06873000 SOUTH FORK SOLOMON RIVER ABOVE WEBSTER RESERVOIR, KS

Smoky Hill Basin
Upper South Fork Solomon Subbasin

LOCATION.--Lat 39°22′36″, long 99°34′47″ referenced to North American Datum of 1927, in SW ¼ NW ¼ sec.8, T.8 S., R.20 W., Rooks County, KS, Hydrologic Unit 10260013, on right bank 0.4 mi downstream from county highway bridge, 4.0 mi north of Damar, 7.0 mi downstream from Wild Horse Creek, and 11 mi upstream from Webster Dam.

DRAINAGE AREA.--1,040 mi^2, approximately.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--January 1945 to current year. Prior to October 1953, published as "at Webster."

REVISED RECORDS.--WSP 1440: 1945-48, 1950.

GAGE.--Water-stage recorder. Datum of gage is 1,933.51 ft above NGVD of 1929 (levels by Bureau of Reclamation). Prior to May 17, 1946, nonrecording gage, May 17, 1946, to May 20, 1951, water-stage recorder, and May 21 to Sept. 30, 1951, nonrecording gage, all at site 8.0 mi downstream at datum 91.52 ft lower. Oct. 1, 1951, to May 22, 1952, nonrecording gage at bridge near Stockton, 23 mi downstream, at different datum. May 23, 1952, to May 23, 1954, water-stage recorder at original site and datum. May 31, 1954, to Sept. 30, 1999, water-stage recorder at county highway bridge 4.0 mi north of Damar at datum 3 ft higher. Oct. 1, 1999, supplementary water-stage recorder converted to water-stage recorder gage at site 0.4 mi downstream at present site and datum. Satellite telemeter at station.

REMARKS.--Records fair except those for estimated daily discharges, which are poor. Natural flow affected by groundwater withdrawals, diversions for irrigation, and return flow from irrigated areas. Satellite telemeter at station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1908, 13.4 ft, June 1908, present site and datum, discharge not determined, from information obtained from Kansas Highway Commission.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,200 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
May 8	0245	*25	*2.62

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 06873000, accessed at http://wdr.water.usgs.gov/wy2013/pdfs/06873000.2013.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	0.00	0.08	1.3	e2.7	e3.5	e7.9	12	9.8	3.2	0.00	0.00	0.00
2	0.00	0.07	1.3	e2.6	3.6	e9.2	12	10	3.0	0.00	0.00	0.00
3	0.00	0.07	1.4	e2.3	4.0	11	12	11	2.4	0.00	0.00	0.00
4	0.00	0.18	1.3	e1.4	4.0	12	11	11	2.1	0.00	0.00	0.00
5	0.00	0.30	1.5	e1.5	4.3	12	12	10	2.5	0.00	0.00	0.00
6	0.00	0.35	1.5	e1.5	4.4	12	11	9.6	3.0	0.00	0.00	0.00
7	0.00	0.44	1.6	e1.6	4.0	12	11	10	2.9	0.00	0.00	0.00
8	0.00	0.58	e1.7	e1.8	3.8	11	11	16	2.7	0.00	0.00	0.00
9	0.00	0.63	e1.5	e2.3	3.9	12	12	13	2.6	0.00	0.00	0.00
10	0.00	0.67	e1.2	e2.6	4.1	12	12	13	1.6	0.00	0.00	0.00
11	0.00	0.34	e0.97	e2.8	e3.8	11	12	12	1.1	0.00	0.00	0.00
12	0.00	0.56	e1.4	e2.6	e3.6	11	11	11	0.62	0.00	0.00	0.00
13	0.00	e0.68	e1.8	e2.9	e3.5	11	11	10	0.31	0.00	0.00	0.00
14	0.00	e0.72	e2.5	e3.1	4.2	11	12	10	0.19	0.00	0.00	0.00
15	0.00	0.74	2.9	e3.3	e3.6	11	11	9.3	0.15	0.00	0.00	0.00
16	0.00	0.75	2.6	e3.7	e4.1	11	10	9.1	0.19	0.00	0.00	0.00
17	0.00	0.82	e2.2	e4.3	4.2	11	11	13	0.60	0.00	0.00	0.00
18	0.00	0.82	2.2	e4.4	4.4	10	12	e10	1.5	0.00	0.00	0.00
19	0.00	0.78	2.5	e4.0	e4.0	10	12	e9.2	6.6	0.00	0.00	0.00
20	0.00	0.72	e2.6	e3.6	e4.4	9.8	12	e8.4	9.7	0.00	0.00	0.00
21	0.00	0.58	e2.6	e3.2	e3.9	10	11	e7.4	3.6	0.00	0.00	0.00
22	0.00	0.41	e2.5	e2.9	e4.0	10	12	e6.7	1.7	0.00	0.00	0.00
23	0.00	0.26	e2.3	e3.1	e9.2	10	12	e6.1	0.94	0.00	0.00	0.00
24	0.00	0.51	e2.1	e3.2	e8.7	e11	12	e5.8	0.65	0.00	0.00	0.00
25	0.00	0.69	e1.8	e3.4	e8.2	e11	12	e5.2	0.46	0.00	0.00	0.00
26	0.18	0.71	e1.5	e3.4	e7.9	e11	11	e4.7	0.30	0.00	0.00	0.00
27	0.29	e0.85	e1.7	3.4	e7.8	12	11	e4.3	0.05	0.00	0.00	0.00
28	0.31	e0.96	e2.2	3.6	e7.8	12	11	e4.0	0.00	0.00	0.00	0.00
29	0.29	e1.1	e2.4	4.0	---	11	10	4.0	0.00	0.00	0.00	0.00
30	0.26	1.1	e2.4	3.9	---	12	10	5.2	0.00	0.00	0.00	0.00
31	0.14	---	e2.4	e3.8	---	13	---	4.0	---	0.00	0.00	---
Mean	0.05	0.58	1.93	3.00	4.89	11.0	11.4	8.80	1.82	0.00	0.00	0.00
Max	0.31	1.1	2.9	4.4	9.2	13	12	16	9.7	0.00	0.00	0.00
Min	0.00	0.07	0.97	1.4	3.5	7.9	10	4.0	0.00	0.00	0.00	0.00
Ac-ft	2.9	35	119	184	272	676	678	541	108	0.00	0.00	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1946 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	31.8	16.3	15.7	18.1	32.3	40.0	45.4	76.9	109	103	54.8	28.2
Max	1,003	124	84.4	77.1	219	314	185	724	1,767	2,561	1,029	385
(WY)	(1947)	(1947)	(1994)	(1994)	(1949)	(1960)	(2010)	(1995)	(1951)	(1951)	(1950)	(1951)
Min	0.00	0.00	0.00	0.00	0.02	0.67	0.28	0.06	0.00	0.00	0.00	0.00
(WY)	(1946)	(1946)	(1982)	(1982)	(1992)	(1982)	(1989)	(2004)	(2004)	(1966)	(1946)	(1947)

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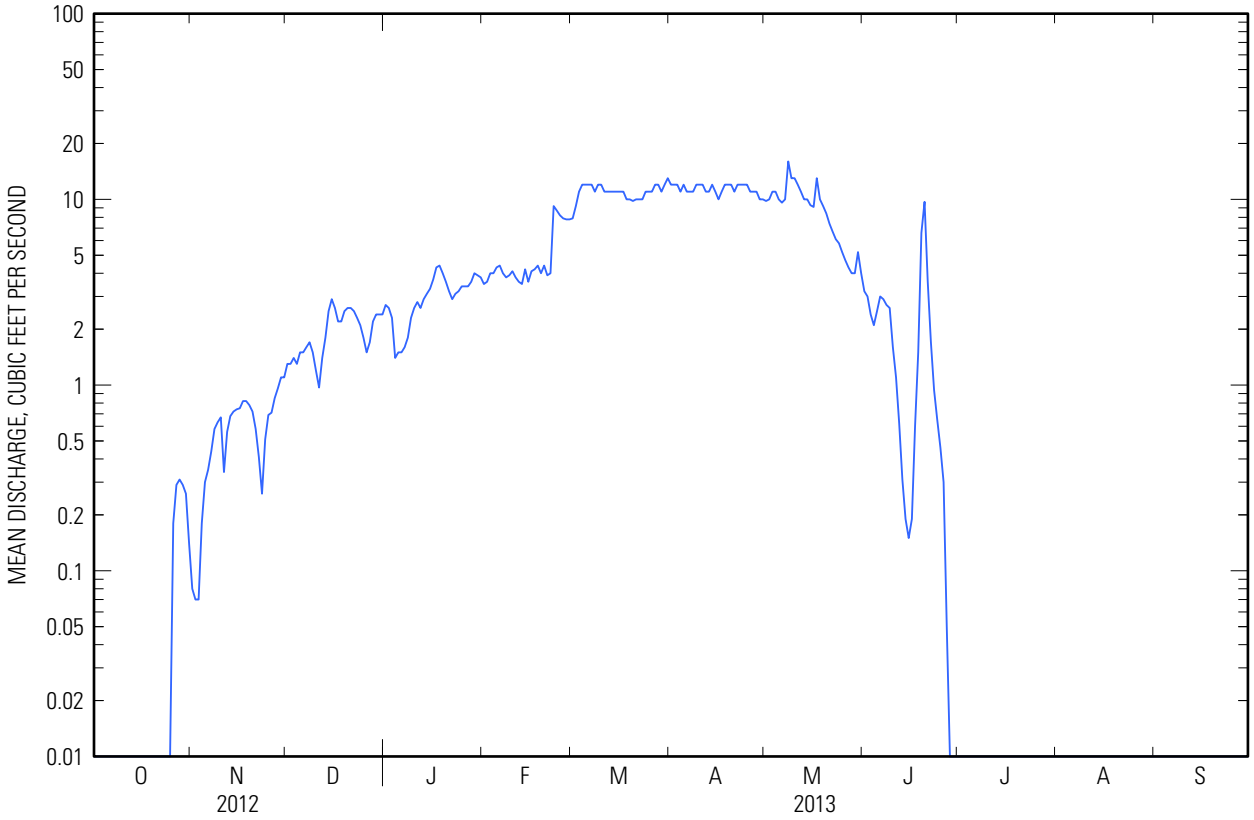
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1946 - 2013	
Annual mean	11.5		3.61		47.8	
Highest annual mean					487	1951
Lowest annual mean					1.59	1991
Highest daily mean	47	Apr 29	16	May 8	35,000	Jul 12, 1951
Lowest daily mean	0.00	Jun 19	0.00	Oct 1	0.00	Oct 1, 1945
Annual seven-day minimum	0.00	Jun 19	0.00	Oct 1	0.00	Oct 1, 1945
Maximum peak flow			25	May 8	55,200	Jul 12, 1951
Maximum peak stage			2.62	May 8	14.90	Jul 12, 1951
Instantaneous low flow			0.00	Oct 1	0.00	most years
Annual runoff (ac-ft)	8,330		2,620		34,620	
10 percent exceeds	32		11		72	
50 percent exceeds	1.5		1.5		12	
90 percent exceeds	0.00		0.00		0.00