14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA

LOCATION.--Lat 46°20'02", long 122°50'20", in NW 1/4 SW 1/4 sec.20, T.10 N., R.1 W., Cowlitz County, Hydrologic Unit 17080005, on right bank 10.7 mi downstream from confluence of North and South Forks, 2.9 mi northwest of Silver Lake, and at mile 6.5.

DRAINAGE AREA.--496 mi^2, of which approximately 21 mi^2 is noncontributing. Prior to July 7, 1981, the noncontributing portion was approximately 40 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1981 to current year.

REVISED RECORDS.--WDR WA-86-1: 1982 (M)(P), 1983 (M)(P), 1984 (M)(P), 1985 (M).

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above sea level, from topographic map.

REMARKS.--No estimated daily discharges. Records fair. No regulation or diversion upstream from station. Some quality of water data available from Washington Office for this station.

AVERAGE DISCHARGE.--20 years (water years 1982-2001), 2,095 ft^3/s, 57.38 in/yr, 1,518,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 61,800 ft^3/s, Feb. 8, 1996, gage height, 24.91 ft; maximum gage height, 28.03 ft Dec. 3, 1982; minimum daily, 243 ft^3/s Oct. 14, 1987.

EXTREMES OUTSIDE PERIOD OF RECORD.--Floods occurred on May 18, 1980, from mudflows caused by the eruption of Mount St. Helens. A flood about 1200 hours was due to mudflow from South Fork Toutle River and a larger flood about 2100 hours was due to mudflow from North Fork Toutle River.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Apr. 30	2045	*4,660	*7.34

Minimum discharge, 256 ft^3/s Sept. 25.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2470	860	1350	1320	971	929	2640	4200	1090	885	517	411
2	1400	807	1380	1230	1230	1250	2460	3910	1230	830	502	417
3	958	762	1300	1190	1300	1140	2310	3290	1460	791	488	404
4	795	810	1180	1400	2690	1030	2070	2890	1200	760	489	402
5	707	865	1100	1570	3430	1020	1910	2680	1110	736	476	387
6	638	912	1040	1600	2700	992	2160	2360	1230	723	452	377
7	580	862	988	1450	2230	990	2100	2100	1140	696	442	373
8	547	1130	945	1340	1880	1080	2040	1960	1080	673	431	362
9	628	1470	941	1290	1660	1190	1980	1870	1140	655	424	355
10	757	1170	914	1290	1470	1110	2010	1760	1150	638	414	349
11	662	1010	862	1180	1340	1080	3050	1660	1310	624	405	343
12	580	923	815	1110	1210	1030	2570	1640	1920	606	401	341
13	582	871	797	1170	1110	1030	2350	1700	1650	590	393	338
14	673	825	830	1270	1040	1090	2090	1960	1470	579	388	334
15	607	782	1410	1170	1030	1130	1890	2850	1350	574	387	333
16	575	742	1230	1080	1420	1300	1800	2970	1240	670	383	335
17	591	712	2290	1020	1250	1200	2180	2440	1170	697	385	331
18	669	691	1670	1030	1140	1360	2150	2120	1100	685	374	331
19	621	672	1440	1110	1050	2320	2070	1910	1040	624	370	329
20	942	663	1340	1090	993	2100	1930	1740	997	583	363	310
21	1370	648	1260	1150	955	1810	1790	1620	963	622	363	280
22	1020	628	1480	1150	954	1620	1680	1600	938	603	524	279
23	863	722	1880	1090	906	1490	1740	1700	918	570	1050	274
24	771	983	2260	1090	972	1430	1670	1670	889	553	885	268
25	709	882	1960	1030	940	2150	1690	1550	1020	543	640	274
26	674	1150	1740	975	898	2350	1800	1440	862	522	541	458
27	651	2440	1680	924	874	2140	1910	1350	1020	509	489	451
28	1010	1770	1550	895	868	2480	2040	1330	1350	617	462	341
29	1160	1490	1430	988	---	2310	2060	1330	1110	643	443	327
30	1080	1490	1400	970	---	2160	3100	1130	953	580	427	333
31	934	---	1400	1000	---	2350	---	1070	---	539	414	---
TOTAL	26224	29742	41862	36172	38511	46661	63240	63800	35100	19920	14722	10447
MEAN	846	991	1350	1167	1375	1505	2108	2058	1170	643	475	348
MAX	2470	2440	2290	1600	3430	2480	3100	4200	1920	885	1050	458
MIN	547	628	797	895	868	929	1670	1070	862	509	363	268
AC-FT	52020	58990	83030	71750	76390	92550	125400	126500	69620	39510	29200	20720
CFSM	1.71	2.00	2.72	2.35	2.77	3.03	4.25	4.15	2.36	1.30	.96	.70
IN.	1.97	2.23	3.14	2.71	2.89	3.50	4.74	4.79	2.63	1.49	1.10	.78

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1981 - 2001, BY WATER YEAR (WY)

MEAN	973	2963	3453	3387	3450	2916	2641	2111	1574	822	486	457
MAX	2931	5290	6954	5939	7754	5500	4697	3192	2643	1653	771	925
(WY)	1998	1996	1997	1997	1996	1997	1991	1999	1990	1983	1999	1997
MIN	310	418	1350	1167	1185	1315	1707	1226	539	412	306	277
(WY)	1988	1994	2001	2001	1993	1992	1998	1992	1992	1992	1992	1989

14242580 TOUTLE RIVER AT TOWER ROAD, NEAR SILVER LAKE, WA--Continued

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1981 - 2001	
ANNUAL TOTAL	584872		426401			
ANNUAL MEAN	1598		1168		2095	
HIGHEST ANNUAL MEAN					3118	1997
LOWEST ANNUAL MEAN					1168	2001
HIGHEST DAILY MEAN	7500	Jun 12	4200	May 1	48300	Feb 8 1996
LOWEST DAILY MEAN	363	Sep 28	268	Sep 24	243	Oct 14 1987
ANNUAL SEVEN-DAY MINIMUM	374	Sep 23	288	Sep 19	248	Oct 10 1987
ANNUAL RUNOFF (AC-FT)	1160000		845800		1518000	
ANNUAL RUNOFF (CFSM)	3.22		2.36		4.22	
ANNUAL RUNOFF (INCHES)	43.87		31.98		57.38	
10 PERCENT EXCEEDS	3100		2110		4110	
50 PERCENT EXCEEDS	1440		1030		1620	
90 PERCENT EXCEEDS	452		405		401	