Water-Data Report 2013

03379500 LITTLE WABASH RIVER BELOW CLAY CITY, IL

Wabash Basin
Little Wabash Subbasin

LOCATION.--Lat 38°38′05″, long 88°17′50″ referenced to North American Datum of 1927, in SE ¼ sec.3, T.2 N., R.8 E., Clay County, IL, Hydrologic Unit 05120114, on left bank of bridge on County Highway 23, 0.3 mi downstream from Big Muddy Creek, 5 mi southeast of Clay City, and at mile 128.5.

DRAINAGE AREA.--1,131 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.—
SURFACE-WATER DISCHARGE AND STAGE
DISCHARGE: August 1914 to current year. Prior to October 1958, published as "at Wilcox." Monthly discharge only for some periods, published in WSP 1305.
STAGE: Water years 1994 to current year.
SURFACE-WATER QUALITY
CHEMICAL: Water years 1979-91.

REVISED RECORDS.--WSP 973: 1937-40. WSP 1335: 1915-33, 1934(M), 1935, 1940, 1941(M), 1946(M). WSP 1625: 1958. WDR IL-75-1: Drainage area.

GAGE.--Water-stage recorder and satellite telemeter. Datum of gage is 392.29 ft above NGVD of 1929 (391.91 ft NAVD 1988). Prior to Jan. 2, 1947, nonrecording gage at highway bridge 300 ft upstream at same datum.

REMARKS.--Discharge records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--
SURFACE-WATER DISCHARGE AND STAGE: Maximum discharge, 47,000 ft^3/s, Jan. 5, 1950, gage height, 26.67 ft; no flow Sept. 3-19, 1954.

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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	92	74	26	e124	6,730	4,610	893	3,000	4,470	4,900	220	24
2	62	56	24	e118	5,170	4,400	691	1,650	8,300	10,500	314	24
3	44	45	24	e107	4,600	4,650	542	833	11,200	11,700	207	25
4	35	37	30	e97	4,440	3,960	421	2,320	11,500	8,740	135	24
5	39	34	26	e85	2,810	1,950	345	4,330	10,100	6,590	99	21
6	537	28	24	e80	1,130	862	303	5,680	7,940	5,360	79	21
7	559	25	24	e77	546	690	279	6,000	4,920	3,300	66	23
8	304	22	23	e73	445	626	311	5,480	2,090	2,030	66	22
9	160	21	23	e100	402	526	249	5,510	723	1,000	1,370	20
10	96	19	27	e400	527	483	223	5,280	975	476	1,830	19
11	64	19	45	1,960	2,220	579	640	3,910	765	339	772	17
12	45	36	48	2,620	3,000	817	2,080	3,300	381	514	256	17
13	34	55	56	6,020	2,730	832	2,330	3,090	259	456	125	17
14	28	168	72	12,900	1,400	611	1,120	1,900	202	290	93	16
15	26	286	75	10,300	707	427	587	724	167	212	68	14
16	23	210	64	7,610	523	348	417	473	162	168	59	14
17	19	133	54	6,490	408	384	384	377	186	138	52	13
18	21	91	53	4,620	338	3,840	2,060	313	1,100	122	47	14
19	23	67	61	2,180	497	6,490	4,830	274	1,450	109	43	14
20	220	51	66	781	814	5,200	9,900	243	627	105	40	14
21	329	44	969	434	967	2,880	20,100	265	334	874	35	15
22	185	39	2,510	e310	653	1,070	18,100	274	477	459	33	15
23	106	36	1,850	e221	577	541	11,600	416	3,620	753	31	15
24	78	34	732	e171	676	456	9,340	396	12,200	1,930	30	14
25	54	31	385	e152	786	766	10,000	288	13,300	1,490	29	13
26	85	30	284	e148	2,110	1,610	8,240	223	10,300	537	27	16
27	147	31	224	e147	4,530	2,700	7,860	187	8,990	259	26	17
28	147	35	185	e145	5,350	3,260	8,250	209	7,730	170	25	16
29	187	32	e161	563	---	3,110	6,860	402	5,140	125	24	17
30	158	29	e151	3,340	---	2,550	4,520	703	3,470	104	23	16
31	108	---	e138	6,390	---	1,460	---	2,090	---	114	23	---
Total	4,015	1,818	8,434	68,763	55,086	62,688	133,475	60,140	133,078	63,864	6,247	527
Mean	130	60.6	272	2,218	1,967	2,022	4,449	1,940	4,436	2,060	202	17.6
Max	559	286	2,510	12,900	6,730	6,490	20,100	6,000	13,300	11,700	1,830	25
Min	19	19	23	73	338	348	223	187	162	104	23	13
Cfsm	0.11	0.05	0.24	1.96	1.74	1.79	3.93	1.72	3.92	1.82	0.18	0.02
In.	0.13	0.06	0.28	2.26	1.81	2.06	4.39	1.98	4.38	2.10	0.21	0.02

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1914 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	226	585	1,059	1,447	1,538	1,749	1,699	1,482	908	499	311	210
Max	2,146	5,462	7,882	9,030	6,833	5,675	6,551	10,150	4,436	4,567	5,794	2,569
(WY)	(1950)	(1986)	(1968)	(1950)	(1982)	(2008)	(2011)	(1943)	(2013)	(2000)	(1915)	(1993)
Min	0.30	1.07	1.73	6.90	12.6	4.92	56.9	45.1	14.4	9.75	4.17	0.79
(WY)	(1954)	(1954)	(1954)	(1977)	(1963)	(1954)	(1954)	(1925)	(1988)	(1930)	(1964)	(1953)

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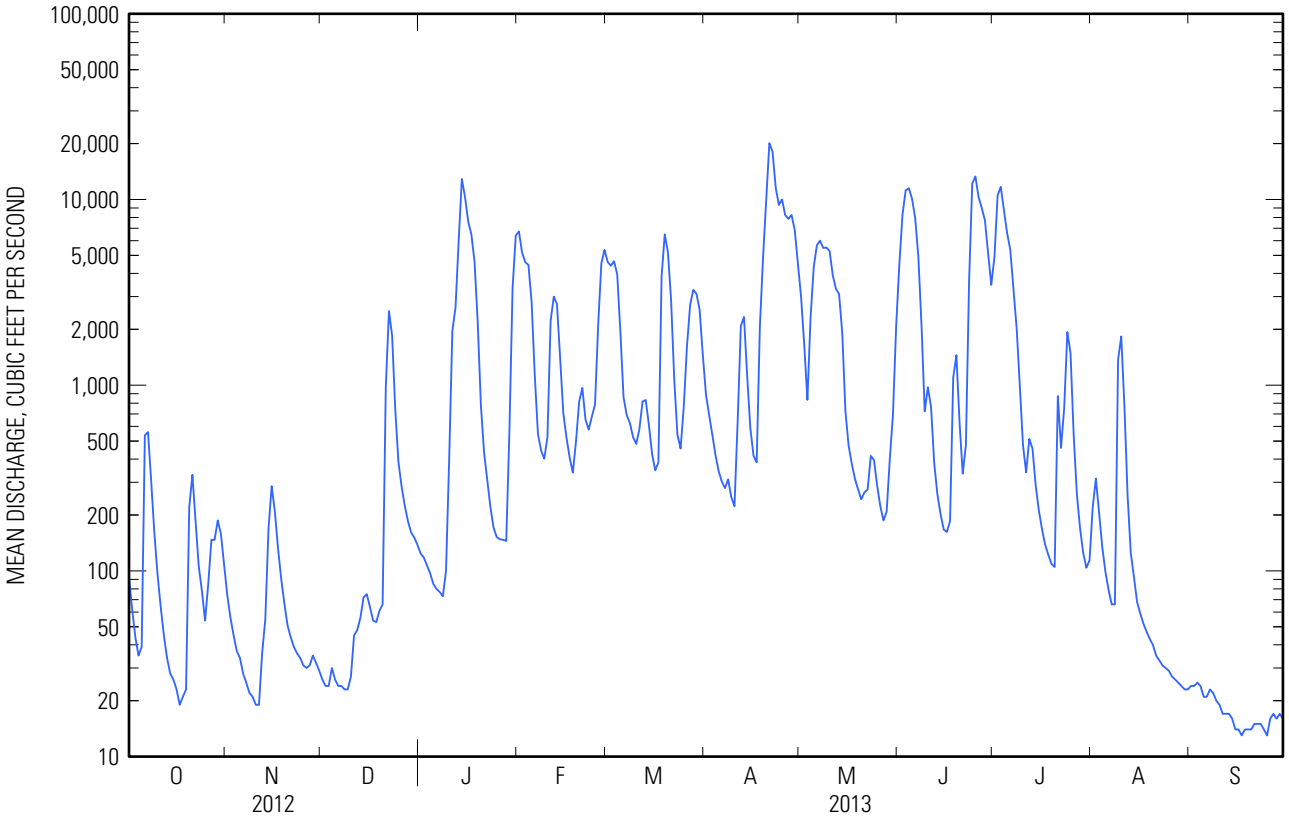
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1914 - 2013	
Annual total	191,086.6		598,135			
Annual mean	522		1,639		974	
Highest annual mean					2,040	1950
Lowest annual mean					29.3	1954
Highest daily mean	7,600	Jan 27	20,100	Apr 21	43,200	May 10, 1961
Lowest daily mean	4.2	Aug 2	13	A	0.00	B
Annual seven-day minimum	4.5	Jul 29	14	Sep 15	0.00	Sep 3, 1954
Maximum peak flow			21,500	Apr 21	47,000	Jan 5, 1950
Maximum peak stage			22.76	Apr 21	26.67	Jan 5, 1950
Instantaneous low flow			12	C		
Annual runoff (cfsm)	0.462		1.45		0.861	
Annual runoff (inches)	6.29		19.67		11.70	
10 percent exceeds	1,710		5,410		3,110	
50 percent exceeds	110		290		153	
90 percent exceeds	13		23		11	

[A] Sept. 17, 25.
[B] Sept. 3-19, 1954.
[C] Sept. 17, 18.



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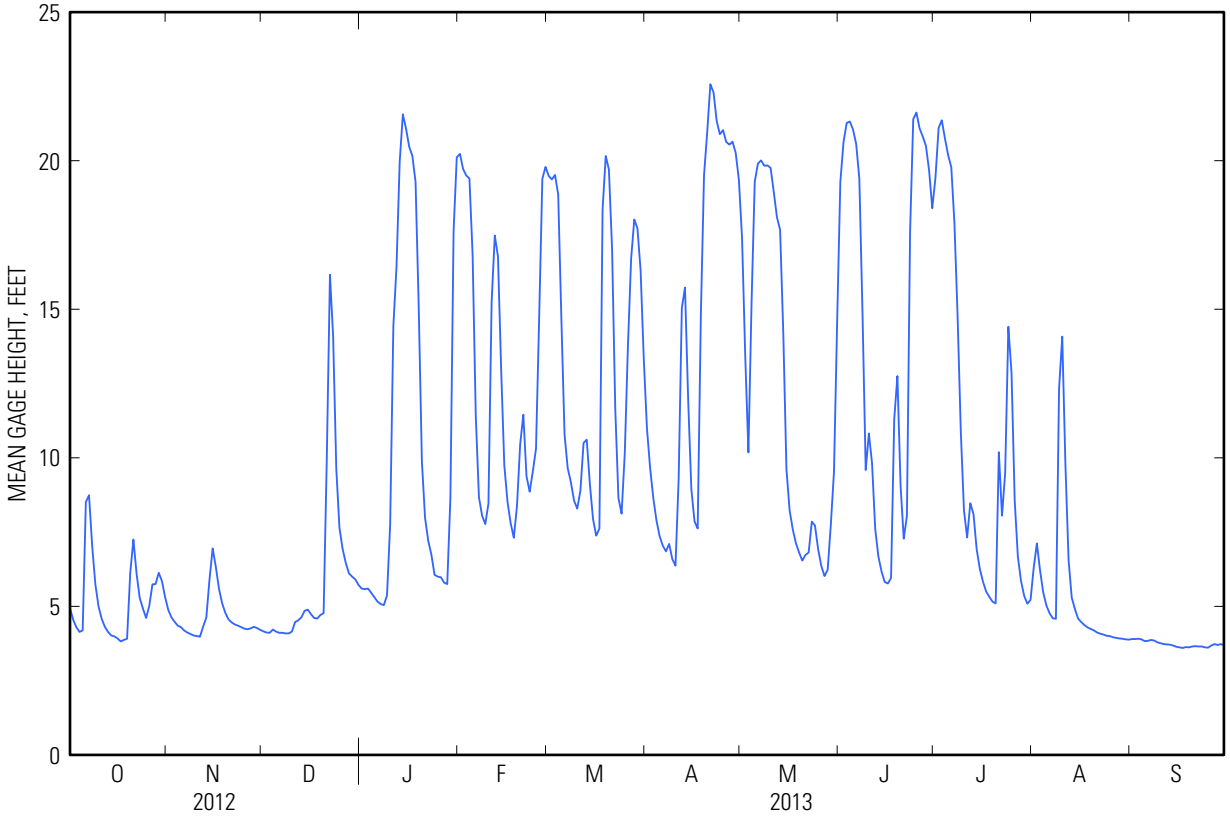
GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	4.94	4.88	4.16	5.60	20.23	19.49	10.99	17.39	19.28	19.42	6.30	3.90
2	4.55	4.63	4.12	5.58	19.72	19.37	9.65	13.43	20.62	21.10	7.12	3.90
3	4.30	4.48	4.11	5.60	19.50	19.52	8.65	10.18	21.27	21.36	6.21	3.91
4	4.14	4.35	4.22	5.46	19.40	18.86	7.89	15.24	21.32	20.75	5.47	3.89
5	4.19	4.30	4.15	5.31	16.84	14.68	7.36	19.29	21.05	20.19	5.03	3.83
6	8.51	4.19	4.11	5.16	11.41	10.79	7.04	19.90	20.56	19.78	4.77	3.84
7	8.74	4.12	4.11	5.08	8.67	9.65	6.85	20.01	19.38	17.88	4.60	3.87
8	7.03	4.07	4.09	5.04	8.05	9.18	7.10	19.83	14.83	14.72	4.58	3.85
9	5.74	4.02	4.09	5.37	7.77	8.56	6.59	19.84	9.59	10.89	12.34	3.79
10	5.00	4.00	4.15	7.77	8.46	8.29	6.37	19.76	10.82	8.23	14.08	3.76
11	4.58	3.98	4.47	14.43	15.25	8.89	9.30	18.95	9.82	7.32	9.77	3.73
12	4.31	4.32	4.53	16.44	17.48	10.50	15.04	18.10	7.61	8.47	6.55	3.72
13	4.14	4.62	4.63	19.96	16.78	10.61	15.73	17.67	6.68	8.11	5.29	3.71
14	4.02	5.90	4.85	21.56	13.00	9.10	11.95	14.21	6.17	6.93	4.91	3.68
15	3.99	6.95	4.89	21.08	9.75	7.93	8.95	9.62	5.82	6.26	4.59	3.64
16	3.92	6.33	4.74	20.47	8.53	7.38	7.86	8.23	5.77	5.83	4.47	3.62
17	3.82	5.59	4.61	20.16	7.80	7.62	7.62	7.59	5.96	5.50	4.37	3.60
18	3.87	5.10	4.59	19.29	7.31	18.36	14.79	7.12	11.30	5.32	4.29	3.63
19	3.91	4.78	4.71	15.09	8.38	20.16	19.51	6.81	12.75	5.16	4.24	3.62
20	6.12	4.56	4.77	9.88	10.45	19.70	20.95	6.54	9.07	5.10	4.19	3.65
21	7.25	4.46	9.96	7.98	11.45	17.02	22.57	6.73	7.28	10.19	4.12	3.66
22	6.10	4.39	16.16	7.21	9.38	11.65	22.30	6.81	8.04	8.05	4.08	3.65
23	5.28	4.35	14.11	6.74	8.86	8.65	21.33	7.85	17.60	9.50	4.05	3.65
24	4.93	4.30	9.63	6.06	9.54	8.12	20.89	7.72	21.40	14.41	4.01	3.62
25	4.61	4.25	7.64	6.00	10.31	10.14	21.03	6.92	21.62	12.86	4.00	3.61
26	5.01	4.23	6.93	5.98	14.73	13.77	20.63	6.36	21.09	8.57	3.96	3.68
27	5.74	4.26	6.46	5.80	19.39	16.69	20.54	6.02	20.81	6.67	3.94	3.73
28	5.75	4.31	6.11	5.75	19.79	18.02	20.64	6.23	20.50	5.85	3.92	3.70
29	6.13	4.27	6.00	8.66	---	17.72	20.26	7.75	19.67	5.35	3.91	3.73
30	5.85	4.21	5.91	17.62	---	16.30	19.35	9.54	18.40	5.09	3.89	3.69
31	5.31	---	5.72	20.11	---	13.31	---	14.62	---	5.22	3.88	---
Mean	5.22	4.61	5.89	10.72	12.79	13.23	13.99	12.14	14.54	10.65	5.38	3.73
Max	8.74	6.95	16.16	21.56	20.23	20.16	22.57	20.01	21.62	21.36	14.08	3.91
Min	3.82	3.98	4.09	5.04	7.31	7.38	6.37	6.02	5.77	5.09	3.88	3.60

	Calendar Year 2012	Water Year 2013
Mean	6.79	9.38
Max	20.47	22.57
Min	3.21	3.60

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