

## CHAMBERS CREEK BASIN

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## 12091200 LEACH CREEK NEAR FIRCREST, WA

LOCATION.--Lat 47°13'18", long 122°30'29", in lot 24, block 14, SE  $\frac{1}{4}$  NE  $\frac{1}{4}$  sec.14, T.20 N., R.2 E., Pierce County, Hydrologic Unit 17110019, on left bank 1.0 mi south of Fircrest, and 2 mi upstream from mouth.

DRAINAGE AREA.--4.73 mi<sup>2</sup> includes 0.68 mi<sup>2</sup> storm drainage from Flett Creek basin.

PERIOD OF RECORD.--March 1957 to September 1985, October 1985 to April 1988 (seasonal records), October 1988 to current year.

REVISED RECORDS.--WSP 1932: Drainage area.

GAGE.--Water-stage recorder, metal weir control, and crest-stage gage. Prior to Oct. 19, 1979, at site 20 ft downstream at same datum. Datum of gage is 222.98 ft above sea level (levels by U.S. Geological Survey National Mapping Division).

REMARKS.--No estimated daily discharges. Records good except for flows below 3 ft<sup>3</sup>/s, which are fair. Since Oct. 1, 1961, flow may be regulated at dam upstream from station. Low flows supplemented from well in basin beginning June 30, 1993. Storage is not retained and observed annual runoff closely represents natural runoff of basin. Drainage into basin influenced by urbanizing of area. No known diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--40 years (water years 1958-85, 1989-2000), 4.72 ft<sup>3</sup>/s, 13.55 in/yr, 3,420 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 309 ft<sup>3</sup>/s Nov. 24, 1990, gage height, 5.76 ft, from rating curve extended above 200 ft<sup>3</sup>/s; minimum discharge, 0.1 ft<sup>3</sup>/s Sept. 22, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 101 ft<sup>3</sup>/s Dec. 15, gage height, 2.62 ft; minimum discharge, 2.0 ft<sup>3</sup>/s Aug. 23.

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	2.7	2.7	11	14	47	5.0	2.6	4.3	2.7	2.5	2.4	2.5
2	2.7	2.5	15	3.2	6.9	17	2.6	4.3	2.7	2.5	2.5	4.0
3	2.8	3.1	3.8	12	4.1	14	2.7	6.0	2.6	7.0	2.5	2.4
4	2.7	2.5	3.7	17	3.6	30	2.7	8.6	2.6	2.6	2.7	2.4
5	2.7	4.5	7.9	3.6	4.0	5.1	2.8	6.1	4.3	2.5	2.6	2.5
6	2.8	12	13	3.4	3.9	4.3	5.2	2.9	6.2	2.5	2.6	2.5
7	10	2.7	3.6	4.1	15	3.7	2.7	2.6	6.3	2.5	2.5	3.0
8	21	6.3	9.6	11	28	3.7	2.6	6.1	3.0	2.5	2.5	4.5
9	2.6	25	10	15	4.7	6.1	2.6	22	4.4	2.5	2.5	2.5
10	2.4	29	4.2	14	3.7	3.1	2.6	5.3	3.5	2.5	2.5	5.2
11	3.9	30	6.2	6.9	3.4	3.5	2.6	3.4	16	2.4	2.5	2.7
12	2.8	50	32	14	3.3	3.7	2.6	3.0	23	2.5	2.5	2.6
13	2.9	31	9.5	7.7	3.3	13	11	2.9	3.1	2.5	2.6	2.5
14	2.4	5.0	28	22	21	8.6	9.0	2.8	2.8	2.4	2.5	2.6
15	2.4	4.7	42	5.1	4.4	3.3	7.1	2.8	2.7	2.4	2.4	2.5
16	2.4	10	18	15	3.5	13	2.8	2.7	2.7	2.4	2.4	2.5
17	2.4	20	23	4.9	3.2	4.5	2.7	2.7	2.6	2.4	2.4	2.5
18	2.4	4.5	7.9	3.6	3.1	17	2.6	10	2.6	2.4	8.0	2.6
19	2.4	12	4.2	4.4	3.1	5.6	2.6	5.9	2.6	2.5	2.9	2.6
20	2.4	23	3.8	11	3.0	3.4	2.6	2.9	2.6	2.5	2.3	2.4
21	2.4	22	3.5	5.6	6.2	3.2	3.9	7.9	2.6	2.5	2.3	2.5
22	2.4	11	3.3	4.1	22	16	3.7	3.1	2.6	2.5	2.3	2.4
23	2.5	4.1	3.2	3.3	4.3	3.5	3.8	2.7	2.6	2.5	2.2	2.3
24	2.6	26	3.2	3.2	3.3	3.1	2.7	2.7	3.1	2.5	2.3	2.6
25	5.6	46	3.3	5.9	9.4	2.9	9.9	2.7	2.6	2.5	2.4	2.4
26	2.4	19	3.4	3.1	14	2.8	2.9	4.7	2.6	2.5	2.4	2.5
27	9.6	12	3.2	3.2	8.4	6.5	2.9	3.7	2.5	2.5	2.4	2.7
28	11	5.1	3.2	3.1	5.4	3.0	3.0	3.5	2.5	2.5	2.3	2.6
29	5.1	7.4	3.1	3.0	36	2.7	2.6	3.1	2.5	2.4	2.3	4.5
30	5.9	16	3.1	3.1	---	2.7	2.5	2.8	2.5	2.4	2.5	12
31	15	---	5.6	11	---	2.6	---	2.9	---	2.5	2.5	---
TOTAL	143.3	449.1	294.5	240.5	281.2	216.6	112.6	147.1	125.1	81.3	81.7	93.5
MEAN	4.62	15.0	9.50	7.76	9.70	6.99	3.75	4.75	4.17	2.62	2.64	3.12
MAX	21	50	42	22	47	30	11	22	23	7.0	8.0	12
MIN	2.4	2.5	3.1	3.0	3.0	2.6	2.5	2.6	2.5	2.4	2.2	2.3
AC-FT	284	891	584	477	558	430	223	292	248	161	162	185
CFSM	.98	3.16	2.01	1.64	2.05	1.48	.79	1.00	.88	.55	.56	.66
IN.	1.13	3.53	2.32	1.89	2.21	1.70	.89	1.16	.98	.64	.64	.74

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1957 - 2000, BY WATER YEAR (WY)

MEAN	4.14	7.21	7.70	7.89	6.79	5.53	4.21	3.11	2.90	2.34	2.43	2.88
MAX	8.60	16.8	15.5	16.3	15.1	12.4	10.3	5.73	5.30	4.58	3.87	6.92
(WY)	1998	1991	1997	1990	1999	1972	1991	1997	1997	1983	1975	1978
MIN	1.57	2.53	3.54	2.80	1.72	2.22	2.09	1.72	1.40	1.33	1.12	1.24
(WY)	1973	1977	1977	1962	1993	1992	1977	1965	1969	1969	1969	1989

SUMMARY STATISTICS FOR 1999 CALENDAR YEAR FOR 2000 WATER YEAR WATER YEARS 1957 - 2000

ANNUAL TOTAL	2585.4	2266.5		
ANNUAL MEAN	7.08	6.19	4.72	
HIGHEST ANNUAL MEAN			8.15	1997
LOWEST ANNUAL MEAN			2.61	1962
HIGHEST DAILY MEAN	50	Jan 28	166	Jan 9 1990
LOWEST DAILY MEAN	2.4	Aug 10	.50	Sep 1 1972
ANNUAL SEVEN-DAY MINIMUM	2.4	Oct 14	.71	Aug 30 1972
ANNUAL RUNOFF (AC-FT)	5130	4500	3420	
ANNUAL RUNOFF (CFSM)	1.50	1.31	1.00	
ANNUAL RUNOFF (INCHES)	20.33	17.83	13.55	
10 PERCENT EXCEEDS	19	15	10	
50 PERCENT EXCEEDS	3.2	3.1	2.6	
90 PERCENT EXCEEDS	2.5	2.4	1.5	