Water-Data Report 2013

05484900 Raccoon River at Fleur Drive at Des Moines, IA

Des Moines Basin
North Raccoon Subbasin

LOCATION.--Lat 41°34′54″, long 93°38′34″ referenced to North American Datum of 1927, in SW ¼ NW ¼ NE ¼ sec.8, T.78 N., R.24 W., Polk County, IA, Hydrologic Unit 07100006, attached to handrail 465 ft from right edge on downstream side of bridge on Fleur Drive (Southwest 18th Street) in Des Moines, 3.0 mi downstream from Walnut Creek, and 2.6 mi upstream from mouth.

DRAINAGE AREA.--3,625 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Stage-only records from October 1995 to September 1996 (revised); discharge records from October 1996 to current year.

GAGE.--Water-stage recorder. Datum of gage is 780.70 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Records good except for estimated daily discharges, which are poor. Discharges are affected by withdrawal by Des Moines Water Works. U.S. Geological Survey data collection platform with satellite telemetry and City of Des Moines alert radio system at station.

EXTREMES FOR PERIOD OF RECORD.--Flood of July 11, 1993, reached a stage of 26.80 ft, discharge about 67,900 ft^3/s, stage-only period of operation.

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 05484900, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/05484900.2013.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	31	89	78	e35	e90	131	786	1,690	25,000	4,930	519	220
2	31	88	83	e39	e85	137	1,300	2,210	22,400	4,420	493	169
3	24	88	81	e42	e80	141	1,390	3,900	18,600	3,990	456	156
4	31	88	81	40	e75	152	1,120	5,760	15,300	3,610	427	152
5	29	120	79	43	e80	170	916	7,020	11,700	3,300	401	134
6	32	95	79	50	e78	149	786	8,160	9,460	3,090	391	139
7	39	94	76	47	e84	141	704	8,160	7,830	2,860	377	127
8	26	93	77	50	e85	312	653	6,820	6,810	2,610	353	125
9	29	90	88	54	e88	1,490	647	7,230	6,330	2,420	333	109
10	34	81	77	59	e97	e2,420	1,090	10,500	6,600	2,250	304	109
11	32	207	42	85	e78	2,830	1,620	7,320	6,590	2,070	289	e122
12	35	118	56	117	e75	1,840	1,940	5,680	6,810	1,860	370	e128
13	144	87	66	78	e77	1,210	1,930	4,700	6,460	1,700	296	140
14	160	72	76	88	e87	997	2,010	4,070	5,940	1,580	266	140
15	69	79	146	77	e92	1,160	1,920	3,560	11,100	1,470	244	131
16	65	75	131	71	e61	1,490	1,790	3,200	20,700	1,370	230	130
17	60	79	118	73	e60	1,890	2,340	2,910	18,400	1,250	229	231
18	71	75	110	76	e63	2,090	5,800	2,680	12,100	1,140	220	165
19	120	74	103	86	e100	1,770	6,550	2,570	10,000	1,060	199	280
20	79	69	47	71	e69	1,450	5,210	3,370	8,580	982	188	434
21	72	72	e41	e51	e76	1,080	4,340	3,870	7,420	932	178	317
22	88	78	e47	e51	e84	956	3,940	3,040	6,680	885	172	230
23	76	75	e52	e52	e91	873	3,610	3,630	6,120	984	163	169
24	85	75	e46	52	e100	850	3,190	3,390	6,030	832	159	156
25	95	70	e36	62	e105	823	3,090	3,210	7,530	749	160	143
26	99	67	e37	49	e118	756	2,940	3,040	8,580	713	149	134
27	91	63	e39	57	128	694	2,720	5,610	9,150	639	148	130
28	91	47	42	78	132	643	2,390	16,300	8,320	590	145	134
29	87	59	e39	116	---	616	2,100	21,500	6,780	541	138	144
30	84	64	e38	84	---	639	1,900	24,000	5,660	575	137	126
31	91	---	e38	e78	---	692	---	25,100	---	540	130	---
Total	2,100	2,531	2,149	2,011	2,438	30,592	70,722	214,200	308,980	55,942	8,264	5,024
Mean	67.7	84.4	69.3	64.9	87.1	987	2,357	6,910	10,300	1,805	267	167
Max	160	207	146	117	132	2,830	6,550	25,100	25,000	4,930	519	434
Min	24	47	36	35	60	131	647	1,690	5,660	540	130	109
Ac-ft	4,170	5,020	4,260	3,990	4,840	60,680	140,300	424,900	612,900	111,000	16,390	9,970
Cfsm	0.02	0.02	0.02	0.02	0.02	0.27	0.65	1.91	2.84	0.50	0.07	0.05
In.	0.02	0.03	0.02	0.02	0.03	0.31	0.73	2.20	3.17	0.57	0.08	0.05

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	1,060	1,008	679	617	1,116	3,055	3,883	5,275	6,450	3,286	1,678	819
Max	5,697	3,230	1,873	1,876	3,437	13,870	9,905	11,870	21,160	11,910	11,830	3,600
(WY)	(2008)	(2010)	(1997)	(2007)	(2009)	(2010)	(1999)	(2007)	(2008)	(2010)	(2010)	(2010)
Min	67.7	84.4	69.3	64.9	87.1	349	277	370	671	242	84.9	63.1
(WY)	(2013)	(2013)	(2013)	(2013)	(2013)	(2000)	(2000)	(2000)	(2000)	(2012)	(2012)	(2012)

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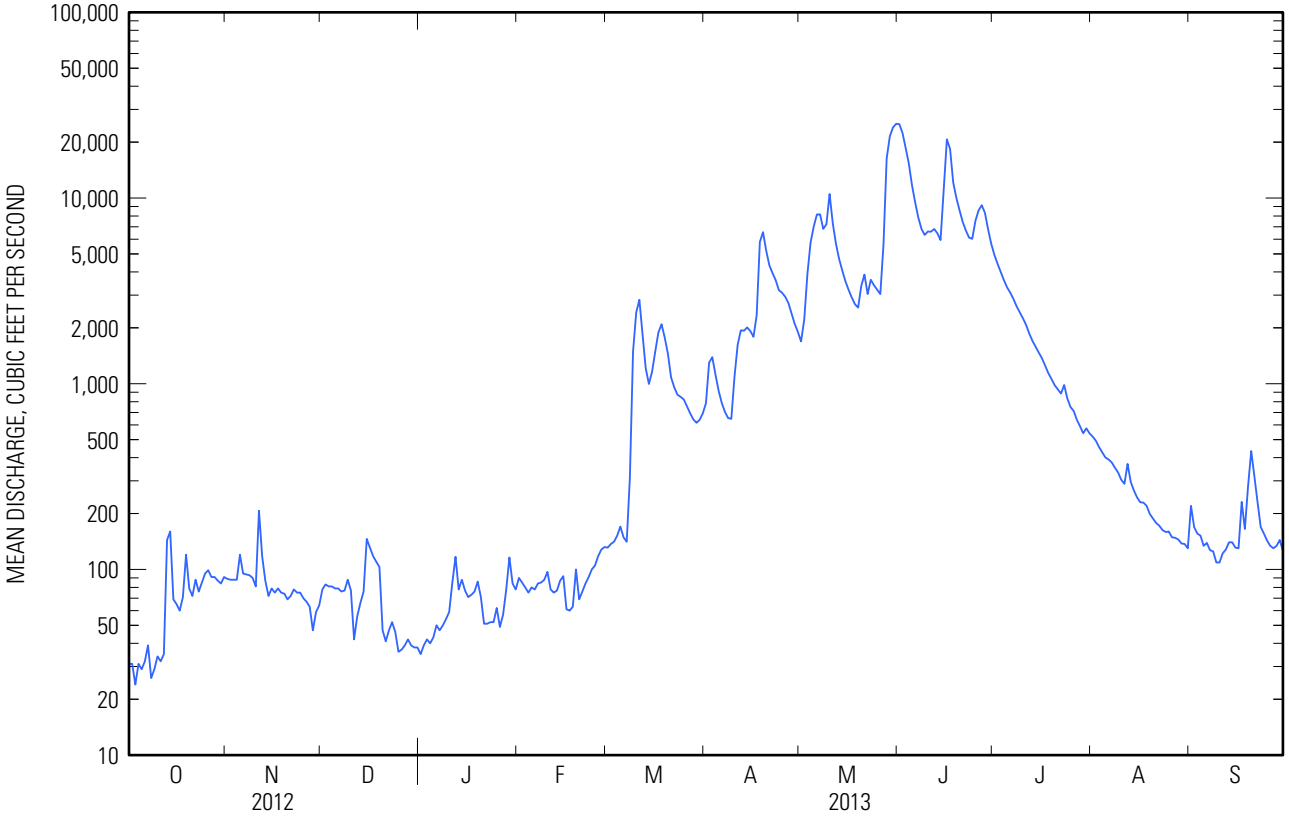
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1997 - 2013	
Annual total	165,387		704,953			
Annual mean	452		1,931		2,413	
Highest annual mean					6,153	2010
Lowest annual mean					381	2000
Highest daily mean	5,670	Apr 15	25,100	May 31	52,800	Jun 13, 2008
Lowest daily mean	24	Oct 3	24	Oct 3	24	Oct 3, 2012
Annual seven-day minimum	29	Sep 30	30	Oct 3	29	Sep 30, 2012
Maximum peak flow			25,600	May 31	56,300	Jun 13, 2008
Maximum peak stage			16.44	Jun 1	24.66	Jun 13, 2008
Annual runoff (ac-ft)	328,000		1,398,000		1,748,000	
Annual runoff (cfsm)	0.125		0.533		0.666	
Annual runoff (inches)	1.70		7.23		9.05	
10 percent exceeds	1,080		6,500		5,820	
50 percent exceeds	192		159		943	
90 percent exceeds	47		52		190