

PUYALLUP RIVER BASIN

12101500 PUYALLUP RIVER AT PUYALLUP, WA

LOCATION.--Lat 47°12'31", long 122°19'33", in SE 1/4 NW 1/4 sec.20, T.20 N., R.4 E., Pierce County, Hydrologic Unit 17110014, on left bank 0.8 mi upstream from bridge at Clark Creek, 2.0 mi northwest of Puyallup City Hall, and at mile 6.6.

DRAINAGE AREA.--948 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1914 to current year.

REVISED RECORDS.--WSP 832: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is NGVD of 1929. Prior to Dec. 3, 1919, at sites 1.2 mi upstream and 900 ft upstream at different datums. Dec. 3, 1919, to Nov. 9, 1935, at site 500 ft upstream at datum 9.61 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. All diverted water returned to river upstream from gage. Large part of flow of White River (a tributary) diverted through Lake Tapps (station 12101000). Flood flow regulated by Mud Mountain Lake (station 12098000) on White River. Some pondage on tributaries and upper Puyallup River. Diurnal fluctuations caused by powerplants and glacial melt upstream from station. U.S. Geological Survey satellite telemeter at station. Chemical analyses October 1958 to September 1968, October 1970 to September 1972, October 1974 to September 1994. Water temperatures July 1959 to September 1961, August 1965 to September 1966. Since 1912 the City of Tacoma pipeline diversion from Green River has released as much as 123 ft³/s daily, and from 1957-1990 an average of about 15 ft³/s per month into Puyallup River 0.5 mi east of McMillin. Since 1990 releases have been minimal.

AVERAGE DISCHARGE.--88 years (water years 1915-2002), 3,330 ft³/s, 2,413,000 acre-ft/yr, adjusted for storage in Lake Tapps since October 1934, and Mud Mountain Lake, October 1944 to September 1947.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 57,000 ft³/s Dec. 10, 1933, elevation, 31.0 ft, present datum; minimum discharge, 306 ft³/s Sept. 25, 1955, elevation, 8.23 ft; minimum daily discharge, 400 ft³/s Nov. 30, 1952.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 16,000 ft³/s Jan. 8, elevation, 19.24 ft; minimum discharge, 829 ft³/s Oct. 8, elevation, 9.20 ft; minimum daily discharge, 906 ft³/s Oct. 7.

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	1900	2860	4540	3220	3800	3120	3210	3700	5760	5050	2290	1480
2	1900	2690	4670	3720	3550	3030	3040	3970	5380	4420	1670	1930
3	1830	2410	4460	2790	2120	2970	2880	3900	5250	3960	1960	2220
4	1920	2100	4120	3410	2790	2960	2930	3620	5180	3730	2030	1770
5	1880	2330	3990	3300	1990	2970	3030	3490	5860	3630	1930	1710
6	1610	2090	4000	3220	2900	2880	2360	3470	6340	3600	1890	1630
7	906	2120	3540	7500	3130	2570	3160	3320	5430	3390	1770	1080
8	1500	2130	3380	14100	4000	2520	3470	3250	4480	4600	1660	1400
9	1580	1820	3000	11300	3580	2390	3320	3150	3900	4270	1750	1020
10	1580	1740	3630	7950	3230	1530	4050	3080	3870	4190	2020	1140
11	2450	1750	3650	5790	3450	2940	4370	3000	4110	4350	2200	1640
12	1800	1460	2810	4660	3070	4710	5130	3000	4680	3970	2070	1570
13	1980	2230	4790	4280	2990	4060	5920	3250	5290	4480	2270	1290
14	2220	7880	9440	3980	1980	3650	12900	3600	6220	4520	2420	1310
15	2850	9280	6130	3790	1740	3630	9780	3440	6520	3840	2440	1340
16	2290	8550	6660	3630	1690	2350	8230	3260	6090	3290	2240	1570
17	2340	5800	11400	2950	2370	2100	7470	3260	5310	3200	2140	1760
18	1960	3920	7380	3200	2740	2730	6160	2790	5050	3450	1950	1720
19	1410	3530	5630	2620	2920	3210	4360	2610	4890	3440	1860	1240
20	1610	e4570	4780	3390	2820	6250	4770	3390	5040	3260	1830	1280
21	1130	e4230	4360	3920	3340	4720	3840	4380	4640	2410	1770	1130
22	2340	e4250	4010	4120	4820	4080	3600	4580	4870	2800	1800	1560
23	3170	e5700	3880	3290	5210	3850	3520	4670	5060	3470	1890	1320
24	2760	e4720	3790	3650	5870	3740	3370	4370	4720	3300	1950	1150
25	2680	e3800	3700	5260	4530	3980	3340	4320	4660	2990	1880	1120
26	2740	e3730	3570	5380	3460	3560	3350	4540	4920	3150	1680	1530
27	2700	e3370	3030	4510	3140	3370	3620	5120	5290	2080	2200	1110
28	2540	3880	3050	4060	3200	3140	3560	6330	5670	3130	2080	980
29	2600	4210	2790	3730	---	3140	3460	7530	8500	3360	2240	1570
30	2350	4090	2090	3380	---	3340	3500	7530	6930	3300	2090	2140
31	3310	---	3510	3300	---	3250	---	6440	---	2950	1420	---
TOTAL	65836	113240	139780	143400	90430	102740	135700	126360	159910	111580	61390	43710
MEAN	2124	3775	4509	4626	3230	3314	4523	4076	5330	3599	1980	1457
MAX	3310	9280	11400	14100	5870	6250	12900	7530	8500	5050	2440	2220
MIN	906	1460	2090	2620	1690	1530	2360	2610	3870	2080	1420	980
AC-FT	130600	224600	277300	284400	179400	203800	269200	250600	317200	221300	121800	86700
MEAN†	1727	3787	4379	4680	3449	3315	4675	4203	5339	3585	1980	1395
CFSM†	1.82	3.99	4.62	4.94	3.64	3.50	4.93	4.43	5.63	3.78	2.09	1.47
IN.†	2.10	4.46	5.33	5.69	3.79	4.03	5.50	5.11	6.28	4.36	2.41	1.64
AC-FT†	106200	225300	269300	287800	191500	203900	278100	258500	317600	220500	121800	82970

CAL YR 2001 TOTAL 1010567 MEAN 2769 MAX 11400 MIN 895 AC-FT 2004000 MEAN† 2729 CFSM† 2.88 IN.† 39.08 AC-FT† 1976000
WTR YR 2002 TOTAL 1294076 MEAN 3545 MAX 14100 MIN 906 AC-FT 2567000 MEAN† 3541 CFSM† 3.74 IN.† 50.71 AC-FT† 2564000

† Adjusted for change in contents in Lake Tapps.
e Estimated