

## SKAGIT RIVER BASIN

## 12179900 BACON CREEK BELOW OAKES CREEK NEAR MARBLEMOUNT, WA

LOCATION.--Lat 48°36'17", long 121°23'54", in SE 1/4 sec.17, T.36 N., R.11 E., Skagit County, Hydrologic Unit 17110005, Mt. Baker Snoqualmie National Forest, on left bank 1.25 mile downstream from Oakes Creek, 5.5 miles northeast of Marblemount, and at mile 1.5.

DRAINAGE AREA.--49.7 mi<sup>2</sup>.

PERIOD OF RECORD.--August 1943 to September 1950, October 1998 to current year. Published as Bacon Creek near Marblemount (station 12180000) 1942-1950.

GAGE.--Water-stage recorder. Elevation of gage is 410 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good except those above 500 ft<sup>3</sup>/s, which are fair. No regulation or diversion upstream from station. Summer flows augmented by glacial melt. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--11 years (water years 1944-50, 1999-2002), 427 ft<sup>3</sup>/s, 116.69 in/yr, 309,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,100 ft<sup>3</sup>/s Nov. 26, 1949, gage height, 7.13 ft at site and datum then in use, on basis of outside high-water mark on pier and by a slope-area determination; minimum discharge, 74 ft<sup>3</sup>/s Oct. 18, 1945 at site then in use.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 14	2200	4,820	9.06	Feb. 22	0630	3,530	8.15
Nov. 15	1415	3,920	8.44	Apr. 14	0315	3,370	8.02
Nov. 20	0545	1,740	6.44	May 29	0530	1,880	6.60
Dec. 17	0015	1,660	6.33	Jun. 14	2215	1,720	6.42
Jan. 07	2030	*7,850	*10.74	Jun. 29	0315	3,300	7.96

Minimum discharge, 90 ft<sup>3</sup>/s Oct. 7.

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	111	666	363	178	186	312	314	803	931	815	330	201
2	108	623	437	260	179	281	295	821	965	648	300	260
3	105	499	351	315	180	261	273	640	996	598	266	275
4	100	507	308	296	178	245	282	505	977	584	264	211
5	96	604	274	272	175	241	342	450	1240	533	330	175
6	94	423	263	559	204	223	495	387	1120	594	370	153
7	92	348	248	4590	235	208	578	336	738	735	307	140
8	100	302	276	3290	228	197	446	303	568	1010	288	131
9	110	271	290	1410	210	188	422	281	537	751	286	133
10	138	255	255	919	207	187	651	271	757	877	297	130
11	189	267	233	692	207	392	650	291	973	996	294	135
12	234	353	226	680	195	476	1000	407	1200	971	289	136
13	301	634	421	594	185	366	1500	626	1410	908	303	138
14	290	3000	635	491	177	317	2300	623	1520	810	309	137
15	244	2800	433	421	172	284	1160	497	1420	690	308	138
16	255	1470	1000	373	174	259	818	471	1220	697	288	254
17	285	857	1080	334	173	235	651	677	968	705	252	258
18	243	603	630	304	183	220	552	649	1250	671	227	186
19	374	764	477	286	220	211	510	645	910	622	214	196
20	317	1300	389	276	235	196	495	910	867	550	203	195
21	268	968	333	260	931	187	484	839	1050	554	192	159
22	436	727	292	243	2770	186	497	739	1200	581	194	139
23	711	646	262	232	1520	196	460	645	1090	616	205	128
24	543	517	239	265	914	209	401	619	973	624	225	124
25	486	435	222	312	638	229	370	697	1030	607	235	119
26	514	379	206	266	502	251	355	760	1220	552	224	115
27	781	342	196	243	416	260	355	898	1190	459	215	111
28	496	318	197	226	356	263	386	1360	1460	420	219	106
29	387	316	193	211	---	254	448	1670	2260	507	220	118
30	447	296	186	202	---	257	632	1330	1130	472	214	142
31	893	---	181	194	---	265	---	1100	---	393	204	---
TOTAL	9748	21490	11096	19194	11950	7856	18122	21250	33170	20550	8072	4843
MEAN	314	716	358	619	427	253	604	685	1106	663	260	161
MAX	893	3000	1080	4590	2770	476	2300	1670	2260	1010	370	275
MIN	92	255	181	178	172	186	273	271	537	393	192	106
AC-FT	19340	42630	22010	38070	23700	15580	35940	42150	65790	40760	16010	9610
CFSM	6.33	14.4	7.20	12.5	8.59	5.10	12.2	13.8	22.2	13.3	5.24	3.25
IN.	7.30	16.09	8.31	14.37	8.94	5.88	13.56	15.91	24.83	15.38	6.04	3.62

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1943 - 2002, BY WATER YEAR (WY)

	338	431	364	320	287	283	398	712	824	579	323	241
MEAN	338	431	364	320	287	283	398	712	824	579	323	241
MAX	574	954	511	619	432	445	604	1030	1267	917	644	350
(WY)	1948	1950	1950	2002	1947	1950	2002	1949	1950	1950	1999	1948
MIN	181	166	172	113	160	177	260	527	518	233	150	146
(WY)	1999	2001	1949	1949	2001	1948	1945	1944	2001	1944	1944	1943

## SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1943 - 2002

ANNUAL TOTAL	128163	187341	
ANNUAL MEAN	351	513	427
HIGHEST ANNUAL MEAN			578
LOWEST ANNUAL MEAN			290
HIGHEST DAILY MEAN	3000	Nov 14	4590
LOWEST DAILY MEAN	92	Oct 7	92
ANNUAL SEVEN-DAY MINIMUM	99	Oct 2	99
ANNUAL RUNOFF (AC-FT)	254200	371600	309200
ANNUAL RUNOFF (CFSM)	7.07	10.3	8.59
ANNUAL RUNOFF (INCHES)	95.93	140.22	116.69
10 PERCENT EXCEEDS	613	1000	823
50 PERCENT EXCEEDS	267	334	318
90 PERCENT EXCEEDS	135	178	142