

03498500 LITTLE RIVER NEAR MARYVILLE, TN

LOCATION.--Lat 35°47'07", long 83°53'04", Blount County, Hydrologic Unit 06010201, on left bank 200 ft above bridge on U.S. Highway 411, 0.8 mi downstream from Crooked Creek, 5.0 mi east of Maryville, and at mile 17.3.

DRAINAGE AREA.--269 mi².

PERIOD OF RECORD.--July 1951 to current year.

GAGE.--Data-collection platform and crest-stage gage. Datum of gage is 850.00 ft above NGVD of 1929.

REMARKS.--Records good except for estimated daily discharges, which are fair. Diurnal fluctuations of flow caused by small mills above station. The town of Maryville diverted an average of about 4.0 ft³/s (2.6 MGD) for municipal supply 100 ft upstream from gage. Periodic observations of water temperature and specific conductance are published in this report as miscellaneous water-quality data.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Feb. 25, 1875, reached a stage of 31 ft, discharge, 50,000 ft³/s, and flood of April 1, 1896, reached a stage of 26 ft, discharge, 36,000 ft³/s, from reports by Tennessee Valley Authority.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

| Date | Time | Discharge (ft ³ /s) | Gage height (ft) | Date | Time | Discharge (ft ³ /s) | Gage height (ft) |
|--------|------|-----------------------------------|---------------------|--------|------|-----------------------------------|---------------------|
| Nov 19 | 1300 | 6,120 | 12.43 | Sep 17 | 1945 | *6,940 | *12.96 |

Minimum discharge, 127 ft³/s, Oct. 26.

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 | 187 | 137 | 669 | 605 | 452 | 379 | 591 | 358 | 725 | 715 | 429 | 228 |
| 2 | 182 | 135 | 566 | 563 | 445 | 787 | 499 | 481 | 485 | 542 | 377 | 213 |
| 3 | 174 | 133 | 497 | 544 | 849 | 1,030 | 472 | 729 | 386 | 596 | 463 | 198 |
| 4 | 171 | 130 | 619 | 565 | 686 | 763 | 463 | 545 | 402 | 553 | 372 | 188 |
| 5 | 167 | 144 | 804 | 1,490 | 634 | 677 | 434 | 483 | 352 | 570 | 340 | 179 |
| 6 | 165 | 1,010 | 729 | 1,790 | 1,930 | 3,250 | 413 | 435 | 309 | 1,720 | 434 | 169 |
| 7 | 163 | 783 | 633 | 1,030 | 2,250 | 2,160 | 407 | 389 | 281 | 785 | 348 | 174 |
| 8 | 160 | 416 | 564 | 828 | 1,560 | 1,250 | 408 | 360 | 268 | 607 | 312 | 886 |
| 9 | 157 | 329 | 508 | 749 | 1,060 | 936 | 404 | 359 | 267 | 483 | 280 | 1,910 |
| 10 | 155 | 277 | 747 | 653 | 881 | 832 | 383 | 348 | 285 | 434 | 261 | 899 |
| 11 | 160 | 248 | 1,070 | 565 | 784 | 718 | 371 | 332 | 250 | 383 | 241 | 614 |
| 12 | 156 | 232 | 808 | 526 | 770 | 659 | 372 | 343 | 235 | 354 | 341 | 499 |
| 13 | 151 | 269 | 698 | 493 | 728 | 592 | 1,130 | 316 | 261 | 336 | 388 | 418 |
| 14 | 148 | 233 | 709 | 460 | 670 | 545 | 988 | 297 | 301 | 342 | 337 | 363 |
| 15 | 161 | 212 | 668 | 446 | 708 | 527 | 814 | 274 | 261 | 325 | 303 | 323 |
| 16 | 162 | 210 | 604 | 413 | 807 | 799 | 736 | 260 | 305 | 279 | 277 | 300 |
| 17 | 148 | 231 | 862 | 400 | 702 | 716 | 653 | 270 | 246 | 262 | 265 | 4,370 |
| 18 | 146 | 238 | 770 | 563 | 657 | 785 | 576 | 284 | 241 | 387 | 252 | 3,390 |
| 19 | 142 | 3,970 | 706 | 837 | 616 | 797 | 511 | 284 | 232 | 286 | 229 | 1,450 |
| 20 | 139 | 2,420 | 620 | 659 | 584 | 706 | 460 | 255 | 210 | 251 | 214 | 864 |
| 21 | 136 | 1,100 | 543 | 584 | 571 | 705 | 428 | 231 | 200 | 232 | 265 | 646 |
| 22 | 134 | 759 | 500 | 531 | 514 | 611 | 398 | 255 | 334 | 217 | 285 | 504 |
| 23 | 132 | 609 | 490 | 483 | 479 | 551 | 376 | 324 | 467 | 244 | 245 | 415 |
| 24 | 131 | 611 | 893 | 452 | 466 | 510 | 357 | 302 | 746 | 219 | 236 | 366 |
| 25 | 130 | 630 | 865 | 544 | 451 | 471 | 340 | 246 | 1,330 | 220 | 342 | 329 |
| 26 | 129 | 528 | 754 | 783 | 434 | 437 | 501 | 237 | 2,300 | 424 | 356 | 305 |
| 27 | 148 | 482 | 665 | 689 | 436 | 415 | 553 | 377 | 1,030 | 2,070 | 268 | 280 |
| 28 | 200 | 895 | 600 | 626 | 406 | 398 | 422 | 287 | 772 | 1,080 | 237 | 373 |
| 29 | 162 | 1,010 | 546 | 568 | 389 | 382 | 388 | 283 | 666 | 678 | 271 | 331 |
| 30 | 148 | 788 | 757 | 539 | --- | 410 | 367 | 296 | 614 | 606 | 320 | 283 |
| 31 | 141 | --- | 666 | 493 | --- | 495 | --- | 966 | --- | 485 | 323 | --- |
| TOTAL | 4,785 | 19,169 | 21,130 | 20,471 | 21,919 | 24,293 | 15,215 | 11,206 | 14,761 | 16,685 | 9,611 | 21,467 |
| MEAN | 154 | 639 | 682 | 660 | 756 | 784 | 507 | 361 | 492 | 538 | 310 | 716 |
| MAX | 200 | 3,970 | 1,070 | 1,790 | 2,250 | 3,250 | 1,130 | 966 | 2,300 | 2,070 | 463 | 4,370 |
| MIN | 129 | 130 | 490 | 400 | 389 | 379 | 340 | 231 | 200 | 217 | 214 | 169 |
| CFSM | 0.57 | 2.38 | 2.53 | 2.45 | 2.81 | 2.91 | 1.89 | 1.34 | 1.83 | 2.00 | 1.15 | 2.66 |
| IN. | 0.66 | 2.65 | 2.92 | 2.83 | 3.03 | 3.36 | 2.10 | 1.55 | 2.04 | 2.31 | 1.33 | 2.97 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2004, BY WATER YEAR (WY)

| | 194 | 345 | 610 | 799 | 946 | 1,000 | 754 | 518 | 378 | 329 | 254 | 188 |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MAX | 830 | 1,160 | 1,679 | 1,792 | 2,254 | 2,517 | 1,701 | 1,782 | 1,261 | 1,391 | 867 | 1,019 |
| (WY) | (1973) | (1958) | (1962) | (1974) | (1957) | (1994) | (1994) | (1984) | (1989) | (1971) | (1971) | (1989) |
| MIN | 50.7 | 65.4 | 103 | 121 | 308 | 385 | 224 | 208 | 86.1 | 100 | 78.1 | 55.6 |
| (WY) | (1988) | (1988) | (1966) | (1981) | (1954) | (1988) | (1986) | (1986) | (1988) | (1952) | (1987) | (1954) |

03498500 LITTLE RIVER NEAR MARYVILLE, TN—Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1951 - 2004 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 267,694 | | 200,712 | | | |
| ANNUAL MEAN | 733 | | 548 | | 524 | |
| HIGHEST ANNUAL MEAN | | | | | 862 1994 | |
| LOWEST ANNUAL MEAN | | | | | 220 1988 | |
| HIGHEST DAILY MEAN | 19,000 | May 6 | 4,370 | Sep 17 | 23,100 | Mar 28, 1994 |
| LOWEST DAILY MEAN | 129 | Oct 26 | 129 | Oct 26 | 43 | Oct 19, 1987 |
| ANNUAL SEVEN-DAY MINIMUM | 133 | Oct 20 | 133 | Oct 20 | 45 | Oct 14, 1987 |
| MAXIMUM PEAK FLOW | | | 6,940 | Sep 17 | a42,100 | Mar 28, 1994 |
| MAXIMUM PEAK STAGE | | | 12.96 | Sep 17 | 27.95 | Mar 28, 1994 |
| INSTANTANEOUS LOW FLOW | | | 127 | Oct 26 | 32 | Aug 27, 1956 |
| ANNUAL RUNOFF (CFSM) | 2.73 | | 2.04 | | 1.95 | |
| ANNUAL RUNOFF (INCHES) | 37.02 | | 27.76 | | 26.49 | |
| 10 PERCENT EXCEEDS | 1,260 | | 870 | | 1,030 | |
| 50 PERCENT EXCEEDS | 440 | | 434 | | 319 | |
| 90 PERCENT EXCEEDS | 169 | | 181 | | 101 | |

a From rating curve extended above 14,800 ft³/s on basis of a contracted opening measurement and road overflow computations.

