Water-Data Report 2012

07141300 ARKANSAS RIVER AT GREAT BEND, KS

Middle Arkansas Basin
Coon-Pickerel Subbasin

LOCATION.--Lat 38°21′11″, long 98°45′50″ referenced to North American Datum of 1927, in NW ¼ NW ¼ SE ¼ sec.33, T.19 S., R.13 W., Barton County, KS, Hydrologic Unit 11030004, on left bank, top of levee, at downstream side of bridge on U.S. Highway 281, 0.5 mi south of Great Bend, 4.5 mi upstream from Walnut Creek, and at mile 873.2.

DRAINAGE AREA.--34,356 mi^2 of which 6,002 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1940 to current year. Fragmentary gage-height records collected at same site, at datum 3.0 ft higher, 1906, 1908-12, are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 1341: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,835.19 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Prior to Oct. 1, 1975, at datum 4.00 ft higher.

REMARKS.--Records poor. Flow moderately regulated since 1948 by John Martin Reservoir (station 07130000). Natural flow of stream affected by transmountain diversions, storage reservoirs, power developments, groundwater withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,300 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec 4	1930	*e12	*1.47

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 07141300, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/07141300.2012.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	e1.1	e1.1	3.3	e3.5	e3.8	e3.9	e4.3	e4.1	e1.1	e0.15	e0.01	e0.01
2	e0.76	e1.6	3.3	e3.5	e3.9	e3.9	e4.2	e3.8	e1.4	e0.14	e0.01	e0.01
3	e0.42	e2.2	e4.8	e3.5	e3.9	e4.0	e4.4	e3.9	e1.4	e0.12	e0.01	e0.01
4	e0.58	e1.9	e5.5	e3.5	e3.9	e4.0	e6.3	e3.8	e1.1	e0.10	e0.01	e0.01
5	0.66	e1.5	e4.1	e3.5	e3.9	e4.0	e5.1	e4.2	e1.2	e0.09	e0.01	e0.01
6	0.60	e1.6	e3.3	e3.5	e3.9	e4.0	e5.0	e4.7	e1.1	e0.07	e0.01	e0.01
7	0.68	e2.1	e3.7	e3.5	e3.9	e4.0	e4.8	e4.7	e0.80	e0.06	e0.01	e0.05
8	1.6	e3.6	e3.9	e3.5	e3.9	e4.0	e4.7	e4.4	e0.76	e0.03	e0.01	e0.01
9	2.6	e3.6	e3.2	e3.5	e3.9	e3.5	e4.6	e4.2	e0.73	e0.64	e0.01	e0.01
10	2.1	e3.3	e3.1	e3.5	e3.9	e3.7	e4.6	e3.8	e0.67	e0.76	e0.01	e0.01
11	1.6	e3.1	e3.2	e3.5	e3.9	e4.4	e4.5	e3.7	e0.60	e0.22	e0.01	e0.01
12	1.4	e3.3	e2.8	e3.6	e3.9	e4.3	e4.4	e3.8	e0.60	e0.08	e0.01	e0.02
13	1.3	e3.3	e2.6	e3.6	e3.9	e3.6	e4.4	e4.4	e0.60	e0.01	e0.01	e0.08
14	1.2	e3.3	e2.7	e3.6	e4.0	e3.5	e4.4	e3.8	e0.67	e0.01	e0.01	e0.01
15	1.2	3.6	e2.3	e3.6	e4.0	e3.8	e4.4	e3.5	e1.7	e0.01	e0.01	e0.01
16	1.3	3.9	e2.3	e3.6	e4.0	e4.3	e4.4	e3.2	e0.95	e0.01	e0.01	e0.01
17	1.3	4.3	e2.3	e3.6	3.9	e4.3	e4.4	e2.8	e1.2	e0.01	e0.01	e0.01
18	1.4	4.6	e2.3	e3.6	4.2	e4.5	e4.3	e2.2	e1.1	e0.01	e0.01	e0.01
19	3.3	4.5	e3.9	e3.6	4.2	e6.8	e4.3	e2.1	e0.80	e0.01	e0.01	e0.01
20	1.8	e4.6	e4.0	e3.6	4.2	e6.4	e4.3	e2.4	e0.97	e0.01	e0.01	e0.01
21	2.1	e4.6	e3.2	e3.7	e4.0	e6.7	e4.3	e2.5	e1.3	e0.01	e0.01	e0.01
22	1.8	e4.6	e2.6	e3.7	e4.0	e6.4	e4.4	e2.2	e0.96	e0.01	e0.01	e0.01
23	e1.1	e4.7	e1.9	e3.7	e4.0	e4.4	e4.4	e1.6	e0.82	e0.01	e0.01	e0.01
24	e1.0	e5.4	e2.1	e3.7	e4.1	e4.3	e4.3	e1.2	e0.56	e0.01	e0.01	e0.01
25	e1.0	e4.6	e1.7	e3.7	e4.0	e4.3	e4.2	1.2	e0.65	e0.01	e0.11	e0.01
26	e1.1	e4.5	e2.1	e3.7	e4.1	e4.3	e4.2	e1.3	e0.58	e0.01	e0.01	e0.01
27	e1.1	e3.9	e1.9	e3.7	e4.0	e4.5	e4.1	e1.7	e0.38	e0.01	e0.01	e0.01
28	e1.2	e3.7	e2.4	e3.7	e3.8	e4.1	e4.4	e1.2	e0.29	e0.01	e0.01	e0.01
29	e1.2	e3.6	e2.7	e3.8	e3.9	e4.2	e4.5	e0.77	e0.22	e0.01	e0.01	e0.01
30	e1.1	e3.5	3.2	e3.7	---	e4.2	e4.1	e1.4	e0.17	e0.01	e0.01	e0.01
31	e1.1	---	e3.5	3.8	---	e4.3	---	e1.4	---	e0.01	e0.01	---
Mean	1.31	3.47	3.03	3.61	3.97	4.41	4.49	2.90	0.85	0.09	0.01	0.01
Max	3.3	5.4	5.5	3.8	4.2	6.8	6.3	4.7	1.7	0.76	0.11	0.08
Min	0.42	1.1	1.7	3.5	3.8	3.5	4.1	0.77	0.17	0.01	0.01	0.01
Ac-ft	81	206	186	222	228	271	267	178	50	5.3	0.8	0.8

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1941 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	153	143	112	117	150	193	246	357	515	411	254	186
Max	1,304	1,170	589	707	843	1,560	2,646	6,047	4,089	4,033	3,247	1,347
(WY)	(1974)	(1997)	(1942)	(1943)	(1949)	(1973)	(1973)	(1942)	(1951)	(1951)	(1950)	(1950)
Min	0.00	0.01	0.00	0.00	0.00	0.03	0.11	0.10	0.46	0.09	0.01	0.00
(WY)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2006)	(2004)	(2005)	(2012)	(2012)	(2005)

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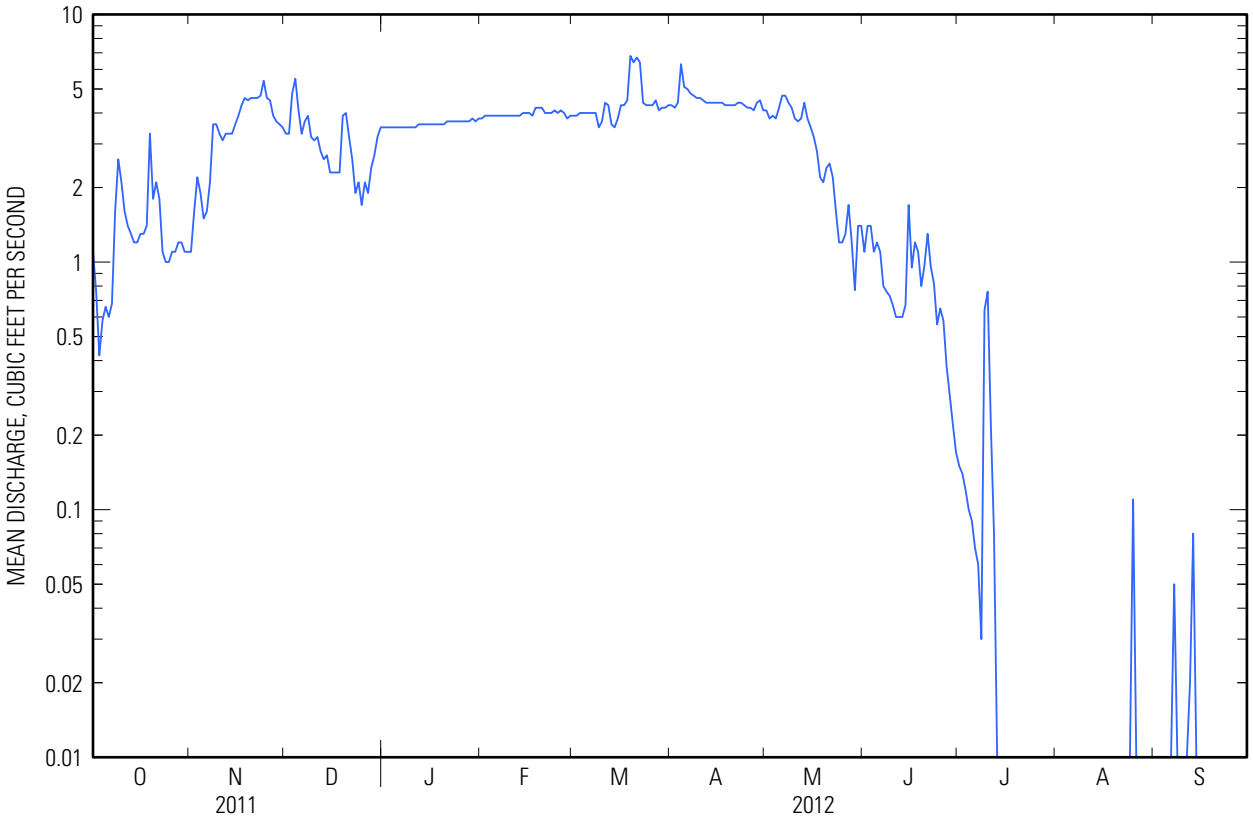
SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1941 - 2012	
Annual mean	9.13		2.34		237	
Highest annual mean					1,565	1942
Lowest annual mean					0.71	2005
Highest daily mean	409	May 27	6.8	Mar 19	21,800	Jun 23, 1965
Lowest daily mean	0.42	Oct 3	0.01	Jul 13	0.00	Oct 25, 1940
Annual seven-day minimum	0.69	Oct 1	0.01	Jul 13	0.00	Aug 2, 1946
Maximum peak flow			[a]12	Dec 4	27,800	Jun 23, 1965
Maximum peak stage			1.47	Dec 4	17.70	Jun 15, 1981
Instantaneous low flow			[a]0.01	Jul 9	0.00	at times
Annual runoff (ac-ft)	6,610		1,700		171,500	
10 percent exceeds	13		4.4		489	
50 percent exceeds	6.3		2.6		59	
90 percent exceeds	1.3		0.01		2.1	

[a] Estimated.