Water-Data Report 2013

05459500 Winnebago River at Mason City, IA

Iowa Basin
Winnebago Subbasin

LOCATION.--Lat 43°09′54″, long 93°11′33″ referenced to North American Datum of 1927, in NE ¼ SE ¼ NW ¼ sec.3, T.96 N., R.20 W., Cerro Gordo County, IA, Hydrologic Unit 07080203, on right bank 650 ft upstream from bridge on 13th Street in Mason City, 0.1 mi downstream from Calmus Creek, 1.0 mi upstream from Willow Creek, and 20.2 mi upstream from mouth.

DRAINAGE AREA.--526 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from October 1932 to current year. Prior to January 1933, monthly mean discharge published in WSP 1308. Prior to October 1959, published as "Lime Creek at Mason City."

REVISED RECORDS.--WSP 825: 1935-36. WSP 1438: Drainage area. WSP 1558: 1933-37, 1943 (M), 1945, 1948.

GAGE.--Water-stage recorder and concrete control. Datum of gage is 1,069.59 ft above National Geodetic Vertical Datum of 1929. Prior to October 15, 1934, non-recording gage at datum 6.47 ft lower; October 15 to November 6, 1934, non-recording gage at different datum; November 7, 1934, to March 22, 1935, non-recording gage at same datum.

REMARKS.--Records good except for estimated daily discharges, which are poor. U.S. Geological Survey data collection platform with satellite telemetry at station.

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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	15	27	26	e8.1	e11	21	830	603	2,380	1,590	359	120
2	14	27	24	e11	e13	e20	602	795	2,010	1,360	365	113
3	12	28	24	e14	14	21	447	1,020	1,720	1,190	330	115
4	13	26	30	e10	e12	21	333	1,200	1,580	1,060	288	110
5	20	27	27	e12	e11	22	258	2,200	2,110	939	448	105
6	18	29	28	e14	13	22	212	2,410	1,890	837	623	100
7	21	30	27	e15	14	20	188	1,940	1,610	742	540	101
8	19	30	26	e15	14	22	211	1,650	1,390	689	483	99
9	19	28	32	17	14	68	306	1,520	1,740	660	439	95
10	27	27	23	18	25	e1,760	1,550	1,420	2,060	628	391	88
11	25	31	26	22	27	e1,710	1,540	1,250	1,600	573	367	84
12	26	28	26	e19	31	949	1,400	1,100	2,060	533	439	77
13	28	26	25	e14	39	844	1,060	981	4,040	1,540	431	72
14	31	29	25	e15	46	839	1,060	884	2,380	3,640	388	72
15	30	29	38	e16	41	724	1,360	784	2,010	2,200	346	88
16	35	27	44	16	38	808	982	706	2,180	1,720	310	84
17	32	28	32	e14	33	918	814	1,370	2,030	1,480	275	79
18	32	28	40	17	31	773	1,140	2,240	1,970	1,260	246	91
19	30	27	37	e16	28	453	1,380	2,810	1,770	1,110	229	90
20	30	29	27	e14	26	346	1,080	4,390	1,550	990	209	83
21	31	28	20	e8.7	22	260	902	4,040	1,550	818	197	79
22	32	27	22	e11	22	212	847	3,480	1,970	695	208	73
23	34	27	20	12	e20	165	1,160	3,010	2,930	600	218	74
24	35	19	e15	e11	e20	201	1,140	2,480	3,150	516	195	70
25	49	29	e9.8	e12	20	206	983	2,140	3,520	509	181	65
26	46	23	e10	e16	20	210	854	2,620	2,960	733	164	64
27	47	21	e12	e19	21	450	754	3,810	2,620	608	152	57
28	36	24	e13	e18	21	1,280	671	4,350	2,410	519	142	58
29	30	25	e12	e17	---	2,140	614	3,910	2,180	469	140	60
30	30	26	e11	14	---	1,750	572	3,370	1,880	421	136	57
31	28	---	e9.8	e13	---	1,200	---	2,760	---	387	128	---
Total	875	810	741.6	448.8	647	18,435	25,250	67,243	65,250	31,016	9,367	2,523
Mean	28.2	27.0	23.9	14.5	23.1	595	842	2,169	2,175	1,001	302	84.1
Max	49	31	44	22	46	2,140	1,550	4,390	4,040	3,640	623	120
Min	12	19	9.8	8.1	11	20	188	603	1,390	387	128	57
Ac-ft	1,740	1,610	1,470	890	1,280	36,570	50,080	133,400	129,400	61,520	18,580	5,000
Cfsm	0.05	0.05	0.05	0.03	0.04	1.13	1.60	4.12	4.13	1.90	0.57	0.16
In.	0.06	0.06	0.05	0.03	0.05	1.30	1.79	4.76	4.61	2.19	0.66	0.18

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1933 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	191	175	113	79.1	129	532	636	502	560	341	224	186
Max	947	811	724	378	1,002	2,149	2,880	2,169	2,795	1,915	2,054	1,188
(WY)	(2008)	(1942)	(1983)	(1983)	(1984)	(2010)	(1965)	(2013)	(2008)	(1993)	(1979)	(2004)
Min	11.3	12.7	7.45	6.61	7.50	17.6	61.0	16.1	21.9	7.29	4.89	12.6
(WY)	(1935)	(1934)	(1934)	(1977)	(1959)	(1934)	(1957)	(1934)	(1934)	(1934)	(1934)	(1933)

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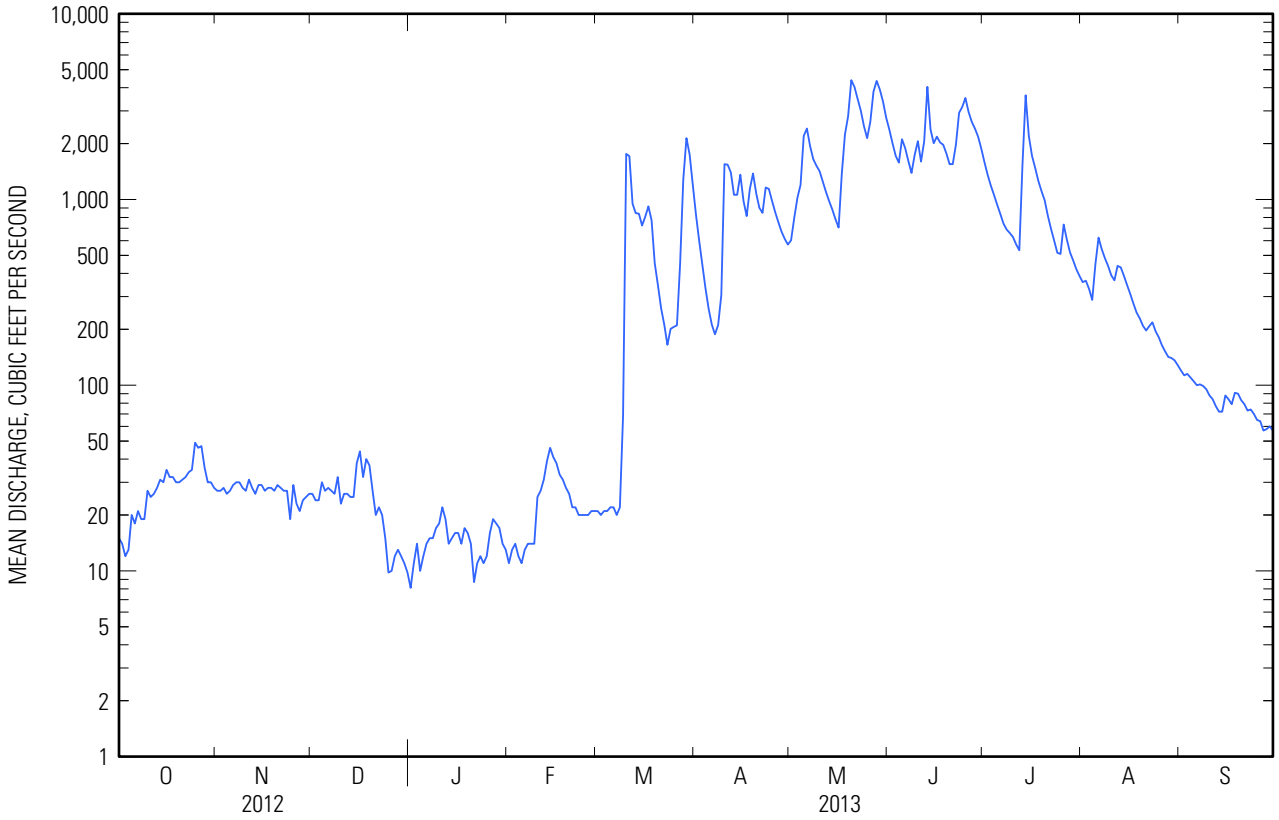
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1933 - 2013	
Annual total	29,825.4		222,606.4			
Annual mean	81.5		610		306	
Highest annual mean					947	1993
Lowest annual mean					28.1	1934
Highest daily mean	1,190	May 6	4,390	May 20	10,400	Jun 8, 2008
Lowest daily mean	8.5	Aug 31	8.1	Jan 1	1.2	Aug 19, 1989
Annual seven-day minimum	11	Aug 27	11	Dec 26	3.1	Dec 29, 1933
Maximum peak flow			4,690	May 20[a]	13,100	Jun 8, 2008
Maximum peak stage			9.44	May 20	18.74	Jun 8, 2008
Instantaneous low flow					0.86	Aug 18, 1988[b]
Annual runoff (ac-ft)	59,160		441,500		221,700	
Annual runoff (cfsm)	0.155		1.16		0.582	
Annual runoff (inches)	2.11		15.74		7.91	
10 percent exceeds	166		1,990		786	
50 percent exceeds	37		99		122	
90 percent exceeds	16		15		22	

[a] Also Jun 13.
[b] Also Aug 19, 1988.