

KINZUA CREEK BASIN

03011800 KINZUA CREEK NEAR GUFFEY, PA

LOCATION.--Lat 41°45'59", long 78°43'08", McKean County, Hydrologic Unit 05010001, in Allegheny National Forest, on right bank 130 ft upstream from bridge on U.S. Highway 219, 0.2 mi upstream from Wintergreen Run, 1.0 mi downstream from Pine Run, and 1.5 mi west of Guffey.

DRAINAGE AREA.--46.4 mi².

PERIOD OF RECORD.--Occasional low-flow measurements, published as "at Tallyho," water years 1959-65. October 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,540 ft above sea level, from topographic map.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Several measurements of water temperature were made during the year. U.S. Army Corps of Engineers satellite telemetry at station.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than a base discharge of 500 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|--|------|---------------------------------|---------------------|
| Feb. 27 | 2300 | *528 | *4.68 | No other peak greater than 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 | 27 | 7.8 | 54 | e40 | e41 | 205 | 41 | 60 | 45 | 24 | 14 | 7.9 |
| 2 | 13 | 42 | 57 | e43 | e39 | 192 | 42 | 82 | 63 | 22 | 12 | 7.9 |
| 3 | 9.6 | 110 | 48 | 88 | e38 | 147 | 71 | 64 | 64 | 21 | 12 | 7.9 |
| 4 | 8.1 | 55 | 72 | 291 | e38 | 126 | 304 | 54 | 42 | 24 | 12 | 7.9 |
| 5 | 7.8 | 39 | 72 | 192 | e36 | 111 | 225 | 49 | 38 | 20 | 11 | 7.4 |
| 6 | 7.2 | 31 | 89 | 149 | e34 | 96 | 186 | 45 | 54 | 17 | 16 | 7.0 |
| 7 | 6.9 | 24 | 75 | 128 | e32 | 85 | 163 | 41 | 43 | 15 | 50 | 6.8 |
| 8 | 6.7 | 20 | 62 | 112 | e31 | 78 | 292 | 39 | 33 | 14 | 27 | 6.9 |
| 9 | 8.1 | 18 | 56 | 100 | e31 | 75 | 265 | 36 | 27 | 14 | 16 | 7.1 |
| 10 | 8.1 | 17 | 72 | 105 | e33 | 71 | 211 | 52 | 24 | 23 | 13 | 7.2 |
| 11 | 7.8 | 18 | 81 | 123 | e39 | 63 | 184 | 57 | 23 | 16 | 11 | 9.4 |
| 12 | 7.1 | 17 | 65 | 104 | e43 | 78 | 160 | 42 | 40 | 13 | 11 | 9.3 |
| 13 | 8.5 | 16 | 62 | 91 | e44 | 67 | 128 | 39 | 41 | 13 | 10 | 14 |
| 14 | 27 | 15 | 94 | e71 | e44 | 62 | 111 | 40 | 34 | 12 | 9.5 | 9.9 |
| 15 | 18 | 14 | 139 | e64 | e44 | 56 | 100 | 32 | 34 | 16 | 9.5 | 18 |
| 16 | 12 | 13 | 124 | e55 | e45 | 58 | 89 | 28 | 48 | 20 | 27 | 22 |
| 17 | 10 | 12 | 106 | e50 | e45 | 104 | 82 | 26 | 63 | 14 | 13 | 14 |
| 18 | 9.8 | 11 | 93 | e48 | e45 | 75 | 77 | 69 | 76 | 13 | 11 | 11 |
| 19 | 8.6 | 11 | 83 | e47 | e43 | 67 | 69 | 255 | 90 | 11 | 9.8 | 9.6 |
| 20 | 8.3 | 13 | 97 | e45 | e42 | 64 | 66 | 159 | 52 | 11 | 9.3 | 8.9 |
| 21 | 8.0 | 14 | 112 | e43 | e41 | 65 | 178 | 128 | 85 | 11 | 8.5 | 12 |
| 22 | 7.9 | 13 | e80 | e41 | e41 | 67 | 207 | 111 | 129 | 11 | 8.3 | 11 |
| 23 | 8.6 | 12 | e71 | e39 | e50 | 61 | 175 | 102 | 77 | 9.9 | 11 | 10 |
| 24 | 12 | 12 | e67 | e38 | e83 | 55 | 148 | 146 | 60 | 9.5 | 11 | 15 |
| 25 | 12 | 12 | e62 | e36 | e140 | 54 | 126 | 134 | 52 | 9.5 | 9.2 | 12 |
| 26 | 10 | 143 | e58 | e35 | e250 | 51 | 110 | 96 | 47 | 9.4 | 8.4 | 12 |
| 27 | 9.2 | 181 | e52 | e34 | 400 | 50 | 98 | 81 | 47 | 9.1 | 8.3 | 13 |
| 28 | 8.1 | 98 | e47 | e34 | 392 | 55 | 87 | 73 | 38 | 11 | 8.3 | 11 |
| 29 | 7.8 | 77 | e44 | e35 | 244 | 53 | 77 | 66 | 32 | 13 | 8.1 | 9.8 |
| 30 | 7.8 | 63 | e40 | e39 | --- | 52 | 67 | 56 | 28 | 12 | 7.9 | 9.4 |
| 31 | 7.8 | --- | e37 | e42 | --- | 47 | --- | 49 | --- | 12 | 7.9 | --- |
| TOTAL | 318.8 | 1128.8 | 2271 | 2362 | 2428 | 2490 | 4139 | 2311 | 1529 | 450.4 | 401.0 | 315.3 |
| MEAN | 10.3 | 37.6 | 73.3 | 76.2 | 83.7 | 80.3 | 138 | 74.5 | 51.0 | 14.5 | 12.9 | 10.5 |
| MAX | 27 | 181 | 139 | 291 | 400 | 205 | 304 | 255 | 129 | 24 | 50 | 22 |
| MIN | 6.7 | 7.8 | 37 | 34 | 31 | 47 | 41 | 26 | 23 | 9.1 | 7.9 | 6.8 |
| CFSM | .22 | .81 | 1.58 | 1.64 | 1.80 | 1.73 | 2.97 | 1.61 | 1.10 | .31 | .28 | .23 |
| IN. | .26 | .90 | 1.82 | 1.89 | 1.95 | 2.00 | 3.32 | 1.85 | 1.23 | .36 | .32 | .25 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1966 - 2000, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 48.3 | 85.0 | 104 | 81.9 | 89.6 | 135 | 137 | 84.6 | 70.6 | 33.5 | 29.3 | 37.7 |
| MAX | 137 | 166 | 281 | 166 | 251 | 269 | 289 | 182 | 272 | 99.0 | 126 | 154 |
| (WY) | 1991 | 1971 | 1984 | 1998 | 1976 | 1979 | 1994 | 1989 | 1989 | 1992 | 1980 | 1977 |
| MIN | 6.69 | 15.3 | 32.6 | 19.8 | 18.4 | 61.6 | 67.9 | 23.8 | 9.49 | 6.29 | 4.96 | 5.16 |
| (WY) | 1992 | 1992 | 1990 | 1981 | 1987 | 1970 | 1976 | 1985 | 1991 | 1991 | 1991 | 1991 |

e Estimated.

KINZUA CREEK BASIN

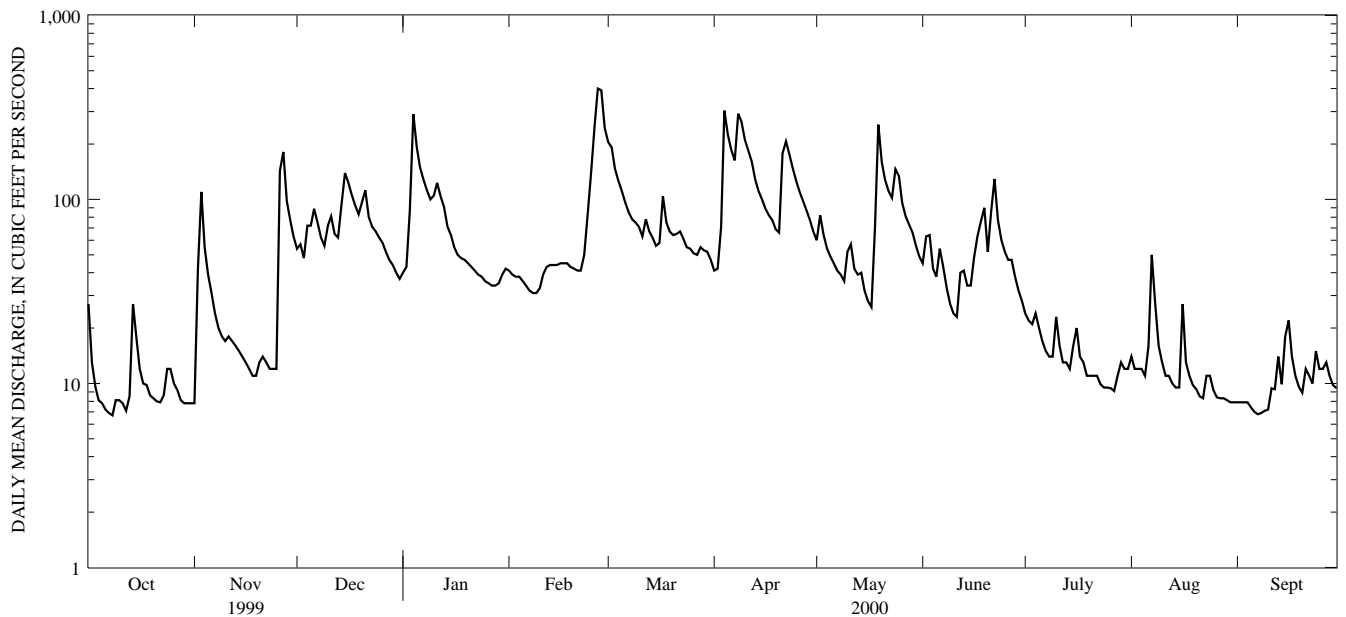
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| SUMMARY STATISTICS | FOR 1999 CALENDAR YEAR | | FOR 2000 WATER YEAR | | WATER YEARS 1966 - 2000 | |
|--------------------------|------------------------|---------------------|---------------------|---------|-------------------------|-------------|
| ANNUAL TOTAL | 21923.4 | | 20144.3 | | | |
| ANNUAL MEAN | 60.1 | | 55.0 | | 78.0 | |
| HIGHEST ANNUAL MEAN | | | | | 113 | 1984 |
| LOWEST ANNUAL MEAN | | | | | 55.0 | 2000 |
| HIGHEST DAILY MEAN | 713 | Jan 24 | 400 | Feb 27 | 2120 | Jun 23 1972 |
| LOWEST DAILY MEAN | 4.5 | Aug 16 ^a | 6.7 | Oct 8 | 2.2 | Sep 30 1995 |
| ANNUAL SEVEN-DAY MINIMUM | 4.7 | Aug 13 | 7.2 | Sep 4 | 3.3 | Sep 10 1991 |
| INSTANTANEOUS PEAK FLOW | | | 528 | Feb 27 | b5220 | Jun 22 1972 |
| INSTANTANEOUS PEAK STAGE | | | 4.68 | Feb 27 | c8.99 | Jun 22 1972 |
| INSTANTANEOUS LOW FLOW | | | 6.5 | Oct 6-8 | 2.0 | Jul 29 1978 |
| ANNUAL RUNOFF (CFSM) | 1.29 | | 1.19 | | 1.68 | |
| ANNUAL RUNOFF (INCHES) | 17.58 | | 16.15 | | 22.83 | |
| 10 PERCENT EXCEEDS | 143 | | 126 | | 170 | |
| 50 PERCENT EXCEEDS | 32 | | 40 | | 50 | |
| 90 PERCENT EXCEEDS | 5.1 | | 8.6 | | 12 | |

a Also Aug. 17-19, Sept. 5.

b From rating curve extended above 1,300 ft³/s on basis of slope-area measurement at gage height 8.33 ft.

c From peak-stage indicator.



1-YEAR HYDROGRAPH
OCTOBER 1, 1999 TO SEPTEMBER 30, 2000