05506800 ELK FORK SALT RIVER NEAR MADISON, MO

Upper Mississippi Basin
Salt Subbasin

LOCATION.--Lat 39°26'05.4", long 92°10'04.0" referenced to North American Datum of 1983, in SE ¼ NE ¼ SW ¼ sec.29, T.54 N., R.11 W., Monroe County, MO, Hydrologic Unit 07110006, on downstream side and 25 ft to the left of bridge on State Highway AA, 500 ft downstream from Allen Creek, 3.5 mi southeast of Madison, and at mile 29.8.

DRAINAGE AREA.--200 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1968 to current year.

REVISED RECORDS.--WDR MO 1973: 1970(M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 690.16 ft above National Geodetic Vertical Datum of 1929 (Missouri State Highway and Transportation Commission bench mark).

REMARKS.--Records fair except for estimated daily discharges and discharges below 5 ft^3/s, which are poor.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 9, 1967, reached a stage of 31.25 ft, from floodmark, discharge 33,300 ft^3/s, by contracted-opening method. Flood in 1871 reached nearly the same stage, from information by local resident.

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

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 28	0715	6,950	19.96
Mar 25	0715	6,030	18.76
Mar 29	0930	3,090	13.95
Apr 11	0415	4,100	15.91
Apr 28	0115	5,560	18.12
Apr 30	2000	*8,580	*21.73
Jun 17	0530	3,710	15.19

Minimum discharge, 1.5 ft^3/s, Sept. 18, gage height, 2.99 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	11	21	19	110	13	26	151	4,140	27	12	4.7	7.4
2	10	20	23	94	13	20	106	555	22	9.1	4.3	5.5
3	8.4	18	23	79	10	16	85	264	19	8.1	4.0	5.8
4	7.0	15	19	75	7.7	15	67	161	18	18	4.5	6.7
5	6.2	12	16	59	6.1	16	57	110	16	338	4.3	6.3
6	5.2	11	15	52	7.9	18	50	86	13	91	4.5	10
7	5.7	14	12	48	14	20	45	63	14	33	3.8	21
8	7.4	23	13	45	18	24	40	60	16	19	3.3	11
9	12	18	228	37	18	40	36	129	17	13	2.8	6.7
10	13	13	498	35	21	1,950	2,850	75	34	9.8	4.8	5.5
11	7.1	13	137	34	301	1,570	2,680	49	100	7.5	7.7	4.7
12	4.8	24	81	32	848	252	331	37	149	8.3	16	3.8
13	3.6	43	58	e28	231	140	1,060	30	65	12	10	3.1
14	3.3	34	53	25	124	103	768	25	38	21	5.9	3.1
15	211	27	121	e18	80	84	280	124	308	24	4.0	2.7
16	590	26	97	13	55	71	154	1,950	3,050	49	3.7	2.3
17	124	31	80	13	45	59	104	606	2,570	28	760	2.0
18	55	26	51	15	45	51	89	134	244	16	802	2.3
19	32	20	370	17	40	45	1,180	78	216	13	174	3.1
20	20	17	931	15	33	38	1,100	54	162	9.1	1,040	2.8
21	14	14	251	13	28	32	250	42	113	8.8	424	3.6
22	1,410	12	217	13	24	33	134	34	112	11	95	8.6
23	1,160	11	107	14	21	40	89	30	72	48	48	5.9
24	214	11	62	11	19	2,270	71	33	134	31	31	7.1
25	125	11	49	9.4	19	5,240	57	327	81	23	22	125
26	80	10	100	7.8	22	591	47	279	48	15	17	158
27	50	10	3,170	7.4	28	227	1,070	128	32	10	16	53
28	36	11	5,800	7.7	31	653	5,060	89	25	9.6	13	31
29	29	10	685	8.2	---	2,570	1,440	56	18	9.5	9.8	17
30	26	15	258	8.7	---	575	6,760	45	15	9.4	9.0	12
31	24	---	173	9.8	---	243	---	40	---	6.8	9.2	---
Mean	139	18.0	442	30.8	75.8	549	874	317	258	29.7	115	17.9
Max	1,410	43	5,800	110	848	5,240	6,760	4,140	3,050	338	1,040	158
Min	3.3	10	12	7.4	6.1	15	36	25	13	6.8	2.8	2.0
In.	0.80	0.10	2.55	0.18	0.39	3.17	4.88	1.83	1.44	0.17	0.66	0.10

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1969 - 2009, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	89.1	127	137	128	211	271	321	263	205	185	60.5	125
Max	1,077	1,248	750	667	923	1,154	1,651	1,554	1,005	2,013	577	1,381
(WY)	(1987)	(1986)	(1983)	(2005)	(1985)	(1973)	(1973)	(1995)	(1969)	(2008)	(2004)	(1993)
Min	0.25	1.24	0.94	0.95	2.07	3.02	4.76	10.0	1.61	1.06	0.82	0.63
(WY)	(1981)	(1981)	(1989)	(1977)	(1989)	(1981)	(2000)	(1992)	(1988)	(1988)	(1980)	(1988)

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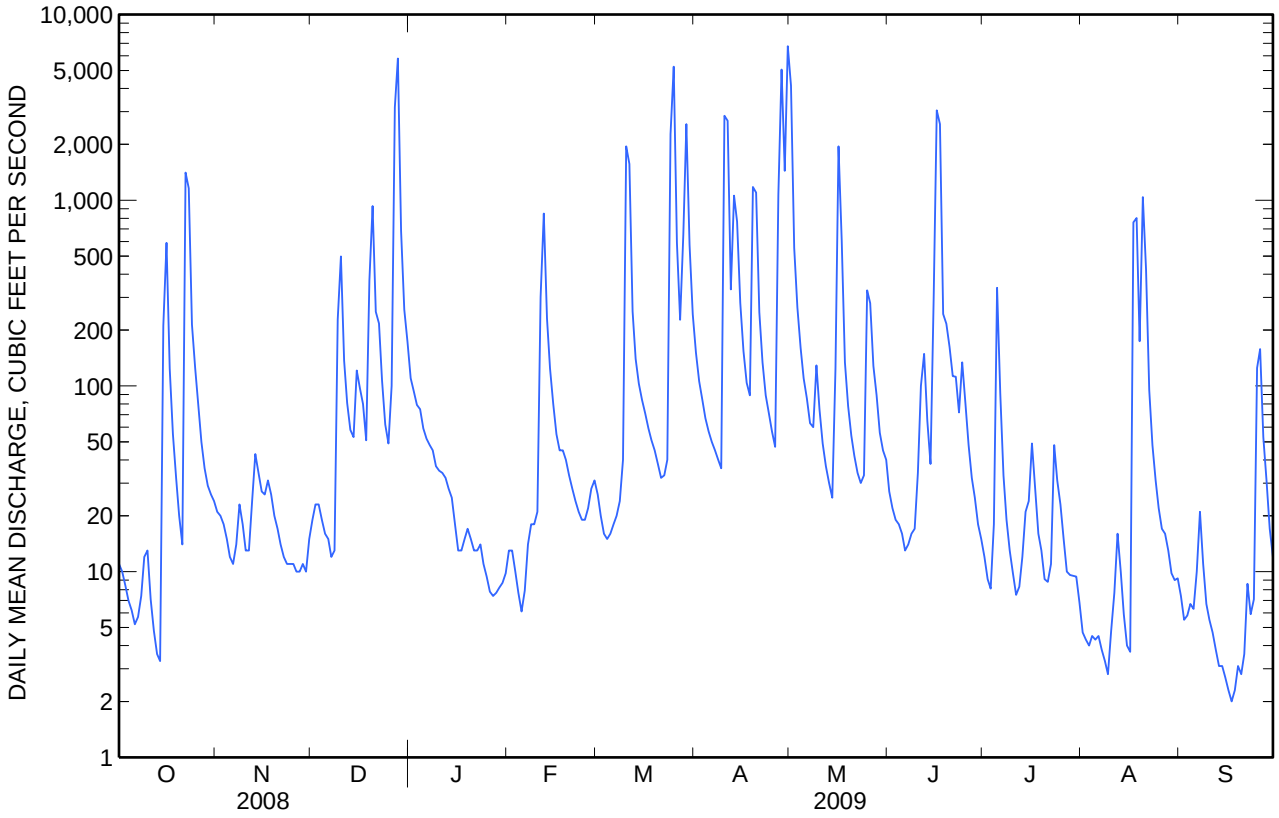
SUMMARY STATISTICS

	Calendar Year 2008		Water Year 2009		Water Years 1969 - 2009	
Annual mean	463		240		177	
Highest annual mean					414	2008
Lowest annual mean					23.6	1976
Highest daily mean	15,300	Jul 25	6,760	Apr 30	24,100	Apr 21, 1973
Lowest daily mean	1.8	Jan 25	2.0	Sep 17	0.00	Aug 4, 1976[a]
Annual seven-day minimum	2.3	Jan 21	2.6	Sep 14	0.00	Aug 4, 1976
Maximum peak flow			8,580	Apr 30	42,300	Apr 21, 1973
Maximum peak stage			21.73	Apr 30	33.40	Apr 21, 1973
Instantaneous low flow			1.5	Sep 18	0.00	Aug 4, 1976[a]
Annual runoff (inches)	31.54		16.27		11.99	
10 percent exceeds	933		454		276	
50 percent exceeds	48		28		15	
90 percent exceeds	9.5		6.5		1.5	

[a] Also Aug 5-10, 1976