Water-Data Report 2013

05420680 Wapsipinicon River near Tripoli, IA

Upper Mississippi-Skunk-Wapsipinicon Basin
Upper Wapsipinicon Subbasin

LOCATION.--Lat 42°50′10″, long 92°15′26″ referenced to North American Datum of 1927, in NW ¼ SW ¼ SW ¼ sec.27, T.93 N., R.12 W., Bremer County, IA, Hydrologic Unit 07080102, on right bank 10 ft downstream from bridge on State Highway 93, 2.0 mi north of Tripoli, 1.0 mi upstream from mouth of East Fork Wapsipinicon River, and 208 mi upstream from mouth.

DRAINAGE AREA.--346 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Partial-record low-flow measurement site from September 1957 to July 1977; stage-only records from May to September 2000, October 2004 to September 2006; discharge records from April 1996 to September 1998, October 2000 to September 2004, October 2006 to current year.

REVISED RECORDS.--WDR-IA-98-1: 1997 (M). WDR-US-2009: Datum.

GAGE.--Water stage recorder. Datum of gage is 986.42 ft above National Geodetic Vertical Datum of 1929.

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 July 1, 1969, discharge about 18,900 ft^3/s, gage height 17.26 ft. Flood of July 21, 1999, discharge 19,400 ft^3/s, gage height 18.50 ft.

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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	6.7	23	19	e20	e28	e57	e707	386	3,030	749	57	46
2	6.5	22	20	e21	e25	e49	e668	377	3,610	596	56	43
3	5.8	21	21	e20	e24	e56	e615	485	2,530	511	53	41
4	6.1	21	20	e20	e23	e55	e678	938	1,800	441	52	40
5	6.2	20	19	e20	e25	e53	e440	1,690	1,440	381	65	39
6	5.9	20	19	e20	e27	e50	e326	2,190	1,350	328	82	38
7	5.8	20	19	e21	e31	e44	e292	2,760	1,320	281	260	37
8	6.2	20	18	e20	e29	e64	e263	2,550	1,210	243	360	36
9	6.8	20	33	e20	e31	e85	e321	2,150	917	218	241	35
10	7.4	20	30	e18	e33	e420	558	1,740	706	206	178	34
11	7.5	24	32	e19	e55	e1,110	991	1,560	607	202	143	36
12	10	31	20	e19	e148	e1,770	1,550	1,420	565	183	121	33
13	13	35	19	e19	e124	e2,150	2,030	968	586	162	133	31
14	35	29	20	e20	e156	e1,700	2,040	676	1,110	154	313	30
15	37	27	23	e19	e142	e1,280	1,710	554	2,560	142	262	32
16	32	26	29	e19	e140	e957	1,730	478	2,580	130	178	33
17	23	24	33	e17	e131	e664	2,280	426	1,840	117	141	36
18	20	24	27	e18	e103	e505	2,560	386	1,080	107	118	37
19	19	25	26	e21	e48	e417	2,310	409	708	98	102	38
20	20	23	41	e18	e56	e349	1,760	537	579	91	91	38
21	18	23	e32	e14	e63	e299	1,430	651	547	86	82	36
22	20	22	e27	e17	e65	e261	1,120	941	537	84	83	34
23	20	21	e24	e17	e62	237	865	2,570	538	80	85	32
24	20	20	e22	e14	e57	266	869	2,300	612	75	90	31
25	22	19	e20	e15	e59	261	889	1,630	1,150	73	80	30
26	22	19	e21	e17	e58	207	779	1,100	2,000	82	72	29
27	26	21	e21	e27	e60	201	633	1,030	2,650	76	59	29
28	37	17	e20	e37	e61	e180	532	1,280	2,730	66	56	28
29	36	17	e20	e44	---	e217	463	1,650	1,980	64	53	27
30	29	18	e20	e38	---	e410	423	2,400	1,200	62	50	27
31	25	---	e19	e33	---	e599	---	2,680	---	60	48	---
Total	554.9	672	734	662	1,864	14,973	31,832	40,912	44,072	6,148	3,764	1,036
Mean	17.9	22.4	23.7	21.4	66.6	483	1,061	1,320	1,469	198	121	34.5
Max	37	35	41	44	156	2,150	2,560	2,760	3,610	749	360	46
Min	5.8	17	18	14	23	44	263	377	537	60	48	27
Ac-ft	1,100	1,330	1,460	1,310	3,700	29,700	63,140	81,150	87,420	12,190	7,470	2,050
Cfsm	0.05	0.06	0.07	0.06	0.19	1.40	3.07	3.81	4.25	0.57	0.35	0.10
In.	0.06	0.07	0.08	0.07	0.20	1.61	3.42	4.40	4.74	0.66	0.40	0.11

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1996 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	168	105	69.6	75.8	141	625	682	637	766	268	142	80.3
Max	950	498	165	217	543	1,437	1,733	1,406	2,667	787	854	319
(WY)	(2008)	(2010)	(2010)	(2007)	(2011)	(2010)	(2008)	(2004)	(2008)	(2010)	(2007)	(2007)
Min	16.2	22.4	23.7	17.8	21.1	51.3	161	174	84.3	20.2	14.4	8.07
(WY)	(2004)	(2013)	(2013)	(2004)	(2003)	(2003)	(2004)	(1996)	(2012)	(2012)	(2012)	(2012)

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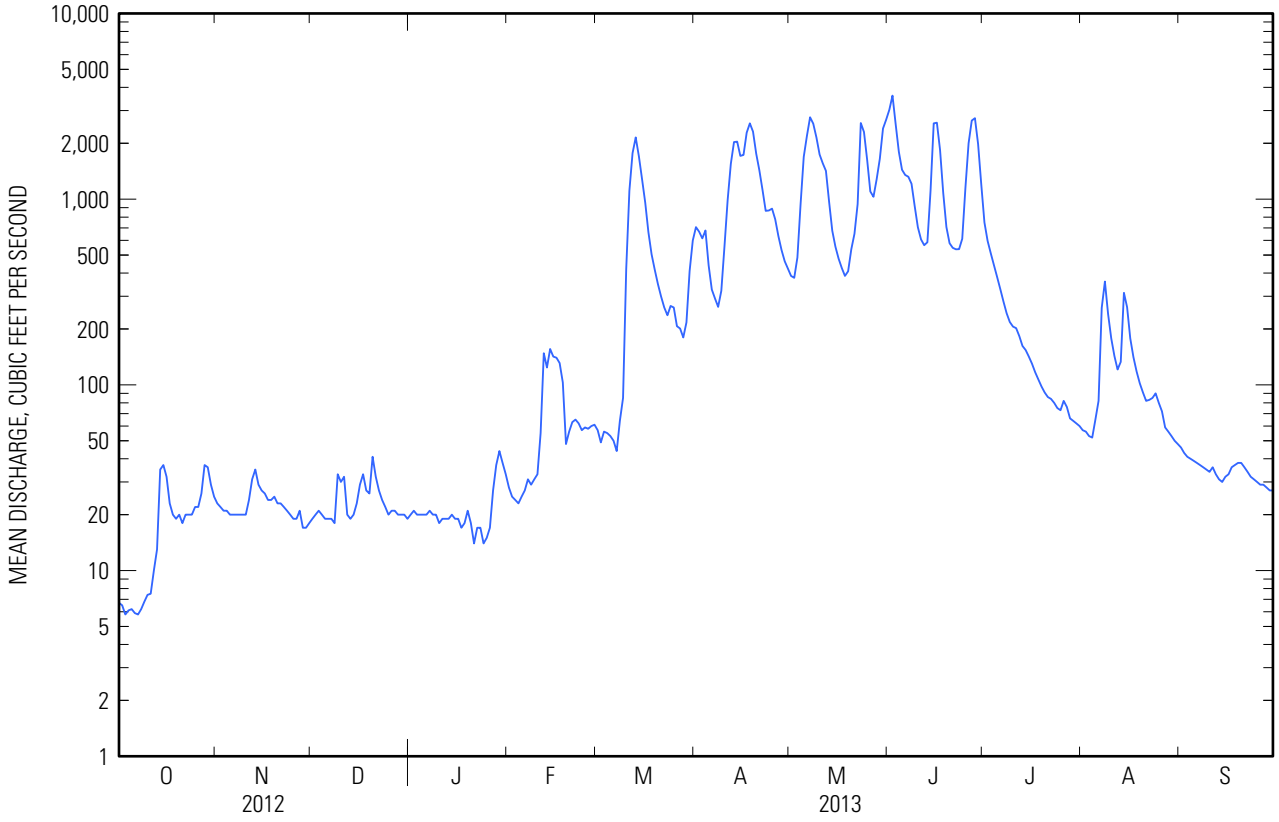
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1996 - 2013	
Annual total	33,744.3		147,223.9			
Annual mean	92.2		403		317	
Highest annual mean					630	2008
Lowest annual mean					96.1	2012
Highest daily mean	1,240	May 8	3,610	Jun 2	13,700	Jun 10, 2008
Lowest daily mean	5.8	Oct 3	5.8	Oct 3[a]	5.8	Oct 3, 2012
Annual seven-day minimum	6.1	Oct 2	6.1	Oct 2	6.1	Oct 2, 2012
Maximum peak flow			4,050	Jun 2	19,400	Jul 21, 1999
Maximum peak stage			14.33	Jun 2	18.50	Jul 21, 1999
Instantaneous low flow			5.5	Oct 3[a]		
Annual runoff (ac-ft)	66,930		292,000		229,900	
Annual runoff (cfsm)	0.266		1.17		0.917	
Annual runoff (inches)	3.63		15.83		12.46	
10 percent exceeds	197		1,480		832	
50 percent exceeds	34		58		95	
90 percent exceeds	9.0		19		26	

[a] Also Oct 7.