

DUWAMISH RIVER BASIN

12113347 MILL CREEK AT EARTHWORKS PARK, AT KENT, WA

LOCATION.--Lat 47°23'00", long 122°13'25", in SW 1/4 NW 1/4 sec.19, T.22 N., R.5 E., King County, Hydrologic Unit 17110013, at control-manhole of flood-detention basin in Earthworks Park, 250 ft upstream from Titus St., and 0.6 mi east of Kent City Hall.

DRAINAGE AREA.--2.49 mi<sup>2</sup>.

PERIOD OF RECORD.--January 1994 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is NGVD of 1929 (City of Kent benchmark).

REMARKS.--Records poor. Natural flow affected by urbanization and construction of flood-control catchments. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--8 years (water year 1995-2002), 4.29 ft<sup>3</sup>/s, 23.40 in/yr, 3,110 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, not determined Feb. 9, 1996, elevation, 47.52 ft, affected by backwater from debris caught on downstream culvert grates; maximum elevation, 48.05 ft May 13, 1996, affected by backwater from debris caught on downstream culvert grates; minimum discharge, 0.31 ft<sup>3</sup>/s July 5, 1995, Aug. 12, 1997.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 233 ft<sup>3</sup>/s Nov. 14, elevation, 47.39 ft; minimum discharge, 0.44 ft<sup>3</sup>/s Nov. 19, but may have been less during period of estimated record in July and Aug.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	0.87	2.0	6.8	5.3	5.6	3.6	1.9	1.6	1.3	1.1	e0.96	0.78
2	0.85	3.4	10	4.1	4.9	3.4	1.9	1.7	1.3	e0.98	0.95	1.1
3	0.85	1.3	6.6	2.5	4.7	3.2	1.8	1.6	1.2	e0.98	0.96	1.0
4	0.85	2.5	2.8	2.2	4.2	3.2	1.8	1.5	1.3	e0.96	0.99	0.80
5	0.84	2.4	2.4	2.4	5.5	3.9	1.8	1.5	1.7	e0.96	0.94	0.78
6	0.85	1.2	3.7	5.8	6.5	3.1	1.7	1.5	1.2	e1.1	0.97	0.78
7	0.89	1.0	1.8	19	9.7	3.0	1.7	1.5	1.2	e7.0	0.94	0.80
8	0.97	0.92	1.5	13	13	2.8	1.7	1.5	1.2	e3.0	0.94	0.76
9	0.85	0.85	1.3	7.6	7.8	2.8	3.3	1.7	1.1	e1.2	0.99	0.76
10	2.5	0.82	2.2	5.7	5.5	2.7	4.9	1.9	1.1	e1.1	0.92	0.74
11	1.0	0.81	1.5	4.9	4.6	12	3.6	1.5	1.1	e0.99	0.91	0.74
12	0.91	3.3	1.6	6.2	4.1	10	3.0	1.4	e1.1	0.99	0.91	0.73
13	0.92	12	40	4.4	3.9	6.5	19	1.8	e1.1	0.99	0.84	0.73
14	4.2	124	25	3.9	3.6	4.4	20	1.5	1.1	0.99	0.81	0.73
15	1.1	35	12	3.6	3.5	3.9	8.9	1.4	1.1	0.99	0.88	0.75
16	1.4	28	42	3.4	3.5	6.7	7.4	1.3	1.1	0.98	0.88	0.82
17	1.1	9.0	17	3.2	3.5	5.2	4.5	1.7	1.3	0.98	0.87	1.2
18	0.91	1.4	8.7	4.3	3.9	4.3	3.2	1.3	e2.0	e0.97	0.87	0.78
19	1.2	6.5	6.8	6.1	5.2	5.5	2.6	1.3	1.0	e0.97	0.91	0.76
20	0.91	3.9	4.9	9.0	3.5	10	2.3	2.5	1.0	0.96	0.95	0.75
21	2.2	2.6	4.0	6.4	11	6.2	2.3	1.8	1.0	0.96	e0.90	0.75
22	1.8	20	3.5	4.6	12	4.0	2.2	1.4	0.99	0.96	e0.86	0.75
23	1.1	18	3.0	4.0	13	3.1	1.9	1.3	0.97	0.96	e0.86	0.75
24	2.6	9.8	2.7	13	11	2.8	1.8	1.3	0.98	0.96	e0.82	0.75
25	3.2	7.8	2.5	32	6.6	2.5	1.9	1.3	0.98	0.96	e0.82	0.74
26	1.5	4.3	2.3	25	5.0	2.3	3.0	1.3	0.96	0.96	e0.80	0.74
27	7.1	2.5	2.3	19	4.3	2.2	5.0	1.4	1.0	0.96	e0.79	0.75
28	1.7	8.6	3.1	11	4.0	2.1	2.2	2.1	e5.0	0.96	0.78	0.74
29	1.2	7.2	2.2	8.3	---	2.0	2.0	e1.5	2.7	0.96	0.78	1.1
30	2.4	4.2	2.1	10	---	1.9	1.9	e1.3	1.2	0.99	0.77	0.77
31	6.9	---	3.1	7.7	---	1.9	---	1.3	---	e0.98	0.77	---
TOTAL	55.67	325.30	229.4	257.6	173.6	131.2	121.2	47.7	40.28	38.80	27.34	24.13
MEAN	1.80	10.8	7.40	8.31	6.20	4.23	4.04	1.54	1.34	1.25	0.88	0.80
MAX	7.1	124	42	32	13	12	20	2.5	5.0	7.0	0.99	1.2
MIN	0.84	0.81	1.3	2.2	3.5	1.9	1.7	1.3	0.96	0.96	0.77	0.73
AC-FT	110	645	455	511	344	260	240	95	80	77	54	48
CFSM	0.72	4.35	2.97	3.34	2.49	1.70	1.62	0.62	0.54	0.50	0.35	0.32
IN.	0.83	4.86	3.43	3.85	2.59	1.96	1.81	0.71	0.60	0.58	0.41	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2002, BY WATER YEAR (WY)

	1994	1995	1996	1997	1998	1999	2000	2001	2002
MEAN	2.25	8.08	8.67	8.48	7.70	5.15	3.30	2.06	1.78
MAX	4.44	13.2	12.6	15.1	20.0	8.34	8.03	3.09	3.45
(WY)	1998	2000	1996	1997	1996	1999	1996	1997	1997
MIN	1.25	2.82	2.29	2.73	2.43	2.55	1.69	1.08	0.85
(WY)	2000	2001	2001	2001	2001	2001	1998	1995	1995

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1994 - 2002
ANNUAL TOTAL	1199.88	1472.22	
ANNUAL MEAN	3.29	4.03	4.29
HIGHEST ANNUAL MEAN			6.32
LOWEST ANNUAL MEAN			2.21
HIGHEST DAILY MEAN	124	Nov 14	124
LOWEST DAILY MEAN	0.71	Jul 5	0.44
ANNUAL SEVEN-DAY MINIMUM	0.76	Jul 1	0.47
ANNUAL RUNOFF (AC-FT)	2380		3110
ANNUAL RUNOFF (CFSM)	1.32		1.72
ANNUAL RUNOFF (INCHES)	17.93		23.40
10 PERCENT EXCEEDS	6.5		10
50 PERCENT EXCEEDS	1.7		2.0
90 PERCENT EXCEEDS	0.88		0.80

e Estimated