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

LOCATION.--Lat 48°10'08", long 121°28'10", on north line, NE¼NE¼, 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.--Records good, except estimated daily discharges, which are fair. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--80 years (water years 1918-20, 1922, 1929-2004), 1,126 ft^3/s, 100.66 in/yr, 815,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 44,000 ft^3/s, Oct. 20, 2003, gage height, 15.39 ft, from rating curve extended above 15,000 ft^3/s, on basis of slope-area measurement; maximum gage height, 16.03 ft, Dec. 26, 1980; minimum daily discharge, 90 ft^3/s, Nov. 6, 2002, but may have been lower during period of missing record.

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)
Oct 17	1330	11,900	8.75	Oct 28	1845	5,000	6.23
Oct 20	2100	(a) *44,000	*15.39	Nov 19	0430	16,700	10.05

Minimum discharge, 219 ft^3/s, Oct. 8.

(a) From rating curve extended above 15,000 ft^3/s, on basis of slope-area measurement.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	236	1,080	1,310	413	1,400	359	841	1,680	1,910	1,000	367	478
2	232	958	1,270	397	1,120	347	772	2,070	1,640	958	347	633
3	232	849	1,770	384	947	343	768	2,030	1,720	893	338	545
4	231	758	1,330	341	857	395	875	1,920	2,130	833	320	455
5	230	689	1,390	331	759	443	924	1,910	2,290	771	313	438
6	228	634	1,610	324	705	417	900	1,520	2,260	815	313	396
7	229	597	1,290	360	666	620	994	1,410	1,800	1,040	543	359
8	242	570	1,080	554	611	1,200	1,020	1,570	1,550	792	390	337
9	427	542	934	582	566	1,560	1,050	1,510	1,720	667	343	367
10	392	634	834	698	529	1,410	1,090	1,400	1,780	623	329	362
11	324	1,500	754	684	504	1,100	1,250	1,260	1,600	605	319	1,510
12	1,000	1,090	744	647	484	974	e1,500	1,360	1,330	572	318	929
13	1,760	850	790	705	466	873	e1,600	1,270	1,660	601	317	850
14	780	738	779	e900	484	813	e1,500	1,260	1,790	620	317	2,270
15	538	685	712	e1,400	499	774	1,350	1,270	1,480	650	314	2,590
16	3,350	816	787	e1,300	503	721	1,170	1,310	1,340	632	312	2,600
17	8,390	1,440	967	e1,200	510	698	1,050	1,300	1,450	596	310	3,190
18	2,740	7,230	766	1,090	531	802	961	1,650	1,610	598	294	2,000
19	1,780	10,300	701	1,000	558	824	890	2,140	1,540	594	287	1,510
20	e40,000	3,540	730	909	513	716	900	1,960	1,440	547	283	1,180
21	e9,000	2,110	773	801	474	671	850	1,930	1,530	480	274	981
22	4,020	1,550	698	721	444	729	806	1,940	1,660	464	604	843
23	3,410	1,310	642	712	423	970	898	1,800	1,760	469	453	774
24	2,290	1,250	646	835	416	1,080	916	1,610	1,740	473	993	693
25	1,730	1,110	667	746	413	1,020	868	1,520	1,600	478	2,420	629
26	1,440	1,000	602	691	398	977	1,050	2,020	1,400	450	2,130	568
27	1,220	884	547	685	387	953	1,550	3,190	1,170	412	1,000	521
28	2,560	1,350	521	889	378	879	1,440	2,660	1,070	397	729	493
29	2,330	2,790	474	e1,600	370	846	1,250	1,980	1,070	400	615	463
30	1,580	1,700	440	e3,500	---	961	1,300	2,290	1,080	400	527	428
31	1,250	---	432	2,000	---	949	---	2,620	---	387	463	---
TOTAL	94,171	50,554	26,990	27,399	16,915	25,424	32,333	55,360	48,120	19,217	16,882	29,392
MEAN	3,038	1,685	871	884	583	820	1,078	1,786	1,604	620	545	980
MAX	40,000	10,300	1,770	3,500	1,400	1,560	1,600	3,190	2,290	1,040	2,420	3,190
MIN	228	542	432	324	370	343	768	1,260	1,070	387	274	337
AC-FT	186,800	100,300	53,530	54,350	33,550	50,430	64,130	109,800	95,450	38,120	33,490	58,300
CFSM	20.0	11.1	5.73	5.81	3.84	5.40	7.09	11.7	10.6	4.08	3.58	6.45
IN.	23.05	12.37	6.61	6.71	4.14	6.22	7.91	13.55	11.78	4.70	4.13	7.19

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

DISCHARGE, CUBIC FEET PER SECOND—CONTINUED
WATER YEAR OCTOBER 2003 TO SEPTEMBER 2004
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2004, BY WATER YEAR (WY)												
MEAN	824	1,205	1,224	1,020	898	781	1,079	1,876	2,173	1,390	593	485
MAX	3,038	4,117	3,512	2,584	2,369	2,442	1,991	2,965	3,648	2,875	1,393	1,504
(WY)	(2004)	(1991)	(1918)	(1953)	(1951)	(1972)	(1934)	(1949)	(1974)	(1954)	(1954)	(1920)
MIN	119	137	347	224	167	293	458	1,119	895	396	215	177
(WY)	(1988)	(1937)	(1986)	(1979)	(1929)	(1955)	(1975)	(1977)	(1941)	(1941)	(1941)	(1942)

SUMMARY STATISTICS	FOR 2003 CALENDAR YEAR		FOR 2004 WATER YEAR		WATER YEARS 1918 - 2004	
ANNUAL TOTAL	455,576		442,757			
ANNUAL MEAN	1,248		1,210		1,126	
HIGHEST ANNUAL MEAN					1,557	1950
LOWEST ANNUAL MEAN					631	2001
HIGHEST DAILY MEAN	40,000	Oct 20	40,000	Oct 20	40,000	Oct 20, 2003
LOWEST DAILY MEAN	204	Aug 25	228	Oct 6	90	Nov 6, 2002
ANNUAL SEVEN-DAY MINIMUM	209	Aug 22	231	Oct 1	96	Oct 24, 1987
ANNUAL RUNOFF (AC-FT)	903,600		878,200		815,800	
ANNUAL RUNOFF (CFSM)	8.21		7.96		7.41	
ANNUAL RUNOFF (INCHES)	111.50		108.36		100.66	
10 PERCENT EXCEEDS	2,320		1,970		2,340	
50 PERCENT EXCEEDS	857		848		812	
90 PERCENT EXCEEDS	232		361		293	

e Estimated