

SKAGIT RIVER BASIN

12200500 SKAGIT RIVER NEAR MOUNT VERNON, WA

LOCATION.--Lat 48°26'42", long 122°20'03", in SE ¹/₄ SE ¹/₄ sec.7, T.34 N., R.4 E., Skagit County, Hydrologic Unit 17110007, on right bank 220 ft downstream of bridge on U.S. Highway 99, 1.5 mi north of Skagit Valley Junior College in Mount Vernon, and at mile 15.7.

DRAINAGE AREA.--3,093 mi², of which 400 mi² is in Canada.

PERIOD OF RECORD.--October 1940 to current year. Monthly discharge only October 1940, published in WSP 1316.

REVISED RECORDS.--WSP 1932: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Supplementary water-stage recorder in bridge pier 0.2 mi downstream from base gage from Dec. 3, 1957, to Oct. 15, 1964. Water-stage recorder located on downstream pier of the Highway 99 bridge from Oct. 15, 1964, to Jan. 6, 1993.

REMARKS.--No estimated daily discharge. Records good. Flow regulated by Ross Reservoir (station 12175000) and Diablo and Gorge Reservoirs, Baker Lake, and Lake Shannon (stations 12176500, 12177700, 12191600, 12193000). Small diversions for domestic and municipal use. Chemical analyses July 1959 to September 1971, October 1973 to September 1994. Prior to November 1962, published as "at Lawrence." U.S. Geological Survey satellite telemeter at station. Specific conductance February 1974 to November 1981. Water temperature July 1962 to August 1970, February 1974 to November 1981.

AVERAGE DISCHARGE.--62 years (water years 1941-2002), 16,640 ft³/s, 12,060,000 acre-ft, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft³/s Nov. 25, 1990, elevation, 37.37 ft, from floodmarks; minimum discharge, 2,740 ft³/s Oct. 7, 1942, elevation, 7.37 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of 1906 reached a stage of 37 ft, from Great Northern Railway high-water profile, discharge 180,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 50,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	1445	69,000	27.83	Feb. 23	0730	71,200	28.21
Dec. 17	1345	52,700	24.70	Apr. 14	2115	53,600	24.88
Jan. 09	0015	*80,800	*29.78	Jun. 29	1900	59,000	25.98

Minimum discharge, 4,530 ft³/s Oct. 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	5740	23600	17400	10300	17800	20400	15100	22500	29100	34600	14800	8310
2	7200	19800	20900	10900	17400	19700	16600	25100	27100	30800	13300	9370
3	7040	18200	18500	12200	17300	18900	15800	24500	26900	27700	13800	10700
4	6980	15500	17000	15500	17700	18300	15200	20500	24800	25400	12500	10100
5	6070	16600	16100	15800	17400	18100	14900	19000	25800	24300	12700	8940
6	5680	16100	15900	16000	17200	16500	15500	18900	30200	23500	13800	8650
7	4740	14300	15700	35700	18000	16400	18900	18800	26300	24600	12400	8110
8	5470	12600	15500	73700	15300	16700	17900	17500	21600	28500	11200	7050
9	6290	12600	17200	69500	14800	15300	16400	16100	18600	30200	11400	7120
10	6510	11500	16800	44500	14200	13000	21000	14500	19500	26800	12200	8030
11	7790	11300	14800	31400	14900	14800	23200	14200	25000	30900	12400	8490
12	8350	9840	13800	27200	14900	25600	25500	14700	29400	35700	12100	8780
13	9720	12600	17800	28100	14500	22300	31100	18000	33300	35800	12400	8800
14	9140	28000	32300	24400	12500	20700	45400	19500	37600	35000	12900	8860
15	10100	63800	25600	22900	11100	18000	42600	19000	39000	32300	13100	8130
16	9160	56900	29700	21600	10800	14800	29700	17700	37800	29100	12300	8370
17	9670	34800	48400	20500	11800	14300	24800	18300	32800	27300	11600	11100
18	9940	24200	33200	19700	13700	14200	22200	21400	31600	25400	10800	10400
19	10900	20800	25200	19300	14600	15300	20900	21700	31000	24900	10700	9530
20	12900	27800	21000	19200	16000	16000	21200	23300	26200	23900	10000	9360
21	9740	28100	18500	19400	18000	15600	20400	26800	29000	23000	10300	9050
22	11400	26300	14300	19000	49700	14800	20400	25300	32100	23200	9750	8490
23	21500	23900	12400	18600	66600	12200	20300	24900	33700	23500	9640	8350
24	21800	21000	11900	20000	42800	12200	19100	22400	32100	23700	10100	8380
25	18600	18300	11000	26100	30000	12400	18500	22700	32300	23600	8830	8350
26	17600	16500	10700	23700	26200	13400	18900	24300	33400	23200	10700	7410
27	20400	16700	12100	21200	23600	14300	18600	25500	38300	22200	10600	6890
28	19100	15900	12000	19700	20500	15100	18400	29200	40700	20900	10400	6870
29	15700	16800	11400	18800	---	13600	18800	37100	51300	20800	12300	5400
30	14400	16900	10700	18200	---	13300	19700	38200	48000	20100	12000	6270
31	19300	---	10600	18000	---	12400	---	33400	---	17900	9350	---
TOTAL	348930	651240	568400	761100	579300	498600	647000	695000	944500	818800	360370	253660
MEAN	11260	21710	18340	24550	20690	16080	21570	22420	31480	26410	11620	8455
MAX	21800	63800	48400	73700	66600	25600	45400	38200	51300	35800	14800	11100
MIN	4740	9840	10600	10300	10800	12200	14900	14200	18600	17900	8830	5400
AC-FT	692100	1292000	1127000	1510000	1149000	989000	1283000	1379000	1873000	1624000	714800	503100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2002, BY WATER YEAR (WY)

MEAN	12290	18160	18780	17580	16750	14280	15060	20540	24750	20380	11780	9369
MAX	23710	52550	37930	27220	31140	27010	23360	36530	43460	37650	21890	17540
(WY)	1968	1991	1976	1974	1951	1972	1943	1946	1972	1972	1999	1959
MIN	4323	6592	8358	7636	7626	6856	8857	12460	13430	9310	6441	5023
(WY)	1943	1944	2001	1942	1942	1942	1973	1970	1992	1977	1941	1942

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1941 - 2002
ANNUAL TOTAL	4475180	7126900	
ANNUAL MEAN	12260	19530	16640
HIGHEST ANNUAL MEAN			23140
LOWEST ANNUAL MEAN			10500
HIGHEST DAILY MEAN	63800	Nov 15	142000
LOWEST DAILY MEAN	4740	Oct 7	3050
ANNUAL SEVEN-DAY MINIMUM	5710	Mar 1	3530
ANNUAL RUNOFF (AC-FT)	8877000	14140000	12060000
10 PERCENT EXCEEDS	19200	32100	27400
50 PERCENT EXCEEDS	10300	17900	14600
90 PERCENT EXCEEDS	6850	9100	7910