Water-Data Report 2013

05330920 MINNESOTA RIVER AT FT. SNELLING STATE PARK, MN

Minnesota Basin
Lower Minnesota Subbasin

LOCATION.--Lat 44°52′13″, long 93°11′32″ referenced to North American Datum of 1927, in SE ¼ SW ¼ NE ¼ sec.32, T.28 N., R.23 W., Hennepin County, MN, Hydrologic Unit 07020012, on left bank at Ft. Snelling State Park and at mile 3.5 upstream from Mississippi River.

DRAINAGE AREA.--16,900 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 2004 to current year.

GAGE.--Water-stage and velocity recorder. Datum of gage is 680.00 ft above sea level (NGVD of 1929).

REMARKS.--Records good except those for estimated discharges, which are poor. Discharges less than 2,000 ft^3/s are considered fair, and those under 1,000 ft^3/s are poor. Backwater from Mississippi River at all times.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 05330920, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05330920.2013.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e632	821	1,010	e701	715	778	11,200	11,000	13,000	46,500	5,120	1,530
2	761	657	864	e701	719	784	10,100	10,900	13,100	49,700	4,910	1,620
3	659	645	794	690	707	802	8,610	10,600	13,000	49,500	4,660	1,530
4	544	571	733	656	732	782	7,910	10,700	12,800	45,900	4,420	1,600
5	338	731	711	e665	763	758	7,160	11,100	11,700	37,800	4,660	1,450
6	560	814	912	e730	686	707	6,570	11,100	11,000	32,500	3,900	1,500
7	571	707	785	755	645	706	6,440	10,900	9,920	29,600	3,990	1,400
8	702	548	740	743	606	782	6,790	11,500	8,910	26,200	3,520	1,590
9	637	555	623	654	700	1,070	6,860	11,200	8,790	23,100	3,420	1,590
10	511	634	935	579	704	1,170	7,240	10,900	8,680	20,200	3,670	1,290
11	647	862	e636	768	724	1,090	7,650	10,500	8,550	17,000	3,650	1,310
12	694	636	597	1,000	591	1,400	8,400	9,600	9,500	14,500	3,550	1,390
13	538	605	558	828	637	2,860	8,650	9,250	12,300	15,600	3,430	1,500
14	681	704	665	725	646	3,790	8,880	9,350	14,000	15,400	3,170	1,230
15	487	852	e723	621	738	4,250	8,850	8,980	15,600	14,800	2,980	1,550
16	545	763	e733	688	e713	4,230	8,910	8,570	16,400	14,000	2,740	1,450
17	842	753	e686	713	732	4,500	9,220	8,610	16,800	13,900	2,880	1,370
18	772	768	570	762	744	4,650	9,920	9,080	17,000	13,900	2,700	1,460
19	570	925	747	839	696	4,450	10,100	9,160	16,300	12,400	2,510	1,310
20	628	805	908	e782	589	4,100	9,900	10,400	15,400	11,300	2,370	1,440
21	623	688	773	796	624	3,650	9,610	12,200	14,400	10,600	2,230	1,400
22	567	644	768	728	779	3,320	11,000	12,300	14,800	9,450	2,190	1,560
23	690	913	783	655	837	3,310	12,600	12,600	15,900	8,590	2,200	1,420
24	816	792	822	e643	797	3,300	13,300	12,300	17,900	7,790	2,260	1,350
25	982	818	725	e638	755	3,320	13,100	12,000	19,700	7,210	2,270	1,370
26	603	899	605	e648	698	3,060	13,300	11,600	20,500	6,640	2,260	1,470
27	574	1,040	723	723	665	3,050	13,400	11,100	21,700	6,170	1,690	1,390
28	777	611	767	683	693	3,260	12,700	10,700	23,800	6,210	1,960	1,340
29	757	725	658	732	---	4,580	12,400	10,600	29,600	5,670	1,850	1,490
30	777	738	726	693	---	7,720	11,300	11,400	38,900	5,680	1,780	1,470
31	728	---	e766	677	---	11,100	---	12,500	---	5,440	1,720	---
Total	20,213	22,224	23,046	22,216	19,635	93,329	292,070	332,700	469,950	583,250	94,660	43,370
Mean	652	741	743	717	701	3,011	9,736	10,730	15,660	18,810	3,054	1,446
Max	982	1,040	1,010	1,000	837	11,100	13,400	12,600	38,900	49,700	5,120	1,620
Min	338	548	558	579	589	706	6,440	8,570	8,550	5,440	1,690	1,230
Ac-ft	40,090	44,080	45,710	44,070	38,950	185,100	579,300	659,900	932,100	1,157,000	187,800	86,020
Cfsm	0.04	0.04	0.04	0.04	0.04	0.18	0.58	0.64	0.93	1.11	0.18	0.09
In.	0.04	0.05	0.05	0.05	0.04	0.21	0.64	0.73	1.03	1.28	0.21	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2004 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	7,679	4,253	2,782	2,365	2,560	9,991	17,380	13,140	14,050	9,439	3,378	3,816
Max	30,280	10,600	6,206	5,517	7,068	30,280	47,990	24,400	26,030	24,680	8,479	13,090
(WY)	(2011)	(2011)	(2011)	(2011)	(2011)	(2010)	(2011)	(2011)	(2011)	(2011)	(2011)	(2010)
Min	652	741	743	717	701	2,799	2,167	3,832	3,998	2,582	1,221	750
(WY)	(2013)	(2013)	(2013)	(2013)	(2013)	(2008)	(2004)	(2004)	(2009)	(2007)	(2012)	(2012)

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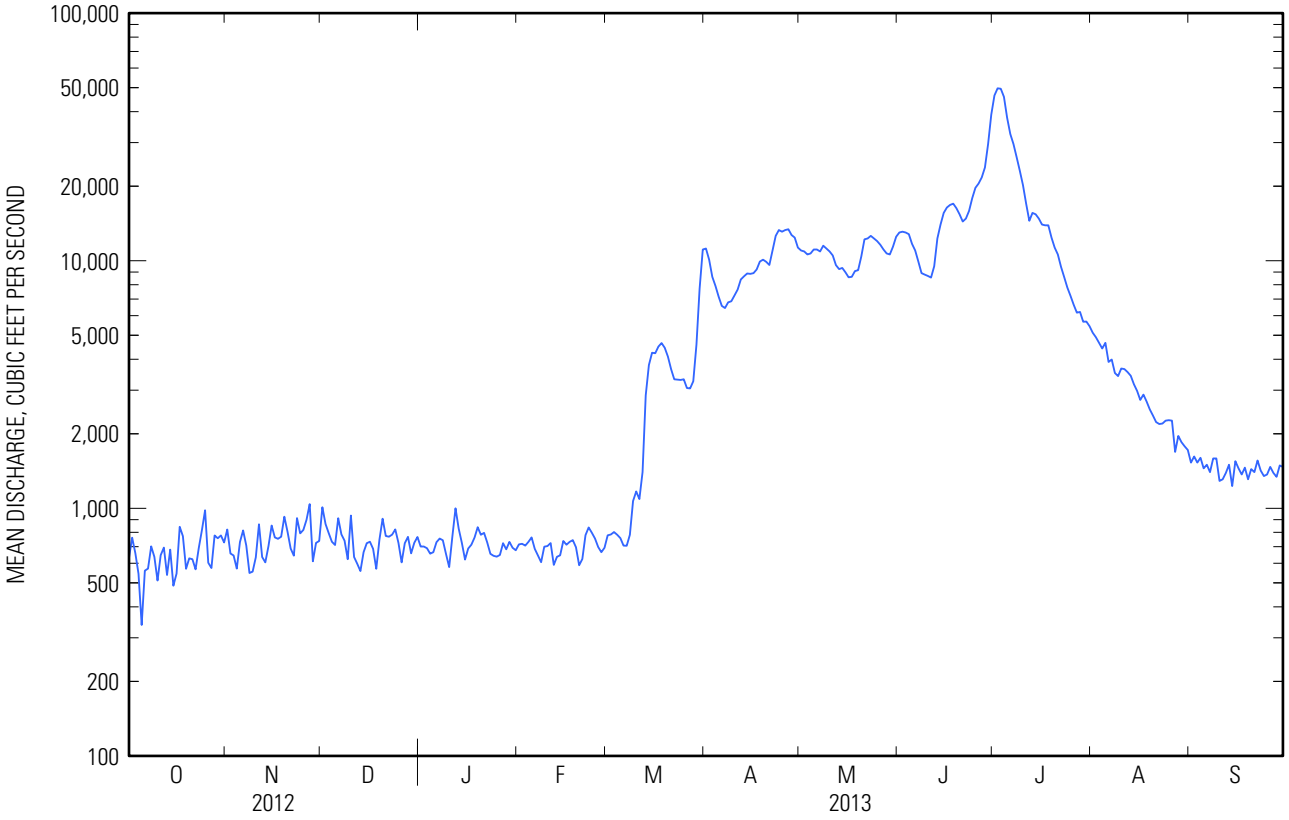
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 2004 - 2013	
Annual total	1,319,136		2,016,663			
Annual mean	3,604		5,525		7,794	
Highest annual mean					18,620	2011
Lowest annual mean					3,530	2009
Highest daily mean	24,100	Jun 3	49,700	Jul 2	68,700	Mar 24, 2010
Lowest daily mean	338	Oct 5	338	Oct 5	338	Oct 5, 2012
Annual seven-day minimum	552	Oct 4	552	Oct 4	552	Oct 4, 2012
Maximum peak flow			52,500	Jul 3	68,900	Mar 24, 2010
Maximum peak stage			[a]700.64	Jul 2	707.45	Mar 30, 2011
Instantaneous low flow			[b]-767	Oct 5	[b]-2,480	Aug 24, 2006
Annual runoff (ac-ft)	2,617,000		4,000,000		5,647,000	
Annual runoff (cfsm)	0.213		0.327		0.461	
Annual runoff (inches)	2.90		4.44		6.27	
10 percent exceeds	11,200		13,300		19,500	
50 percent exceeds	1,690		1,490		4,100	
90 percent exceeds	645		638		1,020	

[a] Due in part to backwater from the Mississippi River.
[b] Result of seiche.