

Water-Data Report 2011

## 08136700 Colorado River near Stacy, TX

Middle Colorado-Concho Basin  
Middle Colorado Subbasin

LOCATION.--Lat 31°29'37", long 99°34'25" referenced to North American Datum of 1927, Coleman County, TX, Hydrologic Unit 12090106, on left bank at downstream side of bridge on Farm Road 503, 1.2 mi upstream from Bois d'Arc Creek, 1.8 mi northeast of Stacy, 10.5 mi downstream from O.H. Ivie Reservoir, 24.0 mi downstream from Concho River, and at mile 604.8.

DRAINAGE AREA.--24,193 mi<sup>2</sup> of which 11,391 mi<sup>2</sup> probably is noncontributing.

### SURFACE-WATER RECORDS

PERIOD OF RECORD.--Mar. 1968 to current year. Prior to Oct. 1970, published as "at Stacy".

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Apr. 1968 to July 1994.

BIOCHEMICAL DATA: Apr. 1968 to Oct. 1977.

BIOLOGICAL DATA: Oct. 1974 to Oct. 1977.

PESTICIDE DATA: Apr. 1975 to Aug. 1977.

RADIOCHEMICAL DATA: Jan. 1981 to Feb. 1981.

SEDIMENT DATA: Oct. 1974 to Oct. 1977.

PERIOD OF DAILY RECORD, Water-Quality.--

SPECIFIC CONDUCTANCE: Apr. 1968 to Sept. 1994.

WATER TEMPERATURE: Apr. 1968 to Sept. 1994.

REVISED RECORDS.--WDR TX-81-3: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,394.66 ft above NGVD of 1929 (Texas Department of Transportation bridge plans). Satellite telemeter at station.

REMARKS.--Record is good. Since installation of gage in Mar. 1968, at least 10% of contributing drainage area has been regulated by upstream reservoirs, and since Mar. 15, 1990, flow completely regulated by O.H. Ivie Reservoir (station 08136600), 10.5 mi upstream. There are many diversions above station for irrigation, municipal, and oil field operations. Wastewater effluent is returned to the river from numerous wastewater plants above station. At times flow may be slightly affected by discharge from the flood-detention pools of 42 floodwater-retarding structures with a combined detention capacity of 56,730 acre-ft. These structures control runoff from 277 mi<sup>2</sup> above this station. No flow at times. Some records listed in the period of record for may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1882, 356,000 ft<sup>3</sup>/s, Sept. 18, 1936, gage height, 64.59 ft, by slope-area measurement of peak flow. The flood of Sept. 18, 1936, was 4 ft higher than the 1906 flood and 7 to 8 ft higher than the 1882 flood, from information by local resident.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft<sup>3</sup>/s, June 22, gage height, 3.88 ft; minimum daily discharge, 0.00 ft<sup>3</sup>/s, on many days.

## 08136700 Colorado River near Stacy, TX—Continued

**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	4.9	2.3	2.3	3.1	3.2	1.8	3.0	7.7	8.7	7.6	e0.00	7.4
2	4.7	2.4	2.4	3.1	2.9	1.8	3.0	10	8.6	7.4	e0.00	7.8
3	4.1	2.2	2.5	3.2	2.9	1.9	2.9	11	8.3	5.8	e0.00	8.0
4	3.3	2.2	2.6	3.1	2.7	1.7	3.3	9.1	8.2	3.9	e0.00	7.7
5	3.0	2.2	2.6	3.1	2.6	1.6	4.0	8.4	8.6	2.9	e0.00	7.0
6	2.7	2.3	2.5	3.0	2.6	1.4	4.8	8.4	8.7	2.1	e0.00	7.1
7	2.3	2.4	2.6	3.0	2.6	1.9	4.8	8.5	8.8	1.6	e0.00	7.6
8	1.9	1.9	2.5	3.1	2.6	1.9	5.2	8.0	8.8	1.1	e0.00	7.6
9	1.6	1.9	2.5	4.4	2.8	1.7	5.6	7.7	8.1	0.93	e0.00	7.7
10	1.5	2.1	2.6	4.7	2.5	1.8	6.0	7.8	8.0	e0.58	0.00	7.8
11	1.3	2.5	2.7	4.4	2.6	1.9	9.2	11	8.2	e0.41	0.00	7.8
12	1.2	2.8	2.6	4.0	2.5	1.9	8.6	13	7.9	e0.20	0.00	7.7
13	0.89	2.7	2.6	3.8	2.5	1.9	7.0	11	7.9	e0.00	0.00	7.5
14	0.68	2.8	2.6	3.5	2.3	1.9	6.6	8.7	8.0	e0.00	0.00	5.9
15	0.65	2.8	2.6	3.5	2.3	2.0	5.9	8.5	8.2	e0.00	0.00	5.0
16	0.77	2.5	2.6	3.5	2.4	2.2	6.0	8.6	7.8	e0.00	0.00	5.5
17	0.90	2.2	2.7	3.6	2.5	2.3	6.3	8.7	7.7	e0.00	0.00	5.9
18	1.00	2.2	2.7	3.6	2.6	2.1	6.5	8.6	7.6	e0.00	0.00	6.2
19	1.0	2.3	2.8	3.5	2.5	1.9	6.6	8.6	7.8	e0.00	0.04	5.0
20	1.2	2.3	2.8	3.4	2.6	1.9	6.7	9.2	7.8	e0.00	3.5	4.3
21	1.3	2.5	2.8	3.2	2.5	2.1	7.1	9.8	8.3	e0.00	6.7	3.7
22	1.4	2.6	2.8	3.2	2.4	2.1	6.9	9.3	14	e0.00	e6.8	2.3
23	1.7	2.6	2.9	3.3	2.3	2.3	6.7	9.0	8.7	e0.00	e7.3	1.4
24	1.9	2.7	4.6	3.2	2.2	2.2	6.8	9.1	5.4	e0.00	7.6	0.96
25	2.0	3.0	6.1	3.2	1.9	2.3	6.9	8.5	3.7	e0.00	7.7	0.82
26	2.3	2.8	5.4	3.1	1.9	2.5	6.3	8.1	2.7	e0.00	8.4	0.68
27	2.2	2.7	4.3	2.9	2.1	2.3	6.3	8.0	3.8	e0.00	8.1	0.61
28	2.1	2.9	3.6	2.7	1.8	2.4	6.9	7.8	6.9	e0.00	7.9	0.50
29	1.9	3.0	3.4	2.7	---	2.6	7.5	7.7	7.9	e0.00	8.0	0.42
30	2.1	2.5	3.4	2.7	---	2.7	7.7	7.4	7.8	e0.00	7.8	0.32
31	2.2	---	3.3	2.7	---	2.9	---	7.8	---	e0.00	7.4	---
<b>Total</b>	60.69	74.3	94.4	103.5	69.3	63.9	181.1	275.0	232.9	34.52	87.24	148.21
<b>Mean</b>	1.96	2.48	3.05	3.34	2.48	2.06	6.04	8.87	7.76	1.11	2.81	4.94
<b>Max</b>	4.9	3.0	6.1	4.7	3.2	2.9	9.2	13	14	7.6	8.4	8.0
<b>Min</b>	0.65	1.9	2.3	2.7	1.8	1.4	2.9	7.4	2.7	0.00	0.00	0.32
<b>Ac-ft</b>	120	147	187	205	137	127	359	545	462	68	173	294

**STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1968 - 2011, BY WATER YEAR (WY)**

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
<b>Mean</b>	171	88.6	75.4	76.2	77.7	107	107	245	279	88.4	128	201
<b>Max</b>	1,475	1,344	562	470	666	732	873	1,440	1,783	623	1,516	2,953
<b>(WY)</b>	(1987)	(1975)	(1975)	(1975)	(1975)	(1987)	(1977)	(1987)	(1996)	(1987)	(1978)	(1980)
<b>Min</b>	1.96	2.48	2.07	2.09	2.19	2.06	0.41	0.00	0.00	0.00	2.24	0.00
<b>(WY)</b>	(2011)	(2011)	(1999)	(1999)	(1999)	(2011)	(1986)	(1984)	(1984)	(1974)	(1983)	(1983)

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SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1968 - 2011	
<b>Annual total</b>	2,043.09		1,425.06			
<b>Annual mean</b>	5.60		3.90		135	
<b>Highest annual mean</b>					719	1987
<b>Lowest annual mean</b>					3.90	2011
<b>Highest daily mean</b>	30	Jan 29	14	Jun 22	31,300	Sep 10, 1980
<b>Lowest daily mean</b>	0.65	Oct 15	0.00	Jul 13	0.00	Jun 22, 1974
<b>Annual seven-day minimum</b>	0.84	Oct 13	0.00	Jul 13	0.00	Jun 22, 1974
<b>Maximum peak flow</b>			15	Jun 22	45,000	Sep 10, 1980
<b>Maximum peak stage</b>			3.88	Jun 22	28.00	Sep 10, 1980
<b>Annual runoff (ac-ft)</b>	4,050		2,830		97,960	
<b>10 percent exceeds</b>	8.7		8.2		248	
<b>50 percent exceeds</b>	5.3		2.8		21	
<b>90 percent exceeds</b>	2.3		0.00		3.3	

