Water-Data Report 2011

08124000 Colorado River at Robert Lee, TX

Upper Colorado Basin
Upper Colorado Subbasin

LOCATION.--Lat 31°53′07″, long 100°28′49″ referenced to North American Datum of 1927, Coke County, TX, Hydrologic Unit 12080008, on left bank 190 ft upstream from bridge on State Highway 208 in Robert Lee, 0.4 mi upstream from Mountain Creek, 2.7 mi downstream from Messbox Creek, 3.6 mi downstream from Robert Lee Dam, and at mile 712.4.

DRAINAGE AREA.--15,307 mi^2 of which 10,260 mi^2 probably is noncontributing.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1923 to Dec. 1927, Apr. 1939 to May 1956, Oct. 1968 to current year. Prior to Dec. 1927, published as "near Robert Lee".

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Oct. 1947 to Sept. 1957.

REVISED RECORDS.--WSP 1732: 1925(M). WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,771.70 ft above NGVD of 1929. Prior to Dec. 31, 1927, nonrecording gage at site 9.0 mi downstream at different datum. Apr. 18 to Sept. 26, 1939, nonrecording gage, and Sept. 27, 1939 to May 9, 1956, water-stage recorder at site 200 ft downstream at same datum. Satellite telemeter at station.

REMARKS.--Records fair. Since July 1952, at least 10% of contributing drainage area has been regulated. There are many diversions above station for municipal, mining, agricultural, and industrial uses. No flow at times.

AVERAGE DISCHARGE FOR PERIOD PRIOR TO REGULATION.--16 years (water years 1924-27, 1940-51) prior to completion of Lake J.B. Thomas, 234 ft^3/s (169,400 acre-ft/yr).

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage since at least 1907, 26.7 ft, Oct. 13, 1957, from floodmarks. Flood in Apr. 1922 reached a stage of 25.5 ft, present datum, from information by local resident.

EXTREMES FOR PERIOD PRIOR TO REGULATION.--WATER YEARS, 1924-1927, 1940-1951: Maximum discharge, 32,500 ft^3/s, Sept. 6, 1926, gage height, 20.20 ft, site and datum then in use, from rating curve extended above 15,000 ft^3/s; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2.1 ft^3/s, Aug. 13, gage height, 1.36 ft; minimum daily discharge, 0.00 ft^3/s, on many days.

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 08124000, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/08124000.2011.pdf

08124000 Colorado River at Robert Lee, TX—Continued

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

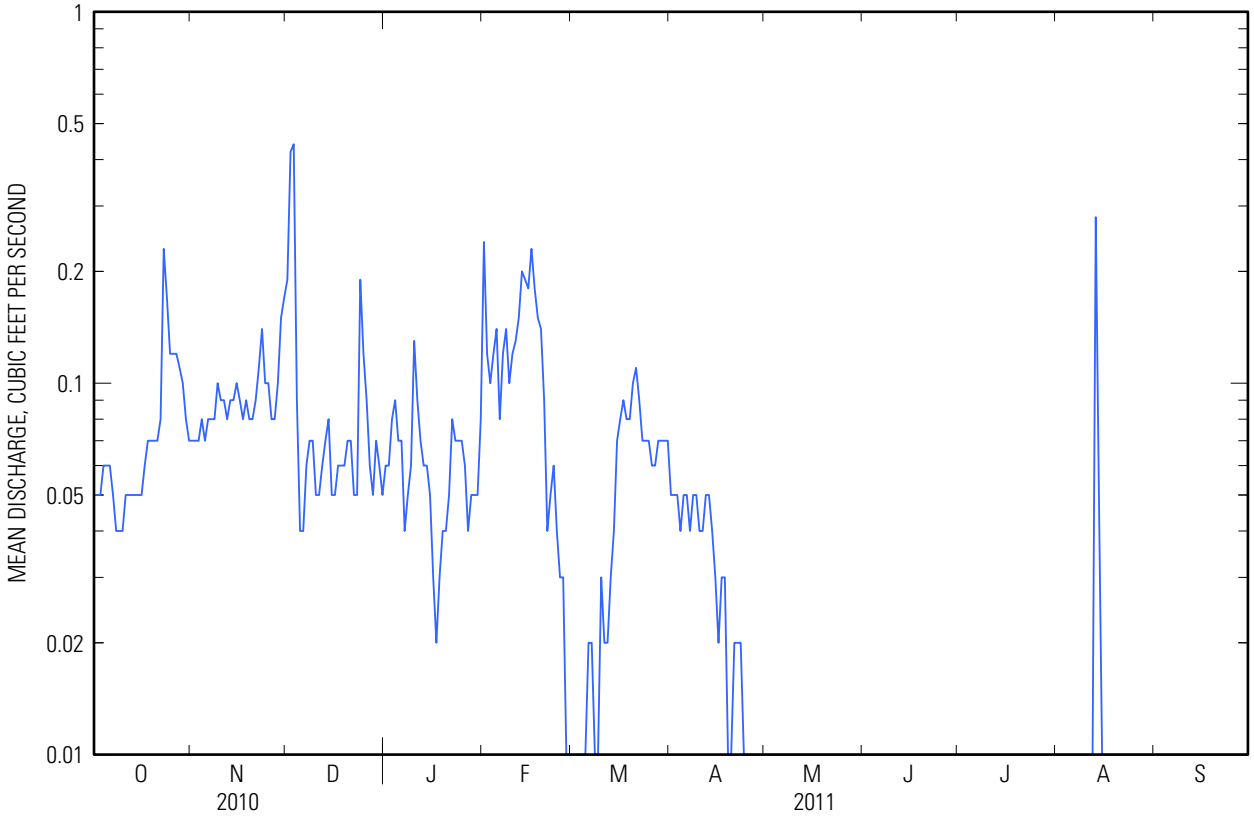
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.05	0.07	0.19	0.06	0.24	0.00	0.05	0.00	0.00	0.00	0.00	0.00
2	0.05	0.07	0.42	0.06	0.12	0.00	0.05	0.00	0.00	0.00	0.00	0.00
3	0.05	0.07	0.44	0.08	0.10	0.00	0.05	0.00	0.00	0.00	0.00	0.00
4	0.06	0.08	0.09	0.09	0.12	0.00	0.04	0.00	0.00	0.00	0.00	0.00
5	0.06	0.07	0.04	0.07	0.14	0.00	0.05	0.00	0.00	0.00	0.00	0.00
6	0.06	0.08	0.04	0.07	0.08	0.02	0.05	0.00	0.00	0.00	0.00	0.00
7	0.05	0.08	0.06	0.04	0.12	0.02	0.04	0.00	0.00	0.00	0.00	0.00
8	0.04	0.08	0.07	0.05	0.14	0.01	0.05	0.00	0.00	0.00	0.00	0.00
9	0.04	0.10	0.07	0.06	0.10	0.01	0.05	0.00	0.00	0.00	0.00	0.00
10	0.04	0.09	0.05	0.13	0.12	0.03	0.04	0.00	0.00	0.00	0.00	0.00
11	0.05	0.09	0.05	0.09	0.13	0.02	0.04	0.00	0.00	0.00	0.00	0.00
12	0.05	0.08	0.06	0.07	0.15	0.02	0.05	0.00	0.00	0.00	0.00	0.00
13	0.05	0.09	0.07	0.06	0.20	0.03	0.05	0.00	0.00	0.00	0.28	0.00
14	0.05	0.09	0.08	0.06	0.19	0.04	0.04	0.00	0.00	0.00	0.05	0.00
15	0.05	0.10	0.05	0.05	0.18	0.07	0.03	0.00	0.00	0.00	0.01	0.00
16	0.05	0.09	0.05	0.03	0.23	0.08	0.02	0.00	0.00	0.00	0.00	0.00
17	0.06	0.08	0.06	0.02	0.18	0.09	0.03	0.00	0.00	0.00	0.00	0.00
18	0.07	0.09	0.06	0.03	0.15	0.08	0.03	0.00	0.00	0.00	0.00	0.00
19	0.07	0.08	0.06	0.04	0.14	0.08	0.01	0.00	0.00	0.00	0.00	0.00
20	0.07	0.08	0.07	0.04	0.09	0.10	0.01	0.00	0.00	0.00	0.00	0.00
21	0.07	0.09	0.07	0.05	0.04	0.11	0.02	0.00	0.00	0.00	0.00	0.00
22	0.08	0.11	0.05	0.08	0.05	0.09	0.02	0.00	0.00	0.00	0.00	0.00
23	0.23	0.14	0.05	0.07	0.06	0.07	0.02	0.00	0.00	0.00	0.00	0.00
24	0.17	0.10	0.19	0.07	0.04	0.07	0.01	0.00	0.00	0.00	0.00	0.00
25	0.12	0.10	0.12	0.07	0.03	0.07	0.01	0.00	0.00	0.00	0.00	0.00
26	0.12	0.08	0.09	0.06	0.03	0.06	0.00	0.00	0.00	0.00	0.00	0.00
27	0.12	0.08	0.06	0.04	0.01	0.06	0.00	0.00	0.00	0.00	0.00	0.00
28	0.11	0.10	0.05	0.05	0.01	0.07	0.00	0.00	0.00	0.00	0.00	0.00
29	0.10	0.15	0.07	0.05	---	0.07	0.00	0.00	0.00	0.00	0.00	0.00
30	0.08	0.17	0.06	0.05	---	0.07	0.00	0.00	0.00	0.00	0.00	0.00
31	0.07	---	0.05	0.08	---	0.07	---	0.00	---	0.00	0.00	---
Total	2.34	2.78	2.94	1.87	3.19	1.51	0.86	0.00	0.00	0.00	0.34	0.00
Mean	0.08	0.09	0.09	0.06	0.11	0.05	0.03	0.00	0.00	0.00	0.01	0.00
Max	0.23	0.17	0.44	0.13	0.24	0.11	0.05	0.00	0.00	0.00	0.28	0.00
Min	0.04	0.07	0.04	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Ac-ft	4.6	5.5	5.8	3.7	6.3	3.0	1.7	0.00	0.00	0.00	0.7	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1952 - 2011, BY WATER YEAR (WY)[hz]

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	30.5	8.78	3.20	2.67	4.56	8.15	23.2	71.7	33.9	32.9	40.7	27.6
Max	578	219	16.9	12.2	102	250	714	1,540	473	495	578	438
(WY)	(1987)	(1987)	(2000)	(2001)	(1998)	(1998)	(1954)	(1954)	(1989)	(1988)	(1953)	(1986)
Min	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(WY)	(1955)	(1955)	(1952)	(1952)	(1952)	(1952)	(1956)	(2011)	(1980)	(1952)	(1952)	(1954)

08124000 Colorado River at Robert Lee, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1952 - 2011[hz]	
Annual total	70.88		15.83			
Annual mean	0.19		0.04		23.8	
Highest annual mean					237	1954
Lowest annual mean					0.04	2011
Highest daily mean	5.8	Sep 25	0.44	Dec 3	13,400	May 12, 1954
Lowest daily mean	0.00	Jun 19	0.00	Mar 1	0.00	Oct 1, 1951
Annual seven-day minimum	0.00	Jun 19	0.00	Apr 26	0.00	Oct 1, 1951
Maximum peak flow			2.1	Aug 13	24,500	Sep 9, 1980
Maximum peak stage			1.36	Aug 13	20.63	Sep 9, 1980
Annual runoff (ac-ft)	141		31		17,260	
10 percent exceeds	0.45		0.10		14	
50 percent exceeds	0.08		0.03		1.2	
90 percent exceeds	0.00		0.00		0.00	

[h] See Period of Record paragraph.
[z] Period of regulated streamflow.