

## SKOKOMISH RIVER BASIN

## 12061500 SKOKOMISH RIVER NEAR POTLATCH, WA

LOCATION.--Lat 47°18'36", long 123°10'33", in SE 1/4 NW 1/4 sec.15, T.21 N., R.4 W., Mason County, Hydrologic Unit 17110017, on upstream side of right pier of bridge on U.S. Highway 101, 3.7 mi downstream from confluence of North and South Forks, 4.7 mi southwest of Potlatch, and at mile 5.3.

DRAINAGE AREA.--227 mi<sup>2</sup>, includes 99 mi<sup>2</sup> upstream from Cushman Dam No. 2, which is noncontributing except during spillage.

PERIOD OF RECORD.--July 1943 to current year.

REVISED RECORDS.--WSP 1716: 1950(M), 1956. WSP 1932: Drainage area. WDR WA-72: 1968(M), 1971(M). WDR WA-75: 1974.

GAGE.--Water-stage recorder. Datum of gage is 10.67 ft above NGVD of 1929. Prior to May 27, 1964, water-stage recorders or nonrecording gage at several sites about 0.6 mi upstream at different datums. Supplementary water-stage recorder on right bank at site 0.6 mi upstream at datum 16.47 ft above NGVD of 1929 used Nov. 16 to Dec. 10, 1964, June 11 to July 7, and Nov. 2-24, 1965.

REMARKS.--Records good except for estimated daily discharges and discharges above 10,000 cfs which are fair. Above stages of about 15 ft, the river flows out of the main channel upstream from the gage into three channels that bypass the gage. Flow partly regulated at Lake Cushman and Cushman Reservoir No. 2. In normal years, practically entire flow of North Fork is diverted at Cushman Dam No. 2 and is discharged into Puget Sound through Cushman powerplant No. 2. Chemical analyses August 1960 to September 1961, October 1961 to September 1970 (partial-record station), October 1971 to September 1974. Water temperatures May 1955 to September 1962, October 1963 to September 1982. Water temperatures and specific conductance July 1996 to April 1998. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--59 years (water years 1944-2002), 1,213 ft<sup>3</sup>/s, 128.72 in/yr, 878,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,600 ft<sup>3</sup>/s, Nov. 23, 1990, gage height, 16.80 ft (floodmark), from rating curve extended above 14,000 ft<sup>3</sup>/s; maximum gage height, 17.75 ft, Mar. 19, 1997; minimum discharge, 99 ft<sup>3</sup>/s, Oct. 27, 28, Nov. 6-9, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of December 1933 reached an elevation of 30.8 ft NGVD of 1929 at site on left bank 150 ft upstream from old highway bridge, discharge, 18,600 ft<sup>3</sup>/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 25,800 ft<sup>3</sup>/s Dec. 17, gage height, 17.17 ft; minimum discharge, 181 ft<sup>3</sup>/s Sept. 28-30.

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	231	1460	5340	1470	1350	1340	874	891	689	620	263	202
2	225	1240	6210	3660	1250	1220	856	906	659	549	260	202
3	221	1020	2680	3180	1540	1130	829	858	645	505	257	202
4	217	866	2050	2370	1550	1060	812	806	623	480	263	202
5	213	773	1720	2000	1420	1000	834	782	611	462	263	199
6	210	693	1730	5520	2130	958	900	748	603	442	264	200
7	210	633	1710	e20100	2880	911	925	714	572	430	260	209
8	209	582	1700	e16700	2100	870	864	683	543	420	251	206
9	207	540	1860	8170	1690	855	916	658	517	407	246	210
10	231	506	1680	4770	1470	1060	1470	638	526	399	242	205
11	255	480	1510	5590	1350	5160	1670	622	543	391	240	200
12	260	560	1510	5330	1230	3770	2390	619	551	383	236	196
13	299	947	6180	4700	1130	2750	3330	663	559	377	233	193
14	289	7510	9760	3400	1040	2100	7050	684	570	371	229	192
15	272	e13600	3320	1710	970	1730	3310	664	551	362	227	193
16	258	4990	e14900	1490	939	1500	2470	636	524	352	225	219
17	242	2580	e16000	1350	910	1320	2040	640	537	343	223	237
18	237	1880	5650	1240	899	1220	1740	632	628	336	221	217
19	235	2850	3330	1180	1480	1160	1550	624	548	330	221	206
20	234	9160	2510	1230	1510	1330	1420	630	502	323	219	202
21	245	e11800	2030	1180	6340	1240	1310	644	484	316	218	198
22	361	9210	1730	1100	e15800	1160	1210	630	482	310	217	194
23	980	4080	1510	1060	7520	1130	1120	619	475	304	214	193
24	853	2620	1360	3410	3590	1130	1040	603	459	300	212	190
25	1190	2020	1240	8380	2510	1120	988	605	446	297	213	189
26	980	1680	1150	3100	2000	1090	951	622	441	294	213	188
27	1010	1470	1080	2100	1690	1060	936	636	442	290	212	187
28	901	1500	1260	1650	1490	1020	885	794	502	283	209	186
29	734	2060	1260	1420	---	975	860	1360	1170	278	206	184
30	719	1970	1160	1360	---	930	862	935	765	273	205	184
31	1780	---	1180	1490	---	893	---	766	---	266	203	---
TOTAL	14508	91280	106310	121410	69778	44192	46412	22312	17167	11493	7165	5985
MEAN	468	3043	3429	3916	2492	1426	1547	720	572	371	231	200
MAX	1780	13600	16000	20100	15800	5160	7050	1360	1170	620	264	237
MIN	207	480	1080	1060	899	855	812	603	441	266	203	184
AC-FT	28780	181100	210900	240800	138400	87650	92060	44260	34050	22800	14210	11870
CFSM	3.66	23.8	26.8	30.6	19.5	11.1	12.1	5.62	4.47	2.90	1.81	1.56
IN.	4.22	26.53	30.90	35.28	20.28	12.84	13.49	6.48	4.99	3.34	2.08	1.74

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2002, BY WATER YEAR (WY)

	802	1972	2400	2190	2130	1589	1202	848	566	353	252	300
MEAN	802	1972	2400	2190	2130	1589	1202	848	566	353	252	300
MAX	2570	5582	5169	5540	4067	3432	2005	1675	1213	783	690	1039
(WY)	1976	1991	1995	1953	1995	1972	1969	1948	1956	1974	1991	1978
MIN	115	286	772	524	709	704	487	473	261	189	144	147
(WY)	1988	1994	1986	1949	1985	2001	1973	1980	1992	1944	1944	1987

## SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1943 - 2002	
ANNUAL TOTAL	376916		558012			
ANNUAL MEAN	1033		1529		1213	
HIGHEST ANNUAL MEAN					1993	
LOWEST ANNUAL MEAN					635	
HIGHEST DAILY MEAN	16000		Dec 17		20100	
LOWEST DAILY MEAN	180		Aug 20		184	
ANNUAL SEVEN-DAY MINIMUM	185		Aug 14		187	
ANNUAL RUNOFF (AC-FT)	747600		1107000		878500	
ANNUAL RUNOFF (CFSM)	8.07		11.9		9.47	
ANNUAL RUNOFF (INCHES)	109.54		162.17		128.72	
10 PERCENT EXCEEDS	1710		3310		2600	
50 PERCENT EXCEEDS	597		853		732	
90 PERCENT EXCEEDS	225		212		205	

e Estimated