SAMISH RIVER BASIN

12201500 SAMISH RIVER NEAR BURLINGTON, WA

LOCATION.--Lat 48°32'46", long 122°20'13", in SE $^1/_4$ SE $^1/_4$ sec.6, T.35 N., R.4 E., Skagit County, Hydrologic Unit 17110004, on left bank, 0.5 mi downstream from Friday Creek, 300 ft downstream from bridge on U.S. Highway 99, 5.0 mi north of Burlington, and at mile 10.3.

DRAINAGE AREA.--87.8 mi^2.

PERIOD OF RECORD.--July 1943 to September 1971, annual maximum water years 1972-79, miscellaneous dischage measurements 1972-74, 1976-96, October 1996 to current year.

REVISED RECORDS.--WSP 1216: Drainage area. WSP 1286: 1944(M), 1945.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above NGVD of 1929, from topographic map. Prior to Dec. 1, 1948, at site 500 ft upstream at datum 0.75 ft higher. Dec. 1, 1948, to Jan. 7, 1949, nonrecording gage 200 ft upstream at datum 3.14 ft higher than present datum.

REMARKS.--No estimated daily discharges. Records good. State fish hatchery on Friday Creek diverts about 4 ft^3/s, which is returned upstream from station. Slight regulation and there may be some pumping for irrigation. Chemical analyses 1959-70, 1973-74, 1977 to June 1980. Water temperatures March 1973 to April 1974.

AVERAGE DISCHARGE.--34 years (water years 1944-71, 1997-2002), 247 ft^3/s, 38.29 in/yr, 179,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,830 ft^3/s Dec. 28, 1949, gage height, 11.89 ft; minimum discharge, 11 ft^3/s July 10, 1951.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,100 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 14	0800	*2,980	*10.63	Jan. 25	0800	1,930	8.99
Dec. 16	1930	1,950	9.02	Feb. 23	0200	2,600	10.07

Minimum discharge, 23 ft^3/s Sept. 25.

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	47	446	582	246	502	400	550	204	136	145	39	28
2	47	354	699	281	476	352	451	204	127	121	38	30
3	47	280	603	261	520	319	380	198	120	104	37	33
4	45	239	560	240	540	292	336	188	115	98	44	30
5	40	255	564	222	484	288	323	237	129	91	64	28
6	39	215	679	222	476	263	428	256	121	82	49	28
7	41	185	719	332	479	243	660	229	107	79	45	27
8	41	163	714	576	503	226	497	199	96	142	43	28
9	44	144	861	553	484	218	465	183	91	120	41	27
10	49	132	758	417	436	211	733	168	91	101	39	26
11	59	119	641	341	415	274	574	159	89	89	37	26
12	59	114	647	463	365	344	565	156	92	77	38	26
13	70	118	1510	534	326	341	620	176	93	70	36	25
14	83	505	2560	444	291	355	892	319	87	65	35	25
15	73	655	1670	356	266	382	780	254	82	61	35	24
16	70	571	1790	318	248	439	784	202	78	57	34	30
17	71	457	1720	284	238	355	659	264	72	54	34	47
18	76	353	1190	262	299	323	540	236	197	53	32	31
19	294	295	1070	392	321	605	455	207	186	52	31	29
20	177	272	854	449	338	694	396	239	161	52	31	36
21	154	245	689	412	630	525	355	225	133	49	31	31
22	293	308	573	417	1910	481	338	208	113	47	31	30
23	336	518	488	433	2240	461	326	190	89	45	30	30
24	345	443	421	739	1290	442	290	166	81	44	31	28
25	546	354	369	1670	847	428	263	159	75	42	30	28
26	410	318	330	1240	650	415	247	156	71	41	30	27
27	820	356	301	851	540	423	236	156	67	40	31	27
28	528	397	290	655	463	683	217	165	80	45	28	27
29	356	629	269	530	---	591	206	169	227	45	28	30
30	263	644	247	466	---	512	201	178	178	43	28	31
31	356	---	251	520	---	459	---	149	---	41	28	---
TOTAL	5879	10084	24619	15126	16577	12344	13767	6199	3384	2195	1108	873
MEAN	190	336	794	488	592	398	459	200	113	70.8	35.7	29.1
MAX	820	655	2560	1670	2240	694	892	319	227	145	64	47
MIN	39	114	247	222	238	211	201	149	67	40	28	24
AC-FT	11660	20000	48830	30000	32880	24480	27310	12300	6710	4350	2200	1730
CFSM	2.16	3.83	9.05	5.56	6.74	4.54	5.23	2.28	1.28	0.81	0.41	0.33
IN.	2.49	4.27	10.43	6.41	7.02	5.23	5.83	2.63	1.43	0.93	0.47	0.37

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

MEAN	146	316	465	513	463	356	285	182	110	59.9	38.4	46.1
MAX	497	649	893	992	988	698	477	328	208	156	83.5	134
(WY)	1957	1946	2000	1971	1961	1950	1959	2000	2000	1999	1954	1959
MIN	25.5	30.4	89.2	203	236	173	151	84.3	41.2	23.0	19.0	21.0
(WY)	1953	1953	1953	1949	1963	1970	1944	1958	1958	1958	1958	1951

SUMMARY STATISTICS	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1943 - 2002	
ANNUAL TOTAL	85044		112155			
ANNUAL MEAN	233		307		247	
HIGHEST ANNUAL MEAN					340	1997
LOWEST ANNUAL MEAN					123	1944
HIGHEST DAILY MEAN	2560	Dec 14	2560	Dec 14	5020	Dec 28 1949
LOWEST DAILY MEAN	27	Sep 13	24	Sep 15	16	Aug 26 1958
ANNUAL SEVEN-DAY MINIMUM	30	Aug 14	26	Sep 9	18	Aug 20 1958
ANNUAL RUNOFF (AC-FT)	168700		222500		179300	
ANNUAL RUNOFF (CFSM)	2.65		3.50		2.82	
ANNUAL RUNOFF (INCHES)	36.03		47.52		38.29	
10 PERCENT EXCEEDS	495		645		539	
50 PERCENT EXCEEDS	169		236		174	
90 PERCENT EXCEEDS	37		31		31	