

LAKE WASHINGTON BASIN

12119000 CEDAR RIVER AT RENTON, WA

LOCATION.--Lat 47°28'58", long 122°12'08", in SW 1/4 NW 1/4 sec.17, T.23 N., R.5 E., King County, Hydrologic Unit 17110012, on left bank 125 ft downstream from bridge on Mill Avenue at Renton, and at mile 1.6.

DRAINAGE AREA.--184 mi², includes 3.67 mi² in vicinity of Youngs Lake in Big Soos Creek basin, excludes 1.9 mi² from upper Rock Creek, Cedar River basin, normally diverted into Issaquah Creek.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--March 1901 to July 1903 (fragmentary), September 1906 to December 1907 (monthly discharge only), August 1945 to current year.

REVISED RECORD.--WSP 1316: 1901-02. WSP 1932: Drainage area. WDR WA-75-1: 1972-74.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 15.20 ft above NGVD of 1929. Prior to Jan. 1, 1908, nonrecording gages within 1 mi of present site, at datum 10.67 ft above NGVD of 1929. Aug. 7, 1945, to Aug. 15, 1947, water-stage recorder at site 700 ft upstream at datum 20.13 ft above NGVD of 1929, and Aug. 16, 1947, to Dec. 7, 1950, at datum 19.13 ft above NGVD of 1929.

REMARKS.--Records good, except for estimated daily discharges, which are fair. Flow partly regulated by Chester Morse Lake and Masonry Dam for operation of powerplant at Cedar Falls 32.1 mi upstream from gage. An average daily discharge of about 122 ft³/s was diverted during the year at Landsburg by the City of Seattle for municipal use, computed from data furnished by Seattle Water Department. U.S. Geological Survey satellite telemeter at station. Chemical analyses July 1959 to August 1964, December 1965 to September 1971.

AVERAGE DISCHARGE.--57 years (water years 1946-2002), 667 ft³/s, 483,300 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,600 ft³/s Nov. 24, 1990, gage height, 17.13 ft from outside high-water mark; minimum daily discharge, 30 ft³/s July 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,620 ft³/s Apr. 14, gage height, 10.80 ft; minimum discharge, 151 ft³/s Aug. 8, 29, Sept. 10.

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	257	695	1320	1050	1180	912	1130	693	629	711	226	170
2	258	582	1280	1040	1150	830	1190	685	652	577	225	172
3	259	738	1170	914	1130	807	1170	770	645	e420	224	199
4	259	742	1030	751	1100	788	1130	806	661	e270	231	177
5	311	647	971	660	1080	917	1030	814	909	e255	215	169
6	393	556	994	670	973	1080	954	771	1030	e257	197	168
7	359	512	967	1160	972	956	974	932	1300	e270	172	168
8	404	469	927	1460	1090	1070	959	979	1470	e283	156	169
9	422	484	1010	1420	987	1070	1030	978	1470	e270	184	169
10	413	500	1000	1480	943	1070	1150	886	1410	269	185	163
11	508	487	918	1320	912	1280	1210	769	1130	268	176	167
12	492	496	804	1210	807	1140	1300	686	875	256	176	173
13	467	521	1460	1180	778	1140	1560	642	653	239	175	174
14	504	1720	1780	1240	747	1120	2400	611	590	234	171	177
15	495	1530	1620	1490	691	1050	2010	568	607	233	169	177
16	470	1230	1650	1650	676	975	1990	561	599	230	170	185
17	465	963	1690	1630	664	858	1800	579	867	236	170	223
18	420	1020	1590	1380	694	742	1640	579	1190	239	170	223
19	432	1110	1740	1300	709	701	1810	581	1210	240	175	234
20	466	1190	1690	1340	697	1050	1740	594	1210	238	182	238
21	469	1490	1660	1370	984	1280	1700	592	1200	235	178	243
22	487	1820	1750	1300	1430	e1440	1660	598	1180	235	176	250
23	485	2000	1700	1270	1380	e1430	1350	583	1190	232	173	257
24	481	1810	1650	1140	1190	e1440	1040	751	1100	238	170	259
25	587	1670	1630	1370	1010	e1400	907	1140	917	235	176	270
26	520	1620	1580	1340	1010	1280	902	1190	766	244	180	267
27	621	1520	1420	1120	942	1150	e850	1190	759	246	181	264
28	631	1410	1230	1020	994	1040	e730	1080	843	242	189	255
29	574	1430	1190	953	---	1010	e680	952	914	249	163	263
30	570	1300	1170	967	---	1040	e690	697	833	244	165	259
31	692	---	1180	1110	---	1050	---	602	---	235	170	---
TOTAL	14171	32262	41771	37305	26920	33116	38686	23859	28809	8630	5670	6282
MEAN	457	1075	1347	1203	961	1068	1290	770	960	278	183	209
MAX	692	2000	1780	1650	1430	1440	2400	1190	1470	711	231	270
MIN	257	469	804	660	664	701	680	561	590	230	156	163
AC-FT	28110	63990	82850	73990	53400	65690	76730	47320	57140	17120	11250	12460

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2002, BY WATER YEAR (WY)

	353	742	1071	1094	1054	867	784	710	632	303	193	227
MEAN	353	742	1071	1094	1054	867	784	710	632	303	193	227
MAX	864	2673	2845	1924	2374	2577	1290	1226	1757	785	582	601
(WY)	1960	1991	1976	1999	1982	1972	2002	1997	1964	1955	1954	1964
MIN	76.4	61.2	91.2	283	299	389	335	274	168	44.9	41.1	52.9
(WY)	1953	1953	1953	1988	1988	1992	1973	1992	1958	1958	1958	1958

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1946 - 2002	
ANNUAL TOTAL	184693		297481			
ANNUAL MEAN	506		815		667	
HIGHEST ANNUAL MEAN					1016	
LOWEST ANNUAL MEAN					373	
HIGHEST DAILY MEAN	2000		2400		8900	
LOWEST DAILY MEAN	126		156		30	
ANNUAL SEVEN-DAY MINIMUM	127		168		41	
ANNUAL RUNOFF (AC-FT)	366300		590100		483300	
10 PERCENT EXCEEDS	1130		1470		1290	
50 PERCENT EXCEEDS	372		788		514	
90 PERCENT EXCEEDS	192		183		152	

e Estimated