Water-Data Report 2013

05388250 Upper Iowa River near Dorchester, IA

Upper Mississippi-Maquoketa-Plum Basin
Upper Iowa Subbasin

LOCATION.--Lat 43°25′16″, long 91°30′31″ referenced to North American Datum of 1927, in SE ¼ SW ¼ NW ¼ sec.1, T.99 N., R.6 W., Allamakee County, IA, Hydrologic Unit 07060002, on right bank 5 ft upstream from bridge on State Highway 76, 3.5 mi south of Dorchester, 650 ft upstream from Mineral Creek, 0.5 mi upstream from Bear Creek, and 18.3 mi upstream from mouth.

DRAINAGE AREA.--770 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge measurements from September 1936 to September 1938, October 1939 to June 1975; discharge records from October 1938 to September 1939, July 1975 to current year.

GAGE.--Water-stage recorder. Datum of gage is 660.00 ft above National Geodetic Vertical Datum of 1929. Prior to January 6, 1938, non-recording gage at site of old bridge, 0.2 mi upstream, at datum 5.91 ft higher; January 6, 1938, to April 26, 1948, non-recording gage at site of old bridge at datum 60.00 ft lower; April 27, 1948, to August 1963, non-recording gage at site of old bridge at same datum; August 1963 to June 1975, non-recording gage at same site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 31, 1941, reached a stage of 21.8 ft, from flood profile, discharge 30,400 ft^3/s, on basis of slope-area determination of peak flow, at current datum.

05388250 Upper Iowa River near Dorchester, IA—Continued

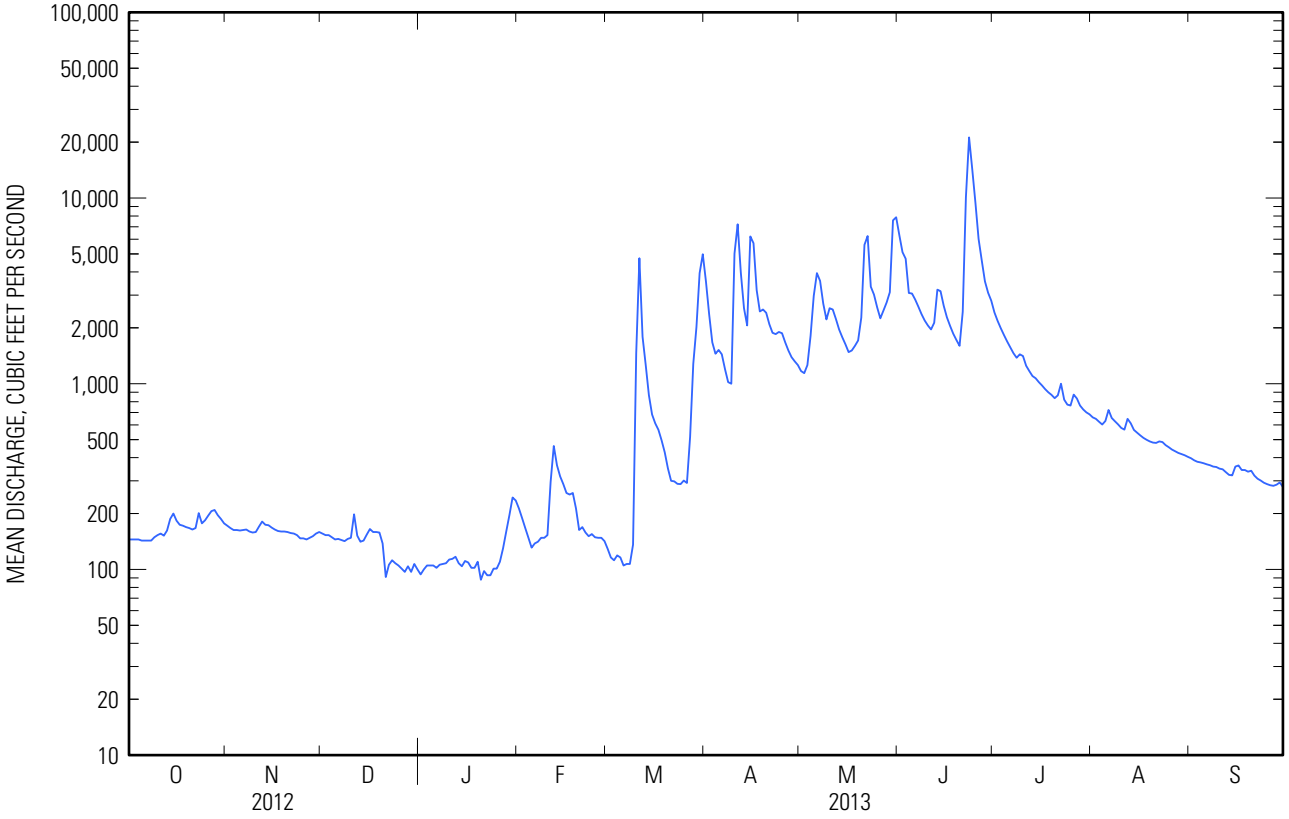
DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	145	172	156	e94	213	e129	3,550	1,170	6,310	2,420	659	397
2	145	167	153	e100	189	e116	2,370	1,140	5,110	2,180	647	387
3	145	163	153	e105	e167	e112	1,670	1,260	4,710	1,990	624	380
4	145	163	149	e105	e148	e119	1,450	1,810	3,080	1,830	603	377
5	143	162	145	e105	e131	e116	1,520	2,970	3,060	1,690	630	373
6	143	163	146	e102	e138	e105	1,440	3,940	2,840	1,570	722	368
7	143	164	144	e106	e141	e107	1,200	3,580	2,600	1,460	654	364
8	143	160	142	e107	e148	e107	1,020	2,700	2,370	1,380	628	358
9	149	158	146	e108	e148	e136	1,000	2,220	2,190	1,440	604	356
10	153	159	148	e113	e153	e1,460	5,020	2,550	2,060	1,410	578	349
11	156	170	198	e114	e296	4,740	7,220	2,510	1,960	1,250	566	346
12	152	181	152	e117	e462	1,790	3,960	2,230	2,130	1,170	647	334
13	162	174	141	e108	e364	1,260	2,550	1,960	3,210	1,100	612	323
14	187	173	143	e104	e317	868	2,060	1,780	3,150	1,070	564	321
15	200	168	154	e111	e288	683	6,210	1,630	2,630	1,020	545	358
16	183	164	165	e109	e258	612	5,710	1,480	2,280	979	527	363
17	174	161	159	e102	e253	565	3,190	1,510	2,050	935	511	343
18	172	160	159	e102	e258	496	2,450	1,600	1,860	899	499	343
19	169	160	158	e110	e213	427	2,510	1,710	1,720	871	489	336
20	167	159	e138	e88	e163	350	2,410	2,270	1,600	836	482	340
21	164	157	e91	e98	e169	300	2,090	5,600	2,440	866	480	320
22	167	156	e106	e93	e158	298	1,880	6,240	10,100	1,000	489	308
23	201	153	e112	e93	e151	289	1,850	3,330	21,200	821	485	301
24	177	147	e108	e101	e155	288	1,900	3,020	14,300	772	467	293
25	184	147	e105	e101	e149	301	1,870	2,580	9,440	763	455	288
26	195	145	e101	e110	e148	292	1,670	2,250	6,020	874	442	284
27	206	e148	e97	e130	e148	518	1,510	2,480	4,610	833	433	282
28	209	151	e104	160	e142	1,280	1,390	2,740	3,560	763	424	286
29	196	156	e97	196	---	2,020	1,320	3,110	3,090	727	418	294
30	187	159	e107	244	---	3,940	1,260	7,580	2,800	701	412	278
31	177	---	e100	235	---	4,980	---	7,880	---	684	404	---
Total	5,239	4,820	4,177	3,671	5,668	28,804	75,250	88,830	134,480	36,304	16,700	10,050
Mean	169	161	135	118	202	929	2,508	2,865	4,483	1,171	539	335
Max	209	181	198	244	462	4,980	7,220	7,880	21,200	2,420	722	397
Min	143	145	91	88	131	105	1,000	1,140	1,600	684	404	278
Ac-ft	10,390	9,560	8,290	7,280	11,240	57,130	149,300	176,200	266,700	72,010	33,120	19,930
Cfsm	0.22	0.21	0.17	0.15	0.26	1.21	3.26	3.72	5.82	1.52	0.70	0.44
In.	0.25	0.23	0.20	0.18	0.27	1.39	3.64	4.29	6.50	1.75	0.81	0.49

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	420	411	326	258	388	991	1,104	919	1,078	688	568	451
Max	2,045	1,476	1,421	836	1,400	2,219	3,973	2,865	4,837	3,318	3,702	1,334
(WY)	(1987)	(1983)	(1983)	(1983)	(1984)	(2011)	(1993)	(2013)	(2008)	(1993)	(1993)	(1986)
Min	116	125	99.9	96.7	112	221	225	175	123	92.9	112	77.5
(WY)	(1990)	(1990)	(1990)	(1977)	(1978)	(2003)	(1977)	(1977)	(1977)	(1939)	(1989)	(1939)

05388250 Upper Iowa River near Dorchester, IA—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1939 - 2013	
Annual total	93,926		413,993			
Annual mean	257		1,134		636	
Highest annual mean					1,726	1993
Lowest annual mean					178	1977
Highest daily mean	1,410	Mar 1	21,200	Jun 23	28,400	Jun 9, 2008
Lowest daily mean	91	Dec 21	88	Jan 20	30	Sep 23, 1939
Annual seven-day minimum	102	Dec 25	98	Jan 19	49	Sep 20, 1939
Maximum peak flow			25,500	Jun 23	31,200	Jun 9, 2008
Maximum peak stage			20.02	Jun 23	22.46	Jun 9, 2008
Annual runoff (ac-ft)	186,300		821,200		460,700	
Annual runoff (cfsm)	0.333		1.47		0.826	
Annual runoff (inches)	4.54		20.00		11.22	
10 percent exceeds	441		2,820		1,370	
50 percent exceeds	194		349		370	
90 percent exceeds	145		112		147