

CHAMBERS CREEK BASIN

12091100 FLETT CREEK AT TACOMA, WA

LOCATION.--Lat 47°11'23", long 122°31'08", in NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec.26, T.20 N., R.2 E., Pierce County, 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 mi², excludes 0.68 mi² storm drainage diverted to Leach Creek basin but does not include some urban storm drainage diverted into the basin.

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.--No estimated daily discharges. Records fair except for discharges below 5.0 ft³/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 are 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.--33 years (water years 1960-85, 1997-2003), 10.9 ft³/s, 7,910 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 203 ft³/s Feb. 8, 1996, gage height, 3.08 ft, site and datum then in use, from rating curve extended above 115 ft³/s; minimum discharge, 0.09 ft³/s Oct. 23-25, Nov. 11, 12, 1987, Sept. 5, 6, 9-15, 18, 2002.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 63 ft³/s Dec. 16, gage height 10.92 ft; minimum discharge, 0.13 ft³/s July 10-13.

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2002 TO SEPTEMBER 2003
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.28	0.80	0.44	19	47	8.3	13	8.2	1.4	0.20	0.25	0.24
2	0.22	0.64	0.41	35	39	8.2	16	8.2	0.81	0.20	0.24	0.24
3	0.78	0.48	0.34	43	37	8.5	18	8.2	0.65	0.19	0.24	0.25
4	0.56	0.49	0.52	38	32	8.9	18	8.2	1.6	0.18	0.24	0.25
5	0.56	0.53	0.34	40	19	8.4	16	7.7	0.89	0.19	0.24	0.43
6	0.51	2.4	0.23	26	17	8.1	15	8.3	0.58	0.18	0.24	0.21
7	0.49	2.1	0.19	13	14	8.7	15	11	0.53	0.18	0.24	0.26
8	0.50	2.2	0.16	11	13	9.6	17	8.0	0.53	0.17	0.24	0.24
9	0.53	2.4	0.16	11	11	18	21	7.4	0.51	0.16	0.46	0.24
10	0.53	1.4	1.0	9.3	11	32	20	6.9	0.44	0.16	0.24	0.28
11	0.47	1.4	2.7	6.4	10	28	17	6.3	0.39	0.16	0.21	0.24
12	0.38	2.7	16	11	12	36	15	6.1	0.35	0.15	0.21	0.24
13	0.39	2.5	22	13	10	47	17	6.3	0.35	0.60	0.21	0.24
14	0.40	2.4	31	16	9.3	36	19	5.7	0.33	0.38	0.22	0.24
15	0.41	1.6	40	13	7.5	33	18	6.6	0.28	0.31	0.23	0.24
16	0.33	2.5	46	11	13	27	18	9.0	0.28	0.30	0.24	0.24
17	0.30	1.8	49	11	15	16	17	6.0	0.25	0.28	0.22	0.24
18	0.31	2.0	38	8.6	15	16	17	4.9	0.27	0.29	0.22	0.24
19	0.40	1.6	20	6.1	15	16	16	4.0	0.28	0.28	0.23	0.25
20	0.42	1.3	12	5.2	15	17	12	3.8	0.28	0.28	0.24	0.24
21	0.42	1.1	10	6.9	16	18	16	3.7	0.34	0.28	0.22	0.24
22	0.44	1.0	8.1	14	15	39	18	3.1	0.29	0.27	0.23	0.24
23	0.51	0.98	5.5	26	14	46	15	2.9	0.25	0.26	0.24	0.24
24	0.58	0.92	3.5	21	13	29	18	2.6	0.24	0.26	0.23	0.24
25	0.53	0.84	4.9	23	12	19	16	2.9	0.24	0.27	0.23	0.24
26	0.53	0.85	6.7	34	11	25	15	1.8	0.22	0.26	0.24	0.24
27	0.68	0.81	9.3	48	10	25	14	2.2	0.23	0.28	0.24	0.24
28	0.71	0.70	10	44	8.7	17	12	2.0	0.20	0.26	0.24	0.27
29	0.76	0.62	9.5	39	---	14	11	1.6	0.20	0.26	0.24	0.28
30	0.82	0.54	11	43	---	12	9.5	1.5	0.22	0.25	0.24	0.28
31	0.85	---	15	54	---	13	---	0.83	---	0.26	0.24	---
TOTAL	15.60	41.60	373.99	699.5	461.5	647.7	479.5	165.93	13.43	7.75	7.45	7.56
MEAN	0.50	1.39	12.1	22.6	16.5	20.9	16.0	5.35	0.45	0.25	0.24	0.25
MAX	0.85	2.7	49	54	47	47	21	11	1.6	0.60	0.46	0.43
MIN	0.22	0.48	0.16	5.2	7.5	8.1	9.5	0.83	0.20	0.15	0.21	0.21
AC-FT	31	83	742	1,390	915	1,280	951	329	27	15	15	15

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2003, BY WATER YEAR (WY)

MEAN	4.16	10.6	19.5	23.8	23.4	20.4	14.5	8.63	5.40	3.01	1.72	2.36
MAX	18.7	32.4	40.2	54.9	53.9	52.1	32.4	29.9	15.6	10.9	5.24	9.81
(WY)	(1998)	(1991)	(1999)	(1997)	(1999)	(1972)	(1991)	(1996)	(1997)	(1983)	(1983)	(1997)
MIN	0.13	1.39	3.14	1.93	1.69	5.81	2.96	2.39	0.45	0.25	0.18	0.14
(WY)	(1988)	(2003)	(1977)	(1977)	(1977)	(1962)	(1977)	(1977)	(2003)	(2003)	(2002)	(2002)

SUMMARY STATISTICS

	FOR 2002 CALENDAR YEAR				FOR 2003 WATER YEAR				WATER YEARS 1959 - 2003			
ANNUAL TOTAL	3,467.70				2,921.51				10.9			
ANNUAL MEAN	9.50				8.00				21.7			
HIGHEST ANNUAL MEAN									1997			
LOWEST ANNUAL MEAN									2.87			
HIGHEST DAILY MEAN	54				Jan 8				138			
LOWEST DAILY MEAN	0.10				Aug 29				Nov 15, 2001			
ANNUAL SEVEN-DAY MINIMUM	0.10				Aug 29				0.09			
ANNUAL RUNOFF (AC-FT)	6,880				5,790				0.09			
10 PERCENT EXCEEDS	29				21				Oct 24, 1987			
50 PERCENT EXCEEDS	2.7				1.6				0.10			
90 PERCENT EXCEEDS	0.16				0.24				Aug 29, 2002			