

PEND OREILLE RIVER BASIN

12396500 PEND OREILLE RIVER BELOW BOX CANYON, NEAR IONE, WA

LOCATION.--Lat 48°46'52", long 117°24'55", in SE 1/4 NE 1/4 sec.19 T.38 N., R.43 E., Pend Oreille County, Hydrologic Unit 17010216, on left bank 1,000 ft downstream from Box Canyon Dam, 2.8 mi north of Ione, and at mile 34.3.

DRAINAGE AREA.--24,900 mi², approximately.

PERIOD OF RECORD.--October 1952 to current year.

REVISED RECORDS.--WSP 1933: Drainage area. WDR WA-81-2: 1976.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Mar. 29, 1954, nonrecording gage at site 300 ft upstream at same datum. Mar. 29 to Aug. 25, 1954, nonrecording gage at present site and datum. Since Aug. 20, 1967, auxiliary water-stage recorder 1.2 mi downstream at same datum.

REMARKS.--No estimated daily discharges. Records fair except those below 10,000 ft³/s, which are poor. Flow regulated by Box Canyon Reservoir, 1,000 ft upstream, since June 1955 and by Pend Oreille Lake, Flathead Lake, Hungry Horse Reservoir, and by several smaller reservoirs and powerplants. Numerous diversions upstream from station for irrigation.

AVERAGE DISCHARGE.--50 years (water years 1953-2002), 26,590 ft³/s, 19,264,000 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 136,000 ft³/s June 13, 14, 1972; maximum daily elevation, 2,015.44 ft June 5, 7, 1997 (mean of surge), (backwater from Boundary Dam); minimum daily discharge, 82 ft³/s Oct. 5, 1985 (result of regulation).

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1948 reached an elevation of 2,018.00 ft, from floodmarks, discharge, 167,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 100,000 ft³/s June 10; maximum elevation, 2,007.47 ft June 10, (backwater from Boundary Dam); minimum daily discharge, 7,770 ft³/s Nov. 22.

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 | 12800 | 18200 | 10300 | 10900 | 17300 | 14700 | 16600 | 32400 | 77000 | 77100 | 16200 | 9210 |
| 2 | 14500 | 18500 | 8380 | 10200 | 16900 | 14800 | 16100 | 32700 | 80500 | 74100 | 15300 | 9440 |
| 3 | 14900 | 18600 | 9010 | 10300 | 17100 | 13800 | 15400 | 32300 | 83200 | 67400 | 14800 | 9630 |
| 4 | 15300 | 18200 | 9880 | 9930 | 16700 | 13500 | 15400 | 32900 | 82300 | 59400 | 13400 | 10200 |
| 5 | 15300 | 18700 | 9680 | 9770 | 17200 | 14300 | 15500 | 32100 | 83400 | 53100 | 12500 | 11000 |
| 6 | 15400 | 18200 | 10600 | 11100 | 17000 | 16000 | 16500 | 32800 | 85000 | 46900 | 12100 | 11000 |
| 7 | 15300 | 19100 | 10700 | 12000 | 17300 | 16000 | 15400 | 37500 | 88100 | 40600 | 11900 | 12200 |
| 8 | 15400 | 21000 | 10500 | 13600 | 17400 | 15900 | 15800 | 39100 | 89900 | 44800 | 13500 | 12300 |
| 9 | 16700 | 21900 | 8690 | 18700 | 19600 | 15200 | 16000 | 39800 | 93200 | 43500 | 18600 | 12000 |
| 10 | 18600 | 21700 | 8710 | 25800 | 20100 | 15000 | 17500 | 39300 | 93700 | 44500 | 16600 | 11400 |
| 11 | 18600 | 21200 | 9230 | 26300 | 19200 | 15900 | 21200 | 34500 | 93400 | 38400 | 15900 | 11600 |
| 12 | 19200 | 19200 | 9460 | 24900 | 16800 | 17400 | 23700 | 32400 | 91900 | 35000 | 16000 | 11800 |
| 13 | 18900 | 14500 | 8730 | 23700 | 14300 | 17600 | 29100 | 31500 | 88800 | 34800 | 16200 | 11800 |
| 14 | 18600 | 12000 | 8950 | 22000 | 14800 | 17700 | 32700 | 30200 | 87800 | 34600 | 15800 | 12200 |
| 15 | 19100 | 11200 | 9530 | 18300 | 16100 | 19200 | 40200 | 29100 | 85300 | 35800 | 15800 | 11800 |
| 16 | 19100 | 13500 | 12400 | 18000 | 16100 | 22500 | 48000 | 30800 | 83800 | 35700 | 15300 | 12600 |
| 17 | 18900 | 16800 | 14000 | 19800 | 15800 | 23000 | 42500 | 32100 | 83300 | 33700 | 14500 | 13100 |
| 18 | 19300 | 16200 | 14600 | 18400 | 15000 | 23700 | 44900 | 32200 | 75400 | 33200 | 13900 | 13400 |
| 19 | 19300 | 12500 | 16000 | 17100 | 15200 | 23900 | 39800 | 32600 | 73400 | 34000 | 14000 | 13400 |
| 20 | 19500 | 9670 | 17300 | 16300 | 17000 | 22500 | 37200 | 33800 | 68900 | 33100 | 12400 | 12900 |
| 21 | 19700 | 8640 | 16800 | 15600 | 16100 | 21100 | 38500 | 42800 | 66000 | 28100 | 12000 | 13300 |
| 22 | 19800 | 7770 | 13900 | 15800 | 14400 | 17300 | 37400 | 50700 | 68800 | 26000 | 11900 | 13600 |
| 23 | 19200 | 9330 | 12800 | 17100 | 14700 | 14800 | 31300 | 61200 | 67300 | 23600 | 11700 | 13000 |
| 24 | 19800 | 9330 | 12700 | 17600 | 14500 | 14200 | 28100 | 73600 | 67600 | 22300 | 11400 | 13200 |
| 25 | 20500 | 9560 | 12400 | 16600 | 13500 | 15300 | 36300 | 76200 | 71100 | 22400 | 11900 | 13100 |
| 26 | 19700 | 9940 | 12700 | 15100 | 14200 | 20100 | 36100 | 74700 | 76600 | 21900 | 13400 | 12900 |
| 27 | 19000 | 10200 | 12800 | 14300 | 15500 | 21500 | 33900 | 66100 | 75400 | 21100 | 13300 | 12300 |
| 28 | 18200 | 11500 | 13200 | 14500 | 16200 | 21000 | 32400 | 65800 | 75000 | 20600 | 13300 | 11100 |
| 29 | 18300 | 12500 | 14700 | 16900 | --- | 19400 | 32100 | 67400 | 77400 | 20800 | 13400 | 10600 |
| 30 | 19200 | 11100 | 15300 | 17600 | --- | 18100 | 31900 | 77200 | 80500 | 19800 | 13200 | 10100 |
| 31 | 18900 | --- | 13500 | 17400 | --- | 17000 | --- | 76900 | --- | 17000 | 12000 | --- |
| TOTAL | 557000 | 440740 | 367450 | 515600 | 456000 | 552400 | 857500 | 1402700 | 2414000 | 1143300 | 432200 | 356180 |
| MEAN | 17970 | 14690 | 11850 | 16630 | 16290 | 17820 | 28580 | 45250 | 80470 | 36880 | 13940 | 11870 |
| MAX | 20500 | 21900 | 17300 | 26300 | 20100 | 23900 | 48000 | 77200 | 93700 | 77100 | 18600 | 13600 |
| MIN | 12800 | 7770 | 8380 | 9770 | 13500 | 13500 | 15400 | 29100 | 66000 | 17000 | 11400 | 9210 |
| AC-FT | 1105000 | 874200 | 728800 | 1023000 | 904500 | 1096000 | 1701000 | 2782000 | 4788000 | 2268000 | 857300 | 706500 |
| CAL YR 2001 | TOTAL 4895970 | MEAN 13410 | MAX 30200 | MIN 5690 | AC-FT 9711000 | | | | | | | |
| WTR YR 2002 | TOTAL 9495070 | MEAN 26010 | MAX 93700 | MIN 7770 | AC-FT 18830000 | | | | | | | |