12436000 FRANKLIN D. ROOSEVELT LAKE AT GRAND COULEE DAM, WA

Upper Columbia Basin
Chief Joseph Subbasin

LOCATION.--Lat 47°57′20″, long 118°59′02″ referenced to North American Datum of 1927, in sec.1, T.28 N., R.30 E., Grant County, WA, Hydrologic Unit 17020005, in block 12 of Grand Coulee Dam on Columbia River, and at mile 596.6.

DRAINAGE AREA.--74,700 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April 1938 to current year. Prior to October 1943, published as Columbia River Reservoir at Grand Coulee Dam.

REVISED RECORDS.--WSP 1286: 1942, 1945(M). WSP 1316: 1942 (May monthend contents). WSP 1933: Drainage area. WDR WA-73-1: 1965, 1967. WDR WA-75-1: 1974 monthend contents.

GAGE.--U.S. Geological Survey water-stage recorder. Datum of gage is NGVD of 1929, adjustment of 1937 (Bureau of Reclamation datum), or 1.425 ft above NGVD of 1929 (levels by Bureau of Reclamation). Prior to Apr. 24, 1942, nonrecording gage at site 2,000 ft upstream at same datum.

REMARKS.--Reservoir is formed by concrete dam; construction of dam began in 1934; completed in 1941; storage began early in construction period. Capacity, 5,022,000 acre-ft between elevations 1,208 ft, proposed lower limit of operation, and 1,288 ft, top of gates. Capacity increased to 5,185,000 acre-ft by use of 2-ft flashboards installed after high-water period each year beginning August 1961. Storage below 1,208 ft, 4,209,000 acre-ft. Figures given herein represent total contents. Water is used for power generation and irrigation. Flow is regulated by nine major reservoirs and numerous smaller reservoirs and powerplants. Diversion by Feeder Canal (station 12435500) for irrigation of about 600,000 acres in the United States plus additional diversions in Canada for irrigation of about 66,500 acres. Maximum and minimum midnight contents were published as EXTREMES FOR CURRENT YEAR for 1997 to 2001.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents 9,586,000 acre-ft, July 17, 1942, June 3, 1945, elevation, 1,290.3 ft; maximum elevation, 1,290.36 ft, Aug. 6, 1976; minimum contents observed, 16,200 acre-ft, Aug. 29, 1938, elevation, 956.1 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents, 9,372,000 acre-ft, July 13, elevation, 1,289.73 ft; minimum contents, 6,786,000 acre-ft, May 10, elevation, 1,254.38.

CAPACITY TABLE

(Prepared by U.S. Geological Survey from data furnished by Bureau of Reclamation, dated Oct. 24, 1975)

Elevation (feet)	Contents (acre-feet)	Elevation (feet)	Contents (acre-feet)
1,210.0	4,301,000	1,270.0	7,864,000
1,230.0	5,309,000	1,291.0	9,477,000
1,250.0	6,502,000		

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 12436000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/12436000.2013.pdf

12436000 FRANKLIN D. ROOSEVELT LAKE AT GRAND COULEE DAM, WA—Continued

LAKE OR RESERVOIR WATER SURFACE ELEVATION ABOVE NGVD 1929, FEET
ADJUSTMENT OF 1937 (BUREAU OF RECLAMATION DATUM), FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,283.64	1,287.25	1,283.75	1,284.15	1,276.06	1,275.62	1,282.07	1,257.26	1,278.53	1,286.59	1,286.44	1,278.14
2	1,283.88	1,287.02	1,284.37	1,283.35	1,277.16	1,276.00	1,281.71	1,256.49	1,278.99	1,286.35	1,286.04	1,278.57
3	1,283.79	1,287.47	1,285.09	1,282.17	1,278.88	1,276.70	1,280.58	1,255.75	1,279.81	1,286.34	1,285.77	1,278.59
4	1,283.64	1,287.68	1,285.85	1,281.00	1,279.80	1,276.42	1,279.75	1,255.81	1,280.26	1,286.68	1,285.41	1,278.56
5	1,283.61	1,287.66	1,285.91	1,280.11	1,280.17	1,275.99	1,279.41	1,255.61	1,280.78	1,287.04	1,284.96	1,278.55
6	1,283.65	1,287.34	1,286.36	1,279.54	1,280.44	1,276.04	1,279.67	1,255.18	1,281.53	1,286.90	1,284.80	1,278.99
7	1,283.73	1,287.53	1,286.58	1,279.34	1,280.63	1,275.77	1,280.48	1,254.86	1,282.76	1,287.08	1,284.33	1,279.35
8	1,283.84	1,287.26	1,286.80	1,279.06	1,280.47	1,275.25	1,280.31	1,254.80	1,284.18	1,287.94	1,283.83	1,279.40
9	1,283.93	1,286.74	1,286.99	1,279.20	1,280.55	1,275.54	1,279.79	1,254.51	1,285.67	1,288.72	1,283.62	1,279.66
10	1,284.02	1,286.21	1,287.13	1,278.96	1,280.64	1,276.18	1,278.94	1,254.44	1,286.23	1,289.12	1,283.46	1,279.92
11	1,283.96	1,286.02	1,286.85	1,278.72	1,280.68	1,275.97	1,277.80	1,255.60	1,286.54	1,289.34	1,283.37	1,280.03
12	1,284.15	1,285.84	1,286.59	1,278.20	1,280.69	1,276.01	1,276.62	1,257.23	1,286.31	1,289.71	1,283.26	1,280.01
13	1,284.44	1,285.71	1,286.03	1,277.87	1,280.43	1,275.94	1,275.61	1,258.94	1,286.17	1,289.56	1,282.84	1,280.07
14	1,284.68	1,285.38	1,285.73	1,277.37	1,279.89	1,275.93	1,274.53	1,260.95	1,286.09	1,289.50	1,282.32	1,280.36
15	1,284.66	1,284.76	1,285.22	1,277.12	1,279.44	1,276.15	1,273.05	1,262.78	1,285.94	1,289.50	1,281.72	1,280.17
16	1,285.30	1,284.11	1,285.13	1,276.43	1,279.05	1,276.76	1,271.58	1,264.30	1,286.02	1,289.42	1,280.96	1,280.64
17	1,285.48	1,283.51	1,284.87	1,275.81	1,278.61	1,277.59	1,270.15	1,265.52	1,285.94	1,289.16	1,280.74	1,281.34
18	1,285.57	1,283.46	1,284.83	1,275.12	1,277.70	1,278.21	1,268.61	1,266.87	1,285.78	1,289.04	1,280.72	1,281.84
19	1,285.99	1,283.43	1,284.82	1,274.28	1,276.70	1,278.03	1,267.75	1,267.61	1,286.34	1,288.77	1,280.55	1,282.45
20	1,286.85	1,283.93	1,284.63	1,273.52	1,275.72	1,278.75	1,267.10	1,268.62	1,287.17	1,288.90	1,280.22	1,283.13
21	1,287.38	1,284.41	1,284.58	1,272.55	1,275.24	1,279.33	1,266.14	1,269.06	1,287.40	1,289.14	1,280.05	1,283.39
22	1,287.12	1,284.57	1,285.11	1,271.88	1,274.95	1,279.93	1,264.90	1,269.85	1,287.54	1,289.05	1,279.97	1,283.38
23	1,286.93	1,284.84	1,285.47	1,271.07	1,275.33	1,280.82	1,263.51	1,271.19	1,287.66	1,288.67	1,279.97	1,283.64
24	1,286.77	1,284.41	1,286.01	1,270.77	1,276.09	1,281.99	1,262.57	1,272.06	1,287.94	1,288.34	1,280.03	1,284.01
25	1,286.77	1,284.39	1,286.07	1,270.78	1,275.82	1,282.73	1,261.54	1,272.58	1,288.08	1,287.99	1,279.56	1,284.34
26	1,286.45	1,284.54	1,285.96	1,271.13	1,275.65	1,282.67	1,260.48	1,272.95	1,288.03	1,287.50	1,279.24	1,284.27
27	1,286.62	1,284.49	1,286.11	1,272.53	1,275.33	1,282.35	1,260.25	1,273.18	1,287.63	1,287.66	1,278.81	1,284.25
28	1,287.22	1,284.04	1,285.32	1,272.71	1,275.40	1,281.78	1,259.84	1,273.56	1,287.22	1,287.74	1,278.44	1,284.47
29	1,287.26	1,283.83	1,284.97	1,273.18	---	1,281.58	1,259.04	1,274.62	1,286.77	1,287.58	1,277.91	1,284.98
30	1,287.26	1,283.92	1,284.57	1,274.11	---	1,281.96	1,258.12	1,276.68	1,286.82	1,287.19	1,277.54	1,284.78
31	1,287.11	---	1,284.09	1,275.08	---	1,282.18	---	1,277.67	---	1,286.65	1,277.36	---
Max	1,287.38	1,287.68	1,287.13	1,284.15	1,280.69	1,282.73	1,282.07	1,277.67	1,288.08	1,289.71	1,286.44	1,284.98
Min	1,283.61	1,283.43	1,283.75	1,270.77	1,274.95	1,275.25	1,258.12	1,254.44	1,278.53	1,286.34	1,277.36	1,278.14
Total Contents, in acre-feet, at end of month												
	9,160,000	8,906,000	8,920,000	8,235,000	8,259,000	8,771,000	7,035,000	8,428,000	9,136,000	9,123,000	8,405,000	8,974,000
Change in contents, in acre-feet												
	+228,000	-254,000	+14,000	-685,000	+24,000	+512,000	-1,736,000	+1,393,000	+708,000	-13,000	-718,000	+569,000

	Calendar Year 2012	Water Year 2013
Max	1,289.63	1,289.71
Min	1,227.54	1,254.44
Change in content, in acre-feet	+237,000	+42,000