

**12452500 CHELAN RIVER AT CHELAN, WA**

Upper Columbia Basin  
Lake Chelan Subbasin

LOCATION.--Lat 47°50'05", long 120°00'43" referenced to North American Datum of 1927, in SE ¼ NE ¼ sec.30, T.27 N., R.23 E., Chelan County, WA, Hydrologic Unit 17020009, on right bank downstream from control dam at outlet of Lake Chelan, 0.4 mi south of Chelan, and at mile 4.1.

DRAINAGE AREA.--924 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--November 1903 to current year. Published as "below Chelan Lake" 1904-05. Adjusted records for October 1903 to September 1911, published in WSP 482, 492, and 870 are unreliable and should not be used.

REVISED RECORDS.--WSP 482: 1904-13. WSP 612: 1924. WSP 1246: 1951. WSP 1286: 1952. WSP 1933: Drainage area. See also PERIOD OF RECORD.

GAGE.--Water-stage recorder and watt-hour meters on each turbine. Datum of gage is 1,074.66 ft above NGVD of 1912. To convert to NGVD of 1929, subtract 1.62 ft. See WSP 1933 for history of changes prior to Mar. 20, 1939. Mar. 20, 1939, to Sept. 30, 1981, gage at site 1.7 mi downstream from the Lake Chelan gage, at same datum, and published as the gage of record, used to determine head and spill discharge.

COOPERATION.--Records partially furnished by Public Utility District No. 1 of Chelan County.

REMARKS.--Daily discharge determined from flow through turbines computed from relation between loading and head, plus flow through two irrigation pipes which divert water from the penstock just above the turbines, plus spill discharge. Unmeasured water that is diverted for irrigation upstream from station is a small percentage of total runoff. Public Utility District No. 1 of Chelan County diverts water at Chelan to develop about 40,000 kW and to irrigate 900 acres near Chelan. This quantity is included in records of daily discharge. Diversions for irrigation of about 6,280 acres with an annual depletion of about 11,000 acre-ft, 1946 estimate. Flow regulated by Lake Chelan (station 12452000).

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--103 years (water years 1905-2007), 2,049 ft<sup>3</sup>/s, 30.11 in/yr, 1,485,000 acre-ft/yr, adjusted for storage since October 1911.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 18,400 ft<sup>3</sup>/s, June 3, 1968; no flow part of day, Jan. 30, 1917, when lake outlet was blocked with ice, and at other times owing to artificial regulation.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, 8,770 ft<sup>3</sup>/s, June 5; minimum daily discharge, 8.7 ft<sup>3</sup>/s, Sept. 25.

## 12452500 CHELAN RIVER AT CHELAN, WA—Continued

**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007**  
**DAILY MEAN VALUES**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,040	2,210	2,210	2,210	2,210	2,200	2,210	6,550	5,470	2,450	2,250	744
2	2,210	2,210	2,210	2,210	2,210	2,200	2,210	6,000	5,090	2,460	2,250	12
3	2,210	2,210	2,210	2,210	2,210	2,200	2,190	5,890	4,210	2,460	2,200	1,640
4	2,210	2,210	2,210	2,210	2,210	2,200	2,210	5,330	4,410	2,460	2,230	2,210
5	2,210	2,210	2,210	2,210	2,210	2,200	2,210	5,030	8,770	3,080	741	2,210
6	2,210	2,210	2,210	2,210	2,210	2,200	2,210	4,960	6,010	4,920	1,880	2,210
7	1,830	2,210	2,210	2,210	2,210	2,200	2,210	4,910	5,890	5,490	920	2,210
8	2,210	2,210	2,210	2,210	2,210	2,200	2,210	4,920	4,660	4,410	888	2,210
9	2,210	2,210	2,210	2,210	2,210	2,200	2,210	4,970	4,550	3,770	1,010	2,210
10	2,210	2,210	2,210	2,210	2,210	2,200	2,210	5,040	4,570	3,750	964	2,210
11	2,210	2,210	2,210	2,210	2,210	2,110	2,210	5,100	4,710	3,350	959	2,210
12	2,210	2,210	2,210	2,210	2,210	2,200	2,210	5,190	4,830	3,720	13	2,210
13	2,210	2,210	2,210	2,210	2,210	2,200	2,210	5,370	4,830	4,700	1,610	2,210
14	2,210	2,210	2,210	2,210	2,210	2,200	2,210	3,880	4,830	4,560	1,960	2,210
15	2,200	2,210	2,210	2,210	2,210	2,200	2,210	3,770	4,830	4,130	1,950	2,210
16	2,190	2,210	2,210	2,210	2,210	2,200	2,540	4,570	4,830	3,670	1,910	2,210
17	2,210	2,210	2,210	2,210	2,210	2,200	2,690	5,140	4,830	2,590	1,880	2,210
18	2,210	2,210	2,210	2,210	2,210	2,200	2,690	5,470	4,180	3,030	1,670	2,210
19	2,210	2,210	2,210	2,210	2,210	2,200	2,690	5,330	3,610	3,540	588	2,210
20	2,120	2,210	2,140	2,210	2,130	2,200	2,690	5,400	3,610	3,540	1,720	2,210
21	2,210	2,210	2,210	2,210	2,210	2,200	2,690	5,440	3,620	3,760	784	1,330
22	2,210	2,210	2,210	2,210	2,210	2,200	2,690	5,450	3,630	2,770	13	9.1
23	2,210	2,210	2,210	2,210	2,090	2,200	2,690	5,460	3,640	2,500	1,440	9.0
24	2,210	2,210	2,210	2,210	2,010	2,200	3,030	3,720	3,650	2,500	1,700	1,290
25	2,200	2,210	2,210	2,210	2,020	2,200	4,140	3,580	3,300	2,500	754	8.7
26	2,210	2,210	2,210	2,210	2,140	2,200	5,490	3,630	2,450	2,500	12	442
27	2,210	2,210	2,210	2,210	2,210	2,200	4,280	3,720	2,450	2,490	709	8.8
28	2,210	2,210	2,210	2,210	2,210	2,200	2,710	3,910	2,450	2,490	787	663
29	2,210	2,210	2,210	2,210	---	2,200	2,720	7,150	2,450	2,480	1,610	730
30	2,210	2,210	2,210	2,210	---	2,200	6,490	3,340	2,450	2,370	1,400	55
31	2,210	---	2,210	2,210	---	2,200	---	5,420	---	2,250	788	---
<b>Total</b>	67,830	66,300	68,440	68,510	61,220	68,110	83,360	153,640	128,810	100,690	39,590	44,511.6
<b>Mean</b>	2,188	2,210	2,208	2,210	2,186	2,197	2,779	4,956	4,294	3,248	1,277	1,484
<b>Max</b>	2,210	2,210	2,210	2,210	2,210	2,200	6,490	7,150	8,770	5,490	2,250	2,210
<b>Min</b>	1,830	2,210	2,140	2,210	2,010	2,110	2,190	3,340	2,450	2,250	12	8.7
<b>Ac-ft</b>	134,500	131,500	135,800	135,900	121,400	135,100	165,300	304,700	255,500	199,700	78,530	88,290
<b>Mean adjusted for change in contents in Lake Chelan</b>	241	3,199	1,130	914	1,048	3,029	3,325	6,377	6,327	3,784	1,004	395
<b>CFSM adjusted for change in contents in Lake Chelan</b>	0.26	3.46	1.22	0.99	1.13	3.28	3.60	6.90	6.85	4.10	1.09	0.43
<b>In. adjusted for change in contents in Lake Chelan</b>	0.30	3.86	1.41	1.14	1.18	3.78	4.01	7.96	7.64	4.72	1.25	0.48
<b>AC-FT adjusted for change in contents in Lake Chelan</b>	14,800	190,300	69,500	56,200	58,200	186,300	197,800	392,200	376,400	232,700	61,730	23,490

12452500 CHELAN RIVER AT CHELAN, WA—Continued

	Calendar Year 2006	Water Year 2007
<b>Total</b>	836,282	951,011.6
<b>Mean</b>	2,291	2,606
<b>Max</b>	8,260	8,770
<b>Min</b>	13	8.7
<b>Ac-ft</b>	1,659,000	1,886,000
<b>Mean adjusted for change in contents in Lake Chelan</b>	2,457	2,567
<b>CFSM adjusted for change in contents in Lake Chelan</b>	2.66	2.78
<b>In. adjusted for change in contents in Lake Chelan</b>	36.10	37.72
<b>AC-FT adjusted for change in contents in Lake Chelan</b>	1,779,000	1,859,000

