

SKAGIT RIVER BASIN

12193500 BAKER RIVER AT CONCRETE, WA

LOCATION.--Lat 48°32'24", long 121°44'31", in NW 1/4 NW 1/4 sec.11, T.35 N., R.8 E., Skagit County, Hydrologic Unit 17110005, on left bank at upstream side of fish barrier, 0.2 mi northeast of Concrete, 0.3 mi downstream from Baker River powerplant, and at mile 0.7.

DRAINAGE AREA.--297 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1910 to March 1915, September 1943 to current year.

REVISED RECORDS.--WSP 1286: 1911-13(M), 1945-46, drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Mar. 5, 1915, nonrecording gage at site 0.2 mi downstream at different datum. Sept. 1, 1943, to Jan. 22, 1958, water-stage recorder at site 700 ft upstream at datum 172.6 ft above NGVD of 1929 (from river-profile survey). Jan. 23 to June 11, 1958, powerplant record. Supplementary water-stage recorder on left bank about 40 ft downstream from fish barrier and on tailrace of powerhouse at same datum.

REMARKS.--No estimated daily discharges. Records good except those below 200 ft<sup>3</sup>/s, which are poor. Flows on occasion may be affected by backwater from Skagit River during high flows. All diversions returned to river upstream from gage; at times, power generation is shut down for maintenance at Baker River or the fish-barrier dam causing the stage to drop below the control. Water is released through a valve-controlled pipe to the fish ladder located on the left bank just downstream from the gage and control. Flow regulated by Baker Lake (station 12191600) since July 1959 and Shannon Lake (station 12193000) since November 1925. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--63 years (water years 1911-14, 1944-2002), 2,660 ft<sup>3</sup>/s, 121.63 in/yr, 1,927,000 acre-ft/yr, adjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,600 ft<sup>3</sup>/s Nov. 19, 1962, elevation, 186.6 ft, computation of peak flow over dam; minimum daily discharge, 30 ft<sup>3</sup>/s Mar. 21-26, 1973, Apr. 26-28, May 7-9, 11, 1983, Apr. 20, 24-28, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,800 ft<sup>3</sup>/s June 29, elevation, 181.59 ft; minimum daily discharge, 74 ft<sup>3</sup>/s, Sept. 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	2460	4020	3950	1710	4120	3970	2910	4030	4430	4020	2730	1460
2	1550	4020	3940	1610	4120	3980	3070	4000	4320	4010	1680	2000
3	1500	4010	3950	1010	4100	3980	3270	3980	1720	4000	2730	1260
4	1140	4370	3940	2900	4180	3770	2890	3930	308	3990	2630	1920
5	748	4720	3960	3210	4220	3640	1890	3910	343	4010	2930	1910
6	769	3990	3980	2590	2900	2640	85	3900	675	4050	3890	2450
7	692	3980	4010	2960	1580	3210	922	2690	630	4050	2200	2430
8	800	4020	4000	5340	1620	3570	2460	2700	91	4050	2530	1210
9	1520	4030	3980	9740	1590	1060	507	2630	92	4050	2590	1210
10	1630	4050	3880	9300	1780	81	2830	118	2180	4040	2570	2460
11	1170	2790	2660	5190	2430	1210	3970	118	3980	3990	2590	2760
12	1430	4070	2530	4000	3070	3990	3980	1050	3980	3980	2570	2620
13	916	4060	1940	3980	2530	4030	3960	223	3970	3970	2480	2720
14	981	8260	3090	4010	80	3980	3890	100	3970	3960	2460	2540
15	1520	13900	4000	3930	80	947	3930	107	3870	3940	2500	2230
16	3110	10600	3900	3920	80	84	3970	112	3830	3930	2450	2700
17	3270	6880	3840	3970	2450	762	4020	120	3010	3920	2630	3900
18	3140	5630	3860	3960	2700	1710	4020	2790	3980	3950	2030	3920
19	3090	6230	3850	3950	3090	2490	4000	2670	3970	3950	1720	3910
20	1840	8360	3860	3950	3180	2860	3950	2940	1950	3920	2660	3980
21	775	6320	3760	3950	3380	2710	3960	2840	4000	3980	2540	4020
22	3200	5900	104	3980	306	1150	4000	3030	3940	3980	2470	3700
23	4070	3960	1180	3990	2570	83	4020	4030	3940	3970	2810	3910
24	4070	3940	1180	4010	3950	85	4020	2430	4770	3980	1060	3950
25	4080	3930	86	3980	3940	86	4010	4000	5360	3970	2320	3810
26	4090	3930	2750	3990	3980	1380	4000	4050	5310	3990	2830	2820
27	4080	3900	2560	4040	3840	952	3990	4080	8560	3980	2470	2580
28	4040	3900	2360	4100	2290	85	3980	4100	9650	4000	3210	116
29	4050	3920	2420	4120	---	85	3970	4390	13500	4010	3990	2390
30	4010	3940	2190	4020	---	85	3980	4410	7000	4030	2980	74
31	4040	---	2370	4110	---	86	---	4440	---	4060	1870	---
TOTAL	73781	155630	94080	125520	74156	58751	100454	83918	117329	123730	79120	76960
MEAN	2380	5188	3035	4049	2648	1895	3348	2707	3911	3991	2552	2565
MAX	4090	13900	4010	9740	4220	4030	4020	4440	13500	4060	3990	4020
MIN	692	2790	86	1010	80	81	85	100	91	3920	1060	74
AC-FT	146300	308700	186600	249000	147100	116500	199300	166500	232700	245400	156900	152700
MEAN†	2358	4305	2405	3655	2572	1490	3488	3597	5855	3668	1732	1141
CFSM†	7.94	14.49	8.10	12.31	8.66	5.02	11.74	12.11	19.71	12.35	5.83	3.84
IN.†	9.15	16.17	9.33	14.19	9.02	5.79	13.10	13.96	21.99	14.24	6.72	4.29
AC-FT†	145000	256100	147900	224800	142800	91640	207500	221200	348300	225600	106500	67880

CAL YR 2001 TOTAL 768630 MEAN 2106 MAX 13900 MIN 47 AC-FT 1525000 MEAN† 2247 CFSM† 7.57 IN.† 102.71 AC-FT† 1627000  
WTR YR 2002 TOTAL 1163429 MEAN 3187 MAX 13900 MIN 74 AC-FT 2308000 MEAN† 3019 CFSM† 10.16 IN.† 138.01 AC-FT† 2186000

† Adjusted for change in contents in Baker Lake and Lake Shannon.