Water-Data Report 2012

06602400 Monona-Harrison Ditch near Turin, IA

Missouri-Little Sioux Basin
Monona-Harrison Ditch Subbasin

LOCATION.--Lat 41°57′52″, long 95°59′30″ referenced to North American Datum of 1927, in NW ¼ NW ¼ NE ¼ sec.32, T.83 N., R.44 W., Monona County, IA, Hydrologic Unit 10230004, on left bank on upstream side of bridge on County Highway E54, 1.0 mi west of gaging station Little Sioux River near Turin (station 06607500), 4.0 mi southwest of Turin, and 12.5 mi upstream from mouth.

DRAINAGE AREA.--900 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from May 1942 to current year. Records for May 1942 to January 1958 are not equivalent owing to diversion from Little Sioux River through equalizer ditch 1.5 mi upstream. Records prior to 1950 are not equivalent owing to diversion to Little Sioux River through diversion ditch 10.2 mi upstream.

REVISED RECORDS.--WSP 1440: Drainage area. WSP 1560: Drainage area. WDR IA-95-1: Period of record.

GAGE.--Water-stage recorder. Datum of gage is 1,015.00 ft above National Geodetic Vertical Datum of 1929 (U.S. Army Corps of Engineers benchmark). May 7, 1942, to October 13, 1953, non-recording gage, and October 14, 1953, to September 30, 1975, water-stage recorder, both at same site at datum 5.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. Monona-Harrison Ditch is a dug channel and is a continuation of West Fork Ditch, paralleling the Little Sioux River, and discharging into the Missouri River 1.5 mi upstream from the mouth of the Little Sioux River. U.S. Geological Survey data collection platform with satellite telemetry at station.

06602400 Monona-Harrison Ditch near Turin, IA—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

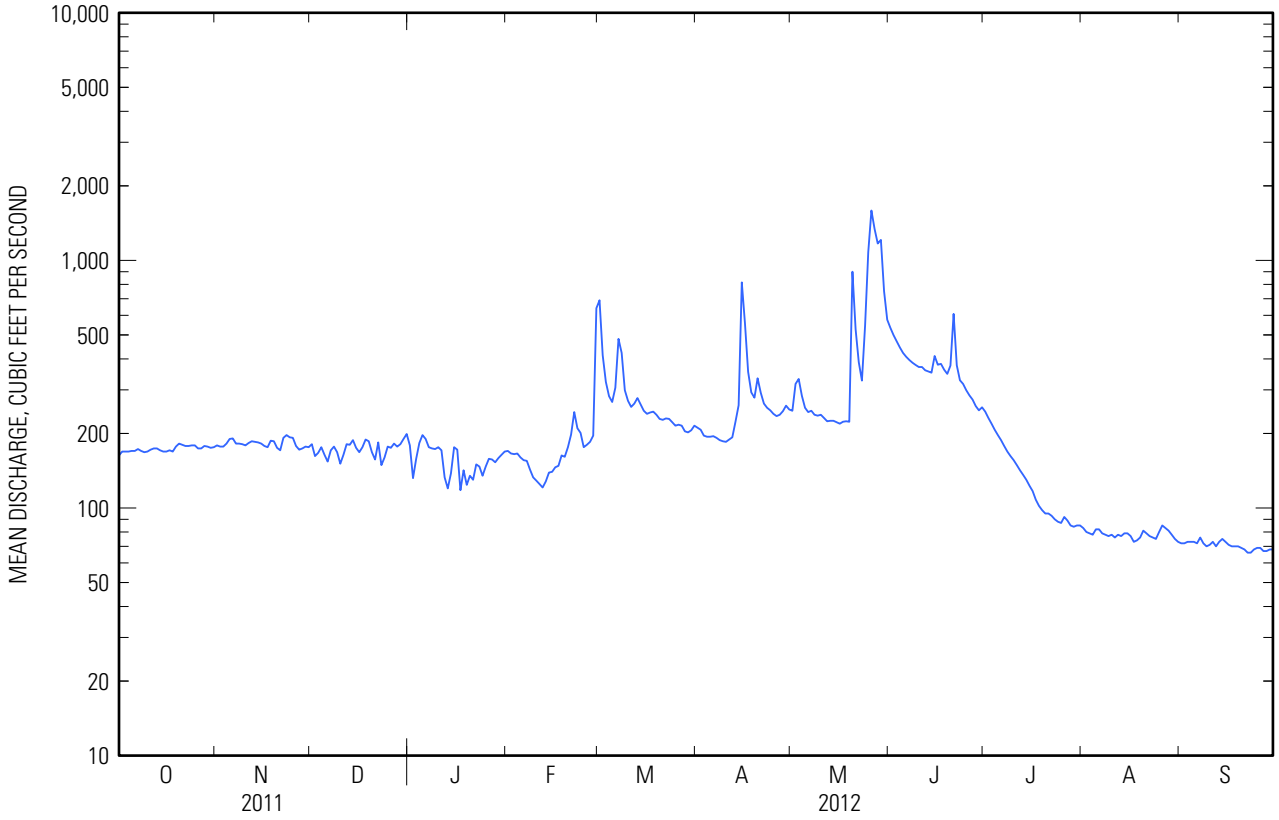
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e163	179	181	179	170	690	211	247	534	245	83	72
2	169	177	162	132	166	414	207	317	499	231	80	72
3	169	177	167	158	165	323	196	332	471	219	79	73
4	169	182	176	183	166	283	194	284	445	207	78	73
5	170	190	164	197	160	268	194	254	423	197	82	73
6	170	191	154	190	156	306	195	244	408	188	82	72
7	173	182	171	176	155	482	192	247	396	178	79	76
8	170	182	e177	174	143	423	188	238	386	169	78	72
9	168	181	e168	173	133	299	186	236	378	162	77	70
10	169	179	e151	176	e129	271	185	238	371	156	78	71
11	172	183	e164	171	e125	256	189	231	371	149	76	73
12	174	186	e181	133	e121	264	193	224	360	142	78	70
13	174	185	e180	e120	e128	278	223	225	356	136	77	73
14	171	184	e188	e138	e139	262	260	225	352	130	79	75
15	169	182	e175	176	e140	247	815	222	411	123	79	73
16	169	178	e168	172	e146	240	557	219	379	117	77	71
17	171	176	176	e118	e148	243	355	223	382	108	73	70
18	169	187	189	e142	163	245	293	224	362	102	74	70
19	177	186	186	e124	161	238	279	223	348	98	76	70
20	182	175	e168	e135	176	229	334	900	376	95	81	69
21	180	171	157	e130	198	227	292	527	608	95	79	68
22	178	192	184	e150	244	230	264	388	377	93	77	66
23	178	197	e149	e147	210	229	254	327	328	90	76	66
24	179	193	e160	e135	201	222	248	546	317	88	75	68
25	179	192	e177	e147	176	215	240	1,080	299	87	80	69
26	174	178	e175	e158	180	217	235	1,590	285	92	85	69
27	174	172	182	e157	185	215	238	1,340	274	89	83	67
28	178	174	e177	e153	196	204	246	1,170	258	85	81	67
29	177	177	181	e159	641	202	259	1,210	248	84	78	68
30	175	176	190	164	---	206	250	751	255	85	75	68
31	176	---	199	169	---	215	---	576	---	85	73	---
Total	5,366	5,464	5,377	4,836	5,221	8,643	7,972	15,058	11,257	4,125	2,428	2,114
Mean	173	182	173	156	180	279	266	486	375	133	78.3	70.5
Max	182	197	199	197	641	690	815	1,590	608	245	85	76
Min	163	171	149	118	121	202	185	219	248	84	73	66
Ac-ft	10,640	10,840	10,670	9,590	10,360	17,140	15,810	29,870	22,330	8,180	4,820	4,190
Cfsm	0.19	0.20	0.19	0.17	0.20	0.31	0.30	0.54	0.42	0.15	0.09	0.08
In.	0.22	0.23	0.22	0.20	0.22	0.36	0.33	0.62	0.47	0.17	0.10	0.09

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1959 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	172	152	129	107	234	496	435	431	602	373	207	156
Max	831	426	421	398	1,963	2,044	1,588	1,157	3,833	2,107	883	576
(WY)	(1993)	(2010)	(1985)	(1973)	(1971)	(2010)	(1965)	(1995)	(1984)	(1993)	(1996)	(1993)
Min	16.0	18.0	11.4	10.5	13.9	46.9	41.1	43.7	71.8	46.1	30.6	30.8
(WY)	(1959)	(1959)	(1959)	(1959)	(1959)	(1968)	(1968)	(1968)	(1989)	(1976)	(1976)	(1981)

06602400 Monona-Harrison Ditch near Turin, IA—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1959 - 2012[a]	
Annual total	153,677		77,861			
Annual mean	421		213		291	
Highest annual mean					798	1993
Lowest annual mean					55.5	1968
Highest daily mean	3,040	Feb 21	1,590	May 26	18,000	Feb 19, 1971
Lowest daily mean	149	Dec 23	66	Sep 22[b]	8.5	Jan 3, 1959[c]
Annual seven-day minimum	164	Dec 5	67	Sep 22	8.5	Jan 3, 1959
Maximum peak flow			2,310	May 26	19,900	Feb 19, 1971
Maximum peak stage			11.85	May 26	[d]23.03	Feb 19, 1971
Instantaneous low flow			65	Sep 21[e]		
Annual runoff (ac-ft)	304,800		154,400		210,900	
Annual runoff (cfsm)	0.468		0.236		0.324	
Annual runoff (inches)	6.35		3.22		4.40	
10 percent exceeds	676		361		545	
50 percent exceeds	277		177		149	
90 percent exceeds	175		76		43	

[a] Post closure of diversion from Little Sioux River.
[b] Also Sep 23.
[c] Also Jan 4-11, 1959.
[d] At datum in use prior to Oct 1, 1975.
[e] Also Sep 22, 23.