

DIVERSION AT GRAND COULEE DAM

12435500 FEEDER CANAL AT GRAND COULEE, WA

LOCATION.--Lat 47°57'05", long 118°59'40", on line between secs.1 and 2, T.28 N., R.30 E., Grant County, Hydrologic Unit 17020001, on left bank at Grand Coulee, 0.2 mi downstream from headworks structure, and 0.5 mi southwest of Grand Coulee Dam.

PERIOD OF RECORD.--October 1951 to current year.

GAGE.--Daily discharge determined from flow through pumps or reverse flow through generators. Datum of gage is 1,500.00 ft above NGVD of 1929 (Bureau of Reclamation datum), adjustment of 1937. May 1, 1952, to Jan. 10, 1978, at datum 50.00 ft higher. Jan. 11, 1978, to Feb. 22, 1981, nonrecording gage at datum 1,500.00 ft lower. May 1, 1952, to Oct. 13, 1960, auxiliary gage 0.6 mi downstream from base gage at same datum.

REMARKS.--Since 1951, water has been pumped (lift about 280 ft) from Franklin D. Roosevelt Lake into the two-mile long Feeder Canal, which empties into Banks Lake. From Banks Lake, it is distributed through a system of canals to the Columbia Basin Project for irrigation. Between May 1951, and December 1974, six pumps were used. Since December 1974, six pump generators, which can also generate power during peak demand periods by returning water from Banks Lake, via the Feeder Canal, to Franklin D. Roosevelt Lake have been added; two in December 1974 and one each in April, June, and November 1983 and April 1984. Discharge is computed from relations between pump operation and head.

COOPERATION.--Discharge records furnished by Bureau of Reclamation; three discharge measurements made by U.S. Geological Survey.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 20,000 ft³/s July 5, 1997; minimum daily discharge, -7,900 ft³/s Nov. 16, 2001, reverse flow from Banks Lake.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 16,100 ft³/s Sept. 15; minimum daily discharge, -7,900 ft³/s Nov. 16, reverse flow from Banks Lake.

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	3640	1450	7570	0.00	0.00	8.1	2000	6380	9650	6160	8120	9920
2	3620	767	7580	0.00	0.00	0.00	4070	6310	9750	6130	9180	9890
3	3630	9300	1860	0.00	0.00	0.00	4040	6670	7170	6390	9240	5560
4	3660	10300	-5400	0.00	0.00	-288	4220	12000	6300	6450	9440	7280
5	3910	1640	-1400	0.00	0.00	0.00	6210	12000	6660	6460	5740	5070
6	5450	-33	-1160	0.00	0.00	0.00	6220	7820	7700	11400	5060	5450
7	5350	-3180	0.00	4.0	0.00	0.00	5940	7780	7730	4800	5070	8090
8	5230	-4360	0.00	0.00	0.00	0.00	6210	7680	6400	3970	5100	8040
9	5440	-3880	0.00	0.00	0.00	0.00	6290	7830	6400	11200	5060	5300
10	5530	1980	0.00	0.00	0.00	0.00	6270	7770	92	7010	7690	4810
11	5420	5800	-5440	33	0.00	2910	6250	11800	-1540	6130	9400	4840
12	5540	1390	0.00	8.1	-3600	979	7880	11800	3290	6480	5710	4840
13	5500	-3110	0.00	0.00	0.00	2040	12900	7090	3890	11400	5200	5430
14	9240	-4360	0.00	0.00	0.00	1620	12800	5640	4230	11400	5150	9700
15	4380	-7790	0.00	0.00	0.00	80	9930	5570	14500	6450	5280	16100
16	3490	-7900	0.00	0.00	0.00	0.00	5000	5630	14600	6290	5200	5160
17	3660	0.00	113	0.00	0.00	0.00	3040	6040	6930	5620	6160	4450
18	3690	0.00	1290	0.00	0.00	0.00	3670	9960	6450	8600	9390	4460
19	3670	-700	1930	0.00	0.00	0.00	458	10200	8770	11100	5570	4260
20	3680	-7.6	0.00	0.00	0.00	819	7880	6540	7250	11000	4980	4810
21	7450	808	0.00	0.00	0.00	1270	9800	5630	7380	11000	5080	5290
22	3390	5780	858	0.00	0.00	1850	-366	5670	14700	4420	5140	4680
23	2410	5760	3130	8.1	0.00	6090	8820	5710	13600	6620	5140	3740
24	1850	-438	2590	0.00	0.00	6100	7920	6200	5170	6430	5320	3450
25	1710	-1380	3830	0.00	0.00	2100	7460	10400	6060	5060	9600	3690
26	1700	-2320	1860	0.00	-3660	1840	7560	10500	6100	6410	5700	3990
27	1950	-2580	0.00	0.00	-2380	1380	10500	10600	6090	6280	5190	3970
28	6040	-1780	33	0.00	0.00	2100	10500	7100	6150	11200	4310	4410
29	1430	315	0.00	0.00	---	2110	6820	5990	11100	4430	3300	6290
30	517	0.00	0.00	-1810	---	6190	6490	6340	11200	5980	7870	4300
31	2070	---	0.00	0.00	---	6200	---	6400	---	5230	2780	---
TOTAL	124247	1471.40	19244.00	-1756.80	-9640.00	45398.10	196782	243050	223772	227500	191170	177270
MEAN	4008	49.05	620.8	-56.67	-344.3	1464	6559	7840	7459	7339	6167	5909
MAX	9240	10300	7580	33	0.00	6200	12900	12000	14700	11400	9600	16100
MIN	517	-7900	-5440	-1810	-3660	-288	-366	5570	-1540	3970	2780	3450
AC-FT	246400	2920	38170	-3480	-19120	90050	390300	482100	443900	451200	379200	351600
CAL YR 2001	TOTAL	1259712.40	MEAN	3451	MAX	10800	MIN	-7900	AC-FT	2499000		
WTR YR 2002	TOTAL	1438507.70	MEAN	3941	MAX	16100	MIN	-7900	AC-FT	2853000		