

WACCAMAW RIVER BASIN

02109500 WACCAMAW RIVER AT FREELAND, NC

LOCATION.--Lat 34°05'43", long 78°32'55", Brunswick County, Hydrologic Unit 03040206, on left bank 150 ft downstream of New Britton bridge on State Highway 130, 1 mi southwest of Freeland, 7 mi downstream of Juniper Creek, and 117 mi upstream from mouth in Winyah Bay.

DRAINAGE AREA.--680 mi².

PERIOD OF RECORD.--July 1939 to current year.

REVISED RECORDS.--WDR NC-80-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 15.52 ft above sea level. Prior to July 15, 1943, nonrecording gage 150 ft upstream at same datum. Auxiliary nonrecording gage 3.3 mi downstream of base gage Oct. 7, 1949, to July 14, 1952. Since July 15, 1952, auxiliary water-stage recorder at same site and datum. Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Maximum discharge for current water year, 3440 ft³/s, Oct. 1, stage falling, peak occurred Sept. 26, 2000; maximum peak discharge, 2910 ft³/s, Mar. 26, gage height, 14.13 ft. Minimum discharge for period of record also occurred Sept. 9, 19, 28, and Oct. 4-14, 1954.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|------|-------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 3270 | 127 | 621 | 354 | 268 | 490 | 2540 | 101 | 128 | 183 | e110 | 236 |
| 2 | 2880 | 116 | 599 | 345 | 256 | 474 | 2390 | 87 | 196 | 159 | 98 | e252 |
| 3 | 2570 | 107 | 582 | 336 | 242 | 460 | 2210 | 76 | 267 | 216 | 107 | e340 |
| 4 | 2330 | 101 | 570 | 324 | 237 | 498 | 2050 | 67 | 299 | 240 | 101 | e390 |
| 5 | 2110 | 101 | 560 | 311 | 258 | 581 | 1880 | 59 | 320 | 254 | 77 | 421 |
| 6 | 1890 | 106 | 549 | 298 | 286 | 655 | 1720 | 52 | 355 | 269 | 60 | 453 |
| 7 | 1680 | 100 | 539 | 287 | 296 | 704 | 1580 | 47 | 393 | 265 | 49 | 446 |
| 8 | 1510 | 96 | 522 | 276 | 303 | 730 | 1460 | 45 | 402 | 239 | 39 | 408 |
| 9 | 1370 | 94 | 499 | 271 | 307 | 744 | 1340 | 42 | 382 | 209 | 33 | 362 |
| 10 | 1220 | 94 | 482 | 268 | 304 | 757 | 1230 | 37 | 356 | 176 | 28 | 324 |
| 11 | 1040 | 89 | 477 | 263 | 297 | 773 | 1120 | 34 | 333 | 136 | 25 | 305 |
| 12 | 917 | 84 | 477 | 259 | 297 | 784 | 987 | 32 | e300 | 111 | 23 | 295 |
| 13 | 822 | 81 | 474 | 265 | 353 | 821 | 880 | 29 | e280 | 88 | 23 | 272 |
| 14 | 738 | 81 | 476 | 274 | 418 | 858 | 783 | 28 | 274 | 69 | 219 | 235 |
| 15 | 662 | 93 | 475 | 284 | 464 | 911 | 696 | 26 | 267 | 56 | 338 | 198 |
| 16 | 588 | 98 | 472 | 290 | 496 | 1030 | 611 | 24 | 261 | 46 | 327 | 168 |
| 17 | 516 | 99 | 466 | 288 | 515 | 1160 | 527 | 27 | 253 | 37 | 295 | 139 |
| 18 | 454 | 107 | 451 | 283 | 527 | 1250 | 456 | 44 | 244 | 31 | 249 | 113 |
| 19 | 401 | 115 | 433 | 278 | 537 | 1290 | 399 | 52 | 232 | 29 | 227 | 91 |
| 20 | 359 | 164 | 414 | 330 | 544 | 1330 | 351 | 49 | 213 | 29 | 221 | 75 |
| 21 | 325 | 202 | 397 | 388 | 545 | 1660 | 309 | 48 | 189 | 26 | 208 | 63 |
| 22 | 296 | 210 | 385 | 405 | 544 | 2060 | 272 | 63 | 161 | 24 | 192 | 59 |
| 23 | 268 | 208 | 370 | 442 | 543 | 2490 | 239 | 66 | 140 | 24 | 173 | 53 |
| 24 | 246 | 206 | 356 | 457 | 544 | 2730 | 209 | 59 | 143 | 29 | 150 | 48 |
| 25 | 226 | 219 | 345 | 437 | 538 | 2860 | 187 | 50 | 210 | 33 | 133 | 47 |
| 26 | 209 | 430 | 338 | 411 | 528 | 2890 | 184 | 42 | 288 | 32 | 115 | 49 |
| 27 | 198 | 541 | 333 | 376 | 518 | 2830 | 178 | 42 | 260 | 35 | 97 | 45 |
| 28 | 184 | 602 | 336 | 343 | 504 | 2690 | 159 | 37 | 235 | 55 | 79 | 40 |
| 29 | 167 | 619 | 346 | 317 | --- | 2650 | 134 | 41 | 217 | 84 | 65 | 35 |
| 30 | 153 | 631 | 358 | 296 | --- | 2670 | 117 | 88 | 203 | 108 | 70 | 31 |
| 31 | 139 | --- | 359 | 282 | --- | 2630 | --- | 112 | --- | e120 | 192 | --- |
| TOTAL | 29738 | 5921 | 14061 | 10038 | 11469 | 44460 | 27198 | 1606 | 7801 | 3412 | 4123 | 5993 |
| MEAN | 959 | 197 | 454 | 324 | 410 | 1434 | 907 | 51.8 | 260 | 110 | 133 | 200 |
| MAX | 3270 | 631 | 621 | 457 | 545 | 2890 | 2540 | 112 | 402 | 269 | 338 | 453 |
| MIN | 139 | 81 | 333 | 259 | 237 | 460 | 117 | 24 | 128 | 24 | 23 | 31 |
| CFSM | 1.41 | .29 | .67 | .48 | .60 | 2.11 | 1.33 | .08 | .38 | .16 | .20 | .29 |
| IN. | 1.63 | .32 | .77 | .55 | .63 | 2.43 | 1.49 | .09 | .43 | .19 | .23 | .33 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2001, BY WATER YEAR (WY)

| | 532 | 350 | 487 | 1049 | 1389 | 1437 | 967 | 377 | 311 | 510 | 640 | 844 |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 532 | 350 | 487 | 1049 | 1389 | 1437 | 967 | 377 | 311 | 510 | 640 | 844 |
| MAX | 5778 | 2332 | 3080 | 3722 | 5574 | 5319 | 2895 | 3586 | 1474 | 3040 | 2740 | 8449 |
| (WY) | 2000 | 1978 | 1949 | 1993 | 1998 | 1983 | 1973 | 1999 | 1969 | 1961 | 1981 | 1999 |
| MIN | 1.14 | .54 | 3.53 | 20.6 | 44.6 | 219 | 120 | 17.5 | 5.51 | 5.72 | 7.59 | .31 |
| (WY) | 1941 | 1955 | 1955 | 1955 | 1941 | 1955 | 1967 | 1995 | 1952 | 1952 | 1954 | 1954 |

SUMMARY STATISTICS FOR 2000 CALENDAR YEAR FOR 2001 WATER YEAR WATER YEARS 1939 - 2001

| | | | |
|--------------------------|--------|--------|--------|
| ANNUAL TOTAL | 290658 | 165820 | |
| ANNUAL MEAN | 794 | 454 | 738 |
| HIGHEST ANNUAL MEAN | | | 1572 |
| LOWEST ANNUAL MEAN | | | 230 |
| HIGHEST DAILY MEAN | 4690 | Feb 1 | 30600 |
| LOWEST DAILY MEAN | 31 | May 23 | .10 |
| ANNUAL SEVEN-DAY MINIMUM | 34 | May 20 | .10 |
| MAXIMUM PEAK FLOW | | | 31200 |
| MAXIMUM PEAK STAGE | | | 14.13* |
| INSTANTANEOUS LOW FLOW | | | 19 |
| ANNUAL RUNOFF (CFSM) | 1.17 | .67 | 1.09 |
| ANNUAL RUNOFF (INCHES) | 15.90 | 9.07 | 14.75 |
| 10 PERCENT EXCEEDS | 2260 | 1070 | 1920 |
| 50 PERCENT EXCEEDS | 440 | 274 | 360 |
| 90 PERCENT EXCEEDS | 59 | 46 | 29 |

e Estimated.
* See REMARKS.

02109500 WACCAMAW RIVER AT FREELAND, NC--Continued

