

CHEHALIS RIVER BASIN

12026150 SKOOKUMCHUCK RIVER BELOW BLOODY RUN CREEK, NEAR CENTRALIA, WA

LOCATION.--Lat 46°47'25", long 122°44'03", in NW 1/4 NW 1/4 sec.18, T.15 N., R.1 E., Thurston County, Hydrologic Unit 17100103, on right bank 0.7 mi downstream from Bloody Run Creek, 1.2 mi downstream from Skookumchuck Dam, 12 mi northeast of Centralia, and at mile 20.7.

DRAINAGE AREA.--65.9 mi². Prior to August 1969, 61.7 mi².

PERIOD OF RECORD.--April 1929 to November 1933, October 1939 to current year. Monthly discharge only for some periods, published in WSP 1316 and 1736. Published as "near Centralia" (12026000) prior to August 1969.

GAGE.--Water-stage recorder. Datum of gage is 317.34 ft above NGVD of 1929. Apr. 1, 1929, to Sept. 30, 1931, and Feb. 1, 1932, to Dec. 6, 1933, nonrecording gage at site 1.1 mi upstream at different datum. Oct. 9, 1939, to July 31, 1969, at site 1.3 mi upstream at datum 301.04 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good. Flow regulated by Skookumchuck Dam since January 1971. No diversions upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--67 years (water years 1930-33, 1940-2002), 256 ft³/s, 185,500 acre-ft/yr, unadjusted.
31 years (water years 1972-2002), 264 ft³/s, 190,900 acre-ft/yr, regulated period.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,020 ft³/s Feb. 8, 1996, gage height, 13.41 ft, result of flow over dam computation, provided by Pacific Power & Light; minimum discharge, 12 ft³/s May 28, 1970, caused by pumping during dam construction.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec. 02	0015	2,740	10.68	Dec. 17	0245	*4,390	*11.88
Dec. 14	0415	2,900	10.83	Jan. 25	1245	2,990	10.91

Minimum discharge, 92 ft³/s June 2.

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	150	149	1830	342	410	378	269	201	121	106	100	100
2	146	148	2200	338	381	369	256	197	120	106	99	120
3	141	146	1290	296	374	358	244	195	122	106	99	136
4	140	147	910	269	389	353	233	190	122	106	98	135
5	139	151	724	266	377	325	232	188	124	106	101	135
6	138	149	810	267	391	294	234	185	122	106	102	135
7	136	148	843	380	637	245	244	183	117	106	102	134
8	136	148	684	1610	931	222	240	178	117	106	102	136
9	137	148	606	1230	829	212	236	174	118	101	101	142
10	139	146	538	787	633	209	330	170	122	100	101	143
11	146	146	533	567	530	271	507	166	132	99	100	144
12	145	148	583	502	446	1100	644	160	133	99	102	146
13	141	156	1070	521	393	1350	768	159	130	98	100	144
14	141	317	2440	477	377	1050	1540	156	126	99	100	143
15	140	239	1370	416	372	744	1150	152	123	99	101	143
16	138	213	2090	386	364	572	844	168	123	99	102	143
17	139	196	3360	384	355	462	678	173	119	99	104	143
18	139	181	1630	370	347	389	540	169	115	99	104	143
19	138	184	1210	364	343	468	444	166	112	100	104	143
20	139	198	931	362	352	893	383	162	108	100	104	142
21	139	204	714	376	380	755	336	157	108	100	104	141
22	132	235	552	382	554	572	300	153	106	99	104	141
23	126	223	459	388	785	468	271	151	106	99	103	141
24	123	200	400	501	859	418	247	149	105	98	103	139
25	128	187	374	2440	681	393	228	149	106	98	102	139
26	128	178	368	1680	532	369	218	148	106	100	102	141
27	131	177	358	946	424	356	216	142	106	100	102	141
28	130	198	369	680	380	339	212	141	107	100	102	142
29	128	286	364	522	---	327	209	141	109	100	101	141
30	129	588	355	425	---	308	206	142	106	100	100	143
31	144	---	348	400	---	286	---	129	---	100	100	---
TOTAL	4246	5934	30313	18874	13826	14855	12459	5094	3491	3134	3149	4159
MEAN	137	198	978	609	494	479	415	164	116	101	102	139
MAX	150	588	3360	2440	931	1350	1540	201	133	106	104	146
MIN	123	146	348	266	343	209	206	129	105	98	98	100
AC-FT	8420	11770	60130	37440	27420	29460	24710	10100	6920	6220	6250	8250

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1972 - 2002, BY WATER YEAR (WY)

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002			
MEAN	141	237	506	494	466	376	294	183	136	105	97.6	137																						
MAX	230	552	1100	910	1131	829	590	365	254	140	134	167																						
(WY)	1998	1984	1978	1974	1999	1972	1991	1984	1990	1997	1997	1983																						
MIN	102	87.6	95.8	92.6	62.5	88.0	145	109	85.4	81.7	78.9	114																						
(WY)	1999	1988	1977	1977	1977	1977	1973	1989	1989	1992	1985	1998																						

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1972 - 2002	
ANNUAL TOTAL		78435		119534		
ANNUAL MEAN		215		327		264
HIGHEST ANNUAL MEAN						413
LOWEST ANNUAL MEAN						119
HIGHEST DAILY MEAN		3360	Dec 17	3360	Dec 17	6600
LOWEST DAILY MEAN		92	Mar 14	98	Jul 13	52
ANNUAL SEVEN-DAY MINIMUM		94	Aug 10	99	Jul 11	53
ANNUAL RUNOFF (AC-FT)		155600		237100		190900
10 PERCENT EXCEEDS		350		696		508
50 PERCENT EXCEEDS		135		166		147
90 PERCENT EXCEEDS		98		101		96