Water-Data Report 2007

12117500 CEDAR RIVER NEAR LANDSBURG, WA

Puget Sound Basin
Lake Washington Subbasin

LOCATION.--Lat 47°23′38″, long 121°57′12″ referenced to North American Datum of 1927, in NW ¼ SW ¼ sec.17, T.22 N., R.7 E., King County, WA, Hydrologic Unit 17110012, on left bank 1.8 mi upstream from intake of Seattle water-supply system near Landsburg, 4.0 mi east of Maple Valley, 5.9 mi downstream from Taylor Creek, and at mile 23.4.

DRAINAGE AREA.--121 mi^2, excludes Walsh Lake diversion, which enters Cedar River at mile 19.5, and excludes 1.9 mi^2 of Walsh Lake drainage in Cedar River basin, which is normally diverted into Issaquah Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--August 1895 to current year (prior to October 1948, flow of Rock Creek included). Monthly discharge only for some periods, published in WSP 1316. Published as "near Seattle" 1895-98, "near Maple Valley" 1902, and as "near Ravensdale" 1898-1901, 1903-12.

REVISED RECORDS.--WSP 313: 1895-98, 1902-09. WSP 1286: 1912. WSP 1316: 1896-98(M), 1902-11(M). WSP 1736: 1960. WSP 1932: 1947, drainage area.

GAGE.--Water-stage recorder. Datum of gage is 565.9 ft above NGVD of 1929. Prior to Oct. 1, 1898, nonrecording gage at site 2.2 mi downstream at different datum. Mar. 24, 1901, to May 15, 1913, nonrecording gage at site 2 mi downstream at datum 535.84 ft NGVD of 1929 (levels by City of Seattle). Apr. 30, 1914, to Oct. 22, 1928, water-stage recorder 0.2 mi downstream at different datum.

REMARKS.--No estimated daily discharges. Records good. All diversions except Rock Creek returned to river upstream from station. Rock Creek, a tributary which entered naturally just upstream from station prior to 1932, is diverted during summer months to enter river at a point about 3.9 mi downstream from station. Some regulation by Chester Morse Lake (station 12115900) and Cedar Lake (station 12116060), 12.2 mi upstream. Chemical analyses July 1959 to July 1960. Water temperatures published August 1953 to September 1985. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--112 years (water years 1896-2007), 686 ft^3/s, 497,000 acre-ft/yr, unadjusted, includes data published in WSP 1316.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 14,200 ft^3/s, Nov. 19, 1911, gage height, 10.0 ft, from graph based on gage readings, site and datum then in use, by computation of peak flow over dam, peak caused by failure of flashboards at Chester Morse Lake; minimum discharge observed, 83 ft^3/s, Sept. 19, 1898.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,670 ft^3/s, Nov. 7, gage height, 6.03 ft; minimum discharge, 262 ft^3/s, Sept. 13-16, gage height, 1.00 ft.

12117500 CEDAR RIVER NEAR LANDSBURG, WA—Continued

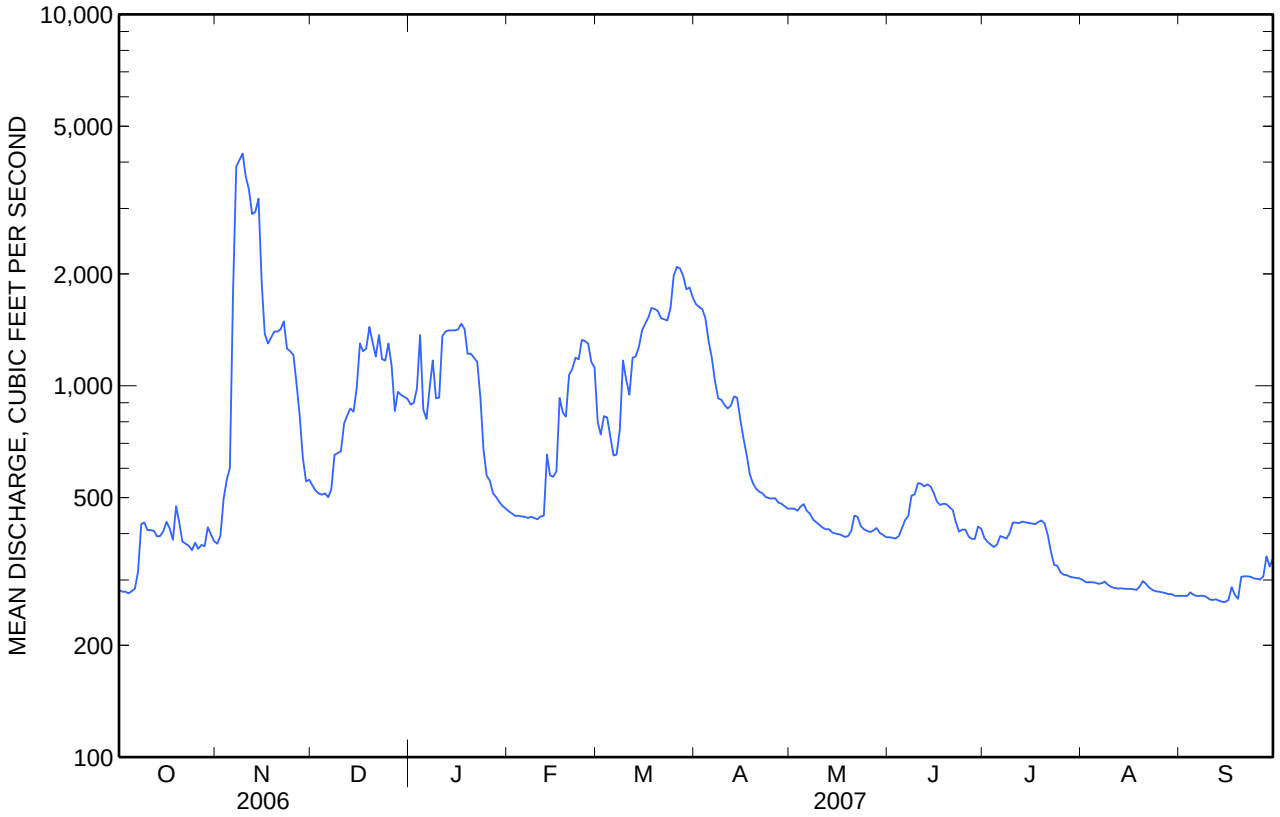
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2006 TO SEPTEMBER 2007
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	282	376	539	890	459	799	1,660	467	391	389	300	272
2	279	395	523	900	453	740	1,630	467	390	380	296	272
3	279	497	513	983	446	829	1,610	461	388	374	296	272
4	276	560	509	1,370	447	822	1,520	473	394	368	296	278
5	280	601	513	862	445	728	1,320	480	414	374	295	274
6	284	1,800	501	815	444	649	1,190	461	435	394	293	272
7	316	3,890	527	993	441	653	1,030	452	446	391	294	272
8	424	4,060	652	1,170	444	761	925	436	506	388	297	272
9	429	4,220	659	926	441	1,170	918	429	510	402	291	270
10	409	3,660	666	930	437	1,040	889	422	547	429	288	266
11	409	3,380	792	1,360	445	946	869	415	545	428	285	265
12	407	2,900	831	1,400	447	1,190	885	411	536	427	285	266
13	393	2,940	869	1,410	653	1,200	936	411	543	431	285	264
14	394	3,190	852	1,410	574	1,270	930	403	536	429	284	262
15	406	1,890	990	1,410	569	1,410	812	400	515	427	284	262
16	430	1,380	1,300	1,420	589	1,470	722	399	489	426	284	265
17	413	1,300	1,240	1,470	928	1,530	651	396	478	424	283	287
18	385	1,350	1,260	1,420	847	1,620	577	392	481	430	282	274
19	474	1,400	1,440	1,220	826	1,610	547	394	480	434	288	267
20	430	1,400	1,310	1,220	1,070	1,590	528	407	471	426	298	306
21	381	1,420	1,200	1,190	1,110	1,520	519	447	463	396	293	307
22	376	1,490	1,370	1,160	1,190	1,510	513	444	430	357	286	307
23	371	1,260	1,180	925	1,180	1,500	502	419	405	329	282	306
24	361	1,240	1,170	675	1,330	1,620	498	411	410	328	280	303
25	378	1,210	1,300	573	1,320	1,980	497	407	410	315	279	302
26	364	1,020	1,130	555	1,300	2,090	498	404	393	310	278	301
27	373	834	855	513	1,160	2,070	485	408	387	309	277	307
28	370	640	963	501	1,120	1,970	481	414	387	306	275	347
29	416	553	945	487	---	1,820	474	402	418	305	275	326
30	398	559	934	475	---	1,840	467	397	412	304	272	343
31	382	---	922	467	---	1,730	---	391	---	303	272	---
Total	11,569	51,415	28,455	31,100	21,115	41,677	25,083	13,120	13,610	11,733	8,873	8,587
Mean	373	1,714	918	1,003	754	1,344	836	423	454	378	286	286
Max	474	4,220	1,440	1,470	1,330	2,090	1,660	480	547	434	300	347
Min	276	376	501	467	437	649	467	391	387	303	272	262
Ac-ft	22,950	102,000	56,440	61,690	41,880	82,670	49,750	26,020	27,000	23,270	17,600	17,030

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1895 - 2007, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	395	735	948	979	895	793	775	779	732	478	345	322
Max	1,015	2,371	3,126	2,198	2,009	2,233	1,498	1,412	1,795	1,077	735	716
(WY)	(1960)	(1991)	(1934)	(1918)	(1982)	(1972)	(1897)	(1897)	(1917)	(1917)	(1954)	(1959)
Min	141	141	179	369	368	360	335	306	320	262	124	127
(WY)	(1905)	(1896)	(1953)	(1988)	(1988)	(1941)	(1941)	(1915)	(1992)	(1898)	(1898)	(1898)

12117500 CEDAR RIVER NEAR LANDSBURG, WA—Continued

SUMMARY STATISTICS

	Calendar Year 2006		Water Year 2007		Water Years 1895 - 2007	
Annual total	284,604		266,337			
Annual mean	780		730		680	
Highest annual mean					1,066	1897
Lowest annual mean					340	1941
Highest daily mean	4,220	Nov 9	4,220	Nov 9	13,600	Nov 19, 1911
Lowest daily mean	252	Sep 13	262	Sep 14	83	Sep 19, 1898
Annual seven-day minimum	256	Sep 7	264	Sep 10	87	Sep 13, 1898
Annual runoff (ac-ft)	564,500		528,300		492,500	
10 percent exceeds	1,430		1,410		1,170	
50 percent exceeds	542		467		560	
90 percent exceeds	277		284		289