Water-Data Report 2012

06927000 MARIES RIVER AT WESTPHALIA, MO

Lower Missouri Basin
Osage Subbasin

LOCATION.--Lat 38°25'54.5", long 91°59'19.0" referenced to North American Datum of 1983, in SW ¼ NE ¼ NE ¼ sec.35, T.43 N., R.10 W., Osage County, MO, Hydrologic Unit 10290111, on the downstream side of bridge on U.S. Highway 63, 0.8 mi southeast of Westphalia, 1.2 mi downstream from Little Maries Creek, and at mile 9.9.

DRAINAGE AREA.--257 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--December 1947 to September 1970, Oct. 1, 2002 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 542.74 ft above National Geodetic Vertical Datum of 1929. Prior to June 8, 1951, nonrecording gage at site 200 ft downstream at same datum.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 26, 1998 reached a stage of 24.84 ft from crest-stage gage, discharge, 56,000 ft^3/s, from rating extended above 35,000 ft^3/s.

REVISIONS.--Peak of Dec. 3, 1982 revised to 39,000 ft^3/s, gage height, 21.96 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 18	0730	6,970	10.63
Apr 14	1830	*12,700	*15.42

Minimum discharge, 0.27 ft^3/s, Aug. 24, 25, 30, 31, gage height, 0.40 ft.

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 06927000, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/06927000.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	7.9	6.1	112	100	100	58	109	200	42	3.1	0.96	0.60
2	7.3	5.7	89	85	87	62	96	117	29	2.8	0.73	0.86
3	7.0	7.8	75	73	128	86	89	82	22	2.8	0.73	0.81
4	6.5	8.4	69	67	2,690	68	84	62	20	2.4	0.72	0.91
5	6.1	8.4	62	62	1,020	58	75	52	16	2.4	0.55	1.0
6	6.0	8.5	57	57	528	51	68	44	14	1.9	0.50	0.77
7	5.8	35	52	53	345	46	60	40	11	1.9	0.45	0.87
8	5.6	350	47	49	258	45	54	36	10	2.8	0.53	0.81
9	5.5	439	43	45	211	43	48	32	8.9	3.8	0.59	0.49
10	5.2	203	39	42	180	44	44	28	8.3	3.7	0.50	0.46
11	5.4	123	36	40	152	45	40	26	8.0	4.0	0.46	0.50
12	6.1	86	33	39	125	51	36	23	7.5	3.1	0.40	1.0
13	7.6	65	39	37	112	58	133	22	6.2	3.5	0.44	1.2
14	6.3	51	144	34	109	63	9,130	21	6.1	5.2	0.42	1.1
15	6.1	41	532	33	114	88	3,710	19	6.1	6.5	0.46	1.2
16	5.7	35	451	32	761	591	1,690	18	5.7	4.5	0.44	1.2
17	5.6	30	259	36	614	401	786	16	9.1	3.5	0.38	1.2
18	8.1	26	181	48	365	2,610	449	15	7.2	3.3	0.36	1.1
19	7.6	24	162	68	259	763	303	14	6.4	2.7	0.34	0.90
20	16	22	3,350	65	201	426	230	14	8.9	2.4	0.37	0.77
21	15	21	1,350	57	166	2,880	187	14	12	2.2	0.33	0.68
22	12	61	632	52	141	2,450	151	12	11	1.7	0.34	0.52
23	11	508	369	48	124	1,190	125	11	8.5	1.5	0.34	0.49
24	9.1	223	257	44	109	822	108	10	7.3	1.6	0.31	0.47
25	8.2	139	196	42	93	535	94	9.8	6.0	1.7	0.29	7.9
26	9.2	142	159	45	81	371	82	9.5	4.9	1.7	0.34	7.4
27	8.4	662	151	184	72	275	70	9.0	4.7	1.5	0.39	6.6
28	7.3	409	170	198	66	213	62	8.3	4.1	1.00	0.35	6.1
29	6.8	227	154	165	63	172	60	8.5	3.6	1.1	0.33	5.7
30	7.1	153	136	137	---	146	77	20	3.3	1.1	0.29	5.3
31	6.8	---	117	116	---	126	---	75	---	1.1	0.56	---
Mean	7.69	137	307	69.5	320	479	608	34.5	10.6	2.66	0.46	1.96
Max	16	662	3,350	198	2,690	2,880	9,130	200	42	6.5	0.96	7.9
Min	5.2	5.7	33	32	63	43	36	8.3	3.3	1.0	0.29	0.46
In.	0.03	0.60	1.38	0.31	1.34	2.15	2.64	0.15	0.05	0.01	0.00	0.01

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1948 - 2012[a], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	142	117	161	241	268	388	374	413	302	128	68.8	121
Max	1,656	763	815	1,383	704	1,378	1,211	1,335	1,304	793	363	808
(WY)	(2010)	(2005)	(1968)	(2005)	(2008)	(2008)	(2008)	(1961)	(1949)	(1951)	(2004)	(2008)
Min	0.24	2.24	4.12	4.27	6.97	9.92	37.4	24.0	8.16	2.66	0.46	0.43
(WY)	(1957)	(1954)	(1954)	(1956)	(1954)	(1954)	(1956)	(1965)	(1952)	(2012)	(2012)	(1953)

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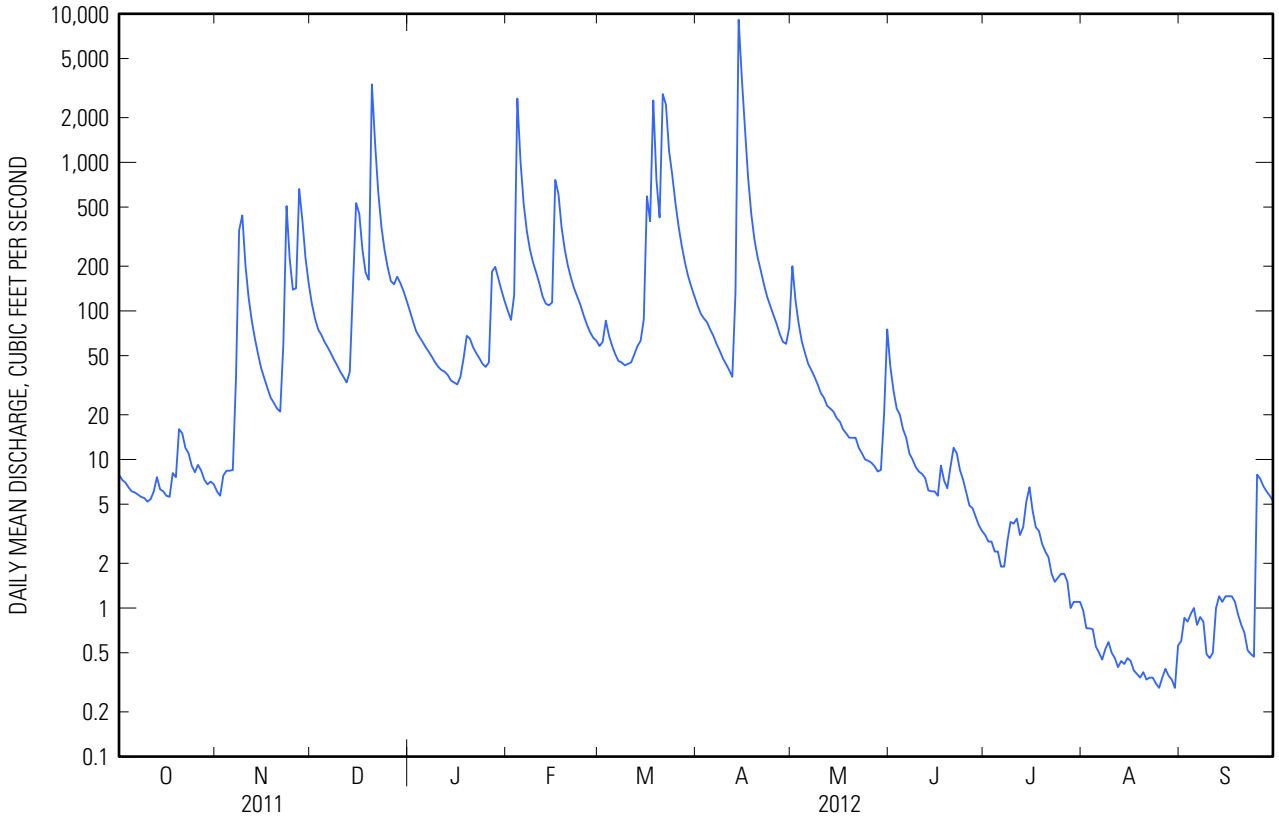
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1948 - 2012[a]	
Annual mean	330		164		227	
Highest annual mean					489	2010
Lowest annual mean					40.7	1956
Highest daily mean	6,730	May 20	9,130	Apr 14	19,900	Jan 5, 2005
Lowest daily mean	4.6	Aug 6	0.29	Aug 25[b]	0.10	Oct 5, 1956[c]
Annual seven-day minimum	5.7	Oct 5	0.33	Aug 24	0.10	Oct 5, 1956
Maximum peak flow			12,700	Apr 14	26,100	Oct 12, 1969
Maximum peak stage			15.42	Apr 14	20.83	Oct 12, 1969
Instantaneous low flow			0.27	Aug 24[d]	0.10	Sep 22, 1956[e]
Annual runoff (inches)	17.46		8.68		11.98	
10 percent exceeds	878		264		454	
50 percent exceeds	74		30		43	
90 percent exceeds	7.7		0.73		3.9	

[a] For Period of Record
[b] Also Aug 30
[c] Also Oct 6-18, 1956
[d] Also Aug 25, 30, 31
[e] Also Oct 5-18, 1956



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GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
OBSERVATION AT 0800
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.75	0.84	1.94	1.81	1.80	1.48	1.80	1.83	1.30	0.51	0.50	0.47
2	0.73	0.84	1.78	1.71	1.71	1.47	1.72	1.83	1.14	0.49	0.48	0.52
3	0.72	0.90	1.67	1.61	1.63	1.73	1.64	1.62	1.03	0.49	0.50	0.50
4	0.70	0.94	1.63	1.55	6.68	1.57	1.65	1.47	0.99	0.47	0.54	0.53
5	0.69	0.95	1.57	1.51	4.11	1.48	1.59	1.38	0.93	0.47	0.53	0.58
6	0.68	0.97	1.54	1.47	3.28	1.42	1.53	1.31	0.87	0.43	0.55	0.52
7	0.67	1.23	1.48	1.43	2.82	1.37	1.47	1.27	0.82	0.41	0.54	0.50
8	0.66	2.68	1.43	1.40	2.53	1.36	1.41	1.23	0.79	0.50	0.55	0.54
9	0.61	3.12	1.39	1.36	2.36	1.34	1.36	1.17	0.73	0.58	0.56	0.48
10	0.58	2.40	1.34	1.33	2.22	1.34	1.32	1.11	0.73	0.52	0.53	0.47
11	0.57	2.01	1.30	1.31	2.10	1.34	1.27	1.08	0.71	0.60	0.52	0.47
12	0.59	1.77	1.27	1.30	1.96	1.40	1.24	1.04	0.71	0.55	0.50	0.56
13	0.72	1.62	1.26	1.26	1.86	1.47	1.24	1.02	0.65	0.52	0.51	0.58
14	0.70	1.48	2.05	1.24	1.85	1.51	12.52	1.01	0.67	0.65	0.50	0.59
15	0.70	1.38	2.92	1.22	1.83	1.52	6.64	0.97	0.66	0.73	0.50	0.60
16	0.69	1.31	3.12	1.20	3.34	3.54	5.39	0.96	0.61	0.64	0.49	0.60
17	0.70	1.23	2.56	1.28	3.46	2.06	3.63	0.92	0.76	0.58	0.47	0.59
18	0.80	1.18	2.24	1.28	2.88	10.52	2.94	0.90	0.69	0.58	0.46	0.60
19	0.79	1.13	2.04	1.55	2.55	3.59	2.56	0.88	0.65	0.54	0.45	0.56
20	1.07	1.10	6.96	1.55	2.32	2.88	2.33	0.86	0.74	0.53	0.44	0.53
21	1.00	1.08	4.57	1.48	2.17	3.77	e2.16	0.87	0.84	0.49	0.44	0.52
22	0.94	1.16	3.50	1.43	2.04	5.92	2.01	0.83	0.79	0.47	0.43	0.50
23	0.91	3.31	2.89	1.38	1.95	---	1.88	0.81	0.74	0.43	0.42	0.50
24	0.88	2.47	2.54	1.35	1.86	3.64	1.77	0.79	0.70	0.44	0.41	0.49
25	0.85	2.09	2.30	1.31	1.76	3.13	1.69	0.77	0.64	0.46	0.40	0.50
26	0.89	1.86	2.12	1.35	1.67	2.75	1.62	0.76	0.62	0.46	0.41	0.79
27	0.88	3.52	2.05	2.28	1.60	2.48	1.53	0.75	0.60	0.45	0.43	0.76
28	0.85	3.04	2.18	2.31	1.55	2.28	1.46	0.73	0.57	0.38	0.42	0.75
29	0.84	2.48	2.10	2.16	1.53	2.11	1.42	0.73	0.54	0.44	0.42	0.72
30	0.86	2.16	2.02	2.02	---	1.99	1.54	0.73	0.52	0.45	0.40	0.72
31	0.85	---	1.91	1.90	---	1.89	---	1.62	---	0.48	0.42	---
Mean	0.77	1.74	2.25	1.53	2.39	---	2.41	1.07	0.76	0.51	0.47	0.57
Max	1.07	3.52	6.96	2.31	6.68	---	12.52	1.83	1.30	0.73	0.56	0.79
Min	0.57	0.84	1.26	1.20	1.53	---	1.24	0.73	0.52	0.38	0.40	0.47