

02124742 ROCKY RIVER NEAR STANFIELD, NC

LOCATION.--Lat 35°10'10", long 80°28'23", Union County, Hydrologic Unit 03040105, on right bank at bridge on Secondary Road 1606, 1.3 mi upstream from Crooked Creek, and 5.0 mi southwest of Stanfield

DRAINAGE AREA.--628 mi².

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

GAGE.--Water-stage recorder. Elevation of gage is 440 ft above NGVD of 1929 (from topographic map). Satellite telemetry at station.

REMARKS.--Records fair except those for estimated daily discharges and those above 1,000 ft³/s, which are poor due to variable backwater. WSACC Rocky River waste water treatment plant discharged an average of 26.2 ft³/s during the current water year as treated effluent 16.5 mi upstream from station. Minimum discharge for period of record and current water year affected by regulation.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|---------|--------|--------|--------|--------|-------|
| 1 | 72 | 231 | 200 | 416 | 808 | 1,260 | 1,150 | 518 | 4,270 | 1,400 | 683 | 428 |
| 2 | 65 | 186 | 191 | 433 | 513 | 2,760 | 779 | 511 | 1,130 | 6,120 | 404 | 356 |
| 3 | 64 | 162 | 190 | 411 | 413 | 1,360 | 640 | 543 | 799 | 3,680 | 329 | 250 |
| 4 | 57 | 145 | 193 | 481 | 387 | 718 | 557 | 3,930 | 2,900 | 1,020 | 515 | 219 |
| 5 | 58 | 149 | 2,520 | 382 | 492 | 611 | 511 | 2,380 | 2,410 | 538 | 1,840 | 320 |
| 6 | 57 | 1,620 | 3,030 | 337 | 356 | 7,030 | 536 | 6,220 | 1,130 | 402 | 1,450 | 483 |
| 7 | 50 | 815 | 1,410 | 312 | 1,670 | 6,600 | 4,860 | 5,340 | 7,560 | 330 | 607 | 291 |
| 8 | 55 | 380 | 818 | 298 | 1,020 | 1,390 | 7,230 | 2,110 | 14,000 | 358 | 1,800 | 247 |
| 9 | 54 | 269 | 591 | 292 | 547 | 839 | 9,530 | 1,070 | 9,840 | 336 | 1,520 | 230 |
| 10 | 54 | 221 | 474 | 277 | 534 | 653 | 16,500 | 763 | 2,250 | 234 | 808 | 210 |
| 11 | 1,780 | 260 | 1,330 | 258 | 537 | 542 | 22,000 | 614 | 1,020 | 388 | 1,170 | 194 |
| 12 | 1,530 | 2,390 | 1,380 | 244 | 423 | 483 | 12,900 | 531 | 713 | 623 | 1,340 | 180 |
| 13 | 1,150 | 3,490 | 3,290 | 233 | 363 | 451 | 1,830 | 469 | 912 | 1,450 | 693 | 180 |
| 14 | 1,750 | 976 | 5,350 | e225 | 331 | 571 | 1,120 | 407 | 588 | 2,000 | 632 | 170 |
| 15 | 425 | 501 | 1,600 | e216 | 368 | 483 | 859 | 363 | 506 | 1,090 | 1,790 | 163 |
| 16 | 2,560 | 740 | 759 | e211 | 449 | 5,730 | 725 | 471 | 1,000 | 967 | 740 | 220 |
| 17 | 1,360 | 4,840 | 565 | e210 | 503 | 4,760 | 636 | 458 | 6,320 | 1,770 | 631 | 196 |
| 18 | 421 | 2,160 | 460 | e210 | 632 | 1,400 | 1,930 | 393 | 3,680 | 932 | 1,060 | 305 |
| 19 | 250 | 828 | 406 | e209 | 1,180 | 1,030 | 7,810 | 512 | 8,850 | 3,650 | 538 | 151 |
| 20 | 186 | 557 | 758 | e208 | 743 | 14,400 | 3,720 | 480 | 3,280 | 1,770 | 367 | 150 |
| 21 | 159 | 451 | 904 | e207 | 579 | 18,900 | 1,530 | 403 | 1,140 | 582 | 329 | 134 |
| 22 | 360 | 390 | 522 | e207 | 3,580 | 8,790 | 1,130 | 7,560 | 754 | 615 | 305 | 132 |
| 23 | 357 | 330 | 421 | e207 | 6,740 | 1,410 | 863 | 18,100 | 605 | 888 | 398 | 645 |
| 24 | 218 | 289 | 2,400 | e206 | 1,800 | 920 | 688 | 12,300 | 607 | 755 | 386 | 1,230 |
| 25 | 173 | 268 | 7,060 | e215 | 704 | 721 | 627 | 6,820 | 418 | 539 | 350 | 520 |
| 26 | 159 | 255 | 3,460 | 230 | 547 | 617 | 1,080 | 10,700 | 376 | 369 | 261 | 337 |
| 27 | 165 | 243 | 1,060 | 223 | 2,660 | 557 | 2,000 | 5,380 | 347 | 346 | 237 | 267 |
| 28 | 155 | 231 | 691 | 208 | 4,050 | 509 | 943 | 2,260 | 435 | 294 | 215 | 281 |
| 29 | 634 | 212 | 549 | 210 | --- | 469 | 681 | 1,160 | 382 | 249 | 221 | 277 |
| 30 | 491 | 204 | 464 | 844 | --- | 2,510 | 585 | 1,450 | 351 | 918 | 225 | 209 |
| 31 | 325 | --- | 410 | 2,460 | --- | 3,670 | --- | 1,240 | --- | 588 | 229 | --- |
| TOTAL | 15,194 | 23,793 | 43,456 | 11,080 | 32,929 | 92,144 | 105,950 | 95,456 | 78,573 | 35,201 | 22,073 | 8,975 |
| MEAN | 490 | 793 | 1,402 | 357 | 1,176 | 2,972 | 3,532 | 3,079 | 2,619 | 1,136 | 712 | 299 |
| MAX | 2,560 | 4,840 | 7,060 | 2,460 | 6,740 | 18,900 | 22,000 | 18,100 | 14,000 | 6,120 | 1,840 | 1,230 |
| MIN | 50 | 145 | 190 | 206 | 331 | 451 | 511 | 363 | 347 | 234 | 215 | 132 |
| CFSM | 0.78 | 1.26 | 2.23 | 0.57 | 1.87 | 4.73 | 5.62 | 4.90 | 4.17 | 1.81 | 1.13 | 0.48 |
| IN. | 0.90 | 1.41 | 2.57 | 0.66 | 1.95 | 5.46 | 6.28 | 5.65 | 4.65 | 2.09 | 1.31 | 0.53 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2000 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 213 | 331 | 545 | 369 | 584 | 1,444 | 1,145 | 886 | 760 | 374 | 263 | 230 |
| MAX | 490 | 793 | 1,402 | 601 | 1,176 | 2,972 | 3,532 | 3,079 | 2,619 | 1,136 | 712 | 314 |
| (WY) | (2003) | (2003) | (2003) | (2002) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2003) | (2000) |
| MIN | 70.6 | 79.6 | 112 | 150 | 226 | 599 | 246 | 133 | 78.8 | 96.4 | 93.6 | 147 |
| (WY) | (2001) | (2002) | (2001) | (2001) | (2001) | (2002) | (2001) | (2001) | (2002) | (2002) | (2002) | (2002) |

02124742 ROCKY RIVER NEAR STANFIELD, NC—Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 2000 - 2003 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 155,675 | | 564,824 | | 660 | |
| ANNUAL MEAN | 427 | | 1,547 | | 1,547 | |
| HIGHEST ANNUAL MEAN | | | | | 2003 | |
| LOWEST ANNUAL MEAN | | | | | 2001 | |
| HIGHEST DAILY MEAN | 7,060 | Dec 25 | 22,000 | Apr 11 | 22,000 | Apr 11, 2003 |
| LOWEST DAILY MEAN | 36 | Aug 12 | 50 | Oct 7 | 35 | Sep 18, 2000 |
| ANNUAL SEVEN-DAY MINIMUM | 40 | Aug 7 | 55 | Oct 4 | 40 | Aug 7, 2002 |
| MAXIMUM PEAK FLOW | | | 23,200* | Apr 11 | 23,200* | Apr 11, 2003 |
| MAXIMUM PEAK STAGE | | | 14.50 | Apr 11 | 14.50 | Apr 11, 2003 |
| INSTANTANEOUS LOW FLOW | | | 44* | Oct 7 | 29* | Aug 12, 2002 |
| ANNUAL RUNOFF (CFSM) | 0.68 | | 2.46 | | 1.05 | |
| ANNUAL RUNOFF (INCHES) | 9.22 | | 33.46 | | 14.27 | |
| 10 PERCENT EXCEEDS | 928 | | 3,700 | | 1,200 | |
| 50 PERCENT EXCEEDS | 176 | | 547 | | 184 | |
| 90 PERCENT EXCEEDS | 50 | | 207 | | 63 | |

e Estimated.
 * See REMARKS.

