



2004 Water Year LEHIGH RIVER BASIN

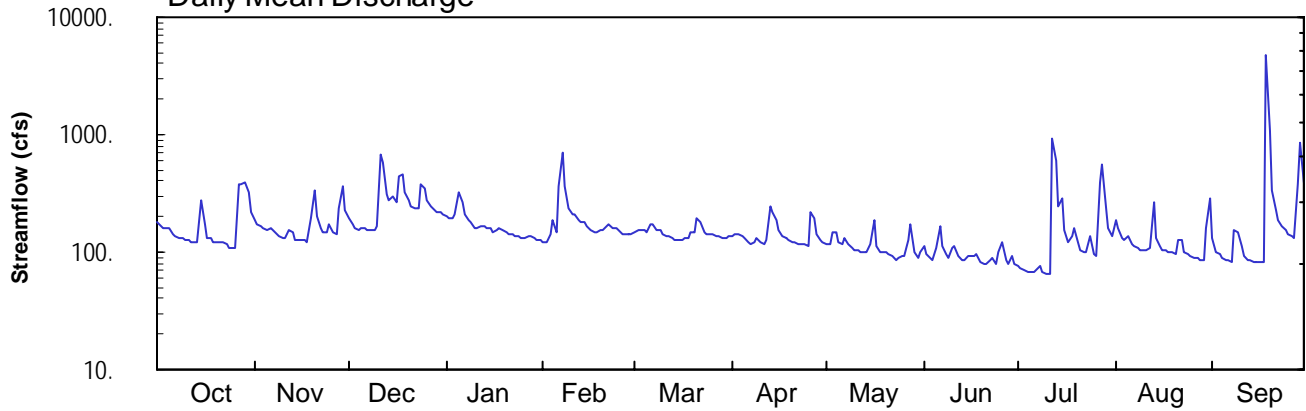
01451500 Little Lehigh Creek near Allentown, PA

Latitude: 40° 34 ' 56"
Lehigh County

Longitude: 075° 29 ' 00"
Datum: 253.41 feet

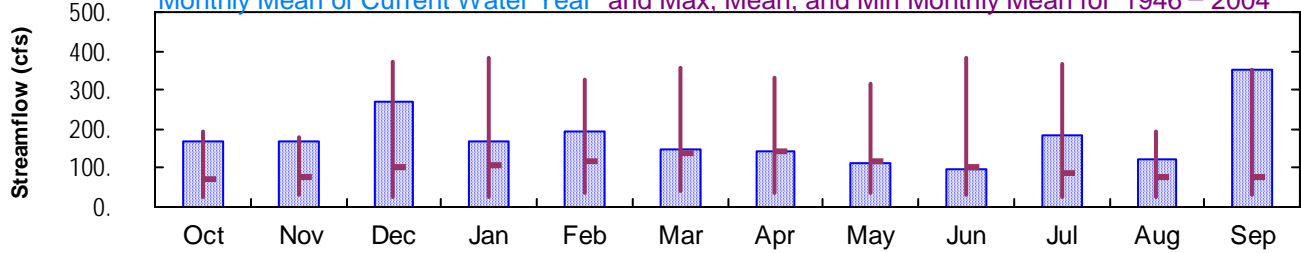
Hydrologic Unit Code: 02040106
Drainage Area: 80.8 mi²

Daily Mean Discharge

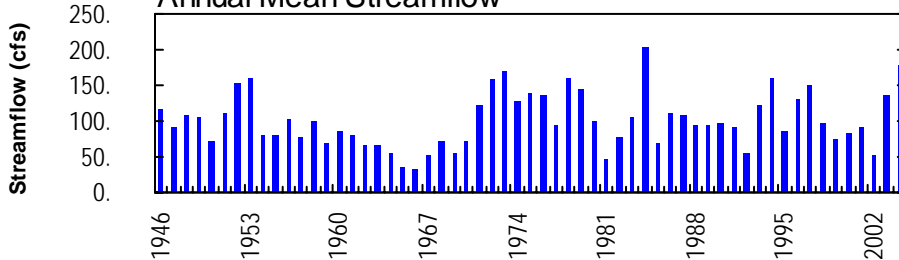


Monthly Statistics

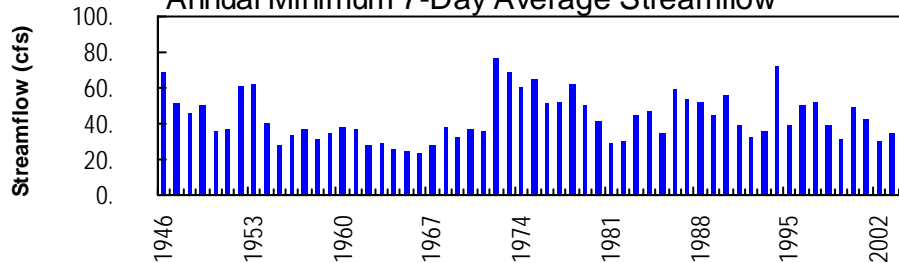
Monthly Mean of Current Water Year and Max, Mean, and Min Monthly Mean for 1946 – 2004



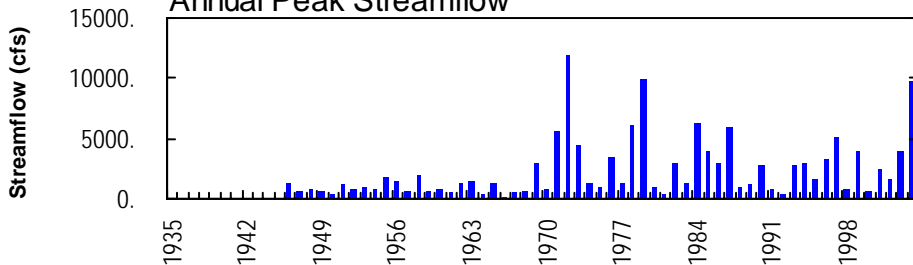
Annual Mean Streamflow



Annual Minimum 7-Day Average Streamflow



Annual Peak Streamflow



LEHIGH RIVER BASIN

01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA

LOCATION.--Lat 40°34'56", long 75°29'00", Lehigh County, Hydrologic Unit 02040106, on right bank at downstream side of bridge on Lehigh Parkway in Allentown, 0.8 mi upstream from Cedar Creek, and 2.9 mi upstream from mouth.

DRAINAGE AREA.--80.8 mi².

PERIOD OF RECORD.--October 1945 to current year. Prior to October 1946, published as "*at Allentown*".

REVISED RECORDS.--WDR PA 73-1: 1946(M), 1951(P), 1955(M), 1956(M), 1958(M), 1962(M), 1963(M), 1965(M), 1969(M), 1971(M).
WDR PA-87-1: 1946 to 1986(P).

GAGE.--Water-stage recorder, crest-stage gage, and masonry control. Datum of gage is 253.41 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records fair. Occasional regulation at low flow by fish hatchery upstream. 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 900 ft³/s and maximum (*):

| Date | Time | Discharge ft ³ /s | Gage Height (ft) | Date | Time | Discharge ft ³ /s | Gage Height (ft) |
|---------|------|---------------------------------|---------------------|----------|------|---------------------------------|---------------------|
| Dec. 11 | 2145 | 1,080 | 3.95 | July 27 | 2145 | 1,140 | 4.04 |
| Feb. 7 | 0600 | 939 | 3.76 | Sept. 18 | 1545 | *9,670 | *a10.63 |
| July 12 | 1945 | 2,520 | 5.61 | Sept. 29 | 0045 | 1,570 | 4.58 |

a From floodmark.

**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 | 180 | 189 | 191 | 201 | 123 | 146 | 138 | 119 | 114 | 76 | 187 | 130 |
| 2 | 168 | 173 | 172 | 198 | 120 | 154 | 144 | 117 | 96 | 74 | 158 | 100 |
| 3 | 159 | 165 | 161 | 195 | 144 | 157 | 143 | 146 | 88 | 72 | 132 | 94 |
| 4 | 159 | 158 | 156 | 210 | 185 | 151 | 138 | 147 | 85 | 69 | 127 | 89 |
| 5 | 158 | 152 | 157 | 319 | 150 | 147 | 131 | 121 | 109 | 69 | 138 | 87 |
| 6 | 143 | 159 | 161 | 268 | 360 | 176 | 123 | 115 | 168 | 67 | 118 | 85 |
| 7 | 137 | 155 | 155 | 207 | 716 | 171 | 119 | 131 | 112 | 70 | 112 | 83 |
| 8 | 132 | 145 | 154 | 188 | 364 | 156 | 122 | 115 | 97 | 77 | 108 | 155 |
| 9 | 129 | 137 | 151 | 182 | 232 | 152 | 134 | 110 | 89 | 69 | 105 | 146 |
| 10 | 127 | 132 | 165 | 162 | 211 | 144 | 121 | 105 | 108 | 66 | 102 | 110 |
| 11 | 125 | 132 | 685 | 162 | 211 | 139 | 117 | 104 | 112 | 64 | 105 | 93 |
| 12 | 122 | 157 | 579 | 168 | 188 | 135 | 125 | 102 | 93 | 919 | 109 | 87 |
| 13 | 120 | 147 | 313 | 168 | 181 | 130 | 243 | 99 | 85 | 598 | 262 | 84 |
| 14 | 122 | 128 | 271 | 161 | 176 | 124 | 219 | 98 | 85 | 245 | 130 | 83 |
| 15 | 272 | 126 | 297 | 159 | 164 | 125 | 185 | 119 | 93 | 289 | 112 | 83 |
| 16 | 170 | 126 | 264 | 149 | 151 | 129 | 151 | 186 | 92 | 151 | 105 | 83 |
| 17 | 132 | 126 | 442 | 154 | 147 | 133 | 139 | 111 | 92 | 120 | 103 | 82 |
| 18 | 129 | 122 | 459 | 158 | 147 | 131 | 130 | 101 | 96 | 138 | 100 | e4800 |
| 19 | 122 | 194 | 317 | 157 | 152 | 146 | 125 | 102 | 83 | 158 | 99 | e1300 |
| 20 | 121 | 338 | 276 | 149 | 156 | 147 | 122 | 101 | 80 | 120 | 97 | 339 |
| 21 | 120 | 198 | 249 | 144 | 167 | 195 | 119 | 98 | 78 | 105 | 126 | 227 |
| 22 | 120 | 161 | 236 | 143 | 172 | 178 | 117 | 94 | 85 | 98 | 124 | 187 |
| 23 | 118 | 145 | 233 | 139 | 159 | 148 | 117 | 87 | 89 | 99 | 100 | 164 |
| 24 | 110 | 146 | 371 | 138 | 158 | 142 | 115 | 89 | 78 | 138 | 95 | 154 |
| 25 | 108 | 172 | 355 | 132 | 151 | 143 | 114 | 93 | 100 | 97 | 92 | 144 |
| 26 | 108 | 148 | 272 | 134 | 143 | 141 | 215 | 91 | 120 | 93 | 88 | 139 |
| 27 | 379 | 143 | 246 | 134 | 141 | 139 | 197 | 129 | 84 | 387 | 88 | 133 |
| 28 | 375 | 239 | 232 | 136 | 140 | 136 | 141 | 169 | 78 | 555 | 86 | 374 |
| 29 | 390 | 365 | 220 | 132 | 143 | 133 | 125 | 99 | 91 | 239 | 84 | 853 |
| 30 | 317 | 228 | 216 | 127 | --- | 132 | 121 | 90 | 79 | 161 | 158 | 385 |
| 31 | 217 | --- | 208 | 124 | --- | 136 | --- | 100 | --- | 139 | 286 | --- |
| TOTAL | 5289 | 5106 | 8364 | 5198 | 5652 | 4516 | 4250 | 3488 | 2859 | 5622 | 3836 | 10873 |
| MEAN | 171 | 170 | 270 | 168 | 195 | 146 | 142 | 113 | 95.3 | 181 | 124 | 362 |
| MAX | 390 | 365 | 685 | 319 | 716 | 195 | 243 | 186 | 168 | 919 | 286 | 4800 |
| MIN | 108 | 122 | 151 | 124 | 120 | 124 | 114 | 87 | 78 | 64 | 84 | 82 |
| CFSM | 2.11 | 2.11 | 3.34 | 2.08 | 2.41 | 1.80 | 1.75 | 1.39 | 1.18 | 2.24 | 1.53 | 4.49 |
| IN. | 2.44 | 2.35 | 3.85 | 2.39 | 2.60 | 2.08 | 1.96 | 1.61 | 1.32 | 2.59 | 1.77 | 5.01 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2004, BY WATER YEAR (WY)

| | | | | | | | | | | | | |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 69.6 | 77.3 | 100 | 108 | 119 | 136 | 142 | 119 | 103 | 88.2 | 77.7 | 78.3 |
| MAX | 195 | 177 | 371 | 385 | 325 | 355 | 331 | 315 | 381 | 366 | 192 | 362 |
| (WY) | 1997 | 1976 | 1997 | 1979 | 1979 | 1994 | 1983 | 1984 | 1972 | 1984 | 1971 | 2004 |
| MIN | 27.3 | 28.1 | 25.7 | 26.6 | 37.7 | 43.1 | 37.1 | 35.8 | 29.2 | 26.5 | 26.5 | 28.9 |
| (WY) | 1964 | 1966 | 1966 | 1966 | 2002 | 1965 | 1966 | 1965 | 1965 | 1965 | 1965 | 1965 |

e Estimated.

LEHIGH RIVER BASIN

01451500 LITTLE LEHIGH CREEK NEAR ALLENTOWN, PA--Continued

| SUMMARY STATISTICS | FOR 2003 CALENDAR YEAR | | FOR 2004 WATER YEAR | | WATER YEARS 1946 - 2004 | |
|---------------------------|-------------------------------|--------|----------------------------|-----------|--------------------------------|-------------|
| ANNUAL TOTAL | 60549 | | 65053 | | | |
| ANNUAL MEAN | 166 | | 178 | | 101 | |
| HIGHEST ANNUAL MEAN | | | | | 203 | 1984 |
| LOWEST ANNUAL MEAN | | | | | 33.8 | 1966 |
| HIGHEST DAILY MEAN | 1790 | Jun 21 | e 4800 | Sep 18 | e 4800 | Sep 18 2004 |
| LOWEST DAILY MEAN | 75 | Feb 16 | 64 | Jul 11 | 23 | Dec 20 1965 |
| ANNUAL SEVEN-DAY MINIMUM | 78 | Feb 13 | 69 | Jul 5 | 23 | Dec 18 1965 |
| MAXIMUM PEAK FLOW | | | b 9670 | Sep 18 | b 11800 | Jun 22 1972 |
| MAXIMUM PEAK STAGE | | | a 10.63 | Sep 18 | 11.80 | Jun 22 1972 |
| INSTANTANEOUS LOW FLOW | | | 62 | Jul 11,12 | 17 | Feb 4 1965 |
| ANNUAL RUNOFF (CFSM) | 2.05 | | 2.20 | | 1.26 | |
| ANNUAL RUNOFF (INCHES) | 27.88 | | 29.95 | | 17.06 | |
| 10 PERCENT EXCEEDS | 267 | | 265 | | 172 | |
| 50 PERCENT EXCEEDS | 132 | | 138 | | 79 | |
| 90 PERCENT EXCEEDS | 91 | | 88 | | 40 | |

a From floodmark.

b From rating curve extended above 820 ft³/s on basis of slope-area measurements at 8.34 ft and at peak flow.

e Estimated.