

SNOHOMISH RIVER BASIN

12137290 SOUTH FORK SULTAN RIVER NEAR SULTAN, WA

LOCATION.--Lat 47°56'51", long 121°37'32", in NE 1/4 NE 1/4 sec.3, T.28 N., R.9 E., Snohomish County, Hydrologic Unit 17110009, on left bank, 0.3 mi downstream from bridge, 14 mi northeast of Sultan, and 2 mi upstream from mouth.

DRAINAGE AREA.--11.6 mi².

PERIOD OF RECORD.--October 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 1,450.53 ft above NGVD of 1929.

REMARKS.--Records fair except flows below 15 ft³/s and above 2,500 ft³/s, Nov. 16-29, and estimated discharges, which are poor. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--11 years (water years 1992-2002), 123 ft³/s, 144.22 in/yr, 89,200 acre-ft/yr.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Nov. 24, 1990, reached a stage of 13.6 ft, from floodmark, discharge, 7,000 ft³/s (revised), from slope-area measurement of peak flow.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,750 ft³/s Dec. 29, 1998, gage height, 12.55 ft; minimum discharge, 4.6 ft³/s Oct. 9, 1991.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Jan. 7	2115	1,700	10.95	Apr. 14	0300	1,380	10.68
Feb. 22	1200	*2,730	*11.63				

Minimum discharge, 14 ft³/s Oct. 6, Aug. 31, Sep. 1, 2, 14-16, 27-29.

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	20	209	124	62	36	64	89	246	269	184	37	15
2	19	261	123	124	34	57	82	268	272	151	34	41
3	17	135	72	103	36	53	74	268	267	137	30	52
4	16	133	61	96	34	51	86	177	276	125	34	28
5	16	146	53	85	33	52	123	158	459	129	43	21
6	15	91	63	198	43	46	243	122	382	141	63	18
7	15	71	60	1270	52	42	249	99	235	164	42	20
8	43	60	68	929	43	39	155	87	208	242	35	19
9	39	52	69	375	38	37	202	83	180	148	32	20
10	141	46	57	196	40	39	381	83	230	194	32	18
11	270	43	48	146	39	159	457	92	278	170	30	16
12	266	52	68	228	35	131	898	162	341	154	28	16
13	201	131	599	152	33	e100	790	269	416	146	28	15
14	368	e975	360	109	31	e75	843	314	379	116	27	14
15	130	e500	167	87	31	e60	317	213	305	96	25	14
16	93	e310	677	74	35	e50	207	176	251	99	23	73
17	85	179	538	63	38	e45	153	285	196	100	22	40
18	106	126	207	57	55	e42	123	255	314	93	21	27
19	407	132	134	53	88	e42	109	e225	200	82	20	23
20	176	245	104	54	69	e40	101	e300	206	72	19	27
21	239	245	80	50	377	e37	96	e280	261	75	18	20
22	438	248	67	44	1750	e37	115	e390	260	82	18	18
23	453	251	57	42	606	e40	116	e300	221	80	18	17
24	236	146	55	191	262	e45	97	e250	192	73	18	16
25	356	102	50	158	156	e55	92	e270	214	65	18	15
26	276	87	47	79	112	63	90	e290	255	56	17	15
27	273	79	47	60	89	67	87	e320	230	47	16	14
28	147	70	76	50	74	73	92	e660	359	44	16	14
29	104	72	64	44	---	69	119	691	673	50	16	23
30	163	63	56	42	---	67	179	389	212	57	16	60
31	302	---	62	40	---	64	---	307	---	43	15	---
TOTAL	5430	5260	4313	5261	4269	1841	6765	8029	8541	3415	811	729
MEAN	175	175	139	170	152	59.4	226	259	285	110	26.2	24.3
MAX	453	975	677	1270	1750	159	898	691	673	242	63	73
MIN	15	43	47	40	31	37	74	83	180	43	15	14
AC-FT	10770	10430	8550	10440	8470	3650	13420	15930	16940	6770	1610	1450
CFSM	15.1	15.1	12.0	14.6	13.1	5.12	19.4	22.3	24.5	9.50	2.26	2.09
IN.	17.41	16.87	13.83	16.87	13.69	5.90	21.69	25.75	27.39	10.95	2.60	2.34

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2002, BY WATER YEAR (WY)

	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	
MEAN	121	182	157	167	124	114	147	174	146	72.2	29.1	45.5
MAX	245	394	274	254	255	224	226	274	285	157	65.3	114
(WY)	1996	1996	2000	1997	1996	1997	2002	1997	2002	1999	1995	1997
MIN	17.1	60.1	64.6	65.5	41.2	43.8	82.2	90.4	34.6	27.9	9.57	7.83
(WY)	1992	1994	1993	2000	2001	1992	1995	1992	1992	1992	1998	1998

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1992 - 2002

ANNUAL TOTAL	37949	54664										
ANNUAL MEAN	104	150								123		
HIGHEST ANNUAL MEAN										176		
LOWEST ANNUAL MEAN										81.2		
HIGHEST DAILY MEAN										2190	Feb 8	1996
LOWEST DAILY MEAN										5.2	Oct 10	1991
ANNUAL SEVEN-DAY MINIMUM										5.5	Oct 9	1991
ANNUAL RUNOFF (AC-FT)	75270	108400								89200		
ANNUAL RUNOFF (CFSM)		8.96								12.9		
ANNUAL RUNOFF (INCHES)		121.70								175.30		
10 PERCENT EXCEEDS		233								314		
50 PERCENT EXCEEDS		69								85		
90 PERCENT EXCEEDS		20								20		

e Estimated