12117600 CEDAR RIVER BELOW DIVERSION, NEAR LANDSBURG, WA

Puget Sound Basin
Lake Washington Subbasin

LOCATION.--Lat 47°22′47″, long 121°58′56″ referenced to North American Datum of 1927, in SE ¼ NW ¼ sec.24, T.22 N., R.6 E., King County, WA, Hydrologic Unit 17110012, on right bank 0.8 mi northwest of the Issaquah-Ravensdale road bridge, 0.9 mi northwest of Landsburg, and at mile 20.4.

DRAINAGE AREA.--124 mi^2, excludes Walsh Lake diversion, which enters Cedar River at mile 19.5, and excludes 1.9 mi of Walsh Lake drainage in Cedar River basin, which is normally diverted into Issaquah Creek.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1991 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 490 ft above NGVD of 1929, from topographic map.

REMARKS.--Records good. Flow is regulated by Chester Morse Lake (station 12115900) and Cedar Lake (station 12116060) 15 mi upstream for operation of powerplant at Cedar Falls 13.1 mi upstream from station. Seattle City Water diversion 1.5 mi upstream from the gage diverted an average discharge of about 131 ft^3/s during the water year. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE FOR PERIOD OF RECORD.--14 years (water years 1993-2006), 512 ft^3/s, 370,600 acre-ft/yr, unadjusted.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,560 ft^3/s, Nov. 30, 1995, gage height, 10.32 ft, from rating curve extended above 2,000 ft^3/s; maximum gage height, 10.70 ft, Nov. 30, 1995, from outside high-water mark; minimum discharge, 45 ft^3/s, Sept. 9, 1993.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,110 ft^3/s, Jan 14, gage height, 7.32 ft; minimum discharge, 101 ft^3/s, Aug. 9-15, 28, gage height, 2.63 ft.

12117600 CEDAR RIVER BELOW DIVERSION, NEAR LANDSBURG, WA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	287	588	386	1,180	1,300	627	381	278	896	249	140	109
2	220	639	374	1,110	1,230	626	375	278	799	250	141	106
3	221	476	376	1,100	1,200	609	375	278	750	250	121	103
4	219	468	392	1,180	1,180	590	376	279	747	249	116	106
5	230	526	386	1,150	1,200	577	376	276	739	250	105	105
6	274	628	353	927	1,380	572	377	270	715	250	105	106
7	343	501	353	987	1,340	574	378	272	698	236	105	108
8	343	391	353	997	1,330	599	381	279	679	222	105	108
9	343	971	353	1,310	1,360	603	376	270	667	220	104	108
10	343	1,320	348	2,030	1,400	705	374	271	574	219	103	108
11	342	1,210	349	2,760	1,360	781	377	270	504	220	102	108
12	344	1,110	348	2,680	1,210	754	378	279	449	220	104	108
13	343	1,300	346	2,920	1,110	614	377	277	448	220	103	108
14	343	1,290	347	2,910	940	513	474	333	425	220	103	109
15	344	1,330	346	2,580	802	425	439	344	416	220	106	112
16	346	1,370	349	2,080	685	403	347	365	388	220	104	139
17	345	1,290	350	2,450	606	388	342	860	377	219	104	141
18	395	1,040	353	2,100	590	384	344	837	365	219	105	143
19	412	770	356	e1,900	581	382	343	656	359	204	105	139
20	465	718	347	1,910	572	389	343	575	353	190	106	140
21	467	697	348	1,880	503	382	343	582	340	190	104	202
22	458	591	358	1,850	507	387	344	580	306	189	104	185
23	461	579	415	1,840	575	380	345	716	278	189	105	220
24	460	573	854	1,680	537	380	344	920	253	175	105	221
25	459	643	627	1,470	501	374	322	1,010	248	160	106	221
26	458	645	759	1,370	491	373	299	876	250	167	108	221
27	459	610	842	1,350	524	375	279	894	248	167	108	220
28	461	594	870	1,370	601	388	278	1,440	248	155	105	221
29	457	486	852	1,280	---	382	279	1,310	248	143	106	220
30	456	388	857	1,530	---	378	278	1,080	249	143	116	220
31	495	---	1,020	1,410	---	377	---	1,070	---	142	112	---
Total	11,593	23,742	14,967	53,291	25,615	15,291	10,644	18,025	14,016	6,367	3,366	4,465
Mean	374	791	483	1,719	915	493	355	581	467	205	109	149
Max	495	1,370	1,020	2,920	1,400	781	474	1,440	896	250	141	221
Min	219	388	346	927	491	373	278	270	248	142	102	103
Ac-ft	22,990	47,090	29,690	105,700	50,810	30,330	21,110	35,750	27,800	12,630	6,680	8,860

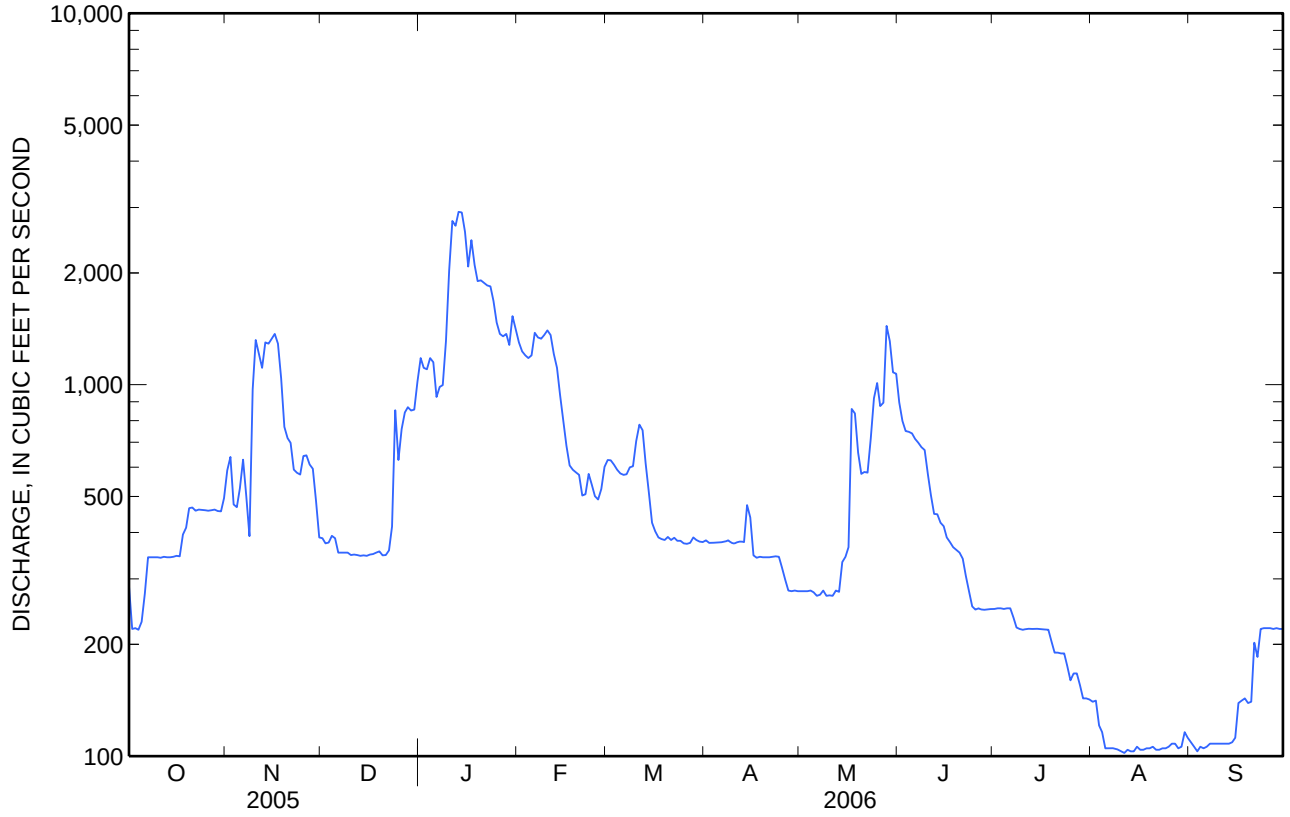
STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1992 - 2006, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	346	666	850	873	743	582	562	487	402	230	131	180
Max	417	1,490	1,755	1,736	1,865	1,232	1,153	1,098	937	509	194	390
(WY)	(1996)	(1996)	(2000)	(1999)	(1996)	(1997)	(2002)	(1997)	(2002)	(1997)	(1993)	(2004)
Min	256	293	296	295	277	282	287	237	196	107	96.5	119
(WY)	(1995)	(2003)	(2003)	(2001)	(2001)	(2005)	(1995)	(1992)	(1992)	(1992)	(1992)	(1995)

12117600 CEDAR RIVER BELOW DIVERSION, NEAR LANDSBURG, WA—Continued

SUMMARY STATISTICS

	Calendar Year 2005		Water Year 2006		Water Years 1992 - 2006	
Annual total	131,705		201,382			
Annual mean	361		552		512	
Highest annual mean					826	1997
Lowest annual mean					294	2001
Highest daily mean	1,790	Jan 22	2,920	Jan 13	6,170	Nov 30, 1995
Lowest daily mean	93	Aug 5	102	Aug 11	78	Aug 8, 1992
Annual seven-day minimum	96	Aug 4	103	Aug 8	85	Sep 4, 1995
Annual runoff (ac-ft)	261,200		399,400		370,600	
10 percent exceeds	641		1,290		1,110	
50 percent exceeds	277		377		350	
90 percent exceeds	115		108		137	



WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 2001 to current year.

INSTRUMENTATION.--Temperature recorder with 15-minute logging interval since May, 2001.

REMARKS.--Records excellent.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 16.3°C, July 18, 2003, July 23, 2006; minimum, 2.9°C, Jan. 7, 2004.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 16.3°C July 23; minimum recorded, 4.3°C Dec. 18.

FROM DCP
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	11.1	10.6	10.9	9.7	8.6	9.2	6.6	6.1	6.4	6.1	5.7	5.9
2	10.6	9.9	10.3	9.4	8.6	9.0	6.4	5.4	5.9	5.8	5.6	5.7
3	10.8	9.6	10.2	9.1	8.2	8.7	7.0	6.4	6.7	5.6	5.4	5.5
4	10.8	9.7	10.2	8.6	8.2	8.4	6.7	6.1	6.4	5.5	5.3	5.4
5	11.5	10.2	10.8	8.5	8.3	8.4	7.1	6.7	6.9	5.9	5.5	5.7
6	11.2	10.8	11.0	8.5	8.0	8.2	6.8	6.4	6.6	6.9	5.9	6.6
7	11.7	11.1	11.4	8.4	7.9	8.1	6.4	6.0	6.2	6.9	6.3	6.7
8	11.6	10.7	11.1	8.5	7.8	8.1	6.0	5.5	5.7	6.6	6.1	6.3
9	11.8	10.7	11.2	8.8	7.9	8.4	5.9	5.5	5.7	6.4	6.1	6.2
10	11.3	10.7	11.1	8.7	8.4	8.5	5.6	5.2	5.4	6.9	6.2	6.6
11	11.6	11.0	11.2	8.5	8.0	8.2	5.7	5.3	5.5	6.2	5.8	6.0
12	11.3	10.6	11.0	8.2	7.8	8.0	5.9	5.4	5.6	5.8	5.6	5.7
13	11.6	10.9	11.2	8.2	7.8	8.0	6.2	5.5	5.9	5.7	5.6	5.6
14	11.6	10.7	11.2	7.9	7.1	7.6	5.5	5.1	5.3	5.6	4.8	5.4
15	11.7	11.0	11.3	7.7	7.0	7.3	5.5	4.9	5.2	5.3	4.9	5.2
16	11.4	11.1	11.2	8.0	7.5	7.7	5.2	4.7	5.0	5.6	5.2	5.5
17	11.7	11.1	11.4	7.9	7.5	7.7	5.2	4.6	4.9	5.7	5.5	5.6
18	12.0	11.2	11.6	7.9	7.4	7.7	5.3	4.3	4.5	5.8	5.6	5.7
19	11.7	11.4	11.5	8.1	7.4	7.7	5.9	5.1	5.5	5.9	5.7	5.8
20	11.4	10.9	11.2	8.0	7.6	7.8	6.3	5.8	6.0	5.8	5.5	5.7
21	11.5	10.8	11.1	7.8	7.4	7.6	5.9	5.7	5.8	5.8	5.5	5.6
22	11.5	10.9	11.2	7.7	7.3	7.5	6.1	5.7	5.9	5.9	5.6	5.7
23	11.5	11.0	11.3	7.5	7.1	7.3	7.1	6.1	6.5	6.0	5.7	5.9
24	11.7	11.1	11.4	7.5	7.0	7.2	7.5	6.7	7.1	6.2	5.5	5.8
25	11.4	10.8	11.2	7.4	7.0	7.3	7.8	7.5	7.7	6.2	6.0	6.1
26	11.3	10.3	10.8	7.2	6.7	7.0	7.6	6.4	6.8	6.3	6.0	6.1
27	10.5	9.6	10.1	6.9	6.3	6.7	6.6	6.3	6.4	6.2	5.9	6.0
28	10.6	10.2	10.4	6.4	5.9	6.2	6.6	6.4	6.5	6.0	5.9	5.9
29	10.4	10.0	10.2	6.3	6.1	6.2	6.5	6.2	6.4	6.4	5.8	6.0
30	10.4	9.8	10.1	7.0	6.3	6.7	6.2	6.1	6.2	6.7	6.4	6.6
31	10.2	9.7	9.8	---	---	---	6.4	6.1	6.2	6.6	6.4	6.5
Month	12.0	9.6	10.9	9.7	5.9	7.7	7.8	4.3	6.0	6.9	4.8	5.9

12117600 CEDAR RIVER BELOW DIVERSION, NEAR LANDSBURG, WA—Continued

FROM DCP
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	6.8	6.4	6.7	7.2	6.2	6.7	8.9	7.7	8.2	10.2	8.1	9.0
2	7.0	6.7	6.8	7.4	6.7	7.1	9.2	7.3	8.2	10.9	7.8	9.2
3	7.0	6.6	6.8	7.4	6.2	6.8	9.2	7.9	8.6	11.6	8.2	9.8
4	7.0	6.4	6.8	7.6	6.8	7.1	9.4	7.7	8.6	12.0	8.7	10.3
5	6.7	5.8	6.4	7.6	6.8	7.2	9.4	7.5	8.5	11.9	9.2	10.5
6	6.3	5.7	6.0	7.8	7.2	7.5	9.1	7.9	8.5	10.7	9.2	9.8
7	6.3	5.7	6.0	7.7	7.1	7.4	9.6	7.6	8.6	9.8	9.0	9.3
8	6.5	5.7	6.2	7.1	6.4	6.9	9.0	8.3	8.5	10.4	8.6	9.4
9	5.8	5.3	5.5	6.7	5.8	6.3	9.2	8.0	8.5	11.2	8.0	9.5
10	5.6	5.2	5.4	6.4	5.5	5.9	9.3	7.9	8.5	11.5	8.4	10
11	5.6	5.1	5.3	6.2	5.3	5.7	9.2	7.4	8.4	10.6	9.3	9.9
12	5.9	5.3	5.6	6.2	5.1	5.6	9.1	8.1	8.5	10.6	8.9	9.7
13	6.0	5.7	5.9	6.9	5.4	6.2	8.6	8.0	8.3	12.1	8.4	10.1
14	6.1	5.5	5.9	7.3	6.4	6.8	8.3	7.1	7.8	12.8	8.9	10.7
15	6.0	5.6	5.8	7.6	6.6	7.1	7.7	6.9	7.2	13.3	9.8	11.4
16	6.4	5.6	6.0	7.8	6.9	7.3	8.9	6.7	7.7	14.0	10.5	12.0
17	6.1	5.1	5.4	8.1	7.0	7.6	8.9	7.2	8.0	12.5	10.1	11.3
18	5.7	4.9	5.3	7.8	7.0	7.4	9.7	7.4	8.5	13.0	10.3	11.4
19	6.1	5.1	5.5	8.2	6.6	7.4	10.4	7.6	9.0	11.4	10.5	10.9
20	6.3	5.4	5.9	8.3	6.5	7.5	10.2	8.3	9.3	11.8	10.8	11.2
21	7.3	6.3	6.9	8.4	7.4	7.9	9.7	8.4	9.0	12.0	10.5	11.2
22	7.4	7.1	7.2	8.6	7.8	8.2	10.1	7.1	8.6	11.3	10.9	11.1
23	7.2	5.9	6.8	8.9	7.9	8.5	10.8	7.7	9.2	12.0	10.8	11.3
24	6.7	5.9	6.2	9.2	8.2	8.6	11.2	8.3	9.8	12.2	11.3	11.7
25	7.0	6.0	6.5	8.4	7.3	7.9	11.3	8.6	9.9	12.0	11.0	11.4
26	7.6	6.7	7.2	8.6	7.6	8.0	10.2	8.7	9.1	11.4	10.8	11.1
27	7.7	7.3	7.5	9.3	7.4	8.3	11.7	8.9	10.1	11.0	10.5	10.7
28	7.6	6.3	6.9	9.4	8.3	8.7	12.1	9.0	10.6	10.7	9.9	10.2
29	---	---	---	8.5	7.6	8.1	11.0	8.6	9.6	10.9	9.8	10.2
30	---	---	---	9.2	7.9	8.6	10.1	8.0	8.9	12.4	9.8	10.9
31	---	---	---	9.8	8.3	9.0	---	---	---	12.2	10.6	11.3
Month	7.7	4.9	6.2	9.8	5.1	7.4	12.1	6.7	8.7	14.0	7.8	10.5

12117600 CEDAR RIVER BELOW DIVERSION, NEAR LANDSBURG, WA—Continued

FROM DCP
TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2005 TO SEPTEMBER 2006

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	11.8	11.0	11.3	14.8	11.1	12.9	14.7	12.0	13.2	13.6	10.6	12.0
2	11.9	11.0	11.4	14.9	11.2	12.9	14.7	12.0	13.3	13.8	11.1	12.4
3	12.4	10.6	11.3	14.7	11.4	12.9	14.7	12.0	13.3	13.4	11.2	12.4
4	12.1	10.8	11.3	13.4	11.6	12.5	14.6	11.4	13.0	13.6	11.3	12.4
5	12.3	10.8	11.4	12.5	11.3	11.7	14.8	11.3	13.0	13.5	11.0	12.2
6	12.9	10.6	11.6	11.9	11.2	11.5	15.1	11.7	13.4	13.4	11.0	12.2
7	12.2	10.7	11.3	14.5	11.0	12.4	15.1	11.8	13.5	13.1	10.9	12.0
8	11.5	10.8	11.1	14.9	11.1	12.9	14.4	11.7	13.1	12.9	10.8	11.9
9	11.5	10.8	11.1	14.8	11.7	13.1	13.2	11.9	12.5	12.2	11.3	11.8
10	11.8	10.7	11.2	13.4	11.9	12.4	12.4	11.6	11.9	12.9	10.7	11.7
11	13.8	10.4	11.9	13.5	11.2	12.3	12.0	11.2	11.5	12.9	10.6	11.7
12	12.2	11.0	11.5	12.6	11.7	12.1	14.0	10.6	12.1	13.0	10.7	11.8
13	11.6	10.9	11.2	12.6	11.6	12.1	14.2	10.9	12.5	12.1	11.2	11.6
14	11.2	10.7	11.0	15.1	11.7	13.1	14.4	11.3	12.8	11.3	10.5	10.9
15	11.4	10.5	10.9	14.0	12.0	13.0	13.1	11.4	12.1	11.4	10.1	10.7
16	12.2	10.7	11.3	15.1	11.4	13.1	12.4	11.2	11.8	11.4	10.0	10.7
17	11.6	10.6	11.0	14.2	11.7	13.0	13.2	10.8	11.9	11.6	10.3	11.0
18	12.3	10.2	11.1	13.5	11.6	12.6	14.1	11.0	12.5	11.6	10.9	11.2
19	12.0	10.4	11.0	14.0	11.4	12.6	14.4	11.3	12.8	11.5	10.9	11.2
20	12.1	10.4	11.2	15.2	11.4	13.2	14.4	11.3	12.8	10.9	10.6	10.7
21	12.1	10.3	11.0	15.9	12.0	13.9	13.9	11.5	12.7	10.9	10.3	10.7
22	13.0	10.0	11.3	15.2	12.7	13.8	12.8	11.4	11.9	11.4	9.9	10.5
23	13.8	10.0	11.7	16.3	12.6	14.3	11.9	11.0	11.5	11.8	10.0	10.8
24	14.4	10.5	12.3	16.1	12.7	14.3	12.1	11.2	11.6	12.2	10.4	11.2
25	15.0	11.0	12.8	15.1	12.3	13.7	13.8	10.9	12.2	12.3	10.7	11.4
26	15.2	11.4	13.2	15.7	12.2	13.9	14.1	11.2	12.6	12.5	11.0	11.7
27	15.1	11.5	13.2	16.2	13.0	14.5	14.2	11.3	12.7	12.6	11.1	11.8
28	14.2	10.9	12.6	14.9	13.0	14.0	14.1	11.4	12.7	12.6	11.2	11.8
29	13.7	10.8	12.2	13.7	12.4	13.0	12.8	11.4	11.8	12.5	11.1	11.7
30	14.8	11.1	12.8	14.0	12.3	13.0	12.3	10.9	11.5	11.8	11.1	11.4
31	---	---	---	14.8	12.1	13.3	13.0	10.2	11.5	---	---	---
Month	15.2	10.0	11.6	16.3	11.0	13.0	15.1	10.2	12.4	13.8	9.9	11.5
Year	16.3	4.3	9.4									