CHEHALIS RIVER BASIN

12025000 NEWAUKUM RIVER NEAR CHEHALIS, WA

LOCATION.--Lat 46°37'13", long 122°56'38", in SW 1/4 SW 1/4 sec.9, T.13 N., R.2 W., Lewis County, Hydrologic Unit 17100103, on left bank at highway bridge 3.0 mi southeast of Chehalis, and at mile 4.1.

DRAINAGE AREA.--155 mi^2.

PERIOD OF RECORD.--March 1929 to September 1931, July 1942 to September 1981, October 1982 to current year.

REVISED RECORDS.--WSP 1012: 1943. WSP 1316: 1929-30(M), 1960(M). WSP 1716: Drainage area. WSP 1932: 1931(M), 1945-49, 1954(M), 1956(P), 1958(M), 1959-60.

GAGE.--Water-stage recorder. Elevation of gage is 190 ft above NGVD of 1929, from topographic map. Prior to Oct. 1, 1929, nonrecording gage at same site at datum 1.0 ft higher. Oct. 1, 1929, to July 5, 1962, nonrecording gage and crest-stage gage at same site and datum.

REMARKS.--No estimated daily discharges. Records good. Cities of Chehalis and Centralia divert about 3 ft^3/s from North Fork Newaukum River for municipal use. No regulation upstream from station.

AVERAGE DISCHARGE.--61 years (water years, 1930-31, 1943-81, 1983-2002), 503 ft^3/s, 44.07 in/yr, 364,200 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 13,300 ft^3/s Feb. 8, 1996, gage height, 13.54 ft from outside high-water mark; maximum gage height, 13.62 ft Dec. 9, 1953; minimum discharge, 12 ft^3/s Sept. 13, 14, 1949, Aug. 29, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 14	1800	6,870	10.66	Dec. 14	0200	6,750	10.56
Nov. 22	2100	4,390	8.58	Dec. 17	0400	*7,920	*11.43
Nov. 29	0900	4,240	8.45	Jan. 25	1500	6,600	10.44
Dec. 01	2100	5,780	9.75				

Minimum discharge, 36 ft^3/s Sept. 26-29.

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	52	608	4590	487	1220	565	506	299	182	153	53	39
2	50	544	4040	725	978	504	471	289	167	131	52	40
3	49	431	2470	583	1050	451	440	277	163	115	52	42
4	47	336	2100	507	1010	417	413	256	155	108	53	43
5	46	320	1920	467	869	394	400	267	163	103	57	41
6	45	272	1800	655	880	443	410	312	160	93	57	40
7	45	233	1650	2520	1210	418	412	299	146	90	54	41
8	48	204	1310	3070	2380	380	380	269	154	101	51	45
9	51	185	1270	1880	1790	364	377	247	148	93	50	45
10	52	172	1180	1270	1300	428	608	232	136	84	49	43
11	110	162	1400	969	1130	1590	1060	218	130	78	50	40
12	81	163	1450	982	914	2270	1070	208	124	74	49	38
13	141	224	2880	886	791	2530	1080	204	115	71	45	38
14	138	4040	5130	741	684	1950	2700	239	108	69	44	38
15	148	3170	2530	636	607	1440	1770	220	106	68	43	37
16	107	1860	4310	578	583	1320	1370	199	103	66	43	40
17	98	1140	6160	631	548	1200	1250	228	105	64	43	48
18	85	807	2890	538	564	1000	1010	211	120	64	42	46
19	77	769	2600	758	730	1680	834	194	137	63	42	42
20	82	1090	1850	1000	762	2450	720	233	114	63	43	42
21	78	1510	1390	1350	1150	1580	627	221	100	61	43	42
22	128	2730	1100	1140	1380	1200	559	226	93	58	44	40
23	410	2910	890	1080	1510	993	500	210	90	57	43	38
24	380	1680	753	1660	1780	891	449	188	87	58	41	38
25	433	1220	654	5350	1200	842	412	176	84	57	40	37
26	325	1030	578	3410	924	750	385	172	80	58	42	37
27	267	822	526	1930	758	710	426	168	78	60	43	36
28	271	1850	557	1390	653	679	391	239	101	59	42	37
29	210	3580	487	1080	---	651	339	289	281	59	39	38
30	197	2570	435	951	---	601	311	252	201	57	39	46
31	439	---	445	1110	---	546	---	206	---	55	39	---
TOTAL	4690	36632	61345	40334	29355	31237	21680	7248	3931	2390	1427	1217
MEAN	151	1221	1979	1301	1048	1008	723	234	131	77.1	46.0	40.6
MAX	439	4040	6160	5350	2380	2530	2700	312	281	153	57	48
MIN	45	162	435	467	548	364	311	168	78	55	39	36
AC-FT	9300	72660	121700	80000	58230	61960	43000	14380	7800	4740	2830	2410
CFSM	0.98	7.88	12.8	8.39	6.76	6.50	4.66	1.51	0.85	0.50	0.30	0.26
IN.	1.13	8.79	14.72	9.68	7.05	7.50	5.20	1.74	0.94	0.57	0.34	0.29

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1930 - 2002, BY WATER YEAR (WY)

MEAN	182	741	1066	1081	988	768	541	296	184	90.7	54.9	68.5
MAX	646	1717	2244	2169	1940	1609	1052	680	464	307	159	243
(WY)	1998	1956	1997	1953	1999	1972	1991	1960	1981	1983	1968	1968
MIN	25.5	47.6	194	192	262	280	278	130	66.3	36.1	21.6	27.9
(WY)	1988	1930	1977	1977	1977	1992	1998	1947	1992	1951	1951	1987

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1930 - 2002	
ANNUAL TOTAL	173495		241486			
ANNUAL MEAN	475		662		503	
HIGHEST ANNUAL MEAN					795	1997
LOWEST ANNUAL MEAN					244	1977
HIGHEST DAILY MEAN	6160	Dec 17	6160	Dec 17	10200	Feb 8 1996
LOWEST DAILY MEAN	45	Sep 24	36	Sep 27	14	Sep 13 1949
ANNUAL SEVEN-DAY MINIMUM	47	Sep 19	37	Sep 23	15	Aug 20 1951
ANNUAL RUNOFF (AC-FT)	344100		479000		364200	
ANNUAL RUNOFF (CFSM)	3.07		4.27		3.24	
ANNUAL RUNOFF (INCHES)	41.64		57.96		44.07	
10 PERCENT EXCEEDS	1100		1770		1220	
50 PERCENT EXCEEDS	231		289		261	
90 PERCENT EXCEEDS	52		43		45	