CHEHALIS RIVER BASIN

12027500 CHEHALIS RIVER NEAR GRAND MOUND, WA

LOCATION.--Lat 46°46'34", long 123°02'04", in NE $^1/_4$ NE $^1/_4$ sec.22, T.15 N., R.3 W., Thurston County, Hydrologic Unit 17100103, on left bank at downstream side of highway bridge at Meadows, 1.5 mi southwest of Grand Mound, 7.0 mi downstream from Skookumchuck River, and at mile 59.9.

DRAINAGE AREA.--895 mi^2.

PERIOD OF RECORD.--October 1928 to current year.

REVISED RECORDS.--WSP 1216: Drainage area. WSP 1286: 1929-30(M), 1931, 1932-34(M).

GAGE.--Water-stage recorder. Datum of gage is 123.65 ft above NGVD of 1929. Prior to Oct. 3, 1934, nonrecording gage at present site at datum 3.0 ft higher.

REMARKS.--Records good except for estimated daily discharges which are fair. Minor effect from regulation on Skookumchuck River by Skookumchuck Dam since January 1971. Up to 54 ft^3/s of Skookumchuck River is consumptively used at Centralia steam generating plant. Many small diversions for irrigation and domestic use upstream from station, including about 3 ft^3/s for municipal water supply for Centralia and Chehalis. Water temperatures March 1952 to September 1974. Miscellaneous suspended sediment data published for water years 1962-64. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--74 years (water years 1929-2002), 2,819 ft^3/s, 42.80 in/yr, 2,042,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,800 ft^3/s Feb. 9, 1996, gage height, 19.98 ft; minimum discharge, 82 ft^3/s Aug. 30, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 16,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 15	1500	18,700	13.15	Jan. 09	0400	23,000	14.51
Dec. 02	2000	21,300	14.01	Jan. 26	1100	23,100	14.54
Dec. 18	0300	*31,900	*16.33				

Minimum discharge, 168 ft^3/s Sept. 1, 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	308	2490	15600	2680	7850	3030	2430	1580	845	818	246	170
2	292	2230	20500	3640	6870	2760	2260	1500	780	662	238	169
3	285	1780	19800	3600	6240	2530	2110	1450	734	585	232	184
4	285	1410	15300	3390	6360	2360	1980	1370	704	540	231	203
5	274	1230	12900	3130	5520	2230	1880	1330	694	523	233	207
6	269	1150	11100	3500	5220	2210	1860	1480	703	501	265	205
7	267	1020	10700	11400	6700	2200	1840	1500	683	474	259	207
8	268	911	8910	20600	9880	2020	1790	1380	657	470	245	213
9	275	834	7670	21800	10500	1940	1700	1290	653	466	236	226
10	291	772	6470	15400	8440	2100	2320	1220	631	435	227	258
11	328	723	6130	9920	6990	5070	3380	1160	602	402	223	232
12	412	705	6380	7460	5660	12600	3570	1100	593	368	221	214
13	430	760	7800	7150	4790	13700	4130	1050	568	356	210	204
14	481	5200	18200	5950	4080	13500	9700	1090	533	355	194	199
15	517	17500	19500	4960	3600	10800	11400	1080	509	344	188	197
16	475	15200	17300	4210	3330	8520	9060	1000	501	334	186	199
17	423	9560	25200	3990	3220	7180	7610	1050	503	325	187	212
18	395	6210	28900	3540	3050	5820	6130	1050	519	317	185	222
19	363	4630	21600	3680	3440	6350	4870	982	596	313	185	219
20	358	6000	16400	4340	4170	9940	4010	994	576	312	186	211
21	366	8760	11800	5930	5130	9300	3440	1030	519	308	187	208
22	411	11400	8920	5950	e7900	7250	3040	967	486	292	186	205
23	734	15400	6820	6050	e7400	5780	2710	932	457	278	186	202
24	1380	12600	5350	7710	e6100	4830	2410	875	444	266	185	198
25	1220	9100	4420	17300	e5300	4260	2190	833	437	261	196	188
26	1170	6750	3780	22600	e4700	3740	2020	814	418	258	183	189
27	973	5240	3390	19000	3890	3450	2100	795	400	262	177	192
28	1000	5350	3280	e12600	3380	3210	2020	867	412	268	178	187
29	962	13200	3090	e8860	---	3100	1820	1030	662	271	179	191
30	843	14600	2790	6960	---	2870	1680	1170	1190	263	183	201
31	983	---	2680	6500	---	2630	---	972	---	249	179	---
TOTAL	17038	182715	352680	263800	159710	167280	107460	34941	18009	11876	6396	6112
MEAN	550	6090	11380	8510	5704	5396	3582	1127	600	383	206	204
MAX	1380	17500	28900	22600	10500	13700	11400	1580	1190	818	265	258
MIN	267	705	2680	2680	3050	1940	1680	795	400	249	177	169
AC-FT	33790	362400	699500	523200	316800	331800	213100	69310	35720	23560	12690	12120
CFSM	0.61	6.81	12.7	9.51	6.37	6.03	4.00	1.26	0.67	0.43	0.23	0.23
IN.	0.71	7.59	14.66	10.96	6.64	6.95	4.47	1.45	0.75	0.49	0.27	0.25

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2002, BY WATER YEAR (WY)

MEAN	917	3838	6362	6388	5868	4512	2946	1389	814	382	241	337
MAX	3643	9697	19280	13900	13680	9477	6787	3496	2482	934	570	1289
(WY)	1998	1956	1934	1971	1999	1972	1937	1948	1936	1983	1968	1978
MIN	125	221	884	860	1201	1354	1086	549	352	174	118	117
(WY)	1953	1937	1977	1977	1977	1992	1939	1939	1992	1970	1967	1967

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1929 - 2002	
ANNUAL TOTAL	882245		1328017			
ANNUAL MEAN	2417		3638		2819	
HIGHEST ANNUAL MEAN					4480	1999
LOWEST ANNUAL MEAN					1122	1977
HIGHEST DAILY MEAN	28900	Dec 18	28900	Dec 18	64200	Feb 9 1996
LOWEST DAILY MEAN	204	Aug 17	169	Sep 2	85	Aug 30 1967
ANNUAL SEVEN-DAY MINIMUM	212	Aug 14	176	Aug 27	91	Aug 28 1967
ANNUAL RUNOFF (AC-FT)	1750000		2634000		2042000	
ANNUAL RUNOFF (CFSM)	2.70		4.07		3.15	
ANNUAL RUNOFF (INCHES)	36.67		55.20		42.80	
10 PERCENT EXCEEDS	5690		10200		7480	
50 PERCENT EXCEEDS	1200		1230		1240	
90 PERCENT EXCEEDS	283		206		223	

e Estimated