SKAGIT RIVER BASIN

12186000 SAUK RIVER ABOVE WHITE CHUCK RIVER, NEAR DARRINGTON, WA

LOCATION.--Lat 48°10'08", long 121°28'10", on north line NE 1/4 NE 1/4 sec.23, T.31 N., R.10 E., Snohomish County, Hydrologic Unit 17110006, Mount Baker National Forest, on right bank 0.6 mi upstream from White Chuck River, 8.4 mi southeast of Darrington, and at mile 32.5.

DRAINAGE AREA.--152 mi^2.

PERIOD OF RECORD.--August to November 1910 (fragmentary gage heights only), October 1917 to September 1922, August 1928 to current year. Monthly discharge only for April and May 1921, published in WSP 1316.

REVISED RECORDS.--WSP 752: 1932. WSP 1286: 1918(M), 1920(M), 1921, 1922(M), 1932(M), 1934(M), 1946-47(M), 1949.

GAGE.--Water-stage recorder. Elevation of gage is 930 ft above NGVD of 1929, from river-profile map. Prior to Nov. 18, 1910, nonrecording gage 0.5 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--78 years (water years 1918-20, 1922, 1929-2002), 1,128 ft^3/s, 100.81 in/yr, 817,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 40,100 ft^3/s Dec. 26, 1980, gage height, 16.03 ft, from rating curve extended above 15,000 ft^3/s; minimum discharge, 94 ft^3/s Oct. 27-31, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 14	2245	9,610	8.07	Apr. 14	0715	8,390	7.61
Dec. 17	0130	6,840	7.03	May 29	1145	5,220	6.34
Jan. 07	2315	*13,500	*9.34	June 29	0730	6,350	6.83
Feb. 22	1345	9,250	7.94				

Minimum discharge, 127 ft^3/s Oct. 7, 8.

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	167	1950	922	449	485	865	593	1640	2810	2350	761	374
2	159	1620	1130	543	454	769	592	1930	2800	2020	696	375
3	151	1280	832	586	467	698	559	1790	2950	1880	609	559
4	144	1050	717	575	457	656	574	1480	3020	1840	583	392
5	136	1100	638	538	438	650	681	1360	3350	1730	592	320
6	132	899	645	807	472	594	901	1200	3520	1700	667	280
7	128	765	630	9420	569	556	1100	1070	2640	2040	592	256
8	148	672	628	9600	540	528	948	963	2130	2860	553	245
9	177	605	682	4500	484	495	882	912	1800	2190	577	242
10	199	556	585	2630	477	493	1140	859	2000	2390	642	241
11	612	528	528	1890	508	1050	1370	860	2580	2790	645	252
12	526	546	514	1820	444	1190	2470	973	3380	2650	605	256
13	971	765	1500	1570	413	972	3780	1450	4220	2450	611	265
14	875	7260	2090	1280	386	824	6750	1600	4780	2370	633	259
15	672	6370	1220	1090	371	721	3640	1460	4690	1970	613	260
16	512	3620	3440	958	375	648	2380	1370	4180	1830	556	311
17	510	2210	4510	852	380	583	1840	1640	3270	1830	514	426
18	432	1580	2140	773	399	543	1490	1810	3220	1740	464	307
19	817	1570	1450	738	526	531	1330	1790	2710	1650	434	261
20	808	2300	1140	756	584	508	1220	2410	2490	1460	425	283
21	599	2230	952	714	1950	468	1150	2480	2910	1420	403	244
22	1180	1900	824	660	7810	471	1090	2200	3450	1470	389	219
23	2110	1770	723	615	5120	493	1070	1940	3460	1510	404	207
24	1320	1400	652	1090	2710	513	957	1810	3030	1540	440	200
25	1190	1160	597	1460	1790	528	901	1900	3020	1510	457	194
26	1100	1040	553	954	1370	559	879	2150	3570	1390	438	191
27	1310	929	520	732	1150	590	852	2430	3720	1150	412	194
28	987	849	538	625	991	620	863	3600	3500	1010	421	182
29	780	832	516	556	---	591	940	4830	5420	1000	431	190
30	804	757	484	519	---	555	1160	3950	3200	994	418	259
31	2480	---	462	527	---	551	---	3300	---	891	389	---
TOTAL	22136	50113	32762	49827	32120	19813	44102	59157	97820	55625	16374	8244
MEAN	714	1670	1057	1607	1147	639	1470	1908	3261	1794	528	275
MAX	2480	7260	4510	9600	7810	1190	6750	4830	5420	2860	761	559
MIN	128	528	462	449	371	468	559	859	1800	891	389	182
AC-FT	43910	99400	64980	98830	63710	39300	87480	117300	194000	110300	32480	16350
CFSM	4.70	11.0	6.95	10.6	7.55	4.20	9.67	12.6	21.5	11.8	3.47	1.81
IN.	5.42	12.26	8.02	12.19	7.86	4.85	10.79	14.48	23.94	13.61	4.01	2.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2002, BY WATER YEAR (WY)

MEAN	805	1205	1235	1014	903	771	1080	1882	2186	1409	598	482
MAX	2174	4117	3512	2584	2369	2442	1991	2965	3648	2875	1393	1504
(WY)	1968	1991	1918	1953	1951	1972	1934	1949	1974	1954	1954	1920
MIN	119	137	347	224	167	293	458	1119	895	396	215	177
(WY)	1988	1937	1986	1979	1929	1955	1975	1977	1941	1941	1941	1942

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1918 - 2002	
ANNUAL TOTAL	293022		488093			
ANNUAL MEAN	803		1337		1128	
HIGHEST ANNUAL MEAN					1557	1950
LOWEST ANNUAL MEAN					631	2001
HIGHEST DAILY MEAN	7260	Nov 14	9600	Jan 8	27000	Dec 26 1980
LOWEST DAILY MEAN	128	Oct 7	128	Oct 7	94	Oct 28 1987
ANNUAL SEVEN-DAY MINIMUM	143	Oct 2	143	Oct 2	96	Oct 24 1987
ANNUAL RUNOFF (AC-FT)	581200		968100		817000	
ANNUAL RUNOFF (CFSM)	5.28		8.80		7.42	
ANNUAL RUNOFF (INCHES)	71.71		119.45		100.81	
10 PERCENT EXCEEDS	1550		2980		2340	
50 PERCENT EXCEEDS	592		852		812	
90 PERCENT EXCEEDS	219		373		295	