

Water-Data Report 2012

**06917060 LITTLE OSAGE RIVER AT HORTON, MO**

Lower Missouri Basin  
Osage Subbasin

LOCATION.--Lat 37°59'41.3", long 94°22'09.5" referenced to North American Datum of 1983, in SW ¼ NE ¼ NW ¼ sec.17, T.37 N., R.31 W., Vernon County, MO, Hydrologic Unit 10290103, on left bank at the upstream side of the southbound bridge of U.S. Highway 71, 4 mi above Marmaton River, and 1 mi north of Horton.

DRAINAGE AREA.--498 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--October 2000 to current year. Nov. 18, 1988 to Sept. 30, 2000, stage only.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1986 reached a stage of 59.4 ft.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,980 ft<sup>3</sup>/s, Mar. 22, gage height, 45.76 ft; minimum discharge, 0.00 ft<sup>3</sup>/s, Aug 11-26.

## 06917060 LITTLE OSAGE RIVER AT HORTON, MO—Continued

**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	0.34	0.10	13	66	10	60	321	4,760	7.3	0.28	0.09	0.97
2	0.33	0.12	9.8	55	9.9	57	278	5,310	6.5	0.21	0.08	1.2
3	0.30	0.45	11	45	15	55	248	4,520	6.2	0.16	0.07	0.61
4	0.27	0.46	18	40	177	55	219	3,340	6.0	0.13	0.07	1.1
5	0.26	0.46	59	37	342	62	210	2,340	4.4	0.10	0.06	1.3
6	0.25	0.47	103	35	262	59	242	1,620	3.0	0.08	0.05	1.1
7	0.22	0.99	58	34	204	51	237	1,130	2.7	0.07	0.03	1.2
8	0.22	613	32	32	168	60	177	720	2.4	0.07	0.03	1.4
9	0.20	528	22	30	126	309	146	299	1.9	0.06	0.02	1.3
10	0.21	269	16	28	104	536	130	139	1.4	0.05	0.02	1.2
11	0.20	84	13	25	89	553	111	108	1.6	0.04	0.01	1.0
12	0.19	35	11	24	76	1,390	94	88	1.8	0.03	0.00	0.92
13	0.18	18	11	22	64	1,320	85	74	2.3	0.03	0.00	0.93
14	0.19	11	13	20	59	764	171	64	1.9	0.03	0.00	1.8
15	0.18	5.6	23	20	60	431	655	52	1.3	0.03	0.00	2.1
16	0.16	3.8	40	19	204	327	766	45	0.83	0.04	0.00	2.1
17	0.17	2.6	49	20	234	273	463	38	159	0.06	0.00	2.4
18	0.19	1.8	40	19	228	236	247	32	50	0.07	0.00	2.2
19	0.18	1.7	81	17	173	221	170	27	11	0.09	0.00	1.8
20	0.17	3.1	2,310	15	142	2,850	127	23	3.8	0.10	0.00	1.7
21	0.17	2.8	3,000	14	129	5,480	104	22	150	0.15	0.00	1.7
22	0.17	2.2	1,580	14	121	8,260	86	21	144	0.35	0.00	1.7
23	0.15	1.7	849	14	118	8,390	72	16	26	0.36	0.00	1.8
24	0.15	1.7	346	14	115	7,000	60	12	10	0.29	0.00	1.8
25	0.15	3.0	227	14	100	5,480	52	9.1	5.0	0.24	0.00	1.8
26	0.17	7.5	175	13	89	3,090	46	8.6	2.3	0.22	0.08	183
27	0.15	39	143	12	77	1,990	40	7.9	1.3	0.20	0.11	546
28	0.14	50	120	12	65	1,370	36	7.0	0.82	0.16	0.10	203
29	0.13	26	102	11	61	1,000	76	6.4	0.53	0.13	0.07	63
30	0.12	17	90	11	---	593	2,890	6.2	0.37	0.11	0.05	31
31	0.11	---	78	10	---	387	---	8.7	---	0.09	0.08	---
<b>Mean</b>	0.19	57.7	311	23.9	125	1,700	285	802	20.5	0.13	0.03	35.4
<b>Max</b>	0.34	613	3,000	66	342	8,390	2,890	5,310	159	0.36	0.11	546
<b>Min</b>	0.11	0.10	9.8	10	9.9	51	36	6.2	0.37	0.03	0.00	0.61
<b>In.</b>	0.00	0.13	0.72	0.06	0.27	3.94	0.64	1.86	0.05	0.00	0.00	0.08

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 2001 - 2012, BY WATER YEAR (WY)**

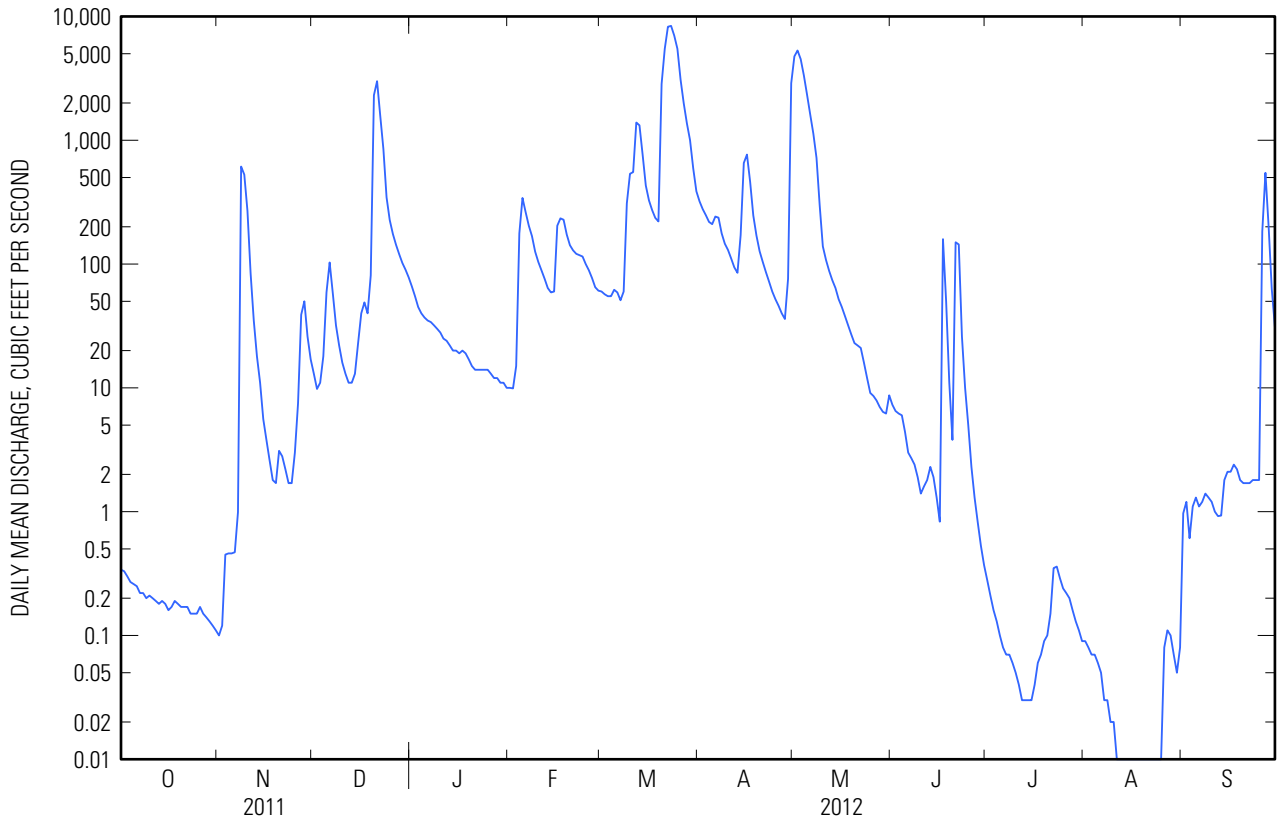
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	120	168	166	204	341	563	598	1,005	473	445	52.5	297
<b>Max</b>	972	914	488	1,203	920	1,700	2,308	2,090	1,504	3,931	408	1,798
<b>(WY)</b>	(2010)	(2005)	(2005)	(2005)	(2010)	(2012)	(2009)	(2009)	(2007)	(2007)	(2005)	(2010)
<b>Min</b>	0.00	0.04	0.60	1.16	5.45	43.8	68.8	174	20.5	0.05	0.03	0.00
<b>(WY)</b>	(2003)	(2003)	(2003)	(2003)	(2006)	(2002)	(2003)	(2001)	(2012)	(2003)	(2012)	(2002)

06917060 LITTLE OSAGE RIVER AT HORTON, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 2001 - 2012	
<b>Annual mean</b>	240		283		369	
<b>Highest annual mean</b>					738	2010
<b>Lowest annual mean</b>					83.1	2003
<b>Highest daily mean</b>	4,400	Feb 26	8,390	Mar 23	43,700	Jul 1, 2007
<b>Lowest daily mean</b>	0.10	Nov 1	0.00	Aug 12 <sup>a</sup>	0.00	Many Days <sup>b</sup>
<b>Annual seven-day minimum</b>	0.12	Oct 27	0.00	Aug 12	0.00	At Times
<b>Maximum peak flow</b>			8,980	Mar 22	48,400	Jul 1, 2007
<b>Maximum peak stage</b>			45.76	Mar 21	53.37	Jul 1, 2007
<b>Instantaneous low flow</b>			0.00	Aug 11 <sup>c</sup>	0.00	Many Days <sup>d</sup>
<b>Annual runoff (inches)</b>	6.53		7.73		10.07	
<b>10 percent exceeds</b>	788		400		886	
<b>50 percent exceeds</b>	24		13		49	
<b>90 percent exceeds</b>	0.39		0.07		0.45	

<sup>a</sup> Also Aug 13-25  
<sup>b</sup> 2002-2004, 2007, 2012  
<sup>c</sup> Also Aug 12-26  
<sup>d</sup> 2001-2004, 2007, 2012



## 06917060 LITTLE OSAGE RIVER AT HORTON, MO—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012**  
**OBSERVATION AT 0800**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>1</b>	23.34	23.22	24.21	25.61	24.08	25.46	28.49	43.07	23.97	23.14	23.07	23.19
<b>2</b>	23.34	23.22	24.07	25.40	24.07	25.39	28.07	43.65	23.92	23.11	23.06	23.48
<b>3</b>	23.33	23.39	24.09	25.21	24.04	25.35	27.78	43.14	23.88	23.09	23.05	23.33
<b>4</b>	23.32	23.38	24.27	25.08	26.79	25.34	27.51	41.99	23.90	23.07	23.05	23.43
<b>5</b>	23.32	23.38	25.23	25.02	28.60	25.49	27.35	40.53	23.79	23.04	23.04	23.48
<b>6</b>	23.31	23.38	26.26	24.96	27.97	25.45	27.57	38.58	23.64	23.03	23.04	23.44
<b>7</b>	23.29	23.38	25.54	24.93	27.21	25.29	27.79	35.71	23.59	23.02	23.02	23.42
<b>8</b>	23.29	31.95	24.92	24.89	26.92	25.25	27.19	32.67	23.58	23.01	23.01	23.49
<b>9</b>	23.28	30.49	24.60	24.81	26.44	26.11	26.86	28.62	23.50	23.01	23.00	23.48
<b>10</b>	23.28	28.31	24.39	24.76	26.15	30.61	26.70	26.73	23.42	22.99	22.99	23.46
<b>11</b>	23.28	26.00	24.23	24.69	25.94	29.23	26.50	26.35	23.32	22.99	22.98	23.43
<b>12</b>	23.28	25.05	24.12	24.63	25.75	36.49	26.26	26.07	23.44	22.98	22.96	23.40
<b>13</b>	23.27	24.50	24.07	24.58	25.54	37.17	26.10	25.80	23.55	22.97	22.95	23.40
<b>14</b>	23.27	24.16	24.18	24.52	25.42	33.07	26.54	25.66	23.49	22.98	22.95	23.53
<b>15</b>	23.27	23.82	24.50	24.48	25.40	29.58	31.35	25.43	23.41	22.98	22.96	23.59
<b>16</b>	23.25	23.66	25.06	24.47	26.86	28.48	32.68	25.26	23.31	22.99	22.95	23.58
<b>17</b>	23.27	23.54	25.27	24.49	27.45	27.94	30.27	25.10	25.63	23.02	22.95	23.64
<b>18</b>	23.27	23.43	25.13	24.47	27.54	27.57	27.94	24.96	25.47	23.04	22.95	23.61
<b>19</b>	23.27	23.36	24.79	24.39	26.96	27.24	27.19	24.81	24.26	23.04	22.93	23.57
<b>20</b>	23.26	23.58	39.83	24.33	26.61	40.08	26.72	24.68	23.71	23.06	22.92	23.53
<b>21</b>	23.26	23.58	41.69	24.29	26.44	43.46	26.41	24.58	24.59	23.07	22.91	23.53
<b>22</b>	23.26	23.48	38.37	24.28	26.36	45.36	26.16	24.59	27.08	23.19	22.90	23.54
<b>23</b>	23.25	23.41	34.07	24.25	26.30	45.61	25.92	24.40	24.86	23.19	22.88	23.55
<b>24</b>	23.25	23.41	28.80	24.27	26.30	44.90	25.72	24.20	24.20	23.17	22.87	23.55
<b>25</b>	23.26	23.45	27.54	24.26	26.09	44.14	25.55	24.09	23.84	23.15	22.86	23.54
<b>26</b>	23.26	23.66	26.99	24.23	25.95	41.74	25.42	24.05	23.54	23.14	23.07	23.91
<b>27</b>	23.25	24.44	26.65	24.20	25.77	39.71	25.29	---	23.40	23.13	23.12	31.31
<b>28</b>	23.24	25.33	26.39	24.18	25.57	37.25	25.14	23.93	23.31	23.11	23.12	27.72
<b>29</b>	23.24	24.74	26.15	24.15	25.47	34.84	25.15	23.92	23.23	23.09	23.10	25.76
<b>30</b>	23.23	24.43	25.96	24.12	---	31.36	40.73	23.85	23.18	23.08	23.08	25.07
<b>31</b>	23.23	---	25.82	24.09	---	29.14	---	24.07	---	23.07	23.06	---
<b>Mean</b>	23.27	24.50	27.01	24.58	26.21	32.71	27.61	---	23.93	23.06	22.99	24.03
<b>Max</b>	23.34	31.95	41.69	25.61	28.60	45.61	40.73	---	27.08	23.19	23.12	31.31
<b>Min</b>	23.23	23.22	24.07	24.09	24.04	25.25	25.14	---	23.18	22.97	22.86	23.19