Water-Data Report 2012

06898000 Thompson River at Davis City, IA

Grand Basin
Thompson Subbasin

LOCATION.--Lat 40°38′25″, long 93°48′29″ referenced to North American Datum of 1927, in NE ¼ SE ¼ SE ¼ sec.35, T.68 N., R.26 W., Decatur County, IA, Hydrologic Unit 10280102, on right bank 15 ft downstream from bridge on U.S. Highway 69 in Davis City, 3.1 mi upstream from Dickersons Branch, and 5.8 mi upstream from Iowa-Missouri state line.

DRAINAGE AREA.--701 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from May 1918 to July 1925, July 1941 to current year. Prior to October 1918, published as "Grand River." May 1918 to July 1925, monthly mean discharge for some periods published in WSP 1310.

REVISED RECORDS.--WSP 1240: 1918, 1920-21 (M), 1922-24, 1925 (M), 1946-47 (M). WSP 1440: Drainage area. WSP 1710: 1957.

GAGE.--Water-stage recorder. Datum of gage is 874.04 ft above National Geodetic Vertical Datum of 1929. May 14, 1918, to July 2, 1925, and July 14, 1941, to February 24, 1942, non-recording gage at same site at datum 2.00 ft higher; February 25, 1942, to February 8, 1967, water-stage recorder at same site at datum 2.00 ft higher.

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 August 8, 1885, reached a stage of 22.8 ft, datum in use prior to February 9, 1967, from floodmark, discharge 30,000 ft^3/s.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 06898000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/06898000.2012.pdf

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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	16	25	53	105	65	402	806	348	97	36	10	11
2	17	40	51	e80	68	387	576	1,400	101	33	9.7	9.5
3	16	54	103	e56	73	326	439	1,670	94	31	9.6	9.7
4	16	82	1,290	68	88	254	362	1,230	90	30	10	9.2
5	16	68	657	85	115	214	330	778	81	28	9.2	8.1
6	16	65	316	e82	93	202	275	602	75	26	15	7.3
7	23	62	136	e78	82	193	241	620	68	25	19	7.1
8	20	76	e104	e72	87	175	219	619	62	24	17	6.2
9	17	130	e101	e70	63	160	204	534	57	23	17	5.6
10	16	278	e88	71	47	146	187	419	54	21	18	5.6
11	16	228	e84	e69	e37	135	169	359	56	20	20	5.0
12	17	162	78	48	e36	156	157	316	53	19	17	4.7
13	16	125	69	e41	39	190	350	281	60	19	13	5.3
14	16	104	536	60	36	190	1,320	255	68	19	11	5.8
15	17	92	1,960	55	38	178	5,090	233	58	18	11	5.7
16	19	91	718	49	46	161	8,520	217	72	18	10	5.8
17	20	85	393	45	49	149	6,330	204	182	21	9.7	6.7
18	20	76	264	e50	58	141	2,360	187	97	19	9.7	5.9
19	20	70	205	e38	62	185	1,160	172	65	17	9.6	5.6
20	21	67	185	e29	73	1,190	1,210	160	56	17	9.5	6.1
21	20	64	173	e30	95	1,170	1,120	149	72	15	9.3	5.4
22	19	64	148	31	198	1,230	788	139	53	14	9.0	4.6
23	19	64	e111	32	312	1,130	643	132	49	13	8.7	4.3
24	20	63	e109	e31	542	753	561	127	61	12	8.7	4.6
25	21	62	e112	34	729	557	497	123	97	12	9.0	4.0
26	20	63	e106	39	483	436	445	147	69	13	175	4.6
27	e19	63	e116	44	373	367	394	139	63	12	37	4.1
28	e18	63	e111	50	335	313	365	115	56	11	29	3.9
29	18	58	107	54	461	292	335	101	45	12	20	3.8
30	17	56	113	57	---	2,380	345	93	39	12	14	4.3
31	18	---	119	62	---	1,580	---	94	---	11	12	---
Total	564	2,600	8,716	1,715	4,783	15,342	35,798	11,963	2,150	601	586.7	179.5
Mean	18.2	86.7	281	55.3	165	495	1,193	386	71.7	19.4	18.9	5.98
Max	23	278	1,960	105	729	2,380	8,520	1,670	182	36	175	11
Min	16	25	51	29	36	135	157	93	39	11	8.7	3.8
Ac-ft	1,120	5,160	17,290	3,400	9,490	30,430	71,010	23,730	4,260	1,190	1,160	356
Cfsm	0.03	0.12	0.40	0.08	0.24	0.71	1.70	0.55	0.10	0.03	0.03	0.01
In.	0.03	0.14	0.46	0.09	0.25	0.81	1.90	0.63	0.11	0.03	0.03	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1919 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	186	209	151	155	327	668	712	755	729	439	208	305
Max	2,138	1,462	1,299	1,292	1,849	2,519	2,586	3,364	4,750	7,239	2,255	5,178
(WY)	(1974)	(1962)	(1983)	(1960)	(1973)	(2010)	(1973)	(1996)	(1947)	(1993)	(1987)	(1992)
Min	1.41	2.07	0.94	0.62	1.14	10.7	2.55	1.19	3.08	1.98	6.16	3.87
(WY)	(1957)	(1956)	(1956)	(1956)	(1956)	(1954)	(1956)	(1956)	(1956)	(1977)	(2003)	(2003)

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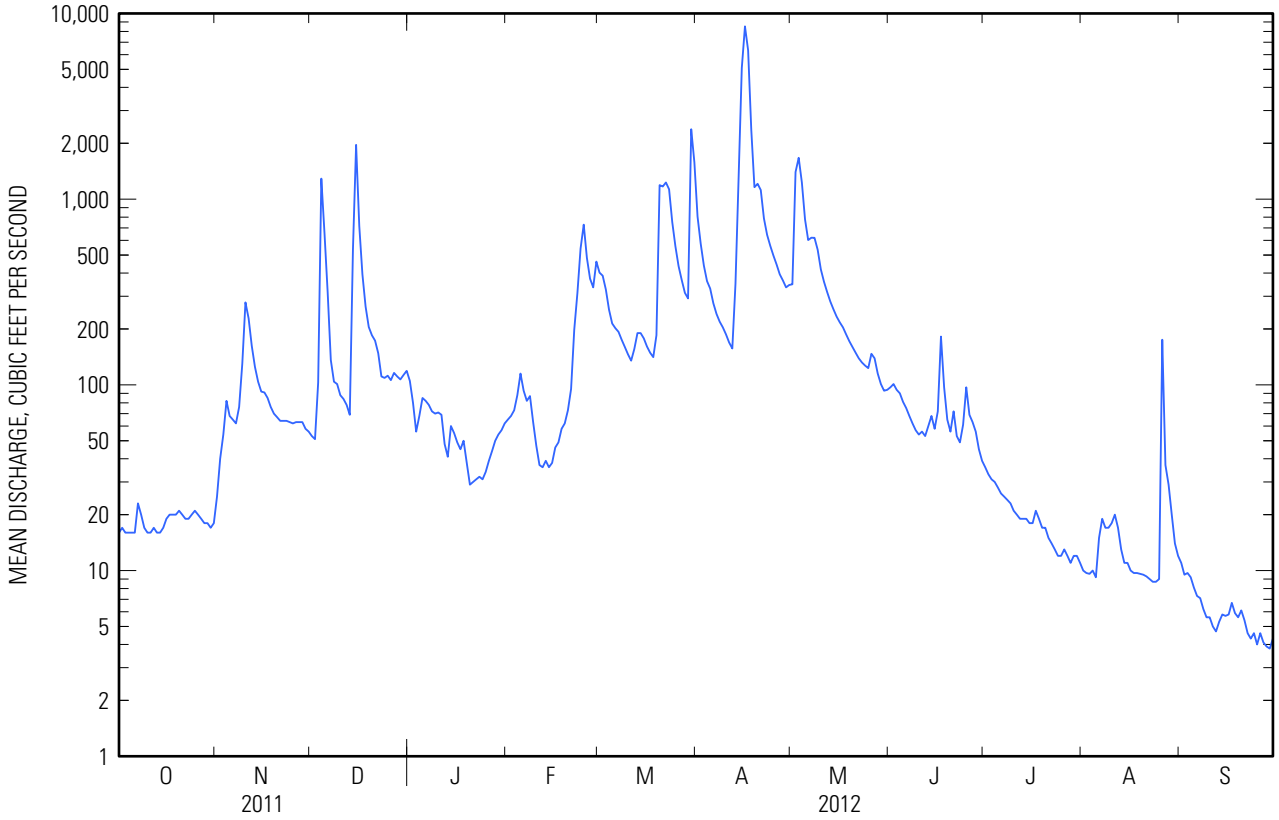
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1919 - 2012	
Annual total	249,569		84,998.2			
Annual mean	684		232		406	
Highest annual mean					1,469	1993
Lowest annual mean					28.6	2000
Highest daily mean	9,670	May 26	8,520	Apr 16	52,900	Sep 16, 1992
Lowest daily mean	16	Oct 1	3.8	Sep 29	0.10	Jun 25, 1956
Annual seven-day minimum	16	Sep 30	4.2	Sep 23	0.36	Jun 19, 1956
Maximum peak flow			9,260	Apr 16	57,000	Sep 16, 1992
Maximum peak stage			9.68	Apr 16	24.29	Sep 16, 1992
Instantaneous low flow			3.5	Sep 25[a]	3.5	Sep 25, 2012
Annual runoff (ac-ft)	495,000		168,600		294,200	
Annual runoff (cfsm)	0.975		0.331		0.579	
Annual runoff (inches)	13.24		4.51		7.87	
10 percent exceeds	1,860		508		878	
50 percent exceeds	213		64		85	
90 percent exceeds	22		9.6		9.3	

[a] Also Sep 27-29.