

DUWAMISH RIVER BASIN

12113000 GREEN RIVER NEAR AUBURN, WA

LOCATION.--Lat 47°18'45", long 122°12'10", in NW 1/4 NW 1/4 sec.17, T.21 N., R.5 E., King County, Hydrologic Unit 17110013, on left bank 1.2 mi east of Auburn, 1.8 mi downstream from Big Soos Creek, and at mile 32.0.

DRAINAGE AREA.--399 mi², excludes 3.67 mi² in the vicinity of Youngs Lake, flow from which has been diverted to Cedar River basin since about 1935.

PERIOD OF RECORD.--August 1936 to current year.

REVISED RECORDS.--WSP 1932: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Oct. 19, 1936, nonrecording gage at same site and datum.

REMARKS.--Records good. Since Dec. 5, 1961, flow regulated by Howard A. Hanson Reservoir (station 12105800), 32.5 mi upstream from station, for flood control and during summer months, to augment the natural river flow. City of Tacoma diverted an average daily discharge of about 64 ft³/s from river at headworks near Palmer, 29 mi upstream from station, for municipal use. Minor diversions on upstream tributaries for domestic use. U.S. Geological Survey satellite telemeter at station. Water temperatures March 1952 to September 1986.

AVERAGE DISCHARGE.--25 years (water years 1937-61), 1,346 ft³/s, 974,500 acre-ft/yr, unregulated.
41 years (water years 1962-2002), 1,336 ft³/s, 967,700 acre-ft/yr, regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 28,100 ft³/s Nov. 23, 1959, elevation, 69.75 ft; minimum discharge, 81 ft³/s Sept. 23, 1952; minimum elevation, 52.76 ft Oct. 22, 29-31, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 15	0015	7,200	60.27	Jan. 08	2315	7,080	60.22
Dec. 14	0730	7,160	60.28	Apr. 14	2345	*7,460	*60.49

Minimum discharge, 220 ft³/s Sep. 4; elevation 52.99 ft.

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	366	1740	1570	1160	2010	1210	1550	1770	2240	1220	339	255
2	361	1840	1530	1230	1590	1080	1650	2500	2100	1190	282	259
3	356	1800	1610	1160	1540	1050	1680	2780	2070	1170	272	278
4	353	1750	1710	1100	1490	1030	1560	2540	2180	1150	271	234
5	345	1720	1480	1010	1440	907	1750	2540	2220	1150	276	235
6	310	1520	1500	1030	1350	944	2050	2480	2240	1190	294	248
7	301	1340	1650	2470	1410	925	2080	2050	2330	1190	267	257
8	306	1050	1760	6380	1750	916	2340	1710	1850	1210	258	261
9	314	950	1470	6270	1610	968	2260	1790	1610	1060	255	261
10	352	749	1520	4090	1520	958	2390	1620	1290	1080	255	248
11	413	734	1680	3020	1470	1200	3020	1780	1510	1070	255	243
12	402	741	1520	2620	1410	1630	3630	1770	1700	1050	251	252
13	401	915	2780	2580	1370	1820	4560	1760	1760	1080	243	242
14	421	3800	6790	2320	1320	1730	6310	1850	1930	1070	240	239
15	443	5880	4790	1870	1230	1660	7020	2050	1890	1070	237	241
16	516	3270	4330	1560	1010	1490	5100	2100	1700	1060	247	247
17	725	2070	5230	1530	1000	1490	3880	1820	1470	1050	252	247
18	658	2030	4140	1450	1060	1450	2880	1800	1330	1030	255	241
19	719	2090	3190	1350	1260	1580	2480	1800	1360	933	255	246
20	1020	2240	2360	1490	1270	2480	2380	1900	1400	837	255	258
21	1030	1830	2140	1710	2030	2090	2330	2100	1250	827	245	257
22	1030	2020	1760	2120	3700	1910	2290	2500	1190	808	245	257
23	1300	2580	1680	2140	4410	1690	2160	2610	1160	696	250	259
24	1960	2860	1620	2220	3830	1600	2030	2300	1060	611	250	282
25	2190	2640	1560	3980	3370	1550	1880	2180	962	563	251	252
26	2340	2350	1480	4030	2600	1520	1770	2180	879	507	254	338
27	2410	1960	1340	2450	2080	1500	1870	2180	850	474	245	349
28	2200	1760	1260	2100	1810	1470	1840	2860	952	461	239	354
29	1910	1930	1070	1760	---	1490	1800	3520	1210	460	254	368
30	1350	1830	1030	1870	---	1560	1350	3290	1390	404	261	358
31	1460	---	1080	2180	---	1550	---	e2700	---	374	254	---
TOTAL	28262	59989	68630	72250	51940	44448	79890	68830	47083	28045	8007	8066
MEAN	911.7	2000	2214	2331	1855	1434	2663	2220	1569	904.7	258.3	268.9
MAX	2410	5880	6790	6380	4410	2480	7020	3520	2330	1220	339	368
MIN	301	734	1030	1010	1000	907	1350	1620	850	374	237	234
AC-FT	56060	119000	136100	143300	103000	88160	158500	136500	93390	55630	15880	16000

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1962 - 2002, BY WATER YEAR (WY)

	MEAN	630.3	1593	2157	2289	2110	1701	1807	1592	986.5	532.0	311.8	368.2
MAX	1364	5045	5654	3908	4969	4994	3023	2896	2849	1069	514	955	
(WY)	1996	1991	1976	1975	1996	1972	1989	1972	1974	1972	1974	1968	
MIN	173	194	597	703	720	891	601	603	330	262	227	210	
(WY)	1988	1988	2001	1988	1977	1963	1992	1994	1987	1987	1989	1989	

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1962 - 2002
ANNUAL TOTAL	405145	565440	
ANNUAL MEAN	1110	1549	1336
HIGHEST ANNUAL MEAN			2071
LOWEST ANNUAL MEAN			785
HIGHEST DAILY MEAN	6790	7020	11600
LOWEST DAILY MEAN	250	234	152
ANNUAL SEVEN-DAY MINIMUM	256	243	157
ANNUAL RUNOFF (AC-FT)	803600	1122000	967700
10 PERCENT EXCEEDS	2020	2610	2700
50 PERCENT EXCEEDS	821	1490	978
90 PERCENT EXCEEDS	304	255	270

e Estimated