



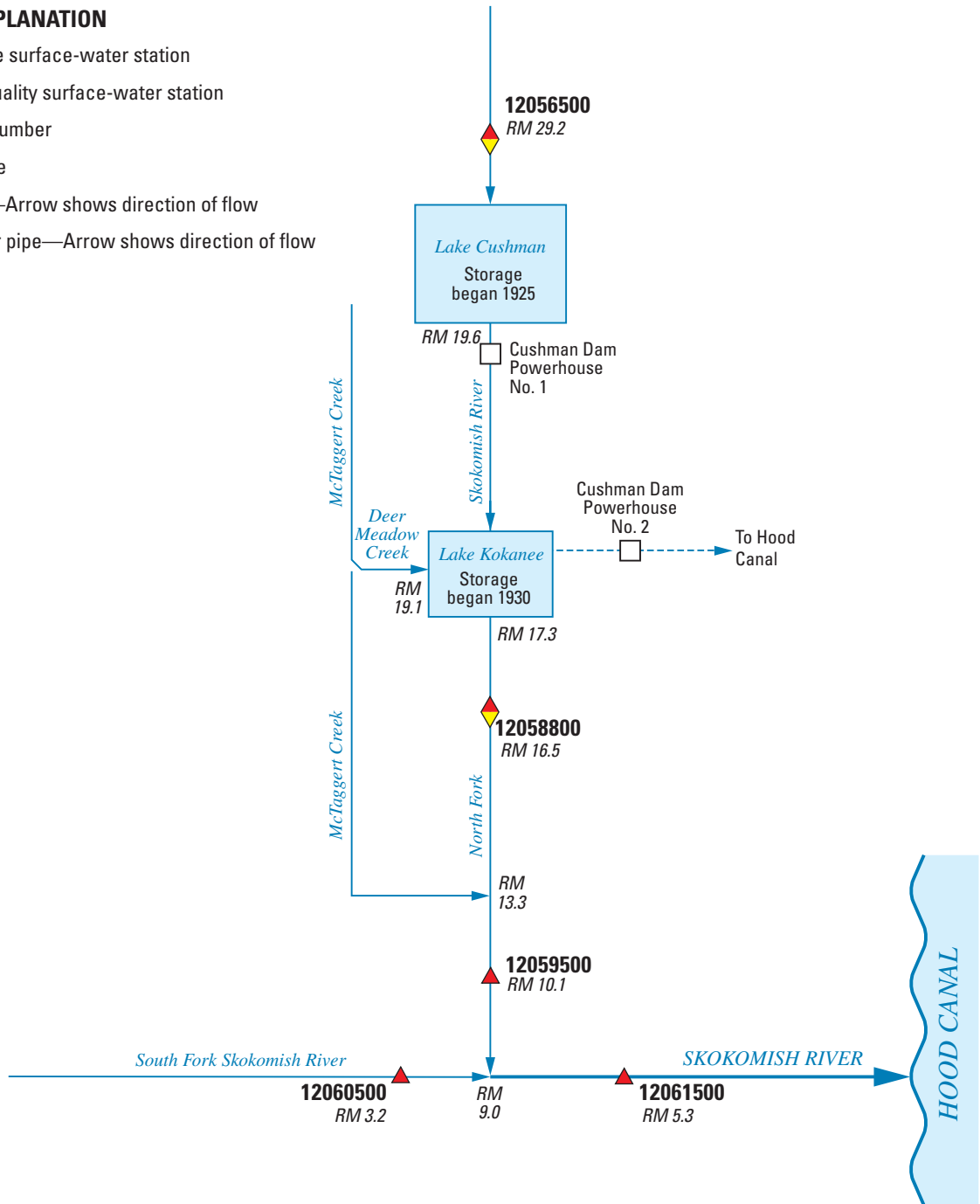


Figure 18. Location of surface-water stations in the Skokomish River Basin.

**EXPLANATION**

-  Real-time surface-water station
-  Water-quality surface-water station
- 12056500** Station number
- RM 17.3* River mile
-  Stream—Arrow shows direction of flow
-  Tunnel or pipe—Arrow shows direction of flow



**Figure 19.** Schematic diagram showing surface-water stations in the Skokomish River Basin.

## 12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WA

LOCATION.--Lat 47°30'52", long 123°19'43", in NW<sup>1</sup>/<sub>4</sub> sec.4, T.23 N., R.5 W., Mason County, Hydrologic Unit 17110017, Olympic National Park, on left bank 1.2 mi upstream from Lake Cushman, 2.8 mi upstream from Dry Creek, 11.3 mi northwest of Hoodsport, and at mile 29.2.

DRAINAGE AREA.--57.2 mi<sup>2</sup>.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1924 to current year.

REVISED RECORDS.--WSP 1286: 1932, 1935, 1937(M), 1942(M), 1947(P), 1948(M). WSP 1636: 1940(M). WSP 1736: 1927. WSP 1932: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 762.26 ft above NGVD of 1929. Prior to Nov. 1, 1934, water-stage recorder, and Nov. 1, 1934, to Nov. 10, 1941, nonrecording gages, on right bank at same datum.

REMARKS.--Records good except for estimated daily discharges, which are fair. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station. Chemical analyses December 1973 to September 1985.

AVERAGE DISCHARGE.--81 years (water years 1925-2005), 510 ft<sup>3</sup>/s, 121.05 in/yr, 369,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 27,000 ft<sup>3</sup>/s, Nov. 5, 1934, gage height, 14.4 ft, from high-water mark, from rating curve extended above 9,800 ft<sup>3</sup>/s, on basis of slope-area measurement at gage height 12.2 ft; minimum discharge recorded, 16 ft<sup>3</sup>/s, Sept. 23, 1930, gage height, 1.12 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov 2	0345	3,710	5.87	Dec 14	0915	3,500	5.74
Dec 10	1845	*6,570	*7.36	Jan 17	2015	4,390	6.26

Minimum daily discharge, 40 ft<sup>3</sup>/s, Sept. 27, 28.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	103	743	298	325	479	349	976	547	454	170	99	53
2	99	2,080	276	306	446	385	685	686	413	162	94	54
3	95	806	258	286	419	325	690	618	385	155	90	54
4	92	567	297	272	459	272	583	617	366	152	88	53
5	95	461	292	e260	417	243	528	593	348	155	86	53
6	112	407	276	e250	389	232	619	558	351	203	85	52
7	94	393	281	e243	359	263	619	501	323	159	83	51
8	368	358	468	e240	335	251	562	452	309	340	82	50
9	560	318	551	228	316	267	474	442	295	276	80	50
10	384	292	4,870	215	303	247	427	565	288	205	79	50
11	257	271	2,570	203	295	230	489	488	281	253	76	49
12	209	251	1,160	202	296	222	433	445	267	247	76	48
13	183	239	1,390	192	281	199	414	425	273	204	74	46
14	164	263	2,980	185	e265	184	394	456	259	185	71	46
15	150	390	1,590	183	e253	175	413	552	246	176	70	46
16	153	352	1,040	213	e240	199	1,390	465	241	167	70	47
17	391	321	867	2,580	227	182	867	427	290	156	71	49
18	373	430	849	2,970	219	165	632	1,690	248	151	72	48
19	1,410	376	801	2,010	211	267	549	1,930	230	146	67	46
20	751	317	658	1,580	199	1,520	551	1,540	223	140	64	45
21	464	290	569	1,220	190	780	650	1,170	225	136	63	44
22	395	277	510	1,940	184	516	738	1,420	219	134	61	43
23	330	267	462	1,670	179	420	792	1,090	206	129	61	43
24	284	1,050	430	1,070	176	363	865	849	200	121	58	42
25	311	1,270	460	838	173	322	835	712	197	117	58	41
26	481	606	467	764	168	717	816	655	192	113	55	41
27	398	467	425	817	164	807	831	627	190	110	55	40
28	348	391	404	653	212	614	747	609	182	108	56	40
29	320	351	388	590	---	549	651	580	178	106	63	175
30	632	323	365	532	---	487	608	524	176	103	57	191
31	422	---	343	534	---	480	---	490	---	99	54	---
TOTAL	10,428	14,927	26,595	23,571	7,854	12,232	19,828	22,723	8,055	5,078	2,218	1,690
MEAN	336	498	858	760	280	395	661	733	268	164	71.5	56.3
MAX	1,410	2,080	4,870	2,970	479	1,520	1,390	1,930	454	340	99	191
MIN	92	239	258	183	164	165	394	425	176	99	54	40
AC-FT	20,680	29,610	52,750	46,750	15,580	24,260	39,330	45,070	15,980	10,070	4,400	3,350
CFSM	5.88	8.70	15.0	13.3	4.90	6.90	11.6	12.8	4.69	2.86	1.25	0.98
IN.	6.78	9.71	17.30	15.33	5.11	7.96	12.90	14.78	5.24	3.30	1.44	1.10

## 12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2005, BY WATER YEAR (WY)												
MEAN	376	712	793	710	627	506	517	655	593	334	154	143
MAX	1,234	1,762	1,778	1,915	1,465	1,325	901	1,304	1,332	1,037	551	624
(WY)	(2004)	(1984)	(1934)	(1953)	(1991)	(1972)	(1943)	(1956)	(1956)	(1999)	(1999)	(1978)
MIN	42.3	40.0	244	124	111	190	268	333	180	88.5	54.9	50.2
(WY)	(1988)	(1937)	(1979)	(1937)	(1929)	(1955)	(1975)	(1930)	(1992)	(1926)	(1926)	(1926)

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1924 - 2005	
ANNUAL TOTAL	163,708		155,199			
ANNUAL MEAN	447		425		510	
HIGHEST ANNUAL MEAN					762	
LOWEST ANNUAL MEAN					256	
HIGHEST DAILY MEAN	4,870	Dec 10	4,870	Dec 10	9,980	Nov 3, 1955
LOWEST DAILY MEAN	73	Sep 8	40	Sep 27	17	Sep 23, 1930
ANNUAL SEVEN-DAY MINIMUM	78	Sep 3	41	Sep 22	20	Sep 17, 1930
ANNUAL RUNOFF (AC-FT)	324,700		307,800		369,200	
ANNUAL RUNOFF (CFSM)	7.82		7.43		8.91	
ANNUAL RUNOFF (INCHES)	106.47		100.93		121.05	
10 PERCENT EXCEEDS	723		823		1,020	
50 PERCENT EXCEEDS	390		290		374	
90 PERCENT EXCEEDS	102		61		91	

e Estimated

## 12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WA

## WATER-QUALITY RECORDS

PERIOD OF RECORD.--September 1973 to September 1985; September 1995 to April 1998; January 2001 to current year.

PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: April 1996 to April 1998.

WATER TEMPERATURE: April 1965 to September 1982, June 1989 to December 1989, December 1990 to April 1991, June 1992 to April 1998, October 1999 to current year.

INSTRUMENTATION.--Temperature recorder April 1965 to September 1982, June 1989 to April 1998, October 1999 to current year. Water-quality monitor April 1996 to April 1998. Electronic Data Logger with 15-minute recording interval. Prior to June 13, 1997, a 60-minute recording interval.

REMARKS.--Temperature records good, Oct. 1-20, Nov. 26 to Dec. 17; fair, Oct. 21-23, 27-31, Nov. 12-25, Dec. 18-30, Apr. 8 to Sept. 30; poor, Oct. 24-26, Nov. 1-11, Dec. 31 to Apr. 8.

EXTREMES FOR PERIOD OF DAILY RECORD.--

SPECIFIC CONDUCTANCE: Maximum recorded, 108 microsiemens, Sept. 11, 28, 1996; minimum recorded, 25 microsiemens, Mar. 18, 19, 1997.

WATER TEMPERATURE: Maximum recorded, 16.5°C (rounded), Aug. 14, 15, 1992; minimum, 0.0°C, Mar. 24, 1976, Jan. 31, 1996, Dec. 29, 1996.

EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum, 15.4°C, Aug. 20; minimum, 0.6°C, Dec. 6, but may have been lower during periods of missing record.

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	10.8	9.0	9.6	6.3	5.6	5.8	1.5	1.0	1.2	4.6	4.2	4.4
2	10.5	8.9	9.4	6.8	6.3	6.6	---	---	---	4.4	3.8	4.1
3	10.3	8.9	9.4	6.5	5.7	6.0	---	---	---	4.0	3.4	3.6
4	10.0	8.7	9.3	6.0	5.5	5.8	---	---	---	---	---	---
5	10.0	8.7	9.4	6.0	5.4	5.7	---	---	---	---	---	---
6	10.5	9.5	9.8	7.0	5.8	6.4	1.9	0.6	1.2	---	---	---
7	9.9	8.9	9.4	7.4	6.8	7.1	4.0	1.1	2.4	3.4	2.0	2.7
8	9.8	9.3	9.5	7.1	6.7	7.0	3.7	2.7	3.2	2.7	1.9	2.2
9	9.3	8.6	8.9	6.8	6.4	6.5	4.3	3.5	3.9	3.4	2.6	3.0
10	9.0	8.4	8.7	6.4	5.7	6.0	4.6	2.7	3.6	3.7	3.1	3.4
11	9.4	8.6	9.0	5.7	5.2	5.5	4.7	4.2	4.5	3.2	2.7	3.0
12	9.5	8.8	9.1	5.3	5.0	5.2	4.7	4.0	4.4	3.6	3.1	3.4
13	9.7	8.9	9.2	5.2	4.4	4.8	4.7	4.4	4.6	3.4	3.2	3.3
14	9.8	8.9	9.4	4.7	4.1	4.5	5.0	4.5	4.7	3.4	2.5	3.0
15	10.3	9.4	9.7	4.2	3.7	4.0	5.1	4.6	4.8	2.6	2.3	2.5
16	10.1	9.5	9.8	4.0	3.3	3.7	5.1	4.5	4.8	3.4	2.6	3.1
17	9.5	8.3	8.9	3.4	2.6	3.1	5.5	4.9	5.2	3.6	1.8	2.7
18	8.3	7.6	7.9	3.1	2.7	2.9	5.7	5.2	5.4	4.5	3.5	4.1
19	8.0	7.4	7.7	3.1	2.5	2.8	5.9	5.0	5.5	4.9	4.5	4.7
20	8.2	7.6	7.9	2.7	2.0	2.3	5.0	4.1	4.6	5.0	4.5	4.8
21	8.0	7.5	7.7	2.4	1.7	2.1	4.7	3.9	4.3	5.2	4.6	4.9
22	8.0	7.2	7.6	2.4	1.9	2.1	5.1	4.5	4.8	5.1	4.8	4.9
23	7.4	6.8	7.1	2.6	2.1	2.3	4.8	4.0	4.3	5.5	4.9	5.2
24	7.1	6.3	6.7	2.3	1.8	2.0	4.6	4.0	4.3	5.5	5.1	5.3
25	6.7	5.4	6.2	2.7	2.1	2.4	4.8	4.0	4.5	5.7	5.1	5.4
26	6.5	5.4	6.0	2.6	1.7	2.2	4.3	3.9	4.1	5.7	5.4	5.5
27	6.2	5.8	6.0	2.3	1.5	1.8	4.2	3.9	4.1	5.6	5.1	5.4
28	6.7	6.0	6.3	1.9	1.2	1.5	4.4	3.9	4.1	5.5	4.8	5.1
29	6.8	6.3	6.6	1.8	1.2	1.6	4.9	4.2	4.5	5.4	5.1	5.3
30	6.7	6.1	6.4	1.7	1.0	1.4	4.6	4.1	4.4	5.7	5.2	5.4
31	6.2	5.6	5.8	---	---	---	4.7	4.3	4.4	5.8	5.1	5.5
MONTH	10.8	5.4	8.2	7.4	1.0	4.0	---	---	---	---	---	---

## 12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WA—Continued

TEMPERATURE, WATER, DEGREES CELSIUS—CONTINUED  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	5.1	4.5	4.9	4.8	4.2	4.5	5.0	4.3	4.6	7.4	5.7	6.5
2	5.5	5.1	5.3	5.1	4.5	4.8	4.8	4.3	4.6	7.0	6.4	6.7
3	5.7	5.1	5.4	4.8	4.2	4.5	5.0	3.9	4.5	7.4	6.0	6.6
4	5.9	5.0	5.6	5.2	4.4	4.8	5.4	4.4	4.8	7.4	6.3	6.8
5	5.0	4.3	4.6	5.3	4.4	4.9	4.9	4.6	4.8	7.8	6.0	6.9
6	4.3	2.3	3.2	5.5	4.8	5.2	5.8	4.6	5.2	8.2	6.4	7.3
7	3.8	3.3	3.6	6.1	5.4	5.7	5.8	5.1	5.4	7.2	6.2	6.8
8	3.8	3.4	3.6	6.2	5.4	5.8	5.8	4.6	5.2	7.3	6.4	6.8
9	3.9	3.5	3.6	6.4	5.8	6.1	5.7	4.4	5.1	7.7	6.6	7.1
10	3.9	3.4	3.6	6.2	5.6	5.9	5.4	4.4	5.0	7.9	7.0	7.4
11	4.0	3.4	3.7	6.4	5.6	6.0	5.3	4.4	4.9	8.0	6.7	7.4
12	4.5	3.9	4.2	6.4	5.7	6.0	4.8	3.5	4.1	8.4	7.2	7.7
13	4.1	3.6	3.9	5.9	5.0	5.5	4.8	3.5	4.2	8.1	7.0	7.6
14	---	---	---	5.8	4.8	5.3	5.5	4.0	4.7	8.3	7.6	8.0
15	---	---	---	5.9	4.9	5.4	4.8	4.4	4.6	---	---	---
16	---	---	---	5.9	5.1	5.5	4.8	3.9	4.4	---	---	---
17	3.8	3.2	3.5	5.5	4.5	4.9	5.6	4.3	4.9	---	---	---
18	3.9	3.3	3.6	5.2	4.4	4.8	6.1	4.5	5.2	---	---	---
19	3.9	3.3	3.6	4.9	4.5	4.8	6.3	4.5	5.5	6.4	6.0	6.2
20	3.9	3.3	3.6	5.0	4.2	4.6	6.7	4.8	5.8	6.5	6.0	6.2
21	3.9	3.2	3.5	4.8	3.8	4.3	6.9	5.2	6.0	6.6	5.9	6.3
22	4.1	3.3	3.6	4.9	4.0	4.5	6.9	5.2	5.9	6.4	5.9	6.1
23	4.3	3.4	3.8	5.2	4.1	4.6	6.7	5.3	5.9	7.0	5.6	6.2
24	4.4	3.5	3.9	5.1	4.4	4.8	7.0	5.3	6.1	8.0	5.7	6.8
25	4.6	3.7	4.1	5.1	4.4	4.8	7.2	5.6	6.3	8.6	6.2	7.4
26	4.7	3.8	4.2	5.0	3.9	4.3	7.7	5.5	6.5	9.3	7.0	8.1
27	4.9	3.9	4.4	5.3	4.3	4.7	7.8	5.8	6.7	9.9	7.5	8.7
28	4.9	4.5	4.7	5.2	4.3	4.8	7.0	5.9	6.4	10.4	8.1	9.2
29	---	---	---	4.6	3.9	4.2	6.5	5.9	6.2	10.3	8.7	9.4
30	---	---	---	5.2	4.2	4.7	6.7	5.8	6.2	9.8	8.6	9.1
31	---	---	---	5.2	4.8	5.0	---	---	---	9.3	8.4	8.9
MONTH	---	---	---	6.4	3.8	5.0	7.8	3.5	5.3	---	---	---
DAY	JUNE			JULY			AUGUST			SEPTEMBER		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.1	7.8	8.4	11.5	10.2	10.8	13.4	12.0	12.5	15.0	10.9	12.0
2	8.6	7.8	8.2	10.9	9.8	10.4	13.9	11.2	12.2	13.1	11.3	11.9
3	9.4	7.7	8.5	11.9	9.4	10.5	14.0	10.9	12.1	13.3	11.0	11.7
4	8.6	7.6	8.1	12.2	9.9	10.9	14.2	11.0	12.2	12.7	10.8	11.4
5	8.3	7.4	7.8	11.0	10.2	10.7	14.3	11.4	12.6	12.8	10.1	11.1
6	9.1	7.3	7.9	12.2	10.3	11.0	14.6	11.6	12.8	13.8	10.0	11.1
7	8.0	7.3	7.7	11.9	10.0	10.7	14.8	11.7	12.9	13.5	10.1	11.2
8	8.3	7.5	7.9	10.6	9.9	10.2	14.9	11.9	13.0	13.1	10.3	11.4
9	8.8	7.7	8.2	10.4	9.2	9.8	14.7	11.9	12.9	11.9	10.1	10.8
10	8.7	7.6	8.2	10.1	9.3	9.7	13.2	12.0	12.4	11.4	10.0	10.5
11	9.3	7.8	8.5	10.5	9.4	9.9	12.2	11.6	12.0	11.8	9.9	10.7
12	9.3	7.4	8.2	11.0	9.7	10.3	14.3	11.0	12.2	12.6	9.8	11.0
13	8.8	7.8	8.3	11.4	9.9	10.5	14.4	11.4	12.6	12.6	9.8	11.0
14	8.8	7.6	8.1	12.4	9.6	10.9	15.1	11.6	12.9	12.7	9.9	11.0
15	9.4	7.2	8.2	11.0	10.4	10.7	15.1	11.9	13.0	11.6	10.0	10.8
16	8.6	8.0	8.3	11.4	10.1	10.8	13.9	12.1	12.7	11.6	10.1	10.8
17	9.6	8.1	8.7	12.8	9.9	11.2	13.4	12.0	12.6	11.6	9.5	10.5
18	9.2	8.2	8.6	13.3	10.5	11.8	14.1	11.6	12.6	12.3	9.8	10.8
19	10.6	8.1	9.2	13.2	10.7	11.9	14.4	11.5	12.6	12.4	9.8	10.8
20	11.1	8.5	9.8	13.4	10.8	11.9	15.4	11.5	12.6	12.6	9.5	10.6
21	10.6	9.4	10.0	13.6	10.7	11.9	14.7	11.3	12.5	12.7	9.1	10.3
22	10.3	9.4	9.8	13.8	11.3	12.2	14.0	11.8	12.7	12.3	8.8	10.0
23	11.1	8.7	9.8	13.4	11.1	12.0	13.6	11.6	12.4	12.8	8.3	9.6
24	11.3	9.3	10.2	13.0	11.0	11.9	14.1	10.8	12.0	13.6	7.8	9.4
25	11.7	9.7	10.5	13.6	10.7	11.9	13.9	10.7	11.9	13.5	8.0	9.7
26	10.5	9.8	10.1	13.8	10.9	12.1	13.9	10.8	12.0	14.2	8.4	10
27	10.5	9.4	9.9	14.2	11.1	12.3	14.1	11.0	12.2	13.9	8.9	10.1
28	10.5	9.3	10.0	14.3	11.4	12.6	13.2	11.6	12.2	14.3	8.2	10.3
29	12.2	9.7	10.7	14.0	11.4	12.5	14.2	11.0	11.9	10.6	10.0	10.3
30	12.4	10.1	11.0	14.5	11.3	12.5	12.8	10.8	11.5	10.5	9.9	10.3
31	---	---	---	14.3	11.3	12.5	13.7	10.8	11.9	---	---	---
MONTH	12.4	7.2	9.0	14.5	9.2	11.3	15.4	10.7	12.4	15.0	7.8	10.7

12056500 NORTH FORK SKOKOMISH RIVER BELOW STAIRCASE RAPIDS, NEAR HOODSPORT, WA—Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Instantaneous discharge, cfs (00061)	Barometric pressure, mm Hg (00025)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf uS/cm 25 degC (00095)	Temperature, air, deg C (00020)	Temperature, water, deg C (00010)	Alkalinity, wat flt inc tit field, mg/L as CaCO3 (39086)	Bicarbonate, wat flt incrm. titr., field, mg/L (00453)	Carbonate, wat flt incrm. titr., field, mg/L (00452)	Chloride, water, fltrd, mg/L (00940)
NOV 04...	1330	553	746	12.4	101	8.0	76	6.1	5.7	32	39	.0	.71
JAN 11...	1320	201	736	13.1	100	7.3	93	E-.5	2.8	39	47	.0	.79
APR 08...	1310	548	735	12.4	102	7.7	73	12.8	5.5	31	38	.0	.62
MAY 11...	1310	473	744	13.3	115	7.7	71	13.5	7.9	30	37	.0	.52
JUL 06...	1120	202	740	11.0	103	7.9	92	16.8	11.0	39	47	.0	.62
SEP 01...	1220	53	745	10.4	102	8.0	108	23.1	13.1	--	--	--	--
SEP 08...	1230	51	742	12.6	121	7.8	109	22.1	12.4	43	52	.0	1.02

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005—CONTINUED

Date	Sulfate water, fltrd, mg/L (00945)	Ammonia water, fltrd, mg/L as N (00608)	Nitrite + nitrate water, fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Total nitrogen, wat unf by analysis, mg/L (62855)	Orthophosphate, water, fltrd, mg/L as P (00671)	Phosphorus, water, unfltrd mg/L (00665)	Mercury water, fltrd, ng/L (50287)	Mercury suspnd total, ng/L (62976)	Methylmercury water, fltrd, ng/L (50285)	Methylmercury suspnd total, ng/L (62977)	Suspended sediment concentration, mg/L (80154)	Suspended sediment discharge, tons/d (80155)
NOV 04...	5.4	<.04	E.05	<.008	E.06	<.006	.004	--	--	--	--	2	3.0
JAN 11...	7.2	<.04	E.03	E.004	<.06	<.006	E.004	--	--	--	--	1	.54
APR 08...	5.2	<.04	<.06	<.008	E.05	<.006	.006	--	--	--	--	<.5	--
MAY 11...	4.8	<.04	<.06	<.008	<.06	<.006	.005	--	--	--	--	<.5	--
JUL 06...	6.7	<.04	<.06	<.008	<.06	<.006	E.002	--	--	--	--	<.5	--
SEP 01...	8.0	--	--	--	--	--	--	.27	<.067	<.04	<.009	1	.14
SEP 08...	8.2	<.04	<.06	<.008	E.05	<.006	<.004	--	--	--	--	<.5	--

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Medium code	Biomass periphyton, ashfree drymass g/m2 (49954)	Periphyton biomass weight, g/m2 (00572)	Periphyton biomass dry weight, g/m2 (00573)	Pheophytin a, periphyton, mg/m2 (62359)	Chlorophyll a periphyton, chromo-fluoro, mg/m2 (70957)	Data base number
AUG 23...	1100	D	11.7	240	248.3	9.2	34.3	01

WATER-QUALITY DATA, WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

Date	Time	Medium code	Mercury solids, total, ng/g (62978)	Suspnd. sediment, sieve diameter percent <.063mm (70331)
SEP 01...	1220	H	29.3	8

## 12058800 NORTH FORK SKOKOMISH RIVER BELOW LOWER CUSHMAN DAM, NEAR POTLATCH, WA

LOCATION.--Lat 47°23'27", long 123°12'30", in SE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> sec.17, T.22 N., R.4 W., Mason County, Hydrologic Unit 17110017, on right bank 1.2 mi downstream from Lower Cushman Dam (Cushman Dam No. 2), 2.8 mi northwest of Potlatch, and at mile 16.5.

DRAINAGE AREA.--102 mi<sup>2</sup>, approximately, includes 99 mi<sup>2</sup> upstream from Cushman Dam No. 2, which is noncontributing except during spillage.

## WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1988 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 230 ft above NGVD of 1929, from topographic map. Prior to Sept. 25, 1991, water-stage recorder at site 400 ft downstream at datum 7.66 ft lower.

REMARKS.--No estimated daily discharges. Records good. Upper portion of McTaggart Creek is diverted through Deer Meadow Creek into Cushman Reservoir No. 2. Flow regulated at Lake Cushman and at Cushman Reservoir No. 2 to supply powerplant, which discharges into Hood Canal. Entire flow of river normally diverted at Cushman Dam No. 2 except instream flow requirement and infrequent larger releases. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--17 years (water years 1989-2005), 56.9 ft<sup>3</sup>/s, 41,240 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,680 ft<sup>3</sup>/s, Dec. 19, 1995, gage height, 10.97 ft, from rating curve extended above 370 ft<sup>3</sup>/s; minimum discharge, 4.7 ft<sup>3</sup>/s, June 13-15, 1988.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 83 ft<sup>3</sup>/s, Dec. 10, gage height, 4.89 ft; minimum discharge, 60 ft<sup>3</sup>/s, on many days during the year.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	64	66	63	63	62	62	66	62	62	61	61	61
2	64	68	63	62	62	62	65	62	62	61	61	60
3	64	66	63	62	62	62	66	62	62	61	61	61
4	64	66	63	62	62	62	65	62	62	61	61	60
5	64	65	63	62	62	61	64	62	62	61	61	61
6	64	66	64	62	63	61	64	62	62	61	61	61
7	65	64	66	63	62	61	64	62	62	61	61	61
8	65	63	71	63	62	61	65	62	62	62	61	60
9	66	63	67	62	62	61	64	62	63	62	61	61
10	65	63	77	62	62	61	63	63	62	62	61	61
11	65	63	73	62	62	62	64	62	62	62	61	61
12	65	63	68	62	62	61	64	62	61	61	61	61
13	64	63	66	62	62	61	64	62	61	61	61	61
14	65	63	68	62	62	61	64	62	61	61	61	61
15	65	63	66	62	62	61	64	62	62	61	61	61
16	65	63	66	63	62	62	67	62	62	61	61	61
17	66	63	65	71	62	61	66	62	61	61	61	61
18	66	63	65	70	62	62	65	63	62	61	61	61
19	68	63	65	67	61	62	64	63	61	61	61	61
20	66	63	65	66	62	65	64	63	61	61	61	62
21	66	63	64	65	61	64	64	63	62	61	61	62
22	66	63	64	65	62	63	64	64	61	61	61	62
23	66	63	64	65	61	62	63	64	61	61	61	61
24	66	64	64	64	62	62	63	63	61	62	61	61
25	66	65	64	64	62	62	63	63	61	61	61	61
26	65	64	64	64	61	67	63	62	61	61	61	61
27	66	63	64	63	62	67	62	62	61	61	61	61
28	66	63	64	64	62	65	62	62	61	62	61	61
29	66	63	63	63	---	65	62	62	62	62	60	62
30	65	63	63	62	---	64	63	62	61	61	60	61
31	66	---	63	62	---	65	---	62	---	61	61	---
TOTAL	2,024	1,914	2,028	1,971	1,733	1,938	1,921	1,933	1,847	1,898	1,889	1,831
MEAN	65.3	63.8	65.4	63.6	61.9	62.5	64.0	62.4	61.6	61.2	60.9	61.0
MAX	68	68	77	71	63	67	67	64	63	62	61	62
MIN	64	63	63	62	61	61	62	62	61	61	60	60
AC-FT	4,010	3,800	4,020	3,910	3,440	3,840	3,810	3,830	3,660	3,760	3,750	3,630

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1988 - 2005, BY WATER YEAR (WY)

MEAN	52.8	51.5	100	63.5	57.3	48.7	62.0	46.4	47.8	46.7	51.4	50.8
MAX	169	95.4	872	309	183	69.3	232	66.9	66.1	66.0	131	99.3
(WY)	(2004)	(1991)	(1996)	(2002)	(1992)	(2003)	(1999)	(1999)	(2000)	(2002)	(1991)	(1990)
MIN	33.0	33.6	32.4	33.9	30.7	30.4	31.3	29.2	30.1	29.6	28.4	31.5
(WY)	(1990)	(1990)	(1989)	(1991)	(1993)	(1993)	(1993)	(1989)	(1989)	(1988)	(1988)	(1989)



## 12058800 NORTH FORK SKOKOMISH RIVER BELOW LOWER CUSHMAN DAM, NEAR POTLATCH, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1988 - 2005	
ANNUAL TOTAL	23,513		22,927			
ANNUAL MEAN	64.2		62.8		56.9	
HIGHEST ANNUAL MEAN					117	1996
LOWEST ANNUAL MEAN					33.1	1989
HIGHEST DAILY MEAN	77	Dec 10	77	Dec 10	3,570	Dec 19, 1995
LOWEST DAILY MEAN	62	Apr 13	60	Aug 29	4.9	Jun 14, 1988
ANNUAL SEVEN-DAY MINIMUM	62	May 19	60	Aug 29	5.1	Jun 8, 1988
ANNUAL RUNOFF (AC-FT)	46,640		45,480		41,240	
10 PERCENT EXCEEDS	66		66		67	
50 PERCENT EXCEEDS	64		62		39	
90 PERCENT EXCEEDS	63		61		33	

12058800 NORTH FORK SKOKOMISH RIVER BELOW LOWER CUSHMAN DAM, NEAR POTLATCH, WA—Continued

## WATER-QUALITY RECORDS

## PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: May 1989 to August 1990, December 1990 to April 1991, August 1993 to current year.

## INSTRUMENTATION.--Temperature recorder.

REMARKS.--Record rated excellent, except Jan. 29 to Feb. 27 and Aug. 13-30, which are good. U.S. Geological Survey satellite telemeter at station.

## EXTREMES FOR PERIOD OF DAILY RECORD.--

WATER TEMPERATURE: Maximum recorded, 13.0°C (rounded), July 4, 5, Oct. 6, 8-10, 1989, June 3, 4, 2000; minimum, 3.5°C (rounded), Feb. 15, 1995.

## EXTREMES FOR CURRENT YEAR.--

WATER TEMPERATURE: Maximum recorded, 11.3°C, July 27; minimum recorded, 5.8°C, Feb. 22, 23.

TEMPERATURE, WATER, DEGREES CELSIUS  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005

DAY	OCTOBER			NOVEMBER			DECEMBER			JANUARY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	9.5	8.8	9.1	9.6	9.2	9.3	8.7	8.4	8.6	7.5	7.3	7.4
2	9.6	8.9	9.2	9.7	9.4	9.6	8.7	8.3	8.5	7.3	7.0	7.2
3	9.6	8.9	9.2	9.6	9.2	9.4	8.7	8.3	8.5	7.1	6.8	6.9
4	9.5	8.9	9.2	9.4	8.9	9.1	8.6	8.5	8.6	7.0	6.7	6.8
5	9.6	9.0	9.3	9.3	8.8	9.0	8.6	8.1	8.3	6.9	6.5	6.7
6	9.8	9.5	9.6	9.5	9.0	9.3	8.3	7.9	8.2	6.9	6.5	6.7
7	9.6	9.1	9.4	9.9	9.5	9.7	8.4	8.2	8.3	6.8	6.4	6.8
8	9.6	9.4	9.5	9.8	9.6	9.7	8.6	8.3	8.4	6.8	6.5	6.7
9	9.6	9.3	9.4	9.7	9.6	9.6	8.5	8.2	8.4	6.8	6.6	6.7
10	9.7	9.2	9.4	9.8	9.3	9.6	8.9	8.4	8.8	6.7	6.5	6.6
11	9.8	9.3	9.5	9.6	9.2	9.4	8.8	8.4	8.6	6.6	6.4	6.5
12	10.0	9.5	9.7	9.5	9.1	9.3	8.4	8.2	8.3	6.6	6.3	6.5
13	10.0	9.5	9.7	9.6	9.3	9.4	8.6	8.2	8.4	6.5	6.2	6.4
14	9.8	9.5	9.7	9.7	9.4	9.6	8.7	8.3	8.5	6.4	6.1	6.2
15	10.1	9.6	9.8	9.7	9.5	9.6	8.4	8.1	8.2	6.3	6.0	6.1
16	9.9	9.6	9.7	9.6	9.1	9.3	8.1	7.8	8.0	6.5	6.2	6.4
17	9.7	9.3	9.5	9.5	9.0	9.3	8.1	8.0	8.0	6.9	6.4	6.6
18	9.5	9.2	9.4	9.4	9.0	9.3	8.2	7.9	8.0	7.1	6.8	7.0
19	9.8	9.5	9.6	9.3	8.8	9.0	8.2	7.7	8.0	7.3	7.0	7.2
20	9.8	9.4	9.6	9.1	8.8	9.0	7.9	7.6	7.8	7.3	6.9	7.1
21	9.7	9.4	9.5	9.1	8.7	8.9	7.8	7.5	7.7	7.2	6.9	7.1
22	9.8	9.2	9.6	9.3	9.0	9.1	7.9	7.6	7.8	7.2	7.0	7.1
23	9.5	9.0	9.3	9.4	9.1	9.2	7.7	7.4	7.6	7.3	7.1	7.2
24	9.5	8.9	9.2	9.6	9.3	9.4	7.7	7.5	7.6	7.3	6.9	7.1
25	9.5	9.1	9.3	9.4	8.8	9.2	7.7	7.6	7.7	7.2	6.8	7.0
26	9.9	9.4	9.6	9.0	8.6	8.8	7.8	7.4	7.6	7.2	6.9	7.1
27	9.8	9.3	9.6	8.9	8.5	8.7	7.6	7.3	7.4	7.2	6.9	7.1
28	9.7	9.4	9.6	8.7	8.4	8.6	7.4	7.1	7.3	7.1	6.7	6.9
29	9.8	9.4	9.6	8.4	8.2	8.4	7.5	7.2	7.4	7.3	7.0	7.2
30	9.7	9.3	9.5	8.7	8.4	8.6	7.5	7.2	7.4	7.4	7.1	7.2
31	9.5	9.0	9.3	---	---	---	7.5	7.2	7.3	7.4	7.0	7.2
MONTH	10.1	8.8	9.5	9.9	8.2	9.2	8.9	7.1	8.0	7.5	6.0	6.9



## 12059500 NORTH FORK SKOKOMISH RIVER NEAR POTLATCH, WA

LOCATION.--Lat 47°19'48", long 123°14'31", in NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec.7, T.21 N., R.4 W., Mason County, Hydrologic Unit 17110017, on left bank 1.1 mi upstream from South Fork Skokomish River, 5.4 mi southwest of Potlatch, 7.2 mi downstream from City of Tacoma Cushman Dam No. 2, and at mile 10.1.

DRAINAGE AREA.--117 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.--March 1944 to November 1949 (destroyed by flood of Nov. 27, 1949), March 1950 to current year.

GAGE.--Water-stage recorder. Datum of gage is 63.49 ft above NGVD of 1929 (levels by City of Tacoma). Prior to Nov. 27, 1949, and Mar. 18 to May 9, 1950, water-stage recorder at site 200 ft downstream at present datum.

REMARKS.--No estimated daily discharges. Records good. Upper portion of McTaggart Creek is diverted through Deer Meadow Creek into Cushman Reservoir No. 2. Flow regulated at Lake Cushman and at Cushman Reservoir No. 2 to supply power plant, which discharges into Hood Canal. Entire flow of river normally diverted at Cushman Dam No. 2 except infrequent releases. Water temperatures March 1965 to September 1982. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--60 years (water years 1945-49, 1951-2005), 117 ft<sup>3</sup>/s, 84,790 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,740 ft<sup>3</sup>/s, Nov. 4, 1955, gage height, 10.45 ft; minimum recorded discharge, 1.3 ft<sup>3</sup>/s, Sept. 5, 14, 16, 1951.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,950 ft<sup>3</sup>/s, Dec. 10, gage height, 5.79 ft; minimum discharge, 61 ft<sup>3</sup>/s, Sept. 12-14, gage height, 2.63 ft.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	72	143	119	131	123	115	248	111	96	75	68	65
2	73	243	114	121	117	104	229	113	95	74	68	65
3	73	196	110	116	114	98	269	108	94	73	68	65
4	72	163	127	113	115	94	244	108	92	73	67	65
5	75	143	135	110	110	91	218	104	91	74	67	65
6	76	132	157	108	125	89	216	102	91	76	67	65
7	75	123	225	121	122	87	197	99	89	73	67	65
8	83	117	544	125	114	87	178	98	88	83	67	65
9	104	112	384	122	111	85	161	98	88	77	67	66
10	101	107	1,210	116	108	83	153	104	87	76	68	66
11	91	105	976	113	106	83	172	97	85	77	68	65
12	87	102	463	112	107	81	167	95	83	75	68	65
13	83	101	334	108	104	80	176	93	84	73	67	64
14	82	103	418	105	101	79	167	92	82	72	66	65
15	81	105	354	105	99	78	177	93	82	73	67	65
16	81	104	274	132	97	85	355	91	82	72	67	67
17	101	101	228	725	96	81	292	91	86	72	67	67
18	106	117	200	897	94	79	231	126	83	71	67	67
19	197	112	180	511	93	93	201	134	81	70	66	66
20	167	107	165	341	90	196	180	127	79	71	66	67
21	136	105	152	262	89	188	166	124	79	69	66	67
22	133	103	143	259	88	153	155	148	79	71	66	67
23	122	100	136	267	87	134	146	139	78	70	66	66
24	114	147	132	228	85	123	140	129	77	70	66	67
25	116	249	159	197	85	113	137	120	77	69	66	66
26	122	178	173	178	84	286	129	114	77	68	66	66
27	114	151	158	164	84	344	124	109	78	68	66	65
28	110	136	149	153	89	262	120	105	77	68	65	66
29	107	129	141	143	---	263	120	103	77	68	65	75
30	128	125	136	137	---	217	115	100	76	68	65	71
31	115	---	130	131	---	194	---	99	---	68	65	---
TOTAL	3,197	3,959	8,326	6,451	2,837	4,145	5,583	3,374	2,513	2,237	2,065	1,986
MEAN	103	132	269	208	101	134	186	109	83.8	72.2	66.6	66.2
MAX	197	249	1,210	897	125	344	355	148	96	83	68	75
MIN	72	100	110	105	84	78	115	91	76	68	65	64
AC-FT	6,340	7,850	16,510	12,800	5,630	8,220	11,070	6,690	4,980	4,440	4,100	3,940

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1944 - 2005, BY WATER YEAR (WY)

MEAN	77.8	187	259	235	211	149	97.4	58.7	45.9	31.7	25.8	24.7
MAX	943	1,005	1,262	938	982	570	272	251	320	215	155	82.5
(WY)	(1952)	(1976)	(1951)	(1974)	(1951)	(1961)	(1999)	(1946)	(1946)	(1946)	(1991)	(1997)
MIN	5.37	12.6	32.9	41.3	63.6	56.2	32.7	22.2	9.99	5.30	2.83	4.52
(WY)	(1945)	(1977)	(1977)	(1979)	(1988)	(1947)	(1973)	(1947)	(1951)	(1951)	(1951)	(1944)

## 12059500 NORTH FORK SKOKOMISH RIVER NEAR POTLATCH, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1944 - 2005	
ANNUAL TOTAL	45,973		46,673			
ANNUAL MEAN	126		128		117	
HIGHEST ANNUAL MEAN					311 1951	
LOWEST ANNUAL MEAN					36.6 1977	
HIGHEST DAILY MEAN	1,210	Dec 10	1,210	Dec 10	6,630	Nov 4, 1955
LOWEST DAILY MEAN	64	Jul 22	64	Sep 13	1.4	Sep 14, 1951
ANNUAL SEVEN-DAY MINIMUM	64	Jul 21	65	Aug 28	1.8	Sep 12, 1951
ANNUAL RUNOFF (AC-FT)	91,190		92,580		84,790	
10 PERCENT EXCEEDS	217		200		240	
50 PERCENT EXCEEDS	98		101		61	
90 PERCENT EXCEEDS	66		67		11	

## 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WA

LOCATION.--Lat 47°20'26", long 123°16'44", in SW¼NE¼ sec.2, T.21 N., R.5 W., Mason County, Hydrologic Unit 17110017, on right bank 3.0 mi upstream from Vance Creek, 3.2 mi upstream from confluence with North Fork, and 8.5 mi west of Union.

DRAINAGE AREA.--76.3 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1931 to September 1984, October 1995 to current year.

GAGE.--Water-stage recorder. Datum of gage is 103.35 ft above NGVD of 1929.

REMARKS.--No estimated daily discharges. Records good except for discharges above 2,500 ft<sup>3</sup>/s, which are poor. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1932-84, 1996-2005), 742 ft<sup>3</sup>/s, 132.06 in/yr, 537,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 24,400 ft<sup>3</sup>/s, Mar. 19, 1997, gage height, 8.98 ft, on basis of slope-area measurement; maximum gage height, 11.0 ft, Jan. 22, 1935, Nov. 26, 1949; minimum discharge, 57 ft<sup>3</sup>/s, Sept. 27-30 and Oct. 1-6, 2003; minimum gage height, 0.11 ft, Aug. 5-6, 2004.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 10,800 ft<sup>3</sup>/s, Dec. 10, maximum gage height, 5.65 ft, Dec. 10; minimum discharge, 70 ft<sup>3</sup>/s, Sept. 27-29.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	173	702	385	586	597	632	1,750	461	388	171	131	89
2	169	2,620	359	551	556	681	1,360	481	367	170	130	89
3	161	1,160	339	525	524	613	1,510	463	350	165	126	88
4	158	796	403	499	542	485	1,300	458	332	161	122	86
5	162	637	510	478	535	418	1,080	461	324	162	122	84
6	187	545	500	465	532	379	1,210	432	324	203	121	82
7	168	484	620	489	490	358	1,090	405	307	185	118	81
8	294	435	1,710	486	457	341	970	388	295	292	114	81
9	689	399	1,290	458	438	327	796	374	285	365	114	87
10	696	371	7,820	435	422	314	705	400	275	266	114	87
11	462	349	4,600	421	416	302	890	385	268	259	114	81
12	365	330	1,960	419	435	290	831	365	260	273	112	81
13	313	315	1,630	408	443	278	828	350	262	245	108	81
14	279	312	3,500	395	421	273	793	344	254	224	105	78
15	257	377	2,310	390	402	263	809	363	247	212	105	78
16	241	396	1,540	507	384	293	2,520	368	239	202	105	81
17	437	421	1,250	4,250	368	295	1,610	351	261	191	105	81
18	585	562	1,100	5,390	354	271	1,100	1,490	244	184	105	80
19	1,650	589	1,000	3,070	340	305	884	2,030	232	178	104	78
20	1,100	483	875	1,960	331	2,480	772	1,610	224	170	100	77
21	691	418	789	1,550	318	1,570	751	1,170	214	164	97	74
22	593	379	723	1,740	309	900	743	1,460	211	164	97	74
23	522	354	668	1,950	301	696	721	1,240	204	160	97	74
24	450	751	626	1,270	293	594	707	937	201	154	96	74
25	455	2,040	750	1,010	288	520	677	738	194	150	93	74
26	711	862	1,000	867	281	1,470	619	625	192	145	92	74
27	609	628	869	846	275	1,720	587	554	192	141	91	73
28	512	510	766	751	296	1,160	556	504	188	141	90	71
29	449	451	701	696	---	1,110	519	466	181	140	92	138
30	675	416	651	640	---	1,030	503	435	179	135	90	330
31	566	---	612	632	---	872	---	408	---	131	89	---
TOTAL	14,779	19,092	41,856	34,134	11,348	21,240	29,191	20,516	7,694	5,903	3,299	2,706
MEAN	477	636	1,350	1,101	405	685	973	662	256	190	106	90.2
MAX	1,650	2,620	7,820	5,390	597	2,480	2,520	2,030	388	365	131	330
MIN	158	312	339	390	275	263	503	344	179	131	89	71
AC-FT	29,310	37,870	83,020	67,700	22,510	42,130	57,900	40,690	15,260	11,710	6,540	5,370
CFSM	6.25	8.34	17.7	14.4	5.31	8.98	12.8	8.67	3.36	2.50	1.39	1.18
IN.	7.21	9.31	20.41	16.64	5.53	10.36	14.23	10.00	3.75	2.88	1.61	1.32

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1931 - 2005, BY WATER YEAR (WY)

MEAN	545	1,159	1,488	1,340	1,181	933	751	590	379	221	141	194
MAX	1,727	2,952	3,330	4,030	2,594	2,138	1,397	1,259	909	479	294	795
(WY)	(1968)	(1984)	(1967)	(1953)	(1961)	(1972)	(1937)	(1948)	(1956)	(1974)	(2001)	(1978)
MIN	72.5	76.8	538	243	405	446	343	266	161	102	70.5	65.5
(WY)	(2003)	(1937)	(1979)	(1949)	(2005)	(1942)	(1973)	(2004)	(1934)	(2003)	(2003)	(2003)

## 12060500 SOUTH FORK SKOKOMISH RIVER NEAR UNION, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1931 - 2005	
ANNUAL TOTAL	202,525		211,758			
ANNUAL MEAN	553		580		742	
HIGHEST ANNUAL MEAN					1,058	1999
LOWEST ANNUAL MEAN					423	2001
HIGHEST DAILY MEAN	7,820	Dec 10	7,820	Dec 10	15,800	Jan 15, 1961
LOWEST DAILY MEAN	93	Aug 3	71	Sep 28	57	Sep 28, 2003
ANNUAL SEVEN-DAY MINIMUM	95	Jul 30	73	Sep 22	57	Sep 28, 2003
ANNUAL RUNOFF (AC-FT)	401,700		420,000		537,200	
ANNUAL RUNOFF (CFSM)	7.25		7.60		9.72	
ANNUAL RUNOFF (INCHES)	98.74		103.24		132.06	
10 PERCENT EXCEEDS	1,100		1,220		1,600	
50 PERCENT EXCEEDS	378		390		462	
90 PERCENT EXCEEDS	116		97		112	

## 12061500 SKOKOMISH RIVER NEAR POTLATCH, WA

LOCATION.--Lat 47°18'36", long 123°10'33", in SE¼NW¼ 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, 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.--62 years (water years 1944-2005), 1,212 ft<sup>3</sup>/s, 128.67 in/yr, 878,100 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 above 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, unknown, Dec. 10, gage height, 16.97 ft; minimum discharge, 168 ft<sup>3</sup>/s, Sept. 28.

DISCHARGE, CUBIC FEET PER SECOND  
WATER YEAR OCTOBER 2004 TO SEPTEMBER 2005  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	314	1,000	668	782	986	863	2,730	687	610	306	254	198
2	305	4,160	617	734	910	950	2,330	705	581	302	252	196
3	297	2,090	579	694	849	912	2,570	683	555	296	248	194
4	291	1,390	667	660	859	765	2,270	669	532	290	244	193
5	290	1,070	885	629	839	680	1,810	667	517	289	240	192
6	320	884	898	608	861	627	1,970	630	516	319	239	190
7	304	775	1,150	651	817	591	1,750	602	496	309	236	189
8	381	701	3,690	661	758	566	1,560	580	480	372	232	187
9	922	641	2,850	625	722	542	1,320	562	464	500	231	194
10	1,140	593	e15,100	589	697	523	1,160	599	451	395	231	199
11	755	553	e15,300	563	681	505	1,430	576	439	377	232	194
12	605	520	4,430	557	705	487	1,380	546	423	387	231	191
13	520	492	2,900	540	717	472	1,390	525	421	363	226	190
14	467	489	7,020	516	688	457	1,340	513	410	344	222	187
15	432	542	4,350	506	661	446	1,350	527	398	331	219	187
16	410	574	2,590	658	635	475	4,060	532	391	322	219	193
17	613	611	1,980	7,930	611	494	2,970	516	413	311	219	195
18	885	780	1,660	e16,400	590	457	1,990	1,720	394	302	220	189
19	2,440	866	1,450	8,750	571	485	1,560	2,760	376	294	217	185
20	1,970	730	1,260	3,860	549	3,170	1,330	2,420	362	289	213	184
21	1,200	643	1,110	3,010	530	2,800	1,220	1,750	354	283	212	184
22	1,000	585	987	2,910	514	1,620	1,160	2,070	347	281	210	181
23	867	542	897	3,610	501	1,210	1,100	1,930	339	276	209	179
24	746	941	829	2,360	488	994	1,060	1,450	333	271	208	179
25	717	4,310	989	1,850	478	848	1,010	1,160	328	267	206	178
26	1,050	1,690	1,420	1,570	469	2,360	927	974	325	266	204	176
27	939	1,180	1,240	1,470	460	3,300	867	850	327	268	203	175
28	794	922	1,070	1,310	479	2,160	812	767	322	265	201	172
29	707	794	963	1,190	---	2,090	766	716	318	261	200	207
30	1,020	732	879	1,090	---	1,900	737	673	313	257	200	402
31	890	---	811	1,050	---	1,570	---	639	---	254	200	---
TOTAL	23,591	31,800	81,239	68,333	18,625	35,319	47,929	29,998	12,535	9,647	6,878	5,860
MEAN	761	1,060	2,621	2,204	665	1,139	1,598	968	418	311	222	195
MAX	2,440	4,310	15,300	16,400	986	3,300	4,060	2,760	610	500	254	402
MIN	290	489	579	506	460	446	737	513	313	254	200	172
AC-FT	46,790	63,080	161,100	135,500	36,940	70,060	95,070	59,500	24,860	19,130	13,640	11,620
CFSM	5.95	8.28	20.5	17.2	5.20	8.90	12.5	7.56	3.26	2.43	1.73	1.53
IN.	6.86	9.24	23.61	19.86	5.41	10.26	13.93	8.72	3.64	2.80	2.00	1.70

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2005, BY WATER YEAR (WY)

MEAN	835	1,961	2,399	2,219	2,083	1,601	1,201	838	556	349	251	299
MAX	3,497	5,582	5,169	5,540	4,067	3,432	2,005	1,675	1,213	783	690	1,039
(WY)	(2004)	(1991)	(1995)	(1953)	(1995)	(1972)	(1969)	(1948)	(1956)	(1974)	(1991)	(1978)
MIN	115	286	772	524	665	704	487	455	261	189	144	147
(WY)	(1988)	(1994)	(1986)	(1949)	(2005)	(2001)	(1973)	(2004)	(1992)	(1944)	(1944)	(1987)



## 12061500 SKOKOMISH RIVER NEAR POTLATCH, WA—Continued

SUMMARY STATISTICS	FOR 2004 CALENDAR YEAR		FOR 2005 WATER YEAR		WATER YEARS 1943 - 2005	
ANNUAL TOTAL	371,801		371,754			
ANNUAL MEAN	1,016		1,019		1,212	
HIGHEST ANNUAL MEAN					1,993	
LOWEST ANNUAL MEAN					635	
HIGHEST DAILY MEAN	15,300	Dec 11	16,400	Jan 18	30,000	Dec 20, 1994
LOWEST DAILY MEAN	210	Aug 1	172	Sep 28	99	Nov 7, 1987
ANNUAL SEVEN-DAY MINIMUM	211	Jul 30	177	Sep 22	105	Oct 22, 1987
ANNUAL RUNOFF (AC-FT)	737,500		737,400		878,100	
ANNUAL RUNOFF (CFSM)	7.94		7.96		9.47	
ANNUAL RUNOFF (INCHES)	108.05		108.04		128.67	
10 PERCENT EXCEEDS	2,080		2,020		2,590	
50 PERCENT EXCEEDS	646		599		725	
90 PERCENT EXCEEDS	237		208		204	

e Estimated