



Water-Data Report 2007

12301920 LAKE KOOCANUSA NEAR LIBBY, MT

Kootenai Basin
Upper Kootenai Subbasin

LOCATION.--Lat 48°24'38", long 115°18'47" referenced to North American Datum of 1927, in NW ¼ sec.33, T.31 N., R.29 W., Lincoln County, MT, Hydrologic Unit 17010101, Kootenai National Forest, in block 18 of Libby Dam on Kootenai River, 11 mi east of Libby and at river mile 221.8.

DRAINAGE AREA.--8,985 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--March 1972 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,201.5, referenced to the National Geodetic Vertical Datum of 1929 (levels by U.S. Army Corps of Engineers). Prior to July 2, 1973, nonrecording gage on upstream face of dam at same elevation.

COOPERATION.--Capacity table and elevations provided by U.S. Army Corps of Engineers.

REMARKS.--Reservoir and flow are completely controlled by gravity type dam with taintor gated spillway; construction began in 1967 and was completed in 1973. Storage began Mar. 21, 1972. Usable capacity is 5,748,000 acre-ft between elevation 2,201.5 ft, bottom of sluice gate, and 2,459 ft, controlled spillway elevation. Dead storage is 121,200 acre-ft below elevation 2,201.5 ft. Minimum operating level is 768,700 acre-ft, elevation 2,287.0 ft for on-site power generation. Figures given herein represent usable contents. Water is used for power production, flood control, irrigation, and recreation.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents, 5,756,000 acre-ft, June 17, 2006, elevation, 2,459.17 ft; minimum contents observed after normal low operating level reached in May 1972, 139,600 acre-ft, Dec. 16-21, 1972, elevation, 2,226.5 ft.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 5,530,000 acre-ft, July 21, elevation, 2,454.25 ft; minimum, 2,938,000 acre-ft, Apr. 29 and 30, elevation, 2,386.05 ft.

AREA CAPACITY TABLE.--Dated June 1980.

CAPACITY TABLE

Elevation (ft)	Capacity (acre-feet)
2,360	2,232,000
2,380	2,765,000
2,400	3,367,000
2,420	4,085,000
2,440	4,899,000
2,460	5,795,000

12301920 LAKE KOOCANUSA NEAR LIBBY, MT—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY OBSERVATION AT 2400 HOURS

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,437.36	2,436.20	2,431.23	2,410.09	2,393.24	2,388.93	2,395.46	2,386.15	2,413.76	2,450.34	2,451.80	2,438.84
2	2,437.38	2,435.89	2,430.49	2,409.42	2,392.88	2,388.83	2,395.54	2,386.20	2,415.10	2,450.80	2,451.46	2,438.69
3	2,437.41	2,435.58	2,430.01	2,408.95	2,392.43	2,388.71	2,395.51	2,386.72	2,416.82	2,451.11	2,451.03	2,438.55
4	2,437.36	2,435.33	2,429.27	2,408.46	2,392.00	2,388.65	2,395.37	2,387.29	2,418.71	2,451.49	2,450.68	2,438.39
5	2,437.36	2,435.13	2,428.40	2,407.95	2,391.61	2,388.56	2,395.28	2,387.77	2,421.04	2,451.80	2,450.31	2,438.18
6	2,437.36	2,434.97	2,427.54	2,407.44	2,391.28	2,388.50	2,395.20	2,388.09	2,423.57	2,452.19	2,449.87	2,438.05
7	2,437.36	2,435.45	2,426.71	2,406.92	2,390.81	2,388.42	2,395.17	2,388.39	2,426.05	2,452.63	2,449.47	2,437.80
8	2,437.30	2,436.14	2,425.90	2,406.42	2,390.45	2,388.38	2,395.11	2,388.76	2,428.38	2,453.02	2,449.08	2,437.70
9	2,437.20	2,436.56	2,425.21	2,406.03	2,390.22	2,388.37	2,395.18	2,389.57	2,430.20	2,453.37	2,448.68	2,437.49
10	2,437.18	2,436.90	2,424.74	2,405.62	2,390.18	2,388.34	2,395.48	2,390.90	2,431.75	2,453.47	2,448.09	2,437.31
11	2,437.15	2,437.14	2,424.02	2,404.62	2,390.22	2,388.35	2,395.59	2,392.43	2,433.19	2,453.58	2,447.83	2,437.10
12	2,437.13	2,437.30	2,423.19	2,403.50	2,390.13	2,388.55	2,395.48	2,393.90	2,434.48	2,453.65	2,447.36	2,436.94
13	2,437.11	2,437.35	2,422.27	2,402.39	2,390.08	2,388.99	2,395.53	2,395.61	2,435.52	2,453.69	2,446.89	2,436.71
14	2,437.02	2,437.15	2,421.49	2,401.24	2,389.94	2,389.46	2,395.48	2,397.57	2,436.47	2,453.76	2,446.44	2,436.50
15	2,437.00	2,436.78	2,420.59	2,400.34	2,389.85	2,389.75	2,395.47	2,399.08	2,437.27	2,453.81	2,446.00	2,436.30
16	2,437.04	2,436.48	2,419.88	2,399.72	2,389.81	2,389.95	2,395.44	2,400.52	2,437.96	2,453.87	2,445.50	2,436.13
17	2,437.00	2,436.23	2,419.39	2,399.08	2,389.78	2,390.21	2,395.15	2,402.08	2,438.67	2,453.92	2,444.98	2,436.10
18	2,436.94	2,436.06	2,418.49	2,398.46	2,389.63	2,390.49	2,394.45	2,403.82	2,439.64	2,454.10	2,444.51	2,436.01
19	2,436.92	2,435.88	2,417.61	2,397.90	2,389.62	2,390.85	2,393.58	2,405.57	2,440.65	2,454.11	2,444.03	2,435.94
20	2,436.87	2,435.65	2,416.61	2,397.58	2,389.54	2,391.34	2,392.70	2,407.40	2,441.64	2,454.22	2,443.50	2,435.86
21	2,436.85	2,435.25	2,415.65	2,397.20	2,389.53	2,391.65	2,391.80	2,408.82	2,442.67	2,454.22	2,443.05	2,435.78
22	2,436.81	2,435.20	2,415.00	2,396.83	2,389.51	2,392.02	2,390.84	2,409.64	2,443.88	2,454.18	2,442.56	2,435.77
23	2,436.76	2,435.11	2,414.50	2,396.57	2,389.36	2,392.35	2,389.90	2,409.97	2,444.98	2,454.02	2,442.18	2,435.64
24	2,436.71	2,435.23	2,414.27	2,396.25	2,389.30	2,392.67	2,389.04	2,410.32	2,446.05	2,453.85	2,441.73	2,435.53
25	2,436.69	2,435.30	2,413.99	2,395.90	2,389.22	2,393.72	2,388.18	2,410.45	2,446.81	2,453.71	2,441.29	2,435.46
26	2,436.59	2,435.32	2,413.62	2,395.57	2,389.11	2,394.75	2,387.46	2,410.49	2,447.52	2,453.47	2,440.87	2,435.38
27	2,436.53	2,434.80	2,413.13	2,395.23	2,389.03	2,395.30	2,386.73	2,410.59	2,448.01	2,453.25	2,440.47	2,435.29
28	2,436.50	2,434.01	2,412.62	2,394.88	2,388.95	2,395.31	2,386.17	2,410.92	2,448.43	2,453.00	2,440.01	2,435.18
29	2,436.57	2,433.01	2,411.96	2,394.51	---	2,395.24	2,386.08	2,411.52	2,448.99	2,452.72	2,439.59	2,435.09
30	2,436.45	2,432.01	2,411.42	2,394.09	---	2,395.32	2,386.08	2,412.10	2,449.65	2,452.40	2,439.23	2,435.01
31	2,436.41	---	2,410.78	2,393.66	---	2,395.37	---	2,412.78	---	2,452.10	2,438.94	---
Mean	2,436.98	2,435.65	2,420.32	2,401.06	2,390.28	2,390.88	2,392.82	2,399.85	2,435.59	2,453.09	2,445.40	2,436.62
Max	2,437.41	2,437.35	2,431.23	2,410.09	2,393.24	2,395.37	2,395.59	2,412.78	2,449.65	2,454.22	2,451.80	2,438.84
Min	2,436.41	2,432.01	2,410.78	2,393.66	2,388.95	2,388.34	2,386.08	2,386.15	2,413.76	2,450.34	2,438.94	2,435.01

CONTENTS IN THOUSANDS OF ACRE-FEET, AT END OF MONTH

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	4,747	4,564	3,740	3,166	3,023	3,219	2,939	3,813	5,322	5,432	4,854	4,688

CHANGE IN CONTENTS, IN ACRE-FEET

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
	-41,000	-183,000	-824,000	-574,000	-143,000	+196,000	-280,000	+874,000	+1,509,000	+110,000	-578,000	-166,000

Calendar Year 2006 -47,000

Water year 2007 +100,000