

Water-Data Report 2006

**12091100 FLETT CREEK AT TACOMA, WA**

Puget Sound Basin  
Puget Sound Subbasin

LOCATION.--Lat 47°11'23", long 122°31'08" referenced to North American Datum of 1927, in NE ¼ SW ¼ sec.26, T.20 N., R.2 E., Pierce County, WA, Hydrologic Unit 17110019, on right bank upstream of 75th Street bridge, 0.6 mi upstream from mouth and 0.7 mi west of city limits of Tacoma.

DRAINAGE AREA.--7.33 mi<sup>2</sup>, excludes 0.68 mi<sup>2</sup> storm drainage diverted to Leach Creek basin.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--June 1959 to September 1985, October 1985 to September 1996 (seasonal records). October 1996 to current year.

REVISED RECORDS.--WSP 1932: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 189.32 ft above NGVD of 1929 (levels by USGS National Mapping Division). Prior to Oct. 11, 2000, at same site and at datum 5.74 ft higher.

REMARKS.--Records fair except for estimated daily discharges and discharges below 5.0 ft<sup>3</sup>/s, which are poor. Storm sewer drainage upstream from station. Several diversions for irrigation and industrial use. At times during winter months 1,000 gpm (~ 2cfs) is pumped into creek for short intervals from Mountain View Memorial Park. Since October 1979, Flett Creek flood control retention ponds store and release flood water upstream from station. Chemical analyses October 1964 to September 1965.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--36 years (water years 1960-85, 1997-2006), 10.9 ft<sup>3</sup>/s, 7,880 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 203 ft<sup>3</sup>/s, Feb. 8, 1996, gage height, 3.08 ft, site and datum then in use, from rating curve extended above 115 ft<sup>3</sup>/s; minimum discharge, 0.04 ft<sup>3</sup>/s, several days in Sept 2005.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 96 ft<sup>3</sup>/s, Jan. 12, gage height, 11.03 ft; minimum discharge, 0.13 ft<sup>3</sup>/s, Oct. 1.

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**DISCHARGE, CUBIC FEET PER SECOND**  
**WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006**  
**DAILY MEAN VALUES**  
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2.1	61	16	39	84	25	16	11	8.3	2.0	e0.27	0.21
2	2.0	48	17	26	78	19	16	8.1	37	1.9	e0.26	0.21
3	1.5	29	19	24	75	15	13	6.9	36	1.8	e0.25	0.21
4	1.3	19	16	21	74	14	12	6.4	23	1.6	e0.24	0.21
5	1.1	23	13	24	70	13	11	5.8	21	1.4	e0.23	0.21
6	0.97	40	11	50	50	13	9.8	4.9	14	1.3	e0.22	0.21
7	1.2	29	8.8	44	35	14	9.1	4.6	9.6	1.2	e0.21	0.21
8	1.5	17	7.3	40	31	14	9.7	5.4	8.1	1.2	e0.20	0.21
9	1.6	12	5.8	44	29	23	12	5.0	6.9	1.0	e0.19	0.23
10	1.6	8.6	4.6	66	26	21	11	4.6	6.0	1.0	e0.18	0.25
11	1.7	7.4	3.6	58	24	18	9.5	4.6	5.2	0.98	e0.19	0.25
12	1.8	9.4	2.8	72	23	16	8.7	4.4	5.2	0.86	0.21	0.23
13	2.3	15	2.2	72	22	14	8.9	4.4	5.5	0.84	0.21	0.18
14	2.5	16	2.6	78	21	13	20	4.4	5.6	0.73	0.21	0.21
15	4.2	12	2.4	70	20	13	21	4.3	5.8	0.69	0.21	0.23
16	4.7	9.2	1.9	64	19	13	18	4.1	5.8	0.69	0.21	0.18
17	3.8	7.4	1.7	69	17	13	15	3.6	6.5	0.73	0.21	0.19
18	3.2	6.3	1.4	60	18	13	12	3.4	6.2	0.67	0.20	0.39
19	3.8	5.5	1.6	45	17	13	10	3.4	5.4	0.61	0.20	0.21
20	4.1	4.8	2.4	40	16	12	9.4	3.5	4.9	0.44	0.19	0.21
21	3.8	4.2	6.4	42	16	11	9.2	3.6	4.2	e0.43	0.21	0.22
22	3.4	3.3	18	34	16	11	8.5	6.1	3.4	e0.42	0.21	0.21
23	3.2	3.0	24	26	16	10	8.1	11	3.2	e0.41	0.21	0.20
24	3.8	3.1	33	23	16	12	7.8	12	2.9	e0.40	0.21	0.18
25	5.4	12	54	21	16	15	7.3	13	2.7	e0.39	0.21	0.18
26	4.3	25	64	20	15	14	7.3	20	2.8	e0.38	0.20	0.20
27	3.3	17	61	21	16	12	6.9	15	2.7	e0.36	0.18	0.21
28	3.8	14	48	28	24	11	6.5	10	2.4	e0.34	0.18	0.21
29	5.7	15	40	35	---	11	7.1	7.8	2.2	e0.32	0.20	0.21
30	6.1	21	37	58	---	10	13	6.4	2.1	e0.30	0.22	0.21
31	30	---	50	82	---	11	---	5.9	---	e0.28	0.21	---
<b>Total</b>	119.77	497.2	576.5	1,396	884	437	333.8	213.6	254.6	25.67	6.53	6.47
<b>Mean</b>	3.86	16.6	18.6	45.0	31.6	14.1	11.1	6.89	8.49	0.83	0.21	0.22
<b>Max</b>	30	61	64	82	84	25	21	20	37	2.0	0.27	0.39
<b>Min</b>	0.97	3.0	1.4	20	15	10	6.5	3.4	2.1	0.28	0.18	0.18
<b>Ac-ft</b>	238	986	1,140	2,770	1,750	867	662	424	505	51	13	13

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2006, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	4.35	10.7	19.3	24.1	23.2	19.9	14.3	8.64	5.46	2.91	1.61	2.26
<b>Max</b>	18.7	32.4	40.2	54.9	53.9	52.1	32.4	29.9	15.6	10.9	5.24	9.81
<b>(WY)</b>	(1998)	(1991)	(1999)	(1997)	(1999)	(1972)	(1991)	(1996)	(1997)	(1983)	(1983)	(1997)
<b>Min</b>	0.13	1.39	3.14	1.93	1.69	5.81	2.96	2.39	0.45	0.25	0.18	0.11
<b>(WY)</b>	(1988)	(2003)	(1977)	(1977)	(1977)	(1962)	(1977)	(1977)	(2003)	(2003)	(2002)	(2005)

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SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1959 - 2006	
<b>Annual total</b>	3,461.67		4,751.14			
<b>Annual mean</b>	9.48		13.0		10.9	
<b>Highest annual mean</b>					21.7	1997
<b>Lowest annual mean</b>					2.87	1977
<b>Highest daily mean</b>	75	Jan 19	84	Feb 1	138	Nov 15, 2001
<b>Lowest daily mean</b>	0.04	Sep 13	0.18	Aug 10	0.04	Sep 13, 2005
<b>Annual seven-day minimum</b>	0.05	Sep 12	0.20	Aug 7	0.05	Sep 12, 2005
<b>Annual runoff (ac-ft)</b>	6,870		9,420		7,880	
<b>10 percent exceeds</b>	21		36		26	
<b>50 percent exceeds</b>	5.8		6.4		6.5	
<b>90 percent exceeds</b>	0.12		0.21		0.90	

