07052500 JAMES RIVER AT GALENA, MO

Upper White Basin
James Subbasin

LOCATION.--Lat 36°48'19.4", long 93°27'41.7" referenced to North American Datum of 1983, in SW ¼ SE ¼ SW ¼ sec.6, T.24 N., R.23 W., Stone County, MO, Hydrologic Unit 11010002, on downstream side of left pier of first arch span from left end of bridge on old State Highways 13 and 248 in Galena, 0.2 mi. upstream from Missouri Pacific R.R. bridge, 1500 ft. downstream from State Highway 13 and State Highway 248, 0.7 mi upstream from Railey Creek, 8 mi. downstream from Crane Creek, and 42.3 mi upstream of mouth.

DRAINAGE AREA.--987 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1921 to current year. Monthly discharge only, October 1921, published in WSP 1311.

REVISED RECORDS.--WSP 977: 1935(M), 1941(M).

GAGE.--Water-stage recorder. Datum of gage is 921.37 ft above National Geodetic Vertical Datum of 1929. Prior to Dec. 11, 1927, nonrecording gage at site 500 ft downstream at datum 1.48 ft higher; Dec. 11, 1927, to July 22, 1939, nonrecording gage, and July 23, 1939, to Sept. 30, 1953, water-stage recorder at present site and at datum 2.00 ft higher.

REMARKS.--Records good except for estimated daily discharges, which are poor. March 22 to July 21 estimated due to backwater from Table Rock Lake.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 12,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan 9	0830	22,500	16.15
Feb 18	0545	27,300	18.01
Mar 4	1445	13,000	11.98
Mar 19	1015	*85,100	*35.96
Sep 15	1115	31,400	19.59

Minimum discharge, 131 ft^3/s, Nov. 24, 25, gage height, 2.79 ft.

07052500 JAMES RIVER AT GALENA, MO—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	251	163	154	269	334	1,540	e9,590	e1,430	e882	e4,620	552	185
2	240	159	151	254	317	1,330	e8,540	e1,370	e906	e3,270	558	180
3	254	160	145	246	305	2,770	e5,490	e1,310	e894	e2,580	496	229
4	255	153	144	244	298	10,500	e4,360	e1,200	e836	e2,180	443	1,930
5	251	148	143	239	359	6,660	e3,740	e1,090	e750	e1,970	408	2,230
6	231	145	139	237	2,600	4,670	e3,100	e1,010	e878	e1,770	382	1,430
7	218	146	140	236	2,750	3,710	e2,660	e1,120	e1,290	e1,460	364	995
8	219	144	145	11,700	2,010	3,140	e2,500	e3,210	e1,250	e1,250	356	752
9	246	144	153	17,600	1,560	2,690	e2,650	e5,620	e1,070	e1,330	342	605
10	282	144	271	6,370	1,240	2,270	e11,000	e4,120	e1,080	e1,370	342	505
11	243	142	895	4,240	1,050	1,900	e24,100	e3,090	e1,010	e1,230	334	457
12	222	159	960	3,230	1,320	1,620	e13,100	e2,540	e868	e1,060	323	411
13	214	165	958	2,530	1,760	1,430	e6,270	e2,120	e2,040	e956	305	374
14	204	185	793	1,990	2,000	1,330	e4,590	e1,860	e11,700	e867	290	12,900
15	201	191	739	1,580	2,910	1,250	e3,640	e2,260	e11,000	e798	302	25,100
16	198	169	801	1,300	4,150	1,160	e3,020	e4,390	e4,740	e728	335	6,620
17	203	158	734	1,100	15,900	1,060	e2,580	e4,210	e3,190	e664	346	4,190
18	208	155	687	934	20,000	23,400	e2,270	e3,090	e2,280	e617	301	3,110
19	236	151	621	804	7,330	72,900	e2,050	e2,440	e1,940	e589	271	2,400
20	224	150	554	699	5,000	33,400	e1,840	e2,020	e4,880	e580	267	1,950
21	203	149	491	625	3,850	12,300	e1,660	e1,720	e7,770	e556	263	1,620
22	193	148	445	570	3,220	e7,690	e1,540	e1,490	e5,020	607	255	1,370
23	192	145	411	522	2,720	e5,650	e1,510	e1,310	e6,020	671	248	1,190
24	201	138	389	483	2,380	e4,450	e2,070	e1,270	e4,790	1,140	237	1,050
25	199	135	363	454	2,320	e3,720	e3,390	e1,340	e3,460	826	227	946
26	191	151	342	429	2,540	e3,230	e3,220	e1,390	e2,600	686	221	846
27	184	170	332	405	2,450	e2,860	e2,520	e1,330	e2,080	651	214	769
28	177	182	324	386	2,130	e2,680	e2,070	e1,250	e3,940	625	207	696
29	170	169	308	375	1,830	e2,390	e1,780	e1,140	e12,500	555	201	643
30	167	158	292	356	---	e2,590	e1,580	e1,020	e9,710	504	200	597
31	166	---	280	344	---	e4,560	---	e917	---	626	192	---
Mean	214	156	429	1,960	3,332	7,447	4,614	2,054	3,712	1,204	316	2,543
Max	282	191	960	17,600	20,000	72,900	24,100	5,620	12,500	4,620	558	25,100
Min	166	135	139	236	298	1,060	1,510	917	750	504	192	180
In.	0.25	0.18	0.50	2.29	3.64	8.70	5.22	2.40	4.20	1.41	0.37	2.87

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1922 - 2008, BY WATER YEAR (WY)

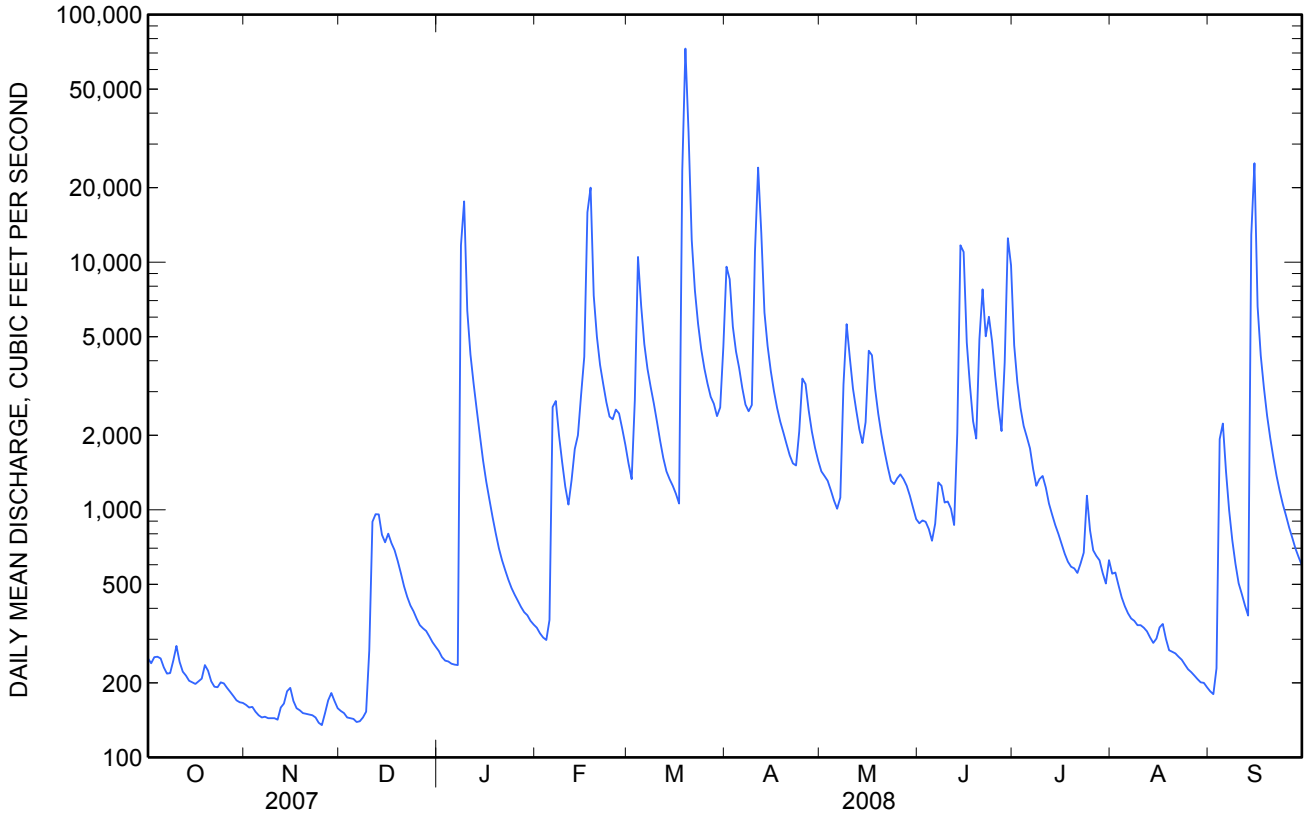
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	461	834	942	957	1,147	1,568	1,768	1,621	1,176	591	380	439
Max	2,494	4,407	5,435	4,809	3,485	7,447	8,376	9,549	6,383	4,010	5,159	5,684
(WY)	(1942)	(1973)	(1983)	(2005)	(1966)	(2008)	(1927)	(1943)	(1935)	(1951)	(1927)	(1993)
Min	58.0	65.3	79.2	68.8	87.4	129	145	179	87.6	46.0	22.6	45.8
(WY)	(1954)	(1954)	(1956)	(1956)	(1954)	(1954)	(1954)	(1936)	(1936)	(1954)	(1954)	(1953)

07052500 JAMES RIVER AT GALENA, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1922 - 2008	
Annual mean	1,077		2,322		988	
Highest annual mean					2,499	1927
Lowest annual mean					119	1954
Highest daily mean	20,400	Jun 13	72,900	Mar 19	72,900	Mar 19, 2008
Lowest daily mean	135	Nov 25	135	Nov 25	11	Aug 22, 1954
Annual seven-day minimum	144	Dec 2	144	Dec 2	12	Aug 18, 1954
Maximum peak flow			85,100	Mar 19	85,100	Mar 19, 2008
Maximum peak stage			35.96	Mar 19	35.96	Mar 19, 2008
Instantaneous low flow			131	Nov 24[a]	10	Sep 20, 1954
Annual runoff (inches)	14.82		32.03		13.61	
10 percent exceeds	2,620		4,690		2,160	
50 percent exceeds	499		900		423	
90 percent exceeds	162		169		120	

[a]Also Nov 25



07052500 JAMES RIVER AT GALENA, MO—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--November 1999 to current year.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 5

[Remark codes: <, less than; >, greater than; E, estimated; M, presence verified but not quantified.]

Date	Time	Sample medium and type	Instantaneous discharge, cfs (00061)	Turbdty white light, det ang 90+/-30 corrctd NTRU (63676)	Dissolved oxygen, mg/L (00300)	Dissolved oxygen, percent of saturation (00301)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)
Oct									
29...	1520	Surface water, regular	166	<2.0	13.8	133	8.4	490	12.7
Nov									
27...	1540	Surface water, regular	174	--	15.9	138	8.5	491	7.9
Dec									
10...	1415	Surface water, regular	223	E1.1	11.2	91	8.4	483	5.6
Jan									
14...	1550	Surface water, regular	1,540	--	9.4	83	7.8	385	8.6
Feb									
20...	1600	Surface water, regular	4,800	10	10.4	94	7.7	333	9.5
Mar									
17...	1600	Surface water, regular	1,030	E1.5	11.5	113	8.1	374	12.6
Apr									
07...	1610	Surface water, regular	4,210	7.7	10.4	109	7.7	330	15.6
May									
08...	1330	Surface water, regular	8,690	8.1	8.4	89	7.4	291	16.0
27...	1520	Surface water, regular	6,160	3.5	10.1	117	7.6	365	20.7
Jun									
09...	1145	Surface water, regular	4,310	3.4	5.8	70	7.7	371	23.0
28...	1535	Surface water, regular	24,200	--	7.8	86	7.7	166	18.8
Jul									
14...	1530	Surface water, regular	1,640	E1.3	11.2	139	8.1	370	24.5
Aug									
18...	1705	Surface water, regular	296	E1.3	10.7	137	8.3	410	25.6
Sep									
03...	0915	Surface water, regular	205	E1.4	5.1	64	7.8	433	23.7

07052500 JAMES RIVER AT GALENA, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 2 of 5
[Remark codes: <, less than; >, greater than; E, estimated; M, presence verified but not quantified.]

Date	Hardness, water, mg/L as CaCO3 (00900)	Calcium water, fltrd, mg/L (00915)	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium, water, fltrd, mg/L (00930)	ANC, wat unf fixed end pt, field, mg/L as CaCO3 (00410)	ANC, wat unf infl pt titr., field, mg/L as CaCO3 (00419)	Bicarbonate, wat unf infl pt titr., field, mg/L (00450)	Carbonate, wat unf infl pt titr., field, mg/L (00447)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)
Oct													
29...	180	61.7	6.69	4.57	24.6	163	162	193	2	36.8	.14	3.7	18.3
Nov													
27...	170	57.7	6.61	5.10	24.2	--	159	189	3	36.7	.14	--	19.3
Dec													
10...	180	62.1	7.01	5.48	26.6	157	156	186	2	36.4	.17	2.2	21.0
Jan													
14...	180	64.0	5.92	2.60	7.34	169	168	205	<1	13.2	<.12	--	9.38
Feb													
20...	150	53.2	4.67	2.16	6.04	134	136	165	<1	12.3	<.12	9.0	7.91
Mar													
17...	180	64.0	4.95	2.36	9.55	148	148	179	<1	17.5	E.07	5.4	9.26
Apr													
07...	150	54.0	4.89	2.00	5.50	--	139	169	<1	10.8	<.12	8.4	7.38
May													
08...	130	46.1	3.61	2.54	6.27	--	115	140	<1	10.5	E.06	--	7.10
27...	160	56.9	5.14	2.20	6.90	--	147	178	<1	12.9	E.08	--	7.42
Jun													
09...	170	58.4	5.01	2.52	7.51	--	156	189	<1	13.5	<.12	9.5	8.26
28...	72	25.5	2.03	3.37	1.95	--	73.4	89.1	<1	5.18	<.12	--	3.22
Jul													
14...	170	60.0	4.96	2.43	7.81	--	158	189	1	13.7	E.11	--	7.35
Aug													
18...	170	59.1	5.42	3.45	13.8	--	150	178	2	22.0	E.10	8.4	11.4
Sep													
03...	170	60.0	5.50	3.92	16.9	--	152	186	<1	25.9	.18	9.7	12.0

07052500 JAMES RIVER AT GALENA, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 3 of 5

[Remark codes: <, less than; >, greater than; E, estimated; M, presence verified but not quantified. Microbiology results with a remark code of E are based on non-ideal colony counts.]

Date	Residue on evap. at 180degC wat flt mg/L (70300)	Residue total non-filter-able, mg/L (00530)	Ammonia + org-N, water, unfltrd mg/L as N (00625)	Ammonia water, fltrd, mg/L as N (00608)	Nitrate + nitrite water fltrd, mg/L as N (00631)	Nitrite water, fltrd, mg/L as N (00613)	Ortho-phos-phate, water, fltrd, mg/L as P (00671)	Phos-phorus, water, fltrd, mg/L as P (00666)	Phos-phorus, water, unfltrd mg/L as P (00665)	E coli, modif. m-TEC, water, col/ 100 mL (90902)	Fecal coli-form, M-FC 0.7u MF col/ 100 mL (31625)	Alum-inum, water, fltrd, µg/L (01106)	Alum-inum, water, unfltrd recover-able, µg/L (01105)
Oct													
29...	282	<10	.16	<.020	3.32	.005	.016	E.03	E.03	E4	E4	--	--
Nov													
27...	283	<10	.19	<.020	4.45	.005	E.005	<.04	<.04	<1	E3	<1.6	9
Dec													
10...	277	<10	.23	<.020	4.37	.007	.008	<.04	E.04	E32	E32	--	--
Jan													
14...	226	<10	.14	<.020	3.28	.002	.037	.05	.06	120	210	E1.0	104
Feb													
20...	183	16	.18	<.020	2.67	.003	.030	E.04	.05	330	600	--	--
Mar													
17...	216	<10	E.11	<.020	2.56	.004	.009	E.02	E.04	E8	E8	--	--
Apr													
07...	190	12	E.13	<.020	2.18	.003	.020	E.03	.05	E20	E37	--	--
May													
08...	165	25	.54	.034	1.86	.009	.043	.06	.11	E10,000	E9,900	3.3	396
27...	200	11	.24	<.020	1.86	.004	.017	E.02	E.04	44	90	E1.1	99
Jun													
09...	221	13	.17	E.011	1.73	.005	.049	.05	.05	110	120	--	--
28...	116	588	2.8	.026	.79	.007	.129	.16	.93	>1,600	>1,200	3.3	6,340
Jul													
14...	192	<10	E.12	.050	1.52	.005	.010	E.04	E.03	<2	E5	1.6	41
Aug													
18...	239	<10	.17	<.020	1.67	.004	.020	E.03	E.04	E3	E1	--	--
Sep													
03...	233	<10	.20	<.020	2.21	.006	.024	.04	.05	46	64	--	--

07052500 JAMES RIVER AT GALENA, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
Part 4 of 5
[Remark codes: <, less than; >, greater than; E, estimated; M, presence verified but not quantified.]

Date	Arsenic water, fltrd, µg/L (01000)	Boron, water, fltrd, µg/L (01020)	Cadmium water, fltrd, µg/L (01025)	Cadmium water, unfltrd µg/L (01027)	Copper, water, fltrd, µg/L (01040)	Iron, water, fltrd, µg/L (01046)	Lead, water, fltrd, µg/L (01049)	Lead, water, unfltrd recover-able, µg/L (01051)	Lithium water, fltrd, µg/L (01130)	Mangan-ese, water, fltrd, µg/L (01056)	Mercury water, unfltrd recover-able, µg/L (71900)	Selen-ium, water, fltrd, µg/L (01145)	Stront-ium, water, fltrd, µg/L (01080)
Oct													
29...	--	--	--	--	--	--	--	--	--	--	--	--	--
Nov													
27...	.21	51	<.04	<.01	E.53	<8	<.08	<.06	1	.7	<.010	.12	62.8
Dec													
10...	--	--	--	--	--	--	--	--	--	--	--	--	--
Jan													
14...	.27	15	<.04	.02	<1.0	<8	<.08	.29	M	2.8	<.010	.44	57.9
Feb													
20...	--	--	--	--	--	--	--	--	--	--	--	--	--
Mar													
17...	--	--	--	--	--	--	--	--	--	--	--	--	--
Apr													
07...	--	--	--	--	--	--	--	--	--	--	--	--	--
May													
08...	.27	15	<.04	.04	E.67	E6	<.08	1.40	M	2.1	<.010	.14	44.3
27...	.29	15	<.04	.02	E.70	<8	<.08	.37	M	5.6	<.010	.20	52.8
Jun													
09...	--	--	--	--	--	--	--	--	--	--	--	--	--
28...	.40	12	<.04	.39	E.90	8	<.08	21.4	M	1.4	.060	.16	26.4
Jul													
14...	.30	17	<.04	E.01	E.52	E6	<.08	.14	M	40.6	<.010	.20	60.2
Aug													
18...	--	--	--	--	--	--	--	--	--	--	--	--	--
Sep													
03...	--	--	--	--	--	--	--	--	--	--	--	--	--

07052500 JAMES RIVER AT GALENA, MO—Continued

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007
TO SEPTEMBER 2008

Part 5 of 5

[Remark codes: <, less than; >, greater than; E, estimated; M, presence verified but not quantified.]

Date	Zinc, water, fltrd, µg/L (01090)	Zinc, water, unfltrd recover-able, µg/L (01092)
Oct		
29...	--	--
Nov		
27...	5.3	3.6
Dec		
10...	--	--
Jan		
14...	E1.2	2.2
Feb		
20...	--	--
Mar		
17...	--	--
Apr		
07...	--	--
May		
08...	E1.8	6.2
27...	E.90	2.2
Jun		
09...	--	--
28...	<1.8	48.1
Jul		
14...	E1.1	E1.6
Aug		
18...	--	--
Sep		
03...	--	--