

CHEHALIS RIVER BASIN

12026400 SKOOKUMCHUCK RIVER NEAR BUCODA, WA

LOCATION.--Lat 46°46'20", long 122°55'23", in SW 1/4 NW 1/4 sec.22, T.15 N., R.2 W., Thurston County, Hydrologic Unit 17100103, on left bank 100 ft downstream from bridge on State Highway 507, 3.3 mi southwest of Bucoda, and at mile 6.4.

DRAINAGE AREA.--112 mi².

PERIOD OF RECORD.--December 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 198.19 ft above NGVD of 1929. Prior to Oct. 1, 1992, at datum 0.41 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Flow regulated by Skookumchuck Dam since January 1971. An average of 30 ft³/s is diverted at point 0.5 mi upstream for consumptive use at Centralia Steam Electric Project. During peak demand months, up to 54 ft³/s may be diverted for periods of one day or less. Other minor diversions for domestic use and irrigation upstream from station. Water temperatures October 1968 to September 1971; sediment records July 1968 to September 1971.

AVERAGE DISCHARGE.--31 years (water years 1972-2002), 356 ft³/s, 258,000 acre-ft/yr, regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 11,300 ft³/s Feb. 8, 1996, gage height, 17.87 ft, present datum, estimated based on comparison with upstream gaging stations; minimum discharge, 21 ft³/s Aug. 15, 16, 18, 19, 20, 1970, gage height, 3.85 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,750 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 02	0830	3,220	13.27	Dec 17	1300	*6,060	*15.97
Dec 14	1300	3,570	13.90	Jan 25	2200	4,600	14.80

Minimum discharge, 60 ft³/s Aug. 14-16.

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	126	149	1710	453	767	489	336	265	128	103	71	63
2	127	145	2920	502	701	474	314	257	127	101	72	72
3	131	134	1940	471	649	457	295	251	125	104	70	101
4	128	129	1420	423	619	445	280	244	124	106	71	100
5	127	132	1190	404	608	418	275	238	131	105	72	100
6	125	133	1130	406	595	379	275	238	129	104	80	99
7	125	129	1220	703	763	334	281	235	125	104	75	99
8	126	127	1030	1890	1260	289	279	228	125	104	75	100
9	126	125	925	1670	1190	275	274	221	124	102	74	124
10	130	123	823	1100	962	275	389	214	126	96	74	131
11	130	123	800	822	e775	479	563	206	129	91	74	104
12	141	123	923	687	e624	1260	698	198	141	80	73	104
13	133	135	1150	701	559	1890	842	189	134	85	67	104
14	134	935	3190	642	513	1530	1640	186	128	93	62	104
15	132	1060	2090	559	496	1100	1540	179	125	92	64	104
16	129	619	2170	500	478	890	1140	184	125	92	65	108
17	126	399	5200	482	466	742	949	205	126	91	66	108
18	114	289	2550	456	459	628	767	198	120	91	66	109
19	111	279	1700	453	481	747	626	192	118	91	66	109
20	111	371	1340	465	504	1270	535	189	110	91	66	107
21	112	458	1080	516	645	1120	471	183	108	87	66	106
22	113	723	836	553	775	868	422	174	106	78	66	105
23	116	862	673	624	1010	691	384	169	104	72	65	111
24	114	527	581	859	1180	597	351	166	104	72	72	101
25	111	390	532	3110	958	547	324	161	104	72	75	100
26	111	322	518	2970	749	493	302	168	101	73	65	111
27	115	293	483	1480	597	468	302	156	100	73	63	110
28	123	396	489	1070	510	440	295	156	105	73	63	113
29	113	901	486	864	---	419	281	156	119	73	62	112
30	111	872	475	712	---	393	273	154	108	72	63	110
31	135	---	465	700	---	363	---	147	---	71	62	---
TOTAL	3806	11403	42039	27247	19893	20770	15703	6107	3579	2742	2125	3129
MEAN	123	380	1356	879	710	670	523	197	119	88.5	68.5	104
MAX	141	1060	5200	3110	1260	1890	1640	265	141	106	80	131
MIN	111	123	465	404	459	275	273	147	100	71	62	63
AC-FT	7550	22620	83380	54040	39460	41200	31150	12110	7100	5440	4210	6210

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	142	354	741	726	686	548	400	228	158	102	82.5	124																							
MAX	294	846	1669	1367	1559	1446	970	461	331	156	123	180																							
(WY)	1998	1984	1997	1997	1996	1972	1991	1984	1990	1983	1997	1978																							
MIN	89.6	66.4	105	95.0	85.7	130	180	118	78.5	62.7	56.3	87.4																							
(WY)	1999	1988	1977	1977	1977	2001	1973	1994	1979	1992	1985	1998																							

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1972 - 2002
ANNUAL TOTAL	99184	158543	
ANNUAL MEAN	272	434	356
HIGHEST ANNUAL MEAN			571
LOWEST ANNUAL MEAN			143
HIGHEST DAILY MEAN	5200	Dec 17	8560
LOWEST DAILY MEAN	62	Aug 3	46
ANNUAL SEVEN-DAY MINIMUM	66	Jul 31	50
ANNUAL RUNOFF (AC-FT)	196700		258000
10 PERCENT EXCEEDS	522		771
50 PERCENT EXCEEDS	131		168
90 PERCENT EXCEEDS	89		86

e Estimated