



Water-Data Report 2007

12452000 LAKE CHELAN AT CHELAN, WA

Upper Columbia Basin
Lake Chelan Subbasin

LOCATION.--Lat 47°50'11", long 120°03'37" referenced to North American Datum of 1927, in sec.15, T.27 N., R.22 E., Chelan County, WA, Hydrologic Unit 17020009, on south shore of Lake Chelan at Lakeside, 2.1 mi west of Chelan.

DRAINAGE AREA.--924 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--September 1897 to December 1899, January to June 1905 and December 1910 to September 1911 (fragmentary gage heights only), October 1911 to current year. Records of change in contents prior to October 1911, published in WSP 482 and 492 in conjunction with records for Chelan River near Chelan, have been found to be unreliable and should not be used. Month-end contents October 1911 to September 1950 published in WSP 1316.

Chemical analyses June 1971 to August 1972.

REVISED RECORDS.--WSP 1246: 1951. WSP 1286: 1952. WSP 1933: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1912. To convert to NGVD of 1929, subtract 1.73 ft. Prior to Jan. 1, 1900, non-recording gage at Lakeside about 1 mi west of Chelan at datum 1,070.18 ft above NGVD of 1912. Jan. 1 to June 30, 1905, non-recording gage at upper highway bridge at Chelan at different datum. Dec. 5, 1910, to Nov. 13, 1927, non-recording gage at Forest Service boat landing at Chelan at datum 1,076.07 ft above NGVD of 1912.

REMARKS.--Reservoir is formed by low concrete dam at lake outlet completed Sept. 3, 1927. Usable capacity between elevations 1,079 ft and 1,100 ft, 677,400 acre-ft. Regulation between these elevations is allowed by stipulation of the Federal Power Commission. Water is used for power development. Elevation of lake maintained between 1,092 ft and 1,100 ft during period Aug. 16 to Sept. 15 for scenic effect and recreational purposes. Diversions for irrigation of about 6,280 acres with an annual depletion of about 11,000 acre-ft, 1946 estimate.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,100.16 ft, June 30, 1981 (affected by seiche); maximum contents, 679,300 acre-ft, June 30, 1981, elevation, 1,100.06 ft, mean of seiche; minimum elevation since completion of dam in 1927, 1,079.68 ft, Apr. 3, 4, 1937, Apr. 3, 1970, contents, 21,350 acre-ft; minimum elevation, 1,076.78 ft, Jan. 27, 28, Dec. 2-5, 1898.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 1100.14 ft July 18 (affected by seiche); Maximum contents, 676,400 acre-ft, July 18, elevation, 1,099.97 ft, mean of seiche; minimum contents, 316,600 acre-ft March 11, 12, elevation, 1,088.94 ft.

CAPACITY TABLE

(Based on data by the Pacific Northwest Coordination Agreement)

Gage height (feet)	Contents (acre-feet)	Gage height (feet)	Contents (acre-feet)	Gage height (feet)	Contents (acre-feet)
1,080	31,540	1,090	350,900	1,100	677,400
1,085	190,200	1,095	513,300		

12452000 LAKE CHELAN AT CHELAN, WA—Continued

ELEVATION ABOVE NGVD 1929, FEET
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1,098.04	1,094.39	1,096.18	1,094.14	1,091.77	1,089.74	1,091.38	1,092.26	1,095.20	1,098.85	1,099.72	1,099.23
2	1,097.89	1,094.28	1,096.10	1,094.09	1,091.67	1,089.64	1,091.44	1,092.16	1,095.53	1,098.98	1,099.69	1,099.22
3	1,097.77	1,094.18	1,096.02	1,094.10	1,091.58	1,089.55	1,091.44	1,092.07	1,096.01	1,099.11	1,099.69	1,099.24
4	1,097.67	1,094.11	1,095.94	1,094.05	1,091.49	1,089.47	1,091.48	1,091.97	1,096.69	1,099.25	1,099.64	1,099.17
5	1,097.54	1,094.11	1,095.86	1,093.98	1,091.40	1,089.39	1,091.50	1,091.88	1,097.21	1,099.43	1,099.60	1,099.10
6	1,097.43	1,094.42	1,095.79	1,093.97	1,091.32	1,089.31	1,091.53	1,091.78	1,097.39	1,099.65	1,099.63	1,099.00
7	1,097.33	1,095.67	1,095.72	1,093.97	1,091.23	1,089.24	1,091.56	1,091.71	1,097.42	1,099.66	1,099.65	1,098.89
8	1,097.20	1,096.33	1,095.64	1,093.86	1,091.14	1,089.15	1,091.63	1,091.72	1,097.44	1,099.64	1,099.65	1,098.76
9	1,097.09	1,096.52	1,095.55	1,093.80	1,091.06	1,089.08	1,091.81	1,091.80	1,097.53	1,099.63	1,099.65	1,098.65
10	1,096.98	1,096.62	1,095.49	1,093.73	1,090.98	1,089.00	1,091.97	1,091.91	1,097.67	1,099.63	1,099.66	1,098.55
11	1,096.85	1,096.71	1,095.43	1,093.63	1,090.92	1,088.96	1,092.07	1,091.99	1,097.79	1,099.67	1,099.63	1,098.45
12	1,096.74	1,096.73	1,095.42	1,093.54	1,090.84	1,089.01	1,092.18	1,092.09	1,097.81	1,099.75	1,099.67	1,098.34
13	1,096.63	1,096.80	1,095.39	1,093.46	1,090.76	1,089.23	1,092.27	1,092.28	1,097.83	1,099.79	1,099.68	1,098.24
14	1,096.52	1,096.81	1,095.41	1,093.37	1,090.67	1,089.40	1,092.37	1,092.41	1,097.82	1,099.80	1,099.61	1,098.14
15	1,096.41	1,096.81	1,095.45	1,093.28	1,090.64	1,089.48	1,092.44	1,092.61	1,097.83	1,099.85	1,099.54	1,098.05
16	1,096.30	1,096.91	1,095.38	1,093.20	1,090.58	1,089.52	1,092.47	1,092.83	1,097.82	1,099.87	1,099.50	1,097.99
17	1,096.18	1,096.88	1,095.30	1,093.10	1,090.47	1,089.58	1,092.51	1,093.09	1,097.83	1,099.89	1,099.45	1,097.85
18	1,096.08	1,096.84	1,095.21	1,093.02	1,090.45	1,089.64	1,092.53	1,093.28	1,097.78	1,099.96	1,099.38	1,097.73
19	1,095.99	1,096.81	1,095.13	1,092.94	1,090.35	1,089.74	1,092.51	1,093.44	1,097.79	1,099.97	1,099.37	1,097.62
20	1,095.87	1,096.79	1,095.06	1,092.86	1,090.37	1,089.90	1,092.49	1,093.56	1,097.84	1,099.95	1,099.35	1,097.50
21	1,095.72	1,096.75	1,094.97	1,092.77	1,090.22	1,089.96	1,092.49	1,093.73	1,097.94	1,099.87	1,099.33	1,097.41
22	1,095.61	1,096.72	1,094.89	1,092.68	1,090.15	1,090.03	1,092.49	1,093.75	1,098.09	1,099.85	1,099.36	1,097.39
23	1,095.50	1,096.70	1,094.85	1,092.60	1,090.09	1,090.11	1,092.50	1,093.75	1,098.18	1,099.87	1,099.38	1,097.40
24	1,095.39	1,096.66	1,094.76	1,092.51	1,090.02	1,090.25	1,092.52	1,093.79	1,098.24	1,099.92	1,099.33	1,097.35
25	1,095.28	1,096.61	1,094.73	1,092.42	1,089.98	1,090.56	1,092.51	1,093.94	1,098.27	1,099.91	1,099.33	1,097.32
26	1,095.14	1,096.54	1,094.66	1,092.33	1,089.94	1,090.75	1,092.40	1,094.12	1,098.31	1,099.89	1,099.38	1,097.33
27	1,095.02	1,096.45	1,094.61	1,092.24	1,089.88	1,091.01	1,092.27	1,094.39	1,098.38	1,099.89	1,099.37	1,097.30
28	1,094.91	1,096.37	1,094.52	1,092.14	1,089.82	1,091.11	1,092.34	1,094.58	1,098.49	1,099.88	1,099.32	1,097.33
29	1,094.81	1,096.29	1,094.42	1,092.04	---	1,091.14	1,092.44	1,094.60	1,098.62	1,099.89	1,099.30	1,097.28
30	1,094.65	1,096.26	1,094.33	1,091.96	---	1,091.24	1,092.45	1,094.72	1,098.74	1,099.87	1,099.25	1,097.24
31	1,094.50	---	1,094.22	1,091.86	---	1,091.33	---	1,094.95	---	1,099.80	1,099.24	---
Mean	1,096.29	1,096.14	1,095.24	1,093.15	1,090.71	1,089.86	1,092.13	1,093.01	1,097.65	1,099.71	1,099.49	1,098.10
Max	1,098.04	1,096.91	1,096.18	1,094.14	1,091.77	1,091.33	1,092.53	1,094.95	1,098.74	1,099.97	1,099.72	1,099.24
Min	1,094.50	1,094.11	1,094.22	1,091.86	1,089.82	1,088.96	1,091.38	1,091.71	1,095.20	1,098.85	1,099.24	1,097.24
Contents, in arce-feet, at 2400, on last day of month	494,800	553,600	487,300	407,600	344,400	395,600	428,100	515,600	636,500	669,500	652,700	587,900
Change in contents, in acre-feet	-119,700	+58,800	-66,300	-79,700	-63,200	+51,200	+32,500	+87,500	+120,900	+33,000	-16,800	-64,800

	Calendar Year 2006	Water Year 2007
Mean	1,092.99	1,095.15
Max	1,099.88	1,099.97
Min	1,082.89	1,088.96
Change in contents, in acre-feet	+119,900	-26,600

12452000 LAKE CHELAN AT CHELAN, WA—Continued

