Water-Data Report 2013

06928000 GASCONADE RIVER NEAR HAZELGREEN, MO

Lower Missouri Basin
Gasconade Subbasin

LOCATION.--Lat 37°45′33″, long 92°27′06″ referenced to North American Datum of 1927, in SW ¼ SE ¼ SE ¼ sec.15, T.35 N., R.14 W., Laclede County, MO, Hydrologic Unit 10290201, on downstream end of center pier of bridge on south outer road, 400 ft upstream from eastbound bridge of Interstate 44, 1 mi downstream from Osage Fork, 1.5 mi west of Hazelgreen, and at mile 180.

DRAINAGE AREA.--1,250 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1928 to September 1971, October 2000 to current year. Prior to April 1929 monthly discharge only published in WSP 1310.

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 844.75 ft above National Geodetic Vertical Datum of 1929. Prior to March 6, 1956, nonrecording gage at present site and datum. March 6, 1956 to Dec. 17, 1957, nonrecording gage at site 750 ft downstream at present datum and Dec. 18, 1957 to Aug. 20, 1958, nonrecording gage at present site and datum. Aug. 20, 1958 to September 1971, water-stage recorder at present site and datum.

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

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Dec. 4, 1982 reached a stage of 34.46 ft, discharge 87,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb 27	1515	11,100	11.73
Mar 18	1045	11,300	11.82
Apr 20	0300	16,800	14.82
Apr 28	1045	16,600	14.75
Jun 2	2015	34,500	22.12
Aug 4	2115	31,100	21.02
Aug 6	1630	*62,300	*29.42
Aug 9	0600	32,900	21.62

Minimum discharge, 106 ft^3/s, Oct. 11, 12, gage height, 0.97 ft.

Suggested citation: U.S. Geological Survey, 2014, Water-resources data for the United States, Water Year 2013: U.S. Geological Survey Water-Data Report WDR-US-2013, site 06928000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/06928000.2013.pdf

06928000 GASCONADE RIVER NEAR HAZELGREEN, MO—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	121	274	153	185	3,580	3,330	2,670	3,210	9,270	354	922	415
2	148	254	150	178	2,070	2,470	2,360	2,510	23,500	331	871	392
3	149	237	147	172	1,550	2,000	1,980	2,240	15,800	305	6,120	369
4	141	220	176	167	1,270	1,700	1,730	2,350	4,030	285	21,700	348
5	137	211	166	163	1,050	1,560	1,530	2,310	2,720	270	18,100	332
6	134	204	161	159	898	1,450	1,370	2,040	2,140	259	47,000	313
7	127	194	164	155	789	1,290	1,280	1,800	1,810	242	44,700	298
8	119	185	179	151	722	1,150	1,710	1,600	1,550	228	37,100	285
9	113	180	190	151	670	1,060	1,480	1,440	1,340	215	32,200	275
10	110	175	192	154	662	1,630	1,300	1,360	1,190	212	21,400	264
11	108	178	189	154	670	4,330	2,690	1,570	1,170	199	16,100	252
12	117	186	183	155	1,050	5,460	4,020	1,480	1,040	187	5,000	242
13	110	183	178	164	1,200	3,160	2,480	1,250	908	177	3,540	228
14	148	189	173	162	1,140	2,280	1,890	1,100	801	170	2,680	219
15	660	228	173	164	1,050	1,830	1,580	987	726	163	2,160	212
16	845	274	167	179	951	1,560	1,360	897	682	160	1,830	208
17	759	271	162	245	851	4,020	1,180	823	710	159	1,590	207
18	613	257	158	274	772	10,600	2,020	771	994	153	1,400	212
19	508	244	154	275	711	7,600	8,100	720	946	148	1,260	213
20	444	231	170	266	657	4,040	10,700	688	803	142	1,130	258
21	390	219	178	253	637	2,830	3,700	742	691	141	1,010	252
22	343	208	179	240	608	2,300	2,570	951	607	158	907	249
23	321	198	186	228	575	2,030	2,210	895	539	163	819	253
24	297	187	201	218	575	1,960	2,310	772	487	175	747	259
25	286	179	213	207	709	2,900	2,440	665	444	173	684	244
26	295	173	212	199	3,250	3,480	2,320	594	408	171	629	228
27	333	167	210	194	9,590	2,790	7,880	542	378	192	581	212
28	362	163	206	190	5,650	2,330	15,000	504	384	200	539	205
29	347	159	199	252	---	2,360	7,510	471	375	193	502	203
30	321	155	191	992	---	2,550	4,450	451	346	213	469	196
31	296	---	189	7,880	---	2,540	---	1,030	---	314	439	---
Mean	297	206	179	469	1,568	2,922	3,461	1,250	2,560	208	8,843	261
Max	845	274	213	7,880	9,590	10,600	15,000	3,210	23,500	354	47,000	415
Min	108	155	147	151	575	1,060	1,180	451	346	141	439	196
In.	0.27	0.18	0.17	0.43	1.31	2.70	3.09	1.15	2.29	0.19	8.16	0.23

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1929 - 2013[a], BY WATER YEAR (WY)

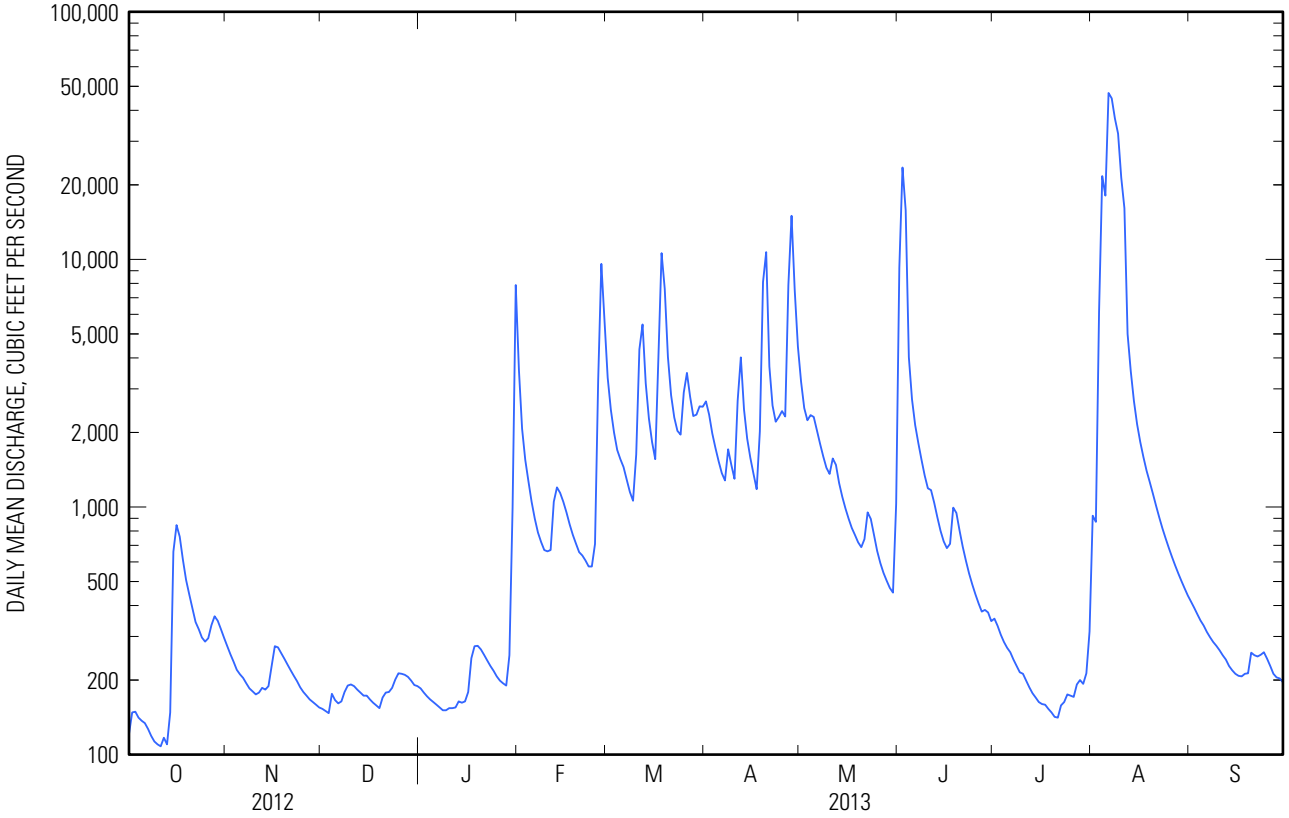
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	493	642	720	1,003	1,242	1,723	1,885	1,906	1,054	498	431	407
Max	4,943	4,273	3,361	4,805	3,668	7,594	10,180	7,340	8,710	5,322	8,843	3,000
(WY)	(1950)	(1952)	(1943)	(1950)	(2008)	(2008)	(1945)	(1943)	(1935)	(1958)	(2013)	(2008)
Min	31.6	65.8	72.6	68.0	91.2	141	130	202	83.2	41.8	30.8	25.6
(WY)	(1957)	(1954)	(1956)	(1956)	(1964)	(1956)	(1956)	(1932)	(1936)	(1934)	(1936)	(1954)

06928000 GASCONADE RIVER NEAR HAZELGREEN, MO—Continued

SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1929 - 2013[a]	
Annual mean	652		1,857		998	
Highest annual mean					2,236	1950
Lowest annual mean					123	1954
Highest daily mean	37,200	Mar 22	47,000	Aug 6	64,900	Mar 19, 2008
Lowest daily mean	48	Jul 28	108	Oct 11	19	Sep 20, 1954
Annual seven-day minimum	51	Jul 28	115	Oct 7	21	Sep 14, 1954
Maximum peak flow			62,300	Aug 6	89,500	Mar 19, 2008
Maximum peak stage			29.42	Aug 6	34.92	Mar 19, 2008
Instantaneous low flow			106	Oct 11[b]	18	Aug 1, 1936
Annual runoff (inches)	7.11		20.17		10.85	
10 percent exceeds	1,100		3,230		2,090	
50 percent exceeds	198		444		352	
90 percent exceeds	65		162		88	

[a] For Period of Record
[b] Also Oct 12



06928000 GASCONADE RIVER NEAR HAZELGREEN, MO—Continued

GAGE HEIGHT, FEET
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
OBSERVATION AT 0800
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.03	1.59	1.17	1.29	6.46	6.14	5.37	5.97	10.58	1.81	2.70	1.98
2	1.15	1.53	1.16	1.27	4.75	5.13	4.99	5.17	16.08	1.75	2.94	1.92
3	1.16	1.47	1.15	1.24	3.99	4.56	4.50	4.73	17.40	1.68	4.67	1.87
4	1.13	1.41	1.28	1.23	3.55	4.12	4.17	4.84	6.89	1.61	14.72	1.81
5	1.10	1.37	1.22	1.21	3.21	3.92	3.89	4.89	5.44	1.57	14.83	1.77
6	1.10	1.36	1.20	1.20	2.96	3.78	3.67	4.58	4.73	1.55	25.08	1.72
7	1.07	1.33	1.20	1.18	2.74	3.56	3.49	4.26	4.28	1.49	24.74	1.69
8	1.04	1.29	1.26	1.17	2.62	3.36	4.02	4.00	3.93	1.44	21.84	1.65
9	1.01	1.27	1.31	1.16	2.52	3.20	3.86	3.73	3.63	1.40	20.84	1.61
10	0.99	1.26	1.31	1.17	2.50	3.15	3.48	3.63	3.40	1.41	16.42	1.58
11	0.98	1.24	1.30	1.18	2.48	5.71	4.92	3.76	3.37	1.35	16.93	1.54
12	1.03	1.29	1.29	1.16	3.08	8.40	7.12	3.85	e3.21	1.31	7.69	1.52
13	0.98	1.28	1.27	1.21	3.44	5.95	5.18	3.52	2.97	1.27	6.33	1.48
14	1.16	1.29	1.25	1.20	3.33	4.91	4.42	3.29	2.78	1.24	5.40	1.45
15	1.20	1.39	1.24	1.21	3.20	4.32	3.95	3.10	2.62	1.21	4.76	1.42
16	2.79	1.57	1.22	1.24	3.04	3.95	3.68	2.94	2.53	1.19	4.30	1.41
17	2.72	1.57	1.21	1.46	2.87	4.25	3.42	2.81	2.51	1.20	3.98	1.40
18	2.44	1.54	1.19	1.57	2.72	11.66	3.39	2.71	3.10	1.18	3.73	1.41
19	2.20	1.49	1.17	1.58	2.60	10.08	6.70	2.62	3.05	1.16	3.51	1.43
20	2.04	1.45	1.23	1.56	2.50	6.85	13.47	2.56	2.79	1.13	3.34	1.59
21	1.91	1.41	1.26	1.52	2.43	5.58	6.50	2.58	2.57	1.13	3.13	1.56
22	1.79	1.37	1.26	1.48	2.40	4.89	5.26	2.87	2.41	1.18	2.96	1.55
23	1.75	1.34	1.29	1.44	2.32	4.57	4.63	2.95	2.25	1.23	2.82	1.55
24	1.66	1.30	1.33	1.40	2.30	4.34	4.80	2.73	2.14	1.26	2.69	1.59
25	1.60	1.27	1.38	1.37	2.44	5.16	5.11	2.52	2.04	1.25	2.56	1.55
26	1.63	1.25	1.38	1.34	5.37	6.28	4.62	2.38	1.95	1.22	2.45	1.49
27	1.72	1.23	1.38	1.32	10.94	5.51	7.77	2.26	1.87	1.30	2.36	1.45
28	1.83	1.21	1.36	1.31	8.27	4.94	14.60	2.18	1.87	1.35	2.27	1.42
29	1.80	1.19	1.34	1.29	---	4.83	9.73	2.11	1.88	1.32	2.18	1.42
30	1.72	1.18	1.31	2.82	---	5.15	7.21	2.03	1.77	1.38	2.11	1.39
31	1.65	---	1.31	10.36	---	5.07	---	2.23	---	1.47	2.04	---
Mean	1.53	1.36	1.27	1.65	3.61	5.27	5.60	3.35	4.20	1.36	7.62	1.57
Max	2.79	1.59	1.38	10.36	10.94	11.66	14.60	5.97	17.40	1.81	25.08	1.98
Min	0.98	1.18	1.15	1.16	2.30	3.15	3.39	2.03	1.77	1.13	2.04	1.39