

SPOKANE RIVER BASIN

12433542 BLUE CREEK ABOVE MIDNITE MINE DRAINAGE, NEAR WELLPINIT, WA

LOCATION.--Lat 47°55'28", long 118°05'18", in NW 1/4 SE 1/4 sec.13, T.28 N., R.37 E., Stevens County, Hydrologic Unit 17010307, Spokane Indian Reservation, on right bank, 2.4 mi downstream from Turtle Lake, and 5.4 mi northwest of Wellpinit.

DRAINAGE AREA.--6.0 mi².

PERIOD OF RECORD.--June 1984 to October 1998, January 2000 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,070 ft above NGVD of 1929, from topographic map.

REMARKS.--Records poor. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--16 years (water years 1985-98, 2001-2002), 1.24 ft³/s, 2.80 in/yr, 895 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 65 ft³/s Mar. 22, 1997, gage height, 3.22 ft, minimum discharge, 0.01 ft³/s Aug. 12, 13, 1992, gage height, 0.86 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge 17 ft³/s Apr. 3, gage height 1.81 ft; minimum discharge 0.04 ft³/s Oct. 1-4 and 11, but may have been lower during periods of ice effect or missing record.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

| DAY | OCT | NOV | DEC | JAN | FEB | MAR | APR | MAY | JUN | JUL | AUG | SEP |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1 | 0.06 | 0.06 | e0.18 | e0.18 | e0.50 | e0.75 | 15 | 4.3 | 1.2 | 0.64 | 0.30 | 0.14 |
| 2 | 0.06 | 0.06 | 0.28 | e0.18 | e0.50 | e0.75 | 15 | 4.0 | 1.2 | 0.64 | 0.30 | 0.14 |
| 3 | 0.06 | 0.06 | 0.28 | e0.20 | e0.50 | e0.80 | 15 | 3.9 | 1.1 | 0.61 | 0.30 | 0.14 |
| 4 | 0.06 | 0.06 | 0.24 | e0.20 | e0.50 | e0.84 | 15 | 3.7 | 1.1 | 0.58 | 0.30 | 0.14 |
| 5 | 0.06 | 0.07 | 0.24 | e0.20 | e0.50 | e0.84 | 15 | 3.7 | 1.1 | 0.56 | 0.30 | 0.14 |
| 6 | 0.06 | 0.06 | 0.24 | e0.25 | e0.50 | e0.84 | 15 | 3.5 | 1.0 | 0.56 | 0.29 | 0.12 |
| 7 | 0.06 | 0.07 | 0.22 | 0.75 | e0.50 | e0.80 | 14 | 3.6 | 1.0 | 0.55 | 0.27 | 0.12 |
| 8 | 0.06 | 0.07 | 0.21 | 0.78 | e0.50 | e0.80 | 14 | 3.4 | 1.0 | 0.60 | 0.26 | 0.12 |
| 9 | 0.06 | 0.07 | 0.21 | 0.96 | e0.52 | e0.90 | 14 | 3.3 | 1.0 | 0.55 | 0.26 | 0.12 |
| 10 | 0.06 | 0.07 | 0.27 | 0.81 | e0.52 | 1.2 | 14 | 3.1 | 0.99 | 0.54 | 0.26 | 0.11 |
| 11 | 0.07 | 0.07 | 0.27 | 0.81 | e0.50 | 1.7 | 13 | 3.0 | 0.97 | 0.53 | 0.25 | 0.10 |
| 12 | 0.07 | 0.08 | e0.22 | 0.81 | e0.48 | 1.7 | 12 | 2.9 | 0.95 | 0.50 | 0.25 | 0.10 |
| 13 | 0.07 | 0.08 | e0.35 | 0.81 | e0.48 | 1.7 | 12 | 2.8 | 0.91 | 0.50 | 0.25 | 0.10 |
| 14 | 0.07 | 0.13 | e0.34 | 0.81 | e0.48 | 1.9 | 12 | 2.7 | 0.89 | 0.49 | 0.23 | 0.08 |
| 15 | 0.07 | 0.11 | e0.25 | e0.80 | e0.50 | 2.1 | 11 | 2.5 | 0.87 | 0.47 | 0.20 | 0.09 |
| 16 | 0.07 | 0.12 | e0.28 | e0.75 | e0.54 | 2.1 | 11 | 2.3 | 0.87 | 0.44 | 0.21 | 0.12 |
| 17 | 0.07 | 0.18 | e0.28 | e0.70 | e0.56 | 2.0 | 11 | 2.3 | 0.87 | 0.39 | 0.22 | 0.10 |
| 18 | 0.06 | 0.11 | e0.24 | e0.75 | e0.58 | 2.0 | 9.6 | 2.2 | 0.87 | 0.39 | 0.23 | 0.09 |
| 19 | 0.06 | 0.11 | 0.26 | e0.80 | e0.58 | 2.0 | 9.0 | 2.2 | 0.87 | 0.38 | 0.23 | 0.09 |
| 20 | 0.06 | 0.11 | 0.24 | e0.78 | e0.58 | 1.9 | 8.6 | 2.1 | 0.85 | 0.38 | 0.21 | 0.09 |
| 21 | 0.06 | 0.12 | 0.24 | e0.75 | 0.69 | 2.0 | 7.9 | 2.0 | 0.78 | 0.37 | 0.20 | 0.08 |
| 22 | 0.06 | 0.15 | e0.22 | e0.75 | 0.95 | 2.0 | 7.5 | 2.0 | 0.73 | 0.37 | 0.19 | 0.07 |
| 23 | 0.06 | 0.15 | e0.20 | e0.75 | 1.3 | 2.1 | 6.9 | 1.9 | 0.71 | 0.37 | 0.18 | 0.07 |
| 24 | 0.06 | e0.13 | e0.18 | 0.73 | 1.2 | 2.2 | 6.7 | 1.8 | 0.71 | 0.35 | 0.18 | 0.07 |
| 25 | 0.06 | e0.12 | e0.15 | 0.71 | e0.80 | 2.7 | 6.3 | 1.8 | 0.70 | 0.35 | 0.19 | 0.07 |
| 26 | 0.06 | 0.11 | e0.15 | 0.60 | e0.70 | 3.2 | 5.9 | 1.6 | 0.69 | 0.34 | 0.18 | 0.08 |
| 27 | 0.06 | 0.10 | e0.15 | 0.56 | e0.70 | 4.3 | 5.6 | 1.6 | 0.66 | 0.33 | 0.19 | 0.09 |
| 28 | 0.06 | 0.11 | e0.15 | e0.50 | e0.75 | 6.0 | 5.1 | 1.5 | 0.67 | 0.31 | 0.18 | 0.09 |
| 29 | 0.06 | 0.13 | e0.18 | e0.48 | --- | 7.9 | 4.9 | 1.5 | 0.69 | 0.30 | 0.15 | 0.09 |
| 30 | 0.10 | 0.12 | e0.18 | e0.50 | --- | 10 | 4.6 | 1.4 | 0.65 | 0.30 | 0.14 | 0.09 |
| 31 | 0.11 | --- | e0.18 | e0.50 | --- | 13 | --- | 1.3 | --- | 0.30 | 0.14 | --- |
| TOTAL | 2.02 | 2.99 | 7.08 | 19.16 | 17.41 | 83.02 | 316.6 | 79.9 | 26.60 | 13.99 | 7.04 | 3.05 |
| MEAN | 0.065 | 0.100 | 0.228 | 0.618 | 0.622 | 2.678 | 10.55 | 2.577 | 0.887 | 0.451 | 0.227 | 0.102 |
| MAX | 0.11 | 0.18 | 0.35 | 0.96 | 1.3 | 13 | 15 | 4.3 | 1.2 | 0.64 | 0.30 | 0.14 |
| MIN | 0.06 | 0.06 | 0.15 | 0.18 | 0.48 | 0.75 | 4.6 | 1.3 | 0.65 | 0.30 | 0.14 | 0.07 |
| AC-FT | 4.0 | 5.9 | 14 | 38 | 35 | 165 | 628 | 158 | 53 | 28 | 14 | 6.0 |
| CFSM | 0.01 | 0.02 | 0.04 | 0.10 | 0.10 | 0.45 | 1.76 | 0.43 | 0.15 | 0.08 | 0.04 | 0.02 |
| IN. | 0.01 | 0.02 | 0.04 | 0.12 | 0.11 | 0.51 | 1.96 | 0.50 | 0.16 | 0.09 | 0.04 | 0.02 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1984 - 2002, BY WATER YEAR (WY)

| | 1984 | 1985 | 1986 | 1987 | 1988 | 1989 | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| MEAN | 0.160 | 0.200 | 0.219 | 0.756 | 1.718 | 5.564 | 4.020 | 1.407 | 0.754 | 0.366 | 0.194 | 0.142 | | | | | | | |
| MAX | 0.25 | 0.37 | 0.47 | 5.61 | 12.4 | 25.7 | 14.1 | 3.40 | 1.85 | 0.76 | 0.36 | 0.24 | | | | | | | |
| (WY) | 1998 | 1985 | 1997 | 1997 | 1995 | 1997 | 1997 | 1997 | 1997 | 1997 | 1984 | 1984 | | | | | | | |
| MIN | 0.062 | 0.10 | 0.13 | 0.094 | 0.16 | 0.34 | 0.34 | 0.30 | 0.17 | 0.10 | 0.067 | 0.054 | | | | | | | |
| (WY) | 2002 | 2002 | 2001 | 2001 | 1990 | 1990 | 1990 | 1992 | 1992 | 1994 | 2001 | 2001 | | | | | | | |

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1984 - 2002

| | | | |
|--------------------------|-------------|------------|------------------|
| ANNUAL TOTAL | 84.81 | 578.86 | |
| ANNUAL MEAN | 0.232 | 1.586 | 1.236 |
| HIGHEST ANNUAL MEAN | | | 4.69 1997 |
| LOWEST ANNUAL MEAN | | | 0.19 1994 |
| HIGHEST DAILY MEAN | 0.74 May 24 | 15 Apr 1 | 60 Mar 21 1997 |
| LOWEST DAILY MEAN | 0.04 Sep 16 | 0.06 Oct 1 | 0.04 Sep 16 2001 |
| ANNUAL SEVEN-DAY MINIMUM | 0.04 Sep 16 | 0.06 Oct 1 | 0.04 Sep 16 2001 |
| ANNUAL RUNOFF (AC-FT) | 168 | 1150 | 895 |
| ANNUAL RUNOFF (CFSM) | 0.039 | 0.26 | 0.21 |
| ANNUAL RUNOFF (INCHES) | 0.53 | 3.59 | 2.80 |
| 10 PERCENT EXCEEDS | 0.56 | 4.1 | 2.9 |
| 50 PERCENT EXCEEDS | 0.15 | 0.50 | 0.25 |
| 90 PERCENT EXCEEDS | 0.06 | 0.07 | 0.12 |

e Estimated