

CHELAN RIVER BASIN

12452000 LAKE CHELAN AT CHELAN, WA

LOCATION.--Lat 47°50'11", long 120°03'37", near center of sec.15, T.27 N., R.22 E., Chelan County, Hydrologic Unit 17020009, on south shore of Lake Chelan at Lakeside, 2.1 mi west of Chelan.

DRAINAGE AREA.--924 mi².

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. Monthend contents October 1911 to September 1950 published in WSP 1316.

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 sea level, datum of 1912. To convert to National Geodetic Vertical Datum of 1929, subtract 1.73 ft. Prior to Jan. 1, 1900, nonrecording gage at Lakeside about 1 mi west of Chelan at datum 1,070.18 ft above National Geodetic Vertical Datum of 1912. Jan. 1 to June 30, 1905, nonrecording gage at upper highway bridge at Chelan at different datum. Dec. 5, 1910, to Nov. 13, 1927, nonrecording gage at Forest Service boat landing at Chelan at datum 1,076.07 ft above National Geodetic Vertical Datum 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. Chemical analyses June 1971 to August 1972.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation, 1,100.16 ft June 30, 1981 (affected by seiche action); 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 contents, 670,100 acre-ft July 28, elevation, 1,099.78 ft; minimum contents, 347,600 acre-ft Dec. 24, 25, elevation, 1,089.90.

Capacity table (elevation, in feet, and usable contents, in acre-feet)
(Based on data by the Pacific Northwest Coordination Agreement)

1,080	31,540	1,090	350,900	1,100	677,400
1,085	190,200	1,095	513,300		

ELEVATION (FEET NGVD), WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1098.49	1095.56	1092.32	1090.03	1090.46	1090.83	1091.72	1091.68	1096.46	1099.51	1099.61	1099.40
2	1098.43	1095.45	1092.21	1090.04	1090.50	1090.86	1091.75	1091.70	1096.61	1099.53	1099.57	1099.38
3	1098.32	1095.34	1092.10	1090.06	1090.50	1090.85	1091.72	1091.73	1096.71	1099.54	1099.55	1099.37
4	1098.21	1095.28	1091.98	1090.07	1090.54	1090.86	1091.68	1091.80	1096.77	1099.57	1099.52	1099.36
5	1098.11	1095.19	1091.86	1090.12	1090.56	1090.88	1091.65	1091.90	1096.80	1099.67	1099.50	1099.34
6	1098.01	1095.06	1091.74	1090.13	1090.57	1090.90	1091.62	1091.95	1096.88	1099.66	1099.46	1099.26
7	1097.92	1094.95	1091.62	1090.14	1090.57	1090.91	1091.61	1092.01	1096.94	1099.64	1099.46	1099.16
8	1097.81	1094.88	1091.50	1090.15	1090.57	1090.94	1091.62	1092.02	1097.04	1099.63	1099.40	1099.07
9	1097.71	1094.80	1091.39	1090.15	1090.60	1090.99	1091.62	1092.05	1097.15	1099.64	1099.35	1099.04
10	1097.62	1094.68	1091.28	1090.17	1090.60	1091.06	1091.55	1092.05	1097.30	1099.66	1099.33	1099.00
11	1097.52	1094.58	1091.15	1090.20	1090.63	1091.08	1091.51	1092.06	1097.44	1099.66	1099.31	1098.95
12	1097.41	1094.46	1091.02	1090.22	1090.63	1091.12	1091.46	1092.12	1097.51	1099.67	1099.27	1098.93
13	1097.34	1094.35	1090.89	1090.23	1090.64	1091.15	1091.40	1092.32	1097.63	1099.67	1099.27	1098.90
14	1097.22	1094.24	1090.76	1090.25	1090.65	1091.14	1091.33	1092.61	1097.79	1099.67	1099.25	1098.88
15	1097.07	1094.13	1090.66	1090.26	1090.65	1091.15	1091.29	1092.85	1097.89	1099.67	1099.23	1098.87
16	1096.96	1094.00	1090.57	1090.27	1090.67	1091.17	1091.29	1093.13	1098.01	1099.60	1099.21	1098.88
17	1096.88	1093.88	1090.51	1090.27	1090.69	1091.19	1091.27	1093.30	1098.09	1099.55	1099.19	1098.90
18	1096.78	1093.77	1090.37	1090.28	1090.71	1091.24	1091.22	1093.41	1098.16	1099.56	1099.29	1098.89
19	1096.69	1093.66	1090.25	1090.30	1090.72	1091.31	1091.16	1093.52	1098.22	1099.57	1099.26	1098.83
20	1096.63	1093.54	1090.13	1090.30	1090.74	1091.29	1091.13	1093.57	1098.35	1099.54	1099.27	1098.75
21	1096.60	1093.44	1090.04	1090.34	1090.75	1091.29	1091.11	1093.62	1098.56	1099.54	1099.29	1098.70
22	1096.49	1093.31	1089.98	1090.36	1090.76	1091.30	1091.13	1093.72	1098.77	1099.59	1099.31	1098.65
23	1096.39	1093.19	1089.93	1090.37	1090.77	1091.33	1091.16	1093.97	1098.96	1099.65	1099.39	1098.61
24	1096.30	1093.07	1089.90	1090.39	1090.78	1091.37	1091.12	1094.43	1099.08	1099.70	1099.44	1098.60
25	1096.21	1092.96	1089.90	1090.39	1090.79	1091.41	1091.11	1094.84	1099.15	1099.69	1099.45	1098.55
26	1096.11	1092.87	1089.92	1090.42	1090.81	1091.49	1091.14	1095.20	1099.22	1099.69	1099.48	1098.53
27	1096.00	1092.76	1089.95	1090.42	1090.82	1091.50	1091.23	1095.57	1099.31	1099.70	1099.54	1098.48
28	1095.93	1092.64	1089.96	1090.42	1090.83	1091.56	1091.33	1095.92	1099.39	1099.71	1099.54	1098.41
29	1095.86	1092.54	1089.98	1090.44	---	1091.62	1091.46	1096.16	1099.43	1099.68	1099.48	1098.31
30	1095.77	1092.43	1089.99	1090.44	---	1091.63	1091.61	1096.26	1099.45	1099.66	1099.47	1098.20
31	1095.66	---	1089.02	1090.45	---	1091.68	---	1096.32	---	1099.64	1099.45	---
MEAN	1097.05	1094.03	1090.77	1090.26	1090.66	1091.20	1091.40	1093.35	1097.97	1099.63	1099.39	1098.87
MAX	1098.49	1095.56	1092.32	1090.45	1090.83	1091.68	1091.75	1096.32	1099.45	1099.71	1099.61	1099.40
MIN	1095.66	1092.43	1089.90	1090.03	1090.46	1090.83	1091.11	1091.68	1096.46	1099.51	1099.19	1098.20
(+)	534300	427800	351900	365800	377700	406300	404000	557500	659600	664500	657900	616800
(+)	-94000	-106500	-75900	+13900	+11900	+28600	-2300	+153500	+102100	+4900	-6600	-41100

CAL YR 2000 MEAN 1094.21 MAX 1099.84 MIN 1087.73 AC-FT(+) -170900
WTR YR 2001 MEAN 1094.57 MAX 1099.71 MIN 1089.90 AC-FT(+) -11500

+ Contents, in acre-feet, at 2400, on last day of month.
+ Change in contents, in acre-feet.