

EAST MAHANTANGO CREEK BASIN

01555500 EAST MAHANTANGO CREEK NEAR DALMATIA, PA

LOCATION.--Lat 40°36'40", long 76°54'44", Northumberland County, Hydrologic Unit 02050301, on right bank at bridge on SR 3017, 2.0 mi upstream from mouth, and 3.2 mi south of Dalmatia.

DRAINAGE AREA.--162 mi².

PERIOD OF RECORD.--October 1929 to current year. Prior to October 1945, published as Mahantango Creek East near Dalmatia.

REVISED RECORDS.--WSP 891: 1933(M). WSP 1302: 1930(M), 1938(M).

GAGE.--Water-stage recorder. Datum of gage is 401.22 ft above National Geodetic Vertical Datum of 1929. Oct. 1, 1929, to Feb. 11, 1930, nonrecording gage, and Feb. 12, 1930, to Nov. 18, 1973, water-stage recorder at present site at datum 0.72 ft lower. Nov. 19, 1973, to June 18, 1974, nonrecording gage at site 2 mi upstream at different datum.

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

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 1,900 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|----------|------|---------------------------------|---------------------|
| Dec. 14 | 1830 | 1,960 | 5.54 | June 21 | 1545 | 1,980 | 5.58 |
| Jan. 2 | 0700 | 2,180 | 5.85 | Aug. 11 | 2200 | 2,920 | 6.78 |
| Mar. 21 | 0500 | 2,860 | 6.71 | Sept. 23 | 1530 | *4,550 | *8.56 |

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 | 115 | 426 | 184 | 507 | e160 | 193 | 503 | 149 | 375 | 189 | 140 | 136 |
| 2 | 86 | 347 | 158 | 1900 | e175 | 204 | 491 | 149 | 440 | 166 | 978 | 177 |
| 3 | 70 | 267 | 132 | 1240 | e190 | 617 | 434 | 144 | 361 | 150 | 446 | 220 |
| 4 | 59 | 213 | e90 | 909 | e250 | 329 | 391 | 131 | 537 | 134 | 690 | 379 |
| 5 | 51 | 179 | e95 | 656 | e340 | e250 | 412 | 126 | 491 | 123 | 1000 | 290 |
| 6 | 46 | 228 | e88 | 530 | e210 | 626 | 364 | 122 | 408 | 112 | 1550 | 212 |
| 7 | 42 | 227 | e82 | 451 | e200 | e350 | 329 | 122 | 582 | 273 | 1120 | 173 |
| 8 | 37 | 199 | e80 | 405 | e120 | e220 | 333 | 149 | 1080 | 279 | 710 | 146 |
| 9 | 35 | 188 | e85 | 430 | e90 | e400 | 344 | 139 | 738 | 175 | 517 | 130 |
| 10 | 34 | 171 | e80 | 586 | e95 | 581 | 367 | 127 | 549 | 161 | 444 | 116 |
| 11 | 143 | 165 | e95 | 496 | e85 | 314 | 572 | 126 | 435 | 167 | 1090 | 104 |
| 12 | 572 | 182 | e800 | 389 | e80 | 268 | 1220 | 119 | 423 | 142 | 1770 | 96 |
| 13 | 384 | 399 | 892 | 325 | e75 | 505 | 875 | 113 | 386 | 116 | 1090 | 106 |
| 14 | 242 | 391 | 1630 | e270 | e80 | 759 | 633 | 106 | 321 | 100 | 688 | 130 |
| 15 | 171 | 324 | 1470 | e230 | e90 | 724 | 508 | 100 | 272 | 87 | 499 | 106 |
| 16 | 349 | 272 | 992 | e190 | e80 | 848 | 433 | 102 | 228 | 82 | 444 | 116 |
| 17 | 1030 | 503 | 658 | e160 | e70 | 982 | 371 | 117 | 200 | 74 | 455 | 114 |
| 18 | 554 | 1260 | 487 | e130 | e75 | 1110 | 327 | 109 | 226 | 67 | 355 | 92 |
| 19 | 350 | 938 | 409 | e140 | e80 | 1070 | 302 | 100 | 219 | 71 | 282 | 167 |
| 20 | 256 | 605 | 494 | e150 | e85 | 1150 | 266 | 91 | 207 | 70 | 237 | 312 |
| 21 | 195 | 449 | 519 | e140 | e80 | 2440 | 246 | 94 | 1480 | 72 | 204 | 228 |
| 22 | 153 | 423 | 437 | e130 | e90 | 1520 | 300 | 94 | 1380 | 435 | 181 | 181 |
| 23 | 129 | 447 | 388 | e120 | e660 | 1080 | 253 | 88 | 1030 | 315 | 184 | 2660 |
| 24 | 112 | 386 | 335 | e110 | e950 | 799 | 219 | 102 | 711 | 792 | 150 | 1560 |
| 25 | 102 | 344 | 331 | e120 | 452 | 623 | 202 | 134 | 522 | 413 | 133 | 719 |
| 26 | 188 | 300 | 317 | e135 | 329 | 530 | 202 | 141 | 419 | 262 | 124 | 457 |
| 27 | 207 | 278 | 262 | e125 | 248 | 492 | 205 | 186 | 347 | 198 | 124 | 336 |
| 28 | 169 | 243 | 232 | e120 | 202 | 405 | 182 | 169 | 290 | 188 | 118 | 353 |
| 29 | 149 | 215 | 227 | e130 | --- | 380 | 172 | 198 | 243 | 157 | 111 | 266 |
| 30 | 208 | 204 | 212 | e140 | --- | 461 | 163 | 195 | 212 | 123 | 169 | 207 |
| 31 | 429 | --- | 210 | e150 | --- | 506 | --- | 178 | --- | 107 | 179 | --- |
| TOTAL | 6667 | 10773 | 12471 | 11514 | 5641 | 20736 | 11619 | 4020 | 15112 | 5800 | 16182 | 10289 |
| MEAN | 215 | 359 | 402 | 371 | 201 | 669 | 387 | 130 | 504 | 187 | 522 | 343 |
| MAX | 1030 | 1260 | 1630 | 1900 | 950 | 2440 | 1220 | 198 | 1480 | 792 | 1770 | 2660 |
| MIN | 34 | 165 | 80 | 110 | 70 | 193 | 163 | 88 | 200 | 67 | 111 | 92 |
| CFSM | 1.33 | 2.22 | 2.48 | 2.29 | 1.24 | 4.13 | 2.39 | 0.80 | 3.11 | 1.15 | 3.22 | 2.12 |
| IN. | 1.53 | 2.47 | 2.86 | 2.64 | 1.30 | 4.76 | 2.67 | 0.92 | 3.47 | 1.33 | 3.72 | 2.36 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2003, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 126 | 208 | 282 | 277 | 305 | 428 | 366 | 276 | 179 | 99.7 | 80.8 | 100 |
| MAX | 1025 | 553 | 852 | 1259 | 831 | 1212 | 1160 | 986 | 2361 | 504 | 585 | 1112 |
| (WY) | 1977 | 1951 | 1997 | 1996 | 1981 | 1994 | 1993 | 1989 | 1972 | 1947 | 1933 | 1975 |
| MIN | 5.14 | 8.65 | 14.0 | 12.4 | 54.3 | 111 | 126 | 67.5 | 29.7 | 13.5 | 9.36 | 3.98 |
| (WY) | 1931 | 1931 | 1931 | 1981 | 1934 | 1931 | 1965 | 1941 | 1965 | 1965 | 1957 | 1932 |

e Estimated.

EAST MAHANTANGO CREEK BASIN

01555500 EAST MAHANTANGO CREEK NEAR DALMATIA, PA--Continued

| SUMMARY STATISTICS | FOR 2002 CALENDAR YEAR | | FOR 2003 WATER YEAR | | WATER YEARS 1930 - 2003 | |
|--------------------------|------------------------|--------|---------------------|----------|-------------------------|-------------------------|
| ANNUAL TOTAL | 63504.7 | | 130824 | | | |
| ANNUAL MEAN | 174 | | 358 | | 227 | |
| HIGHEST ANNUAL MEAN | | | | | 454 | 1972 |
| LOWEST ANNUAL MEAN | | | | | 70.7 | 1931 |
| HIGHEST DAILY MEAN | 1630 | Dec 14 | 2660 | Sep 23 | 39000 | Jun 22 1972 |
| LOWEST DAILY MEAN | 6.0 | Sep 14 | 34 | Oct 10 | 1.5 | Sep 21 1932 |
| ANNUAL SEVEN-DAY MINIMUM | 7.3 | Sep 9 | 43 | Oct 4 | 1.7 | Sep 16 1932 |
| MAXIMUM PEAK FLOW | | | 4550 | Sep 23 | a 69900 | Jun 22 1972 |
| MAXIMUM PEAK STAGE | | | 8.56 | Sep 23 | b 26.62 | Jun 22 1972 |
| INSTANTANEOUS LOW FLOW | | | 32 | Oct 9,10 | 1.3 | Oct 7 1957 ^c |
| ANNUAL RUNOFF (CFSM) | 1.07 | | 2.21 | | 1.40 | |
| ANNUAL RUNOFF (INCHES) | 14.58 | | 30.04 | | 19.02 | |
| 10 PERCENT EXCEEDS | 396 | | 795 | | 493 | |
| 50 PERCENT EXCEEDS | 110 | | 227 | | 120 | |
| 90 PERCENT EXCEEDS | 14 | | 91 | | 23 | |

a From rating curve extended above 5,000 ft³/s on basis of slope-area measurement of peak flow.

b From floodmark in gage.

c Also Nov. 3, 1964.

