

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547500 BALD EAGLE CREEK AT BLANCHARD, PA

LOCATION.--Lat 41°03'06", long 77°36'17", Centre County, Hydrologic Unit 02050204, on left bank 0.4 mi downstream from Foster Joseph Sayers Dam, 0.7 mi upstream from Marsh Creek, and 0.9 mi south of Blanchard.

DRAINAGE AREA.--339 mi².

PERIOD OF RECORD.--May 1954 to current year. Prior to October 1967, published as North Bald Eagle Creek at Blanchard.

REVISED RECORDS.--WSP 1903: 1956(M).

GAGE.--Water-stage recorder. Datum of gage is 579.79 ft above sea level.

REMARKS.--No estimated daily discharges. Records good. Flow regulated since March 1971 by Foster Joseph Sayers Dam (station 01547480). Several measurements of water temperature were made during the year. Satellite telemetry at station.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1998 TO SEPTEMBER 1999
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|------|------|------|-------|-------|-------|-------|------|------|------|------|------|
| 1 | 159 | 152 | 275 | 152 | 609 | 547 | 415 | 272 | 162 | 164 | 138 | 143 |
| 2 | 159 | 152 | 200 | 152 | 573 | 405 | 415 | 274 | 162 | 151 | 138 | 143 |
| 3 | 159 | 152 | 200 | 152 | 677 | 371 | 415 | 252 | 162 | 135 | 138 | 143 |
| 4 | 159 | 152 | 172 | 151 | 741 | 1100 | 415 | 238 | 161 | 135 | 138 | 143 |
| 5 | 159 | 152 | 156 | 149 | 741 | 1790 | 385 | 238 | 159 | 135 | 138 | 143 |
| 6 | 159 | 152 | 156 | 149 | 683 | 1710 | 322 | 238 | 159 | 135 | 138 | 143 |
| 7 | 159 | 152 | 154 | 149 | 644 | 1420 | 268 | 238 | 159 | 135 | 138 | 143 |
| 8 | 255 | 152 | 152 | 149 | 644 | 1010 | 238 | 252 | 159 | 135 | 138 | 143 |
| 9 | 314 | 152 | 152 | 149 | 644 | 601 | 239 | 354 | 159 | 136 | 138 | 142 |
| 10 | 288 | 152 | 152 | 149 | 609 | 517 | 481 | 369 | 159 | 138 | 138 | 140 |
| 11 | 195 | 153 | 152 | 149 | 547 | 481 | 673 | 314 | 144 | 138 | 138 | 140 |
| 12 | 152 | 171 | 152 | 149 | 547 | 433 | 681 | 314 | 133 | 138 | 138 | 140 |
| 13 | 152 | 207 | 152 | 149 | 547 | 432 | 606 | 284 | 132 | 138 | 138 | 140 |
| 14 | 152 | 207 | 152 | 149 | 547 | 432 | 503 | 263 | 132 | 138 | 140 | 142 |
| 15 | 152 | 209 | 152 | 164 | 547 | 481 | 397 | 263 | 131 | 138 | 184 | 143 |
| 16 | 152 | 343 | 152 | 192 | 756 | 534 | 319 | 263 | 129 | 138 | 234 | 143 |
| 17 | 152 | 421 | 152 | 192 | 856 | 695 | 295 | 245 | 231 | 138 | 173 | 192 |
| 18 | 152 | 424 | 152 | 217 | 1030 | 1010 | 297 | 232 | 270 | 138 | 138 | 218 |
| 19 | 152 | 423 | 152 | 277 | 1100 | 906 | 273 | 230 | 152 | 138 | 138 | 218 |
| 20 | 152 | 418 | 152 | 419 | 1060 | 737 | 250 | 221 | 150 | 138 | 140 | 218 |
| 21 | 152 | 415 | 152 | 577 | 875 | 684 | 250 | 203 | 159 | 138 | 140 | 218 |
| 22 | 152 | 415 | 152 | 673 | 768 | 699 | 250 | 202 | 159 | 138 | 139 | 218 |
| 23 | 152 | 413 | 152 | 789 | 638 | 612 | 254 | 200 | 159 | 138 | 138 | 217 |
| 24 | 152 | 409 | 152 | 625 | 563 | 559 | 295 | 198 | 159 | 138 | 138 | 184 |
| 25 | 152 | 409 | 152 | 1420 | 556 | 564 | 330 | 192 | 151 | 138 | 138 | 143 |
| 26 | 152 | 409 | 152 | 1790 | 549 | 505 | 325 | 185 | 140 | 138 | 138 | 143 |
| 27 | 152 | 409 | 152 | 1810 | 541 | 403 | 325 | 184 | 140 | 138 | 138 | 142 |
| 28 | 152 | 406 | 152 | 1260 | 598 | 403 | 328 | 182 | 180 | 138 | 138 | 140 |
| 29 | 152 | 403 | 152 | 924 | --- | 406 | 293 | 182 | 302 | 138 | 194 | 141 |
| 30 | 152 | 403 | 152 | 913 | --- | 411 | 272 | 171 | 257 | 138 | 190 | 368 |
| 31 | 152 | --- | 152 | 896 | --- | 415 | --- | 164 | --- | 138 | 143 | --- |
| TOTAL | 5205 | 8587 | 4961 | 15235 | 19190 | 21273 | 10809 | 7417 | 5011 | 4297 | 4575 | 5034 |
| MEAN | 168 | 286 | 160 | 491 | 685 | 686 | 360 | 239 | 167 | 139 | 148 | 168 |
| MAX | 314 | 424 | 275 | 1810 | 1100 | 1790 | 681 | 369 | 302 | 164 | 234 | 368 |
| MIN | 152 | 152 | 152 | 149 | 541 | 371 | 238 | 164 | 129 | 135 | 138 | 140 |

WEST BRANCH SUSQUEHANNA RIVER BASIN

01547500 BALD EAGLE CREEK AT BLANCHARD, PA--Continued

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1971 - 1999, BY WATER YEAR (WY) (SINCE REGULATION)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 421 | 584 | 582 | 539 | 657 | 735 | 693 | 576 | 443 | 329 | 266 | 318 |
| MAX (WY) | 1012 | 1291 | 1211 | 1213 | 1450 | 1664 | 2095 | 1328 | 1184 | 1580 | 867 | 1096 |
| MIN (WY) | 1980 | 1978 | 1997 | 1996 | 1984 | 1979 | 1993 | 1978 | 1972 | 1972 | 1984 | 1996 |
| MIN (WY) | 165 | 188 | 160 | 133 | 275 | 238 | 208 | 203 | 167 | 139 | 140 | 120 |
| MIN (WY) | 1983 | 1988 | 1999 | 1981 | 1993 | 1990 | 1976 | 1995 | 1999 | 1999 | 1995 | 1995 |

| SUMMARY STATISTICS | FOR 1998 CALENDAR YEAR | | FOR 1999 WATER YEAR | | WATER YEARS 1971 - 1999 | |
|--------------------------|------------------------|---------------------|---------------------|--------|-------------------------|--------------------------|
| ANNUAL TOTAL | 209701 | | 111594 | | | |
| ANNUAL MEAN | 575 | | 306 | | 511 | |
| HIGHEST ANNUAL MEAN | | | | | 764 | |
| LOWEST ANNUAL MEAN | | | | | 306 | |
| HIGHEST DAILY MEAN | 2490 | Jan 12 | 1810 | Jan 27 | 4730 | Jun 29 1972 |
| LOWEST DAILY MEAN | 152 | Oct 12 ^a | 129 | Jun 16 | 5.3 | Mar 29 1993 ^b |
| ANNUAL SEVEN-DAY MINIMUM | 152 | Oct 12 | 135 | Jul 3 | 71 | Apr 20 1971 |
| INSTANTANEOUS PEAK FLOW | | | 1850 | Jan 26 | 4890 | Jun 28 1972 |
| INSTANTANEOUS PEAK STAGE | | | 5.56 | Jan 26 | 9.37 | Jun 28 1972 |
| INSTANTANEOUS LOW FLOW | | | | | 0.00 | May 12 1976 |
| 10 PERCENT EXCEEDS | 1710 | | 640 | | 1050 | |
| 50 PERCENT EXCEEDS | 314 | | 164 | | 333 | |
| 90 PERCENT EXCEEDS | 152 | | 138 | | 163 | |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1954 - 1970, BY WATER YEAR (WY) (PRIOR TO REGULATION)

| | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|----------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 224 | 287 | 330 | 318 | 506 | 855 | 797 | 547 | 289 | 212 | 201 | 178 |
| MAX (WY) | 534 | 557 | 686 | 547 | 909 | 1376 | 1392 | 1053 | 561 | 478 | 623 | 437 |
| MIN (WY) | 1956 | 1960 | 1957 | 1960 | 1956 | 1964 | 1957 | 1960 | 1968 | 1956 | 1956 | 1956 |
| MIN (WY) | 105 | 102 | 109 | 161 | 158 | 304 | 318 | 289 | 137 | 105 | 100 | 99.8 |
| MIN (WY) | 1965 | 1965 | 1966 | 1966 | 1963 | 1969 | 1968 | 1955 | 1965 | 1965 | 1966 | 1965 |

SUMMARY STATISTICS WATER YEARS 1954 - 1970

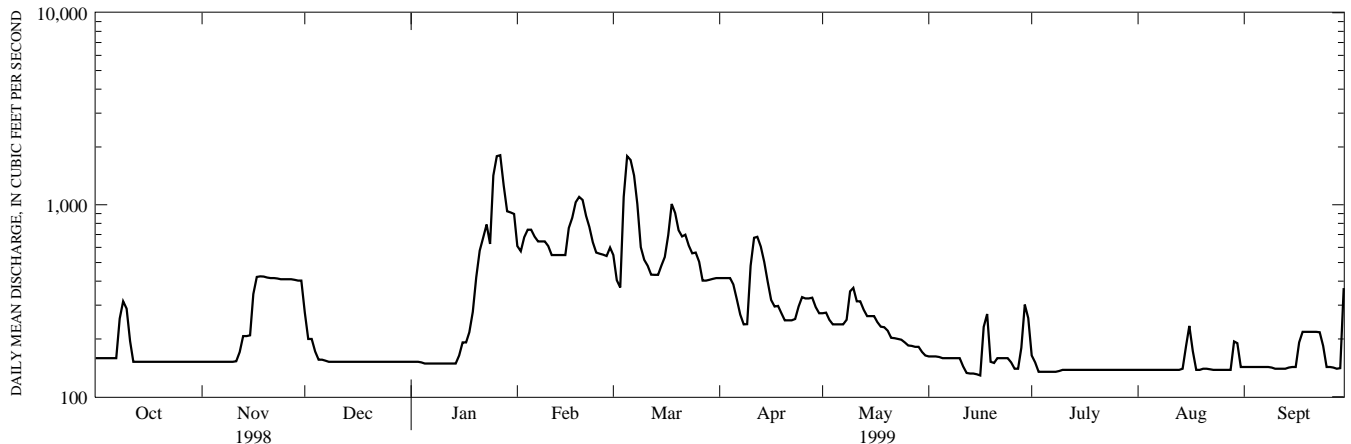
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|--------------------------|-------|--------------------------|
| ANNUAL MEAN | 395 | |
| HIGHEST ANNUAL MEAN | 555 | 1956 |
| LOWEST ANNUAL MEAN | 247 | 1965 |
| HIGHEST DAILY MEAN | 7010 | Mar 10 1964 |
| LOWEST DAILY MEAN | 90 | Sep 11,13 1966 |
| ANNUAL SEVEN-DAY MINIMUM | 93 | Sep 7 1966 |
| INSTANTANEOUS PEAK FLOW | 10100 | Mar 10 1964 |
| INSTANTANEOUS PEAK STAGE | 11.59 | Mar 10 1964 |
| INSTANTANEOUS LOW FLOW | 0.00 | Jun 16 1970 ^c |
| ANNUAL RUNOFF (CFSM) | 1.16 | |
| ANNUAL RUNOFF (INCHES) | 15.82 | |
| 10 PERCENT EXCEEDS | 834 | |
| 50 PERCENT EXCEEDS | 235 | |
| 90 PERCENT EXCEEDS | 124 | |

a Also Oct. 13-Nov. 10, Dec. 8-31.

b Also Mar. 31 and Apr. 1.

c From rating curve extended above 4,100 ft³/s.

d No flow parts of June 16, Nov. 10, 1970, due to construction of dam; May 12, 18, 19, 1976; Mar. 6, 1979, result of shutoff at dam.



1-YEAR HYDROGRAPH
OCTOBER 1, 1998 TO SEPTEMBER 30, 1999