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 estimated daily discharges, which are fair. No regulation or diversion upstream from station.

AVERAGE DISCHARGE.--13 years (water years 1950-54, 1991-92, 1995-2000), 47.9 ft^3/s, 8.82 in/yr, 34,700 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.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 119 ft^3/s Mar. 5, gage height, 16.05 ft; minimum discharge, 0.53 ft^3/s Oct. 26, but may have been lower during period of no gage-height record Oct. 1-22.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1999 TO SEPTEMBER 2000
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	e1.3	1.6	48	52	73	86	62	44	31	18	6.9	3.3
2	e1.3	1.7	52	50	74	91	60	46	30	17	6.8	3.6
3	e1.3	1.9	49	51	72	91	59	51	29	23	5.8	3.4
4	e1.2	2.0	46	59	68	110	58	54	29	20	5.3	3.2
5	e1.2	2.6	46	57	65	117	57	48	28	20	5.1	3.2
6	e1.1	4.5	47	54	63	112	58	49	29	20	5.5	3.1
7	e2.0	2.4	45	52	65	104	57	46	30	24	6.2	3.1
8	e3.8	3.0	45	54	78	96	57	45	27	25	6.0	4.8
9	e2.8	7.0	45	59	85	93	58	53	28	24	5.9	3.6
10	e2.2	8.4	43	62	82	87	59	60	28	22	5.2	4.2
11	e2.2	8.3	42	63	76	84	57	57	30	20	4.9	3.5
12	e2.1	26	51	64	72	81	56	53	32	18	4.8	3.3
13	e1.5	21	54	61	68	83	62	48	30	17	4.6	3.0
14	e1.1	16	60	64	71	85	64	45	29	16	4.3	2.8
15	e.91	15	74	63	69	83	66	42	28	15	4.3	2.7
16	e.78	16	80	66	66	89	61	40	26	14	4.8	2.5
17	e.74	18	88	64	64	86	59	38	27	12	4.2	2.5
18	e.80	16	88	61	60	89	57	40	26	11	5.7	2.4
19	e.94	17	86	59	57	93	54	42	24	10	6.4	2.2
20	e.94	22	80	62	55	89	52	40	23	9.5	5.4	2.2
21	e.94	25	75	61	55	85	51	40	22	8.8	5.7	2.2
22	e1.0	24	70	59	61	90	51	39	21	9.6	e5.0	2.4
23	1.1	23	66	57	64	89	50	38	21	10	4.6	2.4
24	1.4	28	63	54	64	86	49	36	21	9.6	4.6	2.3
25	2.2	48	60	53	64	80	51	35	20	8.7	4.5	2.3
26	.74	52	57	51	69	76	49	35	19	8.3	4.4	2.4
27	2.4	55	54	49	73	73	48	35	21	7.9	4.2	2.5
28	3.4	51	52	48	72	72	48	34	25	7.9	4.0	2.5
29	1.4	47	50	48	86	69	47	33	23	7.8	3.7	2.6
30	1.6	51	48	48	---	67	44	32	21	7.7	3.6	4.4
31	4.5	---	48	50	---	65	---	32	---	7.4	3.5	---
TOTAL	50.89	614.4	1812	1755	1991	2701	1661	1330	778	449.2	155.9	88.6
MEAN	1.64	20.5	58.5	56.6	68.7	87.1	55.4	42.9	25.9	14.5	5.03	2.95
MAX	4.5	55	88	66	86	117	66	60	32	25	6.9	4.8
MIN	.74	1.6	42	48	55	65	44	32	19	7.4	3.5	2.2
AC-FT	101	1220	3590	3480	3950	5360	3290	2640	1540	891	309	176
CFSM	.02	.28	.79	.77	.93	1.18	.75	.58	.35	.20	.07	.04
IN.	.03	.31	.91	.88	1.00	1.36	.84	.67	.39	.23	.08	.04

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2000, BY WATER YEAR (WY)

MEAN	4.90	15.2	58.6	97.4	124	108	74.6	44.5	25.9	14.2	6.21	3.95
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	25.2	47.1	38.0	29.8	20.7	9.93	4.47	.56	.077
(WY)	1953	1953	1953	1952	1952	1992	1952	1952	1992	1952	1952	1952

SUMMARY STATISTICS	FOR 1999 CALENDAR YEAR		FOR 2000 WATER YEAR		WATER YEARS 1949 - 2000	
ANNUAL TOTAL	21717.19		13386.99			
ANNUAL MEAN	59.5		36.6		47.9	
HIGHEST ANNUAL MEAN					81.9	1997
LOWEST ANNUAL MEAN					17.4	1952
HIGHEST DAILY MEAN	222	Mar 3	117	Mar 5	532	Feb 12 1951
LOWEST DAILY MEAN	.74	Oct 17	.74	Oct 17	.00	Oct 20 1949
ANNUAL SEVEN-DAY MINIMUM	.86	Oct 15	.86	Oct 15	.00	Oct 20 1949
ANNUAL RUNOFF (AC-FT)	43080		26550		34700	
ANNUAL RUNOFF (CFSM)	.81		.50		.65	
ANNUAL RUNOFF (INCHES)	10.95		6.75		8.82	
10 PERCENT EXCEEDS	165		75		124	
50 PERCENT EXCEEDS	35		35		25	
90 PERCENT EXCEEDS	1.9		2.4		2.0	

e Estimated