Water-Data Report 2012

05470500 Squaw Creek at Ames, IA

Upper Mississippi-Skunk-Wapsipinicon Basin
South Skunk Subbasin

LOCATION.--Lat 42°01′23″, long 93°37′49″ referenced to North American Datum of 1927, in SE ¼ SE ¼ SW ¼ sec.3, T.83 N., R.24 W., Story County, IA, Hydrologic Unit 07080105, on left bank 65 ft downstream from bridge on Lincoln Way in Ames, 0.2 mi downstream from College Creek, and 2.5 mi upstream from mouth.

DRAINAGE AREA.--204 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Discharge records from May 1919 to September 1927, May 1965 to current year. December 1925 to September 1927, monthly mean discharge for some periods published in WSP 1308.

REVISED RECORDS.--WSP 1308: Drainage area, 1920-22 (M), 1923, 1924-25 (M), 1926, 1927 (M). WDR IA-66-1: 1965. WDR IA-71-1: 1970 (M).

GAGE.--Water-stage recorder and concrete control. Datum of gage is 881.00 ft above National Geodetic Vertical Datum of 1929 (levels by Iowa State University). Prior to March 11, 1925, non-recording gage at site 0.6 mi upstream at different datum; March 11, 1925, to April 30, 1927, non-recording gage at site 65 ft upstream at datum about 4 ft higher.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 4, 1918, reached a stage of 14.50 ft, from floodmarks, at site and datum in use prior to March 11, 1925, discharge 6,900 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 05470500, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/05470500.2012.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	0.00	7.1	2.6	4.5	4.8	47	31	131	56	9.6	0.34	0.00
2	e0.10	16	1.8	e1.3	4.8	39	28	172	46	8.3	0.04	0.00
3	0.53	7.4	12	e1.8	4.9	31	25	226	43	7.3	0.00	0.00
4	13	4.1	7.4	3.2	5.5	22	22	191	40	6.3	57	0.00
5	7.7	3.8	e3.5	3.5	4.7	26	21	167	35	26	8.8	3.1
6	e0.48	2.4	e1.7	3.8	4.4	30	20	181	33	6.5	5.7	0.07
7	e0.10	2.3	e1.9	3.7	4.3	31	20	203	31	5.0	3.4	31
8	e0.03	24	e2.4	3.5	e3.4	29	19	203	30	3.0	23	6.5
9	e0.08	39	e1.6	3.4	e3.5	26	18	180	27	2.4	8.2	4.4
10	e0.20	7.2	e1.5	3.8	e3.2	23	17	165	24	1.9	5.0	1.8
11	0.53	4.7	e1.9	3.6	e2.7	25	17	153	28	1.3	2.4	0.13
12	12	3.7	e2.4	2.6	e2.1	34	16	140	20	0.84	0.98	0.00
13	4.1	3.0	3.8	e2.1	e2.5	27	29	133	17	2.1	0.25	8.3
14	3.4	2.7	16	e1.8	3.7	25	82	130	16	1.3	0.07	3.5
15	3.8	2.5	11	2.6	3.8	24	319	125	50	1.0	0.00	0.69
16	3.9	2.8	5.5	3.0	3.9	23	265	117	61	0.73	0.00	0.00
17	3.4	2.6	6.3	e2.4	4.1	22	202	116	46	0.64	0.00	0.00
18	3.4	2.5	5.4	e1.9	4.0	21	181	111	32	0.63	0.00	0.00
19	3.7	2.8	5.6	e1.7	3.9	24	171	103	24	e0.11	0.00	0.00
20	4.8	3.1	4.7	e1.2	5.3	32	199	99	31	0.00	0.00	0.00
21	5.1	2.9	5.6	e0.73	6.6	31	215	92	62	0.02	0.00	0.00
22	4.7	3.0	4.5	e0.88	6.1	34	183	89	45	0.00	0.00	0.00
23	4.8	3.0	3.4	e1.1	8.3	32	159	90	45	0.00	0.00	0.00
24	4.8	2.9	e3.3	e1.4	7.6	33	149	92	38	0.00	0.00	0.00
25	5.1	2.9	e3.6	e1.6	5.3	29	141	93	26	1.7	0.46	0.00
26	5.7	3.4	3.9	e2.7	5.1	26	125	89	18	4.2	0.55	0.00
27	5.5	2.6	4.3	3.2	5.4	25	112	81	15	0.48	0.00	0.00
28	5.3	2.5	3.8	3.1	8.7	24	128	71	13	16	0.00	0.00
29	5.5	2.9	4.6	3.3	42	26	120	64	12	12	0.00	0.00
30	5.7	3.2	7.0	3.8	---	55	123	58	11	5.1	0.00	0.00
31	6.4	---	5.4	4.4	---	36	---	97	---	2.2	0.00	---
Total	123.85	173.0	148.4	81.61	174.6	912	3,157	3,962	975	126.65	116.19	59.49
Mean	4.00	5.77	4.79	2.63	6.02	29.4	105	128	32.5	4.09	3.75	1.98
Max	13	39	16	4.5	42	55	319	226	62	26	57	31
Min	0.00	2.3	1.5	0.73	2.1	21	16	58	11	0.00	0.00	0.00
Ac-ft	246	343	294	162	346	1,810	6,260	7,860	1,930	251	230	118
Cfsm	0.02	0.03	0.02	0.01	0.03	0.14	0.52	0.63	0.16	0.02	0.02	0.01
In.	0.02	0.03	0.03	0.01	0.03	0.17	0.58	0.72	0.18	0.02	0.02	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1920 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	81.8	83.8	56.8	41.0	95.8	219	234	263	326	176	109	78.5
Max	505	491	372	275	465	844	796	817	1,145	2,128	1,734	568
(WY)	(1974)	(1973)	(1983)	(1973)	(1973)	(2010)	(1999)	(1990)	(2008)	(1993)	(2010)	(1926)
Min	0.30	0.63	0.00	0.00	0.09	2.51	4.32	1.42	2.97	3.61	0.95	0.07
(WY)	(2001)	(1967)	(1977)	(1977)	(1977)	(1981)	(1977)	(1981)	(1977)	(1927)	(1989)	(1971)

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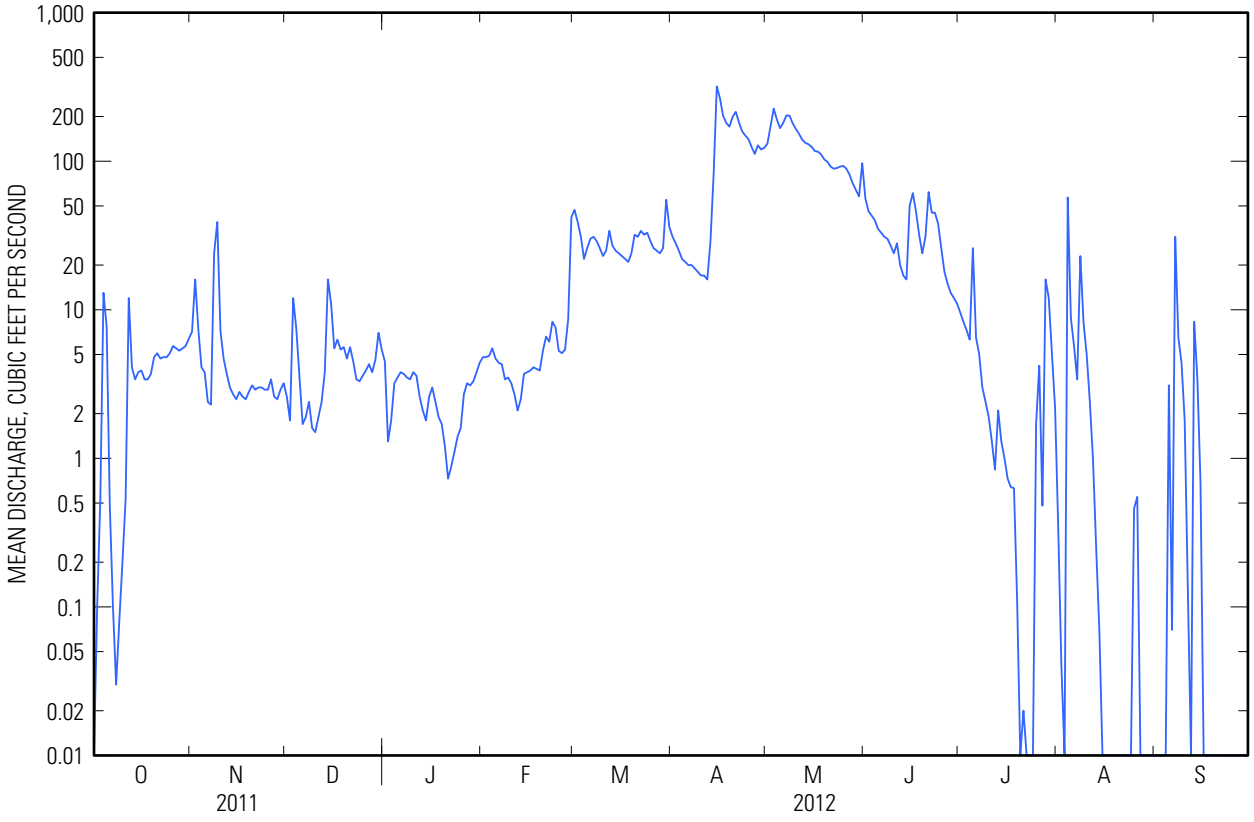
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1920 - 2012	
Annual total	38,550.38		10,009.79			
Annual mean	106		27.3		148	
Highest annual mean					528	1993
Lowest annual mean					13.6	1981
Highest daily mean	931	Apr 26	319	Apr 15	15,900	Aug 11, 2010
Lowest daily mean	0.00	Sep 30	0.00	Many days	0.00	Many days
Annual seven-day minimum	0.89	Sep 11	0.00	Many days	0.00	Many days
Maximum peak flow			453	Apr 14	24,300	Jul 9, 1993
Maximum peak stage			3.13	Apr 14	18.54	Jul 9, 1993
Instantaneous low flow			0.00	Many days	0.00	Many days
Annual runoff (ac-ft)	76,460		19,850		106,900	
Annual runoff (cfsm)	0.518		0.134		0.723	
Annual runoff (inches)	7.03		1.83		9.83	
10 percent exceeds	294		98		356	
50 percent exceeds	45		4.8		48	
90 percent exceeds	2.5		0.00		2.0