

12398600 PEND OREILLE RIVER AT INTERNATIONAL BOUNDARY

LOCATION.--Lat 48°59'56", long 117°21'09", in SW 1/4 NE 1/4 sec.3, T.40 N., R.43 E., Pend Oreille County, Hydrologic Unit 17010216, on left bank 0.1 mi upstream from international boundary, 0.9 mi downstream from Boundary Dam, 6.0 mi downstream from Slate Creek, 9.7 mi north of Metaline Falls, and at mile 16.1.

DRAINAGE AREA.--25,200 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--November 1908 to September 1910 (gage heights only), December 1912 to October 1995, October 1996 to current year. Prior to October 1928, published as "Clark Fork at Metaline Falls," October 1928 to September 1937 as "Clark Fork below Z Canyon, near Metaline Falls," and October 1938 to September 1964 as "below Z Canyon, near Metaline Falls." Concurrent records published for present site December 1962 to September 1964.

REVISED RECORDS.--WSP 442: 1913. WSP 1716: 1919.

GAGE.--Daily discharge determined from flow through turbines plus spillway flow when present. Datum of gage is 1,700.00 ft above NGVD of 1929 (City of Seattle Boundary Dam datum). Prior to Dec. 20, 1928, nonrecording gage at Metaline Falls at datum approximately 1,983.4 ft above NGVD of 1929. Dec. 20, 1928, to Sept. 30, 1964, water-stage recorder at site 1.3 mi upstream at datum 1,721.18 ft NGVD of 1929 (levels by Corps of Engineers).

REMARKS.--Flow regulated by Boundary Reservoir 0.9 mi upstream beginning April 1967, Box Canyon Reservoir beginning June 1955, Pend Oreille Lake beginning June 1952, Flathead Lake beginning April 1938, Hungry Horse Reservoir beginning September 1951, and by several smaller reservoirs and powerplants. In 1980 there were diversions for irrigation of 429,700 acres upstream from the station and there probably has not been any appreciable change since that time. Chemical analyses October 1973 to September 1986. Specific conductance records January 1974 to September 1981. Water temperature records April 1974 to September 1981.

COOPERATION.--Discharge records at Boundary Dam provided by Seattle City Light's Power Resources Branch. The U.S. Geological Survey made 6 discharge measurements at this site during the year.

AVERAGE DISCHARGE.--89 years (water years 1913-95, 1997-2002), 26,620 ft³/s, 19,290,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 171,300 ft³/s June 13, 1948, gage height, 60.25 ft, site and datum then in use; minimum daily discharge, no flow Aug. 14, 21, 28, Sept. 4, 1988, Aug. 7, 1994, result of regulation.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1894 reached a stage of 69.0 ft, from floodmarks, at site and datum 1.3 mi upstream.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 96,900 ft³/s June 10; minimum daily discharge, 2,040 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	12400	18800	10700	8280	20800	19900	21500	37600	77700	80400	16100	9880
2	16400	20100	7630	10700	15000	13600	15600	35300	82500	74900	16500	8630
3	14800	21300	9530	10600	17000	9400	13900	29900	91700	65800	17700	10900
4	15700	17000	10600	13600	17900	15600	17500	36600	90700	59100	11800	9700
5	16000	20200	10500	10800	17700	17700	18200	28600	91000	53700	13100	11500
6	17200	18900	10300	7000	18400	15800	15900	32000	92800	48100	13800	12100
7	15100	20400	11500	14900	18400	14700	13100	42300	94100	42800	11800	13500
8	16200	22800	12000	14500	17600	16600	17800	37200	94000	45000	15100	12700
9	16600	22400	8200	23400	20900	13000	17600	41900	95600	42900	18800	12600
10	19600	24600	8440	25200	20200	14200	14700	40000	96900	45500	15800	11700
11	19400	19900	10200	25300	19400	15800	20300	37300	96600	39400	17600	12000
12	19900	20600	10400	27400	17300	19200	27700	35000	95200	35900	18300	12600
13	19400	15400	8940	22300	16800	18700	33400	34900	95300	34900	17000	14900
14	18800	13000	10600	21700	14600	18800	33600	29700	94700	35300	16100	11500
15	20400	11900	10400	20000	17400	19800	35900	30800	92600	35900	16300	10400
16	19700	16300	11800	18900	16200	23800	47900	31900	90400	36000	16900	14100
17	19600	18500	16500	19000	14800	23200	46500	32100	89900	36000	14700	13200
18	20000	15900	15600	18800	15100	25300	44800	33000	84500	33800	13500	14200
19	19600	15300	16000	17600	15000	23100	42300	30800	82300	31900	15000	14600
20	19900	11900	19500	17300	17500	22200	29900	40300	70700	34800	13700	15400
21	20400	11600	16800	17200	19200	21400	39600	41300	66000	28100	12000	10100
22	20600	2040	15200	17300	16500	16700	39000	49800	68300	29600	12300	16000
23	21100	10800	13600	16200	14000	17500	32900	60900	66700	23400	14000	13200
24	22300	10500	14500	17800	11200	10200	27300	72200	65500	23200	12500	14700
25	19900	8310	10900	18100	12500	15500	33900	77100	69400	22500	10700	13200
26	19900	11100	16000	15800	14500	22900	37600	74800	78200	22500	15400	13800
27	18100	12700	12000	13800	18800	20300	35200	67800	77300	22400	15000	13200
28	15000	10800	14500	16400	13900	21400	30700	66600	77500	19500	13100	11400
29	18500	14300	16500	18900	---	21300	34600	69400	79100	21800	13800	10600
30	21500	12100	17100	16000	---	18400	30100	77600	82600	20000	13900	11000
31	19600	---	10400	18100	---	16500	---	80000	---	17400	13700	---
TOTAL	573600	469450	386840	532880	468600	562500	869000	1434700	2529800	1162500	456000	373310
MEAN	18500	15650	12480	17190	16740	18150	28970	46280	84330	37500	14710	12440
MAX	22300	24600	19500	27400	20900	25300	47900	80000	96900	80400	18800	16000
MIN	12400	2040	7630	7000	11200	9400	13100	28600	65500	17400	10700	8630
AC-FT	1138000	931200	767300	1057000	929500	1116000	1724000	2846000	5018000	2306000	904500	740500
CAL YR 2001	TOTAL 5072450	MEAN 13900	MAX 32400	MIN 2040	AC-FT 10060000							
WTR YR 2002	TOTAL 9819180	MEAN 26900	MAX 96900	MIN 2040	AC-FT 19480000							