

**BRODHEAD CREEK BASIN**

**01442500 BRODHEAD CREEK AT MINISINK HILLS, PA**

**LOCATION.**--Lat 40°59'55", long 75°08'35", Monroe County, Hydrologic Unit 02040104, on left bank at end of township route 646 at Minisink Hills, 500 ft upstream from Marshall Creek, 0.8 mi upstream from mouth, and 3.0 mi southeast of East Stroudsburg.

**DRAINAGE AREA.**--259 mi<sup>2</sup>.

**PERIOD OF RECORD.**--November 1950 to current year.

**REVISED RECORDS.**--WSP 1232: 1951(P).

**GAGE.**--Water-stage recorder and crest-stage gage. Datum of gage is 301.84 ft above sea level. Prior to Aug. 19, 1955, water-stage recorder, and Aug. 23 to Nov. 24, 1955, nonrecording gage at site about 1,300 ft upstream at datum 2.19 ft higher. Nov. 25, 1955, to July 24, 1956, nonrecording gage at site 40 ft upstream at present datum.

**REMARKS.**--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. Satellite telemetry at station.

**PEAK DISCHARGES FOR CURRENT YEAR.**--Peak discharges greater than base discharge of 4,300 ft<sup>3</sup>/s and maximum (\*):

| Date    | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) | Date                             | Time | Discharge<br>ft <sup>3</sup> /s | Gage Height<br>(ft) |
|---------|------|---------------------------------|---------------------|----------------------------------|------|---------------------------------|---------------------|
| Feb. 28 | 0800 | *3,400                          | *5.32               | (No peaks above base discharge.) |      |                                 |                     |

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB   | MAR   | APR   | MAY   | JUN   | JUL  | AUG  | SEP  |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|
| 1     | 463   | 219   | 417   | 353   | e230  | 1750  | 512   | 540   | 408   | 329  | 712  | 136  |
| 2     | 347   | 273   | 387   | 339   | e220  | 1450  | 490   | 534   | 381   | 293  | 695  | 137  |
| 3     | 305   | 895   | 379   | 341   | e220  | 1180  | 485   | 486   | 364   | 272  | 555  | 158  |
| 4     | 482   | 526   | 374   | 350   | e210  | 997   | 745   | 454   | 332   | 271  | 671  | 274  |
| 5     | 567   | 442   | 359   | 382   | e200  | 894   | 693   | 437   | 329   | 259  | 477  | 173  |
| 6     | 442   | 410   | 416   | 318   | e190  | 815   | 578   | 418   | 924   | 234  | 411  | 138  |
| 7     | 384   | 383   | 426   | 301   | e190  | 744   | 533   | 395   | 897   | 216  | 567  | 125  |
| 8     | 343   | 358   | 363   | 288   | e180  | 717   | 514   | 380   | 598   | 201  | 440  | 120  |
| 9     | 333   | 340   | 337   | 280   | e180  | 694   | 689   | 357   | 484   | 191  | 365  | 117  |
| 10    | 435   | 330   | 333   | 495   | e180  | 657   | 635   | 362   | 419   | 186  | 324  | 115  |
| 11    | 482   | 316   | 347   | 915   | e180  | 797   | 596   | 591   | 387   | 173  | 306  | 116  |
| 12    | 375   | 294   | 312   | 573   | e170  | 2110  | 579   | 446   | 815   | 159  | 339  | 112  |
| 13    | 340   | 283   | 300   | 506   | e170  | 1380  | 539   | 428   | 1430  | 151  | 301  | 337  |
| 14    | 390   | 274   | 419   | 427   | 381   | 1080  | 514   | 539   | 859   | 146  | 280  | 187  |
| 15    | 349   | 265   | 723   | e380  | 528   | 938   | 498   | 435   | 755   | 185  | 260  | 242  |
| 16    | 317   | 251   | 585   | e350  | 426   | 845   | 493   | 386   | 675   | 435  | 235  | 187  |
| 17    | 307   | 236   | 515   | e310  | 406   | 1520  | 489   | 358   | 585   | 357  | 209  | 153  |
| 18    | 301   | 224   | 474   | e300  | 381   | 1100  | 694   | 362   | 551   | 257  | 200  | 132  |
| 19    | 276   | 220   | 445   | e310  | 407   | 926   | 601   | 573   | 534   | 208  | 202  | 139  |
| 20    | 335   | 222   | 499   | e300  | 369   | 843   | 539   | 622   | 475   | 195  | 188  | 193  |
| 21    | 340   | 229   | 945   | e290  | 352   | 779   | 829   | 574   | 449   | 171  | 173  | 149  |
| 22    | 305   | 219   | 675   | e290  | 344   | 726   | 1510  | 533   | 929   | 170  | 163  | 127  |
| 23    | 354   | 211   | 585   | e280  | 374   | 663   | 1520  | 573   | 559   | 159  | 165  | 117  |
| 24    | 319   | 213   | 540   | e270  | 433   | 615   | 1180  | 995   | 460   | 147  | 202  | 120  |
| 25    | 286   | 226   | 486   | e270  | 590   | 578   | 975   | 851   | 415   | 141  | 182  | 117  |
| 26    | 270   | 283   | 464   | e250  | 786   | 560   | 857   | 689   | 432   | 151  | 158  | 131  |
| 27    | 259   | 1090  | 448   | e240  | 904   | 520   | 775   | 599   | 426   | 564  | 148  | 138  |
| 28    | 246   | 668   | 421   | e230  | 2690  | 893   | 715   | 554   | 457   | 397  | 153  | 121  |
| 29    | 237   | 522   | 400   | e230  | 2270  | 716   | 649   | 506   | 386   | 281  | 152  | 111  |
| 30    | 231   | 464   | 382   | e250  | ---   | 602   | 592   | 467   | 367   | 464  | 145  | 104  |
| 31    | 222   | ---   | 369   | e240  | ---   | 550   | ---   | 433   | ---   | 480  | 139  | ---  |
| TOTAL | 10642 | 10886 | 14125 | 10658 | 14161 | 28639 | 21018 | 15877 | 17082 | 7843 | 9517 | 4526 |
| MEAN  | 343   | 363   | 456   | 344   | 488   | 924   | 701   | 512   | 569   | 253  | 307  | 151  |
| MAX   | 567   | 1090  | 945   | 915   | 2690  | 2110  | 1520  | 995   | 1430  | 564  | 712  | 337  |
| MIN   | 222   | 211   | 300   | 230   | 170   | 520   | 485   | 357   | 329   | 141  | 139  | 104  |
| CFSM  | 1.33  | 1.40  | 1.76  | 1.33  | 1.89  | 3.57  | 2.71  | 1.98  | 2.20  | .98  | 1.19 | .58  |
| IN.   | 1.53  | 1.56  | 2.03  | 1.53  | 2.03  | 4.11  | 3.02  | 2.28  | 2.45  | 1.13 | 1.37 | .65  |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1951 - 2000, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 315  | 548  | 729  | 634  | 674  | 985  | 993  | 704  | 416  | 256  | 242  | 236  |
| MAX  | 1560 | 1634 | 2321 | 2051 | 1498 | 2108 | 2293 | 1619 | 1876 | 923  | 2505 | 1649 |
| (WY) | 1956 | 1973 | 1997 | 1996 | 1951 | 1977 | 1983 | 1989 | 1972 | 1969 | 1955 | 1987 |
| MIN  | 54.4 | 68.1 | 83.4 | 50.6 | 196  | 387  | 312  | 268  | 119  | 58.1 | 46.4 | 40.8 |
| (WY) | 1964 | 1965 | 1981 | 1981 | 1980 | 1985 | 1985 | 1962 | 1962 | 1999 | 1957 | 1964 |

e Estimated.

**BRODHEAD CREEK BASIN**

**01442500 BRODHEAD CREEK AT MINISINK HILLS, PA--Continued**

| SUMMARY STATISTICS       | FOR 1999 CALENDAR YEAR |         | FOR 2000 WATER YEAR |        | WATER YEARS 1951 - 2000 |             |
|--------------------------|------------------------|---------|---------------------|--------|-------------------------|-------------|
| ANNUAL TOTAL             | 150709                 |         | 164974              |        |                         |             |
| ANNUAL MEAN              | 413                    |         | 451                 |        | 560                     |             |
| HIGHEST ANNUAL MEAN      |                        |         |                     |        | 957                     | 1952        |
| LOWEST ANNUAL MEAN       |                        |         |                     |        | 238                     | 1965        |
| HIGHEST DAILY MEAN       | 4770                   | Jan 24  | 2690                | Feb 28 | 30500                   | Aug 19 1955 |
| LOWEST DAILY MEAN        | 39                     | Aug 4-7 | 104                 | Sep 30 | 30                      | Sep 26 1964 |
| ANNUAL SEVEN-DAY MINIMUM | 40                     | Aug 4   | 120                 | Sep 24 | 33                      | Sep 6 1964  |
| INSTANTANEOUS PEAK FLOW  |                        |         | 3400                | Feb 28 | <b>a</b> 66800          | Aug 19 1955 |
| INSTANTANEOUS PEAK STAGE |                        |         | 5.32                | Feb 28 | <b>b</b> 27.00          | Aug 19 1955 |
| INSTANTANEOUS LOW FLOW   |                        |         |                     |        | 29                      | Sep 27 1964 |
| ANNUAL RUNOFF (CFSM)     | 1.59                   |         | 1.74                |        | 2.16                    |             |
| ANNUAL RUNOFF (INCHES)   | 21.65                  |         | 23.70               |        | 29.38                   |             |
| 10 PERCENT EXCEEDS       | 773                    |         | 815                 |        | 1200                    |             |
| 50 PERCENT EXCEEDS       | 315                    |         | 380                 |        | 350                     |             |
| 90 PERCENT EXCEEDS       | 54                     |         | 162                 |        | 93                      |             |

- a** From rating curve extended above 4,600 ft<sup>3</sup>/s on basis of computation of flow-over-dam at gage height 14.43 ft and slope-area measurement of peak flow.
- b** From floodmark, at site about 1,300 ft upstream at datum 2.19 ft higher.

