

PUYALLUP RIVER BASIN

12093500 PUYALLUP RIVER NEAR ORTING, WA

LOCATION.--Lat 47°02'22", long 122°12'24", in SW 1/4 SW 1/4 sec.17, T.18 N., R.5 E., Pierce County, Hydrologic Unit 17110014, on right bank 600 ft downstream from highway bridge, 4.0 mi south of Orting, 8.5 mi upstream from Carbon River, and at mile 26.4.

DRAINAGE AREA.--172 mi².

PERIOD OF RECORD.--September 1931 to current year.

REVISED RECORDS.--WSP 932: 1937-39. WSP 962: 1934. WSP 1246: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 352.5 ft above NGVD of 1929. Prior to Feb. 6, 1946, at site 600 ft upstream at datum 8.93 ft higher. Supplementary water-stage recorder 200 ft upstream at datum 7.1 ft higher than present gage datum, used at times during period in 1942-46. Feb. 6, 1946, to Mar. 12, 1965, at present site at datum 5.0 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are fair. Up to 400 ft³/s diverted for Electron powerplant of Puget Sound Energy, which is returned to river 4.8 mi upstream from gage. Minor regulation by Electron powerplant. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--71 years (water years 1932-2002), 716 ft³/s, 56.54 in/yr, 518,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,300 ft³/s Feb. 8, 1996, from slope area measurement, gage height, 11.37 ft; minimum discharge, 25 ft³/s Nov. 28, 1952; minimum daily, 59 ft³/s Nov. 29, 1952.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,500 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Dec 17	0130	6,450	8.80	Apr 14	0645	5,800	8.59
Jan 08	0015	*8,230	*9.31				

Minimum discharge, 197 ft³/s Sept. 30.

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	328	794	1200	605	581	553	575	704	1030	884	556	575
2	326	781	1140	1080	534	507	570	796	993	774	519	662
3	324	657	956	916	545	476	555	736	989	722	453	619
4	365	510	838	738	524	457	573	651	988	637	440	401
5	347	622	762	645	515	454	650	611	1290	584	384	318
6	322	510	925	781	543	449	709	587	1230	623	359	288
7	e256	440	931	4150	676	413	779	547	954	841	339	e260
8	e284	402	825	4320	819	392	702	514	795	1060	340	e239
9	e216	374	788	1970	789	380	716	479	673	905	425	273
10	e411	350	720	1350	706	395	937	459	684	1010	582	366
11	498	340	693	1080	704	826	998	442	799	1130	588	436
12	524	412	633	1080	617	1110	1130	476	973	1070	581	472
13	659	573	1700	932	564	912	1470	637	1190	1210	727	423
14	1010	2880	2600	805	514	797	3930	711	1380	1070	766	474
15	658	2060	1470	708	485	699	2070	663	1330	813	692	462
16	504	1520	2190	639	476	634	1530	618	1190	801	611	467
17	e382	1120	3620	587	466	e594	1210	647	966	810	577	367
18	e321	864	1860	547	492	e567	1000	690	928	779	505	307
19	e413	1100	1450	578	571	e774	873	685	814	766	474	413
20	e343	1230	1170	684	566	1230	787	841	727	663	469	417
21	e383	1070	991	726	839	950	722	1020	854	664	426	319
22	511	1390	857	619	1220	829	694	1030	1010	800	494	327
23	732	1860	750	559	1270	773	636	942	1000	883	543	360
24	516	1250	673	718	1280	790	590	836	885	895	551	362
25	591	975	614	1080	961	927	570	857	924	884	511	350
26	568	821	568	927	795	831	571	962	1150	881	561	324
27	563	698	543	742	688	766	638	1150	1230	769	587	262
28	485	826	613	631	609	716	598	1450	1330	758	656	246
29	419	1170	562	564	---	670	568	1750	2170	999	687	291
30	514	1070	521	552	---	620	601	1470	1270	968	578	215
31	922	---	575	584	---	589	---	1170	---	669	492	---
TOTAL	14695	28669	33738	31897	19349	21080	27952	25131	31746	26322	16473	11295
MEAN	474	956	1088	1029	691	680	932	811	1058	849	531	376
MAX	1010	2880	3620	4320	1280	1230	3930	1750	2170	1210	766	662
MIN	216	340	521	547	466	380	555	442	673	584	339	215
AC-FT	29150	56860	66920	63270	38380	41810	55440	49850	62970	52210	32670	22400
CFSM	2.76	5.56	6.33	5.98	4.02	3.95	5.42	4.71	6.15	4.94	3.09	2.19
IN.	3.18	6.20	7.30	6.90	4.18	4.56	6.05	5.44	6.87	5.69	3.56	2.44

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1932 - 2002, BY WATER YEAR (WY)

	MEAN	477	826	960	889	768	615	651	787	880	729	563	445
MAX	1291	2149	3015	2314	2291	1619	1038	1282	1470	1239	881	748	
(WY)	1960	1996	1934	1934	1996	1972	1991	1936	1974	1933	1983	1968	
MIN	210	92.8	205	205	280	266	303	494	311	483	373	283	
(WY)	1953	1953	1953	1937	1977	1941	1975	1941	1934	1977	1957	1936	

SUMMARY STATISTICS FOR 2001 CALENDAR YEAR FOR 2002 WATER YEAR WATER YEARS 1932 - 2002

ANNUAL TOTAL		228497		288347						716		
ANNUAL MEAN		626		790						1174		1996
HIGHEST ANNUAL MEAN										465		1941
LOWEST ANNUAL MEAN										13400		Feb 8 1996
HIGHEST DAILY MEAN		3620		4320	Dec 17		4320	Jan 8		59		Nov 29 1952
LOWEST DAILY MEAN		215		215	Feb 27		293	Sep 30		66		Nov 25 1952
ANNUAL SEVEN-DAY MINIMUM		229		229	Feb 23							
ANNUAL RUNOFF (AC-FT)		453200		571900						518500		
ANNUAL RUNOFF (CFSM)		3.64		4.59						4.16		
ANNUAL RUNOFF (INCHES)		49.42		62.36						56.54		
10 PERCENT EXCEEDS		981		1220						1180		
50 PERCENT EXCEEDS		567		676						588		
90 PERCENT EXCEEDS		283		381						310		

e Estimated