12045500 ELWHA RIVER AT MCDONALD BRIDGE, NEAR PORT ANGELES, WA

LOCATION.--Lat 48°03'18", long 123°34'55", in NE 1/4 NW 1/4 sec.33, T.30 N., R.7 W., Clallam County, Hydrologic Unit 17110020, Olympic National Forest, on right bank 300 ft upstream from site of McDonald Bridge (now removed), 0.7 mi upstream from Little River, 4.9 mi below Glines Canyon Dam, 8 mi southwest of Port Angeles, and at mile 8.6.

DRAINAGE AREA.--269 mi.

PERIOD OF RECORD.--October 1897 to December 1901, October 1918 to current year. Published as "at McDonald" October 1897 to December 1901.

REVISED RECORDS.--WSP 1246: Drainage area. WSP 1286: 1898, 1899(M), 1900-1902, 1919, 1920-31(M), 1932, 1933(M). WSP 1566: 1957(M).

GAGE.--Water-stage recorder. Datum of gage is 200.00 ft above sea level. Oct. 1, 1897, to Dec. 31, 1901, nonrecording gage at McDonald Bridge at different datum. Dec. 9, 1918, to May 1, 1936, water-stage recorder under McDonald Bridge at datum 7.4 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Water is diverted through Glines Canyon powerhouse and returned to river upstream from gage. Flow partly regulated by Lake Mills 4.9 mi upstream (station 12045000). Chemical analyses July 1959 to June 1960, July 1960 to September 1970 (partial-record station), October 1971 to September 1986. Water temperatures April 1976 to August 1977, October 1994 to April 1998. Suspended sediment discharge April 1994 to September 1995. Miscellaneous sediment measurements October 1995 to September 1997. Prior to 1962, published as Elwha River near Port Angeles. October 1971 to September 1974 published as Elwha River below Little River, near Port Angeles. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--87 years (water years 1898-1901, 1919-2001), 1,509 ft^3/s, 76.18 in/yr, 1,093,000 acre-ft/yr, adjusted for storage since April 1927.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 41,600 ft^3/s Nov. 18, 1897, gage height, 14.5 ft, from graph based on gage readings, site and datum then in use, from rating curve extended above 3,300 ft^3/s on basis of two determinations of flow over dam at discharge 26,700 ft^3/s and 30,100 ft^3/s, referred to 1897 datum; minimum daily discharge, 10 ft^3/s Oct. 3, 1938.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,240 ft^3/s Jan. 05, gage height, 15.79 ft; minimum discharge, 176 ft^3/s Dec. 15.

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	908	637	1030	884	698	469	913	1170	1930	1090	501	678
2	523	582	1900	780	809	553	883	1040	1670	1070	557	702
3	469	558	1260	788	841	548	779	995	1410	1080	855	608
4	441	976	1030	1100	838	499	787	959	1270	1190	742	652
5	373	894	953	4370	957	483	743	1140	1240	1310	e700	568
6	335	659	834	2190	907	587	734	1010	1330	1040	e660	464
7	353	578	812	1710	758	531	675	952	1320	966	e680	374
8	383	662	763	1420	697	765	631	1000	1380	1030	e635	385
9	481	621	682	1310	683	688	654	1120	1670	1080	e605	459
10	583	536	687	1250	658	519	750	947	1370	1060	589	355
11	565	512	623	1150	656	560	626	1110	1420	1040	542	352
12	470	512	611	1030	630	588	581	1290	1270	1030	618	411
13	437	512	544	998	572	695	583	1530	1270	912	590	411
14	436	498	565	872	548	600	614	1450	1200	854	569	432
15	390	460	643	867	548	657	539	1650	1270	878	543	340
16	364	431	986	844	551	588	558	1670	1230	864	572	398
17	987	431	1480	808	567	534	791	1330	1240	759	510	373
18	2110	431	903	813	580	712	928	1190	1160	640	483	373
19	1050	431	812	915	552	1510	710	1210	1110	737	469	391
20	3030	431	788	891	517	889	678	1210	1320	681	453	377
21	1480	421	675	944	457	830	676	1230	1430	678	459	350
22	1060	399	974	983	496	845	676	1880	1450	716	1740	342
23	834	417	855	863	551	744	715	2490	1310	722	1670	331
24	791	592	887	843	551	712	761	2430	1210	729	1370	317
25	655	478	796	815	495	1220	983	2110	1140	799	838	310
26	636	647	870	769	460	1290	1160	2020	1070	635	632	490
27	577	956	856	722	487	1070	1320	2050	1300	736	679	612
28	869	559	955	680	517	983	1270	1910	1490	688	620	446
29	815	614	876	846	---	945	1110	1510	1300	700	654	388
30	666	1080	782	705	---	910	1200	1380	1130	584	595	379
31	599	---	847	701	---	891	---	1550	---	596	584	---
TOTAL	23670	17515	27279	33861	17581	23415	24028	44533	39910	26894	21714	13068
MEAN	764	584	880	1092	628	755	801	1437	1330	868	700	436
MAX	3030	1080	1900	4370	957	1510	1320	2490	1930	1310	1740	702
MIN	335	399	544	680	457	469	539	947	1070	584	453	310
AC-FT	46950	34740	54110	67160	34870	46440	47660	88330	79160	53340	43070	25920
MEAN†	760	585	879	1092	626	760	800	1441	1328	867	701	429
CFSM†	2.83	2.18	3.27	4.06	2.33	2.82	2.97	5.36	4.94	3.22	2.61	1.60
IN.†	3.26	2.43	3.77	4.68	2.42	3.26	3.32	6.18	5.51	3.72	3.00	1.78
AC-FT†	46740	34810	54080	67130	34770	46710	47590	88640	79020	53340	43100	25540

CAL YR 2000 TOTAL 425779 MEAN 1163 MAX 3710 MIN 335 AC-FT 844500 MEAN† 1163 CFSM† 4.33 IN.† 58.85 AC-FT† 844300
WTR YR 2001 TOTAL 313468 MEAN 859 MAX 4370 MIN 310 AC-FT 621800 MEAN† 858 CFSM† 3.19 IN.† 43.32 AC-FT† 621500

† Adjusted for change in contents in Lake Mills.
e Estimated