Water-Data Report 2011

402913084285400 Chickasaw Cr. at St. Marys OH

Wabash Basin
Upper Wabash Subbasin

LOCATION.--Lat 40°29′13″, long 84°28′54″ referenced to North American Datum of 1983, Mercer County, OH, Hydrologic Unit 05120101, New Bremen Quad, 2 miles upstream from Grand Lake, upstream side of County Road 219-A bridge, on left bank.

DRAINAGE AREA.--16.4 mi^2

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 2009 to current year

GAGE.-- Water-stage recorder. Datum of gage 867.55 ft NAVD 1988

REMARKS.--Records fair except for periods of estimated record which is poor.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 402913084285400, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/402913084285400.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.39	0.16	34	35	e1.6	239	21	22	7.8	1.6	0.83	0.22
2	0.40	0.16	10	18	e2.8	123	20	66	6.3	1.6	0.59	0.32
3	0.92	0.18	e5.8	9.7	e4.6	77	16	257	5.4	1.6	1.4	0.30
4	0.55	0.24	e3.8	e6.4	e1.7	67	128	72	4.7	1.5	1.4	0.39
5	0.40	0.25	e2.6	e5.5	e2.8	711	121	39	5.0	1.2	0.41	0.69
6	0.39	0.22	e1.5	e4.0	e4.6	243	46	28	3.5	0.99	0.39	0.39
7	0.29	0.21	e1.6	e3.2	e2.0	98	32	40	3.0	0.88	0.70	0.29
8	0.28	0.23	e1.1	e2.5	e1.2	65	30	170	2.5	0.83	2.7	4.3
9	0.28	0.23	e1.1	e1.9	e0.96	150	27	41	2.2	0.68	20	4.6
10	0.30	0.27	e1.2	e2.1	e1.0	103	25	27	46	0.50	7.9	1.3
11	0.30	0.27	e1.3	e2.2	e1.1	65	24	20	46	0.69	1.8	2.7
12	0.34	0.22	e7.7	e3.1	e1.3	52	19	16	15	1.4	0.65	1.5
13	0.47	0.30	10	e2.0	e2.2	41	14	13	8.1	0.48	0.45	0.52
14	2.3	0.43	e6.0	e2.1	e19	38	11	52	6.0	0.29	15	0.32
15	0.70	0.42	e4.8	e2.2	e77	44	10	210	6.5	0.24	3.9	0.53
16	0.43	0.92	e4.8	e2.1	e33	55	20	102	5.6	0.39	1.3	0.62
17	0.42	e8.8	e2.8	e2.4	e279	45	15	45	4.1	0.33	0.73	0.29
18	0.33	e1.5	e2.2	e3.6	238	38	11	87	7.4	0.26	0.49	0.27
19	0.57	0.53	e2.1	e5.0	90	33	59	40	6.0	0.28	0.38	1.2
20	0.52	0.34	e2.0	e2.6	53	31	332	28	10	0.85	0.35	3.5
21	0.33	0.27	e2.0	e2.2	95	30	76	21	17	0.68	0.37	0.88
22	0.29	0.25	e1.6	e2.0	85	53	e43	18	8.7	0.50	0.31	1.2
23	0.26	4.4	e1.3	e3.4	51	42	e33	16	6.6	0.71	3.6	4.2
24	0.34	1.8	e1.2	e1.8	53	68	e23	13	5.4	3.3	6.0	3.2
25	0.38	95	e1.1	e2.9	75	42	e50	25	3.7	7.8	5.8	1.3
26	0.51	60	e0.94	e2.2	49	34	e150	501	3.1	2.1	1.4	26
27	1.6	11	e0.90	e1.6	78	29	320	142	2.9	0.72	0.90	8.4
28	0.39	5.9	e0.85	e1.2	1,020	26	95	41	2.6	0.43	0.84	3.9
29	0.24	3.0	e1.3	e0.86	---	23	40	24	1.8	0.71	0.34	3.1
30	0.19	108	e8.2	e0.77	---	23	27	15	1.6	0.49	0.25	6.5
31	0.16	---	27	e0.74	---	22	---	10	---	0.57	0.21	---
Total	15.27	305.50	152.79	135.27	2,322.86	2,710	1,838	2,201	254.5	34.60	81.39	82.93
Mean	0.49	10.2	4.93	4.36	83.0	87.4	61.3	71.0	8.48	1.12	2.63	2.76
Max	2.3	108	34	35	1,020	711	332	501	46	7.8	20	26
Min	0.16	0.16	0.85	0.74	0.96	22	10	10	1.6	0.24	0.21	0.22
Cfsm	0.03	0.62	0.30	0.27	5.06	5.33	3.74	4.33	0.52	0.07	0.16	0.17
In.	0.03	0.69	0.35	0.31	5.27	6.15	4.17	4.99	0.58	0.08	0.18	0.19

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2009 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	0.94	4.10	8.13	5.02	44.2	51.5	35.3	40.0	17.5	0.98	1.65	1.10
Max	2.11	10.2	14.9	9.13	83.0	87.4	61.3	71.0	29.0	1.18	2.63	2.76
(WY)	(2010)	(2011)	(2009)	(2010)	(2011)	(2011)	(2011)	(2011)	(2010)	(2009)	(2011)	(2011)
Min	0.21	0.81	4.60	1.57	4.41	8.85	8.58	16.8	8.48	0.65	0.80	0.25
(WY)	(2009)	(2010)	(2010)	(2009)	(2010)	(2009)	(2010)	(2010)	(2011)	(2010)	(2009)	(2010)

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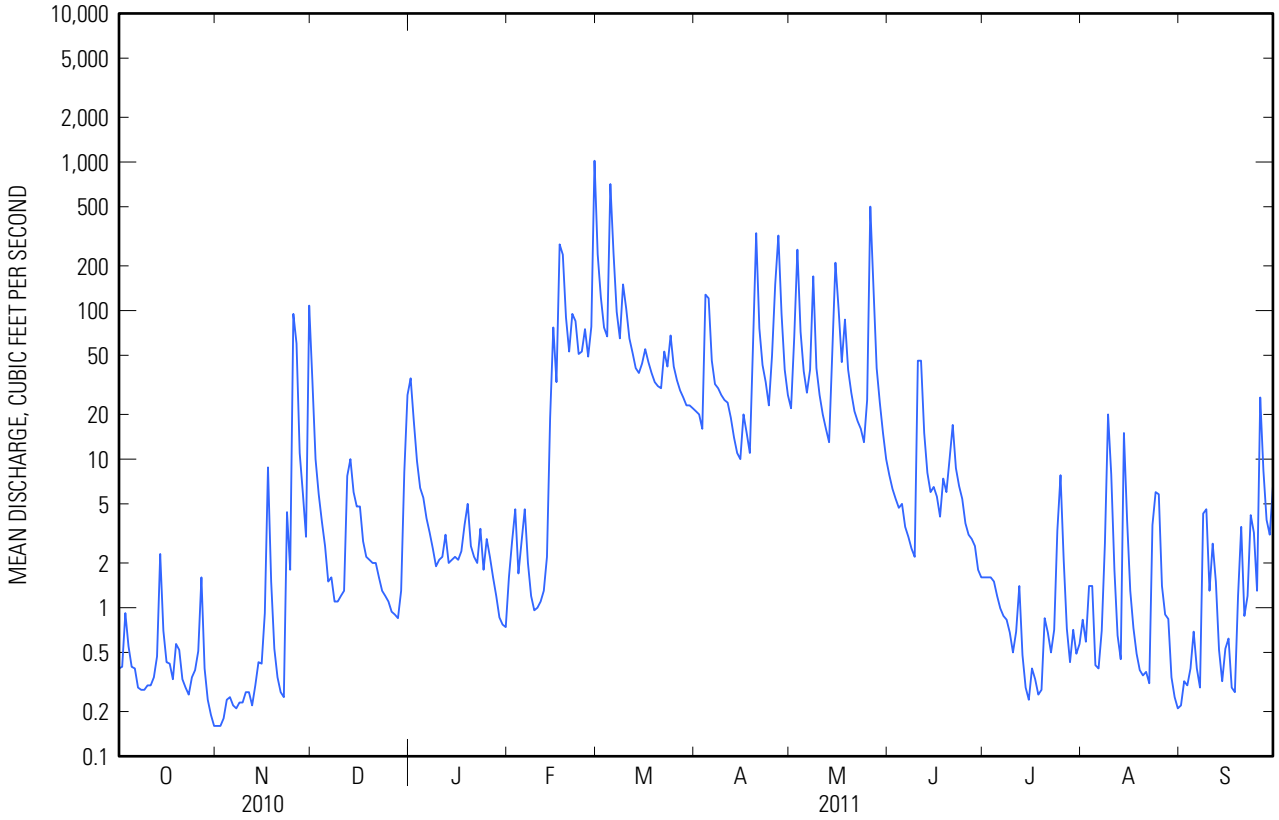
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 2009 - 2011	
Annual total	4,408.19		10,134.11			
Annual mean	12.1		27.8		17.4	
Highest annual mean					27.8	2011
Lowest annual mean					11.4	2010
Highest daily mean	398	Mar 13	1,020	Feb 28	1,020	Feb 28, 2011
Lowest daily mean	0.00	Sep 6	0.16	Oct 31 [a]	0.00	Sep 6, 2010 [b]
Annual seven-day minimum	0.00	Sep 5	0.19	Oct 29	0.00	Sep 5, 2010
Maximum peak flow			1,830	Feb 28	1,830	Feb 28, 2011
Maximum peak stage			14.77	Feb 28	14.77	Feb 28, 2011
Instantaneous low flow			0.13	Oct 31 [a]	0.00	Sep 4, 2010 [b]
Annual runoff (cfsm)	0.74		1.69		1.06	
Annual runoff (inches)	10.00		22.99		14.38	
10 percent exceeds	32		66		40	
50 percent exceeds	1.6		2.9		2.1	
90 percent exceeds	0.16		0.31		0.17	

[a] Also on Nov 1, 2.
[b] Also on many days.



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WATER-QUALITY RECORDS

PERIOD OF RECORD.--October 2009 to September 2011. (discontinued)

REMARKS.--The following table lists the results of bacteriological measurements from water samples collected at Chicasaw Creek at St. Marys. Samples were analyzed for E. coli and enterococci concentrations to help characterize the magnitude of fecal contamination at this site. Additional analyses not reported here were done to characterize the sources of fecal contamination.

COOPERATION.--Project is being done in cooperation with the U.S. Department of Agriculturés Natural Resources Conservation Service.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011

[MF, membrane filter; col/100 mL, colonies per 100 milliliters; E, estimated]

Date	Sample start time	Entero-cocci, mEI MF method, water, col/100 mL (90909)	Esche-richia coli, modified m-TEC MF method, water, col/100 mL (90902)
10-28-2010	**1300**	E 1,500	E 1,300
11-17-2010	**1400**	E 140,000	E 44,000
12-28-2010	**1300**	E 550	E 310
01-20-2011	**1215**	E 15,000	E 1,400
02-15-2011	**1533**	E 16,000	E 460
02-15-2011	**1630**	E 19,000	E 460
02-15-2011	**1830**	E 15,000	E 330
02-17-2011	**1210**	E 37,000	E 2,600
02-17-2011	**1340**	E 40,000	E 2,500
03-15-2011	**1505**	E 800	E 580
05-26-2011	**1210**	E 100,000	E 22,000