

## PAMLICO RIVER BASIN

02081500 TAR RIVER NEAR TAR RIVER, NC

LOCATION.--Lat 36°11'41", long 78°35'00", Granville County, Hydrologic Unit 03020101, on right bank 90 ft upstream from bridge on State Highway 96, 1.2 mi upstream from Fishing Creek, 2.5 mi east of town of Tar River, and 8 mi south of Oxford.

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

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

REVISED RECORDS.--WSP 972: 1940-41. WSP 1112: 1941 (calendar year figures). WSP 1273: 1941(M). WSP 1723:

GAGE.--Water-stage recorder and concrete control with sharp-crested weir. Datum of gage is 287.25 ft above NGVD of 1929. Satellite telemetry at station.

REMARKS.--No estimated daily discharges. Records good. Occasional intermittent diversion for irrigation. Maximum discharge for period of record from rating curve extended above 11,500 ft<sup>3</sup>/s, by logarithmic plotting. Minimum discharge for current water year also occurred Aug. 13, 15.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN    | FEB   | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP    |
|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|--------|
| 1     | 2.3   | 1.6   | 2.1   | 4.1    | 38    | 14    | 170   | 12    | 4.8   | 1.3   | 0.96  | 322    |
| 2     | 2.1   | 1.3   | 2.1   | 3.9    | 32    | 15    | 179   | 11    | 4.3   | 1.2   | 0.89  | 162    |
| 3     | 1.9   | 1.5   | 2.1   | 4.8    | 27    | 32    | 105   | 11    | 3.9   | 0.96  | 0.75  | 57     |
| 4     | 1.8   | 1.6   | 2.1   | 5.7    | 25    | 261   | 76    | 12    | 3.3   | 0.96  | 0.69  | 31     |
| 5     | 2.0   | 1.6   | 2.1   | 5.6    | 22    | 129   | 60    | 14    | 2.9   | 0.96  | 0.69  | 18     |
| 6     | 2.1   | 1.6   | 1.9   | 9.3    | 20    | 70    | 61    | 15    | 3.9   | 0.87  | 0.58  | 12     |
| 7     | 1.6   | 1.6   | 1.9   | 32     | 99    | 53    | 45    | 15    | 3.8   | 0.82  | 0.53  | 7.6    |
| 8     | 1.5   | 1.3   | 2.0   | 34     | 235   | 43    | 37    | 14    | 3.1   | 0.74  | 0.43  | 5.3    |
| 9     | 1.4   | 1.6   | 1.9   | 28     | 156   | 49    | 34    | 14    | 2.8   | 0.64  | 0.34  | 4.2    |
| 10    | 1.5   | 1.6   | 2.0   | 25     | 87    | 36    | 42    | 33    | 2.6   | 0.59  | 0.26  | 3.4    |
| 11    | 1.3   | 1.8   | 12    | 26     | 67    | 30    | 44    | 31    | 2.6   | 1.3   | 0.25  | 2.9    |
| 12    | 1.1   | 1.9   | 15    | 24     | 56    | 27    | 39    | 21    | 2.6   | 1.6   | 0.19  | 2.3    |
| 13    | 1.0   | 1.8   | 11    | 27     | 46    | 28    | 35    | 16    | 2.6   | 1.2   | 0.22  | 2.2    |
| 14    | 1.6   | 1.8   | 10    | 24     | 38    | 30    | 33    | 14    | 2.5   | 1.1   | 0.24  | 1.9    |
| 15    | 6.0   | 3.4   | 7.4   | 21     | 33    | 28    | 35    | 11    | 2.2   | 0.96  | 0.30  | 3.2    |
| 16    | 3.9   | 2.0   | 6.3   | 17     | 29    | 26    | 30    | 12    | 2.1   | 0.84  | 0.61  | 3.4    |
| 17    | 1.9   | 1.9   | 5.5   | 16     | 27    | 29    | 27    | 12    | 2.0   | 0.75  | 0.77  | 1.9    |
| 18    | 1.9   | 1.9   | 6.1   | 13     | 25    | 81    | 25    | 12    | 1.9   | 0.69  | 0.68  | 1.7    |
| 19    | 1.9   | 1.9   | 6.3   | 48     | 23    | 300   | 24    | 10    | 1.6   | 0.72  | 1.1   | 1.8    |
| 20    | 1.6   | 1.7   | 6.1   | 628    | 21    | 166   | 22    | 9.3   | 1.3   | 0.87  | 1.2   | 1.2    |
| 21    | 1.5   | 1.6   | 5.2   | 267    | 21    | 122   | 21    | 8.6   | 1.3   | 3.4   | 0.80  | 0.87   |
| 22    | 1.6   | 1.4   | 4.9   | 170    | 20    | 119   | 21    | 8.3   | 1.3   | 3.8   | 0.61  | 0.65   |
| 23    | 1.5   | 1.2   | 4.8   | 183    | 18    | 87    | 20    | 8.2   | 1.3   | 2.0   | 0.41  | 0.41   |
| 24    | 1.3   | 1.7   | 5.2   | 452    | 18    | 64    | 18    | 7.8   | 1.1   | 3.2   | 0.37  | 0.30   |
| 25    | 1.4   | 2.2   | 4.9   | 284    | 16    | 53    | 16    | 7.0   | 0.98  | 2.9   | 0.30  | 0.29   |
| 26    | 1.7   | 2.3   | 4.8   | 217    | 16    | 47    | 15    | 6.7   | 0.96  | 1.6   | 6.8   | 0.22   |
| 27    | 1.7   | 2.3   | 4.8   | 125    | 15    | 318   | 14    | 7.2   | 1.0   | 1.9   | 3.9   | 0.33   |
| 28    | 1.5   | 2.3   | 4.6   | 80     | 14    | 240   | 14    | 6.2   | 2.3   | 1.9   | 2.5   | 0.34   |
| 29    | 1.1   | 2.1   | 4.7   | 61     | ---   | 130   | 13    | 5.5   | 2.1   | 1.6   | 1.4   | 0.39   |
| 30    | 1.2   | 2.2   | 4.4   | 51     | ---   | 85    | 12    | 5.1   | 1.6   | 1.4   | 5.5   | 0.36   |
| 31    | 1.4   | ---   | 4.1   | 44     | ---   | 83    | ---   | 4.8   | ---   | 1.1   | 28    | ---    |
| TOTAL | 56.3  | 54.7  | 158.3 | 2930.4 | 1244  | 2795  | 1287  | 374.7 | 70.74 | 43.87 | 62.27 | 649.16 |
| MEAN  | 1.816 | 1.823 | 5.106 | 94.53  | 44.43 | 90.16 | 42.90 | 12.09 | 2.358 | 1.415 | 2.009 | 21.64  |
| MAX   | 6.0   | 3.4   | 15    | 628    | 235   | 318   | 179   | 33    | 4.8   | 3.8   | 28    | 322    |
| MIN   | 1.0   | 1.2   | 1.9   | 3.9    | 14    | 14    | 12    | 4.8   | 0.96  | 0.59  | 0.19  | 0.22   |
| CFSM  | 0.01  | 0.01  | 0.03  | 0.57   | 0.27  | 0.54  | 0.26  | 0.07  | 0.01  | 0.01  | 0.01  | 0.13   |
| IN.   | 0.01  | 0.01  | 0.04  | 0.65   | 0.28  | 0.62  | 0.29  | 0.08  | 0.02  | 0.01  | 0.01  | 0.14   |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1940 - 2002, BY WATER YEAR (WY)

|      | MEAN | 64.13 | 108.3 | 142.3 | 255.7 | 315.5 | 335.7 | 213.2 | 117.4 | 75.59 | 78.07 | 74.29 | 83.69 |
|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| MAX  | 565  | 599   | 558   | 819   | 798   | 1047  | 676   | 475   | 488   | 677   | 542   | 939   |       |
| (WY) | 1972 | 1973  | 1973  | 1978  | 1960  | 1998  | 1978  | 1978  | 1982  | 1975  | 1955  | 1999  |       |
| MIN  | 0.41 | 0.28  | 4.39  | 7.04  | 44.4  | 61.0  | 33.1  | 12.1  | 2.36  | 0.92  | 1.39  | 0.28  |       |
| (WY) | 1971 | 1942  | 1942  | 1942  | 2002  | 1981  | 1995  | 2002  | 2002  | 1966  | 1976  | 1968  |       |

SUMMARY STATISTICS

FOR 2001 CALENDAR YEAR

FOR 2002 WATER YEAR

WATER YEARS 1940 - 2002

|                          |         |         |       |
|--------------------------|---------|---------|-------|
| ANNUAL TOTAL             | 34137.5 | 9726.44 |       |
| ANNUAL MEAN              | 93.53   | 26.65   | 154.5 |
| HIGHEST ANNUAL MEAN      |         |         | 336   |
| LOWEST ANNUAL MEAN       |         |         | 26.6  |
| HIGHEST DAILY MEAN       | 4430    | Mar 30  | 628   |
| LOWEST DAILY MEAN        | 1.0     | Oct 13  | 0.19  |
| ANNUAL SEVEN-DAY MINIMUM | 1.3     | Oct 7   | 0.26  |
| MAXIMUM PEAK FLOW        |         |         | 815   |
| MAXIMUM PEAK STAGE       |         |         | 4.76  |
| INSTANTANEOUS LOW FLOW   |         |         | 0.16* |
| ANNUAL RUNOFF (CFSM)     | 0.56    |         | 0.16  |
| ANNUAL RUNOFF (INCHES)   | 7.60    |         | 2.17  |
| 10 PERCENT EXCEEDS       | 144     |         | 61    |
| 50 PERCENT EXCEEDS       | 19      |         | 4.3   |
| 90 PERCENT EXCEEDS       | 1.8     |         | 0.81  |

\* See REMARKS.

02081500 TAR RIVER NEAR TAR RIVER, NC--Continued

