Water-Data Report 2011

05457000 CEDAR RIVER NEAR AUSTIN, MN

Iowa Basin
Upper Cedar Subbasin

LOCATION.--Lat 43°38′14″, long 92°58′28″ referenced to North American Datum of 1927, in NE ¼ SE ¼ sec.15, T.102 N., R.18 W., Mower County, MN, Hydrologic Unit 07080201, at left downstream abutment of highway bridge, 1.0 mi downstream from Turtle Creek, and 1.0 mi south of Austin.

DRAINAGE AREA.--399 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1909 to September 1914, October 1944 to current year.

REVISED RECORDS.--WSP 1145: 1945, 1948.

GAGE.--Water-stage recorder. Datum of gage is 1,162.10 ft above sea level (NGVD of 1929). May 1909 to April 1912, non-recording gage in tailwater of powerplant 200 ft downstream at datum 3.1 ft lower. May 1912 to September 1914, non-recording gage on highway bridge 500 ft downstream at datum 1.1 ft lower.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some regulation at lower flows by wastewater treatment plant upstream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,500 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 21	0830	5,440	12.70
Mar 23	1600	*6,930	*14.84
Apr 10	1530	1,810	6.74
Apr 27	0600	2,030	7.12
Jun 22	0400	1,770	6.67
Jul 16	1500	3,540	9.64
Jul 29	1330	1,500	6.19

Minimum discharge, 59 ft^3/s, Sept. 15, gage height, 2.45 ft.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 05457000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/05457000.2011.pdf

05457000 CEDAR RIVER NEAR AUSTIN, MN—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

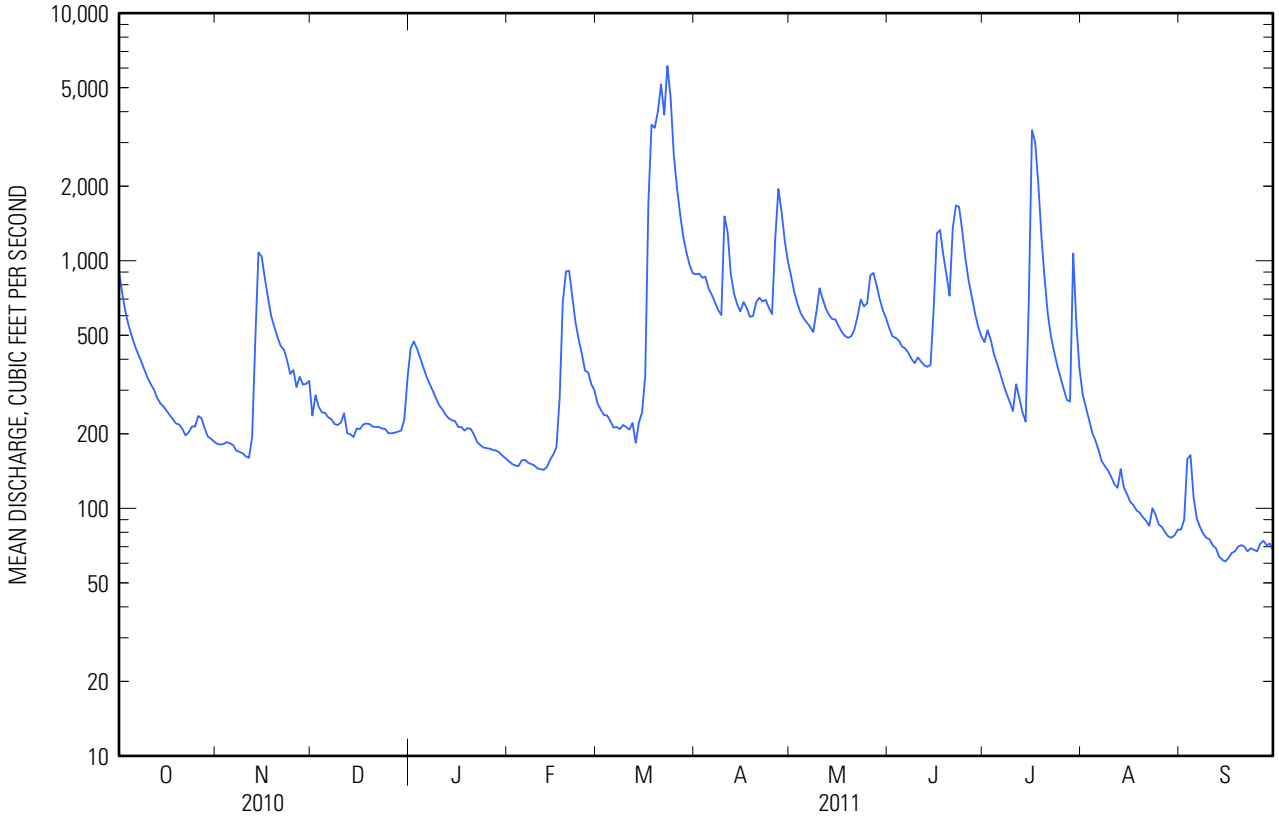
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	906	182	237	e443	155	264	881	869	533	469	288	82
2	741	181	286	e472	e151	250	887	747	495	524	256	90
3	624	182	257	441	e149	238	854	672	488	479	228	158
4	550	185	244	e406	148	237	861	616	476	419	202	164
5	498	183	243	e371	156	225	771	584	451	384	188	110
6	454	180	233	340	157	212	728	562	442	350	172	91
7	421	171	229	318	153	213	680	541	425	316	155	84
8	393	169	e219	e298	e151	209	632	515	401	290	148	79
9	363	167	217	e278	e149	217	603	622	386	269	142	76
10	337	162	222	261	e145	213	1,510	774	407	247	134	75
11	318	160	242	251	144	208	1,300	699	392	317	125	71
12	302	194	e201	e239	143	221	882	638	378	280	121	69
13	280	480	e199	e231	147	184	737	604	373	244	144	64
14	266	1,080	e194	227	157	222	667	581	379	224	121	62
15	258	1,040	210	225	165	244	624	579	646	697	114	61
16	248	850	209	e213	177	342	681	545	1,290	3,370	106	63
17	238	709	218	213	279	1,730	646	515	1,330	3,010	103	66
18	229	598	220	206	681	3,540	594	497	1,060	2,040	98	67
19	220	540	219	211	905	3,440	598	488	881	1,240	96	70
20	218	491	214	209	910	4,020	680	496	722	841	92	71
21	209	453	213	e198	715	5,160	709	528	1,350	608	89	70
22	197	438	213	185	565	3,890	685	599	1,670	493	85	67
23	203	398	210	e180	481	6,110	695	697	1,650	428	100	69
24	214	349	209	e176	421	4,570	645	654	1,320	376	94	68
25	214	362	201	175	360	2,690	609	673	1,020	338	86	67
26	236	309	201	174	354	1,980	1,220	872	833	303	84	72
27	231	340	202	172	317	1,540	1,950	893	717	274	80	74
28	211	316	204	171	299	1,250	1,580	793	616	270	77	71
29	195	318	206	168	---	1,080	1,210	697	542	1,070	76	72
30	191	327	228	163	---	962	994	629	496	555	78	68
31	186	---	334	159	---	889	---	584	---	364	82	---
Total	10,151	11,514	6,934	7,774	8,734	46,550	26,113	19,763	22,169	21,089	3,964	2,371
Mean	327	384	224	251	312	1,502	870	638	739	680	128	79.0
Max	906	1,080	334	472	910	6,110	1,950	893	1,670	3,370	288	164
Min	186	160	194	159	143	184	594	488	373	224	76	61
Ac-ft	20,130	22,840	13,750	15,420	17,320	92,330	51,800	39,200	43,970	41,830	7,860	4,700
Cfsm	0.82	0.96	0.56	0.63	0.78	3.76	2.18	1.60	1.85	1.70	0.32	0.20
In.	0.95	1.07	0.65	0.72	0.81	4.34	2.43	1.84	2.07	1.97	0.37	0.22

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1909 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	184	165	112	82.9	116	489	547	350	366	276	186	187
Max	1,160	997	431	313	701	1,502	2,328	1,387	1,624	1,456	1,720	1,728
(WY)	(2008)	(1910)	(1992)	(2007)	(1984)	(2011)	(2001)	(1999)	(1993)	(1978)	(1993)	(2004)
Min	37.3	35.7	26.6	26.5	25.0	53.3	52.9	67.9	48.9	22.6	32.3	30.9
(WY)	(1959)	(1959)	(1913)	(1913)	(1913)	(1968)	(1911)	(1910)	(1950)	(1911)	(1948)	(1911)

05457000 CEDAR RIVER NEAR AUSTIN, MN—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1909 - 2011	
Annual total	164,524		187,126			
Annual mean	451		513		[a]256	
Highest annual mean					824	1993
Lowest annual mean					58.1	1977
Highest daily mean	11,500	Sep 24	6,110	Mar 23	15,000	Sep 16, 2004
Lowest daily mean	76	Sep 14	61	Sep 15	[b]0.00	Jan 15, 1911
Annual seven-day minimum	86	Sep 4	65	Sep 12	13	Sep 1, 1912
Maximum peak flow			6,930	Mar 23	20,000	Sep 16, 2004
Maximum peak stage			14.84	Mar 23	[c]23.26	Sep 16, 2004
Instantaneous low flow			59	Sep 15	[b]0.00	Jan 15, 1911
Annual runoff (ac-ft)	326,300		371,200		185,300	
Annual runoff (cfsm)	1.13		1.28		0.641	
Annual runoff (inches)	15.34		17.45		8.71	
10 percent exceeds	895		931		536	
50 percent exceeds	214		286		105	
90 percent exceeds	96		92		46	

[a] Median of annual mean discharges is 230 ft³/s.
[b] Occurred on several days in 1911, result of regulation.
[c] From floodmark.