

NEUSE RIVER BASIN

353354077343401 TILE DRAIN (MS2-T2) TO MIDDLE SWAMP TRIBUTARY NEAR MARLBORO, NC

LOCATION.--Lat 35°33'53.6", long 77°34'34.3", North American Datum of 1983, Pitt County, Hydrologic Unit 03020203, approximately 0.3 mi south of U.S. Highway 264A and 1.7 mi southeast of Marlboro.

DRAINAGE AREA.--Not applicable.

PERIOD OF RECORD.--August 2000 to August 2001.

REMARKS.--Station operated in cooperation with the North Carolina Department of Environment and Natural Resources as part of a project to examine nutrient loadings from subsurface tile drains in the Neuse River Basin.

WATER-QUALITY DATA, FOR PERIOD AUGUST 2000 TO AUGUST 2001

| DATE      | TIME  | FLOW RATE (G/M) (00059) | OXYGEN, DIS-SOLVED (MG/L) (00300) | OXYGEN, (PER-CENT SATURATION) (00301) | PH WATER FIELD (STANDARD UNITS) (00400) | SPECIFIC CONDUCTANCE (US/CM) (00095) | TEMPERATURE WATER (DEG C) (00010) | HARDNESS TOTAL (MG/L AS CACO3) (00900) | CALCIUM DIS-SOLVED (MG/L AS CA) (00915) | MAGNESIUM, DIS-SOLVED (MG/L AS MG) (00925) | POTASSIUM, DIS-SOLVED (MG/L AS K) (00935) | SODIUM, DIS-SOLVED (MG/L AS NA) (00930) | CHLORIDE, DIS-SOLVED (MG/L AS CL) (00940) |      |
|-----------|-------|-------------------------|-----------------------------------|---------------------------------------|---|--------------------------------------|-----------------------------------|--|---|--|---|---|---|------|
| SEP 2000  | 29... | 1105                    | 9.9                               | 6.8                                   | 77                                      | 4.2                                  | 132                               | 21.6                                   | 33                                      | 9.90                                       | 1.90                                      | 3.70                                    | 3.4                                       | 12.0 |
| DEC 11... | 1415  | 5.0                     | 9.4                               | 85                                    | 4.4                                     | 143                                  | 10.9                              | 38                                     | 11.0                                    | 2.60                                       | 1.90                                      | 5.2                                     | 12.0                                      |      |
| FEB 2001  | 26... | 1108                    | 2.3                               | 10.5                                  | 91                                      | 4.2                                  | 148                               | 9.5                                    | 39                                      | 11.0                                       | 2.80                                      | 1.40                                    | 6.4                                       | 12.0 |
| APR 02... | 1700  | 13.1                    | 9.4                               | 86                                    | 4.3                                     | 159                                  | 11.3                              | 44                                     | 13.0                                    | 2.70                                       | 2.70                                      | 4.9                                     | 13.0                                      |      |
| JUN 11... | 1725  | .28                     | 7.3                               | 84                                    | 4.2                                     | 161                                  | 21.7                              | 37                                     | 11.0                                    | 2.30                                       | 2.60                                      | 5.7                                     | 14.0                                      |      |
| JUL 09... | 1505  | 1.8                     | 6.5                               | 74                                    | 4.2                                     | 162                                  | 21.9                              | 40                                     | 12.0                                    | 2.50                                       | 3.20                                      | 4.8                                     | 16.0                                      |      |

| DATE      | SULFATE DIS-SOLVED (MG/L AS SO4) (00945) | NITROGEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608) | NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623) | NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625) | NITROGEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631) | NITROGEN, NITRITE DIS-SOLVED (MG/L AS N) (00613) | NITROGEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607) | NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605) | NITROGEN, TOTAL (MG/L AS N) (00600) | PHOSPHORUS, DIS-SOLVED (MG/L AS P) (00666) | PHOSPHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671) | PHOSPHORUS, TOTAL (MG/L AS P) (00665) | CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681) |
|-----------|--|--|--|---|--|--|--|---|-------------------------------------|--|---|---------------------------------------|--|
| SEP 2000  | 21.0                                     | .050   | .30  | .22   | 2.60   | <.010  | .25  | .17   | 2.8                                 | <.020                                      | <.010   | <.020                                 | 2.8  |
| DEC 11... | 30.0                                     | <.010  | <.20   | <.20  | 2.00   | <.010  | --   | --  | --                                  | <.020                                      | <.010   | <.020                                 | 1.4  |
| FEB 2001  | 26...                                    | 33.0   | <.010  | .39   | .30  | 1.60   | <.010  | --  | 1.9                                 | <.020                                      | <.010   | <.020                                 | 1.1  |
| APR 02... | 27.0                                     | <.010  | .24  | .25   | 4.30   | <.010  | --   | --  | 4.5                                 | <.020                                      | <.010   | <.020                                 | 2.5  |
| JUN 11... | 23.0                                     | .012   | .20  | <.20  | 2.90   | <.010  | .19  | --  | --                                  | <.020                                      | .010  | <.020                                 | 2.8  |
| JUL 09... | 23.0                                     | <.010  | <.20   | <.20  | 3.70   | <.010  | --   | --  | --                                  | <.020                                      | <.010   | <.020                                 | 2.1  |

| DATE      | IRON, DIS-SOLVED (UG/L AS FE) (01046) | MANGANESE, DIS-SOLVED (UG/L AS MN) (01056) |
|-----------|---------------------------------------|--|
| SEP 2000  | 30                                    | 13.0                                       |
| DEC 11... | M                                     | 15.0                                       |
| FEB 2001  | 20                                    | 16.0                                       |
| APR 02... | 20                                    | 17.0                                       |
| JUN 11... | 160                                   | 25.0                                       |
| JUL 09... | 10                                    | 16.0                                       |