

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) |

## CAPE FEAR RIVER BASIN

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             |                         |
| ANNUAL MEAN              | 35.2                   | 21.7                | 31.8                    |
| HIGHEST ANNUAL MEAN      |                        |                     | 49.1                    |
| LOWEST ANNUAL MEAN       |                        |                     | 12.4                    |
| HIGHEST DAILY MEAN       | 576                    | Apr 10              | 3,350                   |
| LOWEST DAILY MEAN        | 3.8                    | Oct 25              | 0.74                    |
| ANNUAL SEVEN-DAY MINIMUM | 4.6                    | Oct 20              | 1.5                     |
| MAXIMUM PEAK FLOW        |                        | NOT DETERMINED      | 5,140*                  |
| MAXIMUM PEAK STAGE       |                        | NOT DETERMINED      | 13.92                   |
| INSTANTANEOUS LOW FLOW   |                        | NOT DETERMINED      | 0.76                    |
| 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.

