Water-Data Report 2013

06882510 BIG BLUE RIVER AT MARYSVILLE, KS

Big Blue Basin
Lower Big Blue Subbasin

LOCATION.--Lat 39°50′31″, long 96°39′43″ referenced to North American Datum of 1927, in NE ¼ NW ¼ NE ¼ sec.3, T.2 S., R.7 E., Marshall County, KS, Hydrologic Unit 10270205, on rightt bank at downstream side of bridge on U.S. Highway 36, 0.3 mi west of Marysville, and at mile 84.6.

DRAINAGE AREA.--4,777 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1984 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,110.31 ft above NGVD of 1929.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Powerplant located 0.8 mi upstream. Some pump diversions for irrigation upstream from station. Natural flow affected by ground-water withdrawals for irrigation and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 1903 reached a stage of 43.79 ft, from floodmarks. Flood of June 9, 1941, reached a stage of 45.39 ft, from floodmarks; no discharge determined. Flood of June 15, 1951, reached a stage of 40.22 ft, from U.S. Weather Bureau wire-weight gage reading; discharge 55,600 ft^3/s, by contracted-opening measurement of peak flow. Flood of Oct. 13, 1973, reached a stage of 43.86 ft, from wire-weight gage readings.

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)
May 28	0745	*14,400	*25.99

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 06882510, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/06882510.2013.pdf

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	65	102	114	e106	97	168	184	251	10,800	421	253	64
2	63	103	116	e117	160	159	184	1,820	e6,040	344	2,780	171
3	61	101	121	115	153	168	174	1,540	e3,910	296	3,300	134
4	64	100	119	e115	166	159	178	909	e3,360	254	2,550	109
5	66	100	117	e117	176	156	180	565	e3,040	223	3,030	87
6	65	98	116	e118	187	157	182	431	e2,140	200	1,250	77
7	65	99	118	117	181	152	180	366	e1,460	177	729	66
8	66	99	118	121	190	153	178	327	e1,110	156	466	60
9	68	99	120	123	178	156	187	356	e1,300	132	384	57
10	70	104	106	129	177	166	247	420	e941	113	413	52
11	72	114	92	148	183	168	331	300	e710	90	367	58
12	73	134	102	e156	183	166	312	267	e617	70	330	64
13	91	111	113	e141	186	168	245	248	e562	56	327	183
14	124	105	118	e127	176	179	211	234	521	53	264	124
15	141	105	136	e128	172	186	196	220	492	54	215	124
16	131	105	168	117	168	181	189	226	470	52	212	123
17	112	107	161	141	165	173	1,050	232	437	51	245	122
18	95	107	161	143	161	177	5,410	199	400	43	198	146
19	91	108	153	142	152	179	2,070	205	368	45	234	131
20	85	108	151	133	149	190	999	246	348	105	189	141
21	84	110	108	99	105	204	600	298	336	96	160	459
22	88	110	105	109	80	204	461	255	313	81	138	266
23	88	112	e100	142	124	203	787	253	304	79	114	155
24	89	110	e89	130	123	199	899	485	527	65	91	115
25	96	108	e87	125	178	191	612	402	668	54	72	99
26	99	107	e90	140	199	181	478	328	459	52	58	88
27	98	107	e97	150	201	172	405	564	467	46	44	83
28	97	110	e108	166	181	167	335	11,200	551	52	40	87
29	100	111	107	178	---	165	301	10,300	491	274	42	98
30	99	112	104	153	---	163	271	11,500	474	509	41	91
31	104	---	107	99	---	196	---	11,100	---	391	38	---
Mean	87.4	107	117	130	163	174	601	1,808	1,454	149	599	121
Max	141	134	168	178	201	204	5,410	11,500	10,800	509	3,300	459
Min	61	98	87	99	80	152	174	199	304	43	38	52
Ac-ft	5,380	6,360	7,180	8,020	9,030	10,720	35,770	111,200	86,510	9,190	36,840	7,210

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1985 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	686	484	368	361	609	1,228	965	1,783	1,972	1,889	861	829
Max	5,114	2,172	1,016	1,078	2,157	7,346	4,912	5,946	5,614	15,000	2,751	3,957
(WY)	(1987)	(1999)	(1998)	(2010)	(1993)	(1987)	(1987)	(1995)	(2008)	(1993)	(1993)	(1989)
Min	87.4	107	117	130	147	174	211	187	294	62.7	40.2	59.1
(WY)	(2013)	(2013)	(2013)	(2013)	(2006)	(2013)	(1989)	(1989)	(1988)	(2012)	(2012)	(2012)

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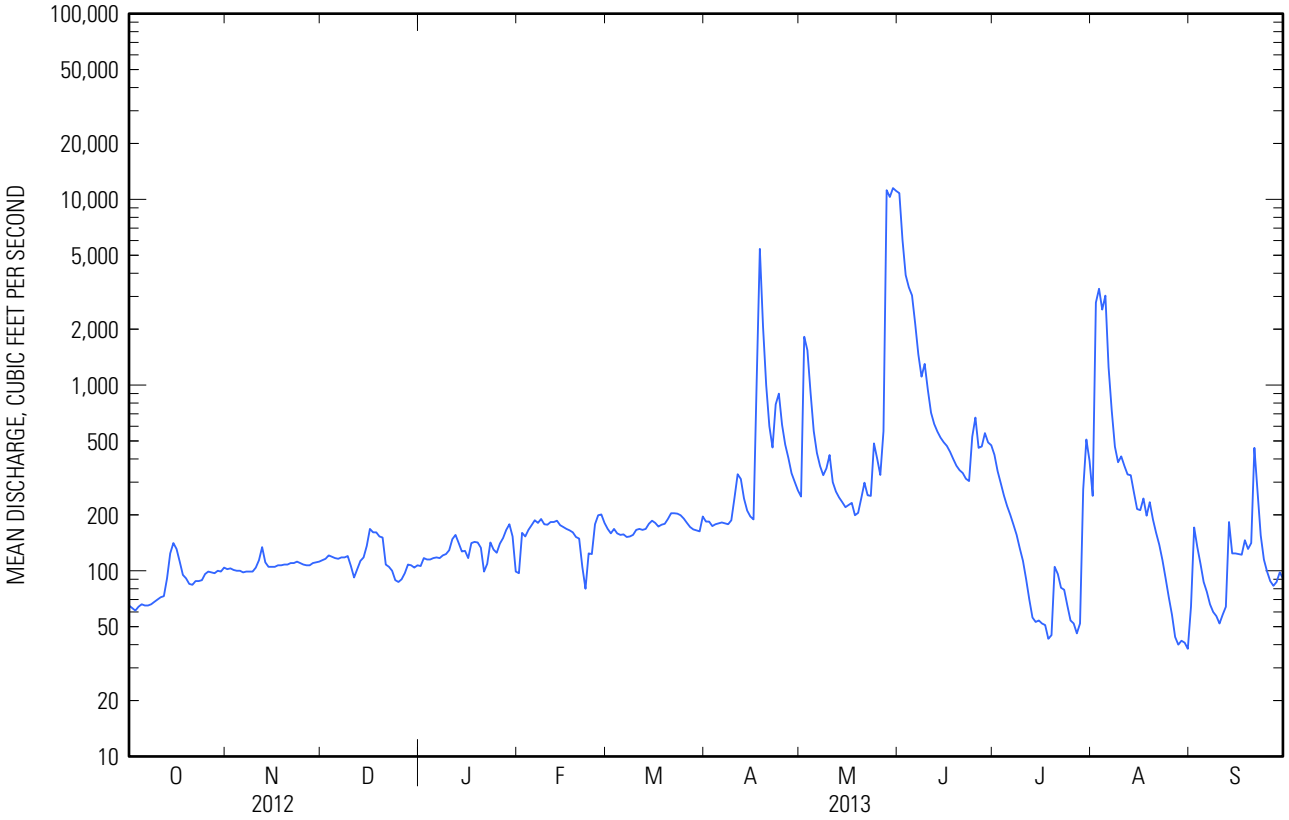
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1985 - 2013	
Annual mean	302		460		1,005	
Highest annual mean					3,318	1993
Lowest annual mean					329	2006
Highest daily mean	5,770	Apr 16	11,500	May 30	34,400	Jul 7, 1986
Lowest daily mean	21	Aug 13	38	Aug 31	16	Aug 1, 2006
Annual seven-day minimum	25	Aug 11	47	Aug 26	24	Jul 31, 2006
Maximum peak flow			14,400	May 28	39,700	Jul 6, 1986
Maximum peak stage			25.99	May 28	38.90	Jul 6, 1986
Instantaneous low flow			37	Aug 30	15	Aug 1, 2006
Annual runoff (ac-ft)	219,400		333,400		728,300	
10 percent exceeds	574		563		2,140	
50 percent exceeds	161		155		388	
90 percent exceeds	45		71		153