

Water-Data Report 2011

**05508000 SALT RIVER NEAR NEW LONDON, MO**

Upper Mississippi Basin  
Salt Subbasin

LOCATION.--Lat 39°36'44.4", long 91°24'26.3" referenced to North American Datum of 1983, in NE ¼ NW ¼ sec.36, T.56 N., R.5 W., Ralls County, MO, Hydrologic Unit 07110007, on left bank near downstream end of bridge on north bound side of dual U.S. Highway 61, 9.9 mi downstream from Clarence Cannon Dam, 2.0 mi north of New London, 8.0 mi upstream from Spencer Creek, and at mile 35.5.

DRAINAGE AREA.--2,480 mi<sup>2</sup>.

**SURFACE-WATER RECORDS**

PERIOD OF RECORD.--February 1922 to current year.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 477.03 ft above National Geodetic Vertical Datum of 1929. Prior to Apr. 7, 1931, nonrecording gage 400 ft upstream at datum 0.03 ft higher; Apr. 7, 1931 to Jan. 17, 1935, nonrecording gage at site 180 ft upstream at datum 0.04 ft lower; Jan. 17, 1935 to April 1985, water-stage recorder 400 ft upstream same datum.

REMARKS.--Records fair except for estimated daily discharges, which are poor. Flow completely regulated by Mark Twain Lake, capacity of 1,860,000 acre-ft, 0.5 mi upstream since September 1979 and by Monroe City Lake (station 05507820) upstream on Ely Creek. Five percent of the drainage area, 130 mi<sup>2</sup>, is natural drainage not regulated.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 107,000 ft<sup>3</sup>/s, Apr. 22, 1973; gage height, 31.8 ft.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 14, 1858, reached a stage of 27.6 ft, present site and datum, based on comparison of June 1928 flood crest at stone marker, 1.0 mi downstream of gage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 12,200 ft<sup>3</sup>/s, Mar. 10, 11, gage height, 12.98 ft, Mar. 11; minimum discharge, 45 ft<sup>3</sup>/s, Dec. 2, gage height, 2.40 ft.

## 05508000 SALT RIVER NEAR NEW LONDON, MO—Continued

**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	4,780	3,000	63	279	184	5,430	104	163	1,580	2,680	2,540	86
2	4,770	5,370	52	124	109	7,980	101	161	4,900	5,070	1,680	91
3	3,170	5,070	64	2,160	163	8,240	103	150	3,600	2,110	1,970	95
4	3,780	4,200	65	3,200	729	8,350	127	146	528	172	848	98
5	4,860	6,680	62	4,720	625	5,010	124	143	436	2,190	144	96
6	3,730	3,350	387	4,150	139	8,370	110	4,430	3,680	4,890	116	95
7	3,940	271	1,230	4,320	81	8,370	108	5,430	4,930	4,790	186	94
8	3,320	90	119	2,430	3,520	8,130	109	5,720	6,480	6,870	109	92
9	1,200	80	94	1,590	6,530	7,980	e101	4,490	6,130	6,080	95	95
10	4,430	77	86	2,140	e91	11,000	e89	258	5,120	5,740	645	95
11	4,820	77	83	452	e69	12,200	e146	252	2,400	6,840	367	93
12	2,810	76	81	1,550	e60	12,000	e4,800	143	4,920	8,200	200	90
13	4,140	76	732	2,270	e55	11,700	e6,140	445	712	10,100	104	87
14	4,910	73	1,030	309	e53	9,810	e4,860	1,360	5,060	10,500	98	87
15	4,680	73	1,830	106	e53	805	400	156	920	8,690	96	86
16	4,840	71	774	98	e995	171	584	153	119	7,920	93	86
17	5,140	70	99	94	2,690	156	4,340	122	109	7,550	90	88
18	5,720	72	80	93	3,100	146	4,710	113	648	7,640	87	93
19	3,270	76	76	330	4,750	141	6,860	367	860	4,080	90	93
20	5,080	75	73	114	4,580	139	6,290	136	340	3,670	92	88
21	5,220	74	74	101	2,840	128	6,610	131	874	4,230	92	85
22	4,000	74	77	102	5,200	116	6,940	122	861	3,940	90	82
23	887	72	78	96	8,490	119	6,910	113	886	2,990	90	83
24	1,970	79	81	287	9,460	111	5,390	550	979	1,340	87	83
25	3,340	86	82	2,170	4,380	116	1,470	1,520	1,010	705	84	88
26	4,970	74	75	668	9,290	123	5,290	834	966	2,040	89	87
27	4,900	70	73	752	5,460	122	507	1,110	703	1,170	94	90
28	5,840	66	72	1,080	5,610	117	200	245	617	946	90	334
29	6,260	65	70	256	---	110	182	270	575	2,450	92	1,030
30	4,800	61	76	98	---	107	174	5,380	1,560	2,290	89	628
31	3,320	---	391	95	---	102	---	1,710	---	2,650	88	---
<b>Mean</b>	4,158	988	265	1,169	2,832	4,110	2,463	1,172	2,083	4,533	343	147
<b>Max</b>	6,260	6,680	1,830	4,720	9,460	12,200	6,940	5,720	6,480	10,500	2,540	1,030
<b>Min</b>	887	61	52	93	53	102	89	113	109	172	84	82
<b>In.</b>	1.93	0.44	0.12	0.54	1.19	1.91	1.11	0.54	0.94	2.11	0.16	0.07

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1980 - 2011<sup>a</sup>, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	1,335	1,448	1,856	1,391	1,825	2,945	2,474	2,762	2,599	3,218	2,200	1,338
<b>Max</b>	9,165	6,406	11,100	7,193	8,787	10,810	10,660	9,003	10,950	11,900	18,940	8,300
<b>(WY)</b>	(1994)	(1986)	(1983)	(2005)	(1982)	(1985)	(1983)	(2002)	(1995)	(1981)	(2008)	(1993)
<b>Min</b>	16.9	18.4	48.6	37.1	62.4	78.0	80.8	59.6	128	88.4	42.8	28.5
<b>(WY)</b>	(1980)	(1981)	(1980)	(1981)	(2006)	(2006)	(2003)	(2006)	(1988)	(1983)	(1983)	(1983)

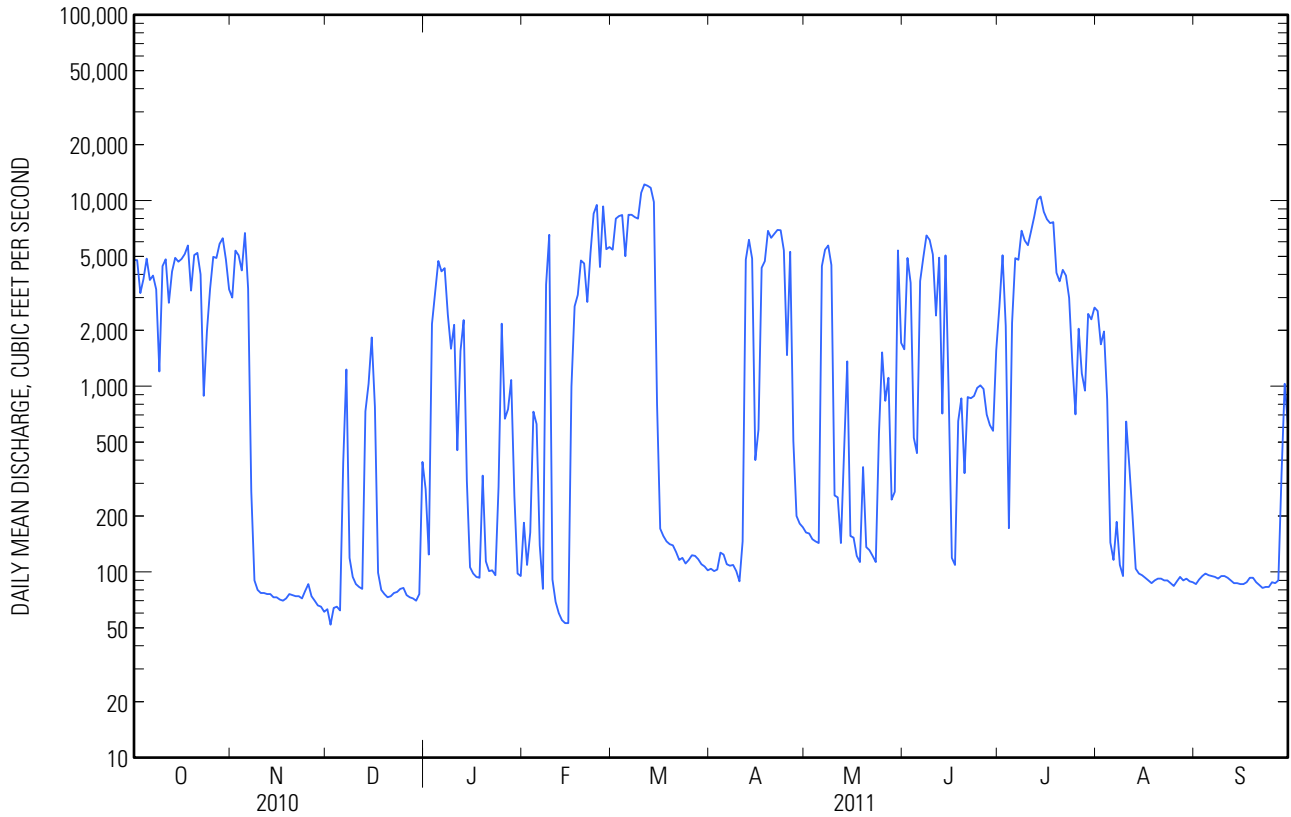
05508000 SALT RIVER NEAR NEW LONDON, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1980 - 2011 <sup>a</sup>	
<b>Annual mean</b>	4,282		2,022		2,120	
<b>Highest annual mean</b>					5,212	2010
<b>Lowest annual mean</b>					307	1989
<b>Highest daily mean</b>	15,500	Jul 20	12,200	Mar 11	62,100	Jul 30, 1981
<b>Lowest daily mean</b>	52	Dec 2	52	Dec 2	9.5	Nov 21, 1980
<b>Annual seven-day minimum</b>	62	Nov 29	62	Nov 29	9.6	Nov 20, 1980
<b>Maximum peak flow</b>			12,200	Mar 10 <sup>b</sup>	74,200	Jul 29, 1981
<b>Maximum peak stage</b>			12.98	Mar 11	31.09	Jul 29, 1981
<b>Instantaneous low flow</b>			45	Dec 2	9.5	Nov 21, 1980
<b>Annual runoff (inches)</b>	23.44		11.07		11.61	
<b>10 percent exceeds</b>	9,870		5,940		6,160	
<b>50 percent exceeds</b>	3,480		387		550	
<b>90 percent exceeds</b>	80		77		63	

<sup>a</sup> Period of Regulated Streamflow

<sup>b</sup> Also Mar 11



## 05508000 SALT RIVER NEAR NEW LONDON, MO—Continued

**GAGE HEIGHT, FEET**  
**WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011**  
**OBSERVATION AT 0800**

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	8.08	6.27	2.50	3.30	3.29	8.09	2.66	2.87	4.00	5.36	6.64	2.45
2	6.85	7.26	2.43	2.77	2.52	10.38	2.65	2.87	8.11	8.33	5.08	2.47
3	7.77	7.54	2.50	2.66	2.85	10.47	2.65	2.83	7.97	6.52	5.58	2.49
4	5.87	7.41	2.51	6.16	3.36	10.50	2.74	2.81	3.94	2.89	4.65	2.51
5	9.80	8.35	2.49	6.11	4.05	6.73	2.75	2.80	3.69	2.78	2.68	2.49
6	9.40	7.28	2.49	6.59	2.85	10.55	2.69	7.65	7.18	8.10	2.58	2.49
7	9.28	3.16	5.61	6.37	2.58	10.54	2.66	7.93	7.98	7.64	2.70	2.49
8	7.37	2.63	2.73	7.14	3.79	10.52	2.68	8.48	9.32	8.59	2.55	2.47
9	4.49	2.57	2.64	2.84	7.50	9.86	---	9.20	8.99	8.41	2.50	2.49
10	6.26	2.55	2.61	3.40	---	11.84	---	3.15	8.06	8.17	4.40	2.49
11	9.15	2.57	2.57	3.63	---	12.97	---	3.36	4.54	8.58	2.74	2.48
12	6.44	2.55	2.61	5.44	---	12.85	---	2.81	9.44	10.16	2.89	2.47
13	7.55	2.56	2.56	5.79	---	12.68	---	2.78	3.24	11.64	2.54	2.46
14	8.14	2.54	3.31	3.29	---	12.49	---	4.94	8.29	11.90	2.51	2.45
15	7.83	2.54	5.28	2.69	---	4.04	3.44	2.83	4.25	10.89	2.50	2.45
16	7.97	2.53	4.63	2.65	---	2.86	2.94	2.87	2.72	10.13	2.48	2.45
17	8.31	2.53	2.66	2.64	5.13	2.85	7.59	2.73	2.67	10.00	2.47	2.45
18	8.26	2.54	2.58	2.64	4.37	2.80	7.64	2.69	4.23	9.71	2.46	2.48
19	4.42	2.56	2.56	3.91	6.61	2.79	9.22	3.90	4.32	6.66	2.47	2.49
20	8.16	2.55	2.55	2.69	6.03	2.79	9.41	2.77	3.26	6.39	2.48	2.46
21	7.83	2.55	2.54	2.58	5.46	2.76	9.70	2.77	4.31	7.31	2.48	2.46
22	6.88	2.54	2.56	2.66	8.59	2.70	9.36	2.73	4.26	6.50	2.47	2.43
23	4.37	2.54	2.56	2.64	9.55	2.73	9.82	2.71	4.30	5.99	2.47	2.44
24	6.90	2.56	2.56	2.62	12.04	2.69	9.63	4.21	4.45	4.61	2.46	2.43
25	6.27	2.62	2.59	3.36	4.15	2.69	3.58	5.72	4.46	2.74	2.44	2.46
26	6.70	2.56	2.55	3.92	9.93	2.73	8.86	4.36	4.42	5.24	2.46	2.46
27	7.22	2.54	2.54	2.74	8.53	2.72	3.64	5.39	4.39	4.61	2.49	2.47
28	7.81	2.51	2.53	3.31	9.84	2.71	2.99	3.05	4.36	4.28	2.47	3.08
29	8.17	2.49	2.52	3.18	---	2.68	2.92	3.20	4.13	6.17	2.48	3.88
30	6.41	2.49	2.54	2.65	---	2.68	2.90	9.04	4.38	5.81	2.47	3.87
31	6.39	---	2.93	2.64	---	2.65	---	5.39	---	5.76	2.46	---
<b>Mean</b>	7.30	3.53	2.85	3.71	---	6.40	---	4.22	5.32	7.16	2.97	2.58
<b>Max</b>	9.80	8.35	5.61	7.14	---	12.97	---	9.20	9.44	11.90	6.64	3.88
<b>Min</b>	4.37	2.49	2.43	2.58	---	2.65	---	2.69	2.67	2.74	2.44	2.43