

CHELAN RIVER BASIN

12451000 STEHEKIN RIVER AT STEHEKIN, WA

LOCATION.--Lat 48°19'47", long 120°41'26", in NE 1/4 SE 1/4 sec.26, T.33 N., R.17 E., Chelan County, Hydrologic Unit 17020009, Lake Chelan National Recreation Area, on left bank 1,100 ft upstream from Boulder Creek, 1.4 mi upstream from Lake Chelan, and 2.1 mi northwest of Stehekin.

DRAINAGE AREA.--321 mi².

PERIOD OF RECORD.--October 1910 to October 1915, October 1926 to current year. Monthly discharge only for some periods, published in WSP 1316.

REVISED RECORDS.--WSP 412: 1914. WSP 1316: 1911(M), 1914-15(M). WSP 1446: 1912(M). WSP 1933: Drainage area. WDR-80-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,098.5 ft above NGVD of 1912. To convert to NGVD of 1929, subtract 1.73 ft. Prior to Aug. 17, 1911, nonrecording gage 0.4 mi upstream from mouth at Lake Chelan at different datums (datum change made June 13, 1911). Aug. 17, 1911 to Oct. 31, 1915, nonrecording gage 0.2 mi downstream from Boulder Creek at different datum.

REMARKS.--Records good, except for estimated daily discharges and the period July 14 to Aug. 28, which are fair. No known regulation or diversion. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--81 years (water years 1911-14, 1927-2002), 1,413 ft³/s, 59.78 in/yr, 1,024,000 acre-ft/yr, includes monthly discharge values published in WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 20,900 ft³/s Nov. 29, 1995, gage height, 29.58 ft, from rating curve extended above 11,000 ft³/s on basis of slope-area measurement at 18,800 ft³/s; minimum discharge, 56 ft³/s Jan. 12, 1930.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
May 29	2215	7,220	23.95	June 16	0130	*8,960	*24.92
June 6	0200	6,840	23.66	June 27	0200	7,820	24.26

Minimum discharge 211 ft³/s Oct. 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	339	440	523	277	396	788	608	2920	5300	4990	2050	e980
2	323	433	493	282	387	731	627	3550	5390	4540	1880	e970
3	289	449	467	270	382	688	617	3330	5850	4350	1690	e930
4	272	414	452	267	361	664	651	2820	6010	4320	1550	e870
5	255	451	435	264	351	654	753	2450	6340	4010	1490	e800
6	245	441	436	273	352	623	917	2150	6270	3900	1460	e770
7	232	424	413	369	346	599	1100	1920	4850	4290	1380	e720
8	226	415	408	1140	339	573	1110	1740	3980	5600	1350	e690
9	221	407	394	908	326	547	1100	1630	3470	4980	1400	e670
10	223	399	381	738	321	539	1160	1560	3600	4840	1600	e640
11	272	394	370	663	316	545	1280	1590	4590	5780	1620	e620
12	241	373	364	648	304	531	1480	1800	5820	5940	1530	e600
13	382	408	381	632	302	500	2220	2320	6760	5680	1550	e590
14	327	396	388	588	295	480	3980	2710	7710	5980	1640	e585
15	309	1950	377	554	290	467	3140	2640	8190	5260	1650	e580
16	279	1780	362	531	287	456	2460	2640	7950	4810	1470	e570
17	289	1280	408	508	285	439	2100	3030	6710	4800	1270	e560
18	266	1010	414	486	283	429	1860	3370	6250	4640	1160	e550
19	312	883	389	475	294	423	1740	3270	5560	4490	1110	e530
20	338	848	368	468	291	417	1720	4010	5480	4110	1080	e515
21	300	833	354	463	319	401	1790	4400	5880	3880	1080	e510
22	366	820	340	444	1320	390	1820	3940	6480	3750	1080	e495
23	466	773	328	430	1940	387	1760	3490	6670	3760	1100	e480
24	404	714	319	450	1540	395	1640	3300	6470	3820	1140	e470
25	394	664	311	530	1240	408	1560	3360	6320	3750	1220	e465
26	364	623	302	504	1090	431	1530	3670	6810	3700	1170	e460
27	385	590	296	466	948	439	1530	3980	7330	3250	1130	e455
28	390	581	295	443	854	451	1540	5200	6710	2920	1140	e445
29	365	546	289	427	---	463	1680	6800	7080	2890	e1160	e440
30	351	508	286	416	---	487	2110	6710	6050	2690	e1130	e435
31	461	---	283	407	---	535	---	6090	---	2380	e990	---
TOTAL	9886	20847	11626	15321	15759	15880	47583	102390	181880	134100	42270	18395
MEAN	319	695	375	494	563	512	1586	3303	6063	4326	1364	613
MAX	466	1950	523	1140	1940	788	3980	6800	8190	5980	2050	980
MIN	221	373	283	264	283	387	608	1560	3470	2380	990	435
AC-FT	19610	41350	23060	30390	31260	31500	94380	203100	360800	266000	83840	36490
CFSM	0.99	2.16	1.17	1.54	1.75	1.60	4.94	10.3	18.9	13.5	4.25	1.91
IN.	1.15	2.42	1.35	1.78	1.83	1.84	5.51	11.87	21.08	15.54	4.90	2.13

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1911 - 2002, BY WATER YEAR (WY)

	605	696	525	404	398	525	1443	3542	4167	2642	1258	697
MEAN	605	696	525	404	398	525	1443	3542	4167	2642	1258	697
MAX	1869	3192	1896	1577	1209	1546	4644	5810	7738	5479	2716	1399
(WY)	1960	1991	1976	1984	1971	1934	1934	1958	1950	1950	1974	1959
MIN	230	148	125	86.0	115	194	549	1475	1680	1157	681	409
(WY)	1988	1930	1930	1930	1937	1937	1955	1977	1915	1977	1944	1942

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1911 - 2002
ANNUAL TOTAL	329314	615937	
ANNUAL MEAN	902	1687	1409
HIGHEST ANNUAL MEAN			2008
LOWEST ANNUAL MEAN			864
HIGHEST DAILY MEAN	6360	May 24	18000
LOWEST DAILY MEAN	115	Feb 7	58
ANNUAL SEVEN-DAY MINIMUM	124	Feb 21	67
ANNUAL RUNOFF (AC-FT)	653200	1222000	1021000
ANNUAL RUNOFF (CFSM)	2.81	5.26	4.39
ANNUAL RUNOFF (INCHES)	38.16	71.38	59.66
10 PERCENT EXCEEDS	2260	4980	3620
50 PERCENT EXCEEDS	436	664	740
90 PERCENT EXCEEDS	142	310	246

e Estimated