Water-Data Report 2011

06889000 KANSAS RIVER AT TOPEKA, KS

Kansas Basin
Middle Kansas Subbasin

LOCATION.--Lat 39°04′00″, long 95°38′58″ referenced to North American Datum of 1927, in NW ¼ NW ¼ SW ¼ sec.28, T.11 S., R.16 E., Shawnee County, KS, Hydrologic Unit 10270102, on right bank at downstream side of Sardou Bridge in Topeka, 2.3 mi upstream from Soldier Creek (diversion channel), and at mile 83.1.

DRAINAGE AREA.--56,720 mi^2, approximately of which a large area is probably noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--April to August 1904 (gage heights only), June 1917 to current year. Gage-height records for this vicinity since August 1904 are contained in reports of U.S. Weather Bureau.

REVISED RECORDS.--WSP 806: Drainage area. WSP 1310: 1920(M), 1922(M), 1993(M).

GAGE.--Water-stage recorder. Datum of gage is 846.66 ft above NGVD of 1929. Feb. 28, 1961, to Sept. 30, 1988, gage datum was 5.00 ft higher. Prior to Feb. 28, 1961, recording or nonrecording gages at several sites within 8,000 ft of present site at various datum.

REMARKS.--Records good except those for estimated daily discharges, which are poor. Natural flow affected by reservoirs in Colorado, Nebraska, and Kansas, and by numerous diversions upstream from station. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 30, 1903 (second highest since 1844), reached a stage of about 37 ft, present site and datum, from floodmarks at site 5,900 ft upstream, discharge, about 300,000 ft^3/s. A flood in the spring of 1844 is known to have been higher than that of 1903.

Suggested citation: U.S. Geological Survey, 2012, Water-resources data for the United States, Water Year 2011: U.S. Geological Survey Water-Data Report WDR-US-2011, site 06889000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/06889000.2011.pdf

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	2,270	1,270	2,470	e2,370	e2,460	4,330	2,260	2,730	22,900	3,060	2,390	1,680
2	2,130	1,250	2,580	e2,420	e2,460	4,050	2,180	2,720	48,300	2,970	2,180	1,970
3	1,940	1,280	3,010	e2,620	e2,420	3,690	2,200	2,670	56,400	2,910	2,120	3,000
4	1,830	1,290	3,120	2,570	e2,420	3,700	2,650	2,410	37,500	2,830	2,140	3,110
5	1,760	1,220	4,060	2,580	e2,240	3,620	2,630	2,040	39,200	2,790	2,170	3,020
6	1,700	1,210	4,480	3,550	e2,110	3,360	2,630	1,900	35,800	2,750	2,290	3,020
7	1,670	1,190	4,520	3,550	e1,990	3,870	2,630	1,900	33,400	2,900	2,400	3,040
8	1,630	1,180	4,460	3,400	e1,900	3,920	2,730	2,060	27,000	2,990	2,570	3,040
9	1,590	1,170	4,210	3,450	e1,800	3,160	2,720	2,070	21,500	3,210	2,690	3,060
10	1,590	1,170	4,610	e3,350	e1,690	2,580	2,660	2,030	18,000	3,380	3,250	3,110
11	1,680	1,180	e4,610	e3,170	e1,650	2,440	2,610	1,980	12,100	3,400	3,520	3,070
12	1,670	1,350	e4,570	e3,030	e1,750	2,370	2,510	1,960	7,250	3,360	3,080	3,050
13	1,680	1,440	e4,620	e2,770	e2,200	2,390	2,320	1,990	5,710	3,570	2,790	3,040
14	1,680	1,640	e4,660	e2,600	e2,490	3,130	1,980	1,960	e7,000	3,410	2,580	3,020
15	1,610	1,690	4,530	e2,610	e2,420	3,290	2,030	1,910	17,800	3,100	2,490	3,920
16	1,550	3,190	4,550	e2,620	e2,850	3,010	2,370	1,880	18,600	2,870	2,410	4,420
17	1,500	4,890	4,590	e2,620	e3,320	2,610	2,640	1,850	16,900	2,740	2,350	4,980
18	1,460	5,240	4,540	e2,620	3,830	2,470	3,010	1,810	13,600	2,590	2,270	8,740
19	1,430	4,930	4,000	e2,620	4,080	2,410	3,000	1,920	12,300	2,490	2,470	9,570
20	1,410	4,680	3,900	e2,630	4,080	2,570	2,830	2,080	8,670	2,430	2,740	9,600
21	1,390	4,550	3,870	e2,630	4,450	3,420	2,690	2,200	5,790	2,390	3,910	10,400
22	1,380	4,470	3,060	e2,640	4,320	3,340	3,720	2,140	4,720	2,350	2,900	11,200
23	1,460	4,400	2,620	e2,640	3,920	2,970	5,020	1,960	4,210	2,320	2,490	13,100
24	1,520	4,380	2,380	e2,650	3,750	2,460	3,310	3,270	3,910	2,270	2,410	13,300
25	1,550	4,320	2,370	e2,650	3,810	2,370	3,600	22,000	3,970	2,280	2,320	13,400
26	1,470	3,280	2,290	e2,460	3,730	2,330	4,300	25,000	3,820	2,290	2,200	13,300
27	1,390	2,710	2,210	e2,240	3,880	2,340	4,400	11,600	3,680	2,220	2,100	13,300
28	1,360	2,610	2,230	e2,110	4,240	2,920	3,660	7,450	3,470	2,180	2,020	13,400
29	1,340	2,590	2,360	e2,210	---	3,060	3,200	6,150	3,310	2,200	1,930	13,500
30	1,320	2,540	2,360	e2,220	---	2,770	2,870	7,100	3,180	2,380	1,850	13,400
31	1,310	---	2,380	e2,310	---	2,310	---	10,200	---	2,500	1,780	---
Mean	1,589	2,610	3,555	2,707	2,938	3,008	2,912	4,546	16,670	2,746	2,478	6,992
Max	2,270	5,240	4,660	3,550	4,450	4,330	5,020	25,000	56,400	3,570	3,910	13,500
Min	1,310	1,170	2,210	2,110	1,650	2,310	1,980	1,810	3,180	2,180	1,780	1,680
Ac-ft	97,730	155,300	218,600	166,400	163,200	185,000	173,300	279,600	991,700	168,900	152,400	416,100

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1918 - 2011, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	4,241	3,315	2,748	2,243	3,425	5,263	6,784	8,483	11,700	9,278	5,581	5,148
Max	42,320	35,190	16,140	11,280	16,720	27,610	32,500	36,010	64,670	109,100	55,350	34,840
(WY)	(1974)	(1974)	(1974)	(1974)	(1949)	(1973)	(1987)	(1995)	(1951)	(1951)	(1993)	(1951)
Min	348	406	383	328	500	492	650	585	1,075	986	269	425
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1967)	(1956)	(1956)	(1989)	(1936)	(1934)	(1956)

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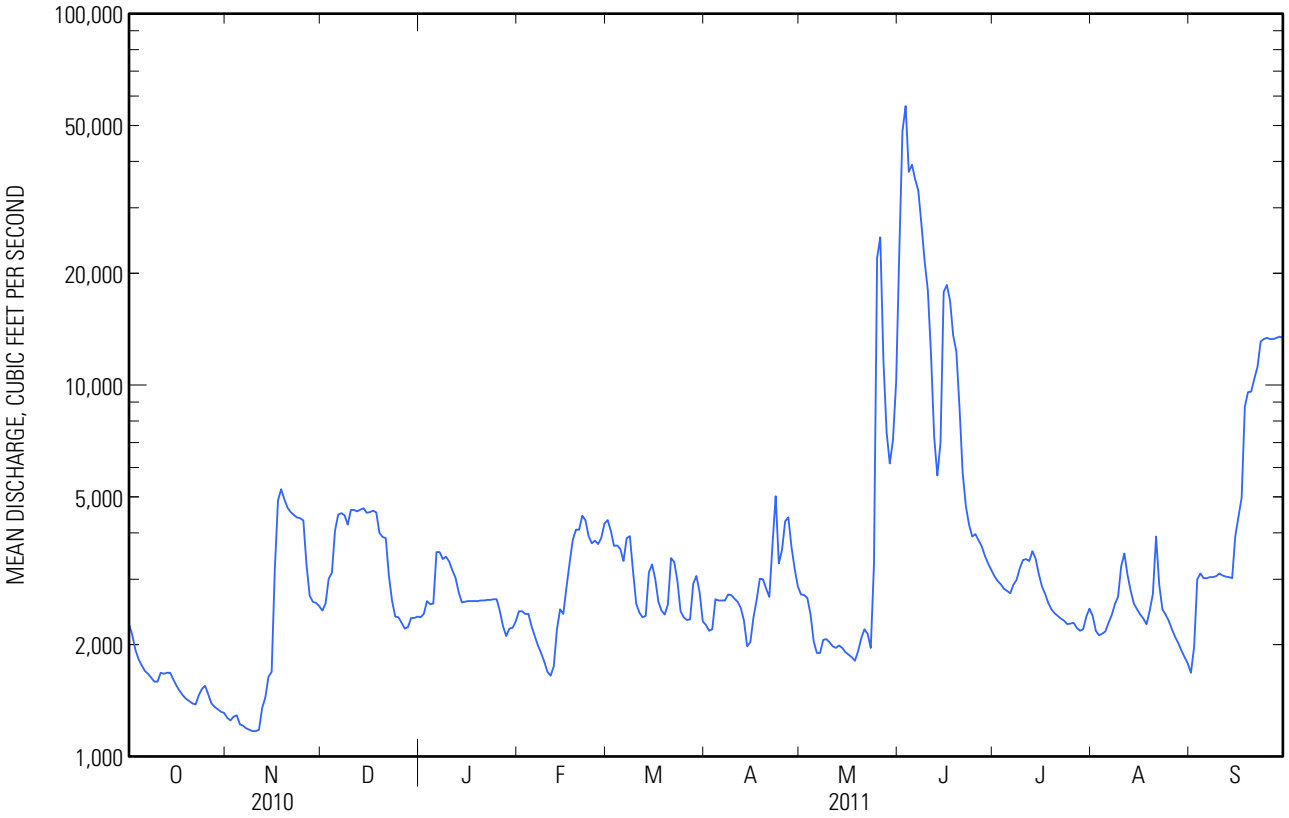
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1918 - 2011	
Annual mean	8,011		4,376		5,724	
Highest annual mean					25,580	1993
Lowest annual mean					1,138	1956
Highest daily mean	38,400	Jun 17	56,400	Jun 3	458,000	Jul 13, 1951
Lowest daily mean	1,170	Nov 9	1,170	Nov 9	170	Oct 11, 1956
Annual seven-day minimum	1,190	Nov 5	1,190	Nov 5	183	Oct 7, 1956
Maximum peak flow			71,600	Jun 3	469,000	Jul 13, 1951
Maximum peak stage			25.53	Jun 3	40.80	Jul 13, 1951
Instantaneous low flow			1,160	Nov 8	112	Dec 16, 1940
Annual runoff (ac-ft)	5,800,000		3,168,000		4,147,000	
10 percent exceeds	17,200		7,160		13,300	
50 percent exceeds	6,240		2,650		2,670	
90 percent exceeds	1,680		1,670		879