# 03061500 BUFFALO CREEK AT BARRACKVILLE, WV

Monongahela Basin
Upper Monongahela Subbasin

LOCATION.--Lat 39°30′14″, long 80°10′20″ referenced to North American Datum of 1927, Marion County, WV, Hydrologic Unit 05020003, on right downstream concrete and steel beam retaining wall 50 ft above highway bridge at Barrackville, 300 ft upstream from Finchs Run, and at mile 4.4.

DRAINAGE AREA.--116 $mi^2$.

## SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1907 to December 1908, May 1915 to May 1924, and August 1932 to current year (daily discharge and peaks).

REVISED RECORDS.--WSP 783: 1917(M). WSP 1335: 1916(M), 1918-20(M), 1921, 1922(M), 1924(M), 1933(M), 1940. WDR WV-97-1: Drainage area. WDR WV-04-1: 2001(M), 2002(M), 2003(M). WDR-US-2009: 1950(M).

GAGE.--Water-stage recorder with satellite telemeter. Datum of gage is 883.63 ft above NAVD88. Prior to Oct. 1, 2000, water-stage recorder at site 0.2 mi upstream at same datum. Prior to Dec. 6, 1940, nonrecording gage 0.2 mi upstream. Prior to June 4, 1943, at datum 1.98 ft higher.

REMARKS.--Records good except for periods of estimated daily discharges (ice effect), which are poor. Flow from 5.2 $mi^2$ is partially controlled, but not diverted, by three floodwater-detention reservoirs. Some additional regulation at low flow from mine pumpage above station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood in July 1912 reached a stage of about 18 ft, at site 0.2 mi upstream at present datum, discharge, 11,600 $ft^3/s$.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 $ft^3/s$ and (or) maximum (*):

| Date | Time | Discharge ($ft^3/s$) | Gage height (ft) |
|---|---|---|---|
| Dec 1 | 0700 | *4,480 | *10.17 |

Minimum discharge, 3.6 $ft^3/s$, Oct. 18, gage height, 1.71 ft.



Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 03061500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/03061500.2011.pdf

**03061500 BUFFALO CREEK AT BARRACKVILLE, WV—Continued**

**DISCHARGE, CUBIC FEET PER SECOND**
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**
**DAILY MEAN VALUES**
[e, estimated]

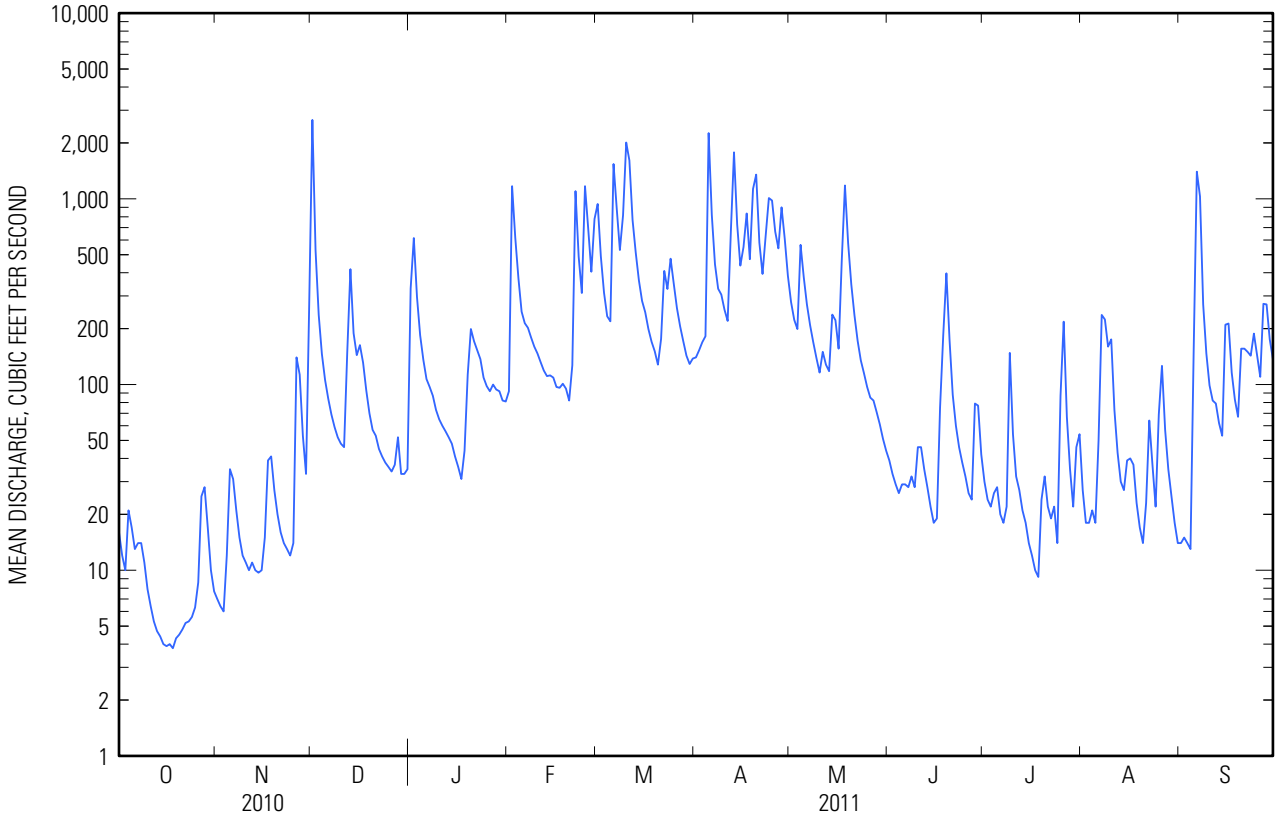
| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 16 | 7.0 | 2,660 | 329 | 92 | 938 | 140 | 278 | 39 | 30 | 27 | 14 |
| 2 | 12 | 6.4 | 529 | 615 | 1,170 | 489 | 153 | 223 | 33 | 24 | 18 | 15 |
| 3 | 10 | 6.0 | 237 | 296 | e618 | 312 | 169 | 199 | 29 | 22 | 18 | 14 |
| 4 | 21 | 12 | 146 | 184 | e373 | 233 | 182 | 565 | 26 | 26 | 21 | 13 |
| 5 | 17 | 35 | 106 | 136 | e247 | 219 | 2,260 | 379 | 29 | 28 | 18 | 151 |
| 6 | 13 | 31 | 84 | 107 | e214 | 1,540 | 818 | 270 | 29 | 20 | 50 | 1,400 |
| 7 | 14 | 21 | 69 | 97 | 202 | 890 | 444 | 209 | 28 | 18 | 237 | 1,030 |
| 8 | 14 | 15 | 59 | 87 | e179 | 530 | 328 | 169 | 32 | 22 | 224 | 270 |
| 9 | 11 | 12 | e52 | e73 | e160 | 816 | 305 | 139 | 28 | 148 | 160 | 147 |
| 10 | 7.9 | 11 | e48 | e65 | e147 | 2,010 | 253 | 116 | 46 | 54 | 175 | 99 |
| 11 | 6.4 | 10 | 46 | 60 | e132 | 1,610 | 220 | 150 | 46 | 32 | 73 | 82 |
| 12 | 5.3 | 11 | 149 | 56 | e119 | 770 | 662 | 128 | 35 | 27 | 43 | 79 |
| 13 | 4.7 | 10 | 418 | 52 | 111 | 514 | 1,780 | 118 | 28 | 21 | 30 | 62 |
| 14 | 4.4 | 9.7 | 189 | 48 | 112 | 364 | 728 | 238 | 22 | 18 | 27 | 53 |
| 15 | 4.0 | 10 | 144 | e41 | 109 | 282 | 437 | 222 | 18 | 14 | 39 | 210 |
| 16 | 3.9 | 15 | 163 | e36 | 97 | 245 | 550 | 156 | 19 | 12 | 40 | 213 |
| 17 | 4.0 | 39 | 131 | e31 | 96 | 199 | 834 | 468 | 75 | 10 | 37 | 116 |
| 18 | 3.8 | 41 | e93 | 44 | 101 | 170 | 473 | 1,180 | 184 | 9.2 | 23 | 83 |
| 19 | 4.3 | 27 | e70 | 113 | 95 | 151 | 1,130 | 578 | 397 | 24 | 17 | 67 |
| 20 | 4.5 | 20 | e57 | 199 | 82 | 128 | 1,350 | 346 | 173 | 32 | 14 | 156 |
| 21 | 4.8 | 16 | 53 | 171 | 127 | 176 | 581 | 236 | 88 | 22 | 23 | 156 |
| 22 | 5.2 | 14 | 45 | 153 | 1,100 | 409 | 394 | 172 | 60 | 19 | 64 | 150 |
| 23 | 5.3 | 13 | 41 | 137 | 489 | 327 | 635 | 135 | 46 | 22 | 37 | 143 |
| 24 | 5.6 | 12 | 38 | 109 | 311 | 476 | 1,010 | 115 | 38 | 14 | 22 | 188 |
| 25 | 6.3 | 14 | 36 | 98 | 1,170 | 349 | 979 | 97 | 32 | 87 | 69 | 144 |
| 26 | 8.6 | 140 | 34 | 92 | 695 | 258 | 666 | 85 | 26 | 218 | 126 | 110 |
| 27 | 25 | 113 | 37 | 100 | 405 | 206 | 541 | 82 | 24 | 67 | 57 | 272 |
| 28 | 28 | 53 | 52 | 94 | 779 | 171 | 900 | 71 | 79 | 35 | 35 | 270 |
| 29 | 17 | 33 | 33 | 92 | --- | 143 | 611 | 61 | 77 | 22 | 25 | 175 |
| 30 | 10 | 270 | 33 | 82 | --- | 129 | 385 | 51 | 42 | 46 | 18 | 137 |
| 31 | 7.7 | --- | 35 | 81 | --- | 138 | --- | 44 | --- | 54 | 14 | --- |
| Total | 304.7 | 1,027.1 | 5,887 | 3,878 | 9,532 | 15,192 | 19,918 | 7,280 | 1,828 | 1,197.2 | 1,781 | 6,019 |
| Mean | 9.83 | 34.2 | 190 | 125 | 340 | 490 | 664 | 235 | 60.9 | 38.6 | 57.5 | 201 |
| Max | 28 | 270 | 2,660 | 615 | 1,170 | 2,010 | 2,260 | 1,180 | 397 | 218 | 237 | 1,400 |
| Min | 3.8 | 6.0 | 33 | 31 | 82 | 128 | 140 | 44 | 18 | 9.2 | 14 | 13 |
| Cfsm | 0.08 | 0.30 | 1.64 | 1.08 | 2.93 | 4.22 | 5.72 | 2.02 | 0.53 | 0.33 | 0.50 | 1.73 |
| In. | 0.10 | 0.33 | 1.89 | 1.24 | 3.06 | 4.87 | 6.39 | 2.33 | 0.59 | 0.38 | 0.57 | 1.93 |

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1907 - 2011, BY WATER YEAR (WY)**

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mean | 47.0 | 111 | 216 | 282 | 301 | 352 | 254 | 199 | 109 | 65.8 | 54.9 | 47.4 |
| Max | 262 | 530 | 696 | 944 | 690 | 795 | 664 | 543 | 476 | 381 | 357 | 285 |
| (WY) | (1990) | (1986) | (1991) | (1937) | (1994) | (1963) | (2011) | (1968) | (1981) | (1978) | (1980) | (1990) |
| Min | 0.00 | 0.00 | 9.53 | 25.2 | 32.8 | 71.9 | 53.3 | 17.8 | 6.69 | 2.44 | 2.24 | 0.01 |
| (WY) | (1909) | (1909) | (1999) | (1967) | (1934) | (1969) | (1971) | (1934) | (1936) | (1966) | (1938) | (1908) |

**03061500 BUFFALO CREEK AT BARRACKVILLE, WV—Continued**

**SUMMARY STATISTICS**

| | Calendar Year 2010 | | Water Year 2011 | | Water Years 1907 - 2011 | |
|---|---|---|---|---|---|---|
| **Annual total** | 49,426.0 | | 73,844.0 | | | |
| **Annual mean** | 135 | | 202 | | 169 | |
| **Highest annual mean** | | | | | 280 | 1994 |
| **Lowest annual mean** | | | | | 80.3 | 1969 |
| **Highest daily mean** | 2,740 | May 19 | 2,660 | Dec 1 | 5,710 | Apr 12, 1948 |
| **Lowest daily mean** | 1.1 | Sep 9[a] | 3.8 | Oct 18 | 0.00 | Aug 13, 1908[b] |
| **Annual seven-day minimum** | 1.3 | Sep 5 | 4.1 | Oct 14 | 0.00 | Sep 4, 1908 |
| **Maximum peak flow** | | | 4,480 | Dec 1 | 10,400 | Feb 19, 2000 |
| **Maximum peak stage** | | | 10.17 | Dec 1 | [c]16.76 | Feb 19, 2000 |
| **Instantaneous low flow** | | | 3.6 | Oct 18 | 0.00 | Aug 1, 1908[d] |
| **Annual runoff (cfsm)** | 1.17 | | 1.74 | | 1.46 | |
| **Annual runoff (inches)** | 15.85 | | 23.68 | | 19.78 | |
| **10 percent exceeds** | 314 | | 545 | | 402 | |
| **50 percent exceeds** | 51 | | 82 | | 60 | |
| **90 percent exceeds** | 4.4 | | 12 | | 5.8 | |

[a] Also Sept. 10, 11.
[b] Also Aug. 14-17, Sept. 4-28, Sept. 30 to Dec. 6, 1908.
[c] From floodmarks.
[d] Greater part of period August to December 1908.