12090500 CLOVER CREEK NEAR TILLICUM, WA

LOCATION.--Lat 47°08'46", long 122°30'33", in NW 1/4 SE 1/4 sec.11, T.19 N., R.2 E., Pierce County, Hydrologic Unit 17110019, at Pacific Highway SW, Lakewood, Washington, 2.5 mi northeast of Tillicum.

DRAINAGE AREA.--73.8 mi^2.

PERIOD OF RECORD.--June 1949 to October 1954, October 1959 to September 1970 (annual maximums only), September 1990 to October 1992, October 1994 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above sea level, from topographic map. Prior to October 22, 1999, at Bridgeport Way, 1/4 mi. upstream, at various datums.

REMARKS.--Records good except for flows below 5 ft^3/s, June 21 to July 3, and estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--14 years (water years 1950-54, 1991-92, 1995-2001), 45.2 ft^3/s, 8.32 in/yr, 32,730 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 568 ft^3/s Feb. 12, 1991, gage height, 5.71 ft (datum then in use); no flow for many days in 1949, 1952-53, 2001.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 56 ft^3/s June 11, gage height, 15.48 ft; minimum discharge, no flow Sept. 29, 30.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3.5	2.8	5.1	10	11	15	17	31	11	5.9	1.5	1.4
2	2.8	2.6	7.0	9.8	12	15	26	27	12	5.0	1.3	1.3
3	2.7	2.6	5.5	13	12	14	25	24	11	4.7	1.4	1.3
4	2.6	5.7	5.4	14	20	14	22	22	11	5.1	1.7	1.2
5	2.6	5.4	5.3	19	18	13	21	21	11	5.2	1.2	1.1
6	2.7	8.7	5.1	17	16	13	21	20	11	5.0	1.1	.92
7	2.7	6.0	5.0	17	15	12	21	19	9.9	4.4	.93	.86
8	2.7	12	4.9	16	16	12	20	18	9.1	3.7	1.9	.90
9	6.4	3.2	5.4	15	16	13	19	17	12	7.0	1.5	.89
10	5.1	2.9	5.2	14	15	13	27	17	9.5	5.4	1.3	.88
11	2.0	3.2	5.1	13	15	13	33	16	28	4.2	1.1	e.75
12	2.0	3.2	4.9	13	14	13	32	16	19	3.9	1.5	e.63
13	2.2	3.1	4.8	13	14	14	28	15	17	3.7	1.2	e.53
14	1.7	3.0	7.8	13	13	13	25	22	15	3.4	1.0	e.46
15	1.7	2.8	5.1	12	13	16	24	24	14	3.1	.95	e.38
16	5.9	2.9	12	12	17	16	23	23	13	3.1	.86	e.33
17	2.7	3.3	8.3	12	16	15	27	20	12	3.0	.86	e.28
18	4.6	3.1	8.1	12	17	19	25	19	11	3.1	.67	.24
19	3.0	3.2	7.8	12	16	19	24	18	11	3.0	.58	.39
20	10	3.0	7.9	12	16	18	22	17	9.5	3.0	.50	.17
21	3.5	2.9	7.6	17	16	16	21	16	8.0	2.9	1.8	.17
22	3.3	2.8	9.3	15	15	15	20	15	8.0	2.7	7.7	.17
23	3.2	5.3	11	14	15	15	22	14	7.7	2.6	2.6	.15
24	3.2	2.9	9.1	14	14	15	20	13	9.7	2.6	1.8	.13
25	2.9	7.5	9.0	13	14	15	19	12	9.0	2.3	1.8	.29
26	2.7	11	8.5	13	13	17	19	12	8.4	2.2	1.7	2.4
27	2.6	7.0	9.2	12	13	20	18	12	19	1.9	1.6	.44
28	5.7	6.1	8.1	12	13	19	18	14	11	3.2	1.6	.08
29	3.1	6.1	9.9	13	---	18	18	13	9.0	1.4	1.4	.01
30	2.7	6.3	9.8	12	---	17	27	12	7.6	1.5	1.4	.00
31	2.9	---	11	12	---	18	---	12	---	2.0	1.4	---
TOTAL	105.4	140.6	228.2	415.8	415	475	684	551	354.4	110.2	47.85	18.75
MEAN	3.40	4.69	7.36	13.4	14.8	15.3	22.8	17.8	11.8	3.55	1.54	.62
MAX	10	12	12	19	20	20	33	31	28	7.0	7.7	2.4
MIN	1.7	2.6	4.8	9.8	11	12	17	12	7.6	1.4	.50	.00
AC-FT	209	279	453	825	823	942	1360	1090	703	219	95	37
CFSM	.05	.06	.10	.18	.20	.21	.31	.24	.16	.05	.02	.01
IN.	.05	.07	.12	.21	.21	.24	.34	.28	.18	.06	.02	.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2001, BY WATER YEAR (WY)

MEAN	4.79	14.4	54.9	91.4	116	102	70.9	42.6	24.9	13.5	5.89	3.73
MAX	13.8	37.0	119	232	279	196	133	78.5	42.1	26.9	12.5	11.5
(WY)	1998	1991	1951	1997	1951	1997	1991	1996	1996	1996	1996	1997
MIN	.000	.000	.000	13.4	14.8	15.3	22.8	17.8	9.93	3.55	.56	.077
(WY)	1953	1953	1953	2001	2001	2001	2001	2001	1992	2001	1952	1952

SUMMARY STATISTICS	FOR 2000 CALENDAR YEAR		FOR 2001 WATER YEAR		WATER YEARS 1949 - 2001	
ANNUAL TOTAL	11383.9		3546.20			
ANNUAL MEAN	31.1		9.72		45.2	
HIGHEST ANNUAL MEAN					81.9	1997
LOWEST ANNUAL MEAN					9.72	2001
HIGHEST DAILY MEAN	117	Mar 5	33	Apr 11	532	Feb 12 1951
LOWEST DAILY MEAN	1.7	Oct 14	.00	Sep 30	.00	Oct 20 1949
ANNUAL SEVEN-DAY MINIMUM	2.3	Sep 19	.20	Sep 18	.00	Oct 20 1949
ANNUAL RUNOFF (AC-FT)	22580		7030		32730	
ANNUAL RUNOFF (CFSM)	.42		.13		.61	
ANNUAL RUNOFF (INCHES)	5.74		1.79		8.32	
10 PERCENT EXCEEDS	72		19		120	
50 PERCENT EXCEEDS	21		9.2		22	
90 PERCENT EXCEEDS	2.8		1.2		1.9	

e Estimated