

LAKE WASHINGTON BASIN

12128000 THORNTON CREEK NEAR SEATTLE, WA

LOCATION.--Lat 47°41'45", long 122°16'30", in NW 1/4 SE 1/4 sec.34, T.26 N., R.4 E., King County, Hydrologic Unit 17110012, on left bank, at highway crossing, 1.5 mi north of Seattle city limits, and at mile 0.25.

DRAINAGE AREA.--12.1 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1945 to September 1946, May 1961 to September 1968, March 1996 to current year.

GAGE.--Water-stage recorder, crest-stage gage, and concrete control. Elevation of gage is 40 ft above NGVD of 1929, from topographic map. June 1945 to September 1946 at datum 0.09 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Intermittent regulation and diversions. Natural flow affected by urbanization and flood-control catchments.

AVERAGE DISCHARGE.--14 years (water years 1946, 1962-68, 1997-2002), 12.0 ft³/s, 13.52 in/yr, 8,720 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 423 ft³/s Dec. 31, 1996, gage height, 5.26 ft; minimum daily discharge, 0.39 ft³/s Sept. 22, 1999.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 81 ft³/s Nov. 14, gage height, 2.47 ft, maximum gage height, 3.01 ft May 13, result of temporary fishtrap on weir; minimum discharge, 2.4 ft³/s Sept. 25.

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	3.8	6.1	35	14	14	9.3	7.7	7.0	5.4	11	3.9	3.7
2	3.7	8.3	25	17	11	8.9	7.6	7.4	5.3	5.5	3.6	3.7
3	3.6	5.2	26	11	13	8.6	7.5	8.2	5.2	5.0	3.7	4.7
4	3.5	11	26	9.2	9.9	8.5	6.9	7.3	5.1	5.1	3.7	3.9
5	3.4	6.9	26	14	12	8.8	7.4	7.1	4.7	4.7	3.4	3.4
6	3.4	5.2	23	21	23	8.2	7.4	e8.9	9.9	4.4	3.4	4.4
7	3.4	4.6	16	42	23	8.1	12	e8.6	7.9	7.9	3.6	3.5
8	5.0	4.6	14	36	26	9.3	7.7	e6.2	6.1	18	3.5	3.7
9	4.7	4.5	19	22	15	9.3	14	e6.8	5.3	6.9	3.4	4.3
10	5.5	4.5	28	16	17	19	17	e6.6	5.1	5.5	3.5	3.6
11	8.9	4.5	19	15	16	31	9.3	e6.3	5.0	4.6	3.4	3.2
12	5.7	11	18	19	12	22	8.2	e6.0	4.9	4.6	3.2	3.8
13	5.2	31	39	12	11	14	20	e9.4	4.6	4.1	3.3	3.7
14	3.9	63	24	10	9.8	12	24	e9.4	4.6	4.1	3.3	3.5
15	4.5	30	27	9.6	9.4	16	15	e6.6	4.7	4.0	3.2	3.2
16	15	18	53	9.4	10	19	17	6.0	4.7	4.0	3.1	4.8
17	8.9	11	29	8.9	10	13	13	11	4.8	3.9	3.1	4.6
18	5.3	8.6	24	14	10	14	10	6.7	5.3	3.8	3.2	3.8
19	7.2	29	17	22	16	14	8.6	6.5	4.9	3.8	3.4	3.7
20	4.8	28	15	14	9.6	17	8.1	12	4.3	3.8	4.0	3.8
21	13	25	12	10	40	11	7.8	6.9	4.3	3.9	4.2	3.3
22	8.1	43	10	9.0	40	9.8	7.6	6.7	4.2	3.7	3.6	3.7
23	4.9	23	9.4	9.0	25	9.2	7.3	6.2	4.3	4.1	3.2	3.7
24	12	15	9.1	17	16	9.2	7.1	5.9	4.1	3.7	3.4	4.0
25	21	13	8.8	32	12	8.9	7.3	5.9	4.0	3.7	3.6	3.3
26	15	11	8.6	19	11	8.1	12	5.8	3.8	4.0	3.7	3.5
27	42	9.9	8.5	18	10	8.0	16	5.6	4.1	3.7	3.7	3.3
28	8.2	30	9.6	19	11	13	8.5	7.4	13	4.3	3.6	3.0
29	5.9	33	8.1	14	---	9.6	7.7	11	11	4.6	3.6	9.3
30	14	28	7.9	23	---	8.7	7.2	5.9	6.6	4.4	3.8	4.1
31	19	---	11	20	---	8.0	---	5.5	---	4.2	3.6	---
TOTAL	272.5	525.9	606.0	526.1	442.7	373.5	316.9	226.8	167.2	159.0	108.9	118.2
MEAN	8.79	17.5	19.5	17.0	15.8	12.0	10.6	7.32	5.57	5.13	3.51	3.94
MAX	42	63	53	42	40	31	24	12	13	18	4.2	9.3
MIN	3.4	4.5	7.9	8.9	9.4	8.0	6.9	5.5	3.8	3.7	3.1	3.0
AC-FT	541	1040	1200	1040	878	741	629	450	332	315	216	234
CFSM	0.73	1.45	1.62	1.40	1.31	1.00	0.87	0.60	0.46	0.42	0.29	0.33
IN.	0.84	1.62	1.86	1.62	1.36	1.15	0.97	0.70	0.51	0.49	0.33	0.36

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1945 - 2002, BY WATER YEAR (WY)

	1945	1946	1946	1946	1946	1946	1946	1946	1946	1946	1945	2002
MEAN	10.1	15.5	18.0	19.6	17.6	16.1	12.3	9.11	7.90	5.97	5.71	7.35
MAX	18.0	29.8	30.7	36.2	45.0	34.4	25.8	13.8	15.1	10.1	10.1	17.3
(WY)	1946	1946	1946	1946	1946	1946	1946	1946	1964	1946	1945	1945
MIN	7.36	7.96	9.78	11.8	8.42	10.2	8.64	6.63	3.62	3.26	1.79	1.27
(WY)	1999	1968	2001	2001	2001	1965	2000	2001	1997	1996	1999	1999

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1945 - 2002

ANNUAL TOTAL	3472.7	3843.7	
ANNUAL MEAN	9.51	10.5	12.0
HIGHEST ANNUAL MEAN			23.0
LOWEST ANNUAL MEAN			8.11
HIGHEST DAILY MEAN	63	Nov 14	129
LOWEST DAILY MEAN	2.2	Sep 3	0.39
ANNUAL SEVEN-DAY MINIMUM	2.8	Aug 8	0.52
ANNUAL RUNOFF (AC-FT)	6890	7620	8720
ANNUAL RUNOFF (CFSM)	0.79	0.87	1.00
ANNUAL RUNOFF (INCHES)	10.68	11.82	13.52
10 PERCENT EXCEEDS	20	23	24
50 PERCENT EXCEEDS	6.1	8.0	9.3
90 PERCENT EXCEEDS	3.4	3.6	4.4

e Estimated