

PUYALLUP RIVER BASIN

12095000 SOUTH PRAIRIE CREEK AT SOUTH PRAIRIE, WA

LOCATION.--Lat 47°08'23", long 122°05'29", in the NE 1/4 NW 1/4 sec.18, T.19 N., R.6 E., Pierce County, Hydrologic Unit 17110014, on left bank 300 ft upstream from bridge on State Highway 162, 0.8 mi downstream from Wilkeson Creek, 0.3 mi east of South Prairie, and at mile 5.9.

DRAINAGE AREA.--79.5 mi².

PERIOD OF RECORD.--June 1949 to September 1971, October 1987 to current year.

REVISED RECORDS.--WSP 1932: Drainage area. WDR WA-96-1: 1980(M), 1991(P).

GAGE.--Water-stage recorder. Datum of gage is 400.0 ft above NGVD of 1929. June 1949 to June 1969, water-stage recorder at site 400 ft downstream at different datum. June 1969 to September 1971, at present site at different datum.

REMARKS.--No estimated daily discharges. Records good except for period June to September, which is poor. No regulation or diversion upstream from station. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--37 years (water years 1950-71, 1988-2002), 236 ft³/s, 40.27 in/yr, 170,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,170 ft³/s Feb. 8, 1996, gage height, 35.14 ft, on basis of contracted-opening measurement of peak flow; minimum discharge, 20 ft³/s Sept. 23, 1967.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,400 ft³/s and maximum (*):

Date	Time	Discharge (ft ³ /s)	Gage height (ft)	Date	Time	Discharge (ft ³ /s)	Gage height (ft)
Nov. 14	1330	1,590	30.16	Jan. 08	0130	1,400	29.78
Dec. 14	0030	1,670	30.07	Apr. 14	0615	*2,100	*30.48
Dec. 17	0215	1,670	30.07				

Minimum discharge, 38 ft³/s Aug. 28.

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	49	253	430	216	259	215	216	216	215	261	56	40
2	48	220	358	284	239	196	213	231	213	223	52	42
3	46	166	315	259	234	184	204	211	214	204	50	66
4	46	132	270	224	226	177	204	189	213	191	52	52
5	45	206	259	206	220	180	225	182	312	187	64	44
6	43	157	317	210	228	181	252	180	254	174	87	43
7	45	127	309	731	290	166	274	174	200	181	65	44
8	58	109	276	1140	419	158	245	171	191	227	56	46
9	71	95	270	747	364	152	246	162	174	184	49	47
10	71	86	262	518	309	160	330	157	160	172	48	45
11	140	78	267	386	300	395	337	152	152	165	48	43
12	91	79	237	358	259	639	439	157	175	144	44	42
13	123	126	793	288	236	514	636	210	217	131	49	41
14	154	1130	1200	253	214	393	1530	250	240	117	48	41
15	131	733	663	227	201	323	803	214	198	91	45	41
16	89	521	930	210	194	275	558	192	177	78	45	47
17	93	403	1250	197	190	248	421	196	142	69	45	56
18	74	304	724	187	203	225	334	201	212	66	47	49
19	71	277	533	210	218	376	284	200	156	73	47	46
20	89	259	400	312	228	1050	260	232	115	72	49	50
21	77	251	323	384	494	647	239	315	139	68	50	48
22	131	379	275	279	783	489	227	325	136	69	48	45
23	208	700	244	239	725	407	210	262	125	64	46	43
24	147	459	222	338	645	371	196	225	98	64	42	43
25	187	334	205	765	439	397	188	227	103	63	42	44
26	164	265	191	603	327	342	186	255	119	66	47	45
27	169	229	182	406	269	304	227	265	108	66	45	46
28	160	299	222	303	240	267	206	360	330	62	41	48
29	122	476	198	255	---	245	192	360	631	66	39	58
30	149	436	182	248	---	229	196	293	341	60	40	58
31	284	---	204	267	---	216	---	242	---	57	40	---
TOTAL	3375	9289	12511	11250	8953	10121	10078	7006	6060	3715	1526	1403
MEAN	109	310	404	363	320	326	336	226	202	120	49.2	46.8
MAX	284	1130	1250	1140	783	1050	1530	360	631	261	87	66
MIN	43	78	182	187	190	152	186	152	98	57	39	40
AC-FT	6690	18420	24820	22310	17760	20080	19990	13900	12020	7370	3030	2780
CFSM	1.37	3.89	5.08	4.56	4.02	4.11	4.23	2.84	2.54	1.51	0.62	0.59
IN.	1.58	4.35	5.85	5.26	4.19	4.74	4.72	3.28	2.84	1.74	0.71	0.66

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1949 - 2002, BY WATER YEAR (WY)

MEAN	140	313	363	382	348	274	291	259	219	111	64.2	68.8
MAX	349	723	728	732	966	527	517	463	439	270	193	233
(WY)	1960	1991	1956	1997	1996	1950	1991	1960	1964	1993	1968	1968
MIN	26.4	35.2	61.5	126	112	138	157	131	59.1	48.7	32.7	34.9
(WY)	1988	1953	1953	1957	1993	1992	1995	1992	1992	1995	1996	1967

SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR		FOR 2002 WATER YEAR		WATER YEARS 1949 - 2002	
ANNUAL TOTAL	68059		85287			
ANNUAL MEAN	186		234		236	
HIGHEST ANNUAL MEAN					338	
LOWEST ANNUAL MEAN					141	
HIGHEST DAILY MEAN	1250		1530		6700	
LOWEST DAILY MEAN	35		39		24	
ANNUAL SEVEN-DAY MINIMUM	39		41		25	
ANNUAL RUNOFF (AC-FT)	135000		169200		170700	
ANNUAL RUNOFF (CFSM)	2.35		2.94		2.96	
ANNUAL RUNOFF (INCHES)	31.85		39.91		40.27	
10 PERCENT EXCEEDS	333		432		451	
50 PERCENT EXCEEDS	140		204		178	
90 PERCENT EXCEEDS	45		47		46	