Water-Data Report 2008

12435500 FEEDER CANAL AT GRAND COULEE, WA

Upper Columbia Basin
Franklin D. Roosevelt Lake Subbasin

LOCATION.--Lat 47°57′05″, long 118°59′40″ referenced to North American Datum of 1927, in T.28 N., R.30 E., Lincoln County, WA, 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.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1952 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.

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

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.

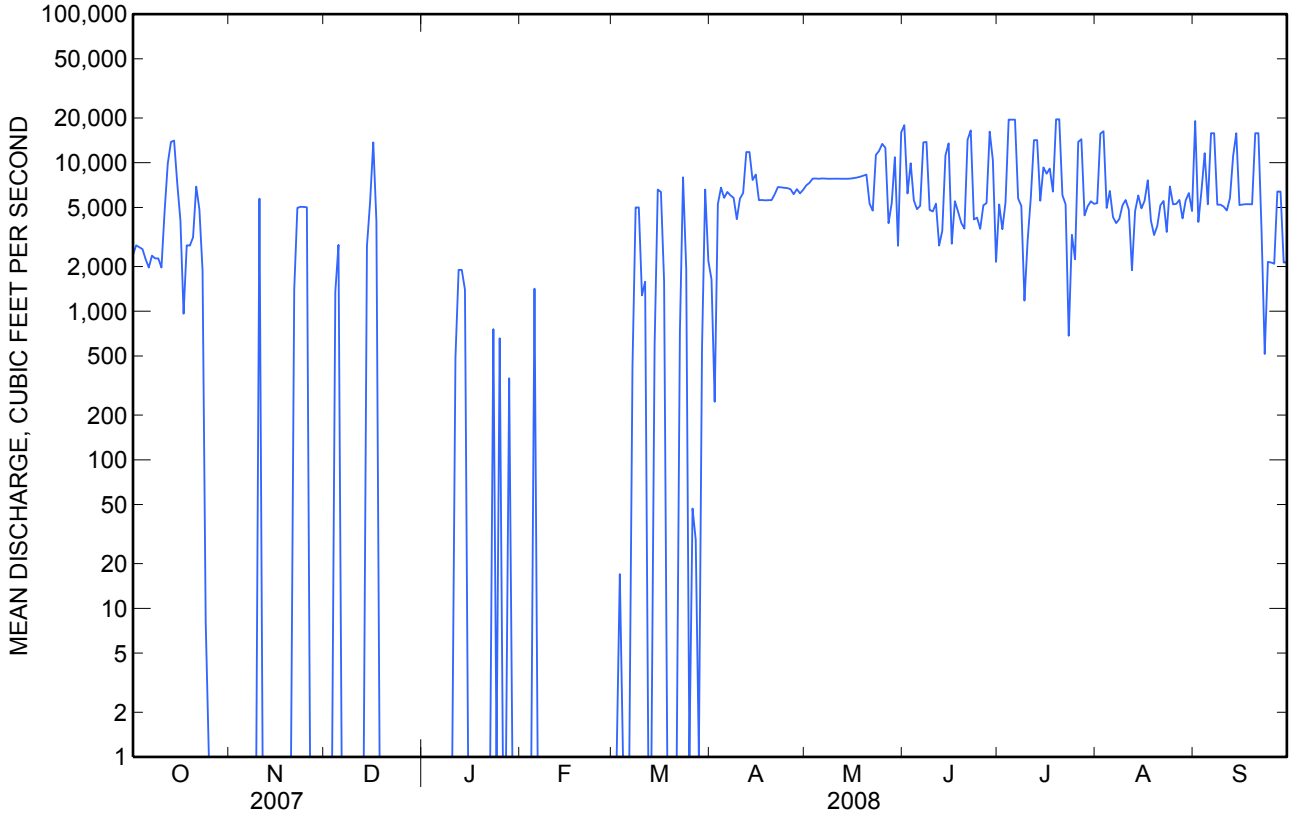
EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 20,300 ft^3/s, May 29, 2004; minimum daily discharge, -8,580 ft^3/s, Dec. 10, 2007, reverse flow from Banks Lake.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 19,600 ft^3/s, July 19, 20; minimum daily discharge, -8,580 ft^3/s, Dec. 10, reverse flow from Banks Lake.

12435500 FEEDER CANAL AT GRAND COULEE, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,400	0.00	0.00	0.00	0.00	0.00	1,640	7,050	17,900	5,240	5,340	19,100
2	2,780	0.00	0.00	-2,360	0.00	0.00	246	7,330	6,210	3,570	15,700	3,990
3	2,700	0.00	-2,710	-1,880	0.00	17	5,260	7,820	9,920	5,410	16,300	6,500
4	2,620	0.00	1,350	0.00	0.00	0.00	6,800	7,830	5,590	19,500	4,960	11,600
5	2,240	0.00	2,800	0.00	1,420	0.00	5,800	7,800	4,870	19,500	6,460	5,250
6	1,970	0.00	0.00	0.00	0.00	0.00	6,360	7,840	5,130	19,500	4,310	15,800
7	2,370	0.00	0.00	-1,530	0.00	429	6,030	7,820	13,700	5,740	3,920	15,800
8	2,270	0.00	0.00	0.00	0.00	5,000	5,800	7,800	13,800	5,120	4,180	5,220
9	2,270	0.00	0.00	0.00	0.00	5,000	4,170	7,800	4,810	1,180	5,170	5,220
10	1,970	5,730	-8,580	0.00	0.00	1,280	5,730	7,810	4,700	3,000	5,610	5,070
11	4,730	0.00	0.00	488	0.00	1,580	6,260	7,810	5,300	5,820	4,830	4,770
12	9,880	-2,800	-6,520	1,900	0.00	0.00	11,800	7,800	2,770	14,200	1,890	5,790
13	13,800	-2,160	-2,230	1,900	0.00	0.00	11,800	7,800	3,480	14,200	4,730	11,100
14	14,100	-6,690	2,750	1,400	0.00	587	7,650	7,800	11,200	5,550	6,020	15,800
15	7,250	-2,740	5,450	0.00	0.00	6,600	8,330	7,820	13,500	9,300	4,930	5,190
16	4,100	0.00	13,700	0.00	0.00	6,360	5,600	7,880	2,850	8,440	5,550	5,230
17	963	0.00	4,040	0.00	0.00	1,590	5,610	7,950	5,510	9,140	7,620	5,260
18	2,780	0.00	-4,210	0.00	0.00	0.00	5,580	8,050	4,680	6,390	4,070	5,260
19	2,770	0.00	0.00	0.00	-3,830	0.00	5,600	8,180	3,940	19,600	3,260	5,250
20	3,150	0.00	0.00	0.00	0.00	0.00	5,600	8,320	3,600	19,600	3,750	15,800
21	6,910	1,400	0.00	-238	0.00	0.00	6,140	5,300	14,300	6,050	5,180	15,800
22	4,850	4,970	0.00	-2,920	0.00	732	6,860	4,760	16,500	5,250	5,530	3,420
23	1,890	5,050	0.00	758	0.00	7,980	6,830	11,300	4,150	684	3,420	516
24	8.0	5,040	0.00	0.00	0.00	1,930	6,780	12,000	4,270	3,270	6,920	2,150
25	-1,270	5,010	0.00	658	0.00	0.00	6,750	13,400	3,590	2,240	5,250	2,130
26	0.00	-38	0.00	0.00	0.00	47	6,630	12,600	5,170	13,800	5,280	2,090
27	0.00	-1,230	-1,880	0.00	-1,330	29	6,140	3,920	5,350	14,400	5,620	6,400
28	0.00	0.00	0.00	354	0.00	0.00	6,640	5,350	16,200	4,420	4,220	6,400
29	0.00	0.00	0.00	-633	0.00	563	6,220	10,900	10,400	5,100	5,580	2,130
30	0.00	0.00	0.00	0.00	---	6,600	6,580	2,760	2,150	5,500	6,250	2,130
31	0.00	---	0.00	-2,500	---	2,180	---	16,000	---	5,290	4,730	---
Total	99,501.00	11,542.00	3,960.00	-4,603.00	-3,740.00	48,504.00	187,236	254,600	225,540	266,004	176,580	216,166
Mean	3,210	385	128	-148	-129	1,565	6,241	8,213	7,518	8,581	5,696	7,206
Max	14,100	5,730	13,700	1,900	1,420	7,980	11,800	16,000	17,900	19,600	16,300	19,100
Min	-1,270	-6,690	-8,580	-2,920	-3,830	0.00	246	2,760	2,150	684	1,890	516
Ac-ft	197,400	22,890	7,850	-9,130	-7,420	96,210	371,400	505,000	447,400	527,600	350,200	428,800

	Calendar Year 2007	Water Year 2008
Total	1,470,691.00	1,481,290.00
Mean	4,029	4,047
Max	18,400	19,600
Min	-8,580	-8,580
Ac-ft	2,917,000	2,938,000

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