --- | ---  |
| 8     | 55  | 50  | 53   | 62  | 56  | 59   | --- | --- | ---  | --- | --- | ---  |
| 9     | 55  | 52  | 54   | 64  | 59  | 61   | --- | --- | ---  | --- | --- | ---  |
| 10    | 55  | 51  | 53   | 64  | 59  | 62   | --- | --- | ---  | --- | --- | ---  |
| 11    | 54  | 51  | 53   | 65  | 60  | 63   | --- | --- | ---  | --- | --- | ---  |
| 12    | 55  | 52  | 53   | 68  | 62  | 64   | --- | --- | ---  | --- | --- | ---  |
| 13    | 55  | 50  | 52   | 68  | 59  | 64   | --- | --- | ---  | --- | --- | ---  |
| 14    | 51  | 45  | 48   | 65  | 59  | 61   | --- | --- | ---  | --- | --- | ---  |
| 15    | 52  | 45  | 48   | 69  | 61  | 65   | --- | --- | ---  | --- | --- | ---  |
| 16    | 50  | 45  | 48   | 71  | 65  | 68   | --- | --- | ---  | --- | --- | ---  |
| 17    | 56  | 49  | 51   | 71  | 67  | 68   | --- | --- | ---  | --- | --- | ---  |
| 18    | 59  | 55  | 57   | 72  | 67  | 70   | --- | --- | ---  | --- | --- | ---  |
| 19    | 60  | 54  | 58   | 74  | 68  | 70   | --- | --- | ---  | --- | --- | ---  |
| 20    | 59  | 55  | 57   | 74  | 68  | 70   | --- | --- | ---  | --- | --- | ---  |
| 21    | 58  | 54  | 56   | 72  | 67  | 69   | --- | --- | ---  | --- | --- | ---  |
| 22    | 58  | 53  | 55   | 71  | 66  | 68   | --- | --- | ---  | --- | --- | ---  |
| 23    | 59  | 54  | 56   | 73  | 66  | 69   | --- | --- | ---  | --- | --- | ---  |
| 24    | 57  | 54  | 55   | 68  | 58  | 62   | --- | --- | ---  | --- | --- | ---  |
| 25    | 55  | 50  | 53   | 62  | 54  | 57   | --- | --- | ---  | --- | --- | ---  |
| 26    | 55  | 49  | 52   | 62  | 54  | 57   | --- | --- | ---  | --- | --- | ---  |
| 27    | 57  | 52  | 55   | 68  | 61  | 63   | --- | --- | ---  | --- | --- | ---  |
| 28    | 59  | 53  | 56   | 69  | 64  | 67   | --- | --- | ---  | --- | --- | ---  |
| 29    | 60  | 54  | 57   | 66  | 62  | 64   | --- | --- | ---  | --- | --- | ---  |
| 30    | 60  | 55  | 57   | 70  | 64  | 67   | --- | --- | ---  | --- | --- | ---  |
| 31    | 59  | 54  | 56   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 60  | 41  | 52   | 74  | 48  | 62   | --- | --- | ---  | --- | --- | ---  |

## 02107576 CAPE FEAR RIVER AT NAVASSA, NC

LOCATION.--Lat 34°15'36", long 77°59'15", Brunswick County, Hydrologic Unit 03030005, at Seaboard Air Line Railroad bridge, .75 mi northeast of Navassa.

DRAINAGE AREA.--7,060 mi<sup>2</sup>.

PERIOD OF RECORD.--Water years 1960 to 1967, 2003 to December 2004 (discontinued).

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1959 to September 1967, November 2003 to November 2004.

SALINITY: October 1959 to September 1967, November 2003 to November 2004.

pH: September 2003 to November 2004.

WATER TEMPERATURE: October 1959 to September 1967, September 2003 to November 2004.

DISSOLVED OXYGEN: November 2003 to November 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: November 2003 to November 2004.

INSTRUMENTATION.--Water-quality monitor from September 2003 to December 2004.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg. A top and bottom sample was collected daily at high tide for specific conductance during the period 1959 to 1967.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                            | MAXIMUM RECORDED                         | MINIMUM RECORDED                    |
|--|--|-------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 26,000, October 24, 1963 (daily, bottom) | 40, February 22, 26, 1960 (daily)   |
| SALINITY, ppt                          | 15.9, October 24, 1963 (daily, bottom)   | 0.02, February 22, 26, 1960 (daily) |
| pH, standard units                     | 7.7, November 27, 28, 2003               | 6.0, September 18, 19, 2004         |
| WATER TEMPERATURE, °C                  | 31.1, July 11, August 21, 25, 1966 (top) | 1.1, December 6, 1965 (bottom)      |
| DISSOLVED OXYGEN, mg/L                 | 12.2, January 31, February 1, 2004       | 2.8, July 26, 27, 2004              |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 97, January 25, 2004                     | 37, July 26, 27, 2004               |

## EXTREMES FOR CURRENT PERIOD.--

| CONSTITUENT                            | MAXIMUM RECORDED                   | MINIMUM RECORDED                     |
|--|------------------------------------|--------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 21,300, November 11, 2004          | 74, September 4, 2004                |
| SALINITY, ppt                          | 12.8, November 11, 2004            | 0.03, on many days during the period |
| pH, standard units                     | 7.7, November 27, 28, 2003         | 6.0, September 18, 19, 2004          |
| WATER TEMPERATURE, °C                  | 30.7, July 21, 2004                | 4.5, February 2, 2004                |
| DISSOLVED OXYGEN, mg/L                 | 12.2, January 31, February 1, 2004 | 2.8, July 26, 27, 2004               |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 97, January 25, 2004               | 37, July 26, 27, 2004                |



## 02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE   |     |       | JULY   |     |       | AUGUST |     |       | SEPTEMBER |     |       |
|-------|--------|-----|-------|--------|-----|-------|--------|-----|-------|-----------|-----|-------|
|       | MAX    | MIN | MEAN  | MAX    | MIN | MEAN  | MAX    | MIN | MEAN  | MAX       | MIN | MEAN  |
| 1     | 16,100 | 191 | 5,880 | 13,300 | 208 | 4,490 | 17,700 | 243 | 6,930 | 134       | 109 | 120   |
| 2     | 16,200 | 174 | 5,970 | 12,300 | 209 | 3,270 | 15,500 | 224 | 4,030 | 127       | 90  | 106   |
| 3     | 16,600 | 187 | 5,710 | 12,000 | 210 | 3,400 | 13,500 | 199 | 3,180 | 102       | 78  | 93    |
| 4     | 16,400 | 195 | 6,420 | 11,800 | 200 | 3,530 | 12,000 | 200 | 3,660 | 83        | 74  | 78    |
| 5     | 18,200 | 187 | 6,960 | 11,500 | 189 | 3,660 | 13,100 | 200 | 4,410 | 91        | 78  | 84    |
| 6     | 19,000 | 189 | 7,840 | 11,800 | 179 | 3,470 | 10,200 | 182 | 2,280 | 96        | 83  | 88    |
| 7     | 18,300 | 169 | 6,470 | 11,600 | 186 | 4,570 | 14,400 | 177 | 4,420 | 297       | 88  | 103   |
| 8     | ---    | --- | ---   | 11,600 | 177 | 4,630 | 12,600 | 183 | 3,380 | 303       | 94  | 117   |
| 9     | ---    | --- | ---   | 10,200 | 164 | 4,210 | 11,600 | 205 | 2,920 | 128       | 100 | 112   |
| 10    | ---    | --- | ---   | 9,440  | 167 | 3,400 | 15,000 | 218 | 3,850 | 129       | 102 | 111   |
| 11    | ---    | --- | ---   | 10,100 | 180 | 3,760 | 13,400 | 242 | 4,980 | 116       | 87  | 98    |
| 12    | ---    | --- | ---   | 13,300 | 184 | 4,800 | 13,700 | 250 | 5,240 | 98        | 76  | 81    |
| 13    | ---    | --- | ---   | 13,300 | 195 | 5,350 | ---    | --- | ---   | 87        | 76  | 82    |
| 14    | ---    | --- | ---   | ---    | --- | ---   | ---    | --- | ---   | 84        | 78  | 81    |
| 15    | ---    | --- | ---   | 16,900 | 215 | 5,830 | ---    | --- | ---   | 91        | 82  | 86    |
| 16    | 13,700 | 199 | 3,850 | 17,300 | 224 | 6,320 | ---    | --- | ---   | 95        | 88  | 92    |
| 17    | 12,800 | 197 | 4,090 | 16,000 | 299 | 7,480 | ---    | --- | ---   | 103       | 90  | 95    |
| 18    | 13,600 | 202 | 4,480 | 18,100 | 227 | 6,220 | ---    | --- | ---   | 106       | 90  | 96    |
| 19    | 15,400 | 200 | 4,930 | 15,900 | 237 | 6,280 | 113    | 83  | 95    | 113       | 91  | 101   |
| 20    | 17,000 | 202 | 4,790 | 15,800 | 250 | 6,390 | 93     | 77  | 84    | 729       | 98  | 142   |
| 21    | 17,000 | 222 | 6,290 | 16,400 | 290 | 7,420 | 94     | 80  | 85    | 3,650     | 96  | 544   |
| 22    | 15,800 | 220 | 5,460 | 17,100 | 319 | 8,290 | 95     | 81  | 85    | 1,130     | 86  | 185   |
| 23    | 13,900 | 210 | 4,440 | 16,500 | 308 | 8,290 | 106    | 86  | 93    | 815       | 85  | 155   |
| 24    | 10,100 | 202 | 4,210 | 17,500 | 244 | 6,510 | 111    | 91  | 98    | 2,360     | 87  | 401   |
| 25    | 13,700 | 213 | 6,210 | 15,300 | 248 | 6,250 | 126    | 96  | 110   | 3,930     | 95  | 698   |
| 26    | 12,600 | 222 | 5,650 | 17,900 | 260 | 7,760 | 1,630  | 112 | 282   | 5,520     | 103 | 1,250 |
| 27    | 14,800 | 214 | 5,990 | 18,700 | 271 | 8,640 | 1,830  | 115 | 295   | 6,810     | 114 | 1,990 |
| 28    | 13,100 | 220 | 4,240 | 19,000 | 271 | 8,240 | 2,800  | 109 | 387   | 7,400     | 124 | 1,940 |
| 29    | 15,500 | 226 | 4,340 | 16,600 | 247 | 6,510 | 2,690  | 118 | 593   | 3,110     | 131 | 616   |
| 30    | ---    | --- | ---   | 16,500 | 249 | 6,480 | 3,680  | 116 | 606   | 3,250     | 141 | 691   |
| 31    | ---    | --- | ---   | 16,700 | 258 | 7,330 | 632    | 114 | 158   | ---       | --- | ---   |
| MONTH | ---    | --- | ---   | ---    | --- | ---   | ---    | --- | ---   | 7,400     | 74  | 348   |







## 02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 9.4  | 0.08 | 3.3  | 7.6  | 0.08 | 2.5  | 10.4 | 0.1  | 3.9  | 0.05 | 0.04 | 0.05 |
| 2     | 9.5  | 0.07 | 3.4  | 7.0  | 0.08 | 1.8  | 9.0  | 0.09 | 2.2  | 0.05 | 0.04 | 0.04 |
| 3     | 9.7  | 0.07 | 3.2  | 6.8  | 0.09 | 1.8  | 7.8  | 0.08 | 1.7  | 0.04 | 0.03 | 0.04 |
| 4     | 9.6  | 0.08 | 3.6  | 6.7  | 0.08 | 1.9  | 6.8  | 0.08 | 2.0  | 0.03 | 0.03 | 0.03 |
| 5     | 10.7 | 0.07 | 3.9  | 6.5  | 0.08 | 2.0  | 7.5  | 0.08 | 2.4  | 0.04 | 0.03 | 0.03 |
| 6     | 11.3 | 0.08 | 4.5  | 6.7  | 0.07 | 1.9  | 5.7  | 0.07 | 1.2  | 0.04 | 0.03 | 0.04 |
| 7     | 10.8 | 0.07 | 3.7  | 6.6  | 0.07 | 2.5  | 8.3  | 0.07 | 2.4  | 0.1  | 0.04 | 0.04 |
| 8     | ---  | ---  | ---  | 6.6  | 0.07 | 2.6  | 7.2  | 0.07 | 1.8  | 0.1  | 0.04 | 0.05 |
| 9     | ---  | ---  | ---  | 5.7  | 0.07 | 2.3  | 6.6  | 0.08 | 1.6  | 0.05 | 0.04 | 0.04 |
| 10    | ---  | ---  | ---  | 5.3  | 0.07 | 1.8  | 8.7  | 0.09 | 2.1  | 0.05 | 0.04 | 0.04 |
| 11    | ---  | ---  | ---  | 5.7  | 0.07 | 2.0  | 7.7  | 0.1  | 2.7  | 0.05 | 0.03 | 0.04 |
| 12    | ---  | ---  | ---  | 7.6  | 0.07 | 2.6  | 7.9  | 0.1  | 2.9  | 0.04 | 0.03 | 0.03 |
| 13    | ---  | ---  | ---  | 7.6  | 0.08 | 3.0  | ---  | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | 0.03 | 0.03 | 0.03 |
| 15    | ---  | ---  | ---  | 9.9  | 0.09 | 3.3  | ---  | ---  | ---  | 0.04 | 0.03 | 0.03 |
| 16    | 7.9  | 0.08 | 2.1  | 10.2 | 0.09 | 3.5  | ---  | ---  | ---  | 0.04 | 0.04 | 0.04 |
| 17    | 7.3  | 0.08 | 2.2  | 9.3  | 0.1  | 4.2  | ---  | ---  | ---  | 0.04 | 0.04 | 0.04 |
| 18    | 7.8  | 0.08 | 2.5  | 10.7 | 0.09 | 3.5  | ---  | ---  | ---  | 0.04 | 0.04 | 0.04 |
| 19    | 9.0  | 0.08 | 2.7  | 9.3  | 0.10 | 3.5  | 0.05 | 0.03 | 0.04 | 0.05 | 0.04 | 0.04 |
| 20    | 10   | 0.08 | 2.6  | 9.2  | 0.1  | 3.6  | 0.04 | 0.03 | 0.03 | 0.3  | 0.04 | 0.06 |
| 21    | 10   | 0.09 | 3.5  | 9.6  | 0.1  | 4.2  | 0.04 | 0.03 | 0.03 | 1.9  | 0.04 | 0.3  |
| 22    | 9.2  | 0.09 | 3.0  | 10.0 | 0.1  | 4.7  | 0.04 | 0.03 | 0.03 | 0.5  | 0.03 | 0.08 |
| 23    | 8.0  | 0.09 | 2.4  | 9.6  | 0.1  | 4.7  | 0.04 | 0.03 | 0.04 | 0.4  | 0.03 | 0.07 |
| 24    | 5.7  | 0.08 | 2.3  | 10.3 | 0.1  | 3.6  | 0.04 | 0.04 | 0.04 | 1.2  | 0.03 | 0.2  |
| 25    | 7.9  | 0.09 | 3.5  | 8.9  | 0.1  | 3.5  | 0.05 | 0.04 | 0.04 | 2.1  | 0.04 | 0.3  |
| 26    | 7.2  | 0.09 | 3.1  | 10.5 | 0.1  | 4.4  | 0.8  | 0.04 | 0.1  | 3.0  | 0.04 | 0.6  |
| 27    | 8.6  | 0.09 | 3.3  | 11.1 | 0.1  | 4.9  | 0.9  | 0.05 | 0.1  | 3.7  | 0.05 | 1.0  |
| 28    | 7.5  | 0.09 | 2.3  | 11.3 | 0.1  | 4.7  | 1.4  | 0.04 | 0.2  | 4.1  | 0.05 | 1.0  |
| 29    | 9.0  | 0.09 | 2.4  | 9.7  | 0.1  | 3.7  | 1.4  | 0.05 | 0.3  | 1.6  | 0.05 | 0.3  |
| 30    | ---  | ---  | ---  | 9.6  | 0.1  | 3.6  | 1.9  | 0.05 | 0.3  | 1.7  | 0.06 | 0.3  |
| 31    | ---  | ---  | ---  | 9.8  | 0.1  | 4.2  | 0.3  | 0.05 | 0.07 | ---  | ---  | ---  |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | 4.1  | 0.03 | 0.2  |







02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|-----|-----|------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |     |     |      | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 7.0 | 6.6 | 6.8  | 7.0  | 6.6 | 6.8  | 7.1  | 6.8 | 6.9  | 6.6    | 6.3 | 6.4  |           |     |      |
| 2     | --- | --- | ---  | 7.0  | 6.7 | 6.8  | 7.0  | 6.8 | 6.9  | 6.6    | 6.3 | 6.4  |           |     |      |
| 3     | --- | --- | ---  | 7.0  | 6.7 | 6.8  | 7.0  | 6.8 | 6.9  | 6.5    | 6.3 | 6.4  |           |     |      |
| 4     | --- | --- | ---  | 7.0  | 6.5 | 6.8  | 7.0  | 6.7 | 6.9  | 6.3    | 6.2 | 6.3  |           |     |      |
| 5     | --- | --- | ---  | 7.0  | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | 6.4    | 6.2 | 6.3  |           |     |      |
| 6     | --- | --- | ---  | 6.9  | 6.6 | 6.8  | 7.0  | 6.7 | 6.8  | 6.4    | 6.2 | 6.3  |           |     |      |
| 7     | --- | --- | ---  | 6.9  | 6.6 | 6.8  | 7.0  | 6.7 | 6.8  | 6.4    | 6.2 | 6.3  |           |     |      |
| 8     | --- | --- | ---  | 6.9  | 6.6 | 6.7  | 7.0  | 6.7 | 6.8  | 6.6    | 6.3 | 6.4  |           |     |      |
| 9     | --- | --- | ---  | 6.9  | 6.6 | 6.7  | 7.0  | 6.8 | 6.9  | 6.6    | 6.4 | 6.5  |           |     |      |
| 10    | --- | --- | ---  | 6.8  | 6.6 | 6.7  | 7.1  | 6.8 | 6.9  | 6.7    | 6.4 | 6.5  |           |     |      |
| 11    | --- | --- | ---  | 6.9  | 6.6 | 6.7  | 7.1  | 6.8 | 7.0  | 6.6    | 6.3 | 6.5  |           |     |      |
| 12    | --- | --- | ---  | 6.9  | 6.6 | 6.7  | 7.0  | 6.8 | 7.0  | 6.4    | 6.2 | 6.3  |           |     |      |
| 13    | --- | --- | ---  | 7.0  | 6.6 | 6.8  | ---  | --- | ---  | 6.3    | 6.2 | 6.3  |           |     |      |
| 14    | --- | --- | ---  | ---  | --- | ---  | ---  | --- | ---  | 6.3    | 6.2 | 6.3  |           |     |      |
| 15    | --- | --- | ---  | 7.0  | 6.7 | 6.8  | ---  | --- | ---  | 6.4    | 6.2 | 6.3  |           |     |      |
| 16    | 7.0 | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | ---  | --- | ---  | 6.3    | 6.2 | 6.3  |           |     |      |
| 17    | 7.0 | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | ---  | --- | ---  | 6.3    | 6.2 | 6.2  |           |     |      |
| 18    | 7.0 | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | ---  | --- | ---  | 6.3    | 6.0 | 6.2  |           |     |      |
| 19    | 7.0 | 6.7 | 6.8  | 6.9  | 6.7 | 6.8  | 6.6  | 6.2 | 6.3  | 6.3    | 6.0 | 6.2  |           |     |      |
| 20    | 7.1 | 6.7 | 6.8  | 6.9  | 6.7 | 6.8  | 6.3  | 6.1 | 6.1  | 6.5    | 6.1 | 6.3  |           |     |      |
| 21    | 7.1 | 6.7 | 6.8  | 6.9  | 6.7 | 6.8  | 6.3  | 6.1 | 6.1  | 6.4    | 6.2 | 6.3  |           |     |      |
| 22    | 7.1 | 6.7 | 6.8  | 7.0  | 6.7 | 6.9  | 6.4  | 6.2 | 6.2  | 6.5    | 6.2 | 6.3  |           |     |      |
| 23    | 7.0 | 6.7 | 6.8  | 7.0  | 6.7 | 6.9  | 6.4  | 6.2 | 6.2  | 6.4    | 6.2 | 6.3  |           |     |      |
| 24    | 6.9 | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | 6.4  | 6.2 | 6.2  | 6.4    | 6.2 | 6.3  |           |     |      |
| 25    | 7.0 | 6.7 | 6.8  | 7.0  | 6.7 | 6.8  | 6.5  | 6.2 | 6.3  | 6.6    | 6.3 | 6.4  |           |     |      |
| 26    | 7.0 | 6.7 | 6.9  | 7.0  | 6.7 | 6.9  | 6.5  | 6.2 | 6.4  | 6.6    | 6.3 | 6.4  |           |     |      |
| 27    | 7.1 | 6.7 | 6.9  | 7.1  | 6.7 | 6.9  | 6.5  | 6.2 | 6.4  | 6.7    | 6.4 | 6.5  |           |     |      |
| 28    | 7.0 | 6.7 | 6.8  | 7.1  | 6.7 | 6.9  | 6.4  | 6.2 | 6.4  | 6.8    | 6.4 | 6.5  |           |     |      |
| 29    | 7.0 | 6.8 | 6.9  | 7.1  | 6.8 | 6.9  | 6.5  | 6.3 | 6.4  | 6.6    | 6.5 | 6.5  |           |     |      |
| 30    | --- | --- | ---  | 7.1  | 6.8 | 6.9  | 6.6  | 6.4 | 6.4  | 6.6    | 6.4 | 6.5  |           |     |      |
| 31    | --- | --- | ---  | 7.1  | 6.8 | 6.9  | 6.4  | 6.3 | 6.4  | ---    | --- | ---  |           |     |      |
| MONTH | --- | --- | ---  | ---  | --- | ---  | ---  | --- | ---  | 6.8    | 6.0 | 6.4  |           |     |      |









## 02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 28.4 | 27.1 | 27.8 | 28.8 | 28.2 | 28.6 | 29.8 | 29.1 | 29.4 | 26.8 | 26.3 | 26.5 |
| 2     | 28.4 | 27.3 | 27.8 | 28.6 | 28.2 | 28.5 | 30.1 | 29.1 | 29.5 | 26.5 | 25.6 | 26.0 |
| 3     | 28.7 | 27.4 | 27.9 | 28.7 | 27.9 | 28.2 | 29.8 | 29.0 | 29.3 | 25.6 | 24.7 | 25.2 |
| 4     | 28.1 | 27.4 | 27.8 | 29.0 | 27.9 | 28.3 | 30.1 | 28.7 | 29.2 | 25.4 | 24.6 | 24.8 |
| 5     | 28.4 | 27.2 | 27.8 | 29.5 | 28.1 | 28.6 | 30.0 | 29.0 | 29.3 | 25.6 | 24.7 | 24.9 |
| 6     | 28.1 | 27.3 | 27.8 | 29.8 | 28.4 | 28.9 | 29.2 | 28.4 | 28.8 | 24.9 | 24.7 | 24.8 |
| 7     | 28.7 | 27.3 | 27.9 | 30.0 | 28.6 | 29.2 | 28.6 | 27.8 | 28.3 | 24.9 | 24.7 | 24.8 |
| 8     | ---  | ---  | ---  | 29.6 | 28.9 | 29.2 | 28.4 | 27.7 | 28.1 | 25.4 | 24.7 | 24.9 |
| 9     | ---  | ---  | ---  | 29.7 | 28.8 | 29.2 | 28.4 | 27.7 | 28.0 | 25.8 | 24.9 | 25.3 |
| 10    | ---  | ---  | ---  | 30.1 | 28.9 | 29.4 | 28.7 | 27.7 | 28.0 | 25.9 | 25.6 | 25.7 |
| 11    | ---  | ---  | ---  | 30.1 | 29.2 | 29.5 | 28.2 | 27.8 | 28.0 | 25.7 | 24.9 | 25.4 |
| 12    | ---  | ---  | ---  | 29.5 | 29.1 | 29.4 | 28.0 | 27.6 | 27.8 | 24.9 | 24.2 | 24.5 |
| 13    | ---  | ---  | ---  | 29.9 | 29.1 | 29.4 | ---  | ---  | ---  | 24.6 | 24.2 | 24.3 |
| 14    | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | 24.2 | 23.8 | 24.0 |
| 15    | ---  | ---  | ---  | 30.2 | 29.6 | 29.9 | ---  | ---  | ---  | 24.1 | 23.7 | 23.9 |
| 16    | 28.3 | 27.8 | 28.0 | 30.2 | 29.7 | 30.0 | ---  | ---  | ---  | 24.2 | 24.0 | 24.1 |
| 17    | 28.0 | 27.6 | 27.9 | 30.2 | 29.4 | 29.8 | ---  | ---  | ---  | 24.6 | 24.1 | 24.4 |
| 18    | 28.6 | 27.7 | 28.0 | 30.1 | 29.1 | 29.5 | ---  | ---  | ---  | 24.4 | 24.0 | 24.2 |
| 19    | 29.3 | 28.0 | 28.4 | 30.3 | 28.9 | 29.4 | 25.0 | 23.9 | 24.2 | 24.0 | 23.2 | 23.7 |
| 20    | 28.7 | 28.0 | 28.4 | 30.4 | 29.1 | 29.5 | 25.1 | 24.1 | 24.5 | 23.2 | 22.7 | 23.0 |
| 21    | 28.9 | 27.7 | 28.2 | 30.7 | 29.2 | 29.7 | 25.8 | 24.8 | 25.1 | 23.0 | 22.3 | 22.7 |
| 22    | 29.0 | 27.9 | 28.4 | 30.0 | 29.3 | 29.7 | 25.8 | 25.2 | 25.4 | 23.0 | 22.1 | 22.5 |
| 23    | 29.5 | 28.2 | 28.7 | 30.1 | 29.3 | 29.7 | 26.3 | 25.5 | 25.7 | 22.9 | 22.0 | 22.3 |
| 24    | 29.1 | 28.4 | 28.8 | 30.1 | 29.3 | 29.7 | 26.4 | 25.5 | 25.8 | 22.7 | 21.9 | 22.2 |
| 25    | 29.5 | 28.5 | 29.0 | 29.8 | 29.2 | 29.6 | 26.6 | 25.6 | 25.9 | 22.9 | 22.0 | 22.3 |
| 26    | 29.2 | 28.5 | 28.9 | 30.2 | 29.2 | 29.7 | 26.2 | 25.8 | 26.0 | 22.8 | 22.2 | 22.4 |
| 27    | 29.1 | 28.5 | 28.8 | 30.1 | 29.5 | 29.8 | 26.5 | 25.9 | 26.1 | 23.6 | 22.3 | 22.8 |
| 28    | 29.2 | 28.5 | 28.9 | 29.8 | 29.2 | 29.6 | 26.6 | 25.8 | 26.1 | 23.9 | 22.9 | 23.3 |
| 29    | 29.1 | 28.6 | 28.8 | 29.5 | 29.0 | 29.3 | 26.6 | 26.0 | 26.2 | 24.0 | 23.1 | 23.4 |
| 30    | ---  | ---  | ---  | 29.7 | 29.0 | 29.3 | 26.6 | 26.0 | 26.3 | 24.1 | 23.4 | 23.7 |
| 31    | ---  | ---  | ---  | 29.9 | 29.1 | 29.4 | 26.6 | 26.2 | 26.4 | ---  | ---  | ---  |
| MONTH | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | ---  | 26.8 | 21.9 | 24.1 |





## CAPE FEAR RIVER BASIN

02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|-----|-----|------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       |     |     |      | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 5.0 | 4.4 | 4.6  | 5.0  | 4.0 | 4.5  | 4.2  | 3.5 | 3.9  | 5.6    | 3.7 | 4.4  |           |     |      |
| 2     | 4.8 | 4.2 | 4.5  | 5.0  | 4.0 | 4.5  | 5.0  | 3.5 | 4.1  | 6.0    | 4.8 | 5.3  |           |     |      |
| 3     | 4.8 | 4.0 | 4.3  | 5.0  | 4.0 | 4.5  | 5.6  | 3.6 | 4.7  | 5.3    | 4.5 | 4.9  |           |     |      |
| 4     | 4.8 | 3.8 | 4.2  | 5.2  | 4.0 | 4.5  | 5.3  | 4.0 | 4.7  | 5.2    | 4.3 | 4.8  |           |     |      |
| 5     | 4.8 | 3.9 | 4.3  | 5.0  | 4.0 | 4.6  | 4.9  | 3.8 | 4.5  | 5.3    | 4.4 | 4.8  |           |     |      |
| 6     | 4.6 | 3.9 | 4.2  | 4.8  | 4.1 | 4.5  | 5.0  | 4.2 | 4.7  | 5.1    | 4.2 | 4.7  |           |     |      |
| 7     | 4.6 | 3.8 | 4.1  | 4.6  | 4.0 | 4.4  | 4.9  | 4.1 | 4.5  | 5.0    | 4.1 | 4.5  |           |     |      |
| 8     | --- | --- | ---  | 4.4  | 4.0 | 4.2  | 4.9  | 4.1 | 4.6  | 5.3    | 4.2 | 4.6  |           |     |      |
| 9     | --- | --- | ---  | 4.3  | 3.7 | 4.0  | 5.2  | 4.2 | 4.7  | 4.5    | 3.9 | 4.3  |           |     |      |
| 10    | --- | --- | ---  | 4.2  | 3.6 | 3.9  | 5.5  | 4.1 | 4.9  | 5.6    | 4.1 | 4.9  |           |     |      |
| 11    | --- | --- | ---  | 4.4  | 3.7 | 4.1  | 5.1  | 4.1 | 4.7  | 6.0    | 4.7 | 5.4  |           |     |      |
| 12    | --- | --- | ---  | 4.4  | 3.8 | 4.1  | 4.7  | 3.9 | 4.4  | 5.0    | 4.3 | 4.7  |           |     |      |
| 13    | --- | --- | ---  | 4.2  | 3.7 | 4.0  | ---  | --- | ---  | 4.7    | 4.1 | 4.5  |           |     |      |
| 14    | --- | --- | ---  | ---  | --- | ---  | ---  | --- | ---  | 4.6    | 4.1 | 4.4  |           |     |      |
| 15    | --- | --- | ---  | 4.0  | 3.4 | 3.6  | ---  | --- | ---  | 4.6    | 3.9 | 4.2  |           |     |      |
| 16    | 4.8 | 4.2 | 4.4  | 3.9  | 3.3 | 3.6  | ---  | --- | ---  | 4.1    | 3.6 | 3.8  |           |     |      |
| 17    | 4.6 | 4.2 | 4.3  | 4.1  | 3.5 | 3.7  | ---  | --- | ---  | 4.2    | 3.4 | 3.7  |           |     |      |
| 18    | 4.6 | 4.1 | 4.3  | 4.4  | 3.5 | 3.8  | ---  | --- | ---  | 4.2    | 3.5 | 3.7  |           |     |      |
| 19    | 4.6 | 3.9 | 4.2  | 4.1  | 3.3 | 3.7  | 5.5  | 4.4 | 4.8  | 4.7    | 3.6 | 4.0  |           |     |      |
| 20    | 4.3 | 3.8 | 4.1  | 4.1  | 3.3 | 3.7  | 5.1  | 4.1 | 4.4  | 6.0    | 4.3 | 5.1  |           |     |      |
| 21    | 4.4 | 3.8 | 4.0  | 4.0  | 3.2 | 3.6  | 5.4  | 4.0 | 4.6  | 6.4    | 5.0 | 5.6  |           |     |      |
| 22    | 4.3 | 3.9 | 4.1  | 3.8  | 3.1 | 3.5  | 5.9  | 4.3 | 4.9  | 6.2    | 5.2 | 5.6  |           |     |      |
| 23    | 4.5 | 3.9 | 4.2  | 3.8  | 3.2 | 3.5  | 5.0  | 3.8 | 4.2  | 6.4    | 5.2 | 5.7  |           |     |      |
| 24    | 4.4 | 3.9 | 4.2  | 4.0  | 3.0 | 3.5  | 4.7  | 3.8 | 4.1  | 6.5    | 5.3 | 5.8  |           |     |      |
| 25    | 4.7 | 3.8 | 4.2  | 3.9  | 3.0 | 3.4  | 5.2  | 4.1 | 4.4  | 6.3    | 5.3 | 5.8  |           |     |      |
| 26    | 4.6 | 4.0 | 4.2  | 3.9  | 2.8 | 3.4  | 4.9  | 3.7 | 4.4  | 5.9    | 5.1 | 5.5  |           |     |      |
| 27    | 4.5 | 3.9 | 4.1  | 3.9  | 2.8 | 3.3  | 4.8  | 3.6 | 4.3  | 5.6    | 4.9 | 5.3  |           |     |      |
| 28    | 4.4 | 3.8 | 4.1  | 4.1  | 2.9 | 3.5  | 4.6  | 3.5 | 4.1  | 5.8    | 5.1 | 5.3  |           |     |      |
| 29    | 4.6 | 3.8 | 4.1  | 4.2  | 3.3 | 3.8  | 5.3  | 3.5 | 4.1  | 5.3    | 4.7 | 5.1  |           |     |      |
| 30    | --- | --- | ---  | 4.2  | 3.4 | 3.8  | 5.0  | 4.1 | 4.3  | 5.0    | 4.4 | 4.7  |           |     |      |
| 31    | --- | --- | ---  | 4.2  | 3.4 | 3.8  | 4.3  | 3.7 | 4.0  | ---    | --- | ---  |           |     |      |
| MONTH | --- | --- | ---  | ---  | --- | ---  | ---  | --- | ---  | 6.5    | 3.4 | 4.8  |           |     |      |





## 02107576 CAPE FEAR RIVER AT NAVASSA, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 64  | 56  | 59   | 65  | 52  | 58   | 56  | 46  | 51   | 70  | 46  | 55   |
| 2     | 61  | 54  | 57   | 65  | 52  | 59   | 66  | 46  | 54   | 76  | 60  | 66   |
| 3     | 61  | 51  | 55   | 64  | 51  | 58   | 74  | 47  | 62   | 65  | 55  | 60   |
| 4     | 61  | 49  | 54   | 67  | 51  | 59   | 69  | 53  | 62   | 80  | 52  | 58   |
| 5     | 61  | 50  | 55   | 65  | 52  | 60   | 64  | 50  | 59   | 65  | 53  | 59   |
| 6     | 59  | 50  | 54   | 64  | 53  | 59   | 65  | 55  | 61   | 62  | 52  | 57   |
| 7     | 59  | 49  | 53   | 61  | 52  | 57   | 63  | 53  | 59   | 61  | 50  | 54   |
| 8     | --- | --- | ---  | 58  | 52  | 55   | 63  | 53  | 59   | 65  | 51  | 55   |
| 9     | --- | --- | ---  | 57  | 48  | 52   | 67  | 54  | 61   | 55  | 48  | 52   |
| 10    | --- | --- | ---  | 56  | 47  | 52   | 71  | 53  | 62   | 69  | 50  | 61   |
| 11    | --- | --- | ---  | 59  | 49  | 54   | 65  | 53  | 60   | 74  | 57  | 66   |
| 12    | --- | --- | ---  | 58  | 50  | 54   | 60  | 50  | 56   | 60  | 52  | 57   |
| 13    | --- | --- | ---  | 56  | 48  | 53   | --- | --- | ---  | 56  | 49  | 54   |
| 14    | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 55  | 49  | 52   |
| 15    | --- | --- | ---  | 53  | 45  | 48   | --- | --- | ---  | 55  | 47  | 50   |
| 16    | 64  | 55  | 58   | 52  | 44  | 48   | --- | --- | ---  | 49  | 43  | 46   |
| 17    | 61  | 54  | 56   | 54  | 46  | 49   | --- | --- | ---  | 51  | 41  | 45   |
| 18    | 62  | 53  | 57   | 59  | 46  | 50   | --- | --- | ---  | 50  | 42  | 45   |
| 19    | 61  | 52  | 55   | 54  | 43  | 49   | 67  | 54  | 58   | 56  | 43  | 48   |
| 20    | 58  | 50  | 53   | 54  | 43  | 49   | 62  | 50  | 54   | 70  | 50  | 59   |
| 21    | 59  | 48  | 53   | 54  | 42  | 48   | 66  | 49  | 57   | 74  | 58  | 65   |
| 22    | 58  | 51  | 54   | 50  | 41  | 46   | 72  | 54  | 60   | 72  | 60  | 65   |
| 23    | 60  | 52  | 55   | 51  | 42  | 46   | 63  | 47  | 52   | 74  | 60  | 66   |
| 24    | 58  | 53  | 55   | 53  | 40  | 46   | 58  | 46  | 51   | 75  | 62  | 67   |
| 25    | 65  | 52  | 56   | 51  | 40  | 45   | 64  | 51  | 55   | 72  | 62  | 66   |
| 26    | 63  | 54  | 56   | 52  | 37  | 44   | 62  | 46  | 55   | 68  | 59  | 64   |
| 27    | 61  | 51  | 55   | 52  | 37  | 44   | 59  | 45  | 54   | 65  | 57  | 62   |
| 28    | 60  | 51  | 55   | 54  | 38  | 46   | 57  | 44  | 51   | 69  | 60  | 63   |
| 29    | 61  | 51  | 55   | 55  | 43  | 50   | 66  | 44  | 51   | 62  | 56  | 60   |
| 30    | --- | --- | ---  | 55  | 44  | 50   | 63  | 51  | 54   | 59  | 52  | 55   |
| 31    | --- | --- | ---  | 56  | 44  | 50   | 54  | 46  | 50   | --- | --- | ---  |
| MONTH | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  | 80  | 41  | 58   |





02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC

LOCATION.--Lat 34°49'44", long 77°49'56", Duplin County, Hydrologic Unit 03030007, on right bank 540 ft downstream of bridge on State Highway 41, 0.5 mi downstream of Muddy Creek, and 1.2 mi west of Chinquapin.

DRAINAGE AREA.--599 mi<sup>2</sup>.

PERIOD OF RECORD.--July 1940 to current year.

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

GAGE.--Water-stage recorder. Datum of gage is 17.28 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Minimum discharge for period of record also occurred Oct. 11, 1954. Minimum discharge for current water year also occurred Aug. 2.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in 1908 reached a stage of 22.6 ft at old bridge site 1,000 ft upstream from gage. Flood in 1928 reached a stage 0.8 ft lower than the flood in 1908, from information by North Carolina State Highway Commission.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004  
DAILY MEAN VALUES

| DAY   | OCT    | NOV    | DEC    | JAN    | FEB    | MAR    | APR    | MAY    | JUN    | JUL   | AUG    | SEP    |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|
| 1     | 361    | 3,620  | 455    | 724    | 600    | 1,770  | 259    | 678    | 239    | 578   | 46     | 1,680  |
| 2     | 318    | 3,110  | 418    | 678    | 550    | 1,580  | 277    | 1,270  | 274    | 639   | 63     | 1,580  |
| 3     | 273    | 2,370  | 385    | 635    | 524    | 1,370  | 292    | 1,970  | 277    | 681   | 130    | 1,380  |
| 4     | 235    | 1,740  | 370    | 595    | 545    | 1,240  | 295    | 3,120  | 252    | 596   | 184    | 1,170  |
| 5     | 201    | 1,320  | 560    | 563    | 539    | 1,160  | 282    | 4,020  | 296    | 428   | 203    | 1,020  |
| 6     | 176    | 1,200  | 719    | 539    | 531    | 1,060  | 256    | 4,070  | 539    | 330   | 327    | 874    |
| 7     | 157    | 1,610  | 771    | 514    | 544    | 937    | 232    | 3,690  | 668    | 283   | 394    | 943    |
| 8     | 158    | 1,720  | 764    | 493    | 546    | 813    | 215    | 2,970  | 616    | 257   | 403    | 1,030  |
| 9     | 476    | 1,570  | 704    | 484    | 525    | 709    | 199    | 2,370  | 473    | 220   | 289    | 1,210  |
| 10    | 804    | 1,350  | 672    | 501    | 498    | 626    | 184    | 1,900  | 363    | 157   | 194    | 1,370  |
| 11    | 996    | 1,140  | 1,450  | 502    | 469    | 556    | 215    | 1,420  | 348    | 131   | 133    | 1,510  |
| 12    | 1,060  | 930    | 1,990  | 490    | 498    | 499    | 553    | 1,040  | 465    | 153   | 95     | 1,530  |
| 13    | 1,050  | 760    | 2,050  | 486    | 766    | 452    | 980    | 733    | 575    | 137   | 339    | 1,390  |
| 14    | 934    | 634    | 2,130  | 473    | 925    | 411    | 1,400  | 565    | 582    | 145   | 1,220  | 1,150  |
| 15    | 812    | 551    | 2,620  | 460    | 1,140  | 386    | 1,770  | 476    | 503    | 110   | e2,240 | 967    |
| 16    | 679    | 497    | 3,090  | 444    | 1,370  | 424    | 1,930  | 450    | 396    | 87    | e3,570 | 791    |
| 17    | 560    | 452    | 3,120  | 423    | 1,520  | 538    | 1,970  | 449    | 488    | 73    | e4,150 | 675    |
| 18    | 479    | 415    | 2,940  | 416    | 1,660  | 573    | 1,840  | 402    | 796    | 63    | 4,030  | 708    |
| 19    | 419    | 424    | 2,550  | 426    | 1,710  | 556    | 1,560  | 333    | 945    | 56    | 3,410  | 751    |
| 20    | 367    | 843    | 2,200  | 420    | 1,610  | 525    | 1,240  | 276    | 906    | 51    | 2,550  | 746    |
| 21    | 321    | 1,010  | 1,890  | 411    | 1,450  | 480    | 928    | 233    | 755    | 76    | 1,880  | 728    |
| 22    | 280    | 1,030  | 1,610  | 404    | 1,280  | 429    | 663    | 197    | 533    | 99    | 1,400  | 702    |
| 23    | 247    | 1,020  | 1,370  | 390    | 1,110  | 382    | 494    | 169    | 378    | 88    | 1,140  | 650    |
| 24    | 215    | 942    | 1,250  | 370    | 986    | 345    | 395    | 156    | 324    | 79    | 942    | 558    |
| 25    | 192    | 824    | 1,220  | 354    | 904    | 315    | 326    | 215    | 340    | 105   | 780    | 467    |
| 26    | 180    | 708    | 1,170  | e400   | 893    | 291    | 278    | 246    | 402    | 121   | 658    | 390    |
| 27    | 173    | 637    | 1,110  | e510   | 1,320  | 270    | 341    | 231    | 399    | 97    | 583    | 337    |
| 28    | 191    | 595    | 1,030  | 589    | 1,700  | 254    | 479    | 181    | 327    | 74    | 607    | 321    |
| 29    | 1,240  | 555    | 941    | 669    | 1,830  | 245    | 552    | 139    | 389    | 60    | 672    | 322    |
| 30    | 2,720  | 499    | 853    | 678    | ---    | 235    | 590    | 142    | 472    | 51    | 1,100  | 312    |
| 31    | 3,630  | ---    | 780    | 653    | ---    | 237    | ---    | 188    | ---    | 48    | 1,520  | ---    |
| TOTAL | 19,904 | 34,076 | 43,182 | 15,694 | 28,543 | 19,668 | 20,995 | 34,299 | 14,320 | 6,073 | 35,252 | 27,262 |
| MEAN  | 642    | 1,136  | 1,393  | 506    | 984    | 634    | 700    | 1,106  | 477    | 196   | 1,137  | 909    |
| MAX   | 3,630  | 3,620  | 3,120  | 724    | 1,830  | 1,770  | 1,970  | 4,070  | 945    | 681   | 4,150  | 1,680  |
| MIN   | 157    | 415    | 370    | 354    | 469    | 235    | 184    | 139    | 239    | 48    | 46     | 312    |
| CFSM  | 1.07   | 1.90   | 2.33   | 0.85   | 1.64   | 1.06   | 1.17   | 1.85   | 0.80   | 0.33  | 1.90   | 1.52   |
| IN.   | 1.24   | 2.12   | 2.68   | 0.97   | 1.77   | 1.22   | 1.30   | 2.13   | 0.89   | 0.38  | 2.19   | 1.69   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2004, BY WATER YEAR (WY)

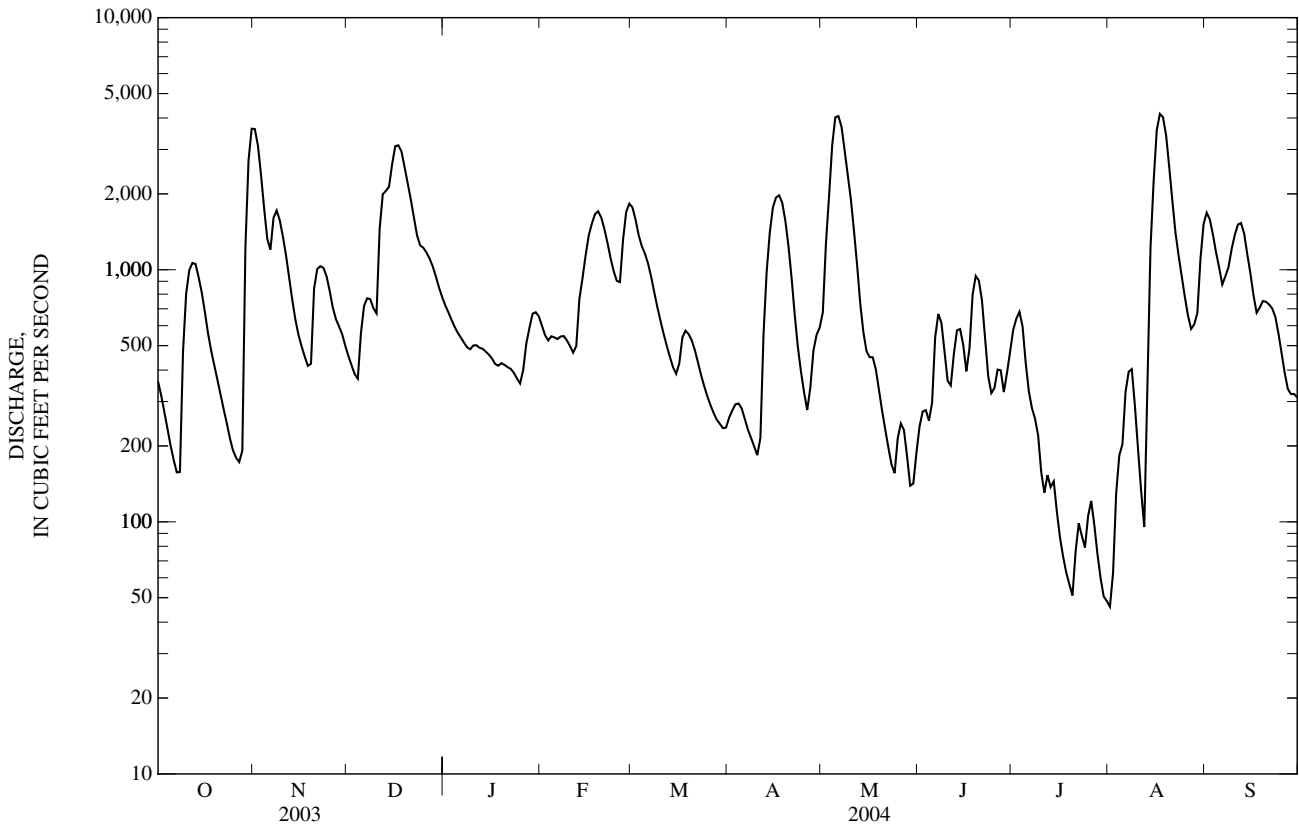
|      |        |        |        |        |        |        |        |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 458    | 430    | 662    | 1,043  | 1,198  | 1,232  | 848    | 475    | 414    | 570    | 680    | 681    |
| MAX  | 3,237  | 1,852  | 2,225  | 2,548  | 4,399  | 3,506  | 2,958  | 1,901  | 1,953  | 3,922  | 2,681  | 7,329  |
| (WY) | (2000) | (1948) | (1949) | (1993) | (1998) | (1983) | (1973) | (1969) | (1961) | (1962) | (1955) | (1999) |
| MIN  | 7.59   | 15.6   | 59.6   | 158    | 249    | 261    | 145    | 64.9   | 17.3   | 25.9   | 13.8   | 11.0   |
| (WY) | (1955) | (1955) | (1955) | (1955) | (1955) | (1955) | (1986) | (1995) | (1994) | (1954) | (1954) | (1954) |

02108000 NORTHEAST CAPE FEAR RIVER NEAR CHINQUAPIN, NC—Continued

| SUMMARY STATISTICS       | FOR 2003 CALENDAR YEAR |        | FOR 2004 WATER YEAR |        | WATER YEARS 1940 - 2004 |              |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL             | 467,787                |        | 299,268             |        | 723                     |              |
| ANNUAL MEAN              | 1,282                  |        | 818                 |        | 1,243                   |              |
| HIGHEST ANNUAL MEAN      |                        |        |                     |        | 1973                    |              |
| LOWEST ANNUAL MEAN       |                        |        |                     |        | 279                     |              |
| HIGHEST DAILY MEAN       | 5,460                  | Jul 17 | 4,150               | Aug 17 | 29,900                  | Sep 18, 1999 |
| LOWEST DAILY MEAN        | 125                    | Sep 17 | 46                  | Aug 1  | 5.3                     | Oct 10, 1954 |
| ANNUAL SEVEN-DAY MINIMUM | 144                    | Sep 12 | 63                  | Jul 27 | 5.5                     | Oct 8, 1954  |
| MAXIMUM PEAK FLOW        |                        |        | 4,180               | Aug 17 | 30,700                  | Sep 18, 1999 |
| MAXIMUM PEAK STAGE       |                        |        | 12.79               | Aug 17 | 23.51                   | Sep 18, 1999 |
| INSTANTANEOUS LOW FLOW   |                        |        | 45*                 | Aug 1  | 5.3*                    | Oct 10, 1954 |
| ANNUAL RUNOFF (CFSM)     | 2.14                   |        | 1.37                |        | 1.21                    |              |
| ANNUAL RUNOFF (INCHES)   | 29.05                  |        | 18.59               |        | 16.41                   |              |
| 10 PERCENT EXCEEDS       | 3,130                  |        | 1,750               |        | 1,700                   |              |
| 50 PERCENT EXCEEDS       | 853                    |        | 552                 |        | 409                     |              |
| 90 PERCENT EXCEEDS       | 269                    |        | 181                 |        | 59                      |              |

\* See REMARKS.

e Estimated.



02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC

LOCATION.--Lat 34°35'54", long 77°52'31", Pender County, Hydrologic Unit 03030007, on left bank at State Highway 53 bridge, 3.9 mi above Holly Shelter Creek and 4.5 mi east of Burgaw.

DRAINAGE AREA.--920 mi<sup>2</sup>.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--September 1999 to November 2003 (elevations only), November 2003 to current year. Records for September 1999 are unpublished and available in the USGS District Office, Raleigh, NC.

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

EXTREMES FOR PERIOD OF RECORD.--Maximum, 22.77 ft, Sept. 20, 1999; minimum, -0.18 ft, Jan. 2, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,610 ft<sup>3</sup>/s, Aug. 20; minimum discharge -472 ft<sup>3</sup>/s, July 30.

REMARKS.--This site is strongly affected by astronomical and wind tides. The astronomical tides occur at primary harmonic periods of 12.42 hours and 24.8 hours. Mean daily discharge for this site may be affected by aliasing due to tides and can contain fluctuations that are not representative of net downstream discharge.

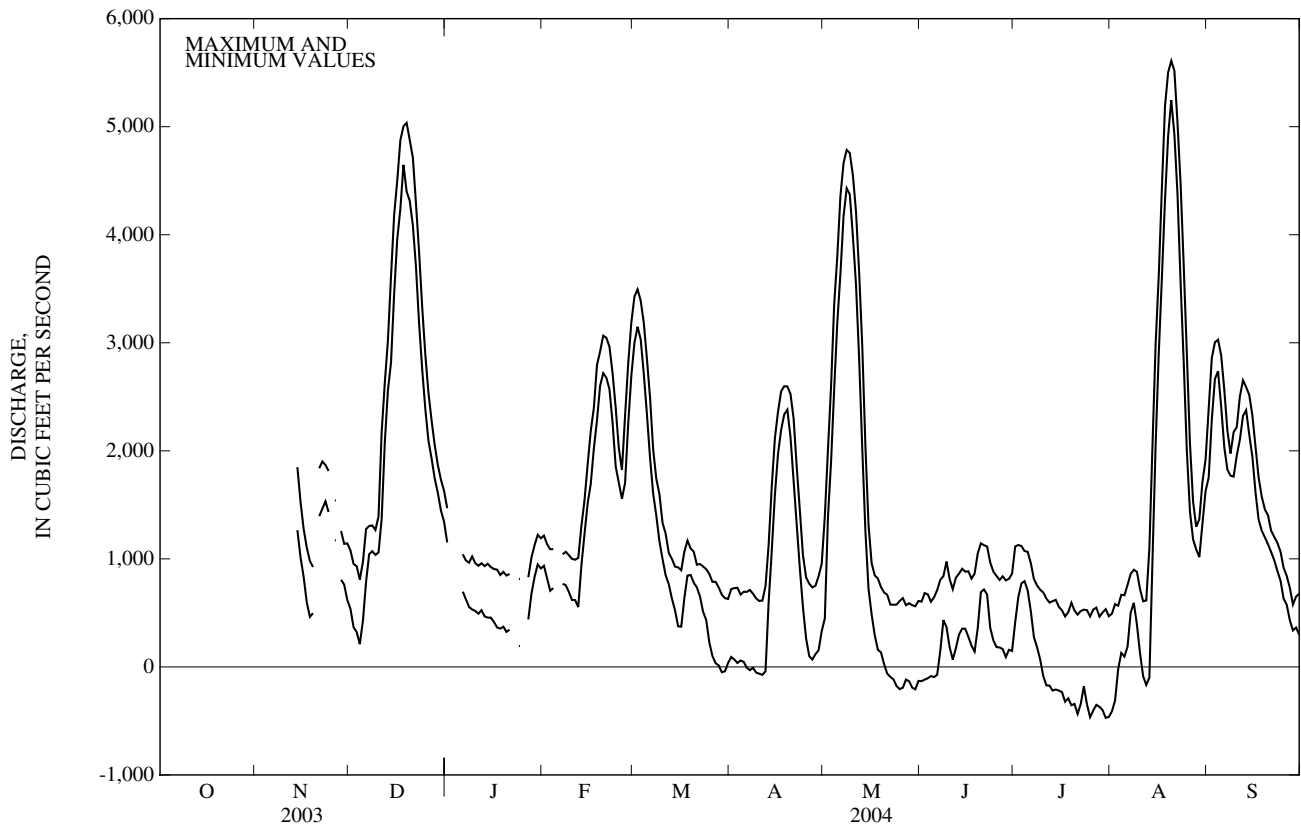
DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX     |     | MIN      |       | MAX      |       | MIN     |       | MAX      |       | MIN   |       |
|-------|---------|-----|----------|-------|----------|-------|---------|-------|----------|-------|-------|-------|
|       | OCTOBER |     | NOVEMBER |       | DECEMBER |       | JANUARY |       | FEBRUARY |       | MARCH |       |
| 1     | ---     | --- | ---      | ---   | 1,080    | 538   | 1,470   | 1,150 | 1,220    | 936   | 3,430 | 3,000 |
| 2     | ---     | --- | ---      | ---   | 954      | 367   | ---     | ---   | 1,140    | 819   | 3,490 | 3,150 |
| 3     | ---     | --- | ---      | ---   | 931      | 321   | ---     | ---   | 1,090    | 705   | 3,390 | 3,030 |
| 4     | ---     | --- | ---      | ---   | 808      | 211   | ---     | ---   | 1,090    | 729   | 3,180 | 2,710 |
| 5     | ---     | --- | ---      | ---   | 971      | 427   | ---     | ---   | ---      | ---   | 2,850 | 2,340 |
| 6     | ---     | --- | ---      | ---   | 1,280    | 785   | 1,040   | 696   | ---      | ---   | 2,490 | 1,930 |
| 7     | ---     | --- | ---      | ---   | 1,300    | 1,040 | 985     | 625   | 1,040    | 770   | 2,010 | 1,610 |
| 8     | ---     | --- | ---      | ---   | 1,310    | 1,070 | 965     | 555   | 1,060    | 755   | 1,740 | 1,400 |
| 9     | ---     | --- | ---      | ---   | 1,270    | 1,040 | 1,020   | 531   | 1,030    | 692   | 1,600 | 1,160 |
| 10    | ---     | --- | ---      | ---   | 1,390    | 1,060 | 961     | 517   | 1,000    | 619   | 1,330 | 998   |
| 11    | ---     | --- | ---      | ---   | 2,170    | 1,370 | 936     | 492   | 992      | 618   | 1,230 | 848   |
| 12    | ---     | --- | ---      | ---   | 2,620    | 2,070 | 959     | 524   | 1,010    | 553   | 1,060 | 766   |
| 13    | ---     | --- | ---      | ---   | 3,020    | 2,560 | 933     | 467   | 1,300    | 937   | 1,000 | 633   |
| 14    | ---     | --- | 1,850    | 1,270 | 3,610    | 2,820 | 955     | 456   | 1,540    | 1,230 | 929   | 524   |
| 15    | ---     | --- | 1,530    | 1,020 | 4,180    | 3,450 | 924     | 456   | 1,870    | 1,510 | 921   | 376   |
| 16    | ---     | --- | 1,280    | 834   | 4,500    | 3,960 | 906     | 415   | 2,180    | 1,690 | 895   | 373   |
| 17    | ---     | --- | 1,110    | 599   | 4,880    | 4,240 | 900     | 365   | 2,400    | 2,020 | 1,070 | 637   |
| 18    | ---     | --- | 982      | 463   | 5,000    | 4,650 | 850     | 354   | 2,790    | 2,280 | 1,170 | 846   |
| 19    | ---     | --- | 924      | 497   | 5,040    | 4,400 | 880     | 372   | 2,920    | 2,600 | 1,100 | 851   |
| 20    | ---     | --- | ---      | ---   | 4,880    | 4,310 | 845     | 324   | 3,070    | 2,720 | 1,070 | 780   |
| 21    | ---     | --- | 1,840    | 1,400 | 4,710    | 4,090 | 860     | 344   | 3,050    | 2,680 | 946   | 736   |
| 22    | ---     | --- | 1,900    | 1,460 | 4,290    | 3,700 | ---     | ---   | 2,960    | 2,570 | 952   | 653   |
| 23    | ---     | --- | 1,870    | 1,530 | 3,840    | 3,180 | ---     | ---   | 2,720    | 2,260 | 929   | 510   |
| 24    | ---     | --- | 1,810    | 1,430 | 3,330    | 2,750 | 815     | 193   | 2,400    | 1,850 | 905   | 434   |
| 25    | ---     | --- | ---      | ---   | 2,890    | 2,390 | ---     | ---   | 2,030    | 1,700 | 860   | 226   |
| 26    | ---     | --- | 1,540    | 1,170 | 2,540    | 2,090 | ---     | ---   | 1,820    | 1,560 | 787   | 100   |
| 27    | ---     | --- | ---      | ---   | 2,280    | 1,930 | 830     | 439   | 2,320    | 1,700 | 787   | 35    |
| 28    | ---     | --- | 1,260    | 807   | 2,060    | 1,750 | 1,010   | 678   | 2,810    | 2,250 | 735   | 13    |
| 29    | ---     | --- | 1,140    | 761   | 1,870    | 1,610 | 1,130   | 832   | 3,190    | 2,690 | 668   | -50   |
| 30    | ---     | --- | 1,140    | 619   | 1,730    | 1,450 | 1,220   | 948   | ---      | ---   | 636   | -41   |
| 31    | ---     | --- | ---      | ---   | 1,630    | 1,340 | 1,190   | 911   | ---      | ---   | 629   | 36    |
| MONTH | ---     | --- | ---      | ---   | 5,040    | 211   | ---     | ---   | ---      | ---   | 3,490 | -50   |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX   |       | MIN   |       | MAX    |           | MIN   |      | MAX   |       | MIN   |       |
|-------|-------|-------|-------|-------|--------|-----------|-------|------|-------|-------|-------|-------|
|       | APRIL | MAY   | JUNE  | JULY  | AUGUST | SEPTEMBER |       |      |       |       |       |       |
| 1     | 720   | 92    | 1,390 | 449   | 604    | -132      | 1,110 | 413  | 492   | -411  | 2,390 | 1,750 |
| 2     | 729   | 69    | 2,010 | 1,380 | 683    | -118      | 1,130 | 646  | 581   | -312  | 2,860 | 2,290 |
| 3     | 732   | 36    | 2,600 | 1,900 | 671    | -105      | 1,120 | 773  | 566   | -20   | 3,000 | 2,660 |
| 4     | 669   | 59    | 3,360 | 2,570 | 603    | -85       | 1,070 | 793  | 668   | 129   | 3,030 | 2,740 |
| 5     | 695   | 47    | 3,800 | 3,190 | 644    | -95       | 1,070 | 708  | 663   | 95    | 2,880 | 2,410 |
| 6     | 694   | -8.2  | 4,360 | 3,640 | 711    | -73       | 961   | 517  | 759   | 188   | 2,570 | 2,030 |
| 7     | 712   | -30   | 4,660 | 4,170 | 805    | 149       | 813   | 276  | 861   | 501   | 2,190 | 1,830 |
| 8     | 677   | -8.2  | 4,790 | 4,430 | 840    | 434       | 753   | 184  | 899   | 593   | 1,980 | 1,770 |
| 9     | 633   | -53   | 4,760 | 4,370 | 975    | 367       | 714   | 69   | 881   | 393   | 2,170 | 1,760 |
| 10    | 610   | -63   | 4,550 | 3,990 | 812    | 182       | 689   | -85  | 721   | 126   | 2,220 | 1,960 |
| 11    | 614   | -74   | 4,210 | 3,540 | 719    | 68        | 633   | -171 | 607   | -87   | 2,500 | 2,100 |
| 12    | 748   | -41   | 3,650 | 2,850 | 826    | 174       | 596   | -173 | 615   | -166  | 2,650 | 2,320 |
| 13    | 1,130 | 596   | 2,970 | 2,020 | 863    | 299       | 608   | -219 | 1,100 | -99   | 2,590 | 2,380 |
| 14    | 1,670 | 1,070 | 2,050 | 1,260 | 908    | 354       | 621   | -209 | 2,050 | 997   | 2,520 | 2,150 |
| 15    | 2,110 | 1,590 | 1,320 | 725   | 881    | 354       | 555   | -219 | 2,990 | 2,050 | 2,330 | 1,940 |
| 16    | 2,360 | 1,970 | 960   | 486   | 885    | 279       | 522   | -234 | 3,620 | 2,900 | 2,040 | 1,620 |
| 17    | 2,550 | 2,190 | 847   | 293   | 817    | 197       | 467   | -323 | 4,430 | 3,600 | 1,750 | 1,360 |
| 18    | 2,600 | 2,340 | 818   | 159   | 863    | 142       | 506   | -291 | 5,190 | 4,320 | 1,580 | 1,260 |
| 19    | 2,600 | 2,380 | 739   | 134   | 1,050  | 358       | 593   | -355 | 5,500 | 4,910 | 1,460 | 1,200 |
| 20    | 2,530 | 2,130 | 689   | 24    | 1,140  | 692       | 523   | -343 | 5,610 | 5,240 | 1,400 | 1,140 |
| 21    | 2,300 | 1,720 | 667   | -62   | 1,130  | 717       | 484   | -435 | 5,520 | 4,930 | 1,260 | 1,060 |
| 22    | 1,850 | 1,320 | 576   | -92   | 1,110  | 669       | 517   | -343 | 5,040 | 4,380 | 1,200 | 988   |
| 23    | 1,450 | 910   | 575   | -116  | 966    | 361       | 530   | -179 | 4,470 | 3,550 | 1,150 | 889   |
| 24    | 1,030 | 552   | 576   | -178  | 882    | 246       | 525   | -348 | 3,710 | 2,820 | 1,070 | 800   |
| 25    | 828   | 263   | 610   | -206  | 842    | 184       | 467   | -466 | 2,900 | 2,000 | 918   | 632   |
| 26    | 770   | 100   | 637   | -193  | 805    | 180       | 531   | -405 | 2,060 | 1,440 | 842   | 575   |
| 27    | 736   | 68    | 571   | -117  | 838    | 165       | 548   | -351 | 1,530 | 1,180 | 732   | 431   |
| 28    | 751   | 118   | 589   | -133  | 801    | 91        | 465   | -370 | 1,300 | 1,090 | 577   | 337   |
| 29    | 839   | 154   | 571   | -192  | 816    | 158       | 504   | -400 | 1,370 | 1,020 | 651   | 364   |
| 30    | 954   | 330   | 562   | -207  | 863    | 148       | 534   | -472 | 1,710 | 1,330 | 677   | 299   |
| 31    | ---   | ---   | 610   | -130  | ---    | ---       | 469   | -464 | 1,920 | 1,630 | ---   | ---   |
| MONTH | 2,600 | -74   | 4,790 | -207  | 1,140  | -132      | 1,130 | -472 | 5,610 | -411  | 3,030 | 299   |



02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1964 to 1967, 2004 to December 2004 (discontinued).

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: October 1964 to September 1967, November 2003 to December 2004.

SALINITY: October 1964 to September 1967, November 2003 to December 2004.

pH: November 2003 to December 2004.

WATER TEMPERATURE: October 1963 to September 1967, November 2003 to December 2004.

DISSOLVED OXYGEN: November 2003 to December 2004.

DISSOLVED OXYGEN, PERCENT SATURATION: November 2003 to December 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from November 2003 to December 2004.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg.

EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                            | MAXIMUM RECORDED                              | MINIMUM RECORDED                                    |
|--|---|---|
| SPECIFIC CONDUCTANCE, microsiemens     | 249, July 27, 2004                            | 39, June 29, August 16, 1965, March 2, 3, 4, 1966   |
| SALINITY, ppt                          | 0.1, July 26, 27, 2004                        | 0.02, June 29, August 16, 1965, March 2, 3, 4, 1966 |
| pH, standard units                     | 7.2, March 9, 10, 12, 13, 2004                | 5.5, August 19, 2004                                |
| WATER TEMPERATURE, °C                  | 30.3, July 15, 16, 2004                       | 1.1, December 22, 1963                              |
| DISSOLVED OXYGEN, mg/L                 | 12.2, January 23, 29, 30, February 2, 3, 2004 | 2.9, August 23, 24, 2004                            |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 96, January 23, 2004                          | 35, August 23, 24, 2004                             |

EXTREMES FOR CURRENT PERIOD.--

| CONSTITUENT                            | MAXIMUM RECORDED                              | MINIMUM RECORDED                     |
|--|---|--------------------------------------|
| SPECIFIC CONDUCTANCE, microsiemens     | 249, July 27, 2004                            | 71, August 19, 2004                  |
| SALINITY, ppt                          | 0.1, July 26, 27, 2004                        | 0.03, on many days during the period |
| pH, standard units                     | 7.2, March 9, 10, 12, 13, 2004                | 5.5, August 19, 2004                 |
| WATER TEMPERATURE, °C                  | 30.3, July 15, 16, 2004                       | 3.0, January 29, 30, 2004            |
| DISSOLVED OXYGEN, mg/L                 | 12.2, January 23, 29, 30, February 2, 3, 2004 | 2.9, August 23, 24, 2004             |
| DISSOLVED OXYGEN, PERCENT SATURATION,% | 96, January 23, 2004                          | 35, August 23, 24, 2004              |

## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|----------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER  |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | ---      | --- | ---  | ---      | --- | ---  | 138      | 135 | 137  | ---     | --- | ---  |
| 2     | ---      | --- | ---  | ---      | --- | ---  | 140      | 137 | 139  | ---     | --- | ---  |
| 3     | ---      | --- | ---  | ---      | --- | ---  | 140      | 140 | 140  | ---     | --- | ---  |
| 4     | ---      | --- | ---  | 86       | 80  | 83   | 140      | 138 | 139  | ---     | --- | ---  |
| 5     | ---      | --- | ---  | 93       | 86  | 90   | 141      | 127 | 136  | ---     | --- | ---  |
| 6     | ---      | --- | ---  | 101      | 93  | 97   | 135      | 127 | 134  | 121     | 120 | 121  |
| 7     | ---      | --- | ---  | 112      | 101 | 106  | 130      | 123 | 127  | 123     | 121 | 122  |
| 8     | ---      | --- | ---  | 112      | 105 | 109  | 125      | 123 | 123  | 124     | 122 | 123  |
| 9     | ---      | --- | ---  | 109      | 105 | 107  | 123      | 115 | 122  | 124     | 121 | 123  |
| 10    | ---      | --- | ---  | 112      | 109 | 110  | 123      | 115 | 121  | 125     | 123 | 125  |
| 11    | ---      | --- | ---  | 113      | 111 | 112  | 115      | 103 | 108  | 126     | 120 | 125  |
| 12    | ---      | --- | ---  | 114      | 112 | 113  | 106      | 92  | 98   | 124     | 123 | 124  |
| 13    | ---      | --- | ---  | ---      | --- | ---  | 92       | 91  | 91   | 125     | 123 | 124  |
| 14    | ---      | --- | ---  | 119      | 114 | 116  | 91       | 85  | 88   | 124     | 122 | 123  |
| 15    | ---      | --- | ---  | 124      | 119 | 121  | 85       | 83  | 84   | 125     | 124 | 125  |
| 16    | ---      | --- | ---  | 129      | 124 | 125  | 84       | 81  | 83   | 125     | 124 | 125  |
| 17    | ---      | --- | ---  | 132      | 129 | 131  | 81       | 80  | 81   | 128     | 125 | 127  |
| 18    | ---      | --- | ---  | 137      | 129 | 135  | 83       | 80  | 81   | 127     | 126 | 126  |
| 19    | ---      | --- | ---  | 138      | 133 | 137  | 86       | 82  | 84   | 129     | 127 | 128  |
| 20    | ---      | --- | ---  | ---      | --- | ---  | 90       | 86  | 88   | 130     | 127 | 129  |
| 21    | ---      | --- | ---  | 125      | 120 | 122  | 95       | 90  | 93   | 130     | 128 | 128  |
| 22    | ---      | --- | ---  | 123      | 114 | 119  | 99       | 95  | 97   | ---     | --- | ---  |
| 23    | ---      | --- | ---  | 120      | 117 | 118  | 102      | 99  | 101  | ---     | --- | ---  |
| 24    | ---      | --- | ---  | 120      | 113 | 119  | 103      | 101 | 102  | 132     | 130 | 131  |
| 25    | ---      | --- | ---  | ---      | --- | ---  | 104      | 102 | 103  | ---     | --- | ---  |
| 26    | ---      | --- | ---  | 123      | 117 | 122  | 107      | 104 | 105  | ---     | --- | ---  |
| 27    | ---      | --- | ---  | ---      | --- | ---  | 109      | 106 | 108  | 130     | 126 | 128  |
| 28    | ---      | --- | ---  | 128      | 121 | 127  | 109      | 107 | 108  | 128     | 125 | 126  |
| 29    | ---      | --- | ---  | 131      | 128 | 129  | 110      | 108 | 109  | 127     | 121 | 124  |
| 30    | ---      | --- | ---  | 135      | 131 | 134  | 111      | 109 | 110  | 122     | 121 | 121  |
| 31    | ---      | --- | ---  | ---      | --- | ---  | 113      | 110 | 111  | 122     | 120 | 121  |
| MONTH | ---      | --- | ---  | ---      | --- | ---  | 141      | 80  | 108  | ---     | --- | ---  |
| DAY   | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|       | FEBRUARY |     |      | MARCH    |     |      | APRIL    |     |      | MAY     |     |      |
| 1     | 120      | 120 | 120  | 86       | 85  | 85   | 133      | 125 | 131  | 124     | 100 | 115  |
| 2     | 121      | 120 | 121  | 88       | 86  | 87   | 133      | 125 | 132  | 101     | 90  | 96   |
| 3     | 121      | 120 | 120  | 91       | 88  | 89   | 134      | 131 | 133  | 94      | 83  | 88   |
| 4     | 123      | 120 | 122  | 93       | 91  | 92   | 136      | 133 | 134  | 83      | 79  | 81   |
| 5     | ---      | --- | ---  | 96       | 93  | 95   | 136      | 133 | 134  | 79      | 76  | 77   |
| 6     | ---      | --- | ---  | 104      | 96  | 100  | 135      | 132 | 134  | 77      | 76  | 77   |
| 7     | 127      | 125 | 126  | 109      | 104 | 107  | 134      | 133 | 133  | 77      | 76  | 76   |
| 8     | 127      | 124 | 125  | 112      | 109 | 111  | 136      | 133 | 134  | 77      | 75  | 76   |
| 9     | 129      | 127 | 128  | 113      | 111 | 112  | 137      | 132 | 134  | 79      | 76  | 77   |
| 10    | 130      | 128 | 129  | 116      | 112 | 114  | 138      | 137 | 137  | 85      | 79  | 82   |
| 11    | 130      | 127 | 129  | 118      | 116 | 117  | 142      | 138 | 140  | 93      | 85  | 89   |
| 12    | 130      | 124 | 127  | 119      | 118 | 119  | 144      | 141 | 142  | 97      | 93  | 95   |
| 13    | 124      | 118 | 121  | 120      | 118 | 119  | 146      | 135 | 142  | 98      | 96  | 97   |
| 14    | 122      | 116 | 119  | 120      | 118 | 119  | 135      | 106 | 117  | 102     | 98  | 100  |
| 15    | 117      | 108 | 112  | 123      | 120 | 122  | 106      | 98  | 100  | 107     | 102 | 104  |
| 16    | 109      | 105 | 107  | 123      | 117 | 120  | 98       | 94  | 96   | 111     | 107 | 110  |
| 17    | 106      | 103 | 104  | 118      | 115 | 116  | 98       | 94  | 96   | 116     | 111 | 114  |
| 18    | 103      | 101 | 102  | 117      | 114 | 116  | 100      | 97  | 98   | 117     | 116 | 116  |
| 19    | 102      | 100 | 101  | 114      | 113 | 113  | 100      | 99  | 99   | 118     | 116 | 117  |
| 20    | 102      | 101 | 102  | 115      | 106 | 114  | 104      | 100 | 101  | 120     | 115 | 118  |
| 21    | 103      | 102 | 102  | 114      | 113 | 113  | 108      | 103 | 105  | 121     | 119 | 120  |
| 22    | 105      | 103 | 104  | 114      | 113 | 113  | 114      | 108 | 111  | 123     | 121 | 122  |
| 23    | 108      | 105 | 106  | 115      | 113 | 114  | 121      | 114 | 117  | 128     | 122 | 124  |
| 24    | 109      | 106 | 107  | 118      | 114 | 115  | 126      | 120 | 124  | 134     | 128 | 130  |
| 25    | 112      | 108 | 110  | 121      | 111 | 119  | 131      | 125 | 129  | 138     | 134 | 136  |
| 26    | 113      | 112 | 112  | 126      | 118 | 122  | 132      | 130 | 131  | 141     | 137 | 139  |
| 27    | 112      | 99  | 107  | 125      | 118 | 123  | 133      | 131 | 132  | 144     | 139 | 142  |
| 28    | 99       | 89  | 93   | 127      | 117 | 125  | 135      | 130 | 132  | 149     | 143 | 147  |
| 29    | 89       | 85  | 87   | 129      | 118 | 126  | 134      | 130 | 132  | 149     | 130 | 140  |
| 30    | ---      | --- | ---  | 134      | 123 | 130  | 132      | 124 | 129  | 132     | 128 | 130  |
| 31    | ---      | --- | ---  | 132      | 120 | 130  | ---      | --- | ---  | 132     | 130 | 131  |
| MONTH | ---      | --- | ---  | 134      | 85  | 113  | 146      | 94  | 124  | 149     | 75  | 109  |

## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 138  | 130 | 133  | 128  | 114 | 121  | 164    | 161 | 163  | 103       | 90  | 98   |
| 2     | 156  | 138 | 149  | 116  | 109 | 112  | 162    | 153 | 160  | 90        | 78  | 85   |
| 3     | 156  | 152 | 153  | 110  | 104 | 108  | 156    | 150 | 152  | 83        | 78  | 80   |
| 4     | 154  | 151 | 153  | 104  | 100 | 102  | 182    | 150 | 163  | 89        | 83  | 86   |
| 5     | 151  | 144 | 148  | 100  | 97  | 98   | 178    | 141 | 150  | 93        | 89  | 91   |
| 6     | 154  | 143 | 146  | 102  | 100 | 101  | 141    | 135 | 137  | 93        | 93  | 93   |
| 7     | 158  | 153 | 155  | 106  | 100 | 103  | 138    | 130 | 135  | 95        | 93  | 94   |
| 8     | 158  | 115 | 136  | 109  | 105 | 107  | 131    | 116 | 122  | 100       | 95  | 97   |
| 9     | 116  | 114 | 115  | 119  | 109 | 114  | 119    | 116 | 118  | 101       | 93  | 97   |
| 10    | 124  | 115 | 120  | 126  | 118 | 123  | 119    | 118 | 118  | 97        | 94  | 96   |
| 11    | 135  | 124 | 131  | 131  | 126 | 129  | 120    | 118 | 119  | 96        | 91  | 94   |
| 12    | 140  | 135 | 137  | 136  | 130 | 133  | 125    | 120 | 122  | 92        | 90  | 90   |
| 13    | 144  | 136 | 141  | 137  | 134 | 136  | 125    | 107 | 116  | 92        | 90  | 91   |
| 14    | 140  | 124 | 129  | 139  | 135 | 136  | 114    | 93  | 101  | 95        | 92  | 93   |
| 15    | 124  | 115 | 119  | 150  | 139 | 143  | 94     | 77  | 83   | 96        | 94  | 95   |
| 16    | 118  | 116 | 117  | 150  | 144 | 149  | 78     | 75  | 76   | 99        | 96  | 98   |
| 17    | 118  | 114 | 115  | 150  | 144 | 148  | 77     | 75  | 76   | 103       | 99  | 101  |
| 18    | 117  | 114 | 115  | 147  | 140 | 146  | 76     | 75  | 76   | 107       | 102 | 105  |
| 19    | 119  | 101 | 115  | 144  | 135 | 139  | 75     | 71  | 74   | 108       | 106 | 107  |
| 20    | 101  | 88  | 91   | 143  | 136 | 138  | 76     | 74  | 75   | 109       | 107 | 108  |
| 21    | 98   | 89  | 93   | 147  | 141 | 144  | 81     | 76  | 79   | 110       | 109 | 109  |
| 22    | 102  | 98  | 100  | 147  | 145 | 146  | 88     | 81  | 84   | 111       | 109 | 110  |
| 23    | 109  | 102 | 105  | 153  | 146 | 151  | 98     | 88  | 93   | 111       | 110 | 111  |
| 24    | 117  | 109 | 112  | 172  | 153 | 165  | 107    | 97  | 102  | 113       | 111 | 112  |
| 25    | 124  | 116 | 121  | 180  | 171 | 173  | 117    | 107 | 111  | 116       | 113 | 114  |
| 26    | 145  | 123 | 130  | 233  | 173 | 199  | 131    | 117 | 124  | 120       | 116 | 118  |
| 27    | 151  | 132 | 137  | 249  | 200 | 227  | 137    | 131 | 135  | 123       | 119 | 121  |
| 28    | 133  | 123 | 127  | 222  | 176 | 195  | 137    | 131 | 136  | 126       | 123 | 125  |
| 29    | 123  | 119 | 121  | 188  | 167 | 175  | 131    | 121 | 126  | ---       | --- | ---  |
| 30    | 125  | 120 | 122  | 169  | 163 | 166  | 122    | 106 | 113  | ---       | --- | ---  |
| 31    | ---  | --- | ---  | 165  | 163 | 164  | 109    | 102 | 105  | ---       | --- | ---  |
| MONTH | 158  | 88  | 126  | 249  | 97  | 142  | 182    | 71  | 114  | ---       | --- | ---  |



## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS  
 WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 137     | 131 | 133  | 165      | 162 | 163  | 137      | 131 | 134  | ---     | --- | ---  |
| 2     | 138     | 137 | 138  | 166      | 164 | 165  | 131      | 129 | 129  | ---     | --- | ---  |
| 3     | 138     | 137 | 137  | 166      | 162 | 164  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 138     | 137 | 137  | 166      | 162 | 163  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 137     | 135 | 136  | 169      | 164 | 168  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 136     | 135 | 136  | 171      | 167 | 169  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 141     | 136 | 138  | 177      | 170 | 174  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 139     | 137 | 138  | 182      | 176 | 180  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | 140     | 137 | 138  | 187      | 181 | 184  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | 145     | 140 | 143  | 189      | 183 | 186  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 148     | 144 | 146  | 192      | 184 | 186  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 151     | 147 | 149  | 196      | 189 | 194  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 153     | 150 | 151  | 195      | 185 | 192  | ---      | --- | ---  | ---     | --- | ---  |
| 14    | 154     | 152 | 153  | 185      | 172 | 178  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | 157     | 153 | 155  | 174      | 163 | 169  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 158     | 156 | 157  | 163      | 148 | 153  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 159     | 151 | 155  | 148      | 137 | 141  | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 161     | 156 | 158  | 138      | 136 | 137  | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 161     | 154 | 157  | 139      | 137 | 138  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 154     | 151 | 152  | 142      | 139 | 140  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 153     | 151 | 152  | 146      | 141 | 143  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 151     | 143 | 147  | 151      | 145 | 148  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | 144     | 142 | 143  | 153      | 150 | 151  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | 145     | 143 | 144  | 156      | 153 | 154  | ---      | --- | ---  | ---     | --- | ---  |
| 25    | 145     | 144 | 145  | 158      | 155 | 156  | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 150     | 145 | 148  | 157      | 153 | 154  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 153     | 149 | 151  | 153      | 147 | 149  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 156     | 153 | 153  | 147      | 138 | 143  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 159     | 155 | 157  | 143      | 139 | 141  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 161     | 158 | 159  | 142      | 136 | 140  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 162     | 160 | 161  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | 162     | 131 | 147  | 196      | 136 | 161  | ---      | --- | ---  | ---     | --- | ---  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |         |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|---------|
|       |          |      |      |       |      |      |       |      |      |      |      |      | OCTOBER |
| 1     | ---      | ---  | ---  | ---   | ---  | ---  | 0.06  | 0.05 | 0.05 | ---  | ---  | ---  |         |
| 2     | ---      | ---  | ---  | ---   | ---  | ---  | 0.06  | 0.05 | 0.06 | ---  | ---  | ---  |         |
| 3     | ---      | ---  | ---  | ---   | ---  | ---  | 0.06  | 0.06 | 0.06 | ---  | ---  | ---  |         |
| 4     | ---      | ---  | ---  | 0.03  | 0.03 | 0.03 | 0.06  | 0.06 | 0.06 | ---  | ---  | ---  |         |
| 5     | ---      | ---  | ---  | 0.04  | 0.03 | 0.04 | 0.06  | 0.05 | 0.05 | ---  | ---  | ---  |         |
| 6     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |         |
| 7     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |         |
| 8     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |         |
| 9     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |         |
| 10    | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |         |
| 11    | ---      | ---  | ---  | 0.05  | 0.04 | 0.04 | 0.05  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 12    | ---      | ---  | ---  | 0.05  | 0.04 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 13    | ---      | ---  | ---  | ---   | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 14    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.03 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 15    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 |         |
| 16    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 |         |
| 17    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 |         |
| 18    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 |         |
| 19    | ---      | ---  | ---  | 0.06  | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05 | 0.05 | 0.05 |         |
| 20    | ---      | ---  | ---  | ---   | ---  | ---  | 0.04  | 0.03 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 21    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 22    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | ---  | ---  | ---  |         |
| 23    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | ---  | ---  | ---  |         |
| 24    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 25    | ---      | ---  | ---  | ---   | ---  | ---  | 0.04  | 0.04 | 0.04 | ---  | ---  | ---  |         |
| 26    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | ---  | ---  | ---  |         |
| 27    | ---      | ---  | ---  | ---   | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 28    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 29    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 30    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| 31    | ---      | ---  | ---  | ---   | ---  | ---  | 0.05  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |         |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | 0.06  | 0.03 | 0.04 | ---  | ---  | ---  |         |
| DAY   | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |         |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |         |
| 1     | 0.05     | 0.05 | 0.05 | 0.03  | 0.03 | 0.03 | 0.05  | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.05    |
| 2     | 0.05     | 0.05 | 0.05 | 0.04  | 0.03 | 0.03 | 0.05  | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04    |
| 3     | 0.05     | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04 | 0.03 | 0.04 | 0.04    |
| 4     | 0.05     | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 5     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 6     | ---      | ---  | ---  | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 7     | 0.05     | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 8     | 0.05     | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 9     | 0.05     | 0.05 | 0.05 | 0.05  | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 10    | 0.05     | 0.05 | 0.05 | 0.05  | 0.04 | 0.05 | 0.06  | 0.05 | 0.05 | 0.03 | 0.03 | 0.03 | 0.03    |
| 11    | 0.05     | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06  | 0.06 | 0.06 | 0.04 | 0.03 | 0.04 | 0.04    |
| 12    | 0.05     | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06  | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04    |
| 13    | 0.05     | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06  | 0.05 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04    |
| 14    | 0.05     | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.05  | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04    |
| 15    | 0.05     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04    |
| 16    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04    |
| 17    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.04 | 0.05 | 0.05    |
| 18    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05    |
| 19    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05    |
| 20    | 0.04     | 0.04 | 0.04 | 0.05  | 0.04 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05    |
| 21    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.04  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05    |
| 22    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05    |
| 23    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05    |
| 24    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05    |
| 25    | 0.04     | 0.04 | 0.04 | 0.05  | 0.04 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.05    |
| 26    | 0.05     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06    |
| 27    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06    |
| 28    | 0.04     | 0.04 | 0.04 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.06    |
| 29    | 0.04     | 0.03 | 0.03 | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.06 | 0.05 | 0.06 | 0.06    |
| 30    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | 0.05  | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05    |
| 31    | ---      | ---  | ---  | 0.05  | 0.05 | 0.05 | ---   | ---  | ---  | 0.05 | 0.05 | 0.05 | 0.05    |
| MONTH | ---      | ---  | ---  | 0.05  | 0.03 | 0.05 | 0.06  | 0.04 | 0.05 | 0.06 | 0.03 | 0.04 | 0.04    |

## CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | 0.04 | 0.04 | 0.04 |
| 2     | 0.06 | 0.06 | 0.06 | 0.05 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 |
| 3     | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 |
| 4     | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.07 | 0.06 | 0.07 | 0.04 | 0.03 | 0.03 |
| 5     | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.07 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 |
| 6     | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 7     | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 8     | 0.06 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 9     | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 10    | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 11    | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 12    | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 |
| 13    | 0.06 | 0.05 | 0.06 | 0.05 | 0.05 | 0.05 | 0.05 | 0.04 | 0.05 | 0.04 | 0.04 | 0.04 |
| 14    | 0.06 | 0.05 | 0.05 | 0.06 | 0.05 | 0.05 | 0.05 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| 15    | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 16    | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 17    | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 18    | 0.05 | 0.05 | 0.05 | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 19    | 0.05 | 0.04 | 0.05 | 0.06 | 0.05 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 20    | 0.04 | 0.04 | 0.04 | 0.06 | 0.05 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 21    | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.03 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 22    | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.04 | 0.03 | 0.03 | 0.04 | 0.04 | 0.04 |
| 23    | 0.04 | 0.04 | 0.04 | 0.06 | 0.06 | 0.06 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 | 0.04 |
| 24    | 0.05 | 0.04 | 0.04 | 0.07 | 0.06 | 0.07 | 0.04 | 0.04 | 0.04 | 0.05 | 0.04 | 0.04 |
| 25    | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 | 0.07 | 0.05 | 0.04 | 0.04 | 0.05 | 0.05 | 0.05 |
| 26    | 0.06 | 0.05 | 0.05 | 0.10 | 0.07 | 0.08 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| 27    | 0.06 | 0.05 | 0.05 | 0.1  | 0.08 | 0.09 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| 28    | 0.05 | 0.05 | 0.05 | 0.09 | 0.07 | 0.08 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 | 0.05 |
| 29    | 0.05 | 0.05 | 0.05 | 0.08 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | ---  | ---  | ---  |
| 30    | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 | 0.07 | 0.05 | 0.04 | 0.05 | ---  | ---  | ---  |
| 31    | ---  | ---  | ---  | 0.07 | 0.07 | 0.07 | 0.04 | 0.04 | 0.04 | ---  | ---  | ---  |
| MONTH | 0.06 | 0.04 | 0.05 | 0.1  | 0.04 | 0.06 | 0.07 | 0.03 | 0.05 | ---  | ---  | ---  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 0.05 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | 0.05 | 0.05 | 0.05 | --- | --- | ---  |
| 2     | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | 0.05 | 0.05 | 0.05 | --- | --- | ---  |
| 3     | 0.06 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 0.06 | 0.05 | 0.05 | 0.07 | 0.06 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 0.05 | 0.05 | 0.05 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 0.06 | 0.05 | 0.06 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 0.06 | 0.06 | 0.06 | 0.08 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 0.06 | 0.06 | 0.06 | 0.08 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 0.06 | 0.06 | 0.06 | 0.08 | 0.08 | 0.08 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 0.06 | 0.06 | 0.06 | 0.08 | 0.07 | 0.08 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 0.06 | 0.06 | 0.06 | 0.07 | 0.07 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 0.06 | 0.06 | 0.06 | 0.07 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.05 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 0.06 | 0.06 | 0.06 | 0.06 | 0.05 | 0.06 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 0.06 | 0.06 | 0.06 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | 0.06 | 0.05 | 0.06 | 0.08 | 0.05 | 0.07 | ---  | ---  | ---  | --- | --- | ---  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | --- | --- | ---  | --- | --- | ---  | 6.5 | 6.5 | 6.5  | --- | --- | ---  |
| 2     | --- | --- | ---  | --- | --- | ---  | 6.5 | 6.4 | 6.5  | --- | --- | ---  |
| 3     | --- | --- | ---  | --- | --- | ---  | 6.5 | 6.5 | 6.5  | --- | --- | ---  |
| 4     | --- | --- | ---  | 5.8 | 5.8 | 5.8  | 6.5 | 6.5 | 6.5  | --- | --- | ---  |
| 5     | --- | --- | ---  | 5.9 | 5.8 | 5.9  | 6.5 | 6.5 | 6.5  | --- | --- | ---  |
| 6     | --- | --- | ---  | 6.0 | 5.9 | 5.9  | 6.6 | 6.5 | 6.6  | 6.3 | 6.3 | 6.3  |
| 7     | --- | --- | ---  | 6.1 | 6.0 | 6.0  | 6.6 | 6.6 | 6.6  | 6.3 | 6.3 | 6.3  |
| 8     | --- | --- | ---  | 6.2 | 6.1 | 6.2  | 6.6 | 6.6 | 6.6  | 6.4 | 6.3 | 6.3  |
| 9     | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 6.6 | 6.6 | 6.6  | 6.4 | 6.3 | 6.3  |
| 10    | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 6.6 | 6.6 | 6.6  | 6.5 | 6.4 | 6.4  |
| 11    | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 6.6 | 6.3 | 6.4  | 6.6 | 6.5 | 6.6  |
| 12    | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 6.5 | 6.3 | 6.4  | 6.6 | 6.6 | 6.6  |
| 13    | --- | --- | ---  | --- | --- | ---  | 6.3 | 6.2 | 6.3  | 6.6 | 6.6 | 6.6  |
| 14    | --- | --- | ---  | 6.3 | 6.2 | 6.2  | 6.3 | 6.2 | 6.2  | 6.6 | 6.6 | 6.6  |
| 15    | --- | --- | ---  | 6.3 | 6.3 | 6.3  | 6.2 | 6.2 | 6.2  | 6.7 | 6.6 | 6.7  |
| 16    | --- | --- | ---  | 6.4 | 6.3 | 6.3  | 6.2 | 6.1 | 6.1  | 6.7 | 6.7 | 6.7  |
| 17    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.1 | 6.0 | 6.1  | 6.7 | 6.7 | 6.7  |
| 18    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.0 | 6.0 | 6.0  | 6.7 | 6.7 | 6.7  |
| 19    | --- | --- | ---  | 6.5 | 6.4 | 6.4  | 6.0 | 6.0 | 6.0  | 6.7 | 6.7 | 6.7  |
| 20    | --- | --- | ---  | --- | --- | ---  | 6.1 | 6.0 | 6.0  | 6.8 | 6.7 | 6.7  |
| 21    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.0 | 6.0 | 6.0  | 6.9 | 6.8 | 6.9  |
| 22    | --- | --- | ---  | 6.4 | 6.3 | 6.3  | 6.0 | 6.0 | 6.0  | --- | --- | ---  |
| 23    | --- | --- | ---  | 6.4 | 6.3 | 6.4  | 6.1 | 6.0 | 6.1  | --- | --- | ---  |
| 24    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.1 | 6.1 | 6.1  | 6.9 | 6.9 | 6.9  |
| 25    | --- | --- | ---  | --- | --- | ---  | 6.1 | 6.1 | 6.1  | --- | --- | ---  |
| 26    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.2 | 6.1 | 6.2  | --- | --- | ---  |
| 27    | --- | --- | ---  | --- | --- | ---  | 6.2 | 6.2 | 6.2  | 6.9 | 6.8 | 6.9  |
| 28    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.3 | 6.2 | 6.2  | 6.9 | 6.8 | 6.9  |
| 29    | --- | --- | ---  | 6.4 | 6.4 | 6.4  | 6.3 | 6.3 | 6.3  | 6.9 | 6.8 | 6.9  |
| 30    | --- | --- | ---  | 6.5 | 6.4 | 6.5  | 6.3 | 6.3 | 6.3  | 6.9 | 6.8 | 6.8  |
| 31    | --- | --- | ---  | --- | --- | ---  | 6.3 | 6.3 | 6.3  | 7.0 | 6.8 | 6.9  |
| MONTH | --- | --- | ---  | --- | --- | ---  | 6.6 | 6.0 | 6.3  | --- | --- | ---  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.0 | 6.8 | 6.9  | 6.9 | 6.9 | 6.9  | 6.6 | 6.5 | 6.6  | 6.9 | 6.8 | 6.9  |
| 2     | 7.0 | 6.8 | 6.9  | 6.9 | 6.8 | 6.9  | 6.6 | 6.6 | 6.6  | 6.8 | 6.6 | 6.7  |
| 3     | 6.9 | 6.9 | 6.9  | 6.9 | 6.9 | 6.9  | 6.7 | 6.6 | 6.7  | 6.6 | 6.5 | 6.6  |
| 4     | 6.9 | 6.9 | 6.9  | 6.9 | 6.9 | 6.9  | 6.8 | 6.7 | 6.7  | 6.5 | 6.2 | 6.3  |
| 5     | --- | --- | ---  | 6.9 | 6.9 | 6.9  | 6.9 | 6.7 | 6.8  | 6.2 | 6.2 | 6.2  |
| 6     | --- | --- | ---  | 7.0 | 6.9 | 6.9  | 6.9 | 6.9 | 6.9  | 6.2 | 6.1 | 6.2  |
| 7     | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  | 6.9 | 6.8 | 6.9  | 6.1 | 6.1 | 6.1  |
| 8     | 6.8 | 6.7 | 6.8  | 7.1 | 7.0 | 7.0  | 6.9 | 6.8 | 6.9  | 6.1 | 6.0 | 6.1  |
| 9     | 6.9 | 6.8 | 6.8  | 7.2 | 7.1 | 7.1  | 6.9 | 6.8 | 6.8  | 6.1 | 6.0 | 6.1  |
| 10    | 6.9 | 6.8 | 6.9  | 7.2 | 7.0 | 7.1  | 6.9 | 6.8 | 6.8  | 6.1 | 6.0 | 6.1  |
| 11    | 6.9 | 6.9 | 6.9  | 7.1 | 7.1 | 7.1  | 6.9 | 6.9 | 6.9  | 6.2 | 6.1 | 6.1  |
| 12    | 6.9 | 6.9 | 6.9  | 7.2 | 7.1 | 7.2  | 6.9 | 6.9 | 6.9  | 6.2 | 6.1 | 6.2  |
| 13    | 6.9 | 6.8 | 6.8  | 7.2 | 7.0 | 7.1  | 7.2 | 6.9 | 7.0  | 6.2 | 6.1 | 6.2  |
| 14    | 7.0 | 6.9 | 7.0  | 7.1 | 7.0 | 7.1  | 7.1 | 6.9 | 7.0  | 6.3 | 6.2 | 6.2  |
| 15    | 7.0 | 6.9 | 6.9  | 7.1 | 7.1 | 7.1  | 6.9 | 6.8 | 6.9  | 6.4 | 6.3 | 6.3  |
| 16    | 6.9 | 6.9 | 6.9  | 7.1 | 6.9 | 7.0  | 6.8 | 6.8 | 6.8  | 6.5 | 6.3 | 6.4  |
| 17    | 6.9 | 6.8 | 6.9  | 7.0 | 6.9 | 6.9  | 6.8 | 6.7 | 6.8  | 6.6 | 6.5 | 6.5  |
| 18    | 6.8 | 6.8 | 6.8  | 7.0 | 7.0 | 7.0  | 6.8 | 6.7 | 6.7  | 6.6 | 6.5 | 6.6  |
| 19    | 6.8 | 6.8 | 6.8  | 7.0 | 6.9 | 6.9  | 6.7 | 6.7 | 6.7  | 6.6 | 6.6 | 6.6  |
| 20    | 6.8 | 6.8 | 6.8  | 7.0 | 6.9 | 6.9  | 6.7 | 6.6 | 6.6  | 6.6 | 6.6 | 6.6  |
| 21    | 6.8 | 6.8 | 6.8  | 6.9 | 6.9 | 6.9  | 6.6 | 6.6 | 6.6  | 6.6 | 6.6 | 6.6  |
| 22    | 6.8 | 6.8 | 6.8  | 6.9 | 6.8 | 6.8  | 6.6 | 6.5 | 6.5  | 6.6 | 6.6 | 6.6  |
| 23    | 6.8 | 6.7 | 6.8  | 6.8 | 6.8 | 6.8  | 6.6 | 6.5 | 6.6  | 6.6 | 6.5 | 6.6  |
| 24    | 6.8 | 6.8 | 6.8  | 6.8 | 6.8 | 6.8  | 6.6 | 6.6 | 6.6  | 6.6 | 6.6 | 6.6  |
| 25    | 6.8 | 6.8 | 6.8  | 6.8 | 6.7 | 6.7  | 6.7 | 6.6 | 6.6  | 6.6 | 6.6 | 6.6  |
| 26    | 6.9 | 6.8 | 6.9  | 6.8 | 6.7 | 6.7  | 6.7 | 6.7 | 6.7  | 6.6 | 6.6 | 6.6  |
| 27    | 6.9 | 6.9 | 6.9  | 6.7 | 6.7 | 6.7  | 6.7 | 6.7 | 6.7  | 6.8 | 6.6 | 6.7  |
| 28    | 6.9 | 6.8 | 6.9  | 6.7 | 6.6 | 6.6  | 6.8 | 6.7 | 6.8  | 6.9 | 6.8 | 6.8  |
| 29    | 6.9 | 6.8 | 6.8  | 6.6 | 6.6 | 6.6  | 6.9 | 6.8 | 6.8  | 6.8 | 6.8 | 6.8  |
| 30    | --- | --- | ---  | 6.6 | 6.6 | 6.6  | 6.9 | 6.8 | 6.8  | 6.8 | 6.8 | 6.8  |
| 31    | --- | --- | ---  | 6.6 | 6.5 | 6.6  | --- | --- | ---  | 6.8 | 6.8 | 6.8  |
| MONTH | --- | --- | ---  | 7.2 | 6.5 | 6.9  | 7.2 | 6.5 | 6.8  | 6.9 | 6.0 | 6.5  |

## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.8 | 6.8 | 6.8  | --- | --- | ---  | 6.7 | 6.7 | 6.7  | 6.3 | 6.1 | 6.2  |
| 2     | 6.8 | 6.8 | 6.8  | 6.8 | 6.7 | 6.7  | 6.7 | 6.6 | 6.7  | 6.1 | 6.0 | 6.1  |
| 3     | 6.9 | 6.7 | 6.7  | 6.7 | 6.7 | 6.7  | 6.7 | 6.6 | 6.6  | 6.1 | 6.0 | 6.0  |
| 4     | 6.8 | 6.7 | 6.7  | 6.7 | 6.6 | 6.7  | 6.6 | 6.6 | 6.6  | 6.1 | 6.0 | 6.1  |
| 5     | 6.8 | 6.7 | 6.8  | 6.6 | 6.6 | 6.6  | 6.8 | 6.6 | 6.7  | 6.1 | 6.0 | 6.0  |
| 6     | 6.8 | 6.7 | 6.7  | 6.6 | 6.6 | 6.6  | 6.8 | 6.8 | 6.8  | 6.1 | 6.0 | 6.0  |
| 7     | 6.8 | 6.7 | 6.7  | 6.6 | 6.6 | 6.6  | 6.8 | 6.7 | 6.8  | 6.1 | 6.0 | 6.1  |
| 8     | 6.8 | 6.6 | 6.7  | 6.7 | 6.6 | 6.6  | 6.7 | 6.5 | 6.7  | 6.2 | 6.1 | 6.1  |
| 9     | 6.6 | 6.6 | 6.6  | 6.7 | 6.6 | 6.7  | 6.5 | 6.5 | 6.5  | 6.2 | 6.1 | 6.2  |
| 10    | 6.6 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  | 6.5 | 6.5 | 6.5  | 6.2 | 6.1 | 6.2  |
| 11    | 6.7 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  | 6.5 | 6.5 | 6.5  | 6.2 | 6.2 | 6.2  |
| 12    | 6.7 | 6.6 | 6.6  | 6.8 | 6.7 | 6.8  | 6.5 | 6.5 | 6.5  | 6.2 | 6.1 | 6.2  |
| 13    | 6.7 | 6.6 | 6.7  | 6.8 | 6.7 | 6.7  | 6.6 | 6.4 | 6.5  | 6.2 | 6.1 | 6.1  |
| 14    | 6.7 | 6.6 | 6.6  | 6.8 | 6.7 | 6.8  | 6.4 | 6.3 | 6.4  | 6.2 | 6.1 | 6.2  |
| 15    | 6.6 | 6.6 | 6.6  | 6.9 | 6.8 | 6.8  | 6.3 | 5.9 | 6.1  | 6.2 | 6.1 | 6.2  |
| 16    | 6.7 | 6.6 | 6.6  | 6.9 | 6.8 | 6.8  | 5.9 | 5.8 | 5.8  | 6.2 | 6.1 | 6.2  |
| 17    | 6.6 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  | 5.8 | 5.7 | 5.7  | 6.2 | 6.1 | 6.2  |
| 18    | 6.6 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  | 5.7 | 5.6 | 5.6  | 6.2 | 6.2 | 6.2  |
| 19    | 6.6 | 6.5 | 6.6  | 6.7 | 6.7 | 6.7  | 5.7 | 5.5 | 5.6  | 6.3 | 6.2 | 6.2  |
| 20    | 6.5 | 6.4 | 6.5  | 6.7 | 6.6 | 6.7  | 5.8 | 5.7 | 5.7  | 6.2 | 6.2 | 6.2  |
| 21    | 6.5 | 6.4 | 6.4  | 6.7 | 6.6 | 6.6  | 5.8 | 5.7 | 5.8  | 6.2 | 6.2 | 6.2  |
| 22    | 6.5 | 6.5 | 6.5  | 6.6 | 6.5 | 6.6  | 5.9 | 5.8 | 5.8  | 6.3 | 6.2 | 6.2  |
| 23    | 6.5 | 6.5 | 6.5  | 6.7 | 6.5 | 6.6  | 5.9 | 5.8 | 5.8  | 6.4 | 6.2 | 6.3  |
| 24    | 6.6 | 6.5 | 6.5  | 6.8 | 6.7 | 6.7  | 6.0 | 5.9 | 5.9  | 6.4 | 6.3 | 6.4  |
| 25    | 6.6 | 6.6 | 6.6  | 6.8 | 6.7 | 6.7  | 6.0 | 6.0 | 6.0  | 6.4 | 6.3 | 6.4  |
| 26    | 6.7 | 6.6 | 6.6  | 6.9 | 6.7 | 6.8  | 6.2 | 6.0 | 6.1  | 6.4 | 6.4 | 6.4  |
| 27    | 6.7 | 6.7 | 6.7  | 6.9 | 6.8 | 6.8  | 6.3 | 6.2 | 6.2  | 6.4 | 6.4 | 6.4  |
| 28    | 6.7 | 6.7 | 6.7  | 6.9 | 6.7 | 6.7  | 6.4 | 6.3 | 6.3  | 6.5 | 6.4 | 6.4  |
| 29    | 6.7 | 6.7 | 6.7  | 6.7 | 6.6 | 6.7  | 6.4 | 6.3 | 6.4  | 6.5 | 6.4 | 6.5  |
| 30    | 6.7 | 6.6 | 6.7  | 6.8 | 6.7 | 6.7  | 6.4 | 6.2 | 6.3  | 6.6 | 6.5 | 6.6  |
| 31    | --- | --- | ---  | 6.8 | 6.6 | 6.7  | 6.3 | 6.2 | 6.3  | --- | --- | ---  |
| MONTH | 6.9 | 6.4 | 6.6  | --- | --- | ---  | 6.8 | 5.5 | 6.3  | 6.6 | 6.0 | 6.2  |

## CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.7 | 6.6 | 6.6  | 6.7 | 6.7 | 6.7  | 6.9 | 6.8 | 6.9  | --- | --- | ---  |
| 2     | 6.7 | 6.7 | 6.7  | 6.7 | 6.7 | 6.7  | 6.9 | 6.8 | 6.8  | --- | --- | ---  |
| 3     | 6.8 | 6.7 | 6.7  | 6.7 | 6.6 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 4     | 6.8 | 6.8 | 6.8  | 6.6 | 6.6 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 5     | 6.8 | 6.8 | 6.8  | 6.7 | 6.6 | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 6     | 6.8 | 6.8 | 6.8  | 6.7 | 6.7 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 7     | 6.8 | 6.7 | 6.8  | 6.7 | 6.7 | 6.7  | --- | --- | ---  | --- | --- | ---  |
| 8     | 6.8 | 6.7 | 6.8  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 9     | 6.8 | 6.7 | 6.7  | 6.8 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 10    | 6.8 | 6.7 | 6.7  | 6.9 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 11    | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 12    | 6.8 | 6.7 | 6.7  | 7.0 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 13    | 6.8 | 6.7 | 6.7  | 7.0 | 7.0 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 14    | 6.7 | 6.6 | 6.6  | 7.0 | 7.0 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 15    | 6.7 | 6.6 | 6.6  | 7.0 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 16    | 6.7 | 6.7 | 6.7  | 7.0 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 17    | 6.8 | 6.7 | 6.7  | 6.9 | 6.8 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 18    | 6.8 | 6.8 | 6.8  | 6.8 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 19    | 6.8 | 6.7 | 6.8  | 6.8 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 20    | 6.8 | 6.7 | 6.7  | 6.8 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 21    | 6.8 | 6.7 | 6.7  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 22    | 6.7 | 6.7 | 6.7  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 23    | 6.7 | 6.7 | 6.7  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 24    | 6.7 | 6.7 | 6.7  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 25    | 6.7 | 6.7 | 6.7  | 6.8 | 6.7 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 26    | 6.7 | 6.7 | 6.7  | 6.8 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 27    | 6.7 | 6.7 | 6.7  | 6.9 | 6.8 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 28    | 6.7 | 6.7 | 6.7  | 6.9 | 6.9 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 29    | 6.7 | 6.7 | 6.7  | 7.0 | 6.9 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 30    | 6.7 | 6.7 | 6.7  | 6.9 | 6.9 | 6.9  | --- | --- | ---  | --- | --- | ---  |
| 31    | 6.7 | 6.7 | 6.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 6.8 | 6.6 | 6.7  | 7.0 | 6.6 | 6.8  | --- | --- | ---  | --- | --- | ---  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | ---      | ---  | ---  | ---   | ---  | ---  | 11.5  | 11.0 | 11.3 | ---  | ---  | ---  |
| 2     | ---      | ---  | ---  | ---   | ---  | ---  | 11.2  | 9.8  | 10.5 | ---  | ---  | ---  |
| 3     | ---      | ---  | ---  | ---   | ---  | ---  | 9.8   | 8.3  | 8.9  | ---  | ---  | ---  |
| 4     | ---      | ---  | ---  | 17.4  | 16.6 | 16.9 | 8.3   | 7.7  | 7.9  | ---  | ---  | ---  |
| 5     | ---      | ---  | ---  | 18.2  | 17.4 | 17.7 | 8.0   | 7.7  | 7.9  | ---  | ---  | ---  |
| 6     | ---      | ---  | ---  | 19.5  | 18.2 | 18.8 | 8.1   | 7.8  | 7.9  | 12.2 | 11.6 | 12.0 |
| 7     | ---      | ---  | ---  | 20.6  | 19.5 | 20.0 | 7.8   | 7.3  | 7.5  | 12.2 | 10.9 | 11.5 |
| 8     | ---      | ---  | ---  | 20.6  | 19.9 | 20.4 | 7.4   | 6.8  | 7.0  | 10.9 | 9.5  | 10.0 |
| 9     | ---      | ---  | ---  | 19.9  | 17.6 | 18.8 | 6.9   | 6.2  | 6.5  | 9.5  | 7.8  | 8.7  |
| 10    | ---      | ---  | ---  | 17.6  | 15.5 | 16.5 | 7.9   | 6.2  | 6.7  | 7.8  | 5.4  | 6.7  |
| 11    | ---      | ---  | ---  | 15.5  | 14.5 | 14.9 | 9.9   | 7.9  | 8.8  | 5.4  | 3.8  | 4.4  |
| 12    | ---      | ---  | ---  | 14.7  | 14.0 | 14.4 | 10.5  | 9.9  | 10.2 | 3.8  | 3.3  | 3.6  |
| 13    | ---      | ---  | ---  | ---   | ---  | ---  | 10.1  | 9.2  | 9.7  | 3.9  | 3.4  | 3.6  |
| 14    | ---      | ---  | ---  | 14.9  | 14.1 | 14.5 | 9.2   | 8.3  | 8.8  | 3.9  | 3.6  | 3.8  |
| 15    | ---      | ---  | ---  | 14.1  | 13.4 | 13.6 | 8.3   | 7.9  | 8.1  | 4.6  | 3.9  | 4.2  |
| 16    | ---      | ---  | ---  | 13.4  | 12.9 | 13.1 | 7.9   | 7.5  | 7.7  | 5.0  | 4.6  | 4.8  |
| 17    | ---      | ---  | ---  | 13.3  | 12.7 | 13.0 | 8.2   | 7.8  | 8.0  | 5.2  | 4.8  | 5.0  |
| 18    | ---      | ---  | ---  | 13.8  | 13.2 | 13.5 | 8.0   | 7.7  | 7.8  | 6.4  | 5.2  | 5.7  |
| 19    | ---      | ---  | ---  | 15.1  | 13.8 | 14.5 | 7.8   | 7.6  | 7.7  | 7.0  | 6.4  | 6.8  |
| 20    | ---      | ---  | ---  | ---   | ---  | ---  | 7.6   | 6.9  | 7.3  | 6.8  | 6.1  | 6.4  |
| 21    | ---      | ---  | ---  | 15.3  | 14.6 | 14.9 | 6.9   | 6.1  | 6.4  | 6.1  | 5.3  | 5.6  |
| 22    | ---      | ---  | ---  | 14.6  | 13.8 | 14.1 | 6.1   | 5.5  | 5.7  | ---  | ---  | ---  |
| 23    | ---      | ---  | ---  | 13.8  | 13.0 | 13.4 | 5.6   | 5.2  | 5.4  | ---  | ---  | ---  |
| 24    | ---      | ---  | ---  | 13.6  | 12.8 | 13.2 | 6.8   | 5.6  | 6.1  | 4.9  | 4.5  | 4.7  |
| 25    | ---      | ---  | ---  | ---   | ---  | ---  | 7.8   | 6.8  | 7.3  | ---  | ---  | ---  |
| 26    | ---      | ---  | ---  | 13.5  | 13.2 | 13.3 | 8.2   | 7.5  | 7.8  | ---  | ---  | ---  |
| 27    | ---      | ---  | ---  | ---   | ---  | ---  | 8.0   | 7.3  | 7.7  | 3.8  | 3.6  | 3.7  |
| 28    | ---      | ---  | ---  | 13.8  | 13.3 | 13.5 | 7.3   | 6.4  | 6.7  | 3.7  | 3.4  | 3.6  |
| 29    | ---      | ---  | ---  | 13.7  | 12.6 | 13.1 | 6.5   | 6.0  | 6.2  | 3.6  | 3.0  | 3.3  |
| 30    | ---      | ---  | ---  | 12.6  | 11.5 | 11.9 | 7.2   | 6.4  | 6.8  | 3.7  | 3.0  | 3.4  |
| 31    | ---      | ---  | ---  | ---   | ---  | ---  | 7.8   | 7.1  | 7.4  | 3.7  | 3.4  | 3.5  |
| MONTH | ---      | ---  | ---  | ---   | ---  | ---  | 11.5  | 5.2  | 7.7  | ---  | ---  | ---  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 3.6      | 3.2  | 3.4  | 7.9   | 6.3  | 7.1  | 16.6  | 16.1 | 16.3 | 20.3 | 19.3 | 19.7 |
| 2     | 4.2      | 3.3  | 3.7  | 10.2  | 7.9  | 9.0  | 16.2  | 15.3 | 15.8 | 20.0 | 19.0 | 19.5 |
| 3     | 4.8      | 4.1  | 4.4  | 12.6  | 10.2 | 11.4 | 15.3  | 14.6 | 14.9 | 20.2 | 19.8 | 20.0 |
| 4     | 5.3      | 4.5  | 4.9  | 14.9  | 12.6 | 13.7 | 15.5  | 14.6 | 14.9 | 19.9 | 19.0 | 19.4 |
| 5     | ---      | ---  | ---  | 16.8  | 14.9 | 15.8 | 15.3  | 14.6 | 14.8 | 19.0 | 18.3 | 18.7 |
| 6     | ---      | ---  | ---  | 18.0  | 16.8 | 17.4 | 15.0  | 14.2 | 14.6 | 19.1 | 18.1 | 18.6 |
| 7     | 10.0     | 8.5  | 9.3  | 18.4  | 17.7 | 18.0 | 15.6  | 14.3 | 14.8 | 19.6 | 18.5 | 19.0 |
| 8     | 10.0     | 9.7  | 9.9  | 18.0  | 17.0 | 17.5 | 16.5  | 15.2 | 15.8 | 20.4 | 19.3 | 19.8 |
| 9     | 9.9      | 9.3  | 9.5  | 17.0  | 15.3 | 15.9 | 17.6  | 16.1 | 16.8 | 21.4 | 20.3 | 20.8 |
| 10    | 10.0     | 9.7  | 9.9  | 15.3  | 14.0 | 14.5 | 17.9  | 17.2 | 17.6 | 22.3 | 21.3 | 21.7 |
| 11    | 9.8      | 9.1  | 9.3  | 14.0  | 12.7 | 13.1 | 18.6  | 17.7 | 18.1 | 22.9 | 22.0 | 22.4 |
| 12    | 9.1      | 8.4  | 8.7  | 13.0  | 12.1 | 12.6 | 18.9  | 18.4 | 18.6 | 23.1 | 22.4 | 22.8 |
| 13    | 8.8      | 8.2  | 8.5  | 12.8  | 12.2 | 12.6 | 19.0  | 18.7 | 18.9 | 23.4 | 22.7 | 23.0 |
| 14    | 8.7      | 8.5  | 8.6  | 12.7  | 12.3 | 12.5 | 18.8  | 17.2 | 17.9 | 23.5 | 22.6 | 23.0 |
| 15    | 8.6      | 8.4  | 8.5  | 13.4  | 12.5 | 12.9 | 17.2  | 16.5 | 16.9 | 23.6 | 22.8 | 23.2 |
| 16    | 8.6      | 8.1  | 8.3  | 14.0  | 13.4 | 13.7 | 17.0  | 15.8 | 16.4 | 23.9 | 23.3 | 23.6 |
| 17    | 8.1      | 6.9  | 7.5  | 14.2  | 13.9 | 14.1 | 17.3  | 15.7 | 16.5 | 24.6 | 23.5 | 23.9 |
| 18    | 6.9      | 6.2  | 6.5  | 14.1  | 13.6 | 13.9 | 18.4  | 16.5 | 17.4 | 24.6 | 24.2 | 24.4 |
| 19    | 6.7      | 5.7  | 6.2  | 14.4  | 13.7 | 14.1 | 19.6  | 17.8 | 18.6 | 24.6 | 23.8 | 24.3 |
| 20    | 7.4      | 6.1  | 6.7  | 14.3  | 13.6 | 14.0 | 20.7  | 19.1 | 19.8 | 25.0 | 24.4 | 24.7 |
| 21    | 9.0      | 7.2  | 8.1  | 14.5  | 14.0 | 14.2 | 21.6  | 20.2 | 20.9 | 25.8 | 24.9 | 25.3 |
| 22    | 10.2     | 8.8  | 9.5  | 14.3  | 13.8 | 14.1 | 22.1  | 20.9 | 21.4 | 26.5 | 25.4 | 25.9 |
| 23    | 10.8     | 9.7  | 10.3 | 14.0  | 13.2 | 13.5 | 22.6  | 21.1 | 21.8 | 27.0 | 25.7 | 26.3 |
| 24    | 10.8     | 10.4 | 10.6 | 13.4  | 12.8 | 13.1 | 22.8  | 21.9 | 22.4 | 27.5 | 26.6 | 27.0 |
| 25    | 10.7     | 10.2 | 10.4 | 13.4  | 12.9 | 13.2 | 22.9  | 22.4 | 22.7 | 28.0 | 27.0 | 27.5 |
| 26    | 10.3     | 8.9  | 9.6  | 14.0  | 13.3 | 13.6 | 22.9  | 22.4 | 22.7 | 28.5 | 27.6 | 28.0 |
| 27    | 8.9      | 6.6  | 7.7  | 15.0  | 14.0 | 14.6 | 22.8  | 22.0 | 22.5 | 28.9 | 28.0 | 28.4 |
| 28    | 6.6      | 5.8  | 6.1  | 15.8  | 14.9 | 15.4 | 22.0  | 21.1 | 21.5 | 28.9 | 28.1 | 28.5 |
| 29    | 6.7      | 5.4  | 6.1  | 16.6  | 15.5 | 16.0 | 21.1  | 20.3 | 20.6 | 28.8 | 28.1 | 28.4 |
| 30    | ---      | ---  | ---  | 16.6  | 16.0 | 16.3 | 20.6  | 19.7 | 20.2 | 28.2 | 27.5 | 27.8 |
| 31    | ---      | ---  | ---  | 16.7  | 15.9 | 16.2 | ---   | ---  | ---  | 27.5 | 26.9 | 27.1 |
| MONTH | ---      | ---  | ---  | 18.4  | 6.3  | 14.0 | 22.9  | 14.2 | 18.4 | 28.9 | 18.1 | 23.6 |



## CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 26.9 | 26.4 | 26.6 | 26.8 | 26.2 | 26.4 | 29.4 | 28.9 | 29.1 | 25.3 | 24.9 | 25.1 |
| 2     | 27.2 | 26.3 | 26.7 | 26.2 | 25.7 | 26.0 | 29.1 | 28.7 | 29.0 | 24.9 | 24.4 | 24.6 |
| 3     | 27.9 | 26.7 | 27.2 | 26.1 | 25.7 | 25.9 | 28.7 | 28.2 | 28.5 | 24.4 | 24.0 | 24.2 |
| 4     | 27.8 | 27.3 | 27.5 | 26.6 | 25.5 | 26.0 | 28.4 | 27.5 | 28.0 | 24.3 | 23.8 | 24.1 |
| 5     | 27.6 | 27.0 | 27.3 | 27.6 | 26.4 | 26.9 | 29.2 | 28.1 | 28.6 | 24.5 | 23.9 | 24.2 |
| 6     | 27.2 | 26.7 | 27.0 | 28.5 | 27.5 | 28.0 | 28.8 | 28.0 | 28.5 | 24.4 | 24.1 | 24.3 |
| 7     | 27.1 | 26.5 | 26.8 | 29.4 | 28.4 | 28.8 | 28.0 | 26.2 | 26.8 | 24.4 | 24.2 | 24.3 |
| 8     | 26.9 | 26.4 | 26.6 | 29.8 | 29.2 | 29.4 | 26.2 | 25.1 | 25.5 | 24.9 | 24.2 | 24.5 |
| 9     | 26.5 | 25.9 | 26.1 | 29.7 | 29.1 | 29.3 | 25.2 | 24.4 | 24.8 | 25.4 | 24.6 | 25.0 |
| 10    | 26.6 | 25.7 | 26.1 | 29.9 | 29.0 | 29.3 | 24.8 | 24.2 | 24.6 | 25.6 | 25.2 | 25.4 |
| 11    | 27.6 | 26.5 | 27.0 | 29.9 | 29.0 | 29.3 | 25.3 | 24.6 | 24.9 | 25.4 | 24.8 | 25.0 |
| 12    | 27.7 | 27.2 | 27.5 | 29.4 | 28.6 | 28.9 | 25.6 | 24.9 | 25.2 | 24.8 | 24.3 | 24.6 |
| 13    | 27.2 | 25.9 | 26.4 | 29.5 | 28.8 | 29.1 | 25.3 | 24.3 | 24.9 | 24.5 | 23.9 | 24.2 |
| 14    | 25.9 | 25.3 | 25.6 | 30.0 | 29.1 | 29.4 | 24.3 | 23.3 | 23.8 | 24.0 | 23.3 | 23.6 |
| 15    | 26.0 | 25.3 | 25.6 | 30.3 | 29.5 | 29.8 | 23.3 | 22.4 | 22.7 | 23.4 | 23.0 | 23.2 |
| 16    | 26.0 | 25.4 | 25.8 | 30.3 | 29.4 | 29.8 | 22.6 | 22.2 | 22.4 | 23.5 | 23.1 | 23.3 |
| 17    | 26.1 | 25.8 | 25.9 | 29.8 | 28.6 | 29.2 | 22.8 | 22.2 | 22.5 | 24.1 | 23.4 | 23.7 |
| 18    | 27.4 | 26.1 | 26.5 | 28.6 | 28.1 | 28.4 | 23.1 | 22.5 | 22.8 | 24.1 | 23.7 | 23.9 |
| 19    | 28.0 | 27.0 | 27.5 | 28.4 | 27.8 | 28.1 | 23.6 | 22.9 | 23.2 | 23.7 | 22.8 | 23.3 |
| 20    | 27.7 | 27.0 | 27.3 | 28.4 | 27.6 | 27.9 | 24.3 | 23.5 | 23.8 | 22.8 | 21.9 | 22.2 |
| 21    | 27.2 | 26.4 | 26.9 | 28.6 | 27.8 | 28.2 | 24.9 | 24.2 | 24.6 | 21.9 | 21.0 | 21.3 |
| 22    | 27.4 | 26.5 | 27.0 | 28.6 | 28.1 | 28.3 | 25.2 | 24.9 | 25.0 | 21.2 | 20.6 | 20.9 |
| 23    | 27.6 | 26.8 | 27.2 | 28.8 | 28.4 | 28.6 | 25.5 | 25.0 | 25.3 | 21.1 | 20.5 | 20.9 |
| 24    | 27.6 | 27.4 | 27.5 | 29.4 | 28.4 | 28.9 | 25.5 | 24.9 | 25.2 | 21.5 | 20.8 | 21.2 |
| 25    | 27.8 | 27.1 | 27.5 | 29.3 | 28.7 | 29.0 | 25.2 | 24.7 | 25.0 | 22.1 | 21.3 | 21.6 |
| 26    | 27.7 | 27.5 | 27.6 | 29.3 | 28.7 | 29.0 | 25.0 | 24.6 | 24.8 | 22.1 | 21.9 | 22.0 |
| 27    | 27.5 | 27.0 | 27.2 | 29.4 | 28.7 | 29.0 | 24.8 | 24.5 | 24.7 | 22.8 | 22.1 | 22.4 |
| 28    | 27.1 | 26.7 | 27.0 | 29.2 | 28.8 | 29.0 | 25.2 | 24.5 | 24.8 | 23.1 | 22.8 | 22.9 |
| 29    | 27.1 | 26.6 | 26.9 | 29.1 | 28.7 | 28.9 | 25.3 | 24.9 | 25.1 | 23.5 | 23.0 | 23.2 |
| 30    | 27.0 | 26.7 | 26.8 | 29.3 | 28.5 | 28.9 | 25.4 | 25.0 | 25.3 | 23.6 | 23.3 | 23.5 |
| 31    | ---  | ---  | ---  | 29.5 | 28.7 | 29.0 | 25.5 | 25.0 | 25.3 | ---  | ---  | ---  |
| MONTH | 28.0 | 25.3 | 26.8 | 30.3 | 25.5 | 28.5 | 29.4 | 22.2 | 25.3 | 25.6 | 20.5 | 23.4 |

## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |     |      |
|-------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
|       | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | 24.0    | 23.5 | 23.7 | 19.1     | 18.0 | 18.6 | 11.8     | 11.3 | 11.5 | ---     | --- | ---  |
| 2     | 24.1    | 23.7 | 23.9 | 19.9     | 18.9 | 19.3 | 11.3     | 10.7 | 10.9 | ---     | --- | ---  |
| 3     | 24.2    | 23.8 | 24.0 | 20.4     | 19.8 | 20.1 | ---      | ---  | ---  | ---     | --- | ---  |
| 4     | 24.1    | 23.6 | 23.9 | 20.6     | 20.1 | 20.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 5     | 23.7    | 23.2 | 23.5 | 20.5     | 19.8 | 20.2 | ---      | ---  | ---  | ---     | --- | ---  |
| 6     | 23.2    | 22.2 | 22.8 | 19.8     | 18.7 | 19.1 | ---      | ---  | ---  | ---     | --- | ---  |
| 7     | 22.2    | 21.0 | 21.6 | 18.7     | 17.6 | 17.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 8     | 21.0    | 20.3 | 20.6 | 17.6     | 16.5 | 16.8 | ---      | ---  | ---  | ---     | --- | ---  |
| 9     | 20.5    | 19.9 | 20.2 | 16.6     | 15.1 | 15.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 10    | 20.6    | 20.0 | 20.2 | 15.1     | 14.0 | 14.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 11    | 20.5    | 20.1 | 20.3 | 14.1     | 13.2 | 13.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 12    | 20.3    | 19.7 | 19.9 | 13.9     | 13.3 | 13.6 | ---      | ---  | ---  | ---     | --- | ---  |
| 13    | 20.1    | 19.8 | 19.9 | 13.7     | 13.1 | 13.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 14    | 20.2    | 19.8 | 20.0 | 13.2     | 12.7 | 13.0 | ---      | ---  | ---  | ---     | --- | ---  |
| 15    | 20.1    | 19.8 | 20.0 | 12.7     | 11.5 | 11.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 16    | 19.9    | 19.3 | 19.5 | 11.5     | 10.0 | 10.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 17    | 19.3    | 18.6 | 18.9 | 10.0     | 9.1  | 9.4  | ---      | ---  | ---  | ---     | --- | ---  |
| 18    | 18.6    | 18.0 | 18.2 | 9.4      | 8.8  | 9.1  | ---      | ---  | ---  | ---     | --- | ---  |
| 19    | 18.9    | 18.1 | 18.5 | 10.0     | 9.2  | 9.6  | ---      | ---  | ---  | ---     | --- | ---  |
| 20    | 19.6    | 18.8 | 19.2 | 11.2     | 9.9  | 10.5 | ---      | ---  | ---  | ---     | --- | ---  |
| 21    | 19.6    | 19.3 | 19.5 | 12.5     | 11.2 | 11.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 22    | 19.5    | 19.1 | 19.3 | 13.7     | 12.5 | 13.1 | ---      | ---  | ---  | ---     | --- | ---  |
| 23    | 19.1    | 18.4 | 18.7 | 14.6     | 13.7 | 14.2 | ---      | ---  | ---  | ---     | --- | ---  |
| 24    | 18.4    | 17.8 | 18.0 | 15.7     | 14.6 | 15.1 | ---      | ---  | ---  | ---     | --- | ---  |
| 25    | 17.8    | 17.3 | 17.6 | 16.4     | 15.7 | 16.1 | ---      | ---  | ---  | ---     | --- | ---  |
| 26    | 17.3    | 16.9 | 17.1 | 16.2     | 14.5 | 15.3 | ---      | ---  | ---  | ---     | --- | ---  |
| 27    | 16.9    | 16.4 | 16.6 | 14.5     | 13.6 | 13.9 | ---      | ---  | ---  | ---     | --- | ---  |
| 28    | 16.9    | 16.4 | 16.6 | 14.0     | 13.0 | 13.7 | ---      | ---  | ---  | ---     | --- | ---  |
| 29    | 16.8    | 16.4 | 16.6 | 13.0     | 11.6 | 12.2 | ---      | ---  | ---  | ---     | --- | ---  |
| 30    | 17.3    | 16.6 | 16.8 | 11.6     | 11.1 | 11.4 | ---      | ---  | ---  | ---     | --- | ---  |
| 31    | 18.3    | 17.2 | 17.6 | ---      | ---  | ---  | ---      | ---  | ---  | ---     | --- | ---  |
| MONTH | 24.2    | 16.4 | 19.8 | 20.6     | 8.8  | 14.5 | ---      | ---  | ---  | ---     | --- | ---  |

## CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | OCTOBER |      |      | NOVEMBER |     |      | DECEMBER |      |      | JANUARY |     |      |
|-------|----------|------|------|---------|------|------|----------|-----|------|----------|------|------|---------|-----|------|
|       |          |      |      | MAX     | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | ---      | ---  | ---  | ---     | ---  | ---  | 7.6      | 7.3 | 7.4  | ---      | ---  | ---  |         |     |      |
| 2     | ---      | ---  | ---  | ---     | ---  | ---  | 8.0      | 7.4 | 7.7  | ---      | ---  | ---  |         |     |      |
| 3     | ---      | ---  | ---  | ---     | ---  | ---  | 8.8      | 7.9 | 8.4  | ---      | ---  | ---  |         |     |      |
| 4     | ---      | ---  | ---  | 5.7     | 5.3  | 5.5  | 9.2      | 8.6 | 8.9  | ---      | ---  | ---  |         |     |      |
| 5     | ---      | ---  | ---  | 5.4     | 5.0  | 5.2  | 9.2      | 8.9 | 9.1  | ---      | ---  | ---  |         |     |      |
| 6     | ---      | ---  | ---  | 5.1     | 4.6  | 4.9  | 9.3      | 9.0 | 9.1  | 8.7      | 8.2  | 8.4  |         |     |      |
| 7     | ---      | ---  | ---  | 4.7     | 4.4  | 4.6  | 9.4      | 9.0 | 9.2  | 8.2      | 8.1  | 8.2  |         |     |      |
| 8     | ---      | ---  | ---  | 4.7     | 4.4  | 4.6  | 9.5      | 9.1 | 9.4  | 8.7      | 8.2  | 8.5  |         |     |      |
| 9     | ---      | ---  | ---  | 5.2     | 4.6  | 4.8  | 9.7      | 9.3 | 9.5  | 9.4      | 8.7  | 9.0  |         |     |      |
| 10    | ---      | ---  | ---  | 5.8     | 5.0  | 5.4  | 9.8      | 9.2 | 9.6  | 10.4     | 9.4  | 9.8  |         |     |      |
| 11    | ---      | ---  | ---  | 6.2     | 5.6  | 5.9  | 9.4      | 8.0 | 8.7  | 11.1     | 10.4 | 10.8 |         |     |      |
| 12    | ---      | ---  | ---  | 6.7     | 6.1  | 6.4  | 8.2      | 7.2 | 7.6  | 11.6     | 11.1 | 11.3 |         |     |      |
| 13    | ---      | ---  | ---  | ---     | ---  | ---  | 7.7      | 7.2 | 7.4  | 11.7     | 11.5 | 11.6 |         |     |      |
| 14    | ---      | ---  | ---  | 6.6     | 6.3  | 6.4  | 8.2      | 7.4 | 7.9  | 11.7     | 11.6 | 11.6 |         |     |      |
| 15    | ---      | ---  | ---  | 6.7     | 6.4  | 6.5  | 8.4      | 7.9 | 8.1  | 11.7     | 11.4 | 11.6 |         |     |      |
| 16    | ---      | ---  | ---  | 7.2     | 6.6  | 6.9  | 8.4      | 8.0 | 8.1  | 11.4     | 11.0 | 11.2 |         |     |      |
| 17    | ---      | ---  | ---  | 7.4     | 7.0  | 7.3  | 8.3      | 8.0 | 8.2  | 11.1     | 10.9 | 11.0 |         |     |      |
| 18    | ---      | ---  | ---  | 7.5     | 7.1  | 7.3  | 8.3      | 7.9 | 8.1  | 11.0     | 10.7 | 10.9 |         |     |      |
| 19    | ---      | ---  | ---  | 7.2     | 6.8  | 7.0  | 8.3      | 8.0 | 8.1  | 10.8     | 10.5 | 10.6 |         |     |      |
| 20    | ---      | ---  | ---  | ---     | ---  | ---  | 8.6      | 8.1 | 8.3  | 10.7     | 10.5 | 10.6 |         |     |      |
| 21    | ---      | ---  | ---  | 6.6     | 6.2  | 6.4  | 9.1      | 8.4 | 8.7  | 11.0     | 10.6 | 10.9 |         |     |      |
| 22    | ---      | ---  | ---  | 6.7     | 6.4  | 6.6  | 9.5      | 8.9 | 9.2  | ---      | ---  | ---  |         |     |      |
| 23    | ---      | ---  | ---  | 7.0     | 6.6  | 6.8  | 9.7      | 9.3 | 9.6  | ---      | ---  | ---  |         |     |      |
| 24    | ---      | ---  | ---  | 7.2     | 6.7  | 6.9  | 9.7      | 9.2 | 9.5  | 11.8     | 11.6 | 11.7 |         |     |      |
| 25    | ---      | ---  | ---  | ---     | ---  | ---  | 9.4      | 8.7 | 9.0  | ---      | ---  | ---  |         |     |      |
| 26    | ---      | ---  | ---  | 6.9     | 6.6  | 6.7  | 8.9      | 8.4 | 8.7  | ---      | ---  | ---  |         |     |      |
| 27    | ---      | ---  | ---  | ---     | ---  | ---  | 9.0      | 8.4 | 8.7  | 11.8     | 11.5 | 11.7 |         |     |      |
| 28    | ---      | ---  | ---  | 7.0     | 6.7  | 6.9  | 9.6      | 8.8 | 9.3  | 11.9     | 11.7 | 11.8 |         |     |      |
| 29    | ---      | ---  | ---  | 7.3     | 6.9  | 7.1  | 9.8      | 9.4 | 9.7  | 12.2     | 11.8 | 12.0 |         |     |      |
| 30    | ---      | ---  | ---  | 7.5     | 7.2  | 7.4  | 9.8      | 9.3 | 9.6  | 12.2     | 12.0 | 12.1 |         |     |      |
| 31    | ---      | ---  | ---  | ---     | ---  | ---  | 9.6      | 9.0 | 9.3  | 12.1     | 12.0 | 12.0 |         |     |      |
| MONTH | ---      | ---  | ---  | ---     | ---  | ---  | 9.8      | 7.2 | 8.7  | ---      | ---  | ---  |         |     |      |
| DAY   | FEBRUARY |      |      | MARCH   |      |      | APRIL    |     |      | MAY      |      |      |         |     |      |
|       | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN | MAX      | MIN | MEAN | MAX      | MIN  | MEAN |         |     |      |
| 1     | 12.1     | 12.0 | 12.0 | 10.9    | 10.4 | 10.7 | 7.0      | 6.8 | 6.9  | 6.6      | 5.5  | 6.0  |         |     |      |
| 2     | 12.2     | 11.9 | 12.0 | 10.4    | 9.6  | 10.1 | 7.0      | 6.6 | 6.8  | 6.7      | 5.5  | 6.2  |         |     |      |
| 3     | 12.2     | 12.0 | 12.1 | 9.7     | 8.9  | 9.3  | 6.8      | 6.6 | 6.7  | 6.2      | 5.6  | 5.9  |         |     |      |
| 4     | 12.1     | 11.8 | 12.0 | 8.9     | 8.0  | 8.5  | 6.9      | 6.7 | 6.8  | 6.1      | 5.3  | 5.7  |         |     |      |
| 5     | ---      | ---  | ---  | 8.1     | 7.4  | 7.7  | 7.1      | 6.9 | 7.0  | 5.7      | 5.2  | 5.5  |         |     |      |
| 6     | ---      | ---  | ---  | 7.4     | 6.9  | 7.2  | 7.2      | 7.0 | 7.1  | 5.7      | 5.2  | 5.5  |         |     |      |
| 7     | 11.1     | 10.4 | 10.7 | 7.0     | 6.6  | 6.8  | 7.2      | 7.0 | 7.2  | 5.7      | 5.2  | 5.4  |         |     |      |
| 8     | 10.5     | 10.0 | 10.2 | 6.7     | 6.5  | 6.6  | 7.2      | 6.9 | 7.0  | 5.6      | 5.1  | 5.3  |         |     |      |
| 9     | 10.1     | 9.9  | 10   | 7.0     | 6.6  | 6.7  | 7.0      | 6.6 | 6.8  | 5.4      | 4.9  | 5.1  |         |     |      |
| 10    | 10.1     | 9.7  | 9.9  | 7.4     | 7.0  | 7.2  | 6.6      | 6.3 | 6.4  | 5.1      | 4.7  | 4.9  |         |     |      |
| 11    | 10.5     | 10.0 | 10.2 | 8.0     | 7.4  | 7.8  | 6.4      | 6.0 | 6.2  | 4.9      | 4.4  | 4.7  |         |     |      |
| 12    | 10.6     | 10.4 | 10.5 | 8.3     | 8.0  | 8.2  | 6.2      | 6.0 | 6.0  | 4.6      | 4.4  | 4.5  |         |     |      |
| 13    | 10.5     | 10.2 | 10.3 | 8.4     | 8.2  | 8.3  | ---      | --- | ---  | 4.5      | 4.2  | 4.4  |         |     |      |
| 14    | 10.4     | 10.2 | 10.3 | 8.5     | 8.3  | 8.4  | ---      | --- | ---  | 4.5      | 4.3  | 4.4  |         |     |      |
| 15    | 10.4     | 10.2 | 10.3 | 8.5     | 8.2  | 8.3  | ---      | --- | ---  | 4.8      | 4.4  | 4.6  |         |     |      |
| 16    | 10.3     | 10.1 | 10.2 | 8.2     | 7.8  | 8.1  | ---      | --- | ---  | 5.1      | 4.7  | 4.9  |         |     |      |
| 17    | 10.6     | 10.1 | 10.4 | 7.9     | 7.7  | 7.8  | ---      | --- | ---  | 5.3      | 5.1  | 5.2  |         |     |      |
| 18    | 11.0     | 10.5 | 10.8 | 7.9     | 7.7  | 7.8  | ---      | --- | ---  | 5.5      | 5.1  | 5.3  |         |     |      |
| 19    | 11.1     | 10.9 | 11.0 | 7.9     | 7.7  | 7.8  | ---      | --- | ---  | 5.6      | 5.3  | 5.5  |         |     |      |
| 20    | 11.1     | 10.7 | 11.0 | 8.2     | 7.9  | 8.1  | 6.1      | 5.9 | 6.0  | 5.6      | 5.0  | 5.3  |         |     |      |
| 21    | 10.8     | 10.2 | 10.5 | 8.2     | 8.0  | 8.1  | 5.9      | 5.5 | 5.7  | 5.1      | 4.7  | 4.9  |         |     |      |
| 22    | 10.2     | 9.6  | 9.9  | 8.1     | 7.8  | 7.9  | 5.6      | 5.4 | 5.5  | 4.9      | 4.4  | 4.7  |         |     |      |
| 23    | 9.7      | 9.2  | 9.4  | 8.0     | 7.8  | 7.9  | 5.5      | 5.3 | 5.4  | 4.9      | 4.4  | 4.7  |         |     |      |
| 24    | 9.3      | 9.1  | 9.2  | 8.2     | 7.9  | 8.0  | 5.5      | 5.3 | 5.4  | 4.6      | 4.1  | 4.4  |         |     |      |
| 25    | 9.4      | 9.1  | 9.2  | 8.3     | 8.1  | 8.2  | 5.4      | 5.3 | 5.4  | 4.4      | 3.8  | 4.2  |         |     |      |
| 26    | 9.7      | 9.2  | 9.4  | 8.4     | 8.1  | 8.2  | 5.5      | 5.3 | 5.4  | 4.2      | 3.8  | 4.0  |         |     |      |
| 27    | 10.6     | 9.7  | 10.2 | 8.2     | 7.8  | 8.0  | ---      | --- | ---  | 4.4      | 3.9  | 4.2  |         |     |      |
| 28    | 10.9     | 10.5 | 10.8 | 7.9     | 7.4  | 7.6  | ---      | --- | ---  | 4.6      | 4.1  | 4.4  |         |     |      |
| 29    | 11.1     | 10.8 | 10.9 | 7.6     | 7.1  | 7.3  | ---      | --- | ---  | 4.5      | 4.1  | 4.4  |         |     |      |
| 30    | ---      | ---  | ---  | 7.1     | 6.9  | 7.0  | ---      | --- | ---  | 4.6      | 4.3  | 4.5  |         |     |      |
| 31    | ---      | ---  | ---  | 7.1     | 6.9  | 7.0  | ---      | --- | ---  | 4.6      | 4.3  | 4.5  |         |     |      |
| MONTH | ---      | ---  | ---  | 10.9    | 6.5  | 8.0  | ---      | --- | ---  | 6.7      | 3.8  | 4.9  |         |     |      |

## 02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 4.6 | 4.2 | 4.5  | 5.8 | 5.5 | 5.6  | 5.0 | 4.7 | 4.8  | 5.2 | 4.6 | 4.8  |
| 2     | 4.6 | 4.2 | 4.4  | 5.6 | 5.3 | 5.5  | 4.8 | 4.5 | 4.7  | 5.0 | 4.6 | 4.8  |
| 3     | 4.5 | 4.1 | 4.4  | 5.9 | 5.6 | 5.7  | 5.1 | 4.6 | 4.8  | 4.8 | 4.5 | 4.6  |
| 4     | 4.7 | 4.0 | 4.3  | 5.9 | 5.7 | 5.8  | 5.1 | 4.7 | 4.9  | 4.8 | 4.6 | 4.7  |
| 5     | 4.8 | 4.5 | 4.6  | 5.8 | 5.6 | 5.7  | 4.8 | 4.4 | 4.6  | 4.7 | 4.6 | 4.7  |
| 6     | 4.8 | 4.5 | 4.7  | 5.6 | 5.3 | 5.4  | 4.8 | 4.7 | 4.8  | 4.8 | 4.6 | 4.7  |
| 7     | 5.0 | 4.7 | 4.9  | 5.3 | 4.9 | 5.1  | 5.2 | 4.8 | 5.1  | 5.0 | 4.7 | 4.8  |
| 8     | 5.2 | 5.0 | 5.1  | 4.9 | 4.7 | 4.8  | 5.5 | 5.2 | 5.4  | 4.9 | 4.8 | 4.9  |
| 9     | 5.2 | 5.0 | 5.1  | 4.8 | 4.6 | 4.7  | 5.7 | 5.4 | 5.6  | 5.2 | 4.8 | 5.0  |
| 10    | 5.7 | 4.8 | 5.1  | 4.8 | 4.5 | 4.7  | 5.8 | 5.6 | 5.7  | 5.0 | 4.6 | 4.8  |
| 11    | 5.2 | 4.9 | 5.0  | 5.0 | 4.6 | 4.8  | 5.6 | 5.3 | 5.5  | 4.8 | 4.5 | 4.6  |
| 12    | 5.1 | 4.8 | 5.0  | 4.9 | 4.7 | 4.8  | 5.4 | 5.1 | 5.2  | 4.8 | 4.5 | 4.7  |
| 13    | 5.3 | 5.0 | 5.1  | 4.7 | 4.2 | 4.5  | 5.8 | 5.1 | 5.6  | 4.8 | 4.6 | 4.7  |
| 14    | 5.5 | 5.0 | 5.3  | 4.6 | 4.3 | 4.4  | 5.9 | 5.6 | 5.7  | 5.0 | 4.6 | 4.8  |
| 15    | 5.9 | 5.2 | 5.6  | 4.6 | 4.0 | 4.3  | 5.9 | 5.3 | 5.6  | 5.0 | 4.7 | 4.9  |
| 16    | 6.0 | 5.6 | 5.8  | 4.2 | 4.0 | 4.1  | 5.3 | 4.8 | 5.1  | 4.9 | 4.6 | 4.8  |
| 17    | 5.8 | 5.5 | 5.6  | 4.9 | 4.0 | 4.4  | 4.8 | 4.3 | 4.6  | 4.8 | 4.5 | 4.7  |
| 18    | 5.6 | 5.4 | 5.5  | 4.9 | 4.4 | 4.6  | 4.4 | 4.1 | 4.2  | 4.9 | 4.5 | 4.7  |
| 19    | 5.6 | 5.4 | 5.5  | 4.6 | 4.2 | 4.4  | 4.2 | 3.7 | 3.9  | 5.1 | 4.7 | 4.9  |
| 20    | 5.5 | 5.4 | 5.4  | 4.4 | 3.9 | 4.2  | 3.7 | 3.4 | 3.5  | 5.5 | 4.9 | 5.3  |
| 21    | 5.6 | 5.4 | 5.5  | 4.3 | 3.9 | 4.1  | 3.5 | 3.3 | 3.4  | 5.9 | 5.3 | 5.7  |
| 22    | 5.6 | 5.4 | 5.5  | 4.1 | 3.5 | 3.9  | 3.4 | 3.1 | 3.2  | 6.3 | 5.8 | 6.1  |
| 23    | 5.5 | 5.3 | 5.4  | 4.2 | 3.4 | 3.8  | 3.1 | 2.9 | 3.0  | 6.4 | 6.0 | 6.2  |
| 24    | 5.5 | 5.3 | 5.4  | 4.3 | 3.5 | 4.0  | 3.1 | 2.9 | 3.0  | 6.2 | 6.0 | 6.1  |
| 25    | 5.4 | 5.1 | 5.3  | 4.8 | 4.2 | 4.4  | 3.2 | 3.0 | 3.1  | 6.1 | 5.8 | 5.9  |
| 26    | 5.3 | 5.0 | 5.1  | 4.8 | 4.3 | 4.6  | 3.8 | 3.2 | 3.5  | 5.8 | 5.6 | 5.7  |
| 27    | 5.4 | 5.1 | 5.3  | 4.7 | 4.4 | 4.5  | 4.2 | 3.7 | 3.9  | 5.6 | 5.4 | 5.5  |
| 28    | 5.6 | 5.3 | 5.5  | 4.7 | 4.2 | 4.4  | 4.7 | 4.2 | 4.5  | 5.4 | 5.2 | 5.4  |
| 29    | 5.8 | 5.5 | 5.7  | 4.8 | 4.3 | 4.5  | 5.0 | 4.5 | 4.8  | 5.3 | 5.1 | 5.2  |
| 30    | 5.7 | 5.2 | 5.6  | 5.0 | 4.5 | 4.7  | 5.2 | 4.8 | 5.0  | 5.2 | 5.0 | 5.1  |
| 31    | --- | --- | ---  | 5.0 | 4.6 | 4.8  | 5.2 | 4.7 | 5.0  | --- | --- | ---  |
| MONTH | 6.0 | 4.0 | 5.2  | 5.9 | 3.4 | 4.7  | 5.9 | 2.9 | 4.6  | 6.4 | 4.5 | 5.1  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|------|------|------|-----|-----|------|-----|-----|------|
|       |     |     |      |      |      |      |     |     |      |     |     |      |
| 1     | 5.1 | 5.0 | 5.1  | 5.8  | 5.5  | 5.7  | 8.9 | 8.5 | 8.7  | --- | --- | ---  |
| 2     | 5.2 | 5.0 | 5.1  | 5.6  | 5.2  | 5.4  | 9.2 | 8.8 | 9.1  | --- | --- | ---  |
| 3     | 5.3 | 5.1 | 5.2  | 5.2  | 4.8  | 5.0  | --- | --- | ---  | --- | --- | ---  |
| 4     | 5.3 | 5.2 | 5.3  | 4.9  | 4.4  | 4.7  | --- | --- | ---  | --- | --- | ---  |
| 5     | 5.4 | 5.2 | 5.3  | 5.0  | 4.5  | 4.8  | --- | --- | ---  | --- | --- | ---  |
| 6     | 5.6 | 5.3 | 5.4  | 4.9  | 4.7  | 4.9  | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | 5.4  | 4.8  | 5.2  | --- | --- | ---  | --- | --- | ---  |
| 8     | 6.5 | 5.9 | 6.1  | 5.8  | 5.2  | 5.6  | --- | --- | ---  | --- | --- | ---  |
| 9     | 6.4 | 6.0 | 6.2  | 6.5  | 5.6  | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 10    | 6.3 | 5.8 | 6.1  | 6.8  | 6.3  | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 11    | 6.2 | 5.5 | 5.9  | 7.1  | 6.5  | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 12    | 6.0 | 5.3 | 5.7  | 7.3  | 6.8  | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 13    | 5.7 | 5.1 | 5.4  | 8.2  | 7.0  | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 14    | 5.4 | 4.6 | 5.1  | 8.3  | 8.0  | 8.2  | --- | --- | ---  | --- | --- | ---  |
| 15    | 5.3 | 4.7 | 5.0  | 8.8  | 8.1  | 8.5  | --- | --- | ---  | --- | --- | ---  |
| 16    | 5.4 | 4.9 | 5.1  | 9.8  | 8.7  | 9.3  | --- | --- | ---  | --- | --- | ---  |
| 17    | 5.6 | 5.1 | 5.3  | 10.7 | 9.8  | 10.3 | --- | --- | ---  | --- | --- | ---  |
| 18    | 6.1 | 5.4 | 5.7  | 10.8 | 10.5 | 10.6 | --- | --- | ---  | --- | --- | ---  |
| 19    | 6.2 | 5.7 | 5.9  | 10.8 | 10.2 | 10.5 | --- | --- | ---  | --- | --- | ---  |
| 20    | 6.2 | 5.7 | 6.0  | 10.3 | 9.4  | 9.9  | --- | --- | ---  | --- | --- | ---  |
| 21    | 6.0 | 5.3 | 5.6  | 9.5  | 8.6  | 9.1  | --- | --- | ---  | --- | --- | ---  |
| 22    | 5.4 | 5.2 | 5.3  | 8.7  | 7.8  | 8.3  | --- | --- | ---  | --- | --- | ---  |
| 23    | 5.4 | 5.2 | 5.3  | 8.0  | 7.2  | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 24    | 5.5 | 5.2 | 5.3  | 7.3  | 6.6  | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 25    | 5.6 | 5.3 | 5.5  | 6.7  | 6.3  | 6.5  | --- | --- | ---  | --- | --- | ---  |
| 26    | 5.7 | 5.4 | 5.5  | 6.8  | 6.3  | 6.6  | --- | --- | ---  | --- | --- | ---  |
| 27    | 5.8 | 5.6 | 5.7  | 7.2  | 6.7  | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 28    | 5.9 | 5.8 | 5.8  | 8.0  | 7.1  | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 29    | 6.1 | 5.8 | 5.9  | 8.7  | 8.0  | 8.4  | --- | --- | ---  | --- | --- | ---  |
| 30    | 6.0 | 5.7 | 5.9  | 8.8  | 8.5  | 8.6  | --- | --- | ---  | --- | --- | ---  |
| 31    | 5.9 | 5.6 | 5.8  | ---  | ---  | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 10.8 | 4.4  | 7.3  | --- | --- | ---  | --- | --- | ---  |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |     |      |       |     |      |       |     |      |     |     |      |
| 1     | ---      | --- | ---  | ---   | --- | ---  | 69    | 66  | 68   | --- | --- | ---  |
| 2     | ---      | --- | ---  | ---   | --- | ---  | 71    | 67  | 69   | --- | --- | ---  |
| 3     | ---      | --- | ---  | ---   | --- | ---  | 75    | 69  | 73   | --- | --- | ---  |
| 4     | ---      | --- | ---  | 59    | 55  | 57   | 77    | 73  | 75   | --- | --- | ---  |
| 5     | ---      | --- | ---  | 56    | 53  | 55   | 78    | 75  | 77   | --- | --- | ---  |
| 6     | ---      | --- | ---  | 54    | 50  | 53   | 78    | 76  | 77   | 80  | 77  | 78   |
| 7     | ---      | --- | ---  | 51    | 49  | 50   | 78    | 75  | 77   | 77  | 74  | 75   |
| 8     | ---      | --- | ---  | 52    | 49  | 51   | 79    | 75  | 77   | 76  | 74  | 75   |
| 9     | ---      | --- | ---  | 55    | 50  | 52   | 79    | 76  | 78   | 79  | 76  | 77   |
| 10    | ---      | --- | ---  | 58    | 53  | 56   | 80    | 77  | 79   | 83  | 79  | 81   |
| 11    | ---      | --- | ---  | 61    | 56  | 59   | 80    | 71  | 75   | 85  | 82  | 83   |
| 12    | ---      | --- | ---  | 66    | 60  | 63   | 73    | 64  | 67   | 88  | 84  | 85   |
| 13    | ---      | --- | ---  | ---   | --- | ---  | 67    | 63  | 65   | 89  | 87  | 88   |
| 14    | ---      | --- | ---  | 65    | 62  | 63   | 71    | 64  | 68   | 89  | 88  | 88   |
| 15    | ---      | --- | ---  | 64    | 62  | 63   | 71    | 67  | 69   | 90  | 88  | 89   |
| 16    | ---      | --- | ---  | 69    | 63  | 66   | 71    | 67  | 68   | 89  | 86  | 87   |
| 17    | ---      | --- | ---  | 71    | 67  | 69   | 71    | 67  | 69   | 87  | 86  | 86   |
| 18    | ---      | --- | ---  | 72    | 69  | 70   | 70    | 67  | 68   | 88  | 86  | 87   |
| 19    | ---      | --- | ---  | 71    | 67  | 69   | 70    | 67  | 68   | 88  | 86  | 87   |
| 20    | ---      | --- | ---  | ---   | --- | ---  | 71    | 67  | 69   | 87  | 86  | 86   |
| 21    | ---      | --- | ---  | 65    | 61  | 63   | 73    | 69  | 71   | 88  | 85  | 87   |
| 22    | ---      | --- | ---  | 65    | 62  | 64   | 76    | 72  | 73   | --- | --- | ---  |
| 23    | ---      | --- | ---  | 67    | 64  | 65   | 77    | 74  | 76   | --- | --- | ---  |
| 24    | ---      | --- | ---  | 68    | 64  | 66   | 78    | 75  | 77   | 92  | 90  | 91   |
| 25    | ---      | --- | ---  | ---   | --- | ---  | 77    | 73  | 75   | --- | --- | ---  |
| 26    | ---      | --- | ---  | 66    | 63  | 64   | 75    | 71  | 73   | --- | --- | ---  |
| 27    | ---      | --- | ---  | ---   | --- | ---  | 75    | 71  | 73   | 90  | 87  | 88   |
| 28    | ---      | --- | ---  | 68    | 64  | 66   | 79    | 73  | 76   | 90  | 88  | 89   |
| 29    | ---      | --- | ---  | 69    | 66  | 68   | 80    | 76  | 78   | 92  | 89  | 90   |
| 30    | ---      | --- | ---  | 69    | 66  | 68   | 80    | 77  | 79   | 93  | 90  | 91   |
| 31    | ---      | --- | ---  | ---   | --- | ---  | 79    | 76  | 78   | 92  | 90  | 91   |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | 80    | 63  | 73   | --- | --- | ---  |
| DAY   | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | 92       | 90  | 91   | 90    | 87  | 88   | 72    | 70  | 71   | 72  | 60  | 66   |
| 2     | 94       | 89  | 91   | 88    | 86  | 87   | 71    | 66  | 69   | 73  | 61  | 67   |
| 3     | 94       | 92  | 93   | 87    | 84  | 85   | 68    | 65  | 67   | 68  | 62  | 65   |
| 4     | 95       | 92  | 94   | 84    | 79  | 82   | 69    | 66  | 68   | 67  | 57  | 62   |
| 5     | ---      | --- | ---  | 80    | 76  | 78   | 71    | 68  | 69   | 61  | 56  | 59   |
| 6     | ---      | --- | ---  | 76    | 73  | 75   | 71    | 69  | 70   | 62  | 56  | 58   |
| 7     | 95       | 92  | 93   | 74    | 70  | 72   | 72    | 70  | 71   | 61  | 57  | 59   |
| 8     | 93       | 89  | 90   | 71    | 68  | 69   | 72    | 70  | 71   | 61  | 57  | 59   |
| 9     | 89       | 86  | 88   | 70    | 67  | 68   | 72    | 69  | 70   | 60  | 56  | 57   |
| 10    | 89       | 86  | 87   | 72    | 69  | 71   | 69    | 66  | 68   | 59  | 54  | 56   |
| 11    | 91       | 87  | 89   | 76    | 72  | 74   | 68    | 64  | 65   | 56  | 51  | 54   |
| 12    | 91       | 89  | 90   | 79    | 76  | 78   | 66    | 64  | 65   | 54  | 51  | 52   |
| 13    | 90       | 88  | 89   | 79    | 77  | 78   | ---   | --- | ---  | 53  | 49  | 51   |
| 14    | 89       | 87  | 88   | 80    | 78  | 79   | ---   | --- | ---  | 53  | 50  | 51   |
| 15    | 89       | 87  | 88   | 80    | 78  | 79   | ---   | --- | ---  | 57  | 52  | 55   |
| 16    | 88       | 86  | 87   | 79    | 76  | 78   | ---   | --- | ---  | 61  | 56  | 58   |
| 17    | 88       | 85  | 87   | 77    | 75  | 76   | ---   | --- | ---  | 64  | 60  | 62   |
| 18    | 89       | 86  | 88   | 76    | 75  | 75   | ---   | --- | ---  | 66  | 61  | 64   |
| 19    | 91       | 88  | 89   | 78    | 75  | 76   | ---   | --- | ---  | 67  | 63  | 66   |
| 20    | 91       | 89  | 90   | 80    | 77  | 78   | 68    | 65  | 66   | 67  | 61  | 64   |
| 21    | 90       | 88  | 89   | 80    | 78  | 79   | 66    | 62  | 64   | 62  | 58  | 60   |
| 22    | 88       | 85  | 87   | 79    | 76  | 77   | 63    | 61  | 62   | 60  | 55  | 58   |
| 23    | 86       | 83  | 84   | 77    | 75  | 76   | 63    | 60  | 62   | 61  | 55  | 58   |
| 24    | 84       | 82  | 83   | 79    | 76  | 77   | 64    | 61  | 62   | 58  | 52  | 56   |
| 25    | 84       | 81  | 83   | 80    | 77  | 78   | 63    | 61  | 62   | 56  | 49  | 54   |
| 26    | 84       | 81  | 83   | 81    | 79  | 80   | 64    | 61  | 63   | 54  | 48  | 52   |
| 27    | 87       | 83  | 85   | 80    | 77  | 78   | ---   | --- | ---  | 57  | 50  | 54   |
| 28    | 88       | 86  | 87   | 78    | 75  | 77   | ---   | --- | ---  | 60  | 53  | 57   |
| 29    | 89       | 86  | 88   | 77    | 72  | 74   | ---   | --- | ---  | 58  | 53  | 57   |
| 30    | ---      | --- | ---  | 73    | 70  | 71   | ---   | --- | ---  | 59  | 55  | 57   |
| 31    | ---      | --- | ---  | 72    | 70  | 71   | ---   | --- | ---  | 58  | 54  | 57   |
| MONTH | ---      | --- | ---  | 90    | 67  | 77   | ---   | --- | ---  | 73  | 48  | 58   |

## CAPE FEAR RIVER BASIN

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 58  | 52  | 56   | 72  | 68  | 70   | 65  | 61  | 63   | 63  | 56  | 59   |
| 2     | 58  | 52  | 56   | 70  | 65  | 68   | 63  | 59  | 61   | 60  | 55  | 58   |
| 3     | 57  | 52  | 55   | 73  | 69  | 71   | 66  | 59  | 63   | 58  | 54  | 55   |
| 4     | 60  | 51  | 55   | 73  | 71  | 72   | 66  | 60  | 63   | 57  | 55  | 56   |
| 5     | 61  | 57  | 59   | 73  | 70  | 71   | 63  | 57  | 60   | 57  | 55  | 56   |
| 6     | 61  | 57  | 59   | 71  | 68  | 69   | 62  | 61  | 62   | 58  | 55  | 56   |
| 7     | 63  | 59  | 61   | 69  | 64  | 66   | 65  | 61  | 63   | 60  | 56  | 58   |
| 8     | 65  | 62  | 64   | 64  | 62  | 63   | 67  | 64  | 66   | 59  | 57  | 59   |
| 9     | 65  | 62  | 64   | 63  | 60  | 62   | 69  | 66  | 68   | 63  | 59  | 61   |
| 10    | 70  | 59  | 63   | 64  | 59  | 61   | 70  | 68  | 69   | 61  | 56  | 59   |
| 11    | 65  | 61  | 63   | 66  | 60  | 63   | 68  | 64  | 67   | 58  | 54  | 56   |
| 12    | 65  | 61  | 63   | 64  | 61  | 63   | 66  | 62  | 64   | 58  | 54  | 56   |
| 13    | 66  | 62  | 64   | 61  | 55  | 59   | 70  | 62  | 68   | 58  | 55  | 57   |
| 14    | 68  | 62  | 65   | 61  | 56  | 59   | 70  | 66  | 68   | 59  | 55  | 57   |
| 15    | 73  | 64  | 69   | 61  | 53  | 57   | 69  | 61  | 66   | 59  | 55  | 57   |
| 16    | 74  | 69  | 71   | 56  | 53  | 55   | 61  | 55  | 59   | 58  | 54  | 56   |
| 17    | 72  | 68  | 69   | 64  | 53  | 57   | 55  | 50  | 53   | 57  | 53  | 55   |
| 18    | 71  | 67  | 69   | 63  | 57  | 60   | 51  | 48  | 49   | 58  | 54  | 56   |
| 19    | 72  | 69  | 70   | 59  | 54  | 56   | 49  | 44  | 46   | 60  | 56  | 58   |
| 20    | 70  | 68  | 69   | 57  | 50  | 54   | 44  | 41  | 42   | 63  | 57  | 61   |
| 21    | 71  | 67  | 68   | 56  | 50  | 52   | 42  | 40  | 41   | 67  | 61  | 64   |
| 22    | 71  | 67  | 69   | 53  | 45  | 50   | 41  | 38  | 39   | 71  | 65  | 68   |
| 23    | 70  | 67  | 69   | 54  | 44  | 50   | 38  | 35  | 37   | 72  | 68  | 70   |
| 24    | 70  | 67  | 68   | 56  | 45  | 52   | 38  | 35  | 37   | 70  | 68  | 69   |
| 25    | 68  | 65  | 67   | 63  | 55  | 58   | 39  | 36  | 37   | 69  | 66  | 68   |
| 26    | 67  | 64  | 65   | 62  | 56  | 60   | 46  | 39  | 42   | 67  | 64  | 65   |
| 27    | 68  | 65  | 67   | 62  | 57  | 59   | 51  | 45  | 48   | 65  | 62  | 64   |
| 28    | 71  | 67  | 69   | 62  | 55  | 58   | 57  | 51  | 55   | 63  | 61  | 63   |
| 29    | 73  | 69  | 72   | 63  | 56  | 59   | 61  | 55  | 58   | 62  | 60  | 61   |
| 30    | 72  | 65  | 70   | 66  | 58  | 61   | 64  | 59  | 61   | 61  | 59  | 60   |
| 31    | --- | --- | ---  | 66  | 60  | 62   | 64  | 57  | 61   | --- | --- | ---  |
| MONTH | 74  | 51  | 65   | 73  | 44  | 61   | 70  | 35  | 56   | 72  | 53  | 60   |

02108566 NORTHEAST CAPE FEAR RIVER NEAR BURGAW, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 61  | 59  | 60   | 63  | 59  | 61   | 82  | 78  | 80   | --- | --- | ---  |
| 2     | 62  | 59  | 61   | 61  | 57  | 58   | 84  | 81  | 82   | --- | --- | ---  |
| 3     | 63  | 61  | 62   | 57  | 53  | 56   | --- | --- | ---  | --- | --- | ---  |
| 4     | 63  | 62  | 63   | 54  | 49  | 52   | --- | --- | ---  | --- | --- | ---  |
| 5     | 64  | 61  | 63   | 56  | 50  | 53   | --- | --- | ---  | --- | --- | ---  |
| 6     | 65  | 62  | 63   | 54  | 52  | 53   | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | 57  | 51  | 55   | --- | --- | ---  | --- | --- | ---  |
| 8     | 72  | 66  | 68   | 60  | 55  | 58   | --- | --- | ---  | --- | --- | ---  |
| 9     | 71  | 66  | 68   | 65  | 57  | 61   | --- | --- | ---  | --- | --- | ---  |
| 10    | 70  | 64  | 67   | 67  | 62  | 65   | --- | --- | ---  | --- | --- | ---  |
| 11    | 69  | 61  | 65   | 68  | 63  | 66   | --- | --- | ---  | --- | --- | ---  |
| 12    | 67  | 58  | 63   | 71  | 65  | 68   | --- | --- | ---  | --- | --- | ---  |
| 13    | 63  | 56  | 59   | 78  | 68  | 73   | --- | --- | ---  | --- | --- | ---  |
| 14    | 60  | 51  | 56   | 79  | 76  | 78   | --- | --- | ---  | --- | --- | ---  |
| 15    | 58  | 52  | 55   | 81  | 77  | 79   | --- | --- | ---  | --- | --- | ---  |
| 16    | 59  | 53  | 56   | 87  | 80  | 84   | --- | --- | ---  | --- | --- | ---  |
| 17    | 60  | 55  | 57   | 93  | 87  | 90   | --- | --- | ---  | --- | --- | ---  |
| 18    | 65  | 58  | 61   | 94  | 91  | 92   | --- | --- | ---  | --- | --- | ---  |
| 19    | 66  | 61  | 64   | 94  | 90  | 92   | --- | --- | ---  | --- | --- | ---  |
| 20    | 67  | 62  | 65   | 91  | 86  | 89   | --- | --- | ---  | --- | --- | ---  |
| 21    | 65  | 58  | 61   | 87  | 81  | 84   | --- | --- | ---  | --- | --- | ---  |
| 22    | 59  | 56  | 58   | 82  | 75  | 79   | --- | --- | ---  | --- | --- | ---  |
| 23    | 58  | 56  | 57   | 77  | 71  | 74   | --- | --- | ---  | --- | --- | ---  |
| 24    | 58  | 55  | 56   | 72  | 66  | 69   | --- | --- | ---  | --- | --- | ---  |
| 25    | 58  | 56  | 57   | 68  | 65  | 67   | --- | --- | ---  | --- | --- | ---  |
| 26    | 59  | 56  | 57   | 68  | 63  | 66   | --- | --- | ---  | --- | --- | ---  |
| 27    | 60  | 58  | 59   | 70  | 66  | 68   | --- | --- | ---  | --- | --- | ---  |
| 28    | 61  | 59  | 60   | 76  | 69  | 72   | --- | --- | ---  | --- | --- | ---  |
| 29    | 63  | 60  | 61   | 80  | 76  | 78   | --- | --- | ---  | --- | --- | ---  |
| 30    | 62  | 59  | 61   | 81  | 78  | 79   | --- | --- | ---  | --- | --- | ---  |
| 31    | 62  | 59  | 61   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 94  | 49  | 71   | --- | --- | ---  | --- | --- | ---  |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC

LOCATION.--Lat 34°15'32", long 77°56'54", New Hanover County, Hydrologic Unit 03030005, at railroad bridge, 1.25 mi upstream of mouth, 2 mi northwest of Wilmington.

DRAINAGE AREA.--1,669 mi<sup>2</sup>

PERIOD OF RECORD.--September 2003 to December 2004 (discontinued).

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP AND BOTTOM): September 2003 to December 2004.

SALINITY (TOP AND BOTTOM): September 2003 to December 2004.

pH (TOP AND BOTTOM): September 2003 to December 2004.

WATER TEMPERATURE (TOP AND BOTTOM): September 2003 to December 2004.

DISSOLVED OXYGEN (TOP AND BOTTOM) : September 2003 to December 2004.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP AND BOTTOM): September 2003 to December 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from September 2003 to December 2004.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                                     | MAXIMUM RECORDED   | MINIMUM RECORDED                        |
|---|--|---|
| SPECIFIC CONDUCTANCE (TOP), microsiemens        | 31,500, March 30, 2004                                     | 60, on several days during the period   |
| SPEICIFC CONDUCTANCE (BOTTOM), microsiemens     | 35,100, October 8, 2004                                    | 70, August 21, 22, September 19, 2004   |
| SALINITY (TOP), ppt                             | 19.6, March 30, 2004                                       | 0.02, on several days during the period |
| SALINITY (BOTTOM), ppt                          | 22.1, October 8, 2004                                      | 0.03, on many days during the period    |
| pH (TOP), standard units                        | 7.8, March 30, 2004  | 5.5, on several days during the period  |
| pH (BOTTOM), standard units                     | 7.8, September 18, 2003, February 3,<br>March 29, 30, 2004 | 5.6, August 25, 2004                    |
| WATER TEMPERATURE (TOP), °C                     | 30.5, July 7, 20, 21, 2004                                 | 4.9, February 2, 2004                   |
| WATER TEMPERATURE (BOTTOM), °C                  | 30.3, August 4, 2004                                       | 5.2, February 2, 2004                   |
| DISSOLVED OXYGEN (TOP), mg/L                    | 11.5, February 7, 8, 2004                                  | 2.7, July 26, 2004                      |
| DISSOLVED OXYGEN (BOTTOM), mg/L                 | 11.4, February 8, 2004                                     | 2.4, July 25, 26, 2004                  |
| DISSOLVED OXYGEN, PERCENT SATURATION (TOP),%    | 97, February 7, 8, 2004                                    | 35, November 7, 2003, July 26, 2004     |
| DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM),% | 96, February 7, 8, 2004                                    | 31, July 25, 2004                       |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN   | MEAN   | MAX      | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX     | MIN    | MEAN   |
|-------|----------|-------|--------|----------|--------|--------|----------|--------|--------|---------|--------|--------|
|       | OCTOBER  |       |        | NOVEMBER |        |        | DECEMBER |        |        | JANUARY |        |        |
| 1     | 3,780    | 680   | 1,510  | 1,610    | 70     | 353    | 7,590    | 230    | 4,010  | 6,080   | 100    | 2,180  |
| 2     | 8,930    | 540   | 2,520  | 1,700    | 70     | 357    | 10,400   | 170    | 3,890  | 8,860   | 130    | 3,640  |
| 3     | ---      | ---   | ---    | 3,060    | 60     | 642    | 12,900   | 1,010  | 6,980  | 10,200  | 220    | 4,730  |
| 4     | 14,400   | 4,020 | 8,850  | 3,070    | 60     | 752    | 16,400   | 2,840  | 9,650  | 10,300  | 330    | 5,070  |
| 5     | 13,400   | 850   | 8,070  | 1,850    | 60     | 426    | 18,300   | 7,600  | 12,700 | 10,200  | 390    | 5,320  |
| 6     | 13,400   | 2,910 | 8,710  | 1,250    | 60     | 300    | 17,000   | 4,510  | 10,800 | 8,010   | 260    | 3,610  |
| 7     | 13,600   | 5,740 | 9,720  | 730      | 60     | 193    | 18,700   | 3,290  | 10,900 | 12,100  | 240    | 5,600  |
| 8     | 13,400   | 5,900 | 9,440  | 1,400    | 60     | 344    | 17,400   | 5,400  | 11,600 | 13,200  | 1,200  | 7,790  |
| 9     | 10,300   | 420   | 4,950  | 4,810    | 60     | 860    | 17,100   | 5,200  | 10,800 | 15,300  | 1,990  | 8,370  |
| 10    | ---      | ---   | ---    | 11,700   | 70     | 2,970  | 16,600   | 3,080  | 10,400 | 15,800  | 800    | 7,900  |
| 11    | 9,080    | 160   | 2,950  | 10,800   | 90     | 2,960  | 13,900   | 510    | 6,550  | 19,100  | 2,730  | 11,400 |
| 12    | 10,000   | 170   | 3,830  | 7,230    | 80     | 2,400  | 6,710    | 120    | 1,910  | 17,200  | 6,030  | 11,700 |
| 13    | 9,830    | 180   | 3,950  | 4,650    | 80     | 1,170  | 4,780    | 120    | 1,560  | 14,100  | 2,840  | 8,550  |
| 14    | 10,000   | 160   | 4,220  | 6,380    | 80     | 1,920  | 8,160    | 130    | 2,650  | 13,300  | 4,120  | 8,790  |
| 15    | 9,750    | 130   | 2,560  | 11,100   | 190    | 3,770  | 3,270    | 100    | 373    | 15,400  | 2,220  | 9,080  |
| 16    | 7,890    | 120   | 2,300  | 10,700   | 270    | 4,530  | 1,730    | 80     | 297    | 15,000  | 3,110  | 9,360  |
| 17    | 8,160    | 150   | 2,540  | 12,000   | 350    | 5,570  | 810      | 70     | 173    | 15,500  | 2,630  | 10,100 |
| 18    | 12,200   | 170   | 3,780  | 15,000   | 1,380  | 8,460  | 110      | 70     | 85     | 17,300  | 4,220  | 11,100 |
| 19    | 17,500   | 1,590 | 8,910  | 15,200   | 4,340  | 11,000 | 100      | 70     | 82     | 12,900  | 2,750  | 8,490  |
| 20    | 15,500   | 410   | 8,690  | 12,500   | 600    | 6,080  | 90       | 70     | 81     | 15,400  | 2,330  | 9,170  |
| 21    | 18,300   | 2,960 | 10,000 | 13,900   | 1,990  | 8,200  | 90       | 70     | 82     | 17,000  | 3,540  | 10,500 |
| 22    | 16,200   | 1,190 | 10,000 | 12,200   | 2,040  | 6,390  | 90       | 70     | 83     | 14,900  | 3,940  | 9,910  |
| 23    | 16,900   | 3,720 | 11,000 | 9,980    | 200    | 4,210  | 100      | 70     | 87     | 12,500  | 2,010  | 7,910  |
| 24    | 16,200   | 6,750 | 11,300 | 8,340    | 130    | 3,430  | 110      | 70     | 92     | 13,300  | 3,770  | 8,310  |
| 25    | 15,200   | 5,000 | 9,990  | 6,790    | 130    | 2,770  | 100      | 80     | 89     | 13,600  | 1,870  | 8,330  |
| 26    | 13,600   | 2,790 | 8,400  | 9,770    | 140    | 3,880  | 100      | 80     | 90     | 17,800  | 4,750  | 10,900 |
| 27    | 14,300   | 2,040 | 8,210  | 11,000   | 350    | 5,200  | 360      | 80     | 114    | 17,200  | 3,440  | 9,200  |
| 28    | 14,300   | 2,370 | 8,320  | 10,600   | 270    | 5,120  | 1,990    | 80     | 422    | 15,400  | 350    | 5,770  |
| 29    | 12,000   | 840   | 5,780  | 5,410    | 110    | 1,870  | 3,260    | 90     | 876    | 13,400  | 660    | 6,250  |
| 30    | 5,480    | 120   | 1,430  | 9,200    | 240    | 3,980  | 4,970    | 90     | 1,020  | 10,800  | 490    | 5,870  |
| 31    | 1,890    | 80    | 356    | ---      | ---    | ---    | 4,070    | 90     | 1,570  | 13,800  | 360    | 6,420  |
| MONTH | ---      | ---   | ---    | 15,200   | 60     | 3,340  | 18,700   | 70     | 3,550  | 19,100  | 100    | 7,780  |
| DAY   | MAX      | MIN   | MEAN   | MAX      | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX     | MIN    | MEAN   |
|       | FEBRUARY |       |        | MARCH    |        |        | APRIL    |        |        | MAY     |        |        |
| 1     | 15,300   | 1,700 | 7,680  | 5,050    | 80     | 803    | 24,300   | 14,200 | 18,800 | 19,000  | 10,100 | 14,500 |
| 2     | 21,100   | 2,320 | 10,800 | 2,180    | 80     | 530    | 22,400   | 12,000 | 16,700 | 14,500  | 1,860  | 9,250  |
| 3     | 20,000   | 5,090 | 13,100 | 1,860    | 80     | 427    | 20,700   | 10,500 | 16,100 | 10,500  | 171    | 4,530  |
| 4     | 16,700   | 890   | 8,050  | 1,590    | 80     | 489    | 19,600   | 11,500 | 16,000 | 5,380   | 128    | 1,220  |
| 5     | 16,500   | 1,590 | 8,560  | 620      | 80     | 174    | 18,700   | 8,630  | 14,100 | 4,290   | 140    | 1,270  |
| 6     | 13,800   | 3,850 | 9,150  | 130      | 80     | 103    | 18,500   | 10,600 | 14,300 | 2,520   | 120    | 508    |
| 7     | 9,690    | 1,860 | 5,350  | 110      | 80     | 95     | 18,200   | 8,670  | 13,200 | 320     | 120    | 156    |
| 8     | 5,300    | 140   | 2,440  | 110      | 80     | 97     | 16,400   | 9,590  | 12,500 | 150     | 100    | 129    |
| 9     | 4,650    | 220   | 2,320  | 320      | 90     | 110    | 16,200   | 9,130  | 12,200 | 130     | 90     | 117    |
| 10    | 4,150    | 230   | 1,850  | 5,490    | 90     | 546    | 17,200   | 8,850  | 13,100 | 120     | 90     | 109    |
| 11    | 3,320    | 180   | 1,470  | 7,820    | 200    | 3,640  | 16,800   | 5,900  | 11,000 | 130     | 90     | 105    |
| 12    | 2,820    | 160   | 1,310  | 9,270    | 220    | 4,220  | 13,300   | 6,500  | 10,100 | 120     | 90     | 102    |
| 13    | 3,590    | 130   | 1,340  | 6,370    | 150    | 2,760  | 12,000   | 4,610  | 8,380  | 270     | 80     | 114    |
| 14    | 4,950    | 110   | 1,480  | 6,520    | 150    | 2,610  | ---      | ---    | ---    | 720     | 90     | 242    |
| 15    | 4,720    | 110   | 1,310  | 5,920    | 150    | 2,900  | ---      | ---    | ---    | 1,950   | 90     | 513    |
| 16    | 4,360    | 110   | 1,450  | 8,170    | 180    | 4,180  | 10,400   | 431    | 4,550  | 3,910   | 100    | 1,110  |
| 17    | 6,750    | 110   | 2,600  | 8,200    | 640    | 4,340  | 6,640    | 212    | 2,990  | 5,510   | 140    | 1,910  |
| 18    | 7,420    | 110   | 2,200  | 9,020    | 680    | 4,910  | 4,450    | 172    | 1,120  | 7,290   | 260    | 3,000  |
| 19    | 4,830    | 100   | 1,600  | 6,880    | 990    | 4,020  | 1,650    | 142    | 359    | 8,530   | 940    | 4,350  |
| 20    | 1,490    | 100   | 450    | 6,590    | 1,250  | 3,780  | 437      | 143    | 192    | 9,240   | 690    | 4,750  |
| 21    | 290      | 90    | 132    | 5,650    | 1,430  | 3,020  | 214      | 143    | 171    | 9,490   | 970    | 5,180  |
| 22    | 120      | 90    | 99     | 5,750    | 220    | 1,900  | 277      | 123    | 169    | 10,700  | 3,220  | 6,920  |
| 23    | 110      | 90    | 98     | 6,220    | 450    | 2,700  | 421      | 124    | 203    | 11,200  | 4,390  | 7,720  |
| 24    | 660      | 90    | 109    | 6,150    | 160    | 2,300  | 1,040    | 134    | 333    | 12,700  | 4,970  | 8,120  |
| 25    | 2,740    | 90    | 726    | 4,710    | 170    | 2,070  | 4,520    | 176    | 1,750  | 11,900  | 5,240  | 8,280  |
| 26    | 7,240    | 90    | 1,690  | 5,180    | 200    | 2,200  | 7,560    | 1,460  | 4,430  | 12,700  | 5,830  | 8,530  |
| 27    | 17,900   | 310   | 5,980  | 8,050    | 1,040  | 3,970  | 12,400   | 1,660  | 5,570  | 12,300  | 5,670  | 9,290  |
| 28    | 18,300   | 230   | 5,170  | 10,900   | 2,620  | 5,860  | 22,200   | 3,670  | 9,790  | 14,500  | 8,410  | 11,700 |
| 29    | 9,620    | 90    | 1,770  | 24,900   | 4,760  | 14,700 | 18,800   | 8,380  | 14,000 | 15,900  | 7,630  | 12,000 |
| 30    | ---      | ---   | ---    | 31,500   | 11,400 | 20,400 | 19,000   | 6,610  | 13,600 | 18,200  | 11,100 | 14,600 |
| 31    | ---      | ---   | ---    | 29,100   | 16,100 | 21,700 | ---      | ---    | ---    | 19,100  | 10,800 | 15,200 |
| MONTH | 21,100   | 90    | 3,460  | 31,500   | 80     | 3,920  | ---      | ---    | ---    | 19,100  | 80     | 5,020  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE   |        |        | JULY   |        |        | AUGUST |        |        | SEPTEMBER |       |       |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|-------|
|       | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX       | MIN   | MEAN  |
| 1     | 18,600 | 9,530  | 14,500 | 18,300 | 8,060  | 13,700 | 21,100 | 12,200 | 16,500 | 530       | 110   | 201   |
| 2     | 19,000 | 11,200 | 14,900 | 17,800 | 5,250  | 12,100 | 20,300 | 10,100 | 15,400 | 170       | 110   | 141   |
| 3     | 18,800 | 10,100 | 14,700 | 16,300 | 6,370  | 11,400 | 18,600 | 10,200 | 14,000 | 140       | 110   | 126   |
| 4     | 18,900 | 11,800 | 15,000 | 16,800 | 6,200  | 11,500 | 18,800 | 10,400 | 14,000 | 130       | 110   | 117   |
| 5     | 19,900 | 10,700 | 15,000 | 18,300 | 6,240  | 11,800 | 19,000 | 10,800 | 14,100 | 320       | 100   | 134   |
| 6     | 20,400 | 12,900 | 16,400 | 16,800 | 6,270  | 11,400 | 17,400 | 5,370  | 11,300 | 1,820     | 110   | 496   |
| 7     | 21,300 | 12,700 | 16,600 | 17,400 | 8,540  | 13,100 | 22,200 | 7,770  | 14,000 | 5,610     | 100   | 1,350 |
| 8     | 19,300 | 11,300 | 15,400 | 18,200 | 8,920  | 13,600 | 21,800 | 6,180  | 13,900 | 3,750     | 90    | 1,210 |
| 9     | 18,900 | 10,900 | 14,400 | 18,200 | 8,440  | 13,500 | 21,700 | 2,160  | 10,900 | 1,000     | 90    | 180   |
| 10    | 19,200 | 9,680  | 14,400 | 17,400 | 6,720  | 12,400 | 21,300 | 3,890  | 11,600 | 710       | 90    | 158   |
| 11    | 19,600 | 8,840  | 14,300 | 18,400 | 6,290  | 12,600 | 19,900 | 5,850  | 13,400 | 360       | 90    | 120   |
| 12    | 18,000 | 5,270  | 13,100 | 20,300 | 5,810  | 13,200 | 18,200 | 5,100  | 12,800 | 1,030     | 80    | 194   |
| 13    | 20,400 | 10,800 | 15,100 | 20,000 | 7,940  | 14,900 | 16,200 | 330    | 8,890  | 680       | 80    | 184   |
| 14    | 19,300 | 8,250  | 14,500 | 20,700 | 7,650  | 15,200 | 9,520  | 330    | 4,980  | 420       | 80    | 122   |
| 15    | 17,200 | 6,950  | 13,200 | 20,800 | 9,140  | 15,500 | 8,790  | 110    | 1,510  | 110       | 80    | 91    |
| 16    | 16,000 | 4,540  | 11,200 | 20,800 | 8,330  | 15,400 | 2,790  | 100    | 420    | 100       | 80    | 91    |
| 17    | 16,200 | 5,320  | 11,100 | 21,500 | 10,900 | 16,200 | 550    | 90     | 145    | 110       | 80    | 96    |
| 18    | 16,800 | 7,690  | 12,200 | 21,300 | 7,510  | 14,900 | 130    | 90     | 111    | 100       | 80    | 90    |
| 19    | 19,500 | 9,300  | 13,500 | 20,600 | 7,980  | 14,600 | 120    | 80     | 99     | 100       | 80    | 90    |
| 20    | 20,000 | 8,780  | 15,000 | 19,100 | 8,380  | 14,400 | 111    | 70     | 88     | 8,950     | 80    | 1,270 |
| 21    | 22,400 | 12,200 | 17,300 | 20,800 | 9,490  | 15,500 | 101    | 71     | 83     | 16,400    | 90    | 4,790 |
| 22    | 22,600 | 10,800 | 17,000 | 22,400 | 10,000 | 16,700 | 92     | 71     | 81     | 10,700    | 110   | 4,870 |
| 23    | 19,500 | 8,720  | 14,100 | 22,100 | 12,500 | 17,700 | 92     | 71     | 84     | 8,450     | 79    | 2,750 |
| 24    | 19,600 | 5,490  | 12,300 | 21,500 | 8,420  | 15,600 | 113    | 72     | 93     | 9,350     | 99    | 3,170 |
| 25    | 19,200 | 7,920  | 14,600 | 21,100 | 4,120  | 14,000 | 860    | 80     | 179    | 9,760     | 176   | 4,330 |
| 26    | 18,900 | 10,800 | 15,600 | 23,200 | 6,980  | 16,000 | 4,930  | 90     | 977    | 11,400    | 302   | 5,140 |
| 27    | 21,100 | 9,880  | 15,300 | 23,400 | 9,690  | 17,800 | 5,400  | 90     | 1,480  | 11,900    | 1,790 | 6,630 |
| 28    | 20,300 | 8,580  | 15,400 | 21,900 | 8,120  | 17,100 | 5,750  | 100    | 1,920  | 11,300    | 5,060 | 7,160 |
| 29    | 19,400 | 6,880  | 14,000 | 20,100 | 4,920  | 14,200 | 6,340  | 280    | 2,610  | 7,090     | 300   | 3,510 |
| 30    | 19,100 | 8,550  | 14,500 | 20,600 | 6,240  | 13,700 | 6,560  | 140    | 2,240  | 7,420     | 260   | 3,500 |
| 31    | ---    | ---    | ---    | 21,300 | 10,400 | 15,900 | 2,080  | 110    | 512    | ---       | ---   | ---   |
| MONTH | 22,600 | 4,540  | 14,500 | 23,400 | 4,120  | 14,400 | 22,200 | 70     | 6,080  | 16,400    | 79    | 1,740 |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX      | MIN   | MEAN  | MAX     | MIN | MEAN |
|-------|---------|--------|--------|----------|--------|--------|----------|-------|-------|---------|-----|------|
|       | OCTOBER |        |        | NOVEMBER |        |        | DECEMBER |       |       | JANUARY |     |      |
| 1     | 9,000   | 1,980  | 4,910  | 19,600   | 8,740  | 14,700 | 11,000   | 2,170 | 6,140 | ---     | --- | ---  |
| 2     | 7,670   | 2,330  | 4,400  | 21,200   | 11,200 | 16,400 | ---      | ---   | ---   | ---     | --- | ---  |
| 3     | 5,260   | 630    | 2,900  | 22,300   | 12,400 | 16,400 | ---      | ---   | ---   | ---     | --- | ---  |
| 4     | 6,330   | 780    | 2,810  | 23,800   | 14,000 | 18,700 | ---      | ---   | ---   | ---     | --- | ---  |
| 5     | 8,130   | 500    | 2,970  | 25,400   | 9,820  | 17,600 | ---      | ---   | ---   | ---     | --- | ---  |
| 6     | 15,200  | 520    | 4,740  | 24,300   | 16,700 | 21,000 | ---      | ---   | ---   | ---     | --- | ---  |
| 7     | 19,000  | 3,260  | 8,550  | 24,500   | 15,600 | 20,000 | ---      | ---   | ---   | ---     | --- | ---  |
| 8     | 25,500  | 7,560  | 13,200 | 22,700   | 13,300 | 19,200 | ---      | ---   | ---   | ---     | --- | ---  |
| 9     | ---     | ---    | ---    | 24,900   | 14,600 | 20,400 | ---      | ---   | ---   | ---     | --- | ---  |
| 10    | ---     | ---    | ---    | 26,600   | 17,600 | 22,100 | ---      | ---   | ---   | ---     | --- | ---  |
| 11    | 23,600  | 14,200 | 19,600 | 26,000   | 17,800 | 22,300 | ---      | ---   | ---   | ---     | --- | ---  |
| 12    | 23,100  | 17,500 | 20,300 | 26,000   | 18,300 | 22,400 | ---      | ---   | ---   | ---     | --- | ---  |
| 13    | 22,200  | 18,200 | 20,000 | 23,200   | 13,700 | 19,300 | ---      | ---   | ---   | ---     | --- | ---  |
| 14    | ---     | ---    | ---    | 24,200   | 11,400 | 18,800 | ---      | ---   | ---   | ---     | --- | ---  |
| 15    | ---     | ---    | ---    | 25,300   | 14,400 | 19,900 | ---      | ---   | ---   | ---     | --- | ---  |
| 16    | 18,800  | 12,000 | 15,400 | 23,600   | 14,200 | 19,100 | ---      | ---   | ---   | ---     | --- | ---  |
| 17    | 16,300  | 8,270  | 12,700 | 21,300   | 11,500 | 16,500 | ---      | ---   | ---   | ---     | --- | ---  |
| 18    | 17,000  | 7,460  | 11,900 | 18,800   | 9,020  | 13,600 | ---      | ---   | ---   | ---     | --- | ---  |
| 19    | 15,600  | 6,550  | 11,400 | 14,900   | 7,530  | 11,400 | ---      | ---   | ---   | ---     | --- | ---  |
| 20    | 16,600  | 4,230  | 10,600 | 13,200   | 6,220  | 9,950  | ---      | ---   | ---   | ---     | --- | ---  |
| 21    | 20,300  | 7,810  | 13,400 | 12,400   | 4,610  | 8,900  | ---      | ---   | ---   | ---     | --- | ---  |
| 22    | 24,300  | 13,700 | 18,100 | 14,700   | 4,650  | 10,100 | ---      | ---   | ---   | ---     | --- | ---  |
| 23    | 26,000  | 17,400 | 21,000 | 15,000   | 7,260  | 11,100 | ---      | ---   | ---   | ---     | --- | ---  |
| 24    | 25,500  | 19,700 | 22,200 | 15,700   | 5,990  | 11,000 | ---      | ---   | ---   | ---     | --- | ---  |
| 25    | 24,400  | 18,900 | 21,500 | 14,400   | 7,230  | 9,630  | ---      | ---   | ---   | ---     | --- | ---  |
| 26    | 23,000  | 17,700 | 20,200 | 11,600   | 770    | 6,730  | ---      | ---   | ---   | ---     | --- | ---  |
| 27    | 22,600  | 16,600 | 19,200 | 14,000   | 2,020  | 8,430  | ---      | ---   | ---   | ---     | --- | ---  |
| 28    | 22,100  | 14,600 | 18,000 | 12,200   | 2,170  | 7,510  | ---      | ---   | ---   | ---     | --- | ---  |
| 29    | 22,100  | 13,700 | 17,700 | 11,700   | 280    | 5,090  | ---      | ---   | ---   | ---     | --- | ---  |
| 30    | 22,400  | 13,600 | 17,500 | 12,100   | 1,320  | 6,870  | ---      | ---   | ---   | ---     | --- | ---  |
| 31    | 20,100  | 11,700 | 16,000 | ---      | ---    | ---    | ---      | ---   | ---   | ---     | --- | ---  |
| MONTH | ---     | ---    | ---    | 26,600   | 280    | 14,800 | ---      | ---   | ---   | ---     | --- | ---  |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX    | MIN   | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   |
|-------|--------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
|       |        |       |        |        |        |        |        |        |        |        |        |        |
| 1     | 4,880  | 680   | 1,630  | 2,950  | 90     | 465    | 11,400 | 260    | 5,920  | 11,000 | 100    | 4,060  |
| 2     | 11,400 | 540   | 3,170  | 2,050  | 90     | 476    | 15,700 | 210    | 6,450  | 15,100 | 140    | 6,580  |
| 3     | ---    | ---   | ---    | 4,950  | 80     | 960    | 16,600 | 1,630  | 10,100 | 19,100 | 240    | 8,680  |
| 4     | 18,700 | 4,560 | 11,000 | 4,610  | 80     | 1,130  | 21,000 | 3,910  | 13,200 | 18,200 | 450    | 8,520  |
| 5     | 16,000 | 1,400 | 9,880  | 3,280  | 80     | 606    | 23,900 | 9,080  | 16,100 | 14,900 | 560    | 7,030  |
| 6     | 15,200 | 3,770 | 10,200 | 1,530  | 80     | 383    | 21,400 | 5,780  | 14,400 | 11,400 | 320    | 5,450  |
| 7     | 14,800 | 6,580 | 10,700 | 820    | 80     | 239    | 20,800 | 4,730  | 14,000 | 15,900 | 300    | 8,210  |
| 8     | 14,700 | 6,560 | 10,300 | 1,750  | 80     | 449    | 19,500 | 6,750  | 13,800 | 18,200 | 1,720  | 10,400 |
| 9     | 11,300 | 480   | 6,020  | 9,700  | 80     | 1,840  | 19,100 | 6,130  | 12,700 | 17,300 | 2,640  | 10,300 |
| 10    | ---    | ---   | ---    | 16,400 | 90     | 5,370  | 18,500 | 4,000  | 12,200 | 22,000 | 850    | 10,900 |
| 11    | 11,500 | 150   | 4,310  | 15,500 | 120    | 5,460  | 15,500 | 830    | 8,260  | 24,800 | 4,120  | 15,400 |
| 12    | 13,200 | 170   | 5,480  | 12,200 | 100    | 4,180  | 10,700 | 130    | 3,440  | 23,100 | 6,950  | 15,000 |
| 13    | 12,500 | 180   | 5,570  | 8,560  | 100    | 2,390  | 10,400 | 130    | 3,110  | 19,100 | 3,370  | 11,700 |
| 14    | 16,000 | 160   | 6,350  | 13,200 | 100    | 4,080  | 17,600 | 140    | 6,130  | 16,600 | 4,900  | 11,400 |
| 15    | 12,200 | 120   | 4,220  | 15,200 | 230    | 7,040  | 7,330  | 100    | 1,160  | 17,200 | 2,650  | 11,200 |
| 16    | 14,300 | 110   | 4,650  | 18,700 | 340    | 8,810  | 3,110  | 90     | 526    | 19,400 | 3,810  | 12,400 |
| 17    | 18,000 | 150   | 5,880  | 19,100 | 760    | 9,840  | 1,060  | 80     | 205    | 18,900 | 3,200  | 12,600 |
| 18    | 24,200 | 180   | 9,450  | 19,600 | 2,790  | 12,100 | 110    | 80     | 91     | 18,300 | 4,850  | 12,800 |
| 19    | 28,300 | 3,120 | 16,300 | 16,900 | 4,660  | 12,700 | 110    | 80     | 88     | 14,900 | 2,930  | 9,860  |
| 20    | 24,800 | 1,320 | 13,900 | 14,500 | 680    | 7,860  | 100    | 80     | 86     | 16,800 | 3,030  | 10,800 |
| 21    | 22,600 | 4,250 | 14,100 | 15,400 | 2,870  | 9,400  | 100    | 80     | 88     | 18,400 | 3,720  | 11,800 |
| 22    | 18,600 | 1,840 | 12,400 | 13,500 | 2,660  | 7,250  | 100    | 80     | 90     | 16,600 | 4,050  | 10,900 |
| 23    | 17,300 | 4,910 | 12,300 | 11,500 | 230    | 4,820  | 110    | 80     | 93     | 13,900 | 2,510  | 8,890  |
| 24    | 17,400 | 7,190 | 12,200 | 9,420  | 150    | 3,870  | 120    | 80     | 99     | 15,400 | 4,350  | 9,810  |
| 25    | 16,500 | 5,800 | 10,800 | 8,160  | 140    | 3,130  | 110    | 80     | 94     | 16,200 | 2,340  | 9,940  |
| 26    | 15,000 | 3,120 | 9,010  | 12,000 | 150    | 4,690  | 110    | 80     | 95     | 22,500 | 5,530  | 13,900 |
| 27    | 15,100 | 2,580 | 8,910  | 13,900 | 410    | 6,360  | 390    | 90     | 124    | 22,800 | 4,340  | 13,700 |
| 28    | 16,100 | 2,770 | 9,050  | 12,800 | 340    | 6,230  | 2,560  | 90     | 531    | 22,300 | 650    | 10,900 |
| 29    | 13,600 | 990   | 6,740  | 7,990  | 120    | 2,720  | 4,230  | 90     | 1,200  | 20,500 | 1,610  | 11,100 |
| 30    | 7,530  | 110   | 2,020  | 12,300 | 270    | 5,500  | 5,690  | 90     | 1,650  | 18,900 | 690    | 10,000 |
| 31    | 2,110  | 100   | 440    | ---    | ---    | ---    | 7,260  | 90     | 2,690  | 21,400 | 690    | 11,200 |
| MONTH | ---    | ---   | ---    | 19,600 | 80     | 4,680  | 23,900 | 80     | 4,800  | 24,800 | 100    | 10,500 |
| DAY   | MAX    | MIN   | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   |
|       |        |       |        |        |        |        |        |        |        |        |        |        |
| 1     | 22,500 | 3,120 | 13,400 | 10,400 | 100    | 2,370  | 27,200 | 16,000 | 21,900 | 21,600 | 3,360  | 14,300 |
| 2     | 26,100 | 4,290 | 16,800 | 6,100  | 100    | 1,140  | 24,800 | 13,500 | 19,300 | 14,800 | 1,350  | 9,190  |
| 3     | 28,900 | 7,410 | 17,800 | 3,330  | 90     | 685    | 21,900 | 12,400 | 17,800 | 10,500 | 154    | 4,850  |
| 4     | 23,500 | 1,480 | 13,000 | 2,130  | 90     | 648    | 20,700 | 11,800 | 17,000 | 5,090  | 115    | 1,440  |
| 5     | 19,400 | 2,730 | 12,100 | 680    | 90     | 207    | 19,600 | 8,720  | 15,100 | 4,310  | 115    | 1,230  |
| 6     | 17,800 | 4,530 | 11,200 | 150    | 100    | 121    | 19,300 | 10,900 | 15,100 | 2,440  | 100    | 463    |
| 7     | 12,700 | 2,380 | 7,020  | 120    | 100    | 112    | 18,900 | 8,790  | 13,900 | 293    | 103    | 137    |
| 8     | 8,400  | 160   | 3,010  | 120    | 100    | 115    | 18,100 | 9,620  | 13,200 | 135    | 85     | 112    |
| 9     | 5,910  | 240   | 2,770  | 430    | 110    | 130    | 17,400 | 9,360  | 13,100 | 118    | 87     | 105    |
| 10    | 5,220  | 250   | 2,240  | 6,720  | 110    | 756    | 19,200 | 9,600  | 14,000 | 111    | 78     | 99     |
| 11    | 4,320  | 210   | 1,790  | 12,100 | 300    | 5,250  | 17,700 | 5,970  | 12,000 | 123    | 78     | 96     |
| 12    | 3,480  | 180   | 1,510  | 12,000 | 300    | 5,300  | 15,900 | 7,320  | 11,200 | 116    | 80     | 96     |
| 13    | 5,270  | 150   | 1,950  | 8,200  | 150    | 3,580  | 13,400 | 6,600  | 9,070  | 300    | 80     | 114    |
| 14    | 7,240  | 130   | 2,220  | 7,250  | 150    | 3,490  | 9,360  | 1,860  | 5,040  | 740    | 90     | 256    |
| 15    | 6,430  | 130   | 1,950  | 9,630  | 170    | 4,010  | 11,100 | 270    | 4,370  | 2,110  | 90     | 578    |
| 16    | 9,560  | 130   | 2,530  | 10,000 | 190    | 5,230  | 12,800 | 459    | 5,940  | 4,600  | 100    | 1,310  |
| 17    | 11,700 | 130   | 4,090  | 9,400  | 900    | 5,190  | 8,620  | 219    | 3,730  | 7,200  | 130    | 2,320  |
| 18    | 9,700  | 120   | 3,100  | 10,800 | 830    | 5,730  | 4,180  | 169    | 1,240  | 8,680  | 260    | 3,520  |
| 19    | 5,760  | 120   | 1,940  | 8,670  | 1,140  | 4,720  | 1,610  | 138    | 362    | 11,800 | 1,260  | 5,230  |
| 20    | 1,740  | 120   | 506    | 7,700  | 1,340  | 4,230  | 435    | 138    | 188    | 11,800 | 690    | 6,030  |
| 21    | 330    | 110   | 151    | 5,880  | 1,510  | 3,340  | 207    | 138    | 166    | 11,900 | 1,050  | 6,830  |
| 22    | 140    | 100   | 116    | 7,260  | 220    | 2,240  | 295    | 118    | 164    | 14,100 | 3,710  | 8,760  |
| 23    | 120    | 100   | 115    | 7,390  | 460    | 3,380  | 413    | 118    | 200    | 15,200 | 4,750  | 9,480  |
| 24    | 890    | 100   | 134    | 7,940  | 160    | 3,070  | 1,560  | 127    | 382    | 14,700 | 5,560  | 9,940  |
| 25    | 5,710  | 110   | 1,280  | 6,190  | 170    | 2,840  | 7,470  | 166    | 2,520  | 15,400 | 5,720  | 10,400 |
| 26    | 15,900 | 110   | 4,500  | 7,460  | 200    | 3,320  | 14,000 | 1,510  | 6,560  | 16,400 | 6,530  | 11,500 |
| 27    | 27,100 | 490   | 13,000 | 12,000 | 1,550  | 6,110  | 19,900 | 1,680  | 9,200  | 18,700 | 7,210  | 13,100 |
| 28    | 28,400 | 430   | 11,500 | 17,700 | 3,680  | 10,700 | 25,200 | 3,870  | 14,500 | 20,000 | 10,400 | 14,900 |
| 29    | 23,400 | 100   | 6,320  | 31,800 | 12,900 | 22,100 | 26,800 | 9,260  | 17,100 | 20,300 | 8,420  | 14,700 |
| 30    | ---    | ---   | ---    | 34,500 | 19,100 | 27,400 | 25,400 | 3,910  | 15,200 | 20,900 | 12,000 | 16,300 |
| 31    | ---    | ---   | ---    | 34,300 | 19,400 | 26,400 | ---    | ---    | ---    | 20,500 | 11,400 | 16,400 |
| MONTH | 28,900 | 100   | 5,450  | 34,500 | 90     | 5,290  | 27,200 | 118    | 9,320  | 21,600 | 78     | 5,930  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE   |        |        | JULY   |        |        | AUGUST |        |        | SEPTEMBER |       |       |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|-------|-------|
|       | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX       | MIN   | MEAN  |
| 1     | 19,300 | 11,100 | 15,600 | 19,100 | 8,940  | 14,600 | 22,500 | 12,500 | 17,200 | 550       | 110   | 203   |
| 2     | 20,000 | 11,800 | 15,600 | 18,700 | 6,130  | 13,100 | 21,800 | 12,400 | 16,200 | 170       | 110   | 141   |
| 3     | 19,900 | 10,700 | 15,500 | 17,300 | 6,570  | 12,200 | 20,300 | 11,000 | 15,300 | 140       | 110   | 126   |
| 4     | 20,300 | 12,200 | 15,900 | 18,200 | 6,430  | 12,400 | 21,000 | 10,800 | 15,400 | 130       | 100   | 117   |
| 5     | 21,300 | 11,500 | 16,200 | 19,400 | 6,170  | 12,700 | 20,400 | 11,300 | 15,100 | 480       | 100   | 137   |
| 6     | 22,400 | 14,200 | 17,700 | 18,100 | 6,180  | 12,500 | 20,400 | 6,080  | 13,600 | 8,540     | 110   | 1,120 |
| 7     | 23,600 | 13,600 | 18,100 | 20,100 | 8,620  | 14,400 | 28,500 | 9,120  | 18,700 | 16,500    | 100   | 3,280 |
| 8     | 21,600 | 11,900 | 16,900 | 20,100 | 9,630  | 15,100 | 27,100 | 8,480  | 18,600 | 8,460     | 90    | 2,210 |
| 9     | 20,300 | 11,600 | 15,800 | 21,000 | 9,610  | 15,300 | 26,400 | 3,920  | 16,300 | 980       | 90    | 192   |
| 10    | 21,600 | 10,900 | 16,300 | 22,500 | 7,870  | 15,500 | 26,900 | 6,330  | 17,400 | 770       | 80    | 169   |
| 11    | 20,600 | 9,820  | 15,900 | 25,000 | 7,580  | 16,300 | 23,700 | 7,940  | 17,200 | 380       | 80    | 120   |
| 12    | 20,600 | 6,100  | 15,200 | 26,500 | 7,840  | 17,400 | 23,500 | 6,810  | 16,300 | 1,230     | 80    | 214   |
| 13    | 22,800 | 11,900 | 17,400 | 26,400 | 10,000 | 18,300 | 20,400 | 390    | 12,500 | 690       | 80    | 202   |
| 14    | 21,800 | 9,470  | 16,700 | 24,000 | 9,920  | 17,900 | 16,800 | 390    | 7,900  | 470       | 80    | 122   |
| 15    | 20,700 | 8,390  | 15,500 | 24,500 | 11,100 | 18,000 | 10,800 | 120    | 2,610  | 110       | 80    | 90    |
| 16    | 18,500 | 5,820  | 13,200 | 22,800 | 9,480  | 17,600 | 4,450  | 100    | 518    | 100       | 80    | 89    |
| 17    | 18,900 | 6,640  | 13,100 | 23,800 | 12,500 | 18,000 | 610    | 90     | 146    | 110       | 80    | 95    |
| 18    | 20,300 | 8,770  | 14,000 | 24,300 | 8,810  | 17,100 | 130    | 90     | 114    | 100       | 80    | 89    |
| 19    | 22,700 | 10,600 | 15,700 | 22,400 | 9,610  | 16,900 | 130    | 80     | 103    | 100       | 70    | 86    |
| 20    | 25,900 | 10,500 | 18,200 | 22,800 | 9,930  | 17,000 | 120    | 80     | 92     | 17,700    | 80    | 2,560 |
| 21    | 27,500 | 13,800 | 20,800 | 23,400 | 11,100 | 18,100 | 100    | 70     | 88     | 23,300    | 90    | 8,460 |
| 22    | 27,300 | 13,000 | 20,200 | 24,100 | 12,000 | 18,800 | 100    | 70     | 85     | 18,300    | 130   | 7,800 |
| 23    | 24,400 | 10,700 | 17,600 | 24,500 | 14,000 | 19,500 | 100    | 80     | 89     | 11,000    | 90    | 4,260 |
| 24    | 22,300 | 7,460  | 15,900 | 23,600 | 10,200 | 18,300 | 110    | 80     | 94     | 12,000    | 110   | 4,200 |
| 25    | 24,000 | 9,580  | 17,600 | 24,900 | 5,460  | 17,400 | 900    | 80     | 192    | 13,500    | 200   | 5,480 |
| 26    | 23,300 | 11,900 | 17,700 | 25,400 | 8,960  | 19,000 | 6,920  | 90     | 1,280  | 14,000    | 330   | 6,440 |
| 27    | 23,200 | 11,200 | 17,800 | 24,400 | 10,900 | 19,400 | 6,850  | 90     | 1,760  | 13,600    | 2,480 | 7,710 |
| 28    | 23,400 | 9,860  | 17,600 | 22,900 | 9,550  | 18,300 | 7,420  | 110    | 2,250  | 12,700    | 5,570 | 7,850 |
| 29    | 21,300 | 8,030  | 16,000 | 21,000 | 6,060  | 15,900 | 7,550  | 260    | 2,940  | 8,300     | 310   | 3,890 |
| 30    | 20,200 | 9,560  | 15,700 | 22,200 | 7,520  | 15,300 | 6,790  | 140    | 2,350  | 8,680     | 260   | 3,950 |
| 31    | ---    | ---    | ---    | 22,300 | 11,500 | 16,800 | 2,150  | 110    | 524    | ---       | ---   | ---   |
| MONTH | 27,500 | 5,820  | 16,500 | 26,500 | 5,460  | 16,400 | 28,500 | 70     | 7,510  | 23,300    | 70    | 2,380 |







## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 2.0      | 0.3  | 0.7  | 0.8      | 0.03 | 0.2  | 4.2      | 0.10 | 2.1  | 3.3     | 0.04 | 1.1  |
| 2     | 5.0      | 0.2  | 1.3  | 0.8      | 0.03 | 0.2  | 5.9      | 0.07 | 2.1  | 4.9     | 0.05 | 1.9  |
| 3     | ---      | ---  | ---  | 1.6      | 0.02 | 0.3  | 7.4      | 0.5  | 3.9  | 5.7     | 0.09 | 2.6  |
| 4     | 8.3      | 2.1  | 4.9  | 1.6      | 0.02 | 0.4  | 9.6      | 1.5  | 5.4  | 5.8     | 0.1  | 2.7  |
| 5     | 7.7      | 0.4  | 4.5  | 0.9      | 0.02 | 0.2  | 10.8     | 4.2  | 7.3  | 5.7     | 0.2  | 2.9  |
| 6     | 7.7      | 1.5  | 4.9  | 0.6      | 0.02 | 0.1  | 10       | 2.4  | 6.1  | 4.4     | 0.1  | 1.9  |
| 7     | 7.8      | 3.1  | 5.5  | 0.3      | 0.02 | 0.08 | 11.1     | 1.7  | 6.2  | 6.9     | 0.10 | 3.1  |
| 8     | 7.7      | 3.2  | 5.3  | 0.7      | 0.02 | 0.2  | 10.2     | 2.9  | 6.6  | 7.6     | 0.6  | 4.3  |
| 9     | 5.8      | 0.2  | 2.7  | 2.6      | 0.02 | 0.4  | 10.0     | 2.8  | 6.1  | 8.9     | 1.0  | 4.7  |
| 10    | ---      | ---  | ---  | 6.7      | 0.03 | 1.6  | 9.7      | 1.6  | 5.9  | 9.2     | 0.4  | 4.4  |
| 11    | 5.1      | 0.06 | 1.6  | 6.1      | 0.04 | 1.6  | 8.0      | 0.2  | 3.6  | 11.3    | 1.4  | 6.5  |
| 12    | 5.6      | 0.07 | 2.1  | 4.0      | 0.03 | 1.3  | 3.7      | 0.05 | 1.0  | 10.1    | 3.3  | 6.7  |
| 13    | 5.5      | 0.07 | 2.1  | 2.5      | 0.03 | 0.6  | 2.5      | 0.05 | 0.8  | 8.1     | 1.5  | 4.8  |
| 14    | 5.6      | 0.06 | 2.3  | 3.5      | 0.03 | 1.0  | 4.5      | 0.05 | 1.4  | 7.6     | 2.2  | 4.9  |
| 15    | 5.5      | 0.05 | 1.4  | 6.3      | 0.08 | 2.0  | 1.7      | 0.04 | 0.2  | 9.0     | 1.1  | 5.1  |
| 16    | 4.4      | 0.05 | 1.2  | 6.1      | 0.1  | 2.4  | 0.9      | 0.03 | 0.1  | 8.7     | 1.6  | 5.3  |
| 17    | 4.5      | 0.06 | 1.3  | 6.8      | 0.2  | 3.0  | 0.4      | 0.03 | 0.07 | 9.0     | 1.3  | 5.7  |
| 18    | 7.0      | 0.07 | 2.0  | 8.7      | 0.7  | 4.7  | 0.04     | 0.03 | 0.03 | 10.2    | 2.2  | 6.3  |
| 19    | 10.3     | 0.8  | 5.0  | 8.8      | 2.3  | 6.2  | 0.04     | 0.03 | 0.03 | 7.4     | 1.4  | 4.7  |
| 20    | 9.0      | 0.2  | 4.9  | 7.2      | 0.3  | 3.3  | 0.04     | 0.03 | 0.03 | 9.0     | 1.2  | 5.2  |
| 21    | 10.8     | 1.5  | 5.7  | 8.0      | 1.0  | 4.6  | 0.04     | 0.03 | 0.03 | 10      | 1.8  | 6.0  |
| 22    | 9.5      | 0.6  | 5.7  | 7.0      | 1.0  | 3.5  | 0.04     | 0.03 | 0.03 | 8.6     | 2.1  | 5.6  |
| 23    | 9.9      | 1.9  | 6.2  | 5.6      | 0.08 | 2.3  | 0.04     | 0.03 | 0.03 | 7.2     | 1.0  | 4.4  |
| 24    | 9.5      | 3.7  | 6.4  | 4.6      | 0.05 | 1.8  | 0.04     | 0.03 | 0.04 | 7.6     | 2.0  | 4.6  |
| 25    | 8.8      | 2.7  | 5.6  | 3.7      | 0.05 | 1.4  | 0.04     | 0.03 | 0.04 | 7.8     | 0.9  | 4.6  |
| 26    | 7.8      | 1.4  | 4.7  | 5.5      | 0.06 | 2.1  | 0.04     | 0.03 | 0.04 | 10.5    | 2.5  | 6.2  |
| 27    | 8.3      | 1.0  | 4.6  | 6.2      | 0.2  | 2.8  | 0.2      | 0.03 | 0.05 | 10.1    | 1.8  | 5.2  |
| 28    | 8.3      | 1.2  | 4.6  | 6.0      | 0.1  | 2.8  | 1.0      | 0.03 | 0.2  | 9.0     | 0.2  | 3.2  |
| 29    | 6.8      | 0.4  | 3.2  | 2.9      | 0.04 | 1.0  | 1.7      | 0.04 | 0.4  | 7.7     | 0.3  | 3.4  |
| 30    | 2.9      | 0.05 | 0.7  | 5.1      | 0.10 | 2.1  | 2.7      | 0.04 | 0.5  | 6.1     | 0.2  | 3.2  |
| 31    | 0.9      | 0.03 | 0.2  | ---      | ---  | ---  | 2.1      | 0.04 | 0.8  | 8.0     | 0.2  | 3.5  |
| MONTH | ---      | ---  | ---  | 8.8      | 0.02 | 1.8  | 11.1     | 0.03 | 2.0  | 11.3    | 0.04 | 4.3  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |      |      | APRIL    |      |      | MAY     |      |      |
| 1     | 8.9      | 0.8  | 4.3  | 2.7      | 0.03 | 0.4  | 14.7     | 8.2  | 11.2 | 11.3    | 5.7  | 8.4  |
| 2     | 12.7     | 1.2  | 6.1  | 1.1      | 0.03 | 0.3  | 13.5     | 6.8  | 9.8  | 8.4     | 0.9  | 5.2  |
| 3     | 11.9     | 2.7  | 7.5  | 0.9      | 0.03 | 0.2  | 12.4     | 5.9  | 9.4  | 5.9     | 0.07 | 2.4  |
| 4     | 9.8      | 0.4  | 4.5  | 0.8      | 0.03 | 0.2  | 11.7     | 6.5  | 9.3  | 2.9     | 0.05 | 0.6  |
| 5     | 9.6      | 0.8  | 4.8  | 0.3      | 0.03 | 0.07 | 11.1     | 4.8  | 8.2  | 2.3     | 0.06 | 0.6  |
| 6     | 8.0      | 2.0  | 5.1  | 0.05     | 0.03 | 0.04 | 10.9     | 6.0  | 8.3  | 1.3     | 0.05 | 0.2  |
| 7     | 5.4      | 0.9  | 2.9  | 0.04     | 0.03 | 0.04 | 10.7     | 4.8  | 7.6  | 0.1     | 0.05 | 0.06 |
| 8     | 2.8      | 0.06 | 1.3  | 0.04     | 0.03 | 0.04 | 9.6      | 5.4  | 7.2  | 0.06    | 0.04 | 0.05 |
| 9     | 2.5      | 0.09 | 1.2  | 0.1      | 0.04 | 0.04 | 9.5      | 5.1  | 6.9  | 0.05    | 0.04 | 0.05 |
| 10    | 2.2      | 0.10 | 0.9  | 2.9      | 0.04 | 0.3  | 10.1     | 4.9  | 7.5  | 0.05    | 0.04 | 0.04 |
| 11    | 1.7      | 0.07 | 0.7  | 4.3      | 0.08 | 1.9  | 9.8      | 3.2  | 6.2  | 0.05    | 0.04 | 0.04 |
| 12    | 1.4      | 0.06 | 0.6  | 5.2      | 0.09 | 2.3  | 7.6      | 3.5  | 5.7  | 0.05    | 0.04 | 0.04 |
| 13    | 1.9      | 0.05 | 0.7  | 3.5      | 0.06 | 1.4  | 6.8      | 2.4  | 4.7  | 0.1     | 0.03 | 0.05 |
| 14    | 2.6      | 0.04 | 0.7  | 3.6      | 0.06 | 1.3  | ---      | ---  | ---  | 0.3     | 0.04 | 0.1  |
| 15    | 2.5      | 0.04 | 0.7  | 3.2      | 0.06 | 1.5  | ---      | ---  | ---  | 1.0     | 0.04 | 0.2  |
| 16    | 2.3      | 0.04 | 0.7  | 4.5      | 0.07 | 2.2  | 5.9      | 0.2  | 2.5  | 2.0     | 0.04 | 0.5  |
| 17    | 3.7      | 0.04 | 1.4  | 4.5      | 0.3  | 2.3  | 3.6      | 0.09 | 1.6  | 3.0     | 0.06 | 1.0  |
| 18    | 4.1      | 0.04 | 1.1  | 5.0      | 0.3  | 2.6  | 2.4      | 0.07 | 0.6  | 4.0     | 0.1  | 1.6  |
| 19    | 2.6      | 0.04 | 0.8  | 3.8      | 0.5  | 2.1  | 0.8      | 0.06 | 0.2  | 4.7     | 0.4  | 2.3  |
| 20    | 0.7      | 0.04 | 0.2  | 3.6      | 0.6  | 2.0  | 0.2      | 0.06 | 0.08 | 5.2     | 0.3  | 2.6  |
| 21    | 0.1      | 0.04 | 0.05 | 3.0      | 0.7  | 1.6  | 0.09     | 0.06 | 0.07 | 5.3     | 0.5  | 2.8  |
| 22    | 0.05     | 0.04 | 0.04 | 3.1      | 0.09 | 1.0  | 0.1      | 0.05 | 0.07 | 6.1     | 1.7  | 3.8  |
| 23    | 0.04     | 0.04 | 0.04 | 3.4      | 0.2  | 1.4  | 0.2      | 0.05 | 0.08 | 6.4     | 2.3  | 4.3  |
| 24    | 0.3      | 0.04 | 0.04 | 3.3      | 0.06 | 1.2  | 0.5      | 0.05 | 0.1  | 7.3     | 2.7  | 4.5  |
| 25    | 1.4      | 0.04 | 0.4  | 2.5      | 0.07 | 1.1  | 2.4      | 0.07 | 0.9  | 6.8     | 2.8  | 4.6  |
| 26    | 4.0      | 0.04 | 0.9  | 2.8      | 0.08 | 1.1  | 4.2      | 0.7  | 2.4  | 7.3     | 3.1  | 4.7  |
| 27    | 10.5     | 0.1  | 3.3  | 4.5      | 0.5  | 2.1  | 7.1      | 0.8  | 3.0  | 7.0     | 3.1  | 5.2  |
| 28    | 10.8     | 0.10 | 2.8  | 6.2      | 1.3  | 3.2  | 13.4     | 1.9  | 5.5  | 8.4     | 4.7  | 6.6  |
| 29    | 5.4      | 0.04 | 0.9  | 15.1     | 2.5  | 8.6  | 11.1     | 4.6  | 8.1  | 9.3     | 4.2  | 6.9  |
| 30    | ---      | ---  | ---  | 19.6     | 6.5  | 12.2 | 11.3     | 3.6  | 7.8  | 10.7    | 6.3  | 8.5  |
| 31    | ---      | ---  | ---  | 18.0     | 9.4  | 13.1 | ---      | ---  | ---  | 11.3    | 6.1  | 8.8  |
| MONTH | 12.7     | 0.04 | 1.9  | 19.6     | 0.03 | 2.2  | ---      | ---  | ---  | 11.3    | 0.03 | 2.8  |

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|-----|------|------|-----|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 11.0 | 5.3 | 8.4  | 10.8 | 4.5 | 7.9  | 12.7   | 7.0  | 9.6  | 0.2       | 0.04 | 0.08 |
| 2     | 11.3 | 6.4 | 8.6  | 10.5 | 2.8 | 6.9  | 12.1   | 5.7  | 8.9  | 0.07      | 0.04 | 0.06 |
| 3     | 11.1 | 5.7 | 8.5  | 9.5  | 3.5 | 6.5  | 11.0   | 5.7  | 8.1  | 0.06      | 0.04 | 0.05 |
| 4     | 11.2 | 6.7 | 8.7  | 9.8  | 3.4 | 6.6  | 11.1   | 5.9  | 8.1  | 0.05      | 0.04 | 0.05 |
| 5     | 11.9 | 6.1 | 8.7  | 10.8 | 3.4 | 6.7  | 11.3   | 6.1  | 8.1  | 0.1       | 0.04 | 0.05 |
| 6     | 12.2 | 7.4 | 9.6  | 9.8  | 3.4 | 6.5  | 10.2   | 2.9  | 6.4  | 0.9       | 0.04 | 0.2  |
| 7     | 12.8 | 7.3 | 9.7  | 10.2 | 4.7 | 7.5  | 13.4   | 4.3  | 8.1  | 3.0       | 0.04 | 0.7  |
| 8     | 11.5 | 6.4 | 9.0  | 10.7 | 5.0 | 7.8  | 13.1   | 3.4  | 8.1  | 2.0       | 0.04 | 0.6  |
| 9     | 11.2 | 6.2 | 8.3  | 10.7 | 4.7 | 7.8  | 13.0   | 1.1  | 6.2  | 0.5       | 0.04 | 0.08 |
| 10    | 11.4 | 5.4 | 8.3  | 10.2 | 3.7 | 7.1  | 12.8   | 2.0  | 6.6  | 0.3       | 0.04 | 0.07 |
| 11    | 11.7 | 4.9 | 8.3  | 10.9 | 3.4 | 7.2  | 11.9   | 3.2  | 7.7  | 0.2       | 0.04 | 0.05 |
| 12    | 10.6 | 2.8 | 7.5  | 12.1 | 3.1 | 7.6  | 10.7   | 2.7  | 7.4  | 0.5       | 0.03 | 0.08 |
| 13    | 12.2 | 6.1 | 8.8  | 11.9 | 4.4 | 8.7  | 9.5    | 0.1  | 5.0  | 0.3       | 0.03 | 0.08 |
| 14    | 11.5 | 4.6 | 8.4  | 12.4 | 4.2 | 8.8  | 5.3    | 0.1  | 2.7  | 0.2       | 0.03 | 0.05 |
| 15    | 10.1 | 3.8 | 7.6  | 12.5 | 5.1 | 9.0  | 4.9    | 0.04 | 0.8  | 0.04      | 0.03 | 0.04 |
| 16    | 9.3  | 2.4 | 6.4  | 12.5 | 4.6 | 9.0  | 1.4    | 0.04 | 0.2  | 0.04      | 0.03 | 0.04 |
| 17    | 9.5  | 2.9 | 6.3  | 12.9 | 6.2 | 9.5  | 0.3    | 0.04 | 0.06 | 0.04      | 0.03 | 0.04 |
| 18    | 9.8  | 4.2 | 7.0  | 12.8 | 4.1 | 8.7  | 0.05   | 0.04 | 0.04 | 0.04      | 0.03 | 0.04 |
| 19    | 11.6 | 5.2 | 7.8  | 12.3 | 4.4 | 8.5  | 0.05   | 0.03 | 0.04 | 0.04      | 0.03 | 0.04 |
| 20    | 11.9 | 4.9 | 8.7  | 11.3 | 4.6 | 8.3  | 0.04   | 0.03 | 0.04 | 5.0       | 0.03 | 0.7  |
| 21    | 13.5 | 7.0 | 10.2 | 12.5 | 5.3 | 9.1  | 0.04   | 0.03 | 0.03 | 9.6       | 0.04 | 2.6  |
| 22    | 13.6 | 6.1 | 10.0 | 13.5 | 5.6 | 9.8  | 0.04   | 0.03 | 0.03 | 6.1       | 0.04 | 2.6  |
| 23    | 11.6 | 4.8 | 8.2  | 13.3 | 7.2 | 10.5 | 0.04   | 0.03 | 0.03 | 4.7       | 0.03 | 1.5  |
| 24    | 11.7 | 2.9 | 7.1  | 12.9 | 4.7 | 9.1  | 0.05   | 0.03 | 0.04 | 5.2       | 0.04 | 1.7  |
| 25    | 11.4 | 4.4 | 8.5  | 12.7 | 2.2 | 8.2  | 0.4    | 0.03 | 0.08 | 5.5       | 0.07 | 2.3  |
| 26    | 11.2 | 6.1 | 9.1  | 14.0 | 3.8 | 9.4  | 2.6    | 0.04 | 0.5  | 6.5       | 0.1  | 2.8  |
| 27    | 12.7 | 5.5 | 8.9  | 14.2 | 5.4 | 10.5 | 2.9    | 0.04 | 0.8  | 6.8       | 0.9  | 3.6  |
| 28    | 12.1 | 4.8 | 9.0  | 13.2 | 4.5 | 10.1 | 3.1    | 0.04 | 1.0  | 6.4       | 2.7  | 3.9  |
| 29    | 11.5 | 3.8 | 8.1  | 12.0 | 2.6 | 8.2  | 3.4    | 0.1  | 1.4  | 3.9       | 0.1  | 1.9  |
| 30    | 11.3 | 4.7 | 8.4  | 12.3 | 3.4 | 7.9  | 3.6    | 0.06 | 1.1  | 4.1       | 0.1  | 1.8  |
| 31    | ---  | --- | ---  | 12.8 | 5.9 | 9.3  | 1.0    | 0.04 | 0.2  | ---       | ---  | ---  |
| MONTH | 13.6 | 2.4 | 8.4  | 14.2 | 2.2 | 8.3  | 13.4   | 0.03 | 3.5  | 9.6       | 0.03 | 0.9  |

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|-----|-----|------|-----|-----|------|
|       |      |      |      |      |      |      |     |     |      |     |     |      |
| 1     | 5.0  | 1.0  | 2.6  | 11.7 | 4.9  | 8.5  | 6.2 | 1.1 | 3.4  | --- | --- | ---  |
| 2     | 4.2  | 1.2  | 2.3  | 12.7 | 6.4  | 9.6  | --- | --- | ---  | --- | --- | ---  |
| 3     | 2.8  | 0.3  | 1.5  | 13.4 | 7.1  | 9.6  | --- | --- | ---  | --- | --- | ---  |
| 4     | 3.4  | 0.4  | 1.4  | 14.4 | 8.1  | 11.1 | --- | --- | ---  | --- | --- | ---  |
| 5     | 4.5  | 0.2  | 1.5  | 15.5 | 5.5  | 10.4 | --- | --- | ---  | --- | --- | ---  |
| 6     | 8.8  | 0.2  | 2.6  | 14.7 | 9.8  | 12.6 | --- | --- | ---  | --- | --- | ---  |
| 7     | 11.3 | 1.7  | 4.8  | 14.9 | 9.1  | 11.9 | --- | --- | ---  | --- | --- | ---  |
| 8     | 15.5 | 4.2  | 7.6  | 13.7 | 7.6  | 11.4 | --- | --- | ---  | --- | --- | ---  |
| 9     | ---  | ---  | ---  | 15.1 | 8.5  | 12.2 | --- | --- | ---  | --- | --- | ---  |
| 10    | ---  | ---  | ---  | 16.3 | 10.3 | 13.3 | --- | --- | ---  | --- | --- | ---  |
| 11    | 14.3 | 8.2  | 11.7 | 15.9 | 10.5 | 13.4 | --- | --- | ---  | --- | --- | ---  |
| 12    | 14.0 | 10.3 | 12.1 | 15.9 | 10.8 | 13.5 | --- | --- | ---  | --- | --- | ---  |
| 13    | 13.4 | 10.7 | 11.9 | 14.0 | 7.9  | 11.5 | --- | --- | ---  | --- | --- | ---  |
| 14    | ---  | ---  | ---  | 14.7 | 6.5  | 11.2 | --- | --- | ---  | --- | --- | ---  |
| 15    | ---  | ---  | ---  | 15.4 | 8.3  | 11.9 | --- | --- | ---  | --- | --- | ---  |
| 16    | 11.1 | 6.8  | 9.0  | 14.3 | 8.2  | 11.4 | --- | --- | ---  | --- | --- | ---  |
| 17    | 9.5  | 4.6  | 7.3  | 12.8 | 6.5  | 9.7  | --- | --- | ---  | --- | --- | ---  |
| 18    | 10   | 4.1  | 6.8  | 11.1 | 5.0  | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 19    | 9.1  | 3.6  | 6.5  | 8.6  | 4.1  | 6.5  | --- | --- | ---  | --- | --- | ---  |
| 20    | 9.7  | 2.2  | 6.0  | 7.6  | 3.4  | 5.6  | --- | --- | ---  | --- | --- | ---  |
| 21    | 12.1 | 4.3  | 7.8  | 7.1  | 2.4  | 5.0  | --- | --- | ---  | --- | --- | ---  |
| 22    | 14.7 | 7.9  | 10.7 | 8.5  | 2.5  | 5.7  | --- | --- | ---  | --- | --- | ---  |
| 23    | 15.9 | 10.2 | 12.6 | 8.7  | 4.0  | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 24    | 15.5 | 11.7 | 13.4 | 9.1  | 3.2  | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 25    | 14.8 | 11.2 | 12.9 | 8.3  | 4.0  | 5.4  | --- | --- | ---  | --- | --- | ---  |
| 26    | 13.9 | 10.4 | 12.0 | 6.6  | 0.4  | 3.7  | --- | --- | ---  | --- | --- | ---  |
| 27    | 13.6 | 9.7  | 11.4 | 8.1  | 1.0  | 4.7  | --- | --- | ---  | --- | --- | ---  |
| 28    | 13.3 | 8.5  | 10.6 | 7.0  | 1.1  | 4.2  | --- | --- | ---  | --- | --- | ---  |
| 29    | 13.3 | 7.9  | 10.4 | 6.7  | 0.1  | 2.8  | --- | --- | ---  | --- | --- | ---  |
| 30    | 13.5 | 7.8  | 10.3 | 6.9  | 0.6  | 3.8  | --- | --- | ---  | --- | --- | ---  |
| 31    | 12.0 | 6.7  | 9.4  | ---  | ---  | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | ---  | ---  | ---  | 16.3 | 0.1  | 8.7  | --- | --- | ---  | --- | --- | ---  |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 2.6  | 0.3  | 0.8  | 1.5  | 0.04 | 0.2  | 6.5  | 0.1  | 3.2  | 6.2  | 0.04 | 2.2  |
| 2     | 6.5  | 0.2  | 1.7  | 1.0  | 0.04 | 0.2  | 9.1  | 0.09 | 3.6  | 8.8  | 0.06 | 3.7  |
| 3     | ---  | ---  | ---  | 2.6  | 0.03 | 0.5  | 9.7  | 0.8  | 5.7  | 11.3 | 0.10 | 4.9  |
| 4     | 11.1 | 2.4  | 6.2  | 2.4  | 0.03 | 0.6  | 12.6 | 2.0  | 7.6  | 10.7 | 0.2  | 4.8  |
| 5     | 9.3  | 0.7  | 5.6  | 1.7  | 0.03 | 0.3  | 14.5 | 5.1  | 9.4  | 8.6  | 0.3  | 3.9  |
| 6     | 8.8  | 2.0  | 5.8  | 0.8  | 0.03 | 0.2  | 12.8 | 3.1  | 8.4  | 6.5  | 0.1  | 3.0  |
| 7     | 8.6  | 3.6  | 6.1  | 0.4  | 0.03 | 0.1  | 12.5 | 2.5  | 8.1  | 9.3  | 0.1  | 4.6  |
| 8     | 8.5  | 3.6  | 5.8  | 0.9  | 0.03 | 0.2  | 11.6 | 3.7  | 8.0  | 10.7 | 0.9  | 5.9  |
| 9     | 6.4  | 0.2  | 3.3  | 5.4  | 0.03 | 1.0  | 11.3 | 3.3  | 7.3  | 10.2 | 1.3  | 5.8  |
| 10    | ---  | ---  | ---  | 9.6  | 0.04 | 3.0  | 10.9 | 2.1  | 7.0  | 13.2 | 0.4  | 6.2  |
| 11    | 6.5  | 0.06 | 2.4  | 9.0  | 0.05 | 3.0  | 9.0  | 0.4  | 4.6  | 15.1 | 2.2  | 9.0  |
| 12    | 7.6  | 0.07 | 3.0  | 7.0  | 0.04 | 2.3  | 6.1  | 0.05 | 1.9  | 14.0 | 3.8  | 8.7  |
| 13    | 7.2  | 0.07 | 3.1  | 4.8  | 0.04 | 1.3  | 5.9  | 0.05 | 1.7  | 11.3 | 1.7  | 6.7  |
| 14    | 9.3  | 0.06 | 3.5  | 7.6  | 0.04 | 2.2  | 10.3 | 0.06 | 3.4  | 9.7  | 2.6  | 6.5  |
| 15    | 7.0  | 0.05 | 2.3  | 8.8  | 0.10 | 3.9  | 4.0  | 0.04 | 0.6  | 10.1 | 1.4  | 6.4  |
| 16    | 8.3  | 0.04 | 2.6  | 11.1 | 0.1  | 5.0  | 1.6  | 0.04 | 0.3  | 11.5 | 2.0  | 7.1  |
| 17    | 10.6 | 0.06 | 3.3  | 11.3 | 0.4  | 5.6  | 0.5  | 0.03 | 0.09 | 11.2 | 1.7  | 7.3  |
| 18    | 14.7 | 0.07 | 5.5  | 11.7 | 1.4  | 6.9  | 0.04 | 0.03 | 0.04 | 10.8 | 2.6  | 7.4  |
| 19    | 17.4 | 1.6  | 9.7  | 9.9  | 2.5  | 7.3  | 0.04 | 0.03 | 0.04 | 8.6  | 1.5  | 5.6  |
| 20    | 15.1 | 0.6  | 8.1  | 8.4  | 0.3  | 4.4  | 0.04 | 0.03 | 0.03 | 9.8  | 1.6  | 6.2  |
| 21    | 13.6 | 2.2  | 8.2  | 9.0  | 1.5  | 5.3  | 0.04 | 0.03 | 0.04 | 10.9 | 1.9  | 6.8  |
| 22    | 11.0 | 0.9  | 7.1  | 7.8  | 1.4  | 4.0  | 0.04 | 0.03 | 0.04 | 9.7  | 2.1  | 6.2  |
| 23    | 10.2 | 2.6  | 7.0  | 6.5  | 0.10 | 2.6  | 0.04 | 0.03 | 0.04 | 8.0  | 1.3  | 5.0  |
| 24    | 10.2 | 3.9  | 7.0  | 5.3  | 0.06 | 2.1  | 0.05 | 0.03 | 0.04 | 9.0  | 2.3  | 5.5  |
| 25    | 9.6  | 3.1  | 6.2  | 4.5  | 0.06 | 1.7  | 0.04 | 0.03 | 0.04 | 9.5  | 1.2  | 5.6  |
| 26    | 8.7  | 1.6  | 5.0  | 6.8  | 0.06 | 2.5  | 0.04 | 0.03 | 0.04 | 13.6 | 3.0  | 8.0  |
| 27    | 8.8  | 1.3  | 5.0  | 8.0  | 0.2  | 3.5  | 0.2  | 0.04 | 0.05 | 13.8 | 2.3  | 8.0  |
| 28    | 9.4  | 1.4  | 5.1  | 7.3  | 0.1  | 3.4  | 1.3  | 0.04 | 0.3  | 13.4 | 0.3  | 6.3  |
| 29    | 7.8  | 0.5  | 3.7  | 4.4  | 0.05 | 1.4  | 2.2  | 0.04 | 0.6  | 12.3 | 0.8  | 6.3  |
| 30    | 4.1  | 0.04 | 1.1  | 7.0  | 0.1  | 3.0  | 3.1  | 0.04 | 0.8  | 11.2 | 0.3  | 5.7  |
| 31    | 1.1  | 0.04 | 0.2  | ---  | ---  | ---  | 4.0  | 0.04 | 1.4  | 12.8 | 0.3  | 6.4  |
| MONTH | ---  | ---  | ---  | 11.7 | 0.03 | 2.6  | 14.5 | 0.03 | 2.7  | 15.1 | 0.04 | 6.0  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 13.6 | 1.6  | 7.8  | 5.9  | 0.04 | 1.3  | 16.7 | 9.3  | 13.2 | 13.0 | 1.7  | 8.3  |
| 2     | 16.0 | 2.3  | 9.9  | 3.3  | 0.04 | 0.6  | 15.1 | 7.8  | 11.5 | 8.6  | 0.7  | 5.2  |
| 3     | 17.8 | 4.1  | 10.6 | 1.7  | 0.04 | 0.3  | 13.2 | 7.1  | 10.5 | 5.9  | 0.06 | 2.6  |
| 4     | 14.2 | 0.7  | 7.5  | 1.1  | 0.04 | 0.3  | 12.4 | 6.7  | 10   | 2.7  | 0.05 | 0.7  |
| 5     | 11.5 | 1.4  | 6.9  | 0.3  | 0.04 | 0.09 | 11.7 | 4.8  | 8.8  | 2.3  | 0.05 | 0.6  |
| 6     | 10.5 | 2.4  | 6.3  | 0.06 | 0.04 | 0.05 | 11.5 | 6.2  | 8.8  | 1.2  | 0.04 | 0.2  |
| 7     | 7.3  | 1.2  | 3.9  | 0.05 | 0.04 | 0.04 | 11.2 | 4.9  | 8.1  | 0.1  | 0.04 | 0.06 |
| 8     | 4.7  | 0.06 | 1.6  | 0.05 | 0.04 | 0.05 | 10.7 | 5.4  | 7.6  | 0.05 | 0.03 | 0.04 |
| 9     | 3.2  | 0.10 | 1.4  | 0.2  | 0.04 | 0.05 | 10.2 | 5.2  | 7.5  | 0.05 | 0.03 | 0.04 |
| 10    | 2.8  | 0.1  | 1.1  | 3.7  | 0.04 | 0.4  | 11.4 | 5.4  | 8.1  | 0.04 | 0.03 | 0.04 |
| 11    | 2.3  | 0.09 | 0.9  | 6.9  | 0.1  | 2.9  | 10.4 | 3.2  | 6.9  | 0.05 | 0.03 | 0.04 |
| 12    | 1.8  | 0.07 | 0.8  | 6.8  | 0.1  | 2.9  | 9.3  | 4.0  | 6.3  | 0.05 | 0.03 | 0.04 |
| 13    | 2.8  | 0.06 | 1.00 | 4.5  | 0.06 | 1.9  | 7.7  | 3.6  | 5.1  | 0.1  | 0.03 | 0.05 |
| 14    | 4.0  | 0.05 | 1.2  | 4.0  | 0.06 | 1.8  | 5.2  | 0.9  | 2.7  | 0.3  | 0.04 | 0.1  |
| 15    | 3.5  | 0.05 | 1.0  | 5.4  | 0.07 | 2.1  | 6.3  | 0.1  | 2.4  | 1.1  | 0.04 | 0.3  |
| 16    | 5.4  | 0.05 | 1.3  | 5.6  | 0.08 | 2.8  | 7.3  | 0.2  | 3.3  | 2.4  | 0.04 | 0.7  |
| 17    | 6.7  | 0.05 | 2.2  | 5.3  | 0.4  | 2.8  | 4.8  | 0.09 | 2.0  | 4.0  | 0.05 | 1.2  |
| 18    | 5.4  | 0.05 | 1.7  | 6.1  | 0.4  | 3.1  | 2.2  | 0.07 | 0.6  | 4.8  | 0.1  | 1.9  |
| 19    | 3.1  | 0.05 | 1.00 | 4.8  | 0.6  | 2.5  | 0.8  | 0.06 | 0.2  | 6.7  | 0.6  | 2.8  |
| 20    | 0.9  | 0.05 | 0.2  | 4.2  | 0.7  | 2.2  | 0.2  | 0.06 | 0.08 | 6.7  | 0.3  | 3.3  |
| 21    | 0.1  | 0.04 | 0.06 | 3.2  | 0.7  | 1.7  | 0.08 | 0.06 | 0.07 | 6.8  | 0.5  | 3.8  |
| 22    | 0.06 | 0.04 | 0.05 | 4.0  | 0.09 | 1.2  | 0.1  | 0.05 | 0.07 | 8.1  | 1.9  | 4.9  |
| 23    | 0.05 | 0.04 | 0.05 | 4.1  | 0.2  | 1.8  | 0.2  | 0.05 | 0.08 | 8.8  | 2.5  | 5.3  |
| 24    | 0.4  | 0.04 | 0.05 | 4.4  | 0.06 | 1.6  | 0.8  | 0.05 | 0.2  | 8.5  | 3.0  | 5.6  |
| 25    | 3.1  | 0.04 | 0.7  | 3.4  | 0.07 | 1.5  | 4.1  | 0.07 | 1.3  | 9.0  | 3.1  | 5.9  |
| 26    | 9.3  | 0.04 | 2.5  | 4.1  | 0.08 | 1.8  | 8.1  | 0.7  | 3.6  | 9.6  | 3.6  | 6.6  |
| 27    | 16.6 | 0.2  | 7.7  | 6.8  | 0.8  | 3.3  | 11.9 | 0.8  | 5.2  | 11.1 | 4.0  | 7.5  |
| 28    | 17.5 | 0.2  | 6.7  | 10.4 | 1.9  | 6.1  | 15.3 | 2.0  | 8.5  | 11.9 | 5.9  | 8.7  |
| 29    | 14.2 | 0.04 | 3.6  | 19.8 | 7.4  | 13.3 | 16.4 | 5.2  | 10.1 | 12.1 | 4.7  | 8.5  |
| 30    | ---  | ---  | ---  | 21.7 | 11.3 | 16.8 | 15.5 | 2.0  | 8.9  | 12.5 | 6.8  | 9.5  |
| 31    | ---  | ---  | ---  | 21.5 | 11.5 | 16.2 | ---  | ---  | ---  | 12.3 | 6.5  | 9.6  |
| MONTH | 17.8 | 0.04 | 3.1  | 21.7 | 0.04 | 3.0  | 16.7 | 0.05 | 5.4  | 13.0 | 0.03 | 3.4  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|-----|------|------|-----|------|------|------|------|------|------|------|
|       |      |     |      |      |     |      |      |      |      |      |      |      |
| 1     | 11.5 | 6.3 | 9.1  | 11.3 | 5.0 | 8.5  | 13.6 | 7.2  | 10.1 | 0.3  | 0.04 | 0.08 |
| 2     | 11.9 | 6.7 | 9.1  | 11.1 | 3.3 | 7.5  | 13.1 | 7.1  | 9.5  | 0.07 | 0.04 | 0.06 |
| 3     | 11.9 | 6.1 | 9.0  | 10.2 | 3.6 | 7.0  | 12.1 | 6.2  | 8.9  | 0.06 | 0.04 | 0.05 |
| 4     | 12.1 | 7.0 | 9.3  | 10.7 | 3.5 | 7.1  | 12.6 | 6.1  | 9.0  | 0.05 | 0.04 | 0.05 |
| 5     | 12.8 | 6.5 | 9.5  | 11.5 | 3.3 | 7.3  | 12.2 | 6.4  | 8.8  | 0.2  | 0.04 | 0.06 |
| 6     | 13.5 | 8.2 | 10.4 | 10.7 | 3.4 | 7.2  | 12.2 | 3.3  | 7.8  | 4.7  | 0.04 | 0.6  |
| 7     | 14.3 | 7.8 | 10.7 | 12.0 | 4.8 | 8.4  | 17.6 | 5.1  | 11.1 | 9.6  | 0.04 | 1.8  |
| 8     | 13.0 | 6.8 | 9.9  | 12.0 | 5.4 | 8.8  | 16.6 | 4.7  | 11.0 | 4.7  | 0.04 | 1.2  |
| 9     | 12.1 | 6.6 | 9.2  | 12.6 | 5.4 | 8.9  | 16.2 | 2.1  | 9.7  | 0.5  | 0.04 | 0.08 |
| 10    | 13.0 | 6.2 | 9.5  | 13.6 | 4.3 | 9.1  | 16.5 | 3.4  | 10.3 | 0.4  | 0.03 | 0.07 |
| 11    | 12.3 | 5.5 | 9.3  | 15.2 | 4.2 | 9.6  | 14.4 | 4.4  | 10.1 | 0.2  | 0.03 | 0.05 |
| 12    | 12.3 | 3.3 | 8.9  | 16.2 | 4.3 | 10.3 | 14.2 | 3.7  | 9.6  | 0.6  | 0.03 | 0.09 |
| 13    | 13.8 | 6.8 | 10.2 | 16.2 | 5.6 | 10.9 | 12.2 | 0.2  | 7.3  | 0.3  | 0.03 | 0.09 |
| 14    | 13.1 | 5.3 | 9.8  | 14.6 | 5.6 | 10.6 | 9.8  | 0.2  | 4.4  | 0.2  | 0.03 | 0.05 |
| 15    | 12.4 | 4.7 | 9.1  | 14.9 | 6.3 | 10.7 | 6.1  | 0.05 | 1.4  | 0.04 | 0.03 | 0.04 |
| 16    | 10.9 | 3.1 | 7.6  | 13.8 | 5.3 | 10.4 | 2.4  | 0.04 | 0.2  | 0.04 | 0.03 | 0.04 |
| 17    | 11.2 | 3.6 | 7.5  | 14.4 | 7.2 | 10.6 | 0.3  | 0.04 | 0.06 | 0.04 | 0.03 | 0.04 |
| 18    | 12.1 | 4.9 | 8.1  | 14.7 | 4.9 | 10.1 | 0.05 | 0.04 | 0.05 | 0.04 | 0.03 | 0.04 |
| 19    | 13.7 | 6.0 | 9.1  | 13.5 | 5.4 | 10   | 0.05 | 0.03 | 0.04 | 0.04 | 0.03 | 0.03 |
| 20    | 15.8 | 5.9 | 10.8 | 13.8 | 5.6 | 10.0 | 0.05 | 0.03 | 0.04 | 10.4 | 0.03 | 1.4  |
| 21    | 16.9 | 8.0 | 12.4 | 14.2 | 6.3 | 10.7 | 0.04 | 0.03 | 0.04 | 14.1 | 0.04 | 4.9  |
| 22    | 16.8 | 7.5 | 12.0 | 14.6 | 6.8 | 11.2 | 0.04 | 0.03 | 0.03 | 10.8 | 0.05 | 4.4  |
| 23    | 14.8 | 6.1 | 10.4 | 14.9 | 8.1 | 11.6 | 0.04 | 0.03 | 0.04 | 6.2  | 0.04 | 2.3  |
| 24    | 13.4 | 4.1 | 9.3  | 14.3 | 5.7 | 10.8 | 0.04 | 0.03 | 0.04 | 6.8  | 0.04 | 2.3  |
| 25    | 14.6 | 5.4 | 10.4 | 15.1 | 2.9 | 10.3 | 0.4  | 0.03 | 0.08 | 7.8  | 0.08 | 3.0  |
| 26    | 14.1 | 6.8 | 10.4 | 15.5 | 5.0 | 11.3 | 3.8  | 0.04 | 0.7  | 8.1  | 0.1  | 3.6  |
| 27    | 14.0 | 6.4 | 10.5 | 14.8 | 6.2 | 11.5 | 3.7  | 0.04 | 0.9  | 7.8  | 1.3  | 4.3  |
| 28    | 14.2 | 5.5 | 10.4 | 13.8 | 5.3 | 10.8 | 4.1  | 0.04 | 1.2  | 7.3  | 3.0  | 4.3  |
| 29    | 12.8 | 4.4 | 9.3  | 12.6 | 3.3 | 9.3  | 4.2  | 0.1  | 1.5  | 4.6  | 0.1  | 2.1  |
| 30    | 12.1 | 5.4 | 9.2  | 13.4 | 4.1 | 8.9  | 3.7  | 0.06 | 1.2  | 4.8  | 0.1  | 2.1  |
| 31    | ---  | --- | ---  | 13.4 | 6.5 | 9.9  | 1.1  | 0.04 | 0.2  | ---  | ---  | ---  |
| MONTH | 16.9 | 3.1 | 9.7  | 16.2 | 2.9 | 9.7  | 17.6 | 0.03 | 4.4  | 14.1 | 0.03 | 1.3  |







## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.8 | 6.5 | 6.6  | 6.8 | 6.2 | 6.4  | 6.7 | 6.0 | 6.5  | 6.7 | 5.7 | 6.3  |
| 2     | 6.9 | 6.5 | 6.7  | 6.7 | 6.2 | 6.4  | 6.7 | 5.9 | 6.4  | 6.8 | 5.8 | 6.4  |
| 3     | --- | --- | ---  | 6.8 | 6.2 | 6.4  | 6.8 | 6.2 | 6.6  | 6.8 | 5.8 | 6.5  |
| 4     | 7.0 | 6.7 | 6.9  | 6.7 | 6.1 | 6.4  | 7.0 | 6.4 | 6.7  | 6.8 | 5.9 | 6.5  |
| 5     | 7.0 | 6.6 | 6.8  | 6.7 | 6.0 | 6.2  | 7.1 | 6.6 | 6.8  | 6.9 | 5.9 | 6.6  |
| 6     | 7.0 | 6.7 | 6.8  | 6.6 | 6.0 | 6.2  | 7.1 | 6.6 | 6.9  | 6.8 | 5.9 | 6.5  |
| 7     | 7.0 | 6.8 | 6.9  | 6.6 | 6.0 | 6.2  | 7.2 | 6.5 | 6.9  | 7.0 | 5.9 | 6.6  |
| 8     | 7.0 | 6.8 | 6.9  | 6.8 | 6.0 | 6.3  | 7.1 | 6.6 | 6.9  | 7.3 | 6.2 | 6.8  |
| 9     | 7.0 | 6.7 | 6.8  | 6.7 | 6.1 | 6.3  | 7.1 | 6.6 | 6.9  | 7.4 | 6.6 | 7.0  |
| 10    | --- | --- | ---  | 7.0 | 6.2 | 6.5  | 7.1 | 6.5 | 6.9  | 7.5 | 6.6 | 7.1  |
| 11    | 6.9 | 6.6 | 6.7  | 6.9 | 6.2 | 6.5  | 7.0 | 6.2 | 6.7  | 7.6 | 6.8 | 7.2  |
| 12    | 6.9 | 6.5 | 6.7  | 6.8 | 6.2 | 6.5  | 6.8 | 6.0 | 6.4  | 7.6 | 7.0 | 7.3  |
| 13    | 6.9 | 6.5 | 6.7  | 6.8 | 6.2 | 6.5  | 6.7 | 6.0 | 6.3  | 7.5 | 6.9 | 7.2  |
| 14    | 6.8 | 6.4 | 6.6  | 6.9 | 6.2 | 6.5  | 6.8 | 6.0 | 6.5  | 7.5 | 7.0 | 7.2  |
| 15    | 6.9 | 6.4 | 6.6  | 7.0 | 6.3 | 6.6  | 6.6 | 6.0 | 6.1  | 7.5 | 7.0 | 7.3  |
| 16    | 6.7 | 6.3 | 6.5  | 7.0 | 6.3 | 6.6  | 6.5 | 5.8 | 6.1  | 7.6 | 7.0 | 7.3  |
| 17    | 6.7 | 6.3 | 6.5  | 6.9 | 6.3 | 6.6  | 6.4 | 5.6 | 6.0  | 7.5 | 6.9 | 7.2  |
| 18    | 6.8 | 6.3 | 6.5  | 7.1 | 6.3 | 6.8  | 6.0 | 5.6 | 5.8  | 7.5 | 7.0 | 7.3  |
| 19    | 7.1 | 6.4 | 6.7  | 7.2 | 6.6 | 7.0  | 6.1 | 5.6 | 5.8  | 7.5 | 7.0 | 7.2  |
| 20    | 7.0 | 6.3 | 6.7  | 7.2 | 6.4 | 6.8  | 6.0 | 5.6 | 5.7  | 7.6 | 7.0 | 7.3  |
| 21    | 7.2 | 6.4 | 6.8  | 7.3 | 6.6 | 7.0  | 6.0 | 5.5 | 5.8  | 7.7 | 7.1 | 7.4  |
| 22    | 7.3 | 6.5 | 6.9  | 7.3 | 6.6 | 6.9  | 6.0 | 5.5 | 5.8  | 7.6 | 7.2 | 7.3  |
| 23    | 7.6 | 6.8 | 7.2  | 7.2 | 6.4 | 6.8  | 6.1 | 5.5 | 5.8  | 7.4 | 7.0 | 7.2  |
| 24    | 7.6 | 7.1 | 7.4  | 7.2 | 6.3 | 6.7  | 6.2 | 5.5 | 5.8  | 7.5 | 7.1 | 7.3  |
| 25    | 7.6 | 7.1 | 7.4  | 6.7 | 5.8 | 6.4  | 6.0 | 5.5 | 5.7  | 7.6 | 7.1 | 7.3  |
| 26    | 7.6 | 7.0 | 7.4  | 7.0 | 5.8 | 6.4  | 6.0 | 5.5 | 5.7  | 7.7 | 7.2 | 7.4  |
| 27    | 7.7 | 7.0 | 7.4  | 7.0 | 5.9 | 6.5  | 6.2 | 5.6 | 5.8  | 7.7 | 7.2 | 7.4  |
| 28    | 7.7 | 7.0 | 7.4  | 7.0 | 5.9 | 6.5  | 6.6 | 5.6 | 6.0  | 7.5 | 6.9 | 7.1  |
| 29    | 7.6 | 7.0 | 7.4  | 6.6 | 5.9 | 6.2  | 6.6 | 5.7 | 6.1  | 7.3 | 6.9 | 7.1  |
| 30    | 7.3 | 6.9 | 7.0  | 6.8 | 6.0 | 6.5  | 6.7 | 5.7 | 6.1  | 7.3 | 6.9 | 7.1  |
| 31    | 7.1 | 6.3 | 6.7  | --- | --- | ---  | 6.7 | 5.7 | 6.2  | 7.3 | 6.9 | 7.1  |
| MONTH | --- | --- | ---  | 7.3 | 5.8 | 6.5  | 7.2 | 5.5 | 6.2  | 7.7 | 5.7 | 7.0  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.4 | 6.9 | 7.1  | 6.9 | 6.1 | 6.4  | 7.5 | 7.0 | 7.2  | 7.2 | 6.9 | 7.1  |
| 2     | 7.6 | 7.0 | 7.2  | 6.8 | 6.0 | 6.3  | 7.1 | 6.8 | 7.0  | 7.2 | 6.7 | 7.0  |
| 3     | 7.5 | 6.9 | 7.2  | 6.8 | 6.0 | 6.3  | 7.2 | 6.9 | 7.1  | 7.0 | 6.5 | 6.8  |
| 4     | 7.3 | 6.8 | 7.0  | 6.8 | 6.0 | 6.3  | 7.2 | 7.0 | 7.1  | 6.9 | 6.4 | 6.6  |
| 5     | 7.3 | 6.8 | 7.0  | 6.6 | 6.0 | 6.2  | 7.3 | 6.9 | 7.0  | 6.8 | 6.4 | 6.6  |
| 6     | 7.3 | 6.9 | 7.1  | 6.4 | 6.0 | 6.2  | 7.3 | 7.0 | 7.1  | 6.7 | 6.3 | 6.5  |
| 7     | 7.2 | 6.9 | 7.1  | 6.3 | 6.0 | 6.1  | 7.3 | 7.0 | 7.1  | 6.5 | 6.4 | 6.4  |
| 8     | 7.2 | 6.7 | 6.9  | 6.3 | 6.0 | 6.2  | 7.2 | 7.0 | 7.1  | 6.4 | 6.2 | 6.4  |
| 9     | 7.1 | 6.7 | 6.9  | 6.4 | 6.0 | 6.2  | 7.3 | 7.1 | 7.2  | 6.4 | 6.1 | 6.3  |
| 10    | 7.3 | 6.5 | 6.9  | 7.1 | 6.0 | 6.4  | 7.4 | 7.1 | 7.2  | 6.3 | 6.0 | 6.2  |
| 11    | 7.4 | 6.5 | 7.0  | 7.2 | 6.2 | 6.7  | 7.3 | 7.1 | 7.2  | 6.3 | 6.0 | 6.1  |
| 12    | 7.4 | 6.6 | 7.1  | 6.7 | 6.3 | 6.5  | 7.3 | 7.1 | 7.2  | 6.2 | 5.9 | 6.0  |
| 13    | 7.5 | 6.5 | 7.1  | 6.6 | 6.3 | 6.4  | 7.3 | 7.1 | 7.2  | 6.2 | 5.9 | 6.1  |
| 14    | 7.4 | 6.4 | 7.0  | 6.6 | 6.3 | 6.5  | --- | --- | ---  | 6.3 | 6.1 | 6.2  |
| 15    | 7.3 | 6.4 | 6.9  | 6.7 | 6.4 | 6.6  | --- | --- | ---  | 6.3 | 6.1 | 6.2  |
| 16    | 7.3 | 6.4 | 6.9  | 6.8 | 6.4 | 6.6  | 7.1 | 6.7 | 6.9  | 6.3 | 6.2 | 6.2  |
| 17    | 7.3 | 6.4 | 6.9  | 6.8 | 6.5 | 6.6  | 6.9 | 6.7 | 6.8  | 6.4 | 6.2 | 6.3  |
| 18    | 7.3 | 6.4 | 6.8  | 6.8 | 6.5 | 6.7  | 6.8 | 6.6 | 6.7  | 6.5 | 6.3 | 6.3  |
| 19    | 7.2 | 6.4 | 6.8  | 6.8 | 6.6 | 6.7  | 6.7 | 6.6 | 6.6  | 6.9 | 6.3 | 6.5  |
| 20    | 7.0 | 6.4 | 6.7  | 6.8 | 6.6 | 6.7  | 6.7 | 6.5 | 6.6  | 6.9 | 6.4 | 6.7  |
| 21    | 6.8 | 6.3 | 6.5  | 6.9 | 6.7 | 6.8  | 6.7 | 6.5 | 6.6  | 6.9 | 6.5 | 6.7  |
| 22    | 6.6 | 6.2 | 6.4  | 7.0 | 6.7 | 6.8  | 6.7 | 6.5 | 6.6  | 6.9 | 6.6 | 6.8  |
| 23    | 6.6 | 6.2 | 6.4  | 7.0 | 6.8 | 6.9  | 6.6 | 6.4 | 6.5  | 7.0 | 6.7 | 6.9  |
| 24    | 6.7 | 6.1 | 6.3  | 7.0 | 6.8 | 6.8  | 6.7 | 6.4 | 6.5  | 7.0 | 6.8 | 6.9  |
| 25    | 7.1 | 6.1 | 6.5  | 6.9 | 6.8 | 6.8  | 6.8 | 6.5 | 6.6  | 7.1 | 6.8 | 6.9  |
| 26    | 7.2 | 6.1 | 6.6  | 7.0 | 6.8 | 6.8  | 6.9 | 6.6 | 6.8  | 7.0 | 6.8 | 6.9  |
| 27    | 7.7 | 6.3 | 7.1  | 7.1 | 6.8 | 6.9  | 7.0 | 6.6 | 6.8  | 7.0 | 6.8 | 6.9  |
| 28    | 7.6 | 6.2 | 6.9  | 7.2 | 6.9 | 7.0  | 7.3 | 6.7 | 6.9  | 7.2 | 6.9 | 7.0  |
| 29    | 7.2 | 6.2 | 6.6  | 7.6 | 6.9 | 7.3  | 7.3 | 6.9 | 7.1  | 7.2 | 6.8 | 7.0  |
| 30    | --- | --- | ---  | 7.8 | 7.1 | 7.4  | 7.3 | 6.8 | 7.0  | 7.2 | 7.0 | 7.1  |
| 31    | --- | --- | ---  | 7.7 | 7.2 | 7.4  | --- | --- | ---  | 7.3 | 6.9 | 7.1  |
| MONTH | 7.7 | 6.1 | 6.9  | 7.8 | 6.0 | 6.6  | --- | --- | ---  | 7.3 | 5.9 | 6.6  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.2 | 6.9 | 7.0  | 7.3 | 7.0 | 7.1  | 7.2 | 6.9 | 7.0  | 6.3 | 6.0 | 6.2  |
| 2     | 7.2 | 6.8 | 7.0  | 7.2 | 6.9 | 7.1  | 7.1 | 6.9 | 7.0  | 6.4 | 6.0 | 6.2  |
| 3     | 7.1 | 6.8 | 6.9  | 7.2 | 6.9 | 7.0  | 7.1 | 6.9 | 7.0  | 6.3 | 6.0 | 6.2  |
| 4     | 7.2 | 6.9 | 7.0  | 7.2 | 6.9 | 7.0  | 7.1 | 6.9 | 7.0  | 6.2 | 6.0 | 6.1  |
| 5     | 7.2 | 6.8 | 7.0  | 7.3 | 6.9 | 7.1  | 7.1 | 6.9 | 7.0  | 6.2 | 6.1 | 6.1  |
| 6     | 7.2 | 6.9 | 7.0  | 7.2 | 6.9 | 7.0  | 7.1 | 6.8 | 6.9  | 6.3 | 6.1 | 6.2  |
| 7     | 7.2 | 6.9 | 7.0  | 7.2 | 7.0 | 7.1  | 7.2 | 6.8 | 7.0  | 6.4 | 6.0 | 6.2  |
| 8     | 7.1 | 6.8 | 7.0  | 7.2 | 7.0 | 7.1  | 7.2 | 6.8 | 7.0  | 6.6 | 6.0 | 6.3  |
| 9     | 7.1 | 6.8 | 6.9  | 7.2 | 7.0 | 7.1  | 7.1 | 6.6 | 6.9  | 6.3 | 6.0 | 6.2  |
| 10    | 7.1 | 6.8 | 6.9  | 7.2 | 6.9 | 7.1  | 7.1 | 6.7 | 6.9  | 6.3 | 6.0 | 6.1  |
| 11    | 7.1 | 6.8 | 6.9  | 7.2 | 6.9 | 7.1  | 7.1 | 6.7 | 6.9  | 6.3 | 6.0 | 6.1  |
| 12    | 7.1 | 6.7 | 6.9  | 7.3 | 6.9 | 7.1  | 7.1 | 6.7 | 6.9  | 6.3 | 5.9 | 6.1  |
| 13    | 7.2 | 6.8 | 7.0  | 7.3 | 7.0 | 7.1  | 7.0 | 6.6 | 6.9  | 6.2 | 6.0 | 6.1  |
| 14    | 7.2 | 6.7 | 7.0  | 7.2 | 6.8 | 7.1  | 6.9 | 6.5 | 6.8  | 6.2 | 6.0 | 6.1  |
| 15    | 7.3 | 6.8 | 7.0  | 7.2 | 6.9 | 7.0  | 6.9 | 6.4 | 6.6  | 6.2 | 5.9 | 6.1  |
| 16    | 7.2 | 6.8 | 7.0  | 7.2 | 6.9 | 7.0  | 6.6 | 6.3 | 6.5  | 6.2 | 5.8 | 6.0  |
| 17    | 7.2 | 6.8 | 7.0  | 7.2 | 7.0 | 7.1  | 6.5 | 6.2 | 6.3  | 6.2 | 5.8 | 6.1  |
| 18    | 7.3 | 6.9 | 7.1  | 7.2 | 6.9 | 7.0  | 6.4 | 6.2 | 6.3  | 6.2 | 5.9 | 6.0  |
| 19    | 7.3 | 6.9 | 7.0  | 7.2 | 6.9 | 7.0  | 6.4 | 6.0 | 6.2  | 6.1 | 5.8 | 6.0  |
| 20    | 7.3 | 6.9 | 7.1  | 7.1 | 6.9 | 7.0  | 6.2 | 5.8 | 6.0  | 6.6 | 5.9 | 6.2  |
| 21    | 7.4 | 6.9 | 7.1  | 7.2 | 6.9 | 7.0  | 6.0 | 5.8 | 5.9  | 6.9 | 5.9 | 6.4  |
| 22    | 7.2 | 6.9 | 7.0  | 7.1 | 6.9 | 7.0  | 6.0 | 5.8 | 5.9  | 6.7 | 5.9 | 6.4  |
| 23    | 7.2 | 6.8 | 7.0  | 7.1 | 6.9 | 7.0  | 6.0 | 5.8 | 5.9  | 6.6 | 6.0 | 6.3  |
| 24    | 7.2 | 6.8 | 7.0  | 7.1 | 6.8 | 6.9  | 6.1 | 5.8 | 5.9  | 6.7 | 6.0 | 6.3  |
| 25    | 7.2 | 6.9 | 7.1  | 7.0 | 6.8 | 6.9  | 6.1 | 5.7 | 5.9  | 6.8 | 6.1 | 6.4  |
| 26    | 7.2 | 7.0 | 7.1  | 7.1 | 6.8 | 7.0  | 6.3 | 5.8 | 6.0  | 6.9 | 6.1 | 6.5  |
| 27    | 7.3 | 7.0 | 7.1  | 7.2 | 6.8 | 7.0  | 6.4 | 5.8 | 6.1  | 7.0 | 6.3 | 6.6  |
| 28    | 7.3 | 7.0 | 7.1  | 7.2 | 6.8 | 7.0  | 6.4 | 5.9 | 6.2  | 7.0 | 6.6 | 6.7  |
| 29    | 7.2 | 6.9 | 7.1  | 7.1 | 6.8 | 7.0  | 6.6 | 6.0 | 6.3  | 6.8 | 6.0 | 6.5  |
| 30    | 7.3 | 7.0 | 7.1  | 7.1 | 6.8 | 7.0  | 6.6 | 6.0 | 6.3  | 6.8 | 6.1 | 6.5  |
| 31    | --- | --- | ---  | 7.2 | 6.9 | 7.0  | 6.4 | 6.0 | 6.2  | --- | --- | ---  |
| MONTH | 7.4 | 6.7 | 7.0  | 7.3 | 6.8 | 7.0  | 7.2 | 5.7 | 6.5  | 7.0 | 5.8 | 6.2  |

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN | MEAN | MAX      | MIN | MEAN | MAX      | MIN | MEAN | MAX     | MIN | MEAN |
|-------|---------|-----|------|----------|-----|------|----------|-----|------|---------|-----|------|
|       | OCTOBER |     |      | NOVEMBER |     |      | DECEMBER |     |      | JANUARY |     |      |
| 1     | 6.8     | 6.4 | 6.6  | 7.1      | 6.8 | 7.0  | 7.2      | 7.0 | 7.1  | ---     | --- | ---  |
| 2     | 6.8     | 6.4 | 6.6  | 7.2      | 6.9 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 3     | 6.7     | 6.2 | 6.5  | 7.2      | 6.9 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 4     | 6.8     | 6.2 | 6.6  | 7.3      | 7.0 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 5     | 6.8     | 6.2 | 6.5  | 7.4      | 6.9 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 6     | 7.0     | 6.2 | 6.6  | 7.3      | 7.1 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 7     | 7.1     | 6.4 | 6.7  | 7.3      | 7.1 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 8     | 7.3     | 6.6 | 6.9  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 9     | ---     | --- | ---  | 7.5      | 7.1 | 7.3  | ---      | --- | ---  | ---     | --- | ---  |
| 10    | ---     | --- | ---  | 7.6      | 7.3 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 11    | 7.3     | 6.9 | 7.1  | 7.6      | 7.3 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 12    | 7.2     | 7.0 | 7.1  | 7.6      | 7.3 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 13    | 7.2     | 7.0 | 7.1  | 7.5      | 7.2 | 7.3  | ---      | --- | ---  | ---     | --- | ---  |
| 14    | ---     | --- | ---  | 7.6      | 7.2 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 15    | ---     | --- | ---  | 7.6      | 7.3 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 16    | 7.2     | 6.9 | 7.0  | 7.6      | 7.3 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 17    | 7.1     | 6.7 | 6.9  | 7.5      | 7.2 | 7.4  | ---      | --- | ---  | ---     | --- | ---  |
| 18    | 7.1     | 6.7 | 7.0  | 7.4      | 7.1 | 7.3  | ---      | --- | ---  | ---     | --- | ---  |
| 19    | 7.1     | 6.8 | 7.0  | 7.3      | 7.1 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 20    | 7.1     | 6.6 | 6.9  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 21    | 7.2     | 6.8 | 7.0  | 7.2      | 7.0 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 22    | 7.4     | 7.0 | 7.2  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 23    | 7.5     | 7.1 | 7.3  | 7.3      | 7.1 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 24    | 7.4     | 7.2 | 7.3  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 25    | 7.4     | 7.1 | 7.2  | 7.3      | 7.1 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 26    | 7.3     | 7.1 | 7.2  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 27    | 7.3     | 7.0 | 7.1  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 28    | 7.2     | 7.0 | 7.1  | 7.3      | 7.0 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |
| 29    | 7.2     | 6.9 | 7.1  | 7.2      | 6.9 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 30    | 7.2     | 6.9 | 7.1  | 7.3      | 7.0 | 7.1  | ---      | --- | ---  | ---     | --- | ---  |
| 31    | 7.2     | 6.9 | 7.0  | ---      | --- | ---  | ---      | --- | ---  | ---     | --- | ---  |
| MONTH | ---     | --- | ---  | 7.6      | 6.8 | 7.2  | ---      | --- | ---  | ---     | --- | ---  |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 6.9 | 6.6 | 6.7  | 6.6 | 6.0 | 6.2  | 6.8 | 6.4 | 6.6  | 6.4 | 5.9 | 6.1  |
| 2     | 7.0 | 6.6 | 6.7  | 6.4 | 6.0 | 6.2  | 6.9 | 6.3 | 6.6  | 6.6 | 5.9 | 6.2  |
| 3     | --- | --- | ---  | 6.6 | 6.0 | 6.2  | 6.9 | 6.3 | 6.6  | 6.8 | 5.9 | 6.3  |
| 4     | 7.2 | 6.7 | 6.9  | 6.5 | 5.8 | 6.1  | 7.1 | 6.4 | 6.7  | 6.7 | 5.9 | 6.3  |
| 5     | 7.0 | 6.6 | 6.9  | 6.4 | 5.8 | 6.0  | 7.2 | 6.6 | 6.8  | 6.6 | 5.9 | 6.3  |
| 6     | 7.0 | 6.7 | 6.8  | 6.3 | 5.7 | 6.0  | 7.0 | 6.4 | 6.7  | 6.5 | 5.9 | 6.2  |
| 7     | 7.0 | 6.7 | 6.9  | 6.2 | 5.7 | 5.9  | 7.0 | 6.3 | 6.7  | 6.8 | 6.0 | 6.4  |
| 8     | 7.0 | 6.8 | 6.9  | 6.5 | 5.7 | 6.0  | 6.9 | 6.4 | 6.7  | 7.1 | 6.1 | 6.6  |
| 9     | 7.0 | 6.6 | 6.8  | 6.7 | 5.8 | 6.1  | 6.8 | 6.3 | 6.6  | 7.2 | 6.4 | 6.9  |
| 10    | --- | --- | ---  | 7.0 | 5.9 | 6.4  | 6.8 | 6.2 | 6.6  | 7.4 | 6.4 | 7.0  |
| 11    | 6.9 | 6.5 | 6.7  | 6.9 | 6.0 | 6.4  | 6.7 | 6.2 | 6.5  | 7.6 | 6.7 | 7.2  |
| 12    | 7.0 | 6.5 | 6.7  | 6.8 | 6.0 | 6.3  | 6.5 | 6.2 | 6.3  | 7.6 | 6.8 | 7.2  |
| 13    | 6.9 | 6.5 | 6.7  | 6.7 | 6.0 | 6.3  | 6.5 | 6.1 | 6.3  | 7.4 | 6.7 | 7.1  |
| 14    | 7.0 | 6.4 | 6.7  | 7.0 | 6.0 | 6.5  | 6.7 | 6.2 | 6.4  | 7.3 | 6.7 | 7.1  |
| 15    | 6.9 | 6.3 | 6.6  | 7.0 | 6.2 | 6.6  | 6.4 | 6.1 | 6.2  | 7.4 | 6.7 | 7.1  |
| 16    | 6.9 | 6.3 | 6.6  | 7.0 | 6.2 | 6.6  | 6.3 | 6.1 | 6.2  | 7.4 | 6.8 | 7.1  |
| 17    | 7.0 | 6.3 | 6.6  | 7.1 | 6.2 | 6.7  | 6.3 | 6.0 | 6.1  | 7.5 | 6.7 | 7.2  |
| 18    | 7.2 | 6.3 | 6.6  | 7.2 | 6.3 | 6.8  | 6.3 | 5.9 | 6.1  | 7.5 | 6.8 | 7.2  |
| 19    | 7.3 | 6.4 | 6.9  | 7.1 | 6.6 | 6.9  | 6.3 | 5.8 | 6.0  | 7.3 | 6.8 | 7.1  |
| 20    | 7.2 | 6.3 | 6.8  | 7.2 | 6.3 | 6.8  | 6.2 | 5.8 | 6.0  | 7.4 | 6.8 | 7.2  |
| 21    | 7.1 | 6.4 | 6.8  | 7.2 | 6.5 | 6.9  | 6.2 | 5.8 | 6.0  | 7.5 | 6.9 | 7.2  |
| 22    | 7.1 | 6.3 | 6.8  | 7.2 | 6.5 | 6.9  | 6.3 | 5.8 | 6.0  | 7.5 | 6.9 | 7.2  |
| 23    | 7.1 | 6.5 | 6.9  | 7.2 | 6.3 | 6.7  | 6.3 | 5.7 | 6.0  | 7.4 | 6.8 | 7.1  |
| 24    | 7.1 | 6.7 | 6.9  | 7.1 | 6.2 | 6.6  | 6.3 | 5.8 | 6.1  | 7.4 | 6.9 | 7.2  |
| 25    | 7.2 | 6.6 | 6.9  | 6.8 | 6.3 | 6.5  | 6.2 | 5.8 | 6.0  | 7.5 | 6.9 | 7.2  |
| 26    | 7.1 | 6.5 | 6.8  | 7.1 | 6.3 | 6.6  | 6.2 | 5.8 | 6.0  | 7.7 | 7.1 | 7.4  |
| 27    | 7.2 | 6.5 | 6.9  | 7.1 | 6.3 | 6.7  | 6.2 | 5.8 | 6.0  | 7.7 | 7.0 | 7.4  |
| 28    | 7.1 | 6.5 | 6.9  | 7.1 | 6.3 | 6.6  | 6.2 | 5.9 | 6.0  | 7.7 | 6.6 | 7.2  |
| 29    | 7.1 | 6.5 | 6.8  | 6.8 | 6.3 | 6.5  | 6.2 | 5.9 | 6.0  | 7.6 | 6.8 | 7.2  |
| 30    | 6.8 | 6.2 | 6.5  | 6.9 | 6.4 | 6.6  | 6.3 | 5.9 | 6.0  | 7.5 | 6.8 | 7.2  |
| 31    | 6.7 | 6.2 | 6.3  | --- | --- | ---  | 6.3 | 5.9 | 6.1  | 7.6 | 6.8 | 7.2  |
| MONTH | --- | --- | ---  | 7.2 | 5.7 | 6.5  | 7.2 | 5.7 | 6.3  | 7.7 | 5.9 | 6.9  |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.6 | 6.9 | 7.3  | 6.6 | 6.2 | 6.3  | 7.6 | 7.0 | 7.4  | 7.4 | 7.0 | 7.2  |
| 2     | 7.7 | 6.9 | 7.4  | 6.4 | 6.2 | 6.3  | 7.5 | 7.1 | 7.3  | 7.2 | 6.8 | 7.0  |
| 3     | 7.8 | 7.0 | 7.4  | 6.4 | 6.2 | 6.3  | 7.4 | 7.1 | 7.2  | 7.1 | 6.6 | 6.9  |
| 4     | 7.6 | 6.8 | 7.2  | 6.3 | 6.2 | 6.3  | 7.4 | 7.1 | 7.2  | 6.9 | 6.5 | 6.7  |
| 5     | 7.5 | 6.8 | 7.2  | 6.4 | 6.2 | 6.3  | 7.4 | 7.0 | 7.2  | 6.9 | 6.5 | 6.7  |
| 6     | 7.5 | 7.0 | 7.2  | 6.5 | 6.2 | 6.3  | 7.4 | 7.1 | 7.2  | --- | --- | ---  |
| 7     | 7.3 | 6.9 | 7.1  | 6.5 | 6.2 | 6.3  | 7.4 | 7.0 | 7.2  | --- | --- | ---  |
| 8     | 7.2 | 6.7 | 7.0  | 6.5 | 6.2 | 6.3  | 7.4 | 7.0 | 7.2  | --- | --- | ---  |
| 9     | 7.2 | 6.7 | 7.0  | 6.5 | 6.2 | 6.4  | 7.3 | 7.0 | 7.2  | --- | --- | ---  |
| 10    | 7.2 | 6.6 | 6.9  | 6.5 | 6.3 | 6.4  | 7.4 | 7.0 | 7.2  | --- | --- | ---  |
| 11    | 7.0 | 6.6 | 6.8  | 6.8 | 6.3 | 6.5  | 7.3 | 6.9 | 7.1  | --- | --- | ---  |
| 12    | 6.9 | 6.6 | 6.8  | 6.8 | 6.3 | 6.5  | 7.2 | 6.9 | 7.1  | --- | --- | ---  |
| 13    | 7.0 | 6.6 | 6.8  | 6.6 | 6.3 | 6.5  | 7.2 | 7.0 | 7.0  | --- | --- | ---  |
| 14    | 6.9 | 6.6 | 6.7  | 6.7 | 6.4 | 6.5  | 7.1 | 6.8 | 7.0  | 6.2 | 5.9 | 6.1  |
| 15    | 6.8 | 6.6 | 6.7  | 6.8 | 6.4 | 6.5  | 7.2 | 6.8 | 7.0  | 6.4 | 5.9 | 6.2  |
| 16    | 6.8 | 6.6 | 6.7  | 6.8 | 6.4 | 6.5  | 7.3 | 6.9 | 7.1  | 6.5 | 6.0 | 6.3  |
| 17    | 6.9 | 6.5 | 6.7  | 6.8 | 6.4 | 6.6  | 7.1 | 6.8 | 6.9  | 6.7 | 6.1 | 6.4  |
| 18    | 6.9 | 6.5 | 6.7  | 6.9 | 6.5 | 6.7  | 7.0 | 6.8 | 6.8  | 6.8 | 6.2 | 6.5  |
| 19    | 6.7 | 6.6 | 6.6  | 6.8 | 6.5 | 6.6  | 6.8 | 6.7 | 6.8  | 7.0 | 6.3 | 6.6  |
| 20    | 6.7 | 6.6 | 6.6  | 6.9 | 6.5 | 6.7  | 6.8 | 6.7 | 6.8  | 7.0 | 6.2 | 6.7  |
| 21    | 6.8 | 6.5 | 6.6  | 6.8 | 6.7 | 6.8  | 6.8 | 6.7 | 6.8  | 7.0 | 6.3 | 6.7  |
| 22    | 6.7 | 6.4 | 6.5  | 7.0 | 6.7 | 6.8  | 6.8 | 6.6 | 6.7  | 7.0 | 6.6 | 6.8  |
| 23    | 6.6 | 6.3 | 6.5  | 6.9 | 6.7 | 6.8  | 6.7 | 6.6 | 6.7  | 7.1 | 6.7 | 6.9  |
| 24    | 6.5 | 6.3 | 6.4  | 6.9 | 6.7 | 6.8  | 6.8 | 6.6 | 6.7  | 7.1 | 6.8 | 6.9  |
| 25    | 6.6 | 6.2 | 6.4  | 7.0 | 6.8 | 6.8  | 7.0 | 6.6 | 6.8  | 7.1 | 6.8 | 7.0  |
| 26    | 6.9 | 6.3 | 6.5  | 7.0 | 6.8 | 6.9  | 7.2 | 6.7 | 6.9  | 7.2 | 6.8 | 7.0  |
| 27    | 7.4 | 6.3 | 6.8  | 7.1 | 6.8 | 6.9  | 7.4 | 6.8 | 7.0  | 7.2 | 6.8 | 7.0  |
| 28    | 7.4 | 6.3 | 6.7  | 7.4 | 6.9 | 7.1  | 7.6 | 6.8 | 7.2  | 7.2 | 6.9 | 7.1  |
| 29    | 7.1 | 6.2 | 6.5  | 7.8 | 7.2 | 7.5  | 7.6 | 7.0 | 7.3  | 7.2 | 6.8 | 7.0  |
| 30    | --- | --- | ---  | 7.8 | 7.3 | 7.6  | 7.6 | 6.9 | 7.2  | 7.3 | 6.9 | 7.1  |
| 31    | --- | --- | ---  | 7.7 | 7.3 | 7.5  | --- | --- | ---  | 7.3 | 6.9 | 7.1  |
| MONTH | 7.8 | 6.2 | 6.8  | 7.8 | 6.2 | 6.7  | 7.6 | 6.6 | 7.0  | --- | --- | ---  |

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 7.2  | 6.9 | 7.0  | 7.3  | 7.0 | 7.2  | 7.1    | 6.8 | 6.9  | 6.3       | 5.9 | 6.1  |
| 2     | 7.2  | 6.9 | 7.0  | 7.3  | 7.0 | 7.1  | 7.1    | 6.9 | 6.9  | 6.4       | 5.9 | 6.2  |
| 3     | 7.2  | 6.9 | 7.0  | 7.3  | 7.0 | 7.1  | 7.0    | 6.8 | 6.9  | 6.3       | 5.9 | 6.1  |
| 4     | 7.2  | 6.9 | 7.0  | 7.2  | 6.9 | 7.0  | 7.2    | 6.8 | 7.0  | 6.2       | 6.0 | 6.1  |
| 5     | 7.3  | 6.9 | 7.1  | 7.2  | 6.9 | 7.0  | 7.2    | 6.9 | 7.1  | 6.2       | 6.0 | 6.1  |
| 6     | 7.3  | 7.0 | 7.1  | 7.2  | 6.8 | 6.9  | 7.2    | 6.9 | 7.0  | 6.5       | 6.1 | 6.2  |
| 7     | 7.3  | 7.0 | 7.1  | 7.2  | 6.8 | 7.0  | 7.4    | 6.9 | 7.2  | 6.7       | 6.0 | 6.3  |
| 8     | 7.2  | 6.9 | 7.0  | 7.2  | 6.9 | 7.1  | 7.4    | 6.9 | 7.2  | 6.6       | 6.0 | 6.3  |
| 9     | 7.1  | 6.8 | 7.0  | 7.2  | 6.9 | 7.1  | 7.3    | 6.7 | 7.1  | 6.3       | 6.0 | 6.1  |
| 10    | 7.2  | 6.8 | 7.0  | 7.3  | 6.9 | 7.1  | 7.3    | 6.8 | 7.1  | 6.3       | 6.0 | 6.1  |
| 11    | 7.2  | 6.8 | 7.0  | 7.3  | 6.9 | 7.1  | 7.2    | 6.8 | 7.1  | 6.3       | 6.0 | 6.1  |
| 12    | 7.2  | 6.7 | 7.0  | 7.4  | 6.9 | 7.1  | 7.2    | 6.8 | 7.1  | 6.3       | 5.9 | 6.1  |
| 13    | 7.3  | 6.9 | 7.1  | 7.4  | 6.9 | 7.1  | 7.2    | 6.6 | 7.0  | 6.2       | 5.9 | 6.1  |
| 14    | 7.3  | 6.9 | 7.1  | 7.3  | 6.8 | 7.1  | 7.1    | 6.6 | 6.9  | 6.2       | 5.9 | 6.1  |
| 15    | 7.3  | 7.0 | 7.1  | 7.2  | 6.8 | 7.0  | 7.0    | 6.4 | 6.7  | 6.2       | 5.9 | 6.0  |
| 16    | 7.3  | 6.9 | 7.1  | 7.2  | 6.8 | 7.0  | 6.8    | 6.3 | 6.5  | 6.2       | 5.8 | 6.0  |
| 17    | 7.3  | 6.9 | 7.0  | 7.2  | 6.9 | 7.0  | 6.5    | 6.2 | 6.3  | 6.2       | 5.8 | 6.1  |
| 18    | 7.3  | 7.0 | 7.1  | 7.2  | 6.8 | 7.0  | 6.5    | 6.2 | 6.3  | 6.2       | 5.9 | 6.0  |
| 19    | 7.3  | 6.9 | 7.1  | 7.1  | 6.8 | 7.0  | 6.6    | 6.0 | 6.3  | 6.1       | 5.8 | 6.0  |
| 20    | 7.4  | 6.9 | 7.1  | 7.1  | 6.8 | 7.0  | 6.3    | 5.8 | 6.0  | 7.0       | 5.9 | 6.3  |
| 21    | 7.4  | 6.9 | 7.2  | 7.2  | 6.9 | 7.1  | 6.1    | 5.8 | 6.0  | 7.2       | 6.0 | 6.6  |
| 22    | 7.3  | 6.9 | 7.1  | 7.2  | 6.9 | 7.1  | 6.0    | 5.7 | 5.8  | 6.9       | 5.8 | 6.5  |
| 23    | 7.3  | 6.8 | 7.1  | 7.3  | 7.0 | 7.1  | 6.0    | 5.7 | 5.9  | 6.6       | 5.9 | 6.3  |
| 24    | 7.3  | 6.9 | 7.1  | 7.2  | 6.9 | 7.1  | 6.1    | 5.7 | 5.9  | 6.8       | 5.9 | 6.3  |
| 25    | 7.3  | 6.9 | 7.1  | 7.2  | 6.8 | 7.1  | 6.1    | 5.6 | 5.8  | 6.9       | 6.0 | 6.4  |
| 26    | 7.3  | 7.0 | 7.1  | 7.3  | 6.9 | 7.1  | 6.4    | 5.7 | 6.0  | 6.9       | 6.0 | 6.5  |
| 27    | 7.3  | 6.9 | 7.1  | 7.3  | 6.9 | 7.1  | 6.5    | 5.8 | 6.1  | 7.0       | 6.3 | 6.6  |
| 28    | 7.3  | 6.9 | 7.1  | 7.2  | 6.8 | 7.1  | 6.5    | 5.8 | 6.2  | 7.0       | 6.6 | 6.7  |
| 29    | 7.2  | 6.8 | 7.0  | 7.1  | 6.7 | 7.0  | 6.6    | 6.0 | 6.3  | 6.7       | 6.2 | 6.5  |
| 30    | 7.4  | 6.9 | 7.1  | 7.1  | 6.7 | 6.9  | 6.6    | 6.0 | 6.4  | 6.9       | 6.2 | 6.6  |
| 31    | ---  | --- | ---  | 7.1  | 6.8 | 6.9  | 6.4    | 5.9 | 6.2  | ---       | --- | ---  |
| MONTH | 7.4  | 6.7 | 7.1  | 7.4  | 6.7 | 7.1  | 7.4    | 5.6 | 6.6  | 7.2       | 5.8 | 6.2  |



02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.0 | 6.5 | 6.7  | 7.3 | 6.9 | 7.1  | 7.4 | 7.1 | 7.2  | --- | --- | ---  |
| 2     | 7.0 | 6.5 | 6.7  | 7.4 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 3     | 6.8 | 6.3 | 6.6  | 7.4 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 4     | 7.0 | 6.3 | 6.7  | 7.6 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 5     | 7.1 | 6.3 | 6.7  | 7.6 | 7.0 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 6     | 7.2 | 6.4 | 6.8  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 7     | 7.5 | 6.5 | 6.9  | 7.5 | 7.2 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 8     | 7.6 | 6.7 | 7.1  | 7.4 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 9     | --- | --- | ---  | 7.5 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 10    | --- | --- | ---  | 7.6 | 7.3 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 11    | 7.2 | 6.8 | 7.1  | 7.6 | 7.3 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 12    | 7.2 | 6.9 | 7.0  | 7.6 | 7.3 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 13    | 7.1 | 6.9 | 7.0  | 7.5 | 7.2 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | 7.6 | 7.3 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 16    | 7.1 | 6.8 | 6.9  | 7.6 | 7.3 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 17    | 7.1 | 6.7 | 6.9  | 7.5 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 18    | 7.1 | 6.7 | 6.9  | 7.4 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 19    | 7.1 | 6.7 | 6.9  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 20    | 7.2 | 6.7 | 7.0  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 21    | 7.4 | 6.8 | 7.1  | 7.3 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 22    | 7.5 | 7.1 | 7.3  | 7.3 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 23    | 7.6 | 7.2 | 7.3  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 24    | 7.5 | 7.2 | 7.4  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 25    | 7.4 | 7.2 | 7.3  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 26    | 7.4 | 7.1 | 7.2  | 7.3 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 27    | 7.4 | 7.1 | 7.2  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 28    | 7.3 | 7.0 | 7.2  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 29    | 7.4 | 7.0 | 7.2  | 7.3 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 30    | 7.3 | 7.0 | 7.2  | 7.5 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 31    | 7.3 | 7.0 | 7.2  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 7.6 | 6.9 | 7.3  | --- | --- | ---  | --- | --- | ---  |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|------|------|-------|------|------|-------|------|------|------|------|------|
|       |          |      |      |       |      |      |       |      |      |      |      |      |
| 1     | 22.8     | 21.7 | 22.3 | 17.6  | 17.0 | 17.3 | 14.2  | 12.9 | 13.5 | 7.9  | 7.3  | 7.6  |
| 2     | 22.2     | 21.6 | 22.0 | 17.3  | 16.8 | 17.1 | 13.7  | 12.6 | 13.0 | 8.3  | 7.5  | 7.9  |
| 3     | ---      | ---  | ---  | 17.6  | 16.9 | 17.3 | 13.2  | 12.1 | 12.6 | 8.9  | 7.8  | 8.3  |
| 4     | 21.7     | 20.9 | 21.4 | 18.0  | 17.3 | 17.6 | 12.7  | 11.7 | 12.1 | 9.6  | 8.4  | 9.0  |
| 5     | 21.8     | 21.0 | 21.4 | 18.3  | 17.7 | 18.0 | 12.5  | 11.4 | 12.0 | 10.9 | 9.3  | 10.0 |
| 6     | 21.8     | 21.1 | 21.4 | 18.8  | 18.1 | 18.5 | 11.9  | 10.8 | 11.5 | 10.8 | 9.9  | 10.4 |
| 7     | 21.6     | 21.3 | 21.4 | 19.1  | 18.7 | 18.9 | 11.6  | 10.6 | 11.0 | 10.4 | 9.6  | 9.9  |
| 8     | 21.5     | 21.1 | 21.3 | 19.1  | 18.6 | 18.9 | 11.1  | 10.3 | 10.7 | 10.4 | 9.2  | 9.7  |
| 9     | 21.2     | 20.8 | 21.0 | 18.7  | 17.6 | 18.1 | 11.0  | 9.8  | 10.5 | 10.2 | 9.0  | 9.5  |
| 10    | ---      | ---  | ---  | 18.4  | 17.0 | 17.5 | 11.4  | 10.1 | 10.8 | 9.7  | 8.2  | 8.8  |
| 11    | 21.1     | 20.6 | 20.9 | 18.2  | 16.9 | 17.5 | 11.3  | 10.6 | 10.9 | 9.2  | 7.5  | 8.2  |
| 12    | 21.3     | 20.4 | 20.8 | 18.4  | 17.1 | 17.6 | 10.8  | 9.8  | 10.2 | 8.6  | 7.4  | 8.0  |
| 13    | 21.9     | 20.4 | 21.1 | 17.8  | 16.8 | 17.3 | 10.2  | 9.4  | 9.8  | 8.4  | 7.4  | 7.8  |
| 14    | 21.5     | 20.6 | 21.1 | 16.9  | 15.8 | 16.4 | 10.0  | 8.7  | 9.4  | 8.1  | 7.4  | 7.8  |
| 15    | 21.4     | 20.2 | 20.6 | 16.8  | 15.5 | 16.0 | 8.8   | 8.2  | 8.5  | 8.2  | 7.6  | 7.8  |
| 16    | 21.0     | 19.8 | 20.2 | 16.7  | 15.3 | 15.9 | 8.7   | 8.2  | 8.4  | 7.9  | 7.1  | 7.6  |
| 17    | 20.8     | 19.5 | 20.1 | 16.6  | 15.4 | 16.1 | 9.0   | 8.4  | 8.8  | 7.7  | 6.9  | 7.5  |
| 18    | 20.5     | 19.5 | 19.9 | 16.6  | 15.7 | 16.2 | 8.6   | 8.1  | 8.3  | 8.7  | 7.3  | 8.0  |
| 19    | 20.5     | 19.0 | 19.8 | 17.1  | 16.2 | 16.7 | 8.2   | 7.6  | 7.9  | 8.6  | 7.8  | 8.1  |
| 20    | 20.3     | 19.0 | 19.7 | 16.5  | 15.7 | 16.1 | 8.0   | 7.2  | 7.6  | 8.0  | 7.3  | 7.8  |
| 21    | 20.4     | 19.2 | 19.7 | 16.3  | 15.6 | 15.9 | 7.4   | 6.7  | 7.0  | 7.9  | 7.1  | 7.6  |
| 22    | 20.2     | 19.1 | 19.8 | 16.1  | 15.3 | 15.7 | 6.9   | 6.4  | 6.7  | 7.9  | 7.0  | 7.4  |
| 23    | 19.9     | 18.9 | 19.4 | 16.0  | 14.9 | 15.5 | 7.0   | 6.3  | 6.7  | 7.8  | 6.8  | 7.3  |
| 24    | 19.4     | 18.7 | 19.0 | 15.9  | 14.7 | 15.5 | 7.6   | 6.8  | 7.2  | 8.0  | 6.7  | 7.3  |
| 25    | 18.9     | 18.1 | 18.5 | 15.8  | 14.9 | 15.4 | 7.6   | 7.1  | 7.3  | 7.4  | 6.6  | 7.0  |
| 26    | 19.1     | 18.0 | 18.7 | 15.8  | 14.6 | 15.2 | 7.3   | 6.9  | 7.1  | 7.2  | 6.1  | 6.5  |
| 27    | 19.6     | 18.3 | 19.1 | 15.8  | 14.6 | 15.2 | 7.3   | 6.8  | 7.1  | 6.6  | 6.0  | 6.2  |
| 28    | 19.5     | 18.7 | 19.2 | 16.1  | 14.7 | 15.4 | 7.3   | 6.8  | 7.1  | 6.4  | 5.6  | 5.9  |
| 29    | 19.5     | 18.5 | 19.0 | 15.6  | 13.8 | 14.5 | 7.4   | 6.9  | 7.1  | 6.3  | 5.3  | 5.8  |
| 30    | 19.0     | 17.8 | 18.2 | 14.7  | 13.4 | 14.0 | 7.7   | 7.1  | 7.4  | 6.0  | 5.5  | 5.7  |
| 31    | 18.0     | 17.1 | 17.6 | ---   | ---  | ---  | 7.9   | 7.2  | 7.5  | 5.8  | 5.1  | 5.5  |
| MONTH | ---      | ---  | ---  | 19.1  | 13.4 | 16.6 | 14.2  | 6.3  | 9.2  | 10.9 | 5.1  | 7.8  |
|       | FEBRUARY |      |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 5.7      | 5.0  | 5.3  | 8.8   | 8.0  | 8.5  | 15.8  | 14.9 | 15.4 | 21.9 | 21.5 | 21.7 |
| 2     | 5.9      | 4.9  | 5.5  | 9.4   | 8.3  | 8.8  | 15.5  | 14.8 | 15.2 | 22.4 | 21.6 | 21.9 |
| 3     | 6.8      | 5.4  | 6.2  | 10.0  | 8.9  | 9.5  | 15.7  | 14.8 | 15.2 | 22.3 | 21.6 | 22.0 |
| 4     | 6.6      | 5.7  | 6.1  | 10.9  | 9.5  | 10.2 | 15.9  | 15.1 | 15.4 | 21.8 | 21.2 | 21.6 |
| 5     | 6.7      | 5.7  | 6.2  | 12.1  | 10.7 | 11.4 | 15.6  | 14.8 | 15.2 | 21.9 | 21.0 | 21.4 |
| 6     | 8.0      | 6.1  | 6.9  | 13.6  | 12.0 | 12.8 | 16.1  | 14.7 | 15.2 | 22.4 | 21.1 | 21.5 |
| 7     | 8.8      | 7.5  | 8.1  | 14.5  | 13.4 | 13.9 | 16.6  | 14.9 | 15.5 | 22.7 | 21.1 | 21.6 |
| 8     | 8.2      | 7.4  | 7.8  | 14.8  | 13.8 | 14.2 | 17.4  | 15.5 | 16.1 | 22.6 | 21.3 | 21.7 |
| 9     | 7.8      | 7.5  | 7.7  | 14.6  | 13.9 | 14.2 | 17.7  | 16.0 | 16.6 | 22.9 | 21.6 | 21.9 |
| 10    | 8.1      | 7.5  | 7.8  | 14.4  | 13.6 | 14.1 | 17.4  | 16.4 | 16.9 | 22.9 | 21.9 | 22.2 |
| 11    | 8.2      | 7.6  | 7.9  | 14.6  | 13.0 | 13.5 | 18.3  | 16.8 | 17.4 | 22.8 | 22.2 | 22.4 |
| 12    | 8.0      | 7.8  | 7.9  | 14.4  | 12.9 | 13.6 | 18.1  | 17.4 | 17.7 | 23.2 | 22.4 | 22.8 |
| 13    | 8.2      | 7.6  | 7.8  | 14.5  | 13.1 | 13.7 | 18.6  | 17.7 | 18.1 | 23.2 | 22.8 | 23.0 |
| 14    | 8.3      | 7.6  | 8.0  | 14.6  | 13.0 | 13.7 | ---   | ---  | ---  | 23.6 | 22.8 | 23.2 |
| 15    | 8.4      | 7.8  | 8.1  | 14.9  | 13.3 | 14.1 | ---   | ---  | ---  | 24.0 | 23.4 | 23.6 |
| 16    | 8.5      | 7.7  | 8.1  | 14.9  | 13.5 | 14.2 | 18.1  | 17.3 | 17.7 | 24.7 | 23.6 | 24.0 |
| 17    | 8.4      | 7.3  | 7.8  | 14.9  | 13.8 | 14.3 | 18.7  | 17.5 | 18.0 | 24.9 | 24.0 | 24.4 |
| 18    | 8.1      | 7.3  | 7.7  | 14.8  | 13.8 | 14.2 | 19.2  | 17.9 | 18.5 | 24.8 | 24.4 | 24.6 |
| 19    | 8.3      | 7.3  | 7.8  | 15.5  | 14.0 | 14.6 | 19.7  | 18.4 | 19.0 | 25.6 | 24.4 | 24.8 |
| 20    | 8.7      | 7.6  | 8.1  | 15.4  | 14.2 | 14.8 | 20.6  | 18.8 | 19.4 | 27.4 | 24.8 | 25.2 |
| 21    | 9.4      | 8.1  | 8.8  | 15.8  | 14.7 | 15.1 | 20.5  | 19.2 | 19.8 | 27.0 | 25.0 | 25.5 |
| 22    | 9.5      | 8.5  | 9.1  | 15.3  | 14.5 | 14.9 | 20.9  | 19.7 | 20.3 | 27.1 | 25.2 | 25.8 |
| 23    | 9.7      | 8.9  | 9.3  | 15.1  | 13.9 | 14.4 | 21.7  | 20.2 | 20.7 | 26.9 | 25.6 | 26.1 |
| 24    | 9.6      | 9.3  | 9.5  | 15.0  | 13.7 | 14.3 | 22.1  | 20.8 | 21.3 | 27.4 | 25.7 | 26.4 |
| 25    | 9.8      | 9.3  | 9.5  | 15.4  | 13.9 | 14.6 | 22.4  | 21.0 | 21.6 | 27.5 | 26.0 | 26.6 |
| 26    | 9.5      | 8.7  | 9.0  | 15.8  | 14.2 | 15.0 | 22.3  | 21.2 | 21.8 | 27.6 | 26.3 | 26.8 |
| 27    | 9.1      | 8.2  | 8.5  | 16.0  | 14.5 | 15.2 | 22.2  | 21.4 | 21.8 | 27.6 | 26.5 | 27.0 |
| 28    | 8.9      | 7.4  | 8.3  | 16.2  | 14.7 | 15.5 | 22.1  | 20.6 | 21.4 | 27.6 | 26.6 | 27.1 |
| 29    | 9.2      | 7.8  | 8.5  | 15.6  | 14.4 | 15.0 | 22.0  | 20.8 | 21.4 | 27.7 | 26.9 | 27.3 |
| 30    | ---      | ---  | ---  | 15.5  | 14.4 | 15.0 | 22.3  | 21.1 | 21.7 | 27.4 | 26.7 | 27.0 |
| 31    | ---      | ---  | ---  | 15.9  | 14.9 | 15.4 | ---   | ---  | ---  | 27.3 | 26.8 | 27.1 |
| MONTH | 9.8      | 4.9  | 7.8  | 16.2  | 8.0  | 13.6 | ---   | ---  | ---  | 27.7 | 21.0 | 24.1 |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|------|------|------|------|------|------|------|------|
|       |      |      |      |      |      |      |      |      |      |      |      |      |
| 1     | 27.8 | 26.8 | 27.2 | 29.0 | 28.2 | 28.5 | 29.6 | 28.9 | 29.2 | 26.9 | 26.4 | 26.6 |
| 2     | 27.9 | 27.1 | 27.4 | 28.8 | 28.4 | 28.6 | 29.7 | 29.0 | 29.3 | 26.8 | 26.0 | 26.4 |
| 3     | 28.2 | 27.2 | 27.6 | 29.0 | 28.2 | 28.5 | 29.9 | 28.8 | 29.3 | 26.3 | 25.8 | 26.1 |
| 4     | 28.0 | 27.4 | 27.6 | 29.4 | 28.2 | 28.6 | 30.4 | 28.9 | 29.4 | 26.3 | 25.4 | 25.9 |
| 5     | 28.3 | 27.2 | 27.7 | 30.1 | 28.4 | 28.9 | 30.3 | 29.1 | 29.6 | 26.3 | 25.4 | 25.9 |
| 6     | 28.0 | 27.3 | 27.6 | 30.4 | 28.7 | 29.3 | 29.7 | 28.7 | 29.1 | 26.1 | 25.5 | 25.7 |
| 7     | 28.2 | 27.3 | 27.7 | 30.5 | 29.0 | 29.4 | 28.9 | 27.5 | 28.5 | 25.6 | 25.3 | 25.4 |
| 8     | 28.2 | 27.4 | 27.8 | 29.9 | 29.2 | 29.5 | 28.8 | 27.6 | 28.3 | 25.6 | 25.1 | 25.3 |
| 9     | 28.0 | 27.5 | 27.8 | 29.9 | 28.9 | 29.3 | 28.6 | 27.4 | 28.1 | 25.7 | 25.2 | 25.4 |
| 10    | 28.2 | 27.3 | 27.7 | 30.0 | 29.0 | 29.5 | 28.7 | 27.5 | 28.1 | 25.8 | 25.5 | 25.6 |
| 11    | 28.4 | 27.5 | 27.9 | 30.1 | 29.1 | 29.5 | 28.3 | 27.7 | 28.0 | 25.6 | 25.2 | 25.4 |
| 12    | 28.3 | 27.5 | 28.0 | 29.6 | 29.1 | 29.4 | 28.1 | 27.4 | 27.8 | 25.5 | 24.8 | 25.1 |
| 13    | 28.0 | 27.3 | 27.7 | 30.0 | 29.1 | 29.5 | 27.6 | 27.2 | 27.4 | 25.1 | 24.6 | 24.9 |
| 14    | 28.1 | 27.3 | 27.7 | 30.1 | 29.3 | 29.7 | 27.3 | 26.3 | 26.9 | 24.8 | 24.1 | 24.4 |
| 15    | 28.3 | 27.4 | 27.8 | 30.3 | 29.4 | 29.8 | 26.8 | 25.4 | 26.0 | 24.4 | 23.9 | 24.2 |
| 16    | 28.2 | 27.6 | 27.9 | 30.3 | 29.4 | 29.8 | 25.8 | 25.0 | 25.2 | 24.5 | 24.1 | 24.3 |
| 17    | 27.9 | 27.5 | 27.7 | 29.8 | 29.3 | 29.5 | 25.2 | 24.3 | 24.7 | 25.0 | 24.2 | 24.6 |
| 18    | 29.1 | 27.4 | 27.9 | 30.0 | 29.0 | 29.3 | 24.9 | 23.9 | 24.5 | 24.8 | 23.8 | 24.3 |
| 19    | 29.4 | 27.9 | 28.4 | 30.1 | 28.7 | 29.3 | 25.3 | 24.0 | 24.5 | 24.0 | 23.2 | 23.5 |
| 20    | 28.7 | 28.0 | 28.3 | 30.5 | 28.8 | 29.4 | 25.0 | 24.1 | 24.6 | 23.7 | 22.6 | 23.1 |
| 21    | 29.0 | 27.5 | 28.0 | 30.5 | 28.9 | 29.5 | 25.0 | 24.4 | 24.8 | 23.5 | 22.1 | 22.8 |
| 22    | 29.2 | 27.7 | 28.3 | 30.2 | 29.1 | 29.6 | 25.2 | 24.5 | 24.9 | 23.2 | 22.3 | 22.8 |
| 23    | 29.8 | 28.0 | 28.6 | 30.0 | 29.1 | 29.5 | 25.4 | 24.5 | 25.0 | 23.0 | 22.4 | 22.7 |
| 24    | 29.2 | 28.2 | 28.7 | 30.0 | 29.1 | 29.6 | 25.7 | 24.9 | 25.3 | 23.0 | 22.5 | 22.8 |
| 25    | 29.4 | 28.2 | 28.8 | 29.7 | 29.0 | 29.5 | 25.9 | 25.2 | 25.5 | 23.2 | 22.5 | 22.9 |
| 26    | 29.0 | 28.3 | 28.6 | 30.0 | 29.1 | 29.5 | 26.0 | 25.4 | 25.7 | 23.2 | 22.6 | 23.0 |
| 27    | 28.7 | 28.2 | 28.5 | 30.0 | 29.2 | 29.5 | 26.3 | 25.6 | 25.9 | 23.8 | 22.8 | 23.3 |
| 28    | 28.9 | 28.2 | 28.5 | 29.6 | 29.1 | 29.4 | 26.6 | 25.8 | 26.2 | 24.2 | 23.5 | 23.8 |
| 29    | 29.1 | 28.3 | 28.6 | 29.2 | 28.7 | 29.0 | 26.7 | 26.1 | 26.4 | 24.4 | 23.5 | 23.9 |
| 30    | 28.8 | 28.3 | 28.6 | 29.6 | 28.6 | 29.1 | 27.0 | 26.1 | 26.4 | 24.4 | 23.7 | 24.0 |
| 31    | ---  | ---  | ---  | 29.7 | 28.9 | 29.2 | 27.2 | 26.3 | 26.6 | ---  | ---  | ---  |
| MONTH | 29.8 | 26.8 | 28.0 | 30.5 | 28.2 | 29.3 | 30.4 | 23.9 | 26.8 | 26.9 | 22.1 | 24.5 |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 24.5 | 23.9 | 24.2 | 20.9 | 19.8 | 20.1 | 15.0 | 14.5 | 14.7 | --- | --- | ---  |
| 2     | 25.1 | 24.0 | 24.4 | 21.2 | 20.1 | 20.4 | ---  | ---  | ---  | --- | --- | ---  |
| 3     | 25.0 | 24.1 | 24.5 | 21.1 | 20.4 | 20.6 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 24.9 | 23.9 | 24.4 | 21.1 | 20.4 | 20.7 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 24.6 | 23.7 | 24.2 | 20.8 | 20.0 | 20.4 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 24.4 | 23.5 | 24.0 | 20.5 | 19.5 | 20.1 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 24.3 | 22.8 | 23.7 | 20.3 | 19.4 | 19.9 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 24.4 | 22.8 | 23.6 | 20.0 | 19.3 | 19.7 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | ---  | ---  | ---  | 19.7 | 18.3 | 19.1 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | ---  | ---  | ---  | 18.8 | 17.7 | 18.4 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 23.8 | 23.0 | 23.5 | 18.0 | 17.7 | 17.8 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 23.5 | 22.8 | 23.2 | 17.9 | 17.5 | 17.7 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 23.5 | 22.8 | 23.2 | 17.8 | 16.9 | 17.4 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | ---  | ---  | ---  | 17.1 | 16.0 | 16.4 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | ---  | ---  | ---  | 16.2 | 15.4 | 15.7 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 22.4 | 21.4 | 21.8 | 15.5 | 14.9 | 15.1 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 21.8 | 21.0 | 21.4 | 15.0 | 14.4 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 21.8 | 20.9 | 21.3 | 14.7 | 14.1 | 14.5 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 22.0 | 21.2 | 21.5 | 14.7 | 13.9 | 14.3 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 21.9 | 21.6 | 21.7 | 14.9 | 13.9 | 14.4 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 21.7 | 21.2 | 21.5 | 15.1 | 13.8 | 14.5 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 21.5 | 20.6 | 21.2 | 15.1 | 14.2 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 21.1 | 20.2 | 20.8 | 15.2 | 14.4 | 14.9 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 20.6 | 20.0 | 20.3 | 15.6 | 14.7 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 20.1 | 19.7 | 19.9 | 16.2 | 15.3 | 15.7 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 19.7 | 19.4 | 19.6 | 15.6 | 14.9 | 15.3 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 19.6 | 19.0 | 19.4 | 15.4 | 14.6 | 15.0 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 19.6 | 19.2 | 19.4 | 15.4 | 14.9 | 15.1 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 19.4 | 19.0 | 19.1 | 15.2 | 14.5 | 14.8 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 20.2 | 18.9 | 19.4 | 15.0 | 14.2 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 20.8 | 19.4 | 19.8 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | ---  | ---  | ---  | 21.2 | 13.8 | 16.9 | ---  | ---  | ---  | --- | --- | ---  |



02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|-------|----------|------|------|----------|------|------|----------|------|------|---------|------|------|
|       | OCTOBER  |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |      |      |
| 1     | 22.7     | 21.7 | 22.3 | 17.7     | 17.0 | 17.3 | 14.7     | 13.2 | 13.9 | 8.3     | 7.5  | 7.8  |
| 2     | 22.4     | 21.6 | 22.0 | 17.4     | 16.8 | 17.1 | 14.4     | 12.8 | 13.5 | 8.8     | 7.6  | 8.1  |
| 3     | ---      | ---  | ---  | 17.8     | 17.0 | 17.3 | 14.0     | 12.3 | 13.1 | 9.1     | 7.9  | 8.6  |
| 4     | 21.8     | 20.9 | 21.4 | 18.0     | 17.3 | 17.7 | 13.4     | 12.0 | 12.7 | 9.6     | 8.5  | 9.1  |
| 5     | 21.6     | 21.1 | 21.4 | 18.3     | 17.7 | 18.0 | 12.9     | 11.9 | 12.4 | 10.6    | 9.3  | 10   |
| 6     | 21.6     | 21.2 | 21.4 | 18.9     | 18.1 | 18.5 | 12.4     | 11.3 | 11.9 | 10.8    | 10.1 | 10.5 |
| 7     | 21.6     | 21.3 | 21.4 | 19.1     | 18.7 | 18.9 | 11.9     | 10.9 | 11.4 | 10.9    | 9.9  | 10.3 |
| 8     | 21.5     | 21.2 | 21.3 | 19.2     | 18.7 | 19.0 | 11.4     | 10.6 | 11.0 | 11.0    | 9.4  | 10.1 |
| 9     | 21.3     | 20.8 | 21.0 | 19.1     | 17.7 | 18.3 | 11.1     | 10.3 | 10.7 | 10.4    | 9.2  | 9.8  |
| 10    | ---      | ---  | ---  | 18.9     | 17.1 | 17.8 | 11.3     | 10.3 | 10.9 | 10.1    | 8.4  | 9.2  |
| 11    | 21.2     | 20.6 | 20.9 | 18.5     | 17.0 | 17.7 | 11.3     | 10.7 | 11.1 | 9.7     | 7.8  | 8.7  |
| 12    | 21.3     | 20.3 | 20.9 | 18.2     | 17.2 | 17.7 | 11.1     | 10.1 | 10.4 | 9.0     | 7.7  | 8.3  |
| 13    | 21.8     | 20.4 | 21.0 | 18.0     | 16.8 | 17.4 | 10.6     | 9.5  | 10.0 | 8.5     | 7.5  | 8.1  |
| 14    | 21.4     | 20.6 | 21.1 | 17.5     | 16.1 | 16.7 | 10.8     | 8.8  | 9.8  | 8.2     | 7.6  | 7.9  |
| 15    | 21.4     | 20.2 | 20.7 | 17.4     | 15.6 | 16.4 | 9.6      | 8.3  | 8.7  | 8.0     | 7.7  | 7.9  |
| 16    | 21.0     | 19.7 | 20.4 | 17.1     | 15.3 | 16.3 | 8.8      | 8.3  | 8.5  | 8.0     | 7.3  | 7.7  |
| 17    | 21.1     | 19.4 | 20.2 | 16.9     | 15.5 | 16.4 | 9.1      | 8.4  | 8.8  | 7.8     | 7.2  | 7.6  |
| 18    | 21.2     | 19.4 | 20.3 | 16.8     | 15.8 | 16.5 | 8.7      | 8.2  | 8.4  | 8.5     | 7.6  | 8.0  |
| 19    | 21.1     | 19.4 | 20.3 | 17.0     | 16.3 | 16.7 | 8.3      | 7.8  | 8.0  | 8.5     | 7.8  | 8.2  |
| 20    | 20.7     | 19.1 | 20.0 | 16.7     | 15.9 | 16.3 | 8.1      | 7.4  | 7.7  | 8.2     | 7.4  | 8.0  |
| 21    | 20.5     | 19.2 | 19.9 | 16.5     | 15.7 | 16.1 | 7.5      | 6.8  | 7.1  | 8.0     | 7.4  | 7.7  |
| 22    | 20.4     | 19.2 | 19.9 | 16.2     | 15.4 | 15.8 | 7.0      | 6.5  | 6.8  | 7.9     | 7.2  | 7.6  |
| 23    | 20.0     | 19.0 | 19.5 | 16.0     | 14.9 | 15.6 | 7.1      | 6.5  | 6.8  | 7.7     | 7.2  | 7.4  |
| 24    | 19.5     | 18.7 | 19.0 | 16.0     | 14.7 | 15.6 | 7.8      | 6.9  | 7.3  | 7.9     | 7.0  | 7.4  |
| 25    | 19.0     | 18.1 | 18.6 | 16.0     | 15.0 | 15.5 | 7.7      | 7.2  | 7.4  | 7.6     | 6.8  | 7.2  |
| 26    | 19.1     | 18.0 | 18.7 | 15.9     | 14.7 | 15.3 | 7.5      | 7.0  | 7.2  | 7.4     | 6.3  | 6.8  |
| 27    | 19.6     | 18.4 | 19.0 | 15.8     | 14.7 | 15.3 | 7.4      | 7.0  | 7.2  | 7.0     | 6.2  | 6.5  |
| 28    | 19.5     | 18.8 | 19.2 | 16.1     | 14.8 | 15.5 | 7.4      | 6.9  | 7.2  | 6.9     | 5.7  | 6.2  |
| 29    | 19.5     | 18.4 | 19.0 | 15.8     | 13.9 | 14.7 | 7.5      | 7.1  | 7.2  | 6.6     | 5.6  | 6.1  |
| 30    | 19.2     | 17.8 | 18.3 | 15.1     | 13.6 | 14.3 | 7.8      | 7.2  | 7.5  | 6.4     | 5.5  | 6.0  |
| 31    | 18.2     | 17.1 | 17.6 | ---      | ---  | ---  | 7.9      | 7.4  | 7.6  | 6.3     | 5.4  | 5.9  |
| MONTH | ---      | ---  | ---  | 19.2     | 13.6 | 16.7 | 14.7     | 6.5  | 9.4  | 11.0    | 5.4  | 8.0  |
| DAY   | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN  | MEAN |
|       | FEBRUARY |      |      | MARCH    |      |      | APRIL    |      |      | MAY     |      |      |
| 1     | 6.2      | 5.2  | 5.7  | 8.9      | 8.3  | 8.5  | 15.8     | 15.1 | 15.4 | 21.9    | 21.4 | 21.7 |
| 2     | 6.2      | 5.2  | 5.8  | 9.5      | 8.5  | 8.9  | 15.5     | 15.0 | 15.2 | 22.3    | 21.6 | 21.9 |
| 3     | 6.7      | 5.6  | 6.3  | 10.1     | 9.0  | 9.6  | 15.6     | 15.0 | 15.2 | 22.4    | 21.7 | 22.1 |
| 4     | 6.5      | 5.8  | 6.3  | 10.9     | 9.5  | 10.2 | 16.0     | 15.1 | 15.4 | 21.8    | 21.4 | 21.7 |
| 5     | 6.6      | 5.9  | 6.3  | 12.2     | 10.8 | 11.4 | 15.7     | 14.9 | 15.2 | 21.8    | 21.0 | 21.4 |
| 6     | 7.8      | 6.3  | 6.9  | 13.6     | 12.1 | 12.9 | 16.0     | 14.8 | 15.3 | 22.1    | 21.1 | 21.5 |
| 7     | 8.6      | 7.3  | 8.0  | 14.6     | 13.5 | 14.0 | 16.4     | 15.0 | 15.5 | 22.4    | 21.0 | 21.5 |
| 8     | 8.2      | 7.6  | 7.9  | 14.8     | 13.8 | 14.2 | 17.0     | 15.4 | 16.0 | 22.5    | 21.1 | 21.6 |
| 9     | 7.9      | 7.6  | 7.8  | 14.6     | 14.0 | 14.3 | 17.8     | 16.0 | 16.5 | 22.6    | 21.5 | 21.8 |
| 10    | 8.2      | 7.6  | 7.9  | 14.6     | 13.6 | 14.1 | 17.4     | 16.3 | 16.8 | 22.7    | 21.8 | 22.1 |
| 11    | 8.2      | 7.6  | 8.0  | 14.1     | 13.0 | 13.5 | 18.1     | 16.8 | 17.3 | 22.8    | 22.1 | 22.4 |
| 12    | 8.1      | 7.9  | 7.9  | 14.5     | 13.0 | 13.5 | 18.0     | 17.2 | 17.7 | 23.1    | 22.3 | 22.7 |
| 13    | 8.2      | 7.7  | 7.9  | 14.6     | 13.1 | 13.7 | 18.5     | 17.7 | 18.1 | 23.2    | 22.7 | 23.0 |
| 14    | 8.4      | 7.8  | 8.1  | 14.7     | 13.1 | 13.6 | 18.6     | 17.6 | 18.1 | 23.6    | 22.8 | 23.2 |
| 15    | 8.5      | 7.9  | 8.2  | 15.0     | 13.1 | 14.0 | 17.8     | 17.3 | 17.6 | 24.0    | 23.4 | 23.6 |
| 16    | 8.6      | 7.8  | 8.2  | 15.0     | 13.4 | 14.1 | 18.1     | 17.4 | 17.7 | 24.3    | 23.7 | 24.0 |
| 17    | 8.5      | 7.6  | 7.9  | 15.0     | 13.7 | 14.3 | 18.7     | 17.6 | 18.0 | 24.9    | 24.0 | 24.4 |
| 18    | 8.1      | 7.5  | 7.8  | 14.9     | 13.8 | 14.3 | 19.3     | 17.9 | 18.5 | 24.9    | 24.4 | 24.6 |
| 19    | 8.3      | 7.4  | 7.8  | 15.6     | 14.1 | 14.7 | 19.8     | 18.4 | 19.0 | 25.2    | 24.4 | 24.8 |
| 20    | 8.7      | 7.7  | 8.2  | 15.4     | 14.3 | 14.8 | 20.2     | 18.8 | 19.4 | 26.3    | 24.8 | 25.1 |
| 21    | 9.5      | 8.2  | 8.8  | 15.8     | 14.8 | 15.2 | 20.5     | 19.3 | 19.8 | 26.2    | 25.0 | 25.3 |
| 22    | 9.6      | 8.6  | 9.2  | 15.3     | 14.6 | 15.0 | 20.9     | 19.7 | 20.3 | 26.8    | 25.2 | 25.6 |
| 23    | 9.8      | 8.9  | 9.3  | 15.2     | 14.1 | 14.5 | 21.3     | 20.3 | 20.7 | 26.9    | 25.5 | 25.9 |
| 24    | 9.7      | 9.4  | 9.6  | 15.0     | 13.8 | 14.4 | 22.1     | 20.8 | 21.2 | 27.2    | 25.8 | 26.2 |
| 25    | 9.8      | 9.3  | 9.5  | 15.3     | 13.9 | 14.5 | 22.2     | 21.0 | 21.4 | 27.3    | 26.0 | 26.4 |
| 26    | 9.6      | 8.8  | 9.2  | 15.8     | 14.2 | 14.9 | 22.3     | 21.1 | 21.6 | 27.2    | 26.2 | 26.6 |
| 27    | 9.5      | 8.3  | 8.8  | 15.9     | 14.4 | 15.0 | 22.1     | 21.2 | 21.6 | 27.2    | 26.5 | 26.8 |
| 28    | 8.9      | 7.9  | 8.5  | 15.9     | 14.5 | 15.1 | 21.8     | 21.0 | 21.3 | 27.3    | 26.6 | 26.9 |
| 29    | 8.8      | 8.1  | 8.5  | 15.2     | 14.5 | 14.9 | 21.6     | 20.8 | 21.3 | 27.5    | 26.9 | 27.1 |
| 30    | ---      | ---  | ---  | 15.2     | 14.7 | 15.0 | 22.0     | 21.2 | 21.6 | 27.1    | 26.7 | 27.0 |
| 31    | ---      | ---  | ---  | 15.7     | 15.0 | 15.3 | ---      | ---  | ---  | 27.2    | 26.9 | 27.0 |
| MONTH | 9.8      | 5.2  | 7.9  | 15.9     | 8.3  | 13.6 | 22.3     | 14.8 | 18.3 | 27.5    | 21.0 | 24.1 |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 27.5 | 26.9 | 27.2 | 29.0 | 28.2 | 28.5 | 29.5   | 28.9 | 29.2 | 26.9      | 26.4 | 26.6 |
| 2     | 27.8 | 27.1 | 27.4 | 28.8 | 28.4 | 28.5 | 29.7   | 29.0 | 29.3 | 26.8      | 26.0 | 26.3 |
| 3     | 28.1 | 27.2 | 27.5 | 29.0 | 28.2 | 28.5 | 29.8   | 28.9 | 29.3 | 26.3      | 25.6 | 26.1 |
| 4     | 27.9 | 27.3 | 27.6 | 29.3 | 28.2 | 28.6 | 30.3   | 28.9 | 29.3 | 26.3      | 25.3 | 25.9 |
| 5     | 28.2 | 27.2 | 27.6 | 29.7 | 28.4 | 28.8 | 30.2   | 29.2 | 29.5 | 26.3      | 25.3 | 25.8 |
| 6     | 27.9 | 27.3 | 27.5 | 30.2 | 28.7 | 29.1 | 29.7   | 28.9 | 29.2 | 26.1      | 25.3 | 25.7 |
| 7     | 28.1 | 27.3 | 27.6 | 30.1 | 28.9 | 29.3 | 29.2   | 27.9 | 28.7 | 26.0      | 25.3 | 25.5 |
| 8     | 28.1 | 27.4 | 27.7 | 29.7 | 29.2 | 29.4 | 28.8   | 27.7 | 28.4 | 25.6      | 25.1 | 25.4 |
| 9     | 28.0 | 27.5 | 27.7 | 29.5 | 29.0 | 29.3 | 28.4   | 27.9 | 28.2 | 25.7      | 25.2 | 25.4 |
| 10    | 27.9 | 27.4 | 27.7 | 29.6 | 29.2 | 29.5 | 28.1   | 27.8 | 28.0 | 25.8      | 25.5 | 25.6 |
| 11    | 28.2 | 27.6 | 27.9 | 29.7 | 29.3 | 29.6 | 28.2   | 27.8 | 28.0 | 25.6      | 25.2 | 25.4 |
| 12    | 28.2 | 27.7 | 28.0 | 29.7 | 29.3 | 29.5 | 28.0   | 27.5 | 27.9 | 25.5      | 24.8 | 25.1 |
| 13    | 28.0 | 27.5 | 27.8 | 29.7 | 29.3 | 29.5 | 27.7   | 27.4 | 27.5 | 25.2      | 24.6 | 24.9 |
| 14    | 28.0 | 27.4 | 27.7 | 30.0 | 29.4 | 29.7 | 27.6   | 26.5 | 27.1 | 24.8      | 24.1 | 24.4 |
| 15    | 28.1 | 27.6 | 27.8 | 30.1 | 29.6 | 29.8 | 27.0   | 25.3 | 26.1 | 24.4      | 23.9 | 24.2 |
| 16    | 28.1 | 27.7 | 27.8 | 30.1 | 29.6 | 29.8 | 26.0   | 25.0 | 25.2 | 24.5      | 24.0 | 24.3 |
| 17    | 27.8 | 27.6 | 27.7 | 29.9 | 29.4 | 29.6 | 25.1   | 24.2 | 24.6 | 25.0      | 24.2 | 24.5 |
| 18    | 28.7 | 27.5 | 27.9 | 29.6 | 29.1 | 29.3 | 24.8   | 23.9 | 24.4 | 24.8      | 23.8 | 24.3 |
| 19    | 29.1 | 27.9 | 28.2 | 29.6 | 28.9 | 29.2 | 25.1   | 23.9 | 24.5 | 24.0      | 23.2 | 23.5 |
| 20    | 28.7 | 27.9 | 28.2 | 30.1 | 29.0 | 29.3 | 24.9   | 24.0 | 24.5 | 24.3      | 22.6 | 23.2 |
| 21    | 28.6 | 27.6 | 28.0 | 30.0 | 29.0 | 29.4 | 25.0   | 24.4 | 24.7 | 23.9      | 22.2 | 23.1 |
| 22    | 28.8 | 27.9 | 28.2 | 29.9 | 29.1 | 29.4 | 25.1   | 24.5 | 24.8 | 23.6      | 22.3 | 22.9 |
| 23    | 29.0 | 28.1 | 28.4 | 29.8 | 29.1 | 29.4 | 25.4   | 24.5 | 25.0 | 23.1      | 22.4 | 22.8 |
| 24    | 28.8 | 28.2 | 28.5 | 29.7 | 29.2 | 29.4 | 25.6   | 24.9 | 25.3 | 23.1      | 22.6 | 22.8 |
| 25    | 28.9 | 28.2 | 28.5 | 29.6 | 29.1 | 29.4 | 25.8   | 25.1 | 25.4 | 23.3      | 22.6 | 22.9 |
| 26    | 28.8 | 28.3 | 28.5 | 29.5 | 29.1 | 29.4 | 26.1   | 25.4 | 25.7 | 23.3      | 22.8 | 23.0 |
| 27    | 28.5 | 28.3 | 28.4 | 29.6 | 29.2 | 29.4 | 26.3   | 25.6 | 25.9 | 23.7      | 22.9 | 23.3 |
| 28    | 28.6 | 28.2 | 28.4 | 29.4 | 29.1 | 29.3 | 26.6   | 25.8 | 26.2 | 24.1      | 23.5 | 23.8 |
| 29    | 28.8 | 28.3 | 28.5 | 29.2 | 28.7 | 29.0 | 26.7   | 26.1 | 26.4 | 24.4      | 23.5 | 23.9 |
| 30    | 28.8 | 28.3 | 28.5 | 29.4 | 28.7 | 29.0 | 26.8   | 26.1 | 26.4 | 24.4      | 23.7 | 24.1 |
| 31    | ---  | ---  | ---  | 29.5 | 28.9 | 29.2 | 27.0   | 26.3 | 26.6 | ---       | ---  | ---  |
| MONTH | 29.1 | 26.9 | 27.9 | 30.2 | 28.2 | 29.3 | 30.3   | 23.9 | 26.8 | 26.9      | 22.2 | 24.5 |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 24.5 | 24.0 | 24.2 | 20.6 | 19.7 | 20.0 | 15.1 | 14.6 | 14.8 | --- | --- | ---  |
| 2     | 25.1 | 24.0 | 24.4 | 20.8 | 20.0 | 20.3 | ---  | ---  | ---  | --- | --- | ---  |
| 3     | 25.0 | 24.2 | 24.5 | 20.8 | 20.3 | 20.5 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 24.9 | 24.2 | 24.5 | 20.9 | 20.5 | 20.7 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 24.8 | 24.0 | 24.4 | 21.0 | 20.3 | 20.6 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 25.0 | 23.7 | 24.3 | 20.9 | 19.7 | 20.4 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 25.2 | 23.6 | 24.3 | 20.6 | 19.6 | 20.1 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 25.0 | 23.5 | 24.2 | 20.3 | 19.4 | 19.8 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | ---  | ---  | ---  | 20.0 | 18.5 | 19.3 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | ---  | ---  | ---  | 19.1 | 17.8 | 18.6 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 23.8 | 23.2 | 23.6 | 18.2 | 17.8 | 17.9 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 23.4 | 23.0 | 23.2 | 17.9 | 17.5 | 17.8 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 23.4 | 22.9 | 23.1 | 17.8 | 17.1 | 17.5 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | ---  | ---  | ---  | 17.2 | 16.3 | 16.6 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | ---  | ---  | ---  | 16.3 | 15.6 | 15.8 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 22.6 | 21.5 | 21.9 | 15.6 | 15.0 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 21.9 | 20.9 | 21.4 | 15.0 | 14.5 | 14.8 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 21.7 | 20.9 | 21.3 | 14.8 | 14.3 | 14.5 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 21.9 | 21.2 | 21.4 | 14.7 | 14.2 | 14.4 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 21.8 | 21.5 | 21.6 | 14.8 | 14.2 | 14.4 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 21.8 | 21.2 | 21.5 | 15.1 | 14.2 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 21.7 | 20.8 | 21.3 | 15.1 | 14.4 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 21.4 | 20.2 | 20.8 | 15.2 | 14.7 | 14.9 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 20.7 | 20.0 | 20.3 | 15.6 | 15.0 | 15.3 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 20.2 | 19.7 | 19.9 | 16.2 | 15.4 | 15.8 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 19.7 | 19.4 | 19.6 | 15.7 | 15.1 | 15.5 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 19.6 | 19.1 | 19.3 | 15.4 | 14.7 | 15.1 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 19.5 | 19.2 | 19.3 | 15.4 | 15.1 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 19.4 | 19.0 | 19.1 | 15.3 | 14.6 | 14.9 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 19.9 | 18.9 | 19.3 | 15.1 | 14.4 | 14.8 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 20.4 | 19.4 | 19.7 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | ---  | ---  | ---  | 21.0 | 14.2 | 17.0 | ---  | ---  | ---  | --- | --- | ---  |



## CAPE FEAR RIVER BASIN

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN |
|-------|------|------|------|------|-----|------|------|-----|------|------|------|------|
|       |      |      |      |      |     |      |      |     |      |      |      |      |
| 1     | 5.6  | 4.9  | 5.2  | 5.9  | 5.0 | 5.4  | 7.7  | 7.1 | 7.4  | 9.7  | 9.0  | 9.3  |
| 2     | 5.4  | 4.8  | 5.2  | 5.7  | 4.2 | 5.1  | 7.8  | 7.1 | 7.5  | 9.5  | 9.0  | 9.2  |
| 3     | ---  | ---  | ---  | 5.7  | 4.3 | 4.9  | 7.9  | 7.2 | 7.6  | 9.5  | 8.8  | 9.0  |
| 4     | 5.3  | 4.9  | 5.1  | 5.4  | 4.1 | 4.7  | 8.1  | 7.5 | 7.7  | 9.5  | 8.8  | 9.0  |
| 5     | 5.2  | 4.6  | 5.0  | 5.0  | 3.8 | 4.4  | 8.0  | 7.6 | 7.8  | 9.4  | 8.8  | 9.0  |
| 6     | 5.2  | 4.6  | 4.9  | 4.8  | 3.8 | 4.3  | 8.3  | 7.8 | 8.0  | 9.4  | 8.9  | 9.1  |
| 7     | 5.1  | 4.6  | 4.8  | 4.6  | 3.3 | 4.1  | 8.4  | 7.9 | 8.2  | 9.4  | 8.8  | 9.1  |
| 8     | 5.6  | 4.7  | 5.1  | 4.7  | 3.3 | 4.1  | 8.5  | 8.0 | 8.2  | 9.4  | 8.1  | 8.8  |
| 9     | 5.7  | 4.9  | 5.3  | 5.2  | 3.7 | 4.5  | 8.7  | 8.0 | 8.2  | 8.6  | 8.0  | 8.3  |
| 10    | ---  | ---  | ---  | 5.4  | 3.8 | 4.8  | 8.6  | 8.1 | 8.3  | 8.7  | 7.9  | 8.4  |
| 11    | 5.4  | 4.6  | 5.0  | 5.3  | 3.6 | 4.6  | 8.8  | 8.2 | 8.5  | 8.7  | 8.1  | 8.4  |
| 12    | 5.3  | 4.5  | 4.9  | 5.2  | 3.5 | 4.5  | 8.8  | 8.2 | 8.4  | 8.7  | 8.3  | 8.5  |
| 13    | 5.2  | 4.3  | 4.7  | 5.6  | 4.2 | 5.0  | 8.8  | 8.1 | 8.4  | 8.8  | 8.3  | 8.6  |
| 14    | 5.1  | 4.1  | 4.6  | 5.8  | 4.9 | 5.4  | 9.3  | 8.5 | 8.8  | 8.9  | 8.5  | 8.6  |
| 15    | 5.1  | 4.4  | 4.7  | 5.9  | 5.0 | 5.4  | 9.5  | 8.8 | 9.0  | 8.9  | 8.5  | 8.7  |
| 16    | 5.0  | 4.1  | 4.5  | 5.8  | 5.0 | 5.3  | 9.4  | 8.4 | 8.8  | 8.9  | 8.7  | 8.8  |
| 17    | 4.9  | 4.1  | 4.4  | 5.8  | 5.0 | 5.4  | 9.2  | 8.4 | 8.7  | 9.1  | 8.6  | 8.8  |
| 18    | 5.3  | 4.1  | 4.7  | 5.9  | 5.1 | 5.5  | 9.3  | 8.4 | 8.8  | 9.2  | 8.7  | 8.8  |
| 19    | 5.4  | 4.0  | 4.8  | 6.5  | 5.4 | 6.0  | 9.4  | 8.4 | 8.8  | 9.2  | 8.7  | 8.9  |
| 20    | 5.3  | 3.5  | 4.4  | 6.4  | 5.8 | 6.1  | 9.5  | 8.5 | 8.9  | 9.2  | 8.8  | 9.0  |
| 21    | 5.6  | 3.5  | 4.6  | 6.4  | 6.0 | 6.1  | 9.7  | 8.6 | 9.1  | 9.3  | 8.8  | 9.0  |
| 22    | 5.6  | 3.7  | 4.7  | 6.5  | 6.0 | 6.2  | 10.0 | 8.7 | 9.2  | 9.4  | 9.0  | 9.1  |
| 23    | 5.7  | 3.9  | 4.9  | 6.5  | 5.8 | 6.1  | 10.0 | 8.8 | 9.4  | 9.7  | 9.1  | 9.3  |
| 24    | 6.0  | 4.0  | 5.1  | 6.6  | 5.8 | 6.3  | 9.9  | 9.0 | 9.4  | 9.7  | 9.2  | 9.4  |
| 25    | 6.1  | 4.2  | 5.3  | 7.0  | 6.0 | 6.5  | 9.9  | 9.1 | 9.4  | 9.9  | 9.3  | 9.5  |
| 26    | 6.2  | 4.2  | 5.3  | 7.0  | 6.2 | 6.7  | 9.9  | 9.1 | 9.4  | 9.8  | 9.3  | 9.6  |
| 27    | 5.9  | 4.1  | 5.1  | 7.1  | 6.5 | 6.8  | 9.8  | 9.2 | 9.5  | 10.0 | 9.5  | 9.8  |
| 28    | 5.7  | 4.1  | 5.0  | 7.2  | 6.4 | 6.9  | 9.8  | 9.2 | 9.5  | 10.2 | 9.6  | 9.9  |
| 29    | 6.1  | 4.3  | 5.3  | 7.4  | 6.8 | 7.2  | 9.8  | 9.1 | 9.4  | 10.2 | 9.8  | 10.0 |
| 30    | 5.9  | 4.1  | 5.2  | 7.6  | 7.1 | 7.3  | 9.9  | 9.2 | 9.4  | 10.4 | 10.0 | 10.1 |
| 31    | 6.8  | 4.2  | 5.3  | ---  | --- | ---  | 9.9  | 9.2 | 9.4  | 10.3 | 9.9  | 10.2 |
| MONTH | ---  | ---  | ---  | 7.6  | 3.3 | 5.5  | 10.0 | 7.1 | 8.7  | 10.4 | 7.9  | 9.1  |
| DAY   | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX  | MIN  | MEAN |
|       |      |      |      |      |     |      |      |     |      |      |      |      |
| 1     | 10.4 | 10.0 | 10.2 | 10.2 | 9.4 | 9.7  | 7.7  | 7.0 | 7.3  | ---  | ---  | ---  |
| 2     | 10.5 | 10.0 | 10.3 | 10.5 | 9.8 | 10.0 | 7.6  | 7.0 | 7.2  | ---  | ---  | ---  |
| 3     | 10.6 | 10.1 | 10.3 | 10.7 | 9.9 | 10.1 | 7.5  | 7.0 | 7.2  | ---  | ---  | ---  |
| 4     | 10.9 | 10.2 | 10.5 | 10.3 | 9.6 | 9.9  | 7.6  | 7.0 | 7.2  | ---  | ---  | ---  |
| 5     | 11.0 | 10.4 | 10.6 | 10.0 | 9.4 | 9.7  | 7.8  | 7.3 | 7.5  | ---  | ---  | ---  |
| 6     | 11.2 | 10.5 | 10.7 | 9.7  | 9.2 | 9.4  | 7.8  | 7.3 | 7.5  | ---  | ---  | ---  |
| 7     | 11.5 | 10.5 | 10.8 | 9.2  | 8.5 | 8.9  | 7.9  | 7.4 | 7.6  | 5.7  | 4.9  | 5.2  |
| 8     | 11.5 | 10.7 | 11.0 | 8.9  | 8.1 | 8.5  | 7.8  | 7.3 | 7.6  | 5.5  | 4.6  | 5.1  |
| 9     | 11.2 | 10.8 | 11.0 | 8.3  | 7.8 | 8.0  | 7.8  | 7.3 | 7.6  | 5.3  | 4.4  | 4.9  |
| 10    | 11.3 | 10.4 | 10.8 | 8.2  | 7.7 | 7.9  | 7.8  | 7.2 | 7.5  | 5.1  | 4.3  | 4.7  |
| 11    | 10.9 | 10.2 | 10.6 | 8.2  | 7.8 | 8.0  | 7.7  | 7.2 | 7.4  | 4.8  | 4.3  | 4.5  |
| 12    | 10.9 | 10.3 | 10.6 | 8.0  | 7.6 | 7.9  | 7.7  | 7.1 | 7.3  | 4.7  | 4.2  | 4.5  |
| 13    | 10.8 | 10.2 | 10.5 | 8.1  | 7.5 | 7.8  | 7.7  | 7.1 | 7.4  | 4.6  | 3.8  | 4.2  |
| 14    | 10.6 | 10.0 | 10.3 | 8.3  | 7.4 | 7.8  | ---  | --- | ---  | 4.5  | 3.8  | 4.1  |
| 15    | 10.5 | 9.8  | 10.1 | 8.2  | 7.4 | 7.8  | ---  | --- | ---  | 4.5  | 3.9  | 4.2  |
| 16    | 10.5 | 9.7  | 10.1 | 8.1  | 7.3 | 7.7  | ---  | --- | ---  | 4.5  | 4.0  | 4.2  |
| 17    | 10.6 | 9.6  | 10.1 | 7.9  | 7.3 | 7.6  | ---  | --- | ---  | 4.5  | 4.1  | 4.3  |
| 18    | 10.6 | 9.7  | 10.1 | 7.9  | 7.3 | 7.6  | ---  | --- | ---  | 4.6  | 4.1  | 4.3  |
| 19    | 10.5 | 9.9  | 10.2 | 8.1  | 7.4 | 7.7  | ---  | --- | ---  | 4.8  | 4.0  | 4.4  |
| 20    | 10.8 | 9.9  | 10.3 | 8.1  | 7.5 | 7.8  | ---  | --- | ---  | 5.0  | 4.0  | 4.5  |
| 21    | 10.7 | 10.1 | 10.4 | 8.3  | 7.6 | 8.0  | ---  | --- | ---  | 4.9  | 4.4  | 4.6  |
| 22    | 10.6 | 9.8  | 10.2 | 8.4  | 7.5 | 8.0  | ---  | --- | ---  | 5.1  | 4.4  | 4.6  |
| 23    | 10.5 | 9.7  | 10.1 | 8.4  | 7.8 | 8.1  | ---  | --- | ---  | 5.3  | 4.7  | 4.8  |
| 24    | 10.1 | 9.6  | 9.9  | 8.5  | 7.5 | 8.0  | ---  | --- | ---  | ---  | ---  | ---  |
| 25    | 10.1 | 9.6  | 9.8  | 8.6  | 7.4 | 7.9  | ---  | --- | ---  | 5.2  | 4.7  | 4.9  |
| 26    | 10.1 | 9.7  | 9.9  | 8.4  | 7.4 | 7.8  | ---  | --- | ---  | 5.4  | 4.6  | 4.9  |
| 27    | 10.2 | 9.4  | 9.8  | 8.3  | 7.4 | 7.7  | ---  | --- | ---  | 5.2  | 4.8  | 4.9  |
| 28    | 10.0 | 9.5  | 9.7  | 8.2  | 7.4 | 7.6  | ---  | --- | ---  | 5.5  | 4.8  | 5.0  |
| 29    | 10.1 | 9.4  | 9.5  | 8.0  | 7.4 | 7.6  | ---  | --- | ---  | 5.0  | 4.6  | 4.8  |
| 30    | ---  | ---  | ---  | 8.0  | 7.2 | 7.5  | ---  | --- | ---  | 5.0  | 4.5  | 4.7  |
| 31    | ---  | ---  | ---  | 7.8  | 7.2 | 7.4  | ---  | --- | ---  | 4.9  | 4.5  | 4.6  |
| MONTH | 11.5 | 9.4  | 10.3 | 10.7 | 7.2 | 8.2  | ---  | --- | ---  | ---  | ---  | ---  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 4.9 | 4.3 | 4.5  | 4.5 | 3.7 | 4.0  | 4.1 | 3.4 | 3.7  | 4.6 | 3.3 | 3.8  |
| 2     | 4.9 | 4.2 | 4.5  | 4.5 | 3.7 | 4.0  | 4.1 | 3.4 | 3.7  | 4.8 | 3.3 | 4.1  |
| 3     | 4.7 | 4.3 | 4.5  | 4.2 | 3.7 | 3.9  | 4.4 | 3.6 | 4.0  | 4.7 | 3.3 | 4.1  |
| 4     | 4.7 | 4.2 | 4.4  | 4.2 | 3.5 | 3.9  | 4.7 | 3.9 | 4.2  | 4.3 | 3.1 | 3.8  |
| 5     | 4.8 | 4.2 | 4.4  | 4.3 | 3.6 | 3.9  | 4.6 | 3.1 | 4.2  | 4.2 | 3.0 | 3.8  |
| 6     | 4.5 | 4.1 | 4.3  | 4.1 | 3.7 | 3.9  | 4.9 | 4.2 | 4.6  | 4.4 | 3.0 | 3.8  |
| 7     | 4.4 | 4.0 | 4.2  | 4.1 | 3.5 | 3.7  | 4.9 | 4.2 | 4.6  | 4.5 | 3.1 | 3.9  |
| 8     | 4.6 | 3.9 | 4.2  | 3.9 | 3.2 | 3.6  | 5.1 | 4.2 | 4.5  | 4.8 | 3.7 | 4.4  |
| 9     | 4.5 | 3.8 | 4.2  | 3.9 | 3.3 | 3.6  | 4.9 | 3.9 | 4.5  | 4.7 | 3.9 | 4.3  |
| 10    | 4.5 | 3.7 | 4.2  | 4.0 | 3.3 | 3.6  | 5.0 | 3.9 | 4.4  | 4.1 | 3.4 | 3.8  |
| 11    | 4.6 | 3.8 | 4.2  | 4.3 | 3.1 | 3.7  | 4.8 | 3.7 | 4.2  | 4.4 | 3.5 | 3.8  |
| 12    | 4.8 | 3.8 | 4.3  | 4.2 | 3.2 | 3.7  | 4.7 | 3.5 | 4.1  | 4.2 | 3.0 | 3.6  |
| 13    | 4.8 | 3.9 | 4.4  | 4.3 | 3.3 | 3.7  | 5.0 | 4.0 | 4.6  | 3.8 | 3.1 | 3.5  |
| 14    | 5.0 | 3.7 | 4.4  | 4.2 | 3.2 | 3.7  | 5.5 | 4.1 | 4.9  | 3.9 | 3.4 | 3.7  |
| 15    | 5.1 | 3.7 | 4.5  | 4.2 | 3.2 | 3.7  | 5.4 | 4.2 | 5.0  | 3.9 | 3.2 | 3.6  |
| 16    | 4.9 | 4.2 | 4.5  | 4.2 | 3.4 | 3.8  | 5.0 | 4.2 | 4.7  | 3.6 | 3.1 | 3.3  |
| 17    | 4.8 | 4.2 | 4.4  | 4.3 | 3.4 | 3.8  | 5.0 | 4.3 | 4.6  | 4.3 | 3.2 | 3.6  |
| 18    | 4.9 | 4.2 | 4.4  | 4.4 | 3.4 | 3.8  | 5.1 | 3.8 | 4.5  | 4.3 | 3.8 | 4.0  |
| 19    | 4.7 | 4.0 | 4.4  | 4.1 | 3.3 | 3.7  | 4.5 | 3.5 | 4.0  | 4.3 | 3.6 | 4.0  |
| 20    | 4.6 | 3.9 | 4.2  | 4.1 | 3.2 | 3.7  | 4.2 | 3.3 | 3.6  | 4.7 | 4.1 | 4.4  |
| 21    | 4.8 | 4.0 | 4.3  | 4.3 | 3.2 | 3.8  | 4.2 | 3.2 | 3.7  | 5.1 | 4.4 | 4.7  |
| 22    | 4.9 | 4.0 | 4.4  | 4.1 | 3.3 | 3.7  | 4.3 | 3.5 | 3.9  | 5.2 | 4.0 | 4.6  |
| 23    | 5.4 | 4.1 | 4.6  | 4.4 | 3.5 | 3.9  | 4.0 | 3.4 | 3.7  | 5.3 | 3.8 | 4.5  |
| 24    | 4.6 | 3.9 | 4.3  | 4.2 | 3.3 | 3.8  | 3.8 | 3.0 | 3.4  | 5.3 | 4.0 | 4.6  |
| 25    | 4.4 | 3.8 | 4.1  | 4.3 | 2.8 | 3.7  | 4.2 | 3.0 | 3.5  | 5.2 | 4.3 | 4.8  |
| 26    | 4.6 | 4.0 | 4.2  | 3.9 | 2.7 | 3.4  | 4.2 | 3.1 | 3.6  | 5.2 | 4.4 | 4.8  |
| 27    | 4.4 | 3.8 | 4.0  | 3.8 | 2.8 | 3.3  | 4.0 | 3.2 | 3.6  | 5.2 | 4.7 | 4.9  |
| 28    | 4.4 | 3.7 | 3.9  | 4.1 | 2.9 | 3.4  | 3.9 | 3.1 | 3.6  | 5.7 | 4.9 | 5.3  |
| 29    | 4.4 | 3.4 | 3.8  | 4.4 | 3.4 | 3.8  | 4.6 | 3.3 | 3.8  | 5.4 | 4.4 | 4.9  |
| 30    | 4.6 | 3.2 | 3.9  | 4.3 | 3.3 | 3.7  | 4.8 | 4.2 | 4.6  | 4.7 | 4.2 | 4.5  |
| 31    | --- | --- | ---  | 4.1 | 3.3 | 3.6  | 4.6 | 3.5 | 4.1  | --- | --- | ---  |
| MONTH | 5.4 | 3.2 | 4.3  | 4.5 | 2.7 | 3.7  | 5.5 | 3.0 | 4.1  | 5.7 | 3.0 | 4.2  |





## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN | MEAN |
|-------|----------|------|------|-------|-----|------|-------|-----|------|------|-----|------|
|       |          |      |      |       |     |      |       |     |      |      |     |      |
| 1     | 5.4      | 4.7  | 5.1  | 5.2   | 4.4 | 4.7  | 7.6   | 7.2 | 7.4  | 9.6  | 9.0 | 9.3  |
| 2     | 5.2      | 4.6  | 5.0  | 5.0   | 4.3 | 4.6  | 7.6   | 7.2 | 7.5  | 9.4  | 8.6 | 9.0  |
| 3     | ---      | ---  | ---  | 5.0   | 4.1 | 4.5  | 7.9   | 7.4 | 7.7  | 9.2  | 8.3 | 8.9  |
| 4     | 5.0      | 4.6  | 4.9  | 5.0   | 4.1 | 4.4  | 8.1   | 7.7 | 7.9  | 9.1  | 8.4 | 8.9  |
| 5     | 5.1      | 4.6  | 4.8  | 4.7   | 4.0 | 4.3  | 8.3   | 7.8 | 8.1  | 9.1  | 8.5 | 8.9  |
| 6     | 5.0      | 4.6  | 4.8  | 4.6   | 3.9 | 4.2  | 8.5   | 8.0 | 8.2  | 9.0  | 8.5 | 8.8  |
| 7     | 5.1      | 4.7  | 4.9  | 4.4   | 3.7 | 4.1  | 8.6   | 8.2 | 8.4  | 9.2  | 8.3 | 8.7  |
| 8     | 5.5      | 4.8  | 5.1  | 4.6   | 3.6 | 4.1  | 8.8   | 8.4 | 8.6  | 9.2  | 7.8 | 8.5  |
| 9     | 5.9      | 5.1  | 5.5  | 4.9   | 4.0 | 4.5  | 8.8   | 8.4 | 8.7  | 8.4  | 7.7 | 8.1  |
| 10    | ---      | ---  | ---  | 5.2   | 4.3 | 4.8  | 9.0   | 8.4 | 8.7  | 8.7  | 7.8 | 8.3  |
| 11    | 5.5      | 4.9  | 5.2  | 5.3   | 4.3 | 4.8  | 9.2   | 8.6 | 8.9  | 8.8  | 7.8 | 8.3  |
| 12    | 5.4      | 4.8  | 5.1  | 5.2   | 4.1 | 4.7  | 9.2   | 8.7 | 8.9  | 8.8  | 8.1 | 8.5  |
| 13    | 5.4      | 4.6  | 5.0  | 5.6   | 4.5 | 5.0  | 9.1   | 8.6 | 8.9  | 8.9  | 8.3 | 8.6  |
| 14    | 5.3      | 4.4  | 4.9  | 5.7   | 4.9 | 5.3  | 9.7   | 8.5 | 9.2  | 9.0  | 8.5 | 8.7  |
| 15    | 5.4      | 4.7  | 5.0  | 5.6   | 5.0 | 5.4  | 10.1  | 9.3 | 9.6  | 9.2  | 8.6 | 8.8  |
| 16    | 5.3      | 4.4  | 4.8  | 5.6   | 5.0 | 5.3  | 9.9   | 8.9 | 9.4  | 9.2  | 8.7 | 9.0  |
| 17    | 5.1      | 4.4  | 4.7  | 5.7   | 5.1 | 5.4  | 10.0  | 9.0 | 9.5  | 9.2  | 8.8 | 9.0  |
| 18    | 5.4      | 4.5  | 5.0  | 5.8   | 5.3 | 5.5  | 10.1  | 8.9 | 9.5  | 9.3  | 8.9 | 9.1  |
| 19    | 6.1      | 5.0  | 5.3  | 6.2   | 5.5 | 5.9  | 9.9   | 9.0 | 9.4  | 9.2  | 9.0 | 9.1  |
| 20    | 6.0      | 4.7  | 5.3  | 6.3   | 5.9 | 6.1  | 10.0  | 8.9 | 9.4  | 9.4  | 9.1 | 9.3  |
| 21    | 6.5      | 4.8  | 5.5  | 6.3   | 6.0 | 6.2  | 10.2  | 9.1 | 9.6  | 9.5  | 9.0 | 9.3  |
| 22    | 6.5      | 5.3  | 5.7  | 6.3   | 5.9 | 6.2  | 10.4  | 9.2 | 9.8  | 9.6  | 9.3 | 9.4  |
| 23    | 6.8      | 5.5  | 6.0  | 6.4   | 5.9 | 6.2  | 10.3  | 9.3 | 9.8  | 9.8  | 9.3 | 9.5  |
| 24    | 7.3      | 5.8  | 6.2  | 6.5   | 5.9 | 6.3  | 10.3  | 9.4 | 9.8  | 9.9  | 9.4 | 9.7  |
| 25    | 7.7      | 6.0  | 6.5  | 7.0   | 6.0 | 6.6  | 10.2  | 9.3 | 9.7  | 10.0 | 9.5 | 9.8  |
| 26    | 7.4      | 6.0  | 6.4  | 7.0   | 6.3 | 6.7  | 10.2  | 9.5 | 9.8  | 10.2 | 9.5 | 9.8  |
| 27    | 6.7      | 6.1  | 6.3  | 7.0   | 6.5 | 6.7  | 10.2  | 9.5 | 9.8  | 10.2 | 9.5 | 9.9  |
| 28    | 6.8      | 6.1  | 6.3  | 7.2   | 6.4 | 6.8  | 10.2  | 9.5 | 9.8  | 10.5 | 9.5 | 10.0 |
| 29    | 7.0      | 6.0  | 6.7  | 7.5   | 6.9 | 7.2  | 10.0  | 9.3 | 9.6  | 10.5 | 9.6 | 10.1 |
| 30    | 6.9      | 6.0  | 6.5  | 7.5   | 7.1 | 7.3  | 10.1  | 9.3 | 9.6  | 10.6 | 9.8 | 10.2 |
| 31    | 6.7      | 4.5  | 5.7  | ---   | --- | ---  | 9.8   | 9.2 | 9.5  | 10.6 | 9.8 | 10.2 |
| MONTH | ---      | ---  | ---  | 7.5   | 3.6 | 5.5  | 10.4  | 7.2 | 9.1  | 10.6 | 7.7 | 9.2  |
|       | FEBRUARY |      |      | MARCH |     |      | APRIL |     |      | MAY  |     |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX  | MIN | MEAN |
| 1     | 10.6     | 9.8  | 10.2 | 9.7   | 9.0 | 9.3  | 7.4   | 6.9 | 7.1  | 6.4  | 5.6 | 6.0  |
| 2     | 10.7     | 9.9  | 10.3 | 10.1  | 9.3 | 9.7  | 7.3   | 6.8 | 7.1  | 6.5  | 5.8 | 6.2  |
| 3     | 10.6     | 9.8  | 10.3 | 10.2  | 9.5 | 9.8  | 7.3   | 6.8 | 7.1  | 6.6  | 6.1 | 6.3  |
| 4     | 10.9     | 10.1 | 10.5 | 9.9   | 9.4 | 9.6  | 7.5   | 6.9 | 7.2  | 6.4  | 5.5 | 6.0  |
| 5     | 10.9     | 10.2 | 10.6 | 9.7   | 9.2 | 9.5  | 7.7   | 7.1 | 7.4  | 6.1  | 5.4 | 5.8  |
| 6     | 11.1     | 10.4 | 10.8 | 9.5   | 8.9 | 9.2  | 7.7   | 7.2 | 7.5  | 6.2  | 4.8 | 5.6  |
| 7     | 11.2     | 10.6 | 10.9 | 9.1   | 8.4 | 8.7  | 7.8   | 7.3 | 7.6  | 5.6  | 4.8 | 5.2  |
| 8     | 11.4     | 10.9 | 11.1 | 8.7   | 8.0 | 8.4  | 7.7   | 7.3 | 7.5  | 5.4  | 4.6 | 5.0  |
| 9     | 11.3     | 10.8 | 11.1 | 8.3   | 7.8 | 8.1  | 7.8   | 7.3 | 7.5  | 5.3  | 4.3 | 4.9  |
| 10    | 11.3     | 10.5 | 11.0 | 8.3   | 7.7 | 7.9  | 7.6   | 7.2 | 7.4  | 5.1  | 4.2 | 4.7  |
| 11    | 11.1     | 10.1 | 10.6 | 8.2   | 7.6 | 8.0  | 7.7   | 7.1 | 7.4  | 4.8  | 4.2 | 4.5  |
| 12    | 10.9     | 10.1 | 10.5 | 8.2   | 7.8 | 8.0  | 7.5   | 7.1 | 7.3  | 4.8  | 4.2 | 4.4  |
| 13    | 10.7     | 9.9  | 10.3 | 8.2   | 7.6 | 8.0  | 7.7   | 7.1 | 7.4  | 4.6  | 4.1 | 4.4  |
| 14    | 10.4     | 9.8  | 10.1 | 8.1   | 7.5 | 7.9  | 7.7   | 6.8 | 7.3  | 4.6  | 4.0 | 4.3  |
| 15    | 10.3     | 9.7  | 9.9  | 8.1   | 7.5 | 7.8  | 7.3   | 6.7 | 7.0  | 4.6  | 4.0 | 4.3  |
| 16    | 10.2     | 9.5  | 9.8  | 8.0   | 7.4 | 7.8  | 7.1   | 6.5 | 6.8  | 4.6  | 4.0 | 4.4  |
| 17    | 10.1     | 9.4  | 9.8  | 7.9   | 7.4 | 7.7  | 7.0   | 6.5 | 6.8  | 4.6  | 4.2 | 4.4  |
| 18    | 10.1     | 9.4  | 9.8  | 7.9   | 7.4 | 7.7  | 7.1   | 6.7 | 6.9  | 4.6  | 4.2 | 4.5  |
| 19    | 10.3     | 9.5  | 9.9  | 8.0   | 7.4 | 7.7  | 7.1   | 6.6 | 6.9  | 4.8  | 4.3 | 4.6  |
| 20    | 10.4     | 9.6  | 9.9  | 8.1   | 7.5 | 7.8  | 7.1   | 6.3 | 6.7  | 5.0  | 4.5 | 4.7  |
| 21    | 10.4     | 9.7  | 10.0 | 8.2   | 7.7 | 7.9  | 6.8   | 6.3 | 6.6  | 5.0  | 4.4 | 4.7  |
| 22    | 10.3     | 9.5  | 9.9  | 8.4   | 7.6 | 8.0  | 6.7   | 6.1 | 6.5  | 5.2  | 4.5 | 4.8  |
| 23    | 10.1     | 9.4  | 9.7  | 8.4   | 7.8 | 8.1  | 6.6   | 6.1 | 6.3  | 5.5  | 4.6 | 4.9  |
| 24    | 9.8      | 9.3  | 9.6  | 8.2   | 7.5 | 8.0  | 6.4   | 6.1 | 6.2  | 5.5  | 4.6 | 4.9  |
| 25    | 9.7      | 9.3  | 9.5  | 8.2   | 7.5 | 7.9  | 6.3   | 6.0 | 6.1  | 5.4  | 4.5 | 4.9  |
| 26    | 9.7      | 9.0  | 9.4  | 8.1   | 7.4 | 7.8  | 6.6   | 5.9 | 6.1  | 5.3  | 4.4 | 4.9  |
| 27    | 9.7      | 8.7  | 9.3  | 7.9   | 7.4 | 7.7  | 6.6   | 5.9 | 6.2  | ---  | --- | ---  |
| 28    | 9.6      | 8.8  | 9.2  | 7.8   | 7.3 | 7.5  | 6.3   | 5.7 | 6.0  | ---  | --- | ---  |
| 29    | 9.3      | 8.8  | 9.1  | 7.6   | 7.1 | 7.3  | 6.2   | 5.6 | 5.9  | ---  | --- | ---  |
| 30    | ---      | ---  | ---  | 7.4   | 7.0 | 7.2  | 6.1   | 5.6 | 5.9  | ---  | --- | ---  |
| 31    | ---      | ---  | ---  | 7.3   | 6.8 | 7.1  | ---   | --- | ---  | ---  | --- | ---  |
| MONTH | 11.4     | 8.7  | 10.1 | 10.2  | 6.8 | 8.2  | 7.8   | 5.6 | 6.9  | ---  | --- | ---  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | ---  | --- | ---  | ---  | --- | ---  | 3.7    | 3.0 | 3.4  | 4.1       | 3.0 | 3.4  |
| 2     | ---  | --- | ---  | ---  | --- | ---  | 3.6    | 2.8 | 3.2  | 4.2       | 3.0 | 3.6  |
| 3     | ---  | --- | ---  | ---  | --- | ---  | 3.9    | 3.0 | 3.5  | 4.2       | 3.1 | 3.6  |
| 4     | ---  | --- | ---  | ---  | --- | ---  | 4.3    | 3.4 | 3.8  | 3.9       | 3.0 | 3.5  |
| 5     | ---  | --- | ---  | ---  | --- | ---  | 4.2    | 3.4 | 3.9  | 3.9       | 3.1 | 3.5  |
| 6     | ---  | --- | ---  | ---  | --- | ---  | 4.4    | 3.5 | 4.0  | 3.9       | 3.2 | 3.6  |
| 7     | ---  | --- | ---  | ---  | --- | ---  | 4.4    | 3.7 | 4.0  | 4.0       | 3.4 | 3.6  |
| 8     | ---  | --- | ---  | 3.8  | 3.4 | 3.7  | 4.3    | 3.6 | 4.0  | 4.8       | 3.5 | 4.2  |
| 9     | 4.2  | 3.8 | 4.0  | 3.9  | 3.4 | 3.6  | 4.4    | 3.5 | 4.0  | 4.8       | 3.9 | 4.4  |
| 10    | 4.1  | 3.7 | 3.9  | 4.0  | 3.3 | 3.6  | 4.2    | 3.4 | 3.8  | 4.2       | 3.4 | 3.8  |
| 11    | 4.2  | 3.7 | 3.9  | 3.9  | 3.2 | 3.6  | 4.1    | 3.4 | 3.8  | 4.4       | 3.4 | 3.8  |
| 12    | 4.3  | 3.7 | 4.0  | 4.0  | 3.1 | 3.6  | 4.2    | 3.2 | 3.8  | 4.2       | 2.9 | 3.6  |
| 13    | 4.3  | 3.8 | 4.0  | 4.1  | 3.2 | 3.6  | 4.8    | 3.4 | 4.1  | 3.9       | 3.1 | 3.5  |
| 14    | 4.4  | 3.8 | 4.1  | 4.0  | 2.9 | 3.5  | 5.2    | 3.4 | 4.5  | 3.9       | 3.3 | 3.7  |
| 15    | ---  | --- | ---  | 3.8  | 2.9 | 3.4  | 5.3    | 4.1 | 4.8  | 3.9       | 3.2 | 3.6  |
| 16    | ---  | --- | ---  | 3.9  | 3.1 | 3.4  | 4.8    | 4.3 | 4.7  | 3.6       | 3.1 | 3.3  |
| 17    | ---  | --- | ---  | 3.8  | 3.1 | 3.4  | 4.8    | 4.4 | 4.6  | 4.3       | 3.1 | 3.6  |
| 18    | ---  | --- | ---  | 3.9  | 3.0 | 3.4  | 4.9    | 3.7 | 4.3  | 4.4       | 3.7 | 4.0  |
| 19    | ---  | --- | ---  | 3.7  | 2.9 | 3.3  | 4.3    | 3.4 | 3.8  | 4.3       | 3.5 | 3.9  |
| 20    | ---  | --- | ---  | 3.7  | 2.9 | 3.3  | 3.9    | 3.2 | 3.5  | 4.7       | 4.0 | 4.3  |
| 21    | ---  | --- | ---  | 3.7  | 2.9 | 3.3  | 4.1    | 3.2 | 3.7  | 4.8       | 4.3 | 4.5  |
| 22    | ---  | --- | ---  | 3.4  | 2.8 | 3.1  | 4.2    | 3.5 | 3.8  | 4.7       | 3.9 | 4.5  |
| 23    | ---  | --- | ---  | 3.4  | 2.8 | 3.1  | 4.0    | 3.3 | 3.7  | 4.7       | 3.7 | 4.3  |
| 24    | 4.7  | 3.8 | 4.3  | 3.5  | 2.5 | 3.0  | 3.9    | 3.0 | 3.5  | 4.7       | 4.0 | 4.4  |
| 25    | 4.5  | 3.8 | 4.2  | 3.7  | 2.4 | 2.9  | 3.9    | 2.9 | 3.4  | 4.9       | 4.3 | 4.6  |
| 26    | 4.7  | 4.0 | 4.3  | 3.3  | 2.4 | 2.8  | 3.7    | 2.8 | 3.2  | 5.0       | 4.4 | 4.8  |
| 27    | 4.7  | 3.9 | 4.2  | 3.2  | 2.5 | 2.8  | 3.6    | 2.9 | 3.2  | 5.0       | 4.8 | 4.9  |
| 28    | 4.6  | 3.8 | 4.1  | 3.7  | 2.7 | 3.1  | 3.4    | 2.8 | 3.2  | 5.7       | 4.9 | 5.3  |
| 29    | 4.6  | 3.7 | 4.1  | 4.1  | 3.0 | 3.4  | 4.0    | 3.0 | 3.4  | 5.4       | 4.2 | 4.9  |
| 30    | ---  | --- | ---  | 4.0  | 3.0 | 3.4  | 4.4    | 3.8 | 4.1  | 4.5       | 4.0 | 4.3  |
| 31    | ---  | --- | ---  | 3.7  | 2.9 | 3.3  | 4.1    | 3.2 | 3.6  | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | ---  | --- | ---  | 5.3    | 2.8 | 3.8  | 5.7       | 2.9 | 4.0  |



02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 4.4 | 4.1 | 4.2  | 5.8 | 5.5 | 5.7  | 7.6 | 7.1 | 7.4  | --- | --- | ---  |
| 2     | 4.5 | 4.0 | 4.2  | 5.9 | 5.2 | 5.6  | --- | --- | ---  | --- | --- | ---  |
| 3     | 5.0 | 3.8 | 4.5  | 5.9 | 5.6 | 5.8  | --- | --- | ---  | --- | --- | ---  |
| 4     | 5.0 | 4.0 | 4.5  | 6.1 | 5.6 | 5.8  | --- | --- | ---  | --- | --- | ---  |
| 5     | 4.7 | 3.8 | 4.4  | 6.2 | 5.7 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 6     | 4.7 | 4.0 | 4.4  | 6.2 | 5.9 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | 6.3 | 6.0 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 8     | --- | --- | ---  | 6.2 | 5.8 | 6.0  | --- | --- | ---  | --- | --- | ---  |
| 9     | --- | --- | ---  | 6.4 | 5.9 | 6.1  | --- | --- | ---  | --- | --- | ---  |
| 10    | --- | --- | ---  | 6.4 | 6.0 | 6.2  | --- | --- | ---  | --- | --- | ---  |
| 11    | --- | --- | ---  | 6.5 | 6.2 | 6.3  | --- | --- | ---  | --- | --- | ---  |
| 12    | --- | --- | ---  | 6.6 | 6.2 | 6.4  | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | 6.8 | 6.3 | 6.5  | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | 7.0 | 6.5 | 6.8  | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | 7.2 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | 7.2 | 6.9 | 7.0  | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | 7.2 | 7.0 | 7.1  | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | 7.3 | 7.0 | 7.1  | --- | --- | ---  | --- | --- | ---  |
| 19    | --- | --- | ---  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 20    | --- | --- | ---  | 7.4 | 7.2 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 21    | 5.1 | 4.5 | 4.8  | 7.4 | 7.2 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 22    | 5.5 | 4.8 | 5.0  | 7.4 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 23    | 5.3 | 5.0 | 5.1  | 7.3 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 24    | 5.4 | 5.0 | 5.2  | 7.3 | 7.1 | 7.2  | --- | --- | ---  | --- | --- | ---  |
| 25    | 5.3 | 5.1 | 5.2  | 7.7 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 26    | 5.5 | 5.1 | 5.3  | 7.6 | 7.1 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 27    | 5.5 | 5.3 | 5.4  | 7.5 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 28    | 5.6 | 5.3 | 5.4  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 29    | 5.7 | 5.3 | 5.5  | 7.6 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 30    | 5.8 | 5.4 | 5.6  | 7.4 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 31    | 5.9 | 5.6 | 5.7  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 7.7 | 5.2 | 6.7  | --- | --- | ---  | --- | --- | ---  |



## CAPE FEAR RIVER BASIN

02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 64  | 57  | 60   | 62  | 52  | 56   | 74  | 68  | 72   | 81  | 75  | 78   |
| 2     | 62  | 55  | 60   | 59  | 44  | 53   | 75  | 67  | 71   | 81  | 75  | 77   |
| 3     | --- | --- | ---  | 60  | 45  | 51   | 74  | 68  | 71   | 82  | 75  | 77   |
| 4     | 60  | 55  | 58   | 57  | 43  | 49   | 75  | 69  | 72   | 83  | 76  | 78   |
| 5     | 59  | 52  | 56   | 53  | 40  | 47   | 75  | 71  | 73   | 83  | 78  | 80   |
| 6     | 59  | 52  | 55   | 52  | 40  | 46   | 76  | 72  | 74   | 84  | 79  | 81   |
| 7     | 58  | 52  | 55   | 50  | 35  | 44   | 76  | 72  | 74   | 83  | 78  | 81   |
| 8     | 63  | 53  | 57   | 51  | 36  | 45   | 76  | 72  | 74   | 82  | 72  | 78   |
| 9     | 64  | 55  | 60   | 55  | 39  | 48   | 77  | 72  | 74   | 75  | 71  | 73   |
| 10    | --- | --- | ---  | 57  | 40  | 50   | 79  | 72  | 75   | 74  | 69  | 72   |
| 11    | 61  | 51  | 56   | 56  | 38  | 49   | 80  | 75  | 77   | 73  | 70  | 72   |
| 12    | 60  | 50  | 55   | 55  | 37  | 48   | 78  | 73  | 75   | 74  | 70  | 72   |
| 13    | 59  | 48  | 53   | 59  | 44  | 52   | 78  | 71  | 74   | 74  | 70  | 73   |
| 14    | 58  | 46  | 52   | 60  | 50  | 55   | 81  | 75  | 77   | 75  | 71  | 73   |
| 15    | 58  | 49  | 52   | 60  | 50  | 55   | 82  | 75  | 77   | 75  | 71  | 73   |
| 16    | 56  | 45  | 50   | 59  | 50  | 54   | 80  | 72  | 75   | 75  | 72  | 74   |
| 17    | 55  | 45  | 49   | 59  | 50  | 55   | 79  | 72  | 75   | 76  | 72  | 74   |
| 18    | 59  | 45  | 51   | 61  | 51  | 56   | 79  | 72  | 75   | 77  | 73  | 75   |
| 19    | 60  | 44  | 52   | 67  | 55  | 62   | 79  | 71  | 74   | 78  | 74  | 76   |
| 20    | 59  | 38  | 48   | 65  | 59  | 62   | 79  | 71  | 75   | 77  | 74  | 76   |
| 21    | 62  | 38  | 50   | 65  | 60  | 62   | 79  | 71  | 75   | 78  | 74  | 76   |
| 22    | 62  | 40  | 52   | 65  | 60  | 62   | 82  | 71  | 76   | 78  | 75  | 76   |
| 23    | 62  | 42  | 54   | 65  | 58  | 62   | 82  | 72  | 77   | 80  | 75  | 77   |
| 24    | 64  | 43  | 55   | 67  | 57  | 63   | 82  | 74  | 78   | 81  | 76  | 78   |
| 25    | 65  | 45  | 57   | 70  | 60  | 65   | 82  | 75  | 78   | 81  | 77  | 79   |
| 26    | 66  | 44  | 57   | 70  | 61  | 67   | 82  | 75  | 78   | 80  | 77  | 79   |
| 27    | 64  | 44  | 56   | 71  | 64  | 68   | 81  | 76  | 78   | 81  | 78  | 79   |
| 28    | 62  | 45  | 54   | 73  | 63  | 69   | 81  | 76  | 78   | 82  | 78  | 80   |
| 29    | 66  | 46  | 57   | 73  | 67  | 71   | 81  | 75  | 78   | 82  | 79  | 80   |
| 30    | 63  | 43  | 55   | 74  | 68  | 71   | 83  | 77  | 79   | 84  | 79  | 81   |
| 31    | 71  | 44  | 56   | --- | --- | ---  | 83  | 77  | 79   | 82  | 79  | 81   |
| MONTH | --- | --- | ---  | 74  | 35  | 57   | 83  | 67  | 75   | 84  | 69  | 77   |
| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 82  | 79  | 81   | 88  | 80  | 83   | 78  | 70  | 73   | --- | --- | ---  |
| 2     | 83  | 80  | 81   | 91  | 84  | 87   | 76  | 70  | 72   | --- | --- | ---  |
| 3     | 85  | 81  | 83   | 93  | 87  | 89   | 75  | 70  | 72   | --- | --- | ---  |
| 4     | 88  | 83  | 85   | 91  | 86  | 88   | 76  | 70  | 72   | --- | --- | ---  |
| 5     | 89  | 84  | 86   | 91  | 86  | 89   | 78  | 72  | 75   | --- | --- | ---  |
| 6     | 92  | 85  | 88   | 91  | 87  | 89   | 79  | 72  | 75   | --- | --- | ---  |
| 7     | 97  | 89  | 92   | 88  | 83  | 86   | 80  | 74  | 77   | 65  | 55  | 60   |
| 8     | 97  | 90  | 92   | 87  | 80  | 83   | 81  | 74  | 77   | 63  | 52  | 58   |
| 9     | 94  | 90  | 92   | 81  | 77  | 79   | 81  | 74  | 78   | 61  | 50  | 56   |
| 10    | 95  | 88  | 91   | 80  | 75  | 77   | 81  | 74  | 77   | 59  | 49  | 54   |
| 11    | 92  | 87  | 89   | 80  | 75  | 77   | 82  | 74  | 78   | 56  | 50  | 53   |
| 12    | 92  | 87  | 90   | 78  | 74  | 76   | 81  | 74  | 77   | 55  | 49  | 52   |
| 13    | 91  | 86  | 88   | 78  | 74  | 76   | 82  | 75  | 78   | 54  | 44  | 49   |
| 14    | 89  | 85  | 87   | 81  | 73  | 76   | --- | --- | ---  | 53  | 45  | 48   |
| 15    | 88  | 84  | 86   | 80  | 73  | 76   | --- | --- | ---  | 53  | 46  | 50   |
| 16    | 89  | 83  | 85   | 79  | 72  | 75   | --- | --- | ---  | 54  | 47  | 51   |
| 17    | 88  | 82  | 85   | 77  | 72  | 75   | --- | --- | ---  | 54  | 49  | 51   |
| 18    | 89  | 82  | 85   | 77  | 72  | 75   | --- | --- | ---  | 56  | 49  | 52   |
| 19    | 88  | 83  | 85   | 80  | 73  | 76   | --- | --- | ---  | 59  | 49  | 54   |
| 20    | 92  | 84  | 87   | 81  | 74  | 77   | --- | --- | ---  | 63  | 49  | 55   |
| 21    | 93  | 86  | 89   | 83  | 76  | 79   | --- | --- | ---  | 62  | 54  | 56   |
| 22    | 92  | 86  | 89   | 83  | 75  | 80   | --- | --- | ---  | 64  | 54  | 57   |
| 23    | 91  | 85  | 88   | 82  | 77  | 79   | --- | --- | ---  | 67  | 58  | 60   |
| 24    | 89  | 84  | 87   | 82  | 74  | 78   | --- | --- | ---  | --- | --- | ---  |
| 25    | 89  | 84  | 86   | 84  | 74  | 78   | --- | --- | ---  | 66  | 59  | 61   |
| 26    | 88  | 84  | 86   | 83  | 74  | 78   | --- | --- | ---  | 69  | 57  | 62   |
| 27    | 87  | 81  | 84   | 82  | 74  | 77   | --- | --- | ---  | 66  | 60  | 62   |
| 28    | 85  | 81  | 83   | 82  | 75  | 77   | --- | --- | ---  | 70  | 60  | 63   |
| 29    | 86  | 80  | 81   | 79  | 73  | 76   | --- | --- | ---  | 64  | 58  | 61   |
| 30    | --- | --- | ---  | 79  | 72  | 74   | --- | --- | ---  | 63  | 57  | 59   |
| 31    | --- | --- | ---  | 79  | 71  | 74   | --- | --- | ---  | 62  | 56  | 58   |
| MONTH | 97  | 79  | 87   | 93  | 71  | 79   | --- | --- | ---  | --- | --- | ---  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 62  | 54  | 57   | 59  | 48  | 52   | 54  | 45  | 48   | 57  | 41  | 48   |
| 2     | 62  | 53  | 57   | 59  | 48  | 52   | 54  | 45  | 49   | 60  | 41  | 51   |
| 3     | 60  | 54  | 57   | 55  | 48  | 50   | 58  | 47  | 53   | 58  | 41  | 50   |
| 4     | 60  | 53  | 56   | 55  | 45  | 50   | 63  | 51  | 56   | 53  | 38  | 47   |
| 5     | 61  | 53  | 56   | 57  | 47  | 51   | 61  | 41  | 55   | 52  | 37  | 46   |
| 6     | 57  | 52  | 54   | 55  | 48  | 51   | 64  | 55  | 60   | 54  | 37  | 47   |
| 7     | 57  | 51  | 54   | 55  | 46  | 49   | 64  | 55  | 59   | 55  | 38  | 48   |
| 8     | 59  | 50  | 53   | 52  | 42  | 47   | 66  | 54  | 58   | 59  | 45  | 54   |
| 9     | 58  | 48  | 53   | 52  | 43  | 47   | 63  | 50  | 57   | 57  | 48  | 53   |
| 10    | 58  | 47  | 53   | 53  | 43  | 48   | 65  | 50  | 56   | 50  | 42  | 46   |
| 11    | 59  | 48  | 54   | 57  | 41  | 48   | 62  | 47  | 54   | 54  | 43  | 47   |
| 12    | 62  | 49  | 55   | 55  | 42  | 48   | 60  | 45  | 53   | 51  | 37  | 44   |
| 13    | 62  | 50  | 56   | 57  | 43  | 49   | 63  | 51  | 58   | 46  | 38  | 42   |
| 14    | 64  | 47  | 56   | 56  | 42  | 49   | 69  | 52  | 62   | 47  | 41  | 44   |
| 15    | 66  | 47  | 57   | 56  | 42  | 49   | 67  | 52  | 62   | 47  | 38  | 43   |
| 16    | 63  | 54  | 57   | 56  | 45  | 50   | 61  | 52  | 58   | 43  | 37  | 40   |
| 17    | 61  | 54  | 56   | 57  | 45  | 50   | 60  | 52  | 56   | 52  | 38  | 44   |
| 18    | 64  | 53  | 57   | 58  | 45  | 49   | 61  | 46  | 54   | 52  | 45  | 48   |
| 19    | 62  | 51  | 56   | 54  | 43  | 48   | 54  | 42  | 48   | 51  | 42  | 47   |
| 20    | 60  | 50  | 55   | 55  | 42  | 48   | 51  | 39  | 44   | 55  | 48  | 51   |
| 21    | 63  | 51  | 55   | 58  | 42  | 50   | 51  | 38  | 45   | 59  | 51  | 55   |
| 22    | 64  | 51  | 57   | 55  | 43  | 49   | 52  | 42  | 47   | 61  | 46  | 54   |
| 23    | 71  | 53  | 59   | 58  | 46  | 52   | 49  | 41  | 45   | 62  | 44  | 52   |
| 24    | 60  | 50  | 56   | 55  | 43  | 50   | 47  | 36  | 42   | 61  | 46  | 53   |
| 25    | 57  | 49  | 54   | 57  | 37  | 48   | 52  | 37  | 43   | 60  | 50  | 56   |
| 26    | 60  | 52  | 55   | 51  | 35  | 44   | 52  | 38  | 45   | 60  | 51  | 56   |
| 27    | 57  | 49  | 52   | 50  | 37  | 44   | 49  | 39  | 45   | 62  | 55  | 57   |
| 28    | 57  | 48  | 51   | 54  | 38  | 45   | 48  | 38  | 44   | 68  | 58  | 62   |
| 29    | 58  | 44  | 50   | 58  | 44  | 49   | 58  | 41  | 48   | 64  | 52  | 59   |
| 30    | 60  | 41  | 50   | 57  | 43  | 49   | 60  | 52  | 57   | 56  | 50  | 54   |
| 31    | --- | --- | ---  | 54  | 43  | 48   | 58  | 44  | 51   | --- | --- | ---  |
| MONTH | 71  | 41  | 55   | 59  | 35  | 49   | 69  | 36  | 52   | 68  | 37  | 50   |





## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |     |      |       |     |      |       |     |      |     |     |      |
| 1     | 63       | 54  | 59   | 55    | 46  | 49   | 73    | 70  | 72   | 81  | 76  | 78   |
| 2     | 60       | 53  | 57   | 52    | 45  | 48   | 74    | 69  | 72   | 80  | 74  | 77   |
| 3     | ---      | --- | ---  | 52    | 43  | 47   | 75    | 72  | 73   | 79  | 72  | 76   |
| 4     | 57       | 52  | 55   | 53    | 43  | 47   | 76    | 73  | 74   | 80  | 73  | 77   |
| 5     | 58       | 52  | 55   | 50    | 42  | 46   | 77    | 74  | 76   | 82  | 75  | 79   |
| 6     | 57       | 52  | 54   | 50    | 41  | 45   | 78    | 75  | 76   | 81  | 76  | 79   |
| 7     | 58       | 53  | 55   | 48    | 40  | 44   | 79    | 76  | 77   | 82  | 75  | 78   |
| 8     | 62       | 54  | 58   | 50    | 39  | 45   | 80    | 77  | 79   | 81  | 70  | 76   |
| 9     | 66       | 58  | 62   | 52    | 43  | 48   | 80    | 76  | 79   | 74  | 69  | 72   |
| 10    | ---      | --- | ---  | 56    | 45  | 51   | 82    | 76  | 79   | 75  | 69  | 72   |
| 11    | 62       | 55  | 58   | 56    | 45  | 51   | 84    | 78  | 81   | 74  | 68  | 71   |
| 12    | 61       | 53  | 57   | 55    | 43  | 50   | 82    | 77  | 80   | 75  | 70  | 72   |
| 13    | 61       | 51  | 56   | 59    | 47  | 53   | 82    | 76  | 79   | 75  | 71  | 73   |
| 14    | 60       | 49  | 55   | 59    | 50  | 55   | 86    | 77  | 82   | 76  | 72  | 74   |
| 15    | 61       | 52  | 56   | 58    | 50  | 55   | 87    | 79  | 82   | 78  | 72  | 74   |
| 16    | 59       | 48  | 54   | 58    | 50  | 55   | 85    | 77  | 81   | 78  | 73  | 75   |
| 17    | 57       | 48  | 52   | 59    | 51  | 56   | 86    | 78  | 82   | 77  | 74  | 75   |
| 18    | 61       | 50  | 55   | 60    | 54  | 57   | 86    | 76  | 81   | 79  | 75  | 77   |
| 19    | 68       | 54  | 59   | 64    | 56  | 61   | 84    | 76  | 79   | 79  | 76  | 78   |
| 20    | 66       | 51  | 58   | 64    | 60  | 62   | 83    | 75  | 79   | 79  | 77  | 78   |
| 21    | 72       | 52  | 60   | 64    | 61  | 63   | 84    | 75  | 80   | 79  | 76  | 78   |
| 22    | 72       | 58  | 63   | 64    | 60  | 62   | 85    | 76  | 80   | 81  | 77  | 79   |
| 23    | 75       | 59  | 65   | 65    | 59  | 62   | 85    | 76  | 81   | 82  | 78  | 80   |
| 24    | 79       | 62  | 68   | 66    | 58  | 63   | 86    | 78  | 82   | 83  | 78  | 81   |
| 25    | 83       | 64  | 69   | 70    | 60  | 66   | 85    | 77  | 81   | 82  | 79  | 81   |
| 26    | 79       | 64  | 69   | 70    | 62  | 67   | 84    | 78  | 81   | 83  | 79  | 81   |
| 27    | 72       | 65  | 68   | 70    | 64  | 68   | 85    | 78  | 81   | 83  | 78  | 81   |
| 28    | 74       | 66  | 69   | 73    | 63  | 69   | 85    | 78  | 81   | 84  | 78  | 81   |
| 29    | 76       | 65  | 72   | 74    | 68  | 71   | 83    | 77  | 80   | 84  | 78  | 82   |
| 30    | 75       | 63  | 70   | 73    | 70  | 72   | 84    | 78  | 80   | 85  | 79  | 82   |
| 31    | 70       | 47  | 60   | ---   | --- | ---  | 82    | 77  | 80   | 84  | 79  | 82   |
| MONTH | ---      | --- | ---  | 74    | 39  | 56   | 87    | 69  | 79   | 85  | 68  | 77   |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | 84       | 79  | 82   | 83    | 77  | 80   | 75    | 69  | 72   | 73  | 63  | 68   |
| 2     | 84       | 80  | 82   | 88    | 80  | 83   | 73    | 68  | 71   | 75  | 66  | 71   |
| 3     | 86       | 79  | 83   | 88    | 84  | 86   | 74    | 68  | 71   | 76  | 70  | 73   |
| 4     | 87       | 82  | 85   | 90    | 83  | 86   | 76    | 69  | 72   | 73  | 63  | 69   |
| 5     | 89       | 83  | 86   | 89    | 85  | 87   | 78    | 71  | 74   | 70  | 61  | 66   |
| 6     | 93       | 85  | 89   | 90    | 85  | 87   | 78    | 71  | 75   | 70  | 54  | 63   |
| 7     | 96       | 88  | 92   | 88    | 83  | 85   | 80    | 73  | 76   | 64  | 54  | 59   |
| 8     | 96       | 91  | 93   | 85    | 79  | 82   | 80    | 74  | 77   | 61  | 52  | 57   |
| 9     | 95       | 90  | 93   | 81    | 77  | 79   | 82    | 74  | 77   | 60  | 49  | 56   |
| 10    | 95       | 89  | 93   | 81    | 75  | 77   | 79    | 74  | 76   | 59  | 48  | 54   |
| 11    | 93       | 86  | 89   | 80    | 72  | 77   | 82    | 74  | 77   | 56  | 48  | 52   |
| 12    | 92       | 85  | 89   | 80    | 75  | 77   | 79    | 74  | 77   | 56  | 48  | 51   |
| 13    | 90       | 84  | 87   | 80    | 75  | 77   | 82    | 75  | 78   | 54  | 48  | 51   |
| 14    | 88       | 84  | 86   | 79    | 74  | 76   | 82    | 72  | 78   | 54  | 47  | 51   |
| 15    | 87       | 83  | 84   | 78    | 74  | 76   | 77    | 71  | 74   | 55  | 47  | 52   |
| 16    | 87       | 81  | 84   | 78    | 74  | 76   | 75    | 68  | 72   | 55  | 48  | 52   |
| 17    | 85       | 80  | 83   | 78    | 73  | 75   | 75    | 68  | 72   | 56  | 50  | 53   |
| 18    | 85       | 79  | 83   | 77    | 73  | 75   | 76    | 71  | 74   | 56  | 51  | 54   |
| 19    | 87       | 80  | 84   | 80    | 73  | 76   | 76    | 71  | 74   | 58  | 52  | 55   |
| 20    | 89       | 81  | 84   | 81    | 75  | 77   | 77    | 70  | 73   | 62  | 54  | 57   |
| 21    | 89       | 83  | 86   | 82    | 77  | 79   | 74    | 69  | 72   | 62  | 53  | 57   |
| 22    | 89       | 83  | 86   | 83    | 76  | 80   | 74    | 68  | 72   | 65  | 55  | 58   |
| 23    | 88       | 82  | 85   | 82    | 77  | 79   | 73    | 68  | 71   | 69  | 56  | 61   |
| 24    | 86       | 82  | 84   | 81    | 75  | 78   | 72    | 68  | 70   | 70  | 57  | 61   |
| 25    | 85       | 81  | 83   | 81    | 74  | 78   | 73    | 68  | 70   | 68  | 56  | 61   |
| 26    | 84       | 79  | 82   | 81    | 75  | 77   | 76    | 67  | 70   | 67  | 55  | 61   |
| 27    | 83       | 76  | 80   | 78    | 74  | 76   | 76    | 67  | 70   | --- | --- | ---  |
| 28    | 82       | 76  | 79   | 78    | 72  | 75   | 72    | 64  | 68   | --- | --- | ---  |
| 29    | 80       | 76  | 78   | 75    | 70  | 73   | 70    | 63  | 67   | --- | --- | ---  |
| 30    | ---      | --- | ---  | 74    | 70  | 72   | 70    | 63  | 67   | --- | --- | ---  |
| 31    | ---      | --- | ---  | 74    | 68  | 71   | ---   | --- | ---  | --- | --- | ---  |
| MONTH | 96       | 76  | 85   | 90    | 68  | 78   | 82    | 63  | 73   | --- | --- | ---  |

## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | ---  | --- | ---  | ---  | --- | ---  | 49     | 39  | 44   | 51        | 37  | 43   |
| 2     | ---  | --- | ---  | ---  | --- | ---  | 47     | 37  | 43   | 52        | 37  | 45   |
| 3     | ---  | --- | ---  | ---  | --- | ---  | 52     | 39  | 46   | 52        | 38  | 45   |
| 4     | ---  | --- | ---  | ---  | --- | ---  | 57     | 44  | 50   | 48        | 37  | 43   |
| 5     | ---  | --- | ---  | ---  | --- | ---  | 55     | 45  | 51   | 48        | 38  | 43   |
| 6     | ---  | --- | ---  | ---  | --- | ---  | 58     | 46  | 53   | 48        | 40  | 44   |
| 7     | ---  | --- | ---  | ---  | --- | ---  | 57     | 48  | 52   | 49        | 42  | 44   |
| 8     | ---  | --- | ---  | 50   | 45  | 49   | 56     | 47  | 52   | 59        | 43  | 51   |
| 9     | 54   | 48  | 50   | 51   | 45  | 48   | 57     | 45  | 51   | 59        | 48  | 54   |
| 10    | 52   | 47  | 49   | 53   | 43  | 47   | 54     | 44  | 49   | 52        | 42  | 46   |
| 11    | 54   | 47  | 50   | 52   | 42  | 47   | 53     | 44  | 48   | 54        | 42  | 47   |
| 12    | 55   | 47  | 51   | 53   | 41  | 48   | 54     | 41  | 48   | 51        | 35  | 44   |
| 13    | 55   | 48  | 52   | 54   | 42  | 48   | 61     | 43  | 53   | 47        | 38  | 42   |
| 14    | 56   | 48  | 52   | 53   | 38  | 47   | 65     | 43  | 56   | 47        | 40  | 44   |
| 15    | ---  | --- | ---  | 51   | 38  | 44   | 66     | 51  | 59   | 47        | 38  | 43   |
| 16    | ---  | --- | ---  | 52   | 41  | 45   | 59     | 53  | 57   | 43        | 37  | 40   |
| 17    | ---  | --- | ---  | 50   | 41  | 45   | 58     | 53  | 55   | 52        | 37  | 44   |
| 18    | ---  | --- | ---  | 51   | 39  | 44   | 59     | 44  | 52   | 53        | 44  | 48   |
| 19    | ---  | --- | ---  | 49   | 38  | 43   | 52     | 41  | 46   | 51        | 41  | 46   |
| 20    | ---  | --- | ---  | 49   | 38  | 43   | 47     | 38  | 43   | 55        | 47  | 51   |
| 21    | ---  | --- | ---  | 49   | 38  | 44   | 50     | 38  | 44   | 56        | 50  | 53   |
| 22    | ---  | --- | ---  | 45   | 37  | 41   | 51     | 42  | 46   | 55        | 45  | 52   |
| 23    | ---  | --- | ---  | 45   | 37  | 41   | 49     | 40  | 45   | 55        | 43  | 50   |
| 24    | 61   | 49  | 55   | 46   | 33  | 39   | 48     | 36  | 43   | 55        | 46  | 52   |
| 25    | 59   | 49  | 54   | 49   | 31  | 38   | 48     | 35  | 41   | 57        | 50  | 54   |
| 26    | 61   | 52  | 56   | 43   | 32  | 37   | 46     | 34  | 40   | 58        | 51  | 56   |
| 27    | 61   | 50  | 55   | 42   | 33  | 37   | 44     | 36  | 40   | 59        | 56  | 57   |
| 28    | 60   | 49  | 54   | 49   | 35  | 41   | 42     | 35  | 40   | 68        | 58  | 63   |
| 29    | 60   | 48  | 53   | 54   | 39  | 45   | 50     | 37  | 42   | 64        | 50  | 58   |
| 30    | ---  | --- | ---  | 53   | 39  | 44   | 55     | 47  | 51   | 56        | 47  | 51   |
| 31    | ---  | --- | ---  | 49   | 38  | 43   | 51     | 40  | 45   | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | ---  | --- | ---  | 66     | 34  | 48   | 68        | 35  | 48   |



## 02108690 NORTHEAST CAPE FEAR RIVER NEAR WILMINGTON, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 58  | 54  | 55   | 65  | 60  | 63   | 76  | 70  | 73   | --- | --- | ---  |
| 2     | 58  | 53  | 55   | 66  | 57  | 62   | --- | --- | ---  | --- | --- | ---  |
| 3     | 62  | 48  | 56   | 66  | 62  | 64   | --- | --- | ---  | --- | --- | ---  |
| 4     | 60  | 49  | 55   | 68  | 62  | 65   | --- | --- | ---  | --- | --- | ---  |
| 5     | 58  | 47  | 53   | 70  | 64  | 67   | --- | --- | ---  | --- | --- | ---  |
| 6     | 56  | 48  | 53   | 69  | 65  | 67   | --- | --- | ---  | --- | --- | ---  |
| 7     | --- | --- | ---  | 69  | 66  | 67   | --- | --- | ---  | --- | --- | ---  |
| 8     | --- | --- | ---  | 68  | 64  | 66   | --- | --- | ---  | --- | --- | ---  |
| 9     | --- | --- | ---  | 69  | 64  | 67   | --- | --- | ---  | --- | --- | ---  |
| 10    | --- | --- | ---  | 68  | 64  | 66   | --- | --- | ---  | --- | --- | ---  |
| 11    | --- | --- | ---  | 69  | 66  | 67   | --- | --- | ---  | --- | --- | ---  |
| 12    | --- | --- | ---  | 69  | 65  | 67   | --- | --- | ---  | --- | --- | ---  |
| 13    | --- | --- | ---  | 71  | 66  | 68   | --- | --- | ---  | --- | --- | ---  |
| 14    | --- | --- | ---  | 72  | 68  | 70   | --- | --- | ---  | --- | --- | ---  |
| 15    | --- | --- | ---  | 73  | 69  | 71   | --- | --- | ---  | --- | --- | ---  |
| 16    | --- | --- | ---  | 72  | 69  | 70   | --- | --- | ---  | --- | --- | ---  |
| 17    | --- | --- | ---  | 72  | 69  | 70   | --- | --- | ---  | --- | --- | ---  |
| 18    | --- | --- | ---  | 72  | 69  | 70   | --- | --- | ---  | --- | --- | ---  |
| 19    | --- | --- | ---  | 73  | 70  | 71   | --- | --- | ---  | --- | --- | ---  |
| 20    | --- | --- | ---  | 73  | 70  | 71   | --- | --- | ---  | --- | --- | ---  |
| 21    | 58  | 51  | 55   | 73  | 70  | 72   | --- | --- | ---  | --- | --- | ---  |
| 22    | 62  | 54  | 57   | 73  | 70  | 72   | --- | --- | ---  | --- | --- | ---  |
| 23    | 60  | 56  | 57   | 73  | 71  | 72   | --- | --- | ---  | --- | --- | ---  |
| 24    | 60  | 56  | 58   | 73  | 71  | 72   | --- | --- | ---  | --- | --- | ---  |
| 25    | 59  | 56  | 57   | 78  | 72  | 74   | --- | --- | ---  | --- | --- | ---  |
| 26    | 60  | 56  | 58   | 77  | 72  | 74   | --- | --- | ---  | --- | --- | ---  |
| 27    | 60  | 57  | 59   | 75  | 72  | 74   | --- | --- | ---  | --- | --- | ---  |
| 28    | 61  | 58  | 59   | 76  | 72  | 74   | --- | --- | ---  | --- | --- | ---  |
| 29    | 62  | 58  | 60   | 75  | 70  | 73   | --- | --- | ---  | --- | --- | ---  |
| 30    | 64  | 58  | 61   | 74  | 71  | 72   | --- | --- | ---  | --- | --- | ---  |
| 31    | 64  | 61  | 62   | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | --- | --- | ---  | 78  | 57  | 69   | --- | --- | ---  | --- | --- | ---  |

## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC

LOCATION.--Lat 34°04'35", long 77°55'53", New Hanover County, Hydrologic Unit 03030005, at U.S. Coast Guard Channel Marker 12.

DRAINAGE AREA.--9,000 mi<sup>2</sup>.

PERIOD OF RECORD.--November 2003 to December 2004 (discontinued).

## PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE (TOP AND BOTTOM): November 2003 to December 2004.

SALINITY (TOP AND BOTTOM): November 2003 to December 2004.

pH (TOP AND BOTTOM): November 2003 to December 2004.

WATER TEMPERATURE (TOP AND BOTTOM): November 2003 to December 2004.

DISSOLVED OXYGEN (TOP AND BOTTOM) : November 2003 to December 2004.

DISSOLVED OXYGEN, PERCENT SATURATION (TOP AND BOTTOM): November 2003 to December 2004.

INSTRUMENTATION.--Water-quality monitor with satellite telemetry from November 2003 to December 2004.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources. Salinity and dissolved oxygen, percent saturation are computed. The salinity is computed from specific conductance using the conversion from U.S. Geological Survey Water Supply Paper 2311. The dissolved oxygen, percent saturation is computed using a barometric pressure of 760 mm of Hg.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

| CONSTITUENT                                     | MAXIMUM RECORDED               | MINIMUM RECORDED         |
|---|--------------------------------|--------------------------|
| SPECIFIC CONDUCTANCE (TOP), microsiemens        | 40,100, November 14, 2004      | 140, August 22, 2004     |
| SPEICIFC CONDUCTANCE (BOTTOM), microsiemens     | 44,900, November 14, 2004      | 100, August 22, 2004     |
| SALINITY (TOP), ppt                             | 25.6, November 14, 2004        | .06, August 21, 22, 2004 |
| SALINITY (BOTTOM), ppt                          | 29.0, November 14, 2004        | .04, August 22, 2004     |
| pH (TOP), standard units                        | 8.4, June 22, 2004             | 6.2, August 22, 2004     |
| pH (BOTTOM), standard units                     | 8.3, June 23, 25, 2004         | 5.7, August 22, 2004     |
| WATER TEMPERATURE (TOP), °C                     | 31.2, August 4, 2004           | 4.9, February 2, 2004    |
| WATER TEMPERATURE (BOTTOM), °C                  | 30.5, July 10, 2004            | 5.6, January 29, 2004    |
| DISSOLVED OXYGEN (TOP), mg/L                    | 11.3, February 8, 10, 11, 2004 | 3.4, September 16, 2004  |
| DISSOLVED OXYGEN (BOTTOM), mg/L                 | 10.9, February 12, 2004        | 2.9, July 30, 2004       |
| DISSOLVED OXYGEN, PERCENT SATURATION (TOP),%    | 133, June 23, 2004             | 41, September 16, 2004   |
| DISSOLVED OXYGEN, PERCENT SATURATION (BOTTOM),% | 117, June 23, 2004             | 37, July 30, 2004        |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE   |        |        | JULY   |        |        | AUGUST |        |        | SEPTEMBER |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|
|       | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX       | MIN    | MEAN   |
| 1     | 37,000 | 22,400 | 27,800 | 37,100 | 21,800 | 27,700 | 38,900 | 25,000 | 31,400 | 18,600    | 4,000  | 9,600  |
| 2     | 38,300 | 22,600 | 28,700 | 37,300 | 20,700 | 27,500 | 39,000 | 23,700 | 30,500 | 17,400    | 3,030  | 7,220  |
| 3     | 38,100 | 22,000 | 28,600 | 36,300 | 19,100 | 26,500 | 38,000 | 20,700 | 28,600 | 15,700    | 2,850  | 6,430  |
| 4     | 37,700 | 22,800 | 28,800 | 36,700 | 19,000 | 25,900 | 37,100 | 22,200 | 27,500 | 11,600    | 2,430  | 5,180  |
| 5     | 38,800 | 21,900 | 28,800 | 36,900 | 19,100 | 25,600 | 36,200 | 21,900 | 27,400 | 13,800    | 1,880  | 4,490  |
| 6     | 38,800 | 24,000 | 29,600 | 34,700 | 18,800 | 24,900 | 33,300 | 19,000 | 24,200 | 10,000    | 2,670  | 4,940  |
| 7     | 38,400 | 23,700 | 29,700 | 34,400 | 20,600 | 26,100 | 33,000 | 18,400 | 24,200 | 14,800    | 2,820  | 6,120  |
| 8     | 38,000 | 22,500 | 29,000 | 34,800 | 21,000 | 26,100 | 32,700 | 19,600 | 23,700 | 14,900    | 4,410  | 8,610  |
| 9     | 35,500 | 21,500 | 27,700 | 33,500 | 20,600 | 25,600 | 30,300 | 18,600 | 23,200 | 10,600    | 4,090  | 6,980  |
| 10    | 35,400 | 20,700 | 26,900 | 31,500 | 19,500 | 24,800 | 30,800 | 17,200 | 22,600 | 9,290     | 2,100  | 4,300  |
| 11    | 34,200 | 20,600 | 25,900 | 32,300 | 18,800 | 24,000 | 31,000 | 19,200 | 23,900 | 13,500    | 2,150  | 4,610  |
| 12    | 32,200 | 19,700 | 25,400 | 31,400 | 18,500 | 23,900 | 32,600 | 20,700 | 24,800 | 11,800    | 2,580  | 5,220  |
| 13    | 34,500 | 20,900 | 26,600 | 32,800 | 20,500 | 24,900 | 29,500 | 20,200 | 24,100 | 15,000    | 3,260  | 6,510  |
| 14    | 34,100 | 21,400 | 26,700 | 34,300 | 21,300 | 25,500 | 28,300 | 18,000 | 22,900 | 15,000    | 3,430  | 6,930  |
| 15    | 34,100 | 21,600 | 26,800 | 34,400 | 21,400 | 26,300 | 23,000 | 8,560  | 16,200 | 13,000    | 2,100  | 5,490  |
| 16    | 34,000 | 20,900 | 26,100 | 34,700 | 22,100 | 26,900 | 18,300 | 5,220  | 10,300 | 10,200    | 380    | 3,360  |
| 17    | 34,000 | 20,000 | 25,600 | 36,500 | 23,500 | 28,200 | 13,800 | 3,350  | 7,350  | 10,300    | 250    | 3,310  |
| 18    | 34,300 | 19,800 | 25,400 | 35,500 | 22,800 | 27,200 | 12,600 | 1,850  | 5,450  | 5,700     | 200    | 1,830  |
| 19    | 36,000 | 19,400 | 25,400 | 35,200 | 22,200 | 27,000 | 9,780  | 570    | 3,690  | 10,000    | 170    | 3,350  |
| 20    | 35,800 | 19,800 | 25,200 | 35,000 | 22,500 | 27,200 | 9,010  | 250    | 2,580  | 28,200    | 2,850  | 8,300  |
| 21    | 36,000 | 22,700 | 27,300 | 35,100 | 23,400 | 28,000 | 7,260  | 160    | 2,170  | ---       | ---    | ---    |
| 22    | 36,200 | 24,400 | 28,300 | 36,300 | 24,300 | 29,000 | 4,650  | 140    | 1,420  | ---       | ---    | ---    |
| 23    | 34,600 | 22,500 | 27,500 | 36,400 | 25,000 | 29,600 | 10,300 | 400    | 2,840  | ---       | ---    | ---    |
| 24    | 32,000 | 21,000 | 25,700 | 35,200 | 23,800 | 28,500 | 13,500 | 2,050  | 5,060  | 29,100    | 8,190  | 14,000 |
| 25    | 32,400 | 20,600 | 26,100 | 35,000 | 21,800 | 27,400 | 15,900 | 3,090  | 6,900  | ---       | ---    | ---    |
| 26    | 34,300 | 22,400 | 26,900 | 36,400 | 22,900 | 28,600 | 22,600 | 3,820  | 9,280  | 27,900    | 11,700 | 18,400 |
| 27    | 34,700 | 22,100 | 27,400 | 37,400 | 24,500 | 30,100 | 23,200 | 6,920  | 12,200 | 29,300    | 12,900 | 20,800 |
| 28    | 36,000 | 22,100 | 27,400 | 38,200 | 25,400 | 30,600 | 24,900 | 8,520  | 14,600 | 29,100    | 16,200 | 21,900 |
| 29    | 36,100 | 20,300 | 27,100 | 37,500 | 22,600 | 29,700 | 28,100 | 10,500 | 16,900 | 27,200    | 12,200 | 18,300 |
| 30    | 36,300 | 21,100 | 27,700 | 38,700 | 22,900 | 29,300 | 27,200 | 9,040  | 16,500 | 28,800    | 11,500 | 18,100 |
| 31    | ---    | ---    | ---    | 38,900 | 24,300 | 30,800 | 20,600 | 6,220  | 12,200 | ---       | ---    | ---    |
| MONTH | 38,800 | 19,400 | 27,200 | 38,900 | 18,500 | 27,200 | 39,000 | 140    | 16,300 | ---       | ---    | ---    |

## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX     | MIN | MEAN |
|-------|---------|--------|--------|----------|--------|--------|----------|--------|--------|---------|-----|------|
|       | OCTOBER |        |        | NOVEMBER |        |        | DECEMBER |        |        | JANUARY |     |      |
| 1     | 28,400  | 11,200 | 17,600 | 33,700   | 20,300 | 25,700 | 26,900   | 12,400 | 17,000 | ---     | --- | ---  |
| 2     | 25,400  | 10,300 | 15,400 | 34,000   | 19,800 | 25,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 3     | 21,800  | 7,610  | 11,900 | 31,200   | 20,900 | 24,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 4     | 20,000  | 6,340  | 10,700 | 33,300   | 20,500 | 26,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 5     | 15,900  | 6,370  | 9,230  | 33,500   | 20,900 | 24,800 | ---      | ---    | ---    | ---     | --- | ---  |
| 6     | 23,000  | 6,430  | 10,100 | 33,000   | 22,000 | 26,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 7     | 26,000  | 8,200  | 12,000 | 33,200   | 23,600 | 27,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 8     | 29,300  | 10,000 | 16,200 | 34,300   | 25,300 | 28,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 9     | 31,600  | 12,800 | 20,900 | 37,600   | 25,000 | 30,800 | ---      | ---    | ---    | ---     | --- | ---  |
| 10    | 32,400  | 19,000 | 25,000 | 37,800   | 27,700 | 37,900 | ---      | ---    | ---    | ---     | --- | ---  |
| 11    | 34,100  | 22,800 | 27,700 | 39,000   | 28,800 | 33,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 12    | 36,100  | 26,000 | 30,000 | 40,000   | 29,100 | 34,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 13    | 36,900  | 26,400 | 31,300 | 38,900   | 27,200 | 32,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 14    | 37,100  | 26,700 | 31,000 | 40,100   | 26,100 | 32,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 15    | 38,200  | 25,800 | 30,600 | 40,000   | 27,300 | 33,000 | ---      | ---    | ---    | ---     | --- | ---  |
| 16    | 36,300  | 23,300 | 28,400 | 39,700   | 25,600 | 31,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 17    | 34,600  | 20,000 | 25,700 | 37,600   | 23,500 | 29,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 18    | 33,800  | 17,600 | 24,500 | 35,600   | 20,200 | 26,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 19    | 32,200  | 18,200 | 24,100 | 33,300   | 17,900 | 24,300 | ---      | ---    | ---    | ---     | --- | ---  |
| 20    | 31,300  | 16,600 | 22,400 | 32,500   | 16,700 | 22,600 | ---      | ---    | ---    | ---     | --- | ---  |
| 21    | 35,200  | 17,300 | 24,300 | 29,900   | 15,300 | 21,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 22    | 36,800  | 21,100 | 27,500 | 31,500   | 16,300 | 22,600 | ---      | ---    | ---    | ---     | --- | ---  |
| 23    | 36,700  | 24,100 | 30,400 | 32,500   | 16,800 | 23,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 24    | 37,500  | 27,200 | 32,200 | 32,700   | 17,700 | 24,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 25    | 38,000  | 28,200 | 32,600 | 33,200   | 19,100 | 23,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 26    | 38,100  | 27,600 | 32,400 | 30,900   | 14,900 | 21,100 | ---      | ---    | ---    | ---     | --- | ---  |
| 27    | 38,000  | 26,900 | 31,800 | 31,900   | 14,100 | 21,900 | ---      | ---    | ---    | ---     | --- | ---  |
| 28    | 37,400  | 25,700 | 30,500 | 29,500   | 15,600 | 20,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 29    | 37,000  | 24,400 | 30,200 | 27,700   | 12,000 | 17,900 | ---      | ---    | ---    | ---     | --- | ---  |
| 30    | 36,800  | 23,700 | 29,200 | 28,200   | 11,900 | 17,800 | ---      | ---    | ---    | ---     | --- | ---  |
| 31    | 34,800  | 23,100 | 27,600 | ---      | ---    | ---    | ---      | ---    | ---    | ---     | --- | ---  |
| MONTH | 38,200  | 6,340  | 24,300 | 40,100   | 11,900 | 26,300 | ---      | ---    | ---    | ---     | --- | ---  |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE   |        |        | JULY   |        |        | AUGUST |        |        | SEPTEMBER |        |        |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-----------|--------|--------|
|       | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX    | MIN    | MEAN   | MAX       | MIN    | MEAN   |
| 1     | 38,800 | 23,100 | 29,700 | 38,900 | 22,400 | 29,500 | 40,600 | 25,500 | 33,000 | 25,500    | 4,770  | 13,200 |
| 2     | 39,800 | 23,500 | 30,200 | 39,400 | 21,600 | 29,500 | 40,700 | 24,900 | 32,400 | 23,900    | 3,760  | 11,300 |
| 3     | 40,400 | 22,400 | 30,300 | 38,200 | 13,200 | 25,800 | 41,400 | 22,200 | 31,100 | 24,100    | 3,690  | 11,600 |
| 4     | 40,800 | 24,000 | 30,800 | 37,600 | 16,700 | 27,100 | 40,400 | 23,200 | 30,400 | 22,200    | 3,030  | 10,700 |
| 5     | 41,000 | 24,000 | 31,400 | 39,500 | 20,100 | 28,600 | 39,000 | 22,500 | 29,800 | 25,800    | 2,520  | 12,100 |
| 6     | 42,200 | 25,600 | 32,500 | 38,600 | 20,700 | 28,500 | 37,300 | 19,400 | 28,000 | 27,100    | 2,800  | 14,500 |
| 7     | 42,400 | 25,400 | 32,600 | 38,500 | 21,900 | 28,800 | 39,100 | 19,800 | 29,800 | 30,900    | 5,320  | 17,500 |
| 8     | 41,400 | 24,400 | 31,700 | 36,800 | 21,900 | 29,000 | 37,300 | 20,600 | 29,500 | 23,600    | 6,100  | 12,300 |
| 9     | 38,800 | 23,100 | 30,400 | 37,700 | 21,700 | 29,200 | 36,000 | 20,200 | 28,400 | 15,500    | 3,930  | 8,600  |
| 10    | 37,900 | 22,200 | 30,100 | 37,800 | 21,100 | 29,000 | 36,900 | 19,600 | 29,200 | 19,700    | 2,670  | 8,320  |
| 11    | 36,500 | 21,800 | 29,400 | 38,200 | 20,400 | 29,200 | 37,600 | 21,500 | 29,600 | 23,600    | 2,700  | 10,100 |
| 12    | ---    | ---    | ---    | 38,700 | 20,400 | 29,800 | 36,600 | 21,800 | 28,400 | 25,800    | 2,990  | 11,500 |
| 13    | ---    | ---    | ---    | 37,400 | 21,700 | 29,400 | 32,900 | 21,000 | 26,400 | 25,400    | 3,850  | 11,700 |
| 14    | ---    | ---    | ---    | 37,800 | 22,400 | 28,700 | 31,000 | 19,500 | 24,800 | 24,600    | 4,250  | 11,000 |
| 15    | ---    | ---    | ---    | 38,700 | 22,700 | 29,300 | 27,200 | 10,300 | 18,500 | 19,700    | 2,490  | 8,110  |
| 16    | 36,100 | 22,200 | 28,100 | 38,800 | 23,600 | 30,000 | 24,000 | 6,030  | 13,500 | 15,200    | 530    | 5,550  |
| 17    | 37,100 | 21,700 | 28,100 | 37,800 | 24,800 | 30,600 | 21,700 | 3,750  | 10,300 | 16,100    | 300    | 5,320  |
| 18    | 37,900 | 20,900 | 28,400 | 37,900 | 23,500 | 29,400 | 20,800 | 2,130  | 8,150  | 12,100    | 220    | 3,670  |
| 19    | 39,300 | 21,200 | 29,500 | 38,600 | 24,100 | 30,400 | 17,100 | 860    | 5,790  | 21,900    | 190    | 7,000  |
| 20    | 40,400 | 20,800 | 31,300 | 38,800 | 24,100 | 30,500 | 27,800 | 240    | 4,660  | 33,900    | 3,000  | 17,500 |
| 21    | 40,700 | 24,300 | 31,600 | 38,500 | 25,100 | 31,300 | 14,100 | 210    | 3,770  | ---       | ---    | ---    |
| 22    | 39,300 | 23,900 | 30,500 | 38,600 | 25,900 | 31,900 | 11,600 | 100    | 2,760  | ---       | ---    | ---    |
| 23    | 36,500 | 23,800 | 29,200 | 38,900 | 26,200 | 32,300 | 22,000 | 590    | 6,470  | 29,500    | 9,860  | 19,100 |
| 24    | 35,900 | 22,500 | 28,900 | 38,300 | 25,300 | 31,200 | 22,800 | 2,350  | 9,760  | 32,600    | 10,000 | 20,800 |
| 25    | 36,500 | 22,400 | 29,400 | 38,800 | 24,000 | 31,300 | 25,300 | 3,520  | 12,300 | ---       | ---    | ---    |
| 26    | 36,700 | 22,700 | 29,200 | 39,500 | 24,400 | 32,100 | 28,500 | 5,250  | 15,400 | 32,600    | 13,600 | 23,000 |
| 27    | 38,700 | 23,100 | 30,700 | 39,600 | 25,700 | 32,400 | 29,300 | 7,690  | 16,700 | 32,900    | 15,700 | 23,800 |
| 28    | 38,000 | 22,900 | 30,000 | 39,700 | 26,200 | 32,100 | 30,000 | 9,370  | 18,500 | 31,900    | 17,300 | 23,700 |
| 29    | 38,500 | 22,100 | 29,400 | 39,600 | 24,100 | 31,300 | 29,300 | 11,000 | 19,300 | 30,800    | 13,400 | 21,300 |
| 30    | 38,800 | 22,300 | 30,000 | 40,500 | 23,600 | 31,300 | 27,000 | 10,100 | 17,900 | 33,000    | 12,800 | 22,300 |
| 31    | ---    | ---    | ---    | 40,900 | 25,700 | 32,500 | 25,900 | 7,470  | 15,000 | ---       | ---    | ---    |
| MONTH | ---    | ---    | ---    | 40,900 | 13,200 | 30,100 | 41,400 | 100    | 19,700 | ---       | ---    | ---    |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX     | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX      | MIN    | MEAN   | MAX     | MIN | MEAN |
|-------|---------|--------|--------|----------|--------|--------|----------|--------|--------|---------|-----|------|
|       | OCTOBER |        |        | NOVEMBER |        |        | DECEMBER |        |        | JANUARY |     |      |
| 1     | 33,600  | 12,800 | 21,800 | 38,100   | 23,600 | 31,300 | 32,800   | 14,300 | 23,100 | ---     | --- | ---  |
| 2     | 31,600  | 11,000 | 19,400 | 38,500   | 24,000 | 32,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 3     | 30,000  | 7,870  | 17,200 | 38,000   | 25,100 | 32,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 4     | 29,700  | 7,180  | 17,500 | 40,400   | 25,900 | 34,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 5     | 32,400  | 7,180  | 19,200 | 38,100   | 26,300 | 33,000 | ---      | ---    | ---    | ---     | --- | ---  |
| 6     | 37,000  | 7,470  | 26,900 | 38,000   | 26,300 | 33,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 7     | 40,300  | 21,400 | 32,800 | 37,100   | 26,700 | 32,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 8     | 42,300  | 27,400 | 36,900 | 37,600   | 26,700 | 32,100 | ---      | ---    | ---    | ---     | --- | ---  |
| 9     | 41,400  | 25,700 | 35,000 | 39,500   | 27,100 | 34,300 | ---      | ---    | ---    | ---     | --- | ---  |
| 10    | 37,200  | 23,600 | 31,900 | 39,900   | 28,500 | 35,300 | ---      | ---    | ---    | ---     | --- | ---  |
| 11    | 36,800  | 24,200 | 30,500 | 40,700   | 30,100 | 35,700 | ---      | ---    | ---    | ---     | --- | ---  |
| 12    | 37,600  | 26,200 | 31,800 | 41,700   | 30,700 | 36,300 | ---      | ---    | ---    | ---     | --- | ---  |
| 13    | 38,600  | 27,300 | 32,700 | 41,000   | 28,300 | 34,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 14    | 38,600  | 27,400 | 32,400 | 44,900   | 27,500 | 35,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 15    | 39,800  | 26,800 | 32,500 | 41,400   | 28,500 | 35,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 16    | 38,700  | 24,500 | 30,800 | 41,700   | 28,200 | 34,600 | ---      | ---    | ---    | ---     | --- | ---  |
| 17    | 37,900  | 21,300 | 28,900 | 40,800   | 26,000 | 32,800 | ---      | ---    | ---    | ---     | --- | ---  |
| 18    | 38,000  | 20,400 | 28,900 | 38,700   | 22,700 | 31,000 | ---      | ---    | ---    | ---     | --- | ---  |
| 19    | 36,500  | 19,800 | 28,300 | 37,400   | 20,100 | 29,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 20    | 37,600  | 19,100 | 28,600 | 36,300   | 18,500 | 28,300 | ---      | ---    | ---    | ---     | --- | ---  |
| 21    | 40,500  | 21,700 | 32,500 | 34,800   | 17,800 | 27,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 22    | 41,400  | 24,900 | 34,600 | 35,700   | 17,900 | 28,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 23    | 40,900  | 27,100 | 35,100 | 36,200   | 19,800 | 28,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 24    | 41,200  | 29,300 | 35,600 | 36,300   | 19,800 | 28,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 25    | 41,200  | 30,300 | 35,700 | 35,500   | 20,100 | 26,400 | ---      | ---    | ---    | ---     | --- | ---  |
| 26    | 41,200  | 29,900 | 35,500 | 34,400   | 16,700 | 25,600 | ---      | ---    | ---    | ---     | --- | ---  |
| 27    | 41,200  | 28,700 | 35,100 | 36,300   | 16,600 | 27,500 | ---      | ---    | ---    | ---     | --- | ---  |
| 28    | 41,200  | 28,000 | 34,300 | 33,900   | 17,200 | 25,200 | ---      | ---    | ---    | ---     | --- | ---  |
| 29    | 40,900  | 27,500 | 34,100 | 33,500   | 13,800 | 24,000 | ---      | ---    | ---    | ---     | --- | ---  |
| 30    | 40,700  | 26,900 | 33,400 | 35,300   | 15,900 | 25,800 | ---      | ---    | ---    | ---     | --- | ---  |
| 31    | 38,800  | 25,700 | 32,100 | ---      | ---    | ---    | ---      | ---    | ---    | ---     | --- | ---  |
| MONTH | 42,300  | 7,180  | 30,400 | 44,900   | 13,800 | 31,100 | ---      | ---    | ---    | ---     | --- | ---  |





## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 23.4 | 13.5 | 17.1 | 23.5 | 13.1 | 17.0 | 24.7   | 15.2 | 19.6 | 11.0      | 2.1  | 5.4  |
| 2     | 24.3 | 13.6 | 17.7 | 23.6 | 12.4 | 16.9 | 24.8   | 14.4 | 19.0 | 10.2      | 1.6  | 4.0  |
| 3     | 24.2 | 13.2 | 17.6 | 22.9 | 11.3 | 16.3 | 24.1   | 12.4 | 17.7 | 9.1       | 1.5  | 3.5  |
| 4     | 23.9 | 13.8 | 17.8 | 23.2 | 11.3 | 15.9 | 23.5   | 13.4 | 16.9 | 6.6       | 1.2  | 2.8  |
| 5     | 24.6 | 13.2 | 17.8 | 23.3 | 11.3 | 15.6 | 22.8   | 13.2 | 16.9 | 8.0       | 0.9  | 2.4  |
| 6     | 24.6 | 14.6 | 18.3 | 21.8 | 11.1 | 15.2 | 20.8   | 11.3 | 14.7 | 5.6       | 1.4  | 2.6  |
| 7     | 24.4 | 14.4 | 18.4 | 21.6 | 12.3 | 16.0 | 20.6   | 10.9 | 14.7 | 8.6       | 1.4  | 3.3  |
| 8     | 24.1 | 13.6 | 17.9 | 21.9 | 12.6 | 16.0 | 20.4   | 11.7 | 14.4 | 8.6       | 2.3  | 4.8  |
| 9     | 22.4 | 12.9 | 17.1 | 21.0 | 12.3 | 15.7 | 18.8   | 11.0 | 14.1 | 6.0       | 2.1  | 3.8  |
| 10    | 22.3 | 12.4 | 16.5 | 19.6 | 11.6 | 15.1 | 19.1   | 10.1 | 13.7 | 5.2       | 1.1  | 2.3  |
| 11    | 21.4 | 12.3 | 15.9 | 20.1 | 11.1 | 14.6 | 19.2   | 11.4 | 14.5 | 7.8       | 1.1  | 2.5  |
| 12    | 20.1 | 11.7 | 15.5 | 19.5 | 10.9 | 14.5 | 20.3   | 12.4 | 15.1 | 6.7       | 1.3  | 2.8  |
| 13    | 21.7 | 12.5 | 16.3 | 20.5 | 12.3 | 15.2 | 18.2   | 12.1 | 14.7 | 8.7       | 1.7  | 3.6  |
| 14    | 21.4 | 12.8 | 16.4 | 21.5 | 12.8 | 15.6 | 17.4   | 10.6 | 13.8 | 8.7       | 1.8  | 3.8  |
| 15    | 21.4 | 13.0 | 16.4 | 21.6 | 12.8 | 16.1 | 13.9   | 4.8  | 9.5  | 7.5       | 1.1  | 3.0  |
| 16    | 21.3 | 12.5 | 16.0 | 21.8 | 13.3 | 16.5 | 10.8   | 2.8  | 5.8  | 5.7       | 0.2  | 1.8  |
| 17    | 21.3 | 11.9 | 15.6 | 23.0 | 14.2 | 17.4 | 8.0    | 1.7  | 4.1  | 5.8       | 0.1  | 1.8  |
| 18    | 21.5 | 11.8 | 15.5 | 22.4 | 13.8 | 16.7 | 7.2    | 0.9  | 3.0  | 3.1       | 0.08 | 0.9  |
| 19    | 22.7 | 11.5 | 15.5 | 22.1 | 13.4 | 16.6 | 5.5    | 0.3  | 2.0  | 5.6       | 0.07 | 1.8  |
| 20    | 22.6 | 11.8 | 15.4 | 22.0 | 13.6 | 16.7 | 5.0    | 0.1  | 1.3  | 17.4      | 1.5  | 4.7  |
| 21    | 22.7 | 13.7 | 16.8 | 22.1 | 14.2 | 17.2 | 4.0    | 0.06 | 1.1  | ---       | ---  | ---  |
| 22    | 22.8 | 14.8 | 17.4 | 22.9 | 14.7 | 17.9 | 2.5    | 0.06 | 0.7  | ---       | ---  | ---  |
| 23    | 21.7 | 13.6 | 16.9 | 23.0 | 15.2 | 18.3 | 5.8    | 0.2  | 1.5  | ---       | ---  | ---  |
| 24    | 19.9 | 12.6 | 15.7 | 22.1 | 14.4 | 17.6 | 7.8    | 1.0  | 2.7  | 18.0      | 4.5  | 8.1  |
| 25    | 20.2 | 12.3 | 16.0 | 22.0 | 13.1 | 16.8 | 9.3    | 1.6  | 3.8  | ---       | ---  | ---  |
| 26    | 21.5 | 13.5 | 16.5 | 23.0 | 13.8 | 17.7 | 13.6   | 2.0  | 5.2  | 17.2      | 6.7  | 10.9 |
| 27    | 21.8 | 13.3 | 16.8 | 23.7 | 14.9 | 18.7 | 14.0   | 3.8  | 7.0  | 18.1      | 7.4  | 12.5 |
| 28    | 22.7 | 13.3 | 16.8 | 24.2 | 15.5 | 19.0 | 15.1   | 4.7  | 8.5  | 18.0      | 9.5  | 13.2 |
| 29    | 22.8 | 12.1 | 16.6 | 23.7 | 13.6 | 18.4 | 17.3   | 5.9  | 10   | 16.7      | 7.0  | 10.9 |
| 30    | 22.9 | 12.7 | 17.0 | 24.6 | 13.8 | 18.1 | 16.7   | 5.0  | 9.7  | 17.8      | 6.5  | 10.7 |
| 31    | ---  | ---  | ---  | 24.7 | 14.7 | 19.1 | 12.3   | 3.4  | 7.0  | ---       | ---  | ---  |
| MONTH | 24.6 | 11.5 | 16.7 | 24.7 | 10.9 | 16.7 | 24.8   | 0.06 | 9.8  | ---       | ---  | ---  |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|-----|------|-----|-----|------|
|       |      |      |      |      |      |      |      |     |      |     |     |      |
| 1     | 17.5 | 6.4  | 10.4 | 21.1 | 12.1 | 15.7 | 16.5 | 7.1 | 10   | --- | --- | ---  |
| 2     | 15.5 | 5.8  | 9.0  | 21.3 | 11.8 | 15.5 | ---  | --- | ---  | --- | --- | ---  |
| 3     | 13.1 | 4.2  | 6.8  | 19.4 | 12.5 | 14.8 | ---  | --- | ---  | --- | --- | ---  |
| 4     | 11.9 | 3.4  | 6.1  | 20.8 | 12.3 | 16.1 | ---  | --- | ---  | --- | --- | ---  |
| 5     | 9.3  | 3.5  | 5.2  | 21.0 | 12.5 | 15.1 | ---  | --- | ---  | --- | --- | ---  |
| 6     | 13.9 | 3.5  | 5.7  | 20.6 | 13.2 | 16.1 | ---  | --- | ---  | --- | --- | ---  |
| 7     | 15.9 | 4.5  | 6.9  | 20.8 | 14.3 | 16.9 | ---  | --- | ---  | --- | --- | ---  |
| 8     | 18.1 | 5.6  | 9.5  | 21.5 | 15.4 | 17.5 | ---  | --- | ---  | --- | --- | ---  |
| 9     | 19.6 | 7.3  | 12.6 | 23.8 | 15.2 | 19.1 | ---  | --- | ---  | --- | --- | ---  |
| 10    | 20.2 | 11.3 | 15.2 | 23.9 | 17.0 | 20.6 | ---  | --- | ---  | --- | --- | ---  |
| 11    | 21.4 | 13.8 | 17.0 | 24.8 | 17.8 | 21.1 | ---  | --- | ---  | --- | --- | ---  |
| 12    | 22.8 | 15.9 | 18.6 | 25.5 | 18.0 | 21.6 | ---  | --- | ---  | --- | --- | ---  |
| 13    | 23.3 | 16.2 | 19.5 | 24.7 | 16.7 | 20.3 | ---  | --- | ---  | --- | --- | ---  |
| 14    | 23.5 | 16.4 | 19.2 | 25.6 | 16.0 | 20.4 | ---  | --- | ---  | --- | --- | ---  |
| 15    | 24.2 | 15.8 | 19.0 | 25.5 | 16.8 | 20.6 | ---  | --- | ---  | --- | --- | ---  |
| 16    | 22.9 | 14.1 | 17.5 | 25.3 | 15.6 | 19.7 | ---  | --- | ---  | --- | --- | ---  |
| 17    | 21.7 | 11.9 | 15.7 | 23.8 | 14.2 | 18.3 | ---  | --- | ---  | --- | --- | ---  |
| 18    | 21.2 | 10.3 | 14.9 | 22.4 | 12.1 | 16.3 | ---  | --- | ---  | --- | --- | ---  |
| 19    | 20.1 | 10.7 | 14.7 | 20.8 | 10.5 | 14.8 | ---  | --- | ---  | --- | --- | ---  |
| 20    | 19.4 | 9.7  | 13.5 | 20.3 | 9.8  | 13.6 | ---  | --- | ---  | --- | --- | ---  |
| 21    | 22.1 | 10.2 | 14.8 | 18.5 | 8.9  | 12.9 | ---  | --- | ---  | --- | --- | ---  |
| 22    | 23.3 | 12.7 | 16.9 | 19.6 | 9.5  | 13.6 | ---  | --- | ---  | --- | --- | ---  |
| 23    | 23.2 | 14.6 | 18.9 | 20.3 | 9.8  | 14.4 | ---  | --- | ---  | --- | --- | ---  |
| 24    | 23.7 | 16.7 | 20.1 | 20.4 | 10.4 | 15.0 | ---  | --- | ---  | --- | --- | ---  |
| 25    | 24.1 | 17.4 | 20.4 | 20.8 | 11.3 | 14.4 | ---  | --- | ---  | --- | --- | ---  |
| 26    | 24.2 | 17.0 | 20.2 | 19.2 | 8.6  | 12.7 | ---  | --- | ---  | --- | --- | ---  |
| 27    | 24.1 | 16.5 | 19.8 | 19.9 | 8.1  | 13.2 | ---  | --- | ---  | --- | --- | ---  |
| 28    | 23.7 | 15.7 | 18.9 | 18.2 | 9.1  | 12.2 | ---  | --- | ---  | --- | --- | ---  |
| 29    | 23.4 | 14.8 | 18.7 | 17.0 | 6.8  | 10.6 | ---  | --- | ---  | --- | --- | ---  |
| 30    | 23.3 | 14.4 | 18.1 | 17.4 | 6.8  | 10.5 | ---  | --- | ---  | --- | --- | ---  |
| 31    | 21.9 | 14.0 | 17.0 | ---  | ---  | ---  | ---  | --- | ---  | --- | --- | ---  |
| MONTH | 24.2 | 3.4  | 14.9 | 25.6 | 6.8  | 16.1 | ---  | --- | ---  | --- | --- | ---  |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 24.6 | 14.0 | 18.4 | 24.7 | 13.5 | 18.3 | 25.9   | 15.5 | 20.6 | 15.5      | 2.5  | 7.7  |
| 2     | 25.3 | 14.2 | 18.7 | 25.1 | 13.0 | 18.3 | 26.0   | 15.1 | 20.2 | 14.5      | 2.0  | 6.5  |
| 3     | 25.8 | 13.5 | 18.8 | 24.2 | 7.6  | 15.8 | 26.5   | 13.4 | 19.4 | 14.6      | 1.9  | 6.7  |
| 4     | 26.1 | 14.6 | 19.1 | 23.8 | 9.8  | 16.7 | 25.8   | 14.0 | 18.9 | 13.4      | 1.6  | 6.1  |
| 5     | 26.2 | 14.6 | 19.6 | 25.1 | 12.0 | 17.7 | 24.8   | 13.6 | 18.5 | 15.8      | 1.3  | 7.0  |
| 6     | 27.1 | 15.6 | 20.3 | 24.5 | 12.4 | 17.6 | 23.6   | 11.5 | 17.3 | 16.6      | 1.4  | 8.6  |
| 7     | 27.2 | 15.5 | 20.4 | 24.4 | 13.2 | 17.8 | 24.9   | 11.8 | 18.5 | 19.2      | 2.9  | 10.4 |
| 8     | 26.5 | 14.8 | 19.8 | 23.3 | 13.2 | 18.0 | 23.6   | 12.3 | 18.3 | 14.3      | 3.3  | 7.1  |
| 9     | 24.6 | 14.0 | 18.9 | 23.9 | 13.0 | 18.0 | 22.7   | 12.1 | 17.5 | 9.0       | 2.1  | 4.8  |
| 10    | 24.0 | 13.4 | 18.7 | 23.9 | 12.7 | 17.9 | 23.3   | 11.7 | 18.1 | 11.7      | 1.4  | 4.7  |
| 11    | 23.0 | 13.1 | 18.2 | 24.2 | 12.2 | 18.1 | 23.8   | 12.9 | 18.3 | 14.3      | 1.4  | 5.8  |
| 12    | ---  | ---  | ---  | 24.6 | 12.2 | 18.5 | 23.1   | 13.1 | 17.5 | 15.8      | 1.5  | 6.7  |
| 13    | ---  | ---  | ---  | 23.7 | 13.0 | 18.2 | 20.5   | 12.6 | 16.1 | 15.5      | 2.0  | 6.8  |
| 14    | ---  | ---  | ---  | 23.9 | 13.5 | 17.7 | 19.2   | 11.6 | 15.1 | 14.9      | 2.2  | 6.3  |
| 15    | ---  | ---  | ---  | 24.6 | 13.7 | 18.1 | 16.7   | 5.8  | 11.0 | 11.7      | 1.3  | 4.6  |
| 16    | 22.8 | 13.4 | 17.3 | 24.6 | 14.3 | 18.6 | 14.6   | 3.3  | 7.9  | 8.8       | 0.2  | 3.1  |
| 17    | 23.5 | 13.0 | 17.3 | 23.9 | 15.1 | 19.0 | 13.0   | 2.0  | 5.9  | 9.4       | 0.1  | 2.9  |
| 18    | 24.0 | 12.5 | 17.5 | 24.0 | 14.2 | 18.2 | 12.5   | 1.1  | 4.6  | 6.9       | 0.09 | 2.0  |
| 19    | 25.0 | 12.7 | 18.3 | 24.5 | 14.6 | 18.9 | 10.0   | 0.4  | 3.2  | 13.2      | 0.08 | 4.0  |
| 20    | 25.8 | 12.5 | 19.5 | 24.6 | 14.6 | 19.0 | 17.1   | 0.10 | 2.6  | 21.2      | 1.5  | 10.5 |
| 21    | 26.0 | 14.7 | 19.7 | 24.4 | 15.3 | 19.5 | 8.1    | 0.09 | 2.0  | ---       | ---  | ---  |
| 22    | 25.0 | 14.5 | 18.9 | 24.5 | 15.8 | 19.9 | 6.6    | 0.04 | 1.5  | ---       | ---  | ---  |
| 23    | 23.0 | 14.4 | 18.1 | 24.7 | 16.0 | 20.1 | 13.2   | 0.3  | 3.6  | 18.2      | 5.5  | 11.4 |
| 24    | 22.6 | 13.6 | 17.8 | 24.3 | 15.4 | 19.4 | 13.8   | 1.2  | 5.6  | 20.3      | 5.6  | 12.6 |
| 25    | 23.0 | 13.5 | 18.2 | 24.6 | 14.6 | 19.5 | 15.4   | 1.8  | 7.2  | ---       | ---  | ---  |
| 26    | 23.2 | 13.7 | 18.1 | 25.1 | 14.8 | 20.0 | 17.6   | 2.8  | 9.1  | 20.3      | 7.8  | 14.0 |
| 27    | 24.6 | 14.0 | 19.1 | 25.2 | 15.7 | 20.2 | 18.1   | 4.2  | 9.9  | 20.5      | 9.1  | 14.5 |
| 28    | 24.1 | 13.8 | 18.6 | 25.3 | 16.0 | 20.0 | 18.6   | 5.2  | 11.0 | 19.9      | 10.2 | 14.4 |
| 29    | 24.4 | 13.3 | 18.2 | 25.2 | 14.6 | 19.5 | 18.1   | 6.2  | 11.5 | 19.1      | 7.7  | 12.8 |
| 30    | 24.6 | 13.4 | 18.6 | 25.8 | 14.3 | 19.5 | 16.6   | 5.7  | 10.6 | 20.6      | 7.3  | 13.5 |
| 31    | ---  | ---  | ---  | 26.1 | 15.7 | 20.3 | 15.8   | 4.1  | 8.8  | ---       | ---  | ---  |
| MONTH | ---  | ---  | ---  | 26.1 | 7.6  | 18.7 | 26.5   | 0.04 | 11.9 | ---       | ---  | ---  |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

SALINITY, WATER, UNFILTERED, PARTS PER THOUSAND, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|-----|------|-----|-----|------|
|       |      |      |      |      |      |      |      |     |      |     |     |      |
| 1     | 21.0 | 7.3  | 13.2 | 24.2 | 14.3 | 19.5 | 20.5 | 8.3 | 14.0 | --- | --- | ---  |
| 2     | 19.6 | 6.2  | 11.6 | 24.4 | 14.6 | 20.3 | ---  | --- | ---  | --- | --- | ---  |
| 3     | 18.6 | 4.3  | 10.2 | 24.1 | 15.3 | 20.3 | ---  | --- | ---  | --- | --- | ---  |
| 4     | 18.4 | 3.9  | 10.4 | 25.8 | 15.8 | 21.8 | ---  | --- | ---  | --- | --- | ---  |
| 5     | 20.2 | 3.9  | 11.5 | 24.2 | 16.1 | 20.7 | ---  | --- | ---  | --- | --- | ---  |
| 6     | 23.4 | 4.1  | 16.6 | 24.1 | 16.1 | 20.9 | ---  | --- | ---  | --- | --- | ---  |
| 7     | 25.7 | 12.8 | 20.5 | 23.5 | 16.4 | 20.4 | ---  | --- | ---  | --- | --- | ---  |
| 8     | 27.1 | 16.8 | 23.3 | 23.8 | 16.4 | 20.0 | ---  | --- | ---  | --- | --- | ---  |
| 9     | 26.5 | 15.7 | 22.0 | 25.1 | 16.6 | 21.5 | ---  | --- | ---  | --- | --- | ---  |
| 10    | 23.5 | 14.3 | 19.9 | 25.4 | 17.6 | 22.2 | ---  | --- | ---  | --- | --- | ---  |
| 11    | 23.3 | 14.7 | 18.9 | 26.0 | 18.6 | 22.5 | ---  | --- | ---  | --- | --- | ---  |
| 12    | 23.8 | 16.0 | 19.8 | 26.7 | 19.0 | 22.9 | ---  | --- | ---  | --- | --- | ---  |
| 13    | 24.5 | 16.8 | 20.4 | 26.2 | 17.4 | 21.6 | ---  | --- | ---  | --- | --- | ---  |
| 14    | 24.5 | 16.8 | 20.3 | 29.0 | 16.9 | 22.4 | ---  | --- | ---  | --- | --- | ---  |
| 15    | 25.3 | 16.4 | 20.3 | 26.5 | 17.6 | 22.3 | ---  | --- | ---  | --- | --- | ---  |
| 16    | 24.6 | 14.9 | 19.1 | 26.7 | 17.4 | 21.8 | ---  | --- | ---  | --- | --- | ---  |
| 17    | 24.0 | 12.8 | 17.9 | 26.1 | 15.9 | 20.5 | ---  | --- | ---  | --- | --- | ---  |
| 18    | 24.1 | 12.2 | 17.9 | 24.6 | 13.7 | 19.3 | ---  | --- | ---  | --- | --- | ---  |
| 19    | 23.0 | 11.8 | 17.4 | 23.7 | 12.0 | 18.3 | ---  | --- | ---  | --- | --- | ---  |
| 20    | 23.8 | 11.3 | 17.7 | 22.9 | 10.9 | 17.4 | ---  | --- | ---  | --- | --- | ---  |
| 21    | 25.8 | 13.0 | 20.3 | 21.9 | 10.5 | 16.7 | ---  | --- | ---  | --- | --- | ---  |
| 22    | 26.5 | 15.1 | 21.8 | 22.5 | 10.5 | 17.4 | ---  | --- | ---  | --- | --- | ---  |
| 23    | 26.1 | 16.6 | 22.1 | 22.8 | 11.8 | 17.4 | ---  | --- | ---  | --- | --- | ---  |
| 24    | 26.3 | 18.1 | 22.4 | 22.9 | 11.8 | 17.4 | ---  | --- | ---  | --- | --- | ---  |
| 25    | 26.3 | 18.8 | 22.5 | 22.4 | 12.0 | 16.2 | ---  | --- | ---  | --- | --- | ---  |
| 26    | 26.3 | 18.5 | 22.4 | 21.6 | 9.8  | 15.7 | ---  | --- | ---  | --- | --- | ---  |
| 27    | 26.3 | 17.7 | 22.1 | 22.9 | 9.7  | 16.9 | ---  | --- | ---  | --- | --- | ---  |
| 28    | 26.3 | 17.2 | 21.5 | 21.2 | 10.1 | 15.4 | ---  | --- | ---  | --- | --- | ---  |
| 29    | 26.1 | 16.9 | 21.4 | 21.0 | 8.0  | 14.6 | ---  | --- | ---  | --- | --- | ---  |
| 30    | 26.0 | 16.5 | 20.9 | 22.2 | 9.3  | 15.8 | ---  | --- | ---  | --- | --- | ---  |
| 31    | 24.6 | 15.7 | 20.0 | ---  | ---  | ---  | ---  | --- | ---  | --- | --- | ---  |
| MONTH | 27.1 | 3.9  | 18.9 | 29.0 | 8.0  | 19.3 | ---  | --- | ---  | --- | --- | ---  |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 8.0  | 7.5 | 7.7  | 7.9  | 7.5 | 7.7  | 7.8    | 7.5 | 7.7  | 7.3       | 6.7 | 6.9  |
| 2     | 8.3  | 7.4 | 7.8  | 7.9  | 7.4 | 7.6  | 7.8    | 7.4 | 7.6  | 7.2       | 6.7 | 6.8  |
| 3     | 8.2  | 7.6 | 7.9  | 7.9  | 7.4 | 7.6  | 7.8    | 7.3 | 7.6  | 7.1       | 6.7 | 6.8  |
| 4     | 8.1  | 7.6 | 7.9  | 7.8  | 7.3 | 7.5  | 7.8    | 7.3 | 7.6  | 7.0       | 6.6 | 6.7  |
| 5     | 8.1  | 7.6 | 7.9  | 7.8  | 7.3 | 7.6  | 7.9    | 7.3 | 7.6  | 7.0       | 6.5 | 6.7  |
| 6     | 8.1  | 7.6 | 7.9  | 7.9  | 7.3 | 7.6  | 7.8    | 7.3 | 7.5  | 6.9       | 6.5 | 6.7  |
| 7     | 8.2  | 7.6 | 7.9  | 8.2  | 7.2 | 7.7  | 8.0    | 7.3 | 7.6  | 7.0       | 6.6 | 6.7  |
| 8     | 8.3  | 7.5 | 7.9  | 8.0  | 7.4 | 7.7  | 8.0    | 7.3 | 7.6  | 7.3       | 6.8 | 7.0  |
| 9     | 8.3  | 7.6 | 7.9  | 8.0  | 7.3 | 7.7  | 8.2    | 7.2 | 7.6  | 7.2       | 6.8 | 7.0  |
| 10    | 8.2  | 7.5 | 7.9  | 8.0  | 7.2 | 7.6  | 8.2    | 7.2 | 7.6  | 6.9       | 6.5 | 6.7  |
| 11    | 8.2  | 7.5 | 7.9  | 7.8  | 7.2 | 7.6  | 8.1    | 7.3 | 7.7  | 6.9       | 6.6 | 6.7  |
| 12    | 8.2  | 7.4 | 7.8  | 7.7  | 7.2 | 7.5  | 7.9    | 7.4 | 7.7  | 6.9       | 6.6 | 6.7  |
| 13    | 8.0  | 7.4 | 7.7  | 7.8  | 7.3 | 7.5  | 7.8    | 7.4 | 7.6  | 7.0       | 6.4 | 6.7  |
| 14    | 8.0  | 7.4 | 7.7  | 8.0  | 7.3 | 7.6  | 7.7    | 7.3 | 7.5  | 7.0       | 6.4 | 6.6  |
| 15    | 8.3  | 7.5 | 7.9  | 8.0  | 7.4 | 7.7  | 7.5    | 7.0 | 7.3  | 6.9       | 6.5 | 6.6  |
| 16    | 8.3  | 7.7 | 8.0  | 8.1  | 7.4 | 7.8  | 7.2    | 6.9 | 7.1  | 6.8       | 6.4 | 6.6  |
| 17    | 8.2  | 7.6 | 7.9  | 8.1  | 7.4 | 7.7  | 7.1    | 6.8 | 6.9  | 6.9       | 6.4 | 6.7  |
| 18    | 8.2  | 7.7 | 8.0  | 7.9  | 7.4 | 7.6  | 7.0    | 6.6 | 6.8  | 6.9       | 6.5 | 6.7  |
| 19    | 8.3  | 7.8 | 8.0  | 7.9  | 7.3 | 7.6  | 7.0    | 6.6 | 6.7  | 7.2       | 6.4 | 6.7  |
| 20    | 8.3  | 7.7 | 8.0  | 8.1  | 7.3 | 7.7  | 6.9    | 6.4 | 6.7  | 7.8       | 6.6 | 7.0  |
| 21    | 8.3  | 7.7 | 8.0  | 8.0  | 7.3 | 7.7  | 6.9    | 6.3 | 6.6  | ---       | --- | ---  |
| 22    | 8.4  | 7.8 | 8.1  | 8.1  | 7.4 | 7.7  | 6.8    | 6.2 | 6.4  | ---       | --- | ---  |
| 23    | 8.3  | 7.7 | 8.0  | 8.1  | 7.4 | 7.7  | 6.8    | 6.3 | 6.5  | ---       | --- | ---  |
| 24    | 8.3  | 7.6 | 7.9  | 7.9  | 7.3 | 7.6  | 6.9    | 6.3 | 6.5  | 7.7       | 6.8 | 7.1  |
| 25    | 8.2  | 7.5 | 8.0  | 7.9  | 7.2 | 7.5  | 7.0    | 6.3 | 6.6  | ---       | --- | ---  |
| 26    | 8.2  | 7.7 | 8.0  | 7.8  | 7.3 | 7.5  | 7.3    | 6.4 | 6.7  | 7.7       | 7.0 | 7.3  |
| 27    | 8.1  | 7.6 | 7.9  | 7.8  | 7.3 | 7.6  | 7.3    | 6.6 | 6.8  | 7.8       | 7.2 | 7.5  |
| 28    | 8.0  | 7.5 | 7.8  | 7.9  | 7.5 | 7.6  | 7.3    | 6.7 | 6.9  | 7.8       | 7.4 | 7.6  |
| 29    | 8.0  | 7.4 | 7.7  | 7.8  | 7.4 | 7.6  | 7.6    | 6.8 | 7.1  | 7.7       | 7.1 | 7.4  |
| 30    | 8.0  | 7.5 | 7.7  | 7.8  | 7.4 | 7.6  | 7.6    | 7.0 | 7.3  | 7.7       | 7.1 | 7.3  |
| 31    | ---  | --- | ---  | 7.8  | 7.4 | 7.6  | 7.4    | 6.8 | 7.0  | ---       | --- | ---  |
| MONTH | 8.4  | 7.4 | 7.9  | 8.2  | 7.2 | 7.6  | 8.2    | 6.2 | 7.2  | ---       | --- | ---  |



02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.7 | 7.0 | 7.3  | 7.8 | 7.4 | 7.6  | 7.6 | 7.1 | 7.3  | --- | --- | ---  |
| 2     | 7.6 | 6.9 | 7.2  | 7.8 | 7.3 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 3     | 7.4 | 6.9 | 7.0  | 7.8 | 7.4 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 4     | 7.3 | 6.9 | 7.0  | 7.9 | 7.4 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 5     | 7.2 | 6.9 | 7.0  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 6     | 7.6 | 6.9 | 7.1  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 7     | 7.7 | 6.9 | 7.1  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 8     | 7.8 | 7.0 | 7.3  | 7.9 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 9     | 7.8 | 7.2 | 7.5  | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 10    | 7.9 | 7.3 | 7.6  | 8.2 | 7.7 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 11    | 7.9 | 7.4 | 7.6  | 8.0 | 7.7 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 12    | 7.9 | 7.5 | 7.7  | 8.0 | 7.7 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 13    | 7.9 | 7.5 | 7.7  | 7.9 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 14    | 7.9 | 7.5 | 7.7  | 7.9 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 15    | 7.9 | 7.5 | 7.7  | 7.9 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 16    | 7.9 | 7.4 | 7.6  | 7.9 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 17    | 7.8 | 7.3 | 7.5  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 18    | 7.8 | 7.2 | 7.5  | 7.8 | 7.4 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 19    | 7.8 | 7.3 | 7.6  | 7.8 | 7.3 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 20    | 7.8 | 7.2 | 7.5  | 7.7 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 21    | 7.9 | 7.3 | 7.6  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 22    | 7.9 | 7.4 | 7.7  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 23    | 7.9 | 7.6 | 7.8  | 7.7 | 7.2 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 24    | 7.9 | 7.6 | 7.8  | 7.7 | 7.3 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 25    | 7.9 | 7.6 | 7.8  | 7.7 | 7.3 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 26    | 7.9 | 7.6 | 7.7  | 7.7 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 27    | 7.9 | 7.5 | 7.7  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 28    | 7.9 | 7.5 | 7.7  | 7.6 | 7.2 | 7.4  | --- | --- | ---  | --- | --- | ---  |
| 29    | 7.9 | 7.4 | 7.7  | 7.6 | 7.1 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 30    | 7.8 | 7.4 | 7.6  | 7.5 | 7.0 | 7.3  | --- | --- | ---  | --- | --- | ---  |
| 31    | 7.8 | 7.4 | 7.6  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 7.9 | 6.9 | 7.5  | 8.2 | 7.0 | 7.6  | --- | --- | ---  | --- | --- | ---  |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.8 | 7.3 | 7.6  | 8.0 | 7.5 | 7.8  | 7.9 | 7.5 | 7.7  | 7.5 | 6.6 | 7.0  |
| 2     | 8.0 | 7.4 | 7.7  | 7.9 | 7.4 | 7.7  | 8.0 | 7.5 | 7.8  | 7.4 | 6.6 | 6.9  |
| 3     | 8.0 | 7.5 | 7.8  | 7.9 | 7.3 | 7.6  | 8.0 | 7.5 | 7.8  | 7.5 | 6.6 | 7.0  |
| 4     | 7.9 | 7.5 | 7.7  | 7.8 | 7.3 | 7.6  | 8.0 | 7.5 | 7.7  | 7.4 | 6.4 | 6.9  |
| 5     | 7.9 | 7.6 | 7.7  | 7.8 | 7.3 | 7.6  | 7.9 | 7.4 | 7.7  | 7.4 | 6.4 | 6.9  |
| 6     | 8.0 | 7.5 | 7.8  | 7.8 | 7.3 | 7.6  | 7.9 | 7.3 | 7.6  | 7.4 | 6.5 | 6.9  |
| 7     | 8.0 | 7.6 | 7.8  | 8.0 | 7.3 | 7.7  | 7.9 | 7.4 | 7.7  | 7.6 | 6.6 | 7.0  |
| 8     | 7.9 | 7.4 | 7.7  | 8.0 | 7.5 | 7.8  | 7.9 | 7.4 | 7.7  | 7.4 | 6.8 | 7.0  |
| 9     | 7.8 | 7.3 | 7.6  | 8.0 | 7.4 | 7.8  | 7.9 | 7.4 | 7.7  | 7.2 | 6.6 | 7.0  |
| 10    | 7.9 | 7.3 | 7.7  | 8.0 | 7.4 | 7.8  | 8.0 | 7.3 | 7.7  | 7.2 | 6.4 | 6.7  |
| 11    | 8.0 | 7.3 | 7.7  | 8.0 | 7.4 | 7.7  | 8.0 | 7.4 | 7.8  | 7.3 | 6.4 | 6.7  |
| 12    | 7.9 | 7.3 | 7.7  | 8.0 | 7.4 | 7.7  | 8.0 | 7.5 | 7.8  | 7.3 | 6.5 | 6.8  |
| 13    | 8.0 | 7.5 | 7.8  | 8.0 | 7.5 | 7.7  | 7.9 | 7.4 | 7.7  | 7.6 | 6.5 | 6.9  |
| 14    | 8.0 | 7.5 | 7.8  | 7.9 | 7.4 | 7.7  | 7.8 | 7.4 | 7.6  | 7.5 | 6.6 | 6.9  |
| 15    | 8.0 | 7.6 | 7.8  | 8.0 | 7.5 | 7.7  | 7.6 | 7.1 | 7.4  | 7.3 | 6.6 | 6.8  |
| 16    | 8.1 | 7.7 | 7.9  | 8.0 | 7.6 | 7.8  | 7.5 | 6.9 | 7.2  | 7.1 | 6.6 | 6.7  |
| 17    | 8.0 | 7.6 | 7.9  | 8.0 | 7.5 | 7.8  | 7.4 | 6.7 | 7.0  | 7.2 | 6.6 | 6.8  |
| 18    | 8.0 | 7.6 | 7.9  | 7.9 | 7.5 | 7.7  | 7.3 | 6.6 | 6.9  | 7.2 | 6.7 | 6.9  |
| 19    | 8.0 | 7.6 | 7.9  | 7.9 | 7.4 | 7.7  | 7.2 | 6.4 | 6.8  | 7.6 | 6.6 | 7.0  |
| 20    | 8.1 | 7.6 | 7.9  | 7.9 | 7.5 | 7.7  | 7.1 | 6.1 | 6.7  | 8.0 | 6.8 | 7.4  |
| 21    | 8.1 | 7.7 | 7.9  | 7.9 | 7.4 | 7.8  | 7.1 | 6.0 | 6.5  | --- | --- | ---  |
| 22    | 8.2 | 7.7 | 8.0  | 7.9 | 7.5 | 7.8  | 7.0 | 5.7 | 6.3  | --- | --- | ---  |
| 23    | 8.3 | 7.8 | 8.0  | 7.9 | 7.5 | 7.8  | 7.4 | 6.1 | 6.6  | 7.5 | 6.6 | 7.0  |
| 24    | 8.2 | 7.7 | 8.0  | 7.8 | 7.4 | 7.7  | 7.3 | 6.3 | 6.7  | 7.6 | 6.7 | 7.1  |
| 25    | 8.3 | 7.7 | 8.0  | 7.8 | 7.3 | 7.6  | 7.5 | 6.4 | 6.8  | --- | --- | ---  |
| 26    | 8.2 | 7.7 | 8.0  | 7.8 | 7.3 | 7.6  | 7.7 | 6.6 | 7.0  | 7.6 | 6.9 | 7.3  |
| 27    | 8.0 | 7.6 | 7.9  | 7.8 | 7.3 | 7.6  | 7.6 | 6.6 | 7.1  | 7.6 | 7.0 | 7.4  |
| 28    | 7.9 | 7.5 | 7.7  | 7.8 | 7.4 | 7.6  | 7.6 | 6.7 | 7.1  | 7.6 | 7.2 | 7.4  |
| 29    | 7.8 | 7.3 | 7.7  | 7.8 | 7.3 | 7.6  | 7.6 | 6.8 | 7.2  | 7.7 | 7.1 | 7.4  |
| 30    | 8.0 | 7.4 | 7.7  | 7.8 | 7.3 | 7.6  | 7.6 | 7.0 | 7.3  | 7.8 | 7.1 | 7.5  |
| 31    | --- | --- | ---  | 7.9 | 7.4 | 7.6  | 7.5 | 6.8 | 7.2  | --- | --- | ---  |
| MONTH | 8.3 | 7.3 | 7.8  | 8.0 | 7.3 | 7.7  | 8.0 | 5.7 | 7.3  | --- | --- | ---  |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|-----|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |     |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.8 | 7.0 | 7.4  | 8.0 | 7.6 | 7.8  | 7.6 | 7.1 | 7.4  | --- | --- | ---  |
| 2     | 7.7 | 6.9 | 7.3  | 7.9 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 3     | 7.6 | 6.8 | 7.2  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 4     | 7.6 | 6.8 | 7.2  | 7.9 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 5     | 7.7 | 6.8 | 7.2  | 7.8 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 6     | 7.8 | 6.9 | 7.5  | 7.8 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 7     | 7.8 | 7.2 | 7.6  | 7.8 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 8     | 7.8 | 7.5 | 7.7  | 7.8 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 9     | 7.8 | 7.6 | 7.7  | 8.1 | 7.5 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 10    | 7.8 | 7.4 | 7.7  | 8.1 | 7.8 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 11    | 7.8 | 7.4 | 7.6  | 8.1 | 7.8 | 8.0  | --- | --- | ---  | --- | --- | ---  |
| 12    | 7.8 | 7.4 | 7.6  | 8.0 | 7.7 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 13    | 7.8 | 7.4 | 7.6  | 8.0 | 7.7 | 7.8  | --- | --- | ---  | --- | --- | ---  |
| 14    | 7.7 | 7.4 | 7.6  | 8.1 | 7.7 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 15    | 7.8 | 7.3 | 7.6  | 8.0 | 7.8 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 16    | 7.8 | 7.4 | 7.6  | 8.0 | 7.6 | 7.9  | --- | --- | ---  | --- | --- | ---  |
| 17    | 7.8 | 7.3 | 7.5  | 7.9 | 7.6 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 18    | 7.8 | 7.2 | 7.5  | 7.9 | 7.5 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 19    | 7.7 | 7.3 | 7.5  | 7.8 | 7.4 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 20    | 8.0 | 7.2 | 7.7  | 7.8 | 7.4 | 7.7  | --- | --- | ---  | --- | --- | ---  |
| 21    | 8.1 | 7.5 | 7.9  | 7.8 | 7.3 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 22    | 8.1 | 7.7 | 8.0  | 7.8 | 7.3 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 23    | 8.2 | 7.8 | 8.0  | 7.8 | 7.3 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 24    | 8.1 | 7.8 | 8.0  | 7.8 | 7.3 | 7.6  | --- | --- | ---  | --- | --- | ---  |
| 25    | 8.1 | 7.8 | 7.9  | 7.7 | 7.3 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 26    | 8.1 | 7.7 | 7.9  | 7.7 | 7.2 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 27    | 8.1 | 7.7 | 7.9  | 7.7 | 7.2 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 28    | 8.0 | 7.6 | 7.8  | 7.6 | 7.3 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 29    | 8.0 | 7.6 | 7.8  | 7.7 | 7.2 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 30    | 8.0 | 7.6 | 7.8  | 7.7 | 7.2 | 7.5  | --- | --- | ---  | --- | --- | ---  |
| 31    | 8.0 | 7.6 | 7.8  | --- | --- | ---  | --- | --- | ---  | --- | --- | ---  |
| MONTH | 8.2 | 6.8 | 7.6  | 8.1 | 7.2 | 7.7  | --- | --- | ---  | --- | --- | ---  |

## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
|-------|----------|-----|------|-------|------|------|-------|------|------|------|------|------|
|       |          |     |      |       |      |      |       |      |      |      |      |      |
| 1     | ---      | --- | ---  | ---   | ---  | ---  | 14.4  | 13.0 | 13.8 | 9.2  | 7.8  | 8.5  |
| 2     | ---      | --- | ---  | ---   | ---  | ---  | 14.0  | 12.7 | 13.2 | 9.3  | 8.1  | 8.7  |
| 3     | ---      | --- | ---  | ---   | ---  | ---  | 13.4  | 11.6 | 12.5 | 10.2 | 8.4  | 9.3  |
| 4     | ---      | --- | ---  | ---   | ---  | ---  | 12.6  | 11.3 | 11.9 | 10.8 | 9.5  | 10.1 |
| 5     | ---      | --- | ---  | ---   | ---  | ---  | 12.3  | 11.7 | 12.0 | 12.8 | 9.8  | 11.2 |
| 6     | ---      | --- | ---  | ---   | ---  | ---  | 12.1  | 11.0 | 11.7 | 12.5 | 10.6 | 11.6 |
| 7     | ---      | --- | ---  | ---   | ---  | ---  | 11.6  | 10.4 | 11.1 | 11.4 | 8.7  | 10.0 |
| 8     | ---      | --- | ---  | 20.6  | 18.6 | 19.7 | 11.3  | 10.5 | 10.9 | 10.4 | 8.8  | 9.7  |
| 9     | ---      | --- | ---  | 18.8  | 16.8 | 18.1 | 11.5  | 10.5 | 10.9 | 10.2 | 8.9  | 9.7  |
| 10    | ---      | --- | ---  | 18.0  | 16.5 | 17.3 | 12.5  | 10.9 | 11.5 | 9.3  | 7.3  | 8.6  |
| 11    | ---      | --- | ---  | 18.5  | 17.0 | 17.6 | 12.0  | 11.0 | 11.5 | 7.7  | 6.2  | 7.3  |
| 12    | ---      | --- | ---  | 18.8  | 17.6 | 18.0 | 11.4  | 10.5 | 10.9 | 8.1  | 6.6  | 7.4  |
| 13    | ---      | --- | ---  | 18.2  | 17.0 | 17.9 | 11.1  | 10.0 | 10.4 | 8.5  | 7.4  | 7.8  |
| 14    | ---      | --- | ---  | 17.2  | 15.6 | 16.2 | 11.0  | 9.8  | 10.2 | 8.6  | 7.5  | 7.9  |
| 15    | ---      | --- | ---  | 16.5  | 14.7 | 15.8 | 10.2  | 8.9  | 9.4  | 8.7  | 7.8  | 8.2  |
| 16    | ---      | --- | ---  | 17.1  | 15.3 | 16.3 | 10.0  | 8.6  | 9.2  | 8.4  | 7.3  | 7.9  |
| 17    | ---      | --- | ---  | 17.6  | 16.3 | 16.8 | 10.0  | 8.9  | 9.5  | 8.2  | 7.1  | 7.8  |
| 18    | ---      | --- | ---  | 17.7  | 16.7 | 17.0 | 9.8   | 8.2  | 8.9  | 10.1 | 7.8  | 8.7  |
| 19    | ---      | --- | ---  | 18.1  | 17.1 | 17.5 | 9.3   | 7.9  | 8.5  | 9.6  | 8.4  | 9.0  |
| 20    | ---      | --- | ---  | 17.5  | 16.2 | 16.9 | 8.7   | 7.2  | 7.9  | 8.8  | 7.3  | 8.1  |
| 21    | ---      | --- | ---  | 17.4  | 16.0 | 16.8 | 8.2   | 6.6  | 7.3  | 8.1  | 7.4  | 7.8  |
| 22    | ---      | --- | ---  | 17.2  | 16.3 | 16.7 | 7.9   | 6.8  | 7.3  | 8.2  | 7.5  | 7.8  |
| 23    | ---      | --- | ---  | 17.2  | 16.2 | 16.7 | 8.1   | 6.7  | 7.4  | 8.1  | 7.3  | 7.7  |
| 24    | ---      | --- | ---  | 17.5  | 16.1 | 16.8 | 8.7   | 7.1  | 8.0  | 8.2  | 7.1  | 7.6  |
| 25    | ---      | --- | ---  | 17.4  | 16.1 | 16.5 | 8.8   | 7.5  | 8.0  | 8.0  | 6.7  | 7.3  |
| 26    | ---      | --- | ---  | 16.9  | 15.6 | 16.1 | 8.7   | 7.2  | 7.8  | 7.5  | 6.2  | 6.6  |
| 27    | ---      | --- | ---  | 16.7  | 15.7 | 16.2 | 8.6   | 7.2  | 7.8  | 6.8  | 6.0  | 6.3  |
| 28    | ---      | --- | ---  | 17.4  | 15.9 | 16.6 | 8.7   | 7.0  | 7.8  | 6.5  | 5.6  | 6.0  |
| 29    | ---      | --- | ---  | 16.8  | 13.3 | 15.1 | 8.5   | 7.3  | 7.9  | 6.7  | 5.2  | 5.9  |
| 30    | ---      | --- | ---  | 15.0  | 13.2 | 14.1 | 9.0   | 7.9  | 8.4  | 6.6  | 5.8  | 6.2  |
| 31    | ---      | --- | ---  | ---   | ---  | ---  | 9.3   | 7.6  | 8.4  | 6.4  | 5.5  | 5.9  |
| MONTH | ---      | --- | ---  | ---   | ---  | ---  | 14.4  | 6.6  | 9.7  | 12.8 | 5.2  | 8.1  |
| DAY   | FEBRUARY |     |      | MARCH |      |      | APRIL |      |      | MAY  |      |      |
|       | MAX      | MIN | MEAN | MAX   | MIN  | MEAN | MAX   | MIN  | MEAN | MAX  | MIN  | MEAN |
| 1     | 6.3      | 5.0 | 5.5  | 10.3  | 8.4  | 9.1  | ---   | ---  | ---  | 22.3 | 21.0 | 21.5 |
| 2     | 6.3      | 4.9 | 5.7  | 11.4  | 9.0  | 10   | 15.4  | 14.4 | 15.0 | 22.6 | 20.8 | 21.6 |
| 3     | 8.0      | 6.2 | 7.0  | 11.4  | 9.9  | 10.4 | 15.6  | 13.8 | 14.8 | 22.1 | 21.3 | 21.8 |
| 4     | 8.0      | 6.8 | 7.2  | 12.7  | 9.8  | 10.8 | 15.9  | 14.6 | 15.2 | 21.9 | 20.4 | 21.2 |
| 5     | 7.9      | 6.7 | 7.3  | 12.7  | 10.6 | 11.6 | 15.1  | 13.8 | 14.7 | 21.8 | 20.2 | 21.2 |
| 6     | 9.0      | 7.0 | 7.9  | 14.6  | 11.8 | 13.0 | 15.2  | 13.9 | 14.6 | 22.4 | 20.9 | 21.6 |
| 7     | 9.9      | 8.6 | 9.2  | 14.3  | 13.2 | 13.7 | 16.4  | 14.2 | 15.1 | 23.6 | 21.6 | 22.2 |
| 8     | 9.0      | 7.8 | 8.4  | 13.9  | 12.9 | 13.6 | 16.8  | 15.3 | 15.9 | 24.0 | 22.0 | 22.6 |
| 9     | 8.6      | 7.8 | 8.1  | 13.7  | 12.2 | 13.2 | 17.9  | 15.9 | 16.6 | 24.1 | 22.0 | 22.8 |
| 10    | 8.6      | 8.0 | 8.2  | 13.4  | 11.9 | 12.8 | 18.3  | 16.5 | 17.2 | 24.4 | 22.4 | 23.2 |
| 11    | 8.6      | 8.0 | 8.3  | 13.2  | 11.1 | 12.2 | 18.8  | 17.3 | 17.9 | 24.4 | 22.6 | 23.3 |
| 12    | 8.6      | 7.7 | 8.1  | 13.7  | 11.7 | 12.6 | 18.6  | 17.9 | 18.2 | 24.7 | 22.9 | 23.7 |
| 13    | 8.5      | 7.4 | 7.9  | 13.6  | 12.2 | 12.9 | 19.0  | 18.1 | 18.5 | 24.9 | 23.5 | 24.0 |
| 14    | 8.2      | 7.8 | 8.0  | 14.0  | 12.1 | 12.9 | 18.4  | 17.0 | 17.7 | 25.4 | 23.6 | 24.3 |
| 15    | 8.2      | 7.7 | 8.0  | 14.5  | 12.7 | 13.5 | 17.6  | 15.8 | 17.0 | 25.3 | 24.0 | 24.5 |
| 16    | 7.9      | 7.1 | 7.7  | 14.5  | 13.5 | 14.0 | 18.6  | 16.6 | 17.6 | 25.7 | 24.2 | 24.7 |
| 17    | 7.8      | 6.9 | 7.3  | 14.5  | 13.4 | 14.0 | 19.4  | 17.4 | 18.2 | 26.2 | 24.5 | 25.1 |
| 18    | 7.5      | 6.7 | 7.2  | 14.7  | 13.3 | 14.0 | 20.0  | 18.1 | 18.8 | 25.5 | 24.7 | 25.0 |
| 19    | 8.3      | 6.8 | 7.5  | 15.5  | 13.9 | 14.5 | 20.2  | 18.6 | 19.2 | 25.8 | 24.4 | 25.1 |
| 20    | 9.0      | 7.6 | 8.1  | 15.0  | 13.8 | 14.4 | 20.9  | 18.9 | 19.6 | 26.3 | 24.8 | 25.4 |
| 21    | 9.9      | 8.2 | 8.8  | 15.5  | 14.5 | 14.9 | 20.8  | 19.5 | 20.0 | 27.0 | 25.1 | 25.9 |
| 22    | 9.7      | 8.8 | 9.2  | 14.5  | 12.9 | 14.0 | 21.5  | 19.8 | 20.5 | 27.5 | 25.5 | 26.2 |
| 23    | 9.9      | 8.9 | 9.3  | 14.5  | 13.0 | 13.6 | 22.2  | 20.3 | 21.1 | 27.3 | 25.8 | 26.4 |
| 24    | 9.7      | 9.3 | 9.5  | ---   | ---  | ---  | 23.4  | 20.9 | 21.8 | 27.4 | 26.0 | 26.5 |
| 25    | 9.8      | 9.2 | 9.4  | ---   | ---  | ---  | 24.1  | 21.3 | 22.1 | 28.0 | 26.0 | 26.7 |
| 26    | 9.3      | 8.2 | 8.7  | ---   | ---  | ---  | 23.1  | 21.7 | 22.4 | 28.0 | 26.1 | 27.0 |
| 27    | 8.4      | 7.8 | 8.1  | ---   | ---  | ---  | 22.8  | 21.5 | 22.0 | 28.0 | 26.4 | 27.1 |
| 28    | 9.1      | 7.1 | 7.9  | ---   | ---  | ---  | 21.6  | 19.9 | 21.0 | 27.8 | 26.4 | 27.2 |
| 29    | 9.3      | 7.9 | 8.5  | ---   | ---  | ---  | 22.2  | 19.9 | 21.2 | 28.0 | 26.8 | 27.4 |
| 30    | ---      | --- | ---  | ---   | ---  | ---  | 23.2  | 20.6 | 21.7 | 27.4 | 26.4 | 26.9 |
| 31    | ---      | --- | ---  | ---   | ---  | ---  | ---   | ---  | ---  | 27.3 | 26.2 | 26.8 |
| MONTH | 9.9      | 4.9 | 8.0  | ---   | ---  | ---  | ---   | ---  | ---  | 28.0 | 20.2 | 24.5 |

## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 27.8 | 26.3 | 26.9 | 29.0 | 27.8 | 28.4 | 29.8   | 28.8 | 29.3 | 27.5      | 26.8 | 27.1 |
| 2     | 27.9 | 26.6 | 27.2 | 28.6 | 28.0 | 28.4 | 30.2   | 29.0 | 29.4 | 27.1      | 26.4 | 26.7 |
| 3     | 28.2 | 26.6 | 27.4 | 29.0 | 27.8 | 28.3 | 29.5   | 28.5 | 29.1 | 26.8      | 25.8 | 26.3 |
| 4     | 27.6 | 26.5 | 27.2 | 29.4 | 27.8 | 28.3 | 31.2   | 28.8 | 29.4 | 27.1      | 25.8 | 26.3 |
| 5     | 27.8 | 26.4 | 27.1 | 29.8 | 27.9 | 28.8 | 30.6   | 29.0 | 29.7 | 27.0      | 25.4 | 26.0 |
| 6     | 27.7 | 26.8 | 27.2 | 30.3 | 28.6 | 29.3 | 29.6   | 28.1 | 28.8 | 26.1      | 25.4 | 25.7 |
| 7     | 28.0 | 26.6 | 27.3 | 30.8 | 29.0 | 29.7 | 28.6   | 26.4 | 27.5 | 25.9      | 25.2 | 25.5 |
| 8     | 28.6 | 27.0 | 27.6 | 30.1 | 29.3 | 29.7 | 28.6   | 26.5 | 27.8 | 26.5      | 25.4 | 25.8 |
| 9     | 28.8 | 27.2 | 27.9 | 30.0 | 28.6 | 29.5 | 28.6   | 27.1 | 28.0 | 27.0      | 25.8 | 26.2 |
| 10    | 28.6 | 27.3 | 28.0 | 30.8 | 28.9 | 29.8 | 29.0   | 27.2 | 28.1 | 26.9      | 25.8 | 26.3 |
| 11    | 28.8 | 27.5 | 28.2 | 30.7 | 29.5 | 30.0 | 29.1   | 27.6 | 28.2 | 26.2      | 25.3 | 25.8 |
| 12    | 28.6 | 27.4 | 28.1 | 29.8 | 29.1 | 29.5 | 28.5   | 27.6 | 28.0 | 26.1      | 25.1 | 25.5 |
| 13    | 27.8 | 26.5 | 27.3 | 30.1 | 28.9 | 29.3 | 27.7   | 26.9 | 27.4 | 25.6      | 24.9 | 25.2 |
| 14    | 27.7 | 26.5 | 27.2 | 30.8 | 29.0 | 29.7 | 27.2   | 26.4 | 26.8 | 25.0      | 24.4 | 24.7 |
| 15    | 28.3 | 26.7 | 27.5 | 30.6 | 29.5 | 30.0 | 26.7   | 26.0 | 26.4 | 25.4      | 24.3 | 24.6 |
| 16    | 28.4 | 27.1 | 27.7 | 30.6 | 29.1 | 29.9 | 26.9   | 25.8 | 26.2 | 25.3      | 24.2 | 24.7 |
| 17    | 27.8 | 27.0 | 27.5 | 30.2 | 28.7 | 29.4 | 26.7   | 25.4 | 26.0 | 25.8      | 24.4 | 25.1 |
| 18    | 28.7 | 26.8 | 27.7 | 29.2 | 28.2 | 28.8 | 26.9   | 25.1 | 25.8 | 25.4      | 24.2 | 24.6 |
| 19    | 29.6 | 27.7 | 28.5 | 30.1 | 28.1 | 29.0 | 27.0   | 25.1 | 25.9 | 24.4      | 23.1 | 23.8 |
| 20    | 29.0 | 28.0 | 28.5 | 30.6 | 28.6 | 29.4 | 27.2   | 25.1 | 26.0 | 23.6      | 22.2 | 23.0 |
| 21    | 28.8 | 27.4 | 28.0 | 30.4 | 28.8 | 29.5 | 27.1   | 25.1 | 26.0 | ---       | ---  | ---  |
| 22    | 29.4 | 27.6 | 28.3 | 30.7 | 29.1 | 29.6 | 26.7   | 25.1 | 25.7 | ---       | ---  | ---  |
| 23    | 29.6 | 28.0 | 28.7 | 30.2 | 29.0 | 29.4 | 26.6   | 25.2 | 25.7 | ---       | ---  | ---  |
| 24    | 29.5 | 28.3 | 28.8 | 30.2 | 29.0 | 29.5 | 26.8   | 25.3 | 26.0 | 24.4      | 22.9 | 23.5 |
| 25    | 29.4 | 28.4 | 28.9 | 30.3 | 28.8 | 29.3 | 27.5   | 25.5 | 26.3 | ---       | ---  | ---  |
| 26    | 29.0 | 28.2 | 28.6 | 30.0 | 28.7 | 29.4 | 27.2   | 26.0 | 26.6 | 23.8      | 23.3 | 23.6 |
| 27    | 28.6 | 27.8 | 28.2 | 30.0 | 29.0 | 29.5 | 27.4   | 26.4 | 26.8 | 24.6      | 23.3 | 23.9 |
| 28    | 29.0 | 27.6 | 28.3 | 29.7 | 28.7 | 29.2 | 27.8   | 26.6 | 27.1 | 25.2      | 24.2 | 24.6 |
| 29    | 29.9 | 27.6 | 28.4 | 29.2 | 28.1 | 28.8 | 27.5   | 26.9 | 27.2 | 25.3      | 24.1 | 24.7 |
| 30    | 28.8 | 28.1 | 28.5 | 29.8 | 28.4 | 29.0 | 27.7   | 26.5 | 27.0 | 25.4      | 24.4 | 24.9 |
| 31    | ---  | ---  | ---  | 29.8 | 28.7 | 29.2 | 27.9   | 26.9 | 27.3 | ---       | ---  | ---  |
| MONTH | 29.9 | 26.3 | 27.9 | 30.8 | 27.8 | 29.3 | 31.2   | 25.1 | 27.3 | ---       | ---  | ---  |

## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, TOP  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 25.6 | 24.4 | 24.9 | 22.0 | 20.0 | 20.7 | 15.3 | 14.5 | 14.8 | --- | --- | ---  |
| 2     | 25.6 | 24.4 | 24.9 | 22.0 | 20.3 | 21.0 | ---  | ---  | ---  | --- | --- | ---  |
| 3     | 26.0 | 24.4 | 25.0 | 22.2 | 20.6 | 21.2 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 25.5 | 24.2 | 24.8 | 21.8 | 20.6 | 21.2 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 25.2 | 23.9 | 24.5 | 21.4 | 19.7 | 20.5 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 24.6 | 23.1 | 23.8 | 20.7 | 18.8 | 19.7 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 24.3 | 22.3 | 23.2 | 20.0 | 18.1 | 19.4 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 23.9 | 22.1 | 23.1 | 19.7 | 18.4 | 19.4 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 24.0 | 22.5 | 23.5 | 19.2 | 17.4 | 18.2 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 24.3 | 23.0 | 23.7 | 17.9 | 16.3 | 17.1 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 24.1 | 23.0 | 23.7 | 17.2 | 16.2 | 16.8 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 23.6 | 22.9 | 23.3 | 17.3 | 16.8 | 17.1 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 24.0 | 23.2 | 23.5 | 17.3 | 15.7 | 16.8 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 23.6 | 22.8 | 23.3 | 15.9 | 14.7 | 15.5 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 23.1 | 21.9 | 22.7 | 14.9 | 14.2 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 22.0 | 20.9 | 21.5 | 14.6 | 13.9 | 14.3 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 21.7 | 20.5 | 21.1 | 14.7 | 13.5 | 14.1 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 22.4 | 20.8 | 21.4 | 15.0 | 13.7 | 14.2 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 22.9 | 21.4 | 21.9 | 15.2 | 14.2 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 22.9 | 21.8 | 22.2 | 15.7 | 14.4 | 14.9 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 22.2 | 21.3 | 21.7 | 16.0 | 14.7 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 21.8 | 20.5 | 21.1 | 16.1 | 15.1 | 15.6 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 20.9 | 19.6 | 20.4 | 16.5 | 15.1 | 15.8 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 20.3 | 19.5 | 20.0 | 16.6 | 15.4 | 16.1 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 19.9 | 19.3 | 19.7 | 17.0 | 15.7 | 16.5 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 19.6 | 19.0 | 19.4 | 16.1 | 14.2 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 19.6 | 19.0 | 19.4 | 15.2 | 14.1 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 19.5 | 19.2 | 19.4 | 15.3 | 14.8 | 15.1 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 19.3 | 19.1 | 19.2 | 14.9 | 14.0 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 20.3 | 19.0 | 19.5 | 14.9 | 13.8 | 14.4 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 21.0 | 19.6 | 20.1 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | 26.0 | 19.0 | 22.1 | 22.2 | 13.5 | 16.8 | ---  | ---  | ---  | --- | --- | ---  |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | OCTOBER |      |      | NOVEMBER |      |      | DECEMBER |      |      | JANUARY |     |      |
|-------|----------|-----|------|---------|------|------|----------|------|------|----------|------|------|---------|-----|------|
|       |          |     |      | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN | MAX     | MIN | MEAN |
| 1     | ---      | --- | ---  | ---     | ---  | ---  | 14.7     | 13.1 | 14.0 | 9.9      | 7.9  | 8.9  |         |     |      |
| 2     | ---      | --- | ---  | ---     | ---  | ---  | 14.0     | 12.8 | 13.4 | 10.0     | 8.3  | 9.2  |         |     |      |
| 3     | ---      | --- | ---  | ---     | ---  | ---  | 13.5     | 12.0 | 12.8 | 10.2     | 8.6  | 9.5  |         |     |      |
| 4     | ---      | --- | ---  | ---     | ---  | ---  | 12.8     | 11.3 | 12.2 | 11.1     | 9.6  | 10.4 |         |     |      |
| 5     | ---      | --- | ---  | ---     | ---  | ---  | 12.3     | 11.6 | 12.0 | 13.0     | 10.5 | 11.6 |         |     |      |
| 6     | ---      | --- | ---  | ---     | ---  | ---  | 12.0     | 11.2 | 11.7 | 13.6     | 11.1 | 12.1 |         |     |      |
| 7     | ---      | --- | ---  | ---     | ---  | ---  | 11.6     | 10.6 | 11.2 | 11.9     | 9.9  | 10.8 |         |     |      |
| 8     | ---      | --- | ---  | 21.0    | 19.0 | 20.0 | 11.2     | 10.4 | 10.9 | 10.8     | 9.4  | 10.2 |         |     |      |
| 9     | ---      | --- | ---  | 19.9    | 17.7 | 18.7 | 11.3     | 10.4 | 10.9 | 10.3     | 9.3  | 9.8  |         |     |      |
| 10    | ---      | --- | ---  | 18.5    | 16.9 | 17.6 | 12.4     | 10.7 | 11.4 | 9.7      | 8.2  | 8.9  |         |     |      |
| 11    | ---      | --- | ---  | 18.1    | 17.1 | 17.6 | 12.0     | 11.2 | 11.5 | 8.6      | 6.7  | 7.6  |         |     |      |
| 12    | ---      | --- | ---  | 18.6    | 17.7 | 18.0 | 11.5     | 10.4 | 11.0 | 7.8      | 6.6  | 7.5  |         |     |      |
| 13    | ---      | --- | ---  | 18.1    | 17.5 | 17.9 | 11.3     | 10.0 | 10.7 | 8.1      | 7.3  | 7.7  |         |     |      |
| 14    | ---      | --- | ---  | 17.9    | 15.9 | 16.9 | 11.3     | 9.7  | 10.5 | 8.2      | 7.5  | 7.9  |         |     |      |
| 15    | ---      | --- | ---  | 17.4    | 15.5 | 16.6 | 10.7     | 8.9  | 9.7  | 8.5      | 7.8  | 8.1  |         |     |      |
| 16    | ---      | --- | ---  | 16.8    | 15.9 | 16.5 | 10.2     | 8.6  | 9.4  | 8.5      | 7.5  | 8.0  |         |     |      |
| 17    | ---      | --- | ---  | 17.2    | 16.4 | 16.8 | 10.2     | 8.8  | 9.5  | 8.3      | 7.3  | 7.9  |         |     |      |
| 18    | ---      | --- | ---  | 17.4    | 16.7 | 17.0 | 10.2     | 8.4  | 9.1  | 10.3     | 7.8  | 8.7  |         |     |      |
| 19    | ---      | --- | ---  | 18.1    | 17.1 | 17.5 | 9.7      | 7.8  | 8.6  | 9.5      | 8.5  | 9.1  |         |     |      |
| 20    | ---      | --- | ---  | 17.6    | 16.5 | 17.1 | 9.1      | 7.2  | 8.0  | 8.9      | 7.7  | 8.3  |         |     |      |
| 21    | ---      | --- | ---  | 17.4    | 16.3 | 16.9 | 8.6      | 6.7  | 7.5  | 8.2      | 7.5  | 7.9  |         |     |      |
| 22    | ---      | --- | ---  | 17.2    | 16.4 | 16.8 | 8.2      | 6.8  | 7.4  | 8.2      | 7.5  | 7.9  |         |     |      |
| 23    | ---      | --- | ---  | 17.3    | 16.4 | 16.8 | 8.2      | 6.7  | 7.4  | 8.2      | 7.4  | 7.8  |         |     |      |
| 24    | ---      | --- | ---  | 17.4    | 16.2 | 16.8 | 8.8      | 7.0  | 8.0  | 8.2      | 7.1  | 7.7  |         |     |      |
| 25    | ---      | --- | ---  | 17.3    | 16.0 | 16.5 | 9.0      | 7.4  | 8.1  | 8.2      | 6.8  | 7.4  |         |     |      |
| 26    | ---      | --- | ---  | 16.7    | 15.4 | 16.1 | 8.9      | 7.2  | 7.9  | 7.6      | 6.2  | 6.9  |         |     |      |
| 27    | ---      | --- | ---  | 16.7    | 15.6 | 16.2 | 9.0      | 7.1  | 7.9  | 7.6      | 6.3  | 6.7  |         |     |      |
| 28    | ---      | --- | ---  | 17.2    | 15.8 | 16.5 | 8.9      | 7.2  | 8.0  | 7.2      | 6.0  | 6.5  |         |     |      |
| 29    | ---      | --- | ---  | 16.8    | 13.3 | 15.2 | 9.0      | 7.5  | 8.2  | 6.7      | 5.6  | 6.4  |         |     |      |
| 30    | ---      | --- | ---  | 15.5    | 12.8 | 14.4 | 9.1      | 8.0  | 8.6  | 7.1      | 6.1  | 6.6  |         |     |      |
| 31    | ---      | --- | ---  | ---     | ---  | ---  | 9.7      | 7.8  | 8.8  | ---      | ---  | ---  |         |     |      |
| MONTH | ---      | --- | ---  | ---     | ---  | ---  | 14.7     | 6.7  | 9.9  | ---      | ---  | ---  |         |     |      |
| DAY   | FEBRUARY |     |      | MARCH   |      |      | APRIL    |      |      | MAY      |      |      |         |     |      |
|       | MAX      | MIN | MEAN | MAX     | MIN  | MEAN | MAX      | MIN  | MEAN | MAX      | MIN  | MEAN |         |     |      |
| 1     | ---      | --- | ---  | 9.9     | 8.2  | 8.7  | 15.9     | 14.5 | 15.2 | 22.2     | 20.7 | 21.3 |         |     |      |
| 2     | ---      | --- | ---  | 11.4    | 8.8  | 9.9  | 15.4     | 14.4 | 15.1 | 22.7     | 20.8 | 21.5 |         |     |      |
| 3     | ---      | --- | ---  | 11.2    | 9.7  | 10.4 | 15.4     | 14.1 | 14.9 | 22.2     | 21.4 | 21.8 |         |     |      |
| 4     | ---      | --- | ---  | 12.3    | 9.8  | 10.8 | 16.0     | 14.7 | 15.3 | 21.8     | 20.4 | 21.1 |         |     |      |
| 5     | ---      | --- | ---  | 12.7    | 10.7 | 11.6 | 15.1     | 14.2 | 14.8 | 21.9     | 20.3 | 21.1 |         |     |      |
| 6     | ---      | --- | ---  | 14.3    | 11.9 | 13.1 | 15.8     | 14.0 | 14.7 | 22.5     | 20.8 | 21.5 |         |     |      |
| 7     | ---      | --- | ---  | 14.5    | 13.2 | 13.8 | 16.4     | 14.3 | 15.2 | 23.0     | 21.4 | 22.1 |         |     |      |
| 8     | ---      | --- | ---  | 13.9    | 13.0 | 13.6 | 16.9     | 15.3 | 15.9 | 23.2     | 22.0 | 22.5 |         |     |      |
| 9     | ---      | --- | ---  | 13.8    | 12.0 | 13.1 | 17.5     | 15.9 | 16.5 | 23.7     | 22.1 | 22.8 |         |     |      |
| 10    | ---      | --- | ---  | 13.4    | 11.7 | 12.7 | 18.2     | 16.5 | 17.1 | 23.9     | 22.4 | 23.0 |         |     |      |
| 11    | 8.6      | 7.9 | 8.3  | 12.9    | 11.1 | 12.1 | 18.6     | 17.3 | 17.8 | 24.1     | 22.7 | 23.2 |         |     |      |
| 12    | 8.7      | 7.8 | 8.2  | 13.4    | 11.5 | 12.3 | 18.7     | 18.0 | 18.2 | 24.5     | 23.0 | 23.6 |         |     |      |
| 13    | 8.3      | 7.5 | 8.0  | 13.3    | 11.8 | 12.5 | 19.0     | 18.2 | 18.6 | 24.7     | 23.5 | 23.9 |         |     |      |
| 14    | 8.2      | 7.7 | 8.0  | 13.8    | 11.8 | 12.5 | 18.6     | 17.2 | 17.9 | 24.9     | 23.7 | 24.1 |         |     |      |
| 15    | 8.2      | 7.6 | 8.0  | 14.2    | 12.0 | 13.1 | 17.8     | 16.4 | 17.1 | 24.8     | 24.1 | 24.3 |         |     |      |
| 16    | 8.0      | 7.3 | 7.7  | 14.3    | 12.7 | 13.6 | 18.2     | 16.8 | 17.4 | 25.1     | 24.2 | 24.5 |         |     |      |
| 17    | 7.8      | 7.1 | 7.5  | 14.3    | 13.1 | 13.7 | 19.4     | 17.3 | 18.0 | 25.9     | 24.4 | 24.8 |         |     |      |
| 18    | 7.6      | 6.7 | 7.2  | 14.5    | 13.1 | 13.8 | 19.7     | 18.0 | 18.6 | 25.5     | 24.6 | 24.9 |         |     |      |
| 19    | 8.3      | 7.0 | 7.5  | 15.2    | 13.6 | 14.3 | 20.1     | 18.6 | 19.2 | 25.8     | 24.5 | 24.9 |         |     |      |
| 20    | 8.8      | 7.6 | 8.0  | 15.0    | 13.5 | 14.3 | 20.3     | 19.0 | 19.5 | 26.2     | 24.7 | 25.2 |         |     |      |
| 21    | 9.6      | 8.2 | 8.8  | 15.4    | 14.2 | 14.7 | 20.6     | 19.5 | 20.0 | 27.0     | 25.1 | 25.6 |         |     |      |
| 22    | 9.5      | 8.8 | 9.1  | 14.4    | 12.8 | 13.9 | 21.2     | 19.8 | 20.4 | 27.3     | 25.5 | 26.0 |         |     |      |
| 23    | 9.6      | 8.9 | 9.2  | 14.2    | 12.3 | 13.4 | 22.1     | 20.3 | 20.9 | 27.2     | 25.8 | 26.3 |         |     |      |
| 24    | 9.6      | 9.2 | 9.4  | 14.7    | 12.9 | 13.6 | 23.1     | 20.9 | 21.4 | 27.3     | 26.0 | 26.4 |         |     |      |
| 25    | 9.6      | 9.1 | 9.4  | 15.2    | 13.3 | 14.0 | 23.1     | 20.8 | 21.6 | 27.4     | 26.0 | 26.5 |         |     |      |
| 26    | 9.3      | 8.4 | 8.8  | 16.3    | 13.7 | 14.6 | 23.0     | 21.1 | 22.0 | 27.5     | 26.4 | 26.7 |         |     |      |
| 27    | 8.4      | 7.8 | 8.1  | 16.6    | 14.3 | 15.1 | 22.2     | 21.3 | 21.7 | 27.7     | 26.6 | 26.9 |         |     |      |
| 28    | 8.6      | 7.3 | 7.8  | 16.2    | 14.8 | 15.3 | 21.6     | 20.4 | 21.1 | 27.6     | 26.7 | 27.0 |         |     |      |
| 29    | 9.1      | 7.8 | 8.2  | 15.6    | 14.1 | 14.7 | 21.9     | 20.2 | 20.9 | 27.6     | 26.8 | 27.1 |         |     |      |
| 30    | ---      | --- | ---  | 15.3    | 14.1 | 14.5 | 22.3     | 20.1 | 21.1 | 27.5     | 26.4 | 26.8 |         |     |      |
| 31    | ---      | --- | ---  | 15.8    | 14.2 | 14.8 | ---      | ---  | ---  | 27.3     | 26.3 | 26.8 |         |     |      |
| MONTH | ---      | --- | ---  | 16.6    | 8.2  | 13.2 | 23.1     | 14.0 | 18.3 | 27.7     | 20.3 | 24.3 |         |     |      |



## 02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |      |      | JULY |      |      | AUGUST |      |      | SEPTEMBER |      |      |
|-------|------|------|------|------|------|------|--------|------|------|-----------|------|------|
|       | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX    | MIN  | MEAN | MAX       | MIN  | MEAN |
| 1     | 27.9 | 26.3 | 26.9 | 29.0 | 27.8 | 28.3 | 29.7   | 28.5 | 29.1 | 27.5      | 26.7 | 27.1 |
| 2     | 27.9 | 26.5 | 27.1 | 28.6 | 28.0 | 28.3 | 29.8   | 28.8 | 29.2 | 27.1      | 26.2 | 26.7 |
| 3     | 27.9 | 26.6 | 27.2 | 28.5 | 27.8 | 28.2 | 29.4   | 28.3 | 29.0 | 27.0      | 25.9 | 26.4 |
| 4     | 27.6 | 26.5 | 27.1 | 28.8 | 27.7 | 28.2 | 30.0   | 28.6 | 29.1 | 26.6      | 25.8 | 26.2 |
| 5     | 27.8 | 26.4 | 27.0 | 29.6 | 28.1 | 28.6 | 30.4   | 28.8 | 29.5 | 26.7      | 25.4 | 26.1 |
| 6     | 27.7 | 26.6 | 27.1 | 30.0 | 28.6 | 29.1 | 29.6   | 28.1 | 28.9 | 26.6      | 25.5 | 26.0 |
| 7     | 27.8 | 26.7 | 27.2 | 30.4 | 29.1 | 29.5 | 28.4   | 26.7 | 27.6 | 26.4      | 25.3 | 25.9 |
| 8     | 28.1 | 26.9 | 27.4 | 30.2 | 29.5 | 29.7 | 28.3   | 27.1 | 27.6 | 26.4      | 25.4 | 25.8 |
| 9     | 28.4 | 27.4 | 27.8 | 29.9 | 29.1 | 29.6 | 28.2   | 27.4 | 27.7 | 26.6      | 25.8 | 26.1 |
| 10    | 28.6 | 27.6 | 28.0 | 30.5 | 29.4 | 29.8 | 28.4   | 27.4 | 27.7 | 26.6      | 25.8 | 26.2 |
| 11    | 28.7 | 27.7 | 28.1 | 30.3 | 29.6 | 30.0 | 28.3   | 27.6 | 27.9 | 26.4      | 25.3 | 25.9 |
| 12    | 28.6 | 27.7 | 28.2 | 30.0 | 29.3 | 29.7 | 28.4   | 27.6 | 27.9 | 26.2      | 25.1 | 25.7 |
| 13    | 27.9 | 26.5 | 27.3 | 29.9 | 29.2 | 29.5 | 27.8   | 27.1 | 27.4 | 25.9      | 25.0 | 25.5 |
| 14    | 27.6 | 26.6 | 27.2 | 30.1 | 29.2 | 29.6 | 27.2   | 26.2 | 26.9 | 25.3      | 24.6 | 24.9 |
| 15    | 28.1 | 26.8 | 27.4 | 30.4 | 29.5 | 29.8 | 26.7   | 26.0 | 26.3 | 25.6      | 24.4 | 24.8 |
| 16    | 28.4 | 27.2 | 27.7 | 30.3 | 29.1 | 29.8 | 26.6   | 25.8 | 26.1 | 25.6      | 24.3 | 24.9 |
| 17    | 27.8 | 27.2 | 27.5 | 29.9 | 29.0 | 29.4 | 26.7   | 25.4 | 26.0 | 25.9      | 24.5 | 25.2 |
| 18    | 28.7 | 27.0 | 27.6 | 29.2 | 28.2 | 28.8 | 26.6   | 25.0 | 25.8 | 25.8      | 24.3 | 24.9 |
| 19    | 29.1 | 27.7 | 28.1 | 30.0 | 28.1 | 28.9 | 26.6   | 25.0 | 25.8 | 25.0      | 23.4 | 24.1 |
| 20    | 28.7 | 27.8 | 28.3 | 30.2 | 28.5 | 29.1 | 26.7   | 25.1 | 26.0 | 24.6      | 22.5 | 23.5 |
| 21    | 28.5 | 27.4 | 28.0 | 30.0 | 28.8 | 29.2 | 26.8   | 25.1 | 26.0 | ---       | ---  | ---  |
| 22    | 29.2 | 27.8 | 28.2 | 30.2 | 29.0 | 29.5 | 26.5   | 25.1 | 25.7 | ---       | ---  | ---  |
| 23    | 29.4 | 28.1 | 28.5 | 29.8 | 29.1 | 29.4 | 26.7   | 25.1 | 25.8 | 24.0      | 23.0 | 23.5 |
| 24    | 29.1 | 28.2 | 28.6 | 29.9 | 29.1 | 29.4 | 26.6   | 25.3 | 26.0 | 24.4      | 23.1 | 23.7 |
| 25    | 29.2 | 28.3 | 28.7 | 29.7 | 28.6 | 29.2 | 26.9   | 25.5 | 26.2 | ---       | ---  | ---  |
| 26    | 29.0 | 28.3 | 28.5 | 29.8 | 28.9 | 29.3 | 27.0   | 26.0 | 26.6 | 24.1      | 23.5 | 23.8 |
| 27    | 28.6 | 28.0 | 28.2 | 29.7 | 29.1 | 29.4 | 27.5   | 26.5 | 26.8 | 24.9      | 23.5 | 24.0 |
| 28    | 28.6 | 27.7 | 28.2 | 29.7 | 28.7 | 29.2 | 27.9   | 26.7 | 27.0 | 25.3      | 24.4 | 24.7 |
| 29    | 28.7 | 27.8 | 28.3 | 29.1 | 28.1 | 28.6 | 27.5   | 26.9 | 27.2 | 25.4      | 24.3 | 24.8 |
| 30    | 28.9 | 28.1 | 28.4 | 29.7 | 28.2 | 28.8 | 27.7   | 26.3 | 26.9 | 25.3      | 24.5 | 25.0 |
| 31    | ---  | ---  | ---  | 29.8 | 28.4 | 29.1 | 27.8   | 26.9 | 27.2 | ---       | ---  | ---  |
| MONTH | 29.4 | 26.3 | 27.8 | 30.5 | 27.7 | 29.2 | 30.4   | 25.0 | 27.2 | ---       | ---  | ---  |

02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

TEMPERATURE, WATER, DEGREES CELSIUS, BOTTOM  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

| DAY   | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX  | MIN  | MEAN | MAX | MIN | MEAN |
|-------|------|------|------|------|------|------|------|------|------|-----|-----|------|
|       |      |      |      |      |      |      |      |      |      |     |     |      |
| 1     | 25.4 | 24.6 | 25.0 | 21.2 | 20.2 | 20.5 | 15.1 | 14.5 | 14.8 | --- | --- | ---  |
| 2     | 25.4 | 24.5 | 25.0 | 21.4 | 20.6 | 20.9 | ---  | ---  | ---  | --- | --- | ---  |
| 3     | 25.5 | 24.5 | 25.1 | 21.5 | 20.9 | 21.2 | ---  | ---  | ---  | --- | --- | ---  |
| 4     | 25.6 | 24.4 | 25.0 | 21.8 | 21.1 | 21.5 | ---  | ---  | ---  | --- | --- | ---  |
| 5     | 25.5 | 24.0 | 24.9 | 21.7 | 20.7 | 21.3 | ---  | ---  | ---  | --- | --- | ---  |
| 6     | 25.5 | 23.4 | 24.8 | 21.4 | 19.4 | 20.8 | ---  | ---  | ---  | --- | --- | ---  |
| 7     | 25.2 | 23.4 | 24.8 | 20.8 | 19.0 | 20.2 | ---  | ---  | ---  | --- | --- | ---  |
| 8     | 25.0 | 23.4 | 24.6 | 20.1 | 19.3 | 19.7 | ---  | ---  | ---  | --- | --- | ---  |
| 9     | 24.6 | 23.5 | 24.2 | 19.5 | 17.7 | 18.4 | ---  | ---  | ---  | --- | --- | ---  |
| 10    | 24.2 | 23.6 | 23.9 | 18.0 | 16.7 | 17.2 | ---  | ---  | ---  | --- | --- | ---  |
| 11    | 24.0 | 23.4 | 23.8 | 17.1 | 16.4 | 16.7 | ---  | ---  | ---  | --- | --- | ---  |
| 12    | 23.7 | 23.0 | 23.4 | 17.3 | 16.8 | 17.0 | ---  | ---  | ---  | --- | --- | ---  |
| 13    | 24.1 | 23.2 | 23.5 | 17.3 | 16.1 | 16.8 | ---  | ---  | ---  | --- | --- | ---  |
| 14    | 23.8 | 22.9 | 23.4 | 16.3 | 14.9 | 15.5 | ---  | ---  | ---  | --- | --- | ---  |
| 15    | 23.4 | 22.3 | 22.9 | 15.3 | 13.9 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 16    | 22.9 | 20.8 | 21.6 | 14.6 | 13.8 | 14.3 | ---  | ---  | ---  | --- | --- | ---  |
| 17    | 21.8 | 20.2 | 21.1 | 14.4 | 13.4 | 14.1 | ---  | ---  | ---  | --- | --- | ---  |
| 18    | 21.8 | 20.8 | 21.3 | 14.4 | 13.7 | 14.2 | ---  | ---  | ---  | --- | --- | ---  |
| 19    | 22.6 | 21.4 | 21.7 | 14.9 | 14.2 | 14.4 | ---  | ---  | ---  | --- | --- | ---  |
| 20    | 22.5 | 21.9 | 22.1 | 15.4 | 14.4 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 21    | 22.4 | 21.6 | 22.1 | 15.8 | 14.7 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 22    | 22.0 | 20.9 | 21.5 | 16.3 | 15.1 | 15.7 | ---  | ---  | ---  | --- | --- | ---  |
| 23    | 21.1 | 20.0 | 20.6 | 16.5 | 15.3 | 16.0 | ---  | ---  | ---  | --- | --- | ---  |
| 24    | 20.5 | 19.8 | 20.1 | 16.8 | 15.6 | 16.2 | ---  | ---  | ---  | --- | --- | ---  |
| 25    | 20.0 | 19.6 | 19.8 | 16.9 | 15.8 | 16.6 | ---  | ---  | ---  | --- | --- | ---  |
| 26    | 19.8 | 19.2 | 19.5 | 16.5 | 15.0 | 15.6 | ---  | ---  | ---  | --- | --- | ---  |
| 27    | 19.7 | 19.1 | 19.4 | 15.5 | 14.0 | 15.0 | ---  | ---  | ---  | --- | --- | ---  |
| 28    | 19.7 | 19.4 | 19.6 | 15.3 | 15.0 | 15.2 | ---  | ---  | ---  | --- | --- | ---  |
| 29    | 19.6 | 19.2 | 19.3 | 15.2 | 14.2 | 14.7 | ---  | ---  | ---  | --- | --- | ---  |
| 30    | 20.1 | 19.1 | 19.5 | 14.9 | 14.2 | 14.6 | ---  | ---  | ---  | --- | --- | ---  |
| 31    | 21.2 | 19.7 | 20.0 | ---  | ---  | ---  | ---  | ---  | ---  | --- | --- | ---  |
| MONTH | 25.6 | 19.1 | 22.4 | 21.8 | 13.4 | 17.0 | ---  | ---  | ---  | --- | --- | ---  |



02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, TOP—CONTINUED  
 WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX  | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN | MAX | MIN | MEAN |
|-------|------|-----|------|-----|-----|------|-----|-----|------|-----|-----|------|
|       |      |     |      |     |     |      |     |     |      |     |     |      |
| 1     | 7.5  | 5.7 | 6.4  | 6.2 | 4.6 | 5.1  | 6.2 | 4.8 | 5.4  | 5.2 | 4.1 | 4.6  |
| 2     | 7.1  | 5.5 | 6.3  | 6.0 | 4.7 | 5.2  | 6.5 | 4.7 | 5.4  | 5.2 | 3.9 | 4.6  |
| 3     | 7.0  | 5.3 | 6.0  | 6.5 | 4.3 | 5.2  | 6.5 | 4.8 | 5.5  | 5.4 | 4.4 | 4.9  |
| 4     | 6.4  | 5.1 | 5.8  | 6.7 | 4.5 | 5.4  | 7.0 | 4.6 | 5.3  | 5.3 | 4.2 | 4.7  |
| 5     | ---  | --- | ---  | 7.5 | 5.2 | 6.1  | 6.9 | 4.4 | 5.4  | 5.4 | 4.2 | 4.7  |
| 6     | ---  | --- | ---  | 8.5 | 5.3 | 6.4  | 6.7 | 4.7 | 5.5  | 5.6 | 4.4 | 5.0  |
| 7     | ---  | --- | ---  | 8.8 | 5.5 | 6.6  | 7.6 | 4.7 | 5.7  | 6.1 | 4.6 | 5.2  |
| 8     | ---  | --- | ---  | 7.2 | 5.1 | 6.0  | 7.8 | 4.4 | 5.7  | 6.6 | 5.5 | 6.1  |
| 9     | 8.4  | 5.3 | 6.4  | 6.7 | 4.7 | 5.5  | 8.4 | 4.6 | 5.8  | 6.8 | 5.4 | 6.1  |
| 10    | 8.3  | 5.5 | 6.7  | 6.7 | 4.4 | 5.3  | 8.4 | 4.6 | 5.9  | 5.6 | 4.1 | 4.9  |
| 11    | 8.2  | 5.4 | 6.7  | 6.6 | 4.5 | 5.4  | 8.5 | 4.9 | 5.8  | 5.5 | 4.4 | 4.8  |
| 12    | 8.1  | 5.4 | 6.4  | 5.8 | 4.6 | 5.2  | 6.4 | 4.7 | 5.5  | 5.8 | 4.6 | 5.1  |
| 13    | 8.0  | 5.2 | 6.5  | 6.3 | 4.9 | 5.4  | 6.0 | 4.5 | 5.1  | 5.8 | 4.4 | 5.0  |
| 14    | 8.6  | 5.8 | 7.0  | 7.4 | 5.1 | 6.0  | 6.2 | 4.5 | 5.2  | 5.3 | 4.1 | 4.7  |
| 15    | 8.1  | 6.2 | 7.0  | 8.3 | 5.3 | 6.6  | 5.7 | 4.5 | 5.0  | 5.0 | 3.9 | 4.4  |
| 16    | 7.5  | 5.7 | 6.5  | 9.0 | 5.5 | 6.8  | 5.3 | 4.4 | 4.8  | 4.4 | 3.4 | 3.8  |
| 17    | 7.2  | 5.7 | 6.3  | 8.0 | 5.0 | 6.1  | 5.2 | 4.4 | 4.7  | 5.5 | 3.5 | 4.6  |
| 18    | 7.8  | 5.7 | 6.6  | 7.1 | 5.0 | 5.9  | 5.3 | 4.5 | 4.8  | 6.0 | 4.7 | 5.4  |
| 19    | 8.6  | 6.2 | 7.1  | 8.0 | 4.8 | 6.0  | 5.5 | 4.5 | 4.9  | 6.4 | 4.7 | 5.6  |
| 20    | 8.5  | 6.2 | 7.0  | 9.3 | 5.0 | 6.4  | 5.5 | 4.4 | 4.9  | 6.8 | 5.1 | 6.1  |
| 21    | 8.9  | 5.7 | 7.1  | 8.1 | 5.0 | 6.2  | 5.7 | 4.3 | 4.9  | --- | --- | ---  |
| 22    | 9.3  | 6.0 | 7.3  | 8.2 | 4.4 | 5.9  | 5.9 | 4.2 | 4.7  | --- | --- | ---  |
| 23    | 10.1 | 5.7 | 7.3  | 8.3 | 4.5 | 5.8  | 5.4 | 4.2 | 4.7  | --- | --- | ---  |
| 24    | 9.8  | 5.6 | 7.2  | 6.7 | 4.4 | 5.4  | 5.6 | 4.2 | 4.8  | 6.4 | 5.1 | 5.7  |
| 25    | 8.4  | 5.7 | 7.2  | 6.9 | 3.9 | 5.1  | 5.5 | 3.7 | 4.7  | --- | --- | ---  |
| 26    | 8.4  | 5.3 | 6.4  | 6.6 | 4.0 | 5.1  | 5.2 | 4.0 | 4.6  | 6.6 | 5.5 | 6.0  |
| 27    | 7.7  | 5.6 | 6.3  | 6.4 | 4.3 | 5.2  | 5.1 | 4.0 | 4.6  | 6.5 | 5.7 | 6.1  |
| 28    | 7.3  | 5.6 | 6.3  | 5.9 | 4.5 | 5.1  | 4.9 | 3.8 | 4.5  | 6.8 | 6.1 | 6.4  |
| 29    | 6.8  | 5.3 | 6.0  | 5.6 | 4.7 | 5.1  | 5.7 | 3.9 | 4.9  | --- | --- | ---  |
| 30    | 6.4  | 4.8 | 5.4  | 5.6 | 4.5 | 5.0  | 6.2 | 5.2 | 5.8  | --- | --- | ---  |
| 31    | ---  | --- | ---  | 5.7 | 4.6 | 5.2  | 6.2 | 4.4 | 5.1  | --- | --- | ---  |
| MONTH | ---  | --- | ---  | 9.3 | 3.9 | 5.7  | 8.5 | 3.7 | 5.1  | --- | --- | ---  |



02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|------|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |      |      |       |     |      |       |     |      |     |     |      |
| 1     | ---      | ---  | ---  | ---   | --- | ---  | 7.0   | 6.4 | 6.7  | --- | --- | ---  |
| 2     | ---      | ---  | ---  | ---   | --- | ---  | 7.5   | 6.4 | 6.9  | --- | --- | ---  |
| 3     | ---      | ---  | ---  | ---   | --- | ---  | 7.6   | 6.7 | 7.1  | --- | --- | ---  |
| 4     | ---      | ---  | ---  | ---   | --- | ---  | 7.8   | 7.0 | 7.4  | --- | --- | ---  |
| 5     | ---      | ---  | ---  | ---   | --- | ---  | 7.9   | 7.3 | 7.6  | --- | --- | ---  |
| 6     | ---      | ---  | ---  | ---   | --- | ---  | 8.1   | 7.4 | 7.7  | --- | --- | ---  |
| 7     | ---      | ---  | ---  | ---   | --- | ---  | 8.4   | 7.5 | 7.9  | --- | --- | ---  |
| 8     | ---      | ---  | ---  | 6.4   | 5.3 | 5.8  | ---   | --- | ---  | --- | --- | ---  |
| 9     | ---      | ---  | ---  | 7.3   | 5.8 | 6.6  | ---   | --- | ---  | 8.8 | 8.1 | 8.5  |
| 10    | ---      | ---  | ---  | 7.5   | 6.3 | 7.0  | ---   | --- | ---  | 9.3 | 8.4 | 8.9  |
| 11    | ---      | ---  | ---  | 7.3   | 6.4 | 6.9  | ---   | --- | ---  | --- | --- | ---  |
| 12    | ---      | ---  | ---  | 7.0   | 6.2 | 6.6  | ---   | --- | ---  | --- | --- | ---  |
| 13    | ---      | ---  | ---  | 7.6   | 6.7 | 7.1  | ---   | --- | ---  | --- | --- | ---  |
| 14    | ---      | ---  | ---  | 7.6   | 6.8 | 7.1  | ---   | --- | ---  | --- | --- | ---  |
| 15    | ---      | ---  | ---  | 7.4   | 6.5 | 7.0  | ---   | --- | ---  | --- | --- | ---  |
| 16    | ---      | ---  | ---  | 7.1   | 6.3 | 6.8  | ---   | --- | ---  | --- | --- | ---  |
| 17    | ---      | ---  | ---  | 6.9   | 6.3 | 6.7  | ---   | --- | ---  | --- | --- | ---  |
| 18    | ---      | ---  | ---  | 6.9   | 6.3 | 6.7  | ---   | --- | ---  | --- | --- | ---  |
| 19    | ---      | ---  | ---  | 7.7   | 6.5 | 7.2  | ---   | --- | ---  | --- | --- | ---  |
| 20    | ---      | ---  | ---  | 7.7   | 6.9 | 7.3  | ---   | --- | ---  | --- | --- | ---  |
| 21    | ---      | ---  | ---  | 7.5   | 6.7 | 7.1  | ---   | --- | ---  | --- | --- | ---  |
| 22    | ---      | ---  | ---  | 7.1   | 6.5 | 6.8  | ---   | --- | ---  | --- | --- | ---  |
| 23    | ---      | ---  | ---  | 6.9   | 6.3 | 6.6  | ---   | --- | ---  | --- | --- | ---  |
| 24    | ---      | ---  | ---  | 6.7   | 5.9 | 6.3  | ---   | --- | ---  | --- | --- | ---  |
| 25    | ---      | ---  | ---  | 7.0   | 5.9 | 6.4  | ---   | --- | ---  | --- | --- | ---  |
| 26    | ---      | ---  | ---  | 6.8   | 6.1 | 6.5  | ---   | --- | ---  | --- | --- | ---  |
| 27    | ---      | ---  | ---  | 6.6   | 6.0 | 6.3  | ---   | --- | ---  | --- | --- | ---  |
| 28    | ---      | ---  | ---  | 6.7   | 6.0 | 6.3  | ---   | --- | ---  | --- | --- | ---  |
| 29    | ---      | ---  | ---  | 7.4   | 6.1 | 6.7  | ---   | --- | ---  | --- | --- | ---  |
| 30    | ---      | ---  | ---  | 7.0   | 6.2 | 6.7  | ---   | --- | ---  | --- | --- | ---  |
| 31    | ---      | ---  | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
| MONTH | ---      | ---  | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
|       | FEBRUARY |      |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN  | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | ---      | ---  | ---  | 10.1  | 9.0 | 9.7  | 8.8   | 7.3 | 8.1  | --- | --- | ---  |
| 2     | ---      | ---  | ---  | 10.1  | 9.0 | 9.7  | 8.9   | 7.9 | 8.2  | --- | --- | ---  |
| 3     | ---      | ---  | ---  | 10.1  | 8.8 | 9.7  | 9.0   | 7.9 | 8.3  | --- | --- | ---  |
| 4     | ---      | ---  | ---  | 10.0  | 8.7 | 9.6  | 8.6   | 8.0 | 8.3  | --- | --- | ---  |
| 5     | ---      | ---  | ---  | 9.9   | 8.4 | 9.4  | 8.8   | 8.2 | 8.5  | --- | --- | ---  |
| 6     | ---      | ---  | ---  | 9.7   | 8.7 | 9.4  | 9.0   | 8.1 | 8.5  | --- | --- | ---  |
| 7     | ---      | ---  | ---  | 9.5   | 8.4 | 9.1  | 8.9   | 7.9 | 8.4  | 6.0 | 5.3 | 5.6  |
| 8     | ---      | ---  | ---  | 9.3   | 8.1 | 9.0  | 8.8   | 7.7 | 8.2  | 5.9 | 5.1 | 5.5  |
| 9     | ---      | ---  | ---  | 9.3   | 8.3 | 8.8  | 9.0   | 7.7 | 8.2  | 5.8 | 5.2 | 5.5  |
| 10    | ---      | ---  | ---  | 9.3   | 8.5 | 8.9  | 9.0   | 7.8 | 8.3  | --- | --- | ---  |
| 11    | 10.7     | 9.6  | 10.2 | 9.7   | 8.5 | 9.1  | 8.8   | 7.8 | 8.2  | 6.0 | 5.2 | 5.6  |
| 12    | 10.9     | 9.6  | 10.1 | 9.4   | 8.6 | 8.9  | 8.3   | 7.7 | 8.0  | 6.1 | 5.2 | 5.6  |
| 13    | 10.8     | 9.7  | 10.2 | 9.2   | 8.4 | 8.8  | 8.2   | 7.6 | 7.9  | 6.2 | 5.3 | 5.7  |
| 14    | 10.5     | 9.7  | 10.0 | 9.2   | 8.4 | 8.7  | 8.3   | 7.3 | 7.8  | 6.0 | 5.1 | 5.5  |
| 15    | 10.3     | 9.5  | 9.9  | 8.9   | 8.3 | 8.6  | 8.4   | 7.3 | 7.8  | 6.0 | 5.2 | 5.6  |
| 16    | 10.7     | 9.6  | 10.1 | 8.7   | 8.1 | 8.5  | 8.2   | 7.4 | 7.8  | 5.8 | 5.1 | 5.5  |
| 17    | 10.7     | 9.7  | 10.1 | 8.7   | 8.0 | 8.3  | ---   | --- | ---  | 5.9 | 5.2 | 5.5  |
| 18    | 10.8     | 9.7  | 10.2 | 8.7   | 8.0 | 8.3  | ---   | --- | ---  | 5.8 | 5.2 | 5.6  |
| 19    | 10.4     | 9.7  | 10.1 | 8.8   | 8.1 | 8.4  | ---   | --- | ---  | 6.3 | 5.4 | 5.8  |
| 20    | 10.2     | 9.8  | 10.0 | 8.8   | 8.1 | 8.5  | ---   | --- | ---  | 6.4 | 5.4 | 6.0  |
| 21    | 10.5     | 10.0 | 10.2 | 8.8   | 8.2 | 8.5  | ---   | --- | ---  | 6.4 | 5.6 | 6.0  |
| 22    | 10.6     | 10.0 | 10.3 | 9.2   | 8.3 | 8.7  | ---   | --- | ---  | 6.7 | 5.7 | 6.1  |
| 23    | 10.6     | 9.8  | 10.2 | 9.4   | 8.3 | 8.8  | ---   | --- | ---  | 7.0 | 5.8 | 6.3  |
| 24    | 10.3     | 9.6  | 10   | 9.1   | 8.3 | 8.7  | ---   | --- | ---  | 7.2 | 6.0 | 6.4  |
| 25    | 10.1     | 9.3  | 9.8  | 9.0   | 8.0 | 8.6  | ---   | --- | ---  | 7.0 | 6.0 | 6.4  |
| 26    | 10.1     | 9.2  | 9.7  | 9.0   | 7.9 | 8.5  | ---   | --- | ---  | 6.9 | 5.7 | 6.2  |
| 27    | 10.3     | 9.5  | 9.8  | 8.8   | 8.0 | 8.3  | ---   | --- | ---  | 7.1 | 5.5 | 6.1  |
| 28    | 10.0     | 9.5  | 9.7  | 8.6   | 7.8 | 8.2  | ---   | --- | ---  | 7.2 | 5.8 | 6.3  |
| 29    | 10.0     | 9.5  | 9.8  | 8.9   | 7.6 | 8.2  | ---   | --- | ---  | --- | --- | ---  |
| 30    | ---      | ---  | ---  | 8.7   | 7.4 | 7.9  | ---   | --- | ---  | --- | --- | ---  |
| 31    | ---      | ---  | ---  | 8.4   | 7.2 | 7.8  | ---   | --- | ---  | 6.8 | 5.7 | 6.2  |
| MONTH | ---      | ---  | ---  | 10.1  | 7.2 | 8.8  | ---   | --- | ---  | --- | --- | ---  |









02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, TOP—CONTINUED  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | JUNE |     |      | JULY |     |      | AUGUST |     |      | SEPTEMBER |     |      |
|-------|------|-----|------|------|-----|------|--------|-----|------|-----------|-----|------|
|       | MAX  | MIN | MEAN | MAX  | MIN | MEAN | MAX    | MIN | MEAN | MAX       | MIN | MEAN |
| 1     | 96   | 72  | 80   | 81   | 59  | 66   | 82     | 63  | 71   | 66        | 52  | 58   |
| 2     | 91   | 70  | 79   | 78   | 61  | 67   | 87     | 61  | 71   | 66        | 49  | 57   |
| 3     | 88   | 68  | 76   | 85   | 55  | 67   | 86     | 63  | 72   | 68        | 55  | 61   |
| 4     | 80   | 64  | 73   | 88   | 58  | 70   | 95     | 60  | 70   | 67        | 52  | 58   |
| 5     | ---  | --- | ---  | 99   | 67  | 79   | 92     | 58  | 71   | 67        | 51  | 59   |
| 6     | ---  | --- | ---  | 113  | 69  | 84   | 87     | 61  | 72   | 69        | 54  | 62   |
| 7     | ---  | --- | ---  | 118  | 72  | 87   | 98     | 60  | 73   | 75        | 56  | 64   |
| 8     | ---  | --- | ---  | 96   | 67  | 80   | 101    | 56  | 73   | 82        | 67  | 75   |
| 9     | 109  | 67  | 82   | 89   | 62  | 73   | 109    | 59  | 75   | 84        | 67  | 76   |
| 10    | 107  | 70  | 86   | 90   | 58  | 70   | 110    | 59  | 76   | 70        | 51  | 61   |
| 11    | 107  | 69  | 86   | 88   | 59  | 71   | 111    | 63  | 75   | 67        | 54  | 60   |
| 12    | 104  | 69  | 82   | 76   | 61  | 68   | 83     | 60  | 71   | 71        | 56  | 62   |
| 13    | 102  | 66  | 83   | 84   | 64  | 71   | 77     | 57  | 65   | 71        | 54  | 61   |
| 14    | 110  | 73  | 88   | 100  | 68  | 79   | 78     | 57  | 65   | 64        | 50  | 57   |
| 15    | 104  | 78  | 88   | 111  | 70  | 87   | 71     | 56  | 63   | 60        | 47  | 53   |
| 16    | 97   | 73  | 83   | 121  | 73  | 89   | 66     | 55  | 60   | 54        | 41  | 46   |
| 17    | 92   | 72  | 80   | 106  | 66  | 80   | 65     | 54  | 59   | 68        | 42  | 56   |
| 18    | 101  | 72  | 85   | 93   | 65  | 77   | 67     | 55  | 59   | 72        | 56  | 65   |
| 19    | 113  | 79  | 92   | 106  | 62  | 78   | 69     | 55  | 60   | 76        | 56  | 67   |
| 20    | 110  | 80  | 90   | 125  | 65  | 85   | 69     | 54  | 60   | 80        | 60  | 72   |
| 21    | 115  | 73  | 91   | 108  | 65  | 81   | 72     | 52  | 60   | ---       | --- | ---  |
| 22    | 122  | 77  | 94   | 110  | 58  | 77   | 74     | 51  | 57   | ---       | --- | ---  |
| 23    | 133  | 74  | 94   | 110  | 59  | 76   | 68     | 51  | 58   | ---       | --- | ---  |
| 24    | 129  | 72  | 94   | 89   | 58  | 71   | 70     | 51  | 60   | 76        | 60  | 67   |
| 25    | 110  | 74  | 93   | 92   | 51  | 67   | 69     | 46  | 58   | ---       | --- | ---  |
| 26    | 109  | 69  | 83   | 87   | 52  | 67   | 65     | 50  | 58   | 78        | 65  | 71   |
| 27    | 99   | 72  | 82   | 85   | 57  | 69   | 64     | 50  | 57   | 78        | 67  | 73   |
| 28    | 95   | 72  | 81   | 78   | 59  | 67   | 62     | 48  | 56   | 82        | 73  | 78   |
| 29    | 88   | 69  | 77   | 73   | 61  | 66   | 72     | 49  | 62   | ---       | --- | ---  |
| 30    | 83   | 62  | 70   | 73   | 59  | 65   | 78     | 66  | 73   | ---       | --- | ---  |
| 31    | ---  | --- | ---  | 75   | 60  | 68   | 79     | 56  | 65   | ---       | --- | ---  |
| MONTH | ---  | --- | ---  | 125  | 51  | 74   | 111    | 46  | 65   | ---       | --- | ---  |



02108820 CAPE FEAR RIVER AT CHANNEL MARKER 12 NEAR CAROLINA BEACH, NC—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, PERCENT OF SATURATION, BOTTOM  
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004

| DAY   | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
|-------|----------|-----|------|-------|-----|------|-------|-----|------|-----|-----|------|
|       |          |     |      |       |     |      |       |     |      |     |     |      |
| 1     | ---      | --- | ---  | ---   | --- | ---  | 68    | 62  | 65   | --- | --- | ---  |
| 2     | ---      | --- | ---  | ---   | --- | ---  | 71    | 62  | 66   | --- | --- | ---  |
| 3     | ---      | --- | ---  | ---   | --- | ---  | 71    | 64  | 67   | --- | --- | ---  |
| 4     | ---      | --- | ---  | ---   | --- | ---  | 72    | 66  | 69   | --- | --- | ---  |
| 5     | ---      | --- | ---  | ---   | --- | ---  | 73    | 68  | 71   | --- | --- | ---  |
| 6     | ---      | --- | ---  | ---   | --- | ---  | 74    | 68  | 71   | --- | --- | ---  |
| 7     | ---      | --- | ---  | ---   | --- | ---  | 76    | 69  | 72   | --- | --- | ---  |
| 8     | ---      | --- | ---  | 70    | 58  | 64   | ---   | --- | ---  | --- | --- | ---  |
| 9     | ---      | --- | ---  | 77    | 62  | 70   | ---   | --- | ---  | 78  | 72  | 75   |
| 10    | ---      | --- | ---  | 78    | 67  | 74   | ---   | --- | ---  | 80  | 74  | 77   |
| 11    | ---      | --- | ---  | 76    | 67  | 72   | ---   | --- | ---  | --- | --- | ---  |
| 12    | ---      | --- | ---  | 74    | 65  | 70   | ---   | --- | ---  | --- | --- | ---  |
| 13    | ---      | --- | ---  | 80    | 71  | 75   | ---   | --- | ---  | --- | --- | ---  |
| 14    | ---      | --- | ---  | 78    | 70  | 74   | ---   | --- | ---  | --- | --- | ---  |
| 15    | ---      | --- | ---  | 75    | 66  | 72   | ---   | --- | ---  | --- | --- | ---  |
| 16    | ---      | --- | ---  | 73    | 64  | 70   | ---   | --- | ---  | --- | --- | ---  |
| 17    | ---      | --- | ---  | 72    | 65  | 69   | ---   | --- | ---  | --- | --- | ---  |
| 18    | ---      | --- | ---  | 72    | 65  | 69   | ---   | --- | ---  | --- | --- | ---  |
| 19    | ---      | --- | ---  | 81    | 68  | 75   | ---   | --- | ---  | --- | --- | ---  |
| 20    | ---      | --- | ---  | 79    | 72  | 75   | ---   | --- | ---  | --- | --- | ---  |
| 21    | ---      | --- | ---  | 77    | 70  | 73   | ---   | --- | ---  | --- | --- | ---  |
| 22    | ---      | --- | ---  | 73    | 67  | 70   | ---   | --- | ---  | --- | --- | ---  |
| 23    | ---      | --- | ---  | 71    | 65  | 68   | ---   | --- | ---  | --- | --- | ---  |
| 24    | ---      | --- | ---  | 69    | 62  | 65   | ---   | --- | ---  | --- | --- | ---  |
| 25    | ---      | --- | ---  | 72    | 62  | 66   | ---   | --- | ---  | --- | --- | ---  |
| 26    | ---      | --- | ---  | 69    | 62  | 66   | ---   | --- | ---  | --- | --- | ---  |
| 27    | ---      | --- | ---  | 67    | 61  | 64   | ---   | --- | ---  | --- | --- | ---  |
| 28    | ---      | --- | ---  | 69    | 61  | 64   | ---   | --- | ---  | --- | --- | ---  |
| 29    | ---      | --- | ---  | 71    | 63  | 67   | ---   | --- | ---  | --- | --- | ---  |
| 30    | ---      | --- | ---  | 69    | 62  | 66   | ---   | --- | ---  | --- | --- | ---  |
| 31    | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
| MONTH | ---      | --- | ---  | ---   | --- | ---  | ---   | --- | ---  | --- | --- | ---  |
|       | FEBRUARY |     |      | MARCH |     |      | APRIL |     |      | MAY |     |      |
|       | MAX      | MIN | MEAN | MAX   | MIN | MEAN | MAX   | MIN | MEAN | MAX | MIN | MEAN |
| 1     | ---      | --- | ---  | 87    | 78  | 83   | 88    | 72  | 81   | --- | --- | ---  |
| 2     | ---      | --- | ---  | 92    | 78  | 86   | 88    | 78  | 82   | --- | --- | ---  |
| 3     | ---      | --- | ---  | 90    | 79  | 87   | 90    | 79  | 82   | --- | --- | ---  |
| 4     | ---      | --- | ---  | 91    | 78  | 87   | 87    | 80  | 83   | --- | --- | ---  |
| 5     | ---      | --- | ---  | 91    | 77  | 87   | 87    | 80  | 84   | --- | --- | ---  |
| 6     | ---      | --- | ---  | 94    | 83  | 89   | 91    | 79  | 84   | --- | --- | ---  |
| 7     | ---      | --- | ---  | 91    | 81  | 88   | 91    | 78  | 84   | 68  | 60  | 64   |
| 8     | ---      | --- | ---  | 90    | 78  | 87   | 90    | 78  | 83   | 68  | 59  | 63   |
| 9     | ---      | --- | ---  | 89    | 78  | 84   | 94    | 78  | 84   | 68  | 60  | 64   |
| 10    | ---      | --- | ---  | 89    | 81  | 85   | 95    | 80  | 86   | --- | --- | ---  |
| 11    | 91       | 82  | 87   | 89    | 79  | 84   | 94    | 82  | 87   | 72  | 60  | 65   |
| 12    | 92       | 81  | 86   | 87    | 80  | 83   | 89    | 82  | 85   | 73  | 61  | 67   |
| 13    | 92       | 82  | 86   | 86    | 79  | 82   | 89    | 81  | 84   | 75  | 63  | 68   |
| 14    | 88       | 82  | 85   | 86    | 80  | 82   | 87    | 77  | 82   | 73  | 61  | 66   |
| 15    | 87       | 81  | 84   | 86    | 79  | 82   | 88    | 76  | 82   | 73  | 62  | 67   |
| 16    | 89       | 81  | 85   | 85    | 77  | 82   | 87    | 77  | 81   | 71  | 61  | 66   |
| 17    | 90       | 82  | 85   | 84    | 77  | 80   | ---   | --- | ---  | 72  | 63  | 66   |
| 18    | 89       | 80  | 85   | 85    | 77  | 81   | ---   | --- | ---  | 71  | 63  | 67   |
| 19    | 88       | 80  | 84   | 86    | 79  | 82   | ---   | --- | ---  | 78  | 65  | 71   |
| 20    | 88       | 82  | 85   | 87    | 79  | 83   | ---   | --- | ---  | 78  | 66  | 73   |
| 21    | 92       | 85  | 88   | 86    | 81  | 84   | ---   | --- | ---  | 81  | 68  | 73   |
| 22    | 93       | 87  | 90   | 89    | 80  | 85   | ---   | --- | ---  | 85  | 70  | 76   |
| 23    | 93       | 86  | 89   | 89    | 79  | 84   | ---   | --- | ---  | 88  | 72  | 79   |
| 24    | 90       | 84  | 87   | 87    | 79  | 83   | ---   | --- | ---  | 91  | 74  | 80   |
| 25    | 89       | 81  | 85   | 87    | 79  | 83   | ---   | --- | ---  | 89  | 74  | 79   |
| 26    | 87       | 79  | 83   | 89    | 79  | 84   | ---   | --- | ---  | 88  | 71  | 78   |
| 27    | 87       | 80  | 83   | 89    | 79  | 83   | ---   | --- | ---  | 91  | 69  | 77   |
| 28    | 86       | 80  | 82   | 87    | 77  | 82   | ---   | --- | ---  | 92  | 73  | 79   |
| 29    | 87       | 80  | 83   | 87    | 75  | 80   | ---   | --- | ---  | --- | --- | ---  |
| 30    | ---      | --- | ---  | 85    | 72  | 78   | ---   | --- | ---  | --- | --- | ---  |
| 31    | ---      | --- | ---  | 85    | 70  | 77   | ---   | --- | ---  | 86  | 72  | 78   |
| MONTH | ---      | --- | ---  | 94    | 70  | 83   | ---   | --- | ---  | --- | --- | ---  |



