

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC

LOCATION.--Lat 36°23'36", long 81°24'25", Ashe County, Hydrologic Unit 05050001, on right bank 600 ft upstream from bridge on State Highways 16 and 88, 0.2 mi downstream of Bear Creek, and 4 mi southeast of Jefferson.

DRAINAGE AREA.--205 mi².

PERIOD OF RECORD.--October 1924 to current year. Monthly discharge only for some periods, published in WSP 1305.

REVISED RECORDS.--WSP 1275: 1925-26(M), 1928-30(M), 1931-32, 1933-35(M), 1941-42(m), 1944(m). WDR NC-81-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 2,657.04 ft above NGVD of 1929. Prior to Oct. 14, 1934, nonrecording gage on bridge 400 ft downstream at same datum. Oct. 14, 1934, to Mar. 25, 1935, nonrecording gage at present site and datum. Satellite telemetry at station.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Maximum discharge for period of record, from rating curve extended above 14,000 ft³/s on basis of slope-area measurement of peak flow. Minimum discharge for period of record result of freezeup.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 15, 1916, reached a stage of 18.0 ft, from floodmarks witnessed by local resident; discharge, 35,200 ft³/s.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| 1 | 813 | 449 | e650 | 440 | 420 | 433 | 661 | 546 | 334 | 344 | 341 | 421 |
| 2 | 729 | 432 | 568 | 427 | 402 | 390 | 1,160 | 495 | 740 | 333 | 326 | 327 |
| 3 | 674 | 423 | 499 | 417 | 452 | 396 | 1,180 | 471 | 718 | 445 | 306 | 295 |
| 4 | 639 | 497 | 472 | 412 | 538 | 393 | 934 | 450 | 551 | 353 | 304 | 272 |
| 5 | 598 | 596 | 453 | 402 | 455 | 484 | 795 | 438 | 461 | 344 | 297 | 262 |
| 6 | 570 | 478 | 449 | 395 | 436 | 665 | 705 | 438 | 426 | 335 | 296 | 255 |
| 7 | 547 | 449 | 494 | 387 | 424 | 537 | 654 | 424 | 589 | 518 | 326 | 248 |
| 8 | 526 | 433 | 465 | 399 | 423 | 557 | 707 | 411 | 444 | 1,190 | 351 | 237 |
| 9 | 511 | 415 | 477 | 396 | 434 | 589 | 804 | 398 | 467 | 537 | 376 | 229 |
| 10 | 505 | 401 | 717 | 375 | 449 | 501 | 660 | 402 | 592 | 424 | 443 | 223 |
| 11 | 491 | 397 | 587 | 366 | 438 | 471 | 604 | 453 | 588 | 413 | 355 | 223 |
| 12 | 479 | 509 | 555 | 362 | 408 | 466 | 578 | 417 | 496 | 499 | 308 | 220 |
| 13 | 736 | 711 | 506 | 378 | 402 | 453 | 628 | 391 | 713 | 444 | 305 | 217 |
| 14 | 622 | 516 | 476 | 2,550 | 513 | 465 | 815 | 407 | 826 | 512 | 301 | 211 |
| 15 | 522 | 466 | 451 | 1,160 | 515 | 476 | 678 | 518 | 602 | 538 | 286 | 207 |
| 16 | 479 | 447 | 450 | 770 | 460 | 451 | 597 | 474 | 511 | 1,320 | 297 | 204 |
| 17 | 455 | 430 | 436 | 650 | 440 | 506 | 558 | 412 | 459 | 819 | 270 | 206 |
| 18 | 441 | e466 | 417 | 573 | 410 | 473 | 536 | 391 | 423 | 583 | 432 | 208 |
| 19 | 458 | 408 | 411 | e540 | 392 | 490 | 516 | 381 | 416 | 709 | 556 | 201 |
| 20 | 503 | 402 | e406 | e505 | 389 | 464 | 504 | 410 | 531 | 733 | 380 | 197 |
| 21 | 457 | 392 | e402 | 496 | 413 | 440 | 483 | 424 | 451 | 630 | 325 | 192 |
| 22 | 442 | e429 | e398 | 486 | 421 | 423 | 493 | 376 | 409 | 522 | 293 | 189 |
| 23 | 440 | 414 | 1,140 | 461 | 389 | 671 | 579 | 376 | 379 | 466 | 277 | 191 |
| 24 | 451 | 694 | 1,200 | e452 | 413 | 798 | 516 | 394 | 364 | 426 | 270 | 192 |
| 25 | 454 | 1,230 | 711 | e448 | 448 | 581 | 499 | 358 | 352 | 396 | 263 | 201 |
| 26 | 425 | 727 | 600 | e438 | 403 | 529 | 479 | 349 | 345 | 373 | 256 | 215 |
| 27 | 427 | 597 | 548 | 427 | 385 | 505 | 479 | 340 | 342 | 356 | 251 | 232 |
| 28 | 494 | 597 | 498 | 402 | 433 | 1,450 | 470 | 336 | 343 | 360 | 254 | 230 |
| 29 | 530 | 541 | 480 | 399 | --- | 1,310 | 508 | 329 | 356 | 390 | 251 | 206 |
| 30 | 524 | e562 | 470 | 433 | --- | 900 | 683 | 324 | 366 | 401 | 380 | 202 |
| 31 | 482 | --- | 455 | 441 | --- | 741 | --- | 319 | --- | 361 | 853 | --- |
| TOTAL | 16,424 | 15,508 | 16,841 | 16,787 | 12,105 | 18,008 | 19,463 | 12,652 | 14,594 | 16,074 | 10,529 | 6,913 |
| MEAN | 530 | 517 | 543 | 542 | 432 | 581 | 649 | 408 | 486 | 519 | 340 | 230 |
| MAX | 813 | 1,230 | 1,200 | 2,550 | 538 | 1,450 | 1,180 | 546 | 826 | 1,320 | 853 | 421 |
| MIN | 425 | 392 | 398 | 362 | 385 | 390 | 470 | 319 | 334 | 333 | 251 | 189 |
| CFSM | 2.58 | 2.52 | 2.65 | 2.64 | 2.11 | 2.83 | 3.16 | 1.99 | 2.37 | 2.53 | 1.66 | 1.12 |
| IN. | 2.98 | 2.81 | 3.06 | 3.05 | 2.20 | 3.27 | 3.53 | 2.30 | 2.65 | 2.92 | 1.91 | 1.25 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1925 - 2005, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| MEAN | 354 | 404 | 406 | 467 | 512 | 582 | 563 | 453 | 391 | 334 | 351 | 336 |
| MAX | 901 | 1,889 | 797 | 1,346 | 1,173 | 1,316 | 1,350 | 1,052 | 1,036 | 904 | 2,613 | 1,556 |
| (WY) | (1991) | (1978) | (1958) | (1995) | (1998) | (1979) | (1983) | (1973) | (1992) | (1941) | (1940) | (2004) |
| MIN | 111 | 124 | 146 | 140 | 188 | 222 | 236 | 220 | 158 | 111 | 93.7 | 99.5 |
| (WY) | (2001) | (1932) | (1934) | (1940) | (2001) | (1988) | (1986) | (2001) | (1988) | (1930) | (1925) | (1954) |

03161000 SOUTH FORK NEW RIVER NEAR JEFFERSON, NC—Continued

| SUMMARY STATISTICS | FOR 2004 CALENDAR YEAR | | FOR 2005 WATER YEAR | | WATER YEARS 1925 - 2005 | |
|--------------------------|------------------------|--------|---------------------|--------|-------------------------|--------------|
| ANNUAL TOTAL | 187,777 | | 175,898 | | 429 | |
| ANNUAL MEAN | 513 | | 482 | | 215 | |
| HIGHEST ANNUAL MEAN | | | | | 669 | 1949 |
| LOWEST ANNUAL MEAN | | | | | 215 | 2002 |
| HIGHEST DAILY MEAN | 10,500 | Sep 8 | 2,550 | Jan 14 | 27,700 | Aug 14, 1940 |
| LOWEST DAILY MEAN | 173 | Aug 20 | 189 | Sep 22 | 65 | Sep 9, 1925 |
| ANNUAL SEVEN-DAY MINIMUM | 184 | Aug 17 | 195 | Sep 19 | 72 | Aug 21, 1925 |
| MAXIMUM PEAK FLOW | | | 4,050 | Jan 14 | 52,800* | Aug 14, 1940 |
| MAXIMUM PEAK STAGE | | | 6.46 | Jan 14 | 22.50 | Aug 14, 1940 |
| INSTANTANEOUS LOW FLOW | | | 185 | Sep 22 | 52* | Dec 24, 1943 |
| ANNUAL RUNOFF (CFSM) | 2.50 | | 2.35 | | 2.09 | |
| ANNUAL RUNOFF (INCHES) | 34.07 | | 31.92 | | 28.40 | |
| 10 PERCENT EXCEEDS | 673 | | 698 | | 705 | |
| 50 PERCENT EXCEEDS | 415 | | 447 | | 345 | |
| 90 PERCENT EXCEEDS | 250 | | 290 | | 168 | |

* See REMARKS.

e Estimated.

