Water-Data Report 2011

08185500 Cibolo Creek at Sutherland Springs, TX

San Antonio Basin
Cibolo Subbasin

LOCATION.--Lat 29°16′47″, long 98°03′12″ referenced to North American Datum of 1983, Wilson County, TX, Hydrologic Unit 12100304, at right downstream abutment of bridge on FM 539, 1.1 mi upstream of Gum Branch, 4.1 mi downstream of Alum Creek, 0.5 mi north of Sutherland Springs, and at mile 27.5.

DRAINAGE AREA.--665 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--June 1924 to Apr. 1929, Dec. 2005 to current year (daily mean discharge).

PERIOD OF RECORD, Water-Quality.--

CHEMICAL DATA: Dec. 2006 to Oct. 2007.
BIOCHEMICAL DATA: Dec. 2006 to Oct. 2007

GAGE.--Water-stage recorder. Datum of gage is 372.01 ft above NAVD88. June 22, 1924 to April 30, 1929, nonrecording gage on right bank at upstream side of highway bridge (datum unknown). Satellite telemeter at station.

REMARKS.--Records good. There are several diversions for irrigation above station. Much of the base flow is discharge from the Carrizo Sands in the vicinity of Sutherland Springs. No flow at times. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage known according to local resident was at gage height of about 39 ft in Sept. 1913 (determined by levels to approximate mark indicated by local resident and considered reliable).

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 08185500, accessed at http://wdr.water.usgs.gov/wy2011/pdfs/08185500.2011.pdf

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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	73	55	58	58	50	39	29	21	16	30	17	12
2	69	69	55	56	47	40	28	20	17	29	17	12
3	66	87	54	56	45	38	28	20	17	27	17	12
4	64	64	55	57	46	38	27	21	17	28	16	12
5	64	59	55	60	47	37	27	21	16	26	15	13
6	63	58	55	57	49	36	29	21	15	26	14	12
7	62	55	56	56	48	35	29	21	16	26	15	13
8	61	55	58	56	52	36	28	21	16	25	14	14
9	60	54	56	80	53	38	27	18	15	24	14	13
10	59	55	57	136	50	36	26	19	14	25	14	14
11	60	58	56	121	47	35	24	19	14	26	14	13
12	63	61	54	83	44	34	23	22	14	25	14	14
13	62	71	51	69	43	33	24	24	14	25	14	15
14	61	62	52	64	43	32	25	25	14	25	16	16
15	59	60	55	71	45	33	24	24	14	24	15	17
16	60	59	56	156	47	35	23	24	14	24	15	17
17	59	59	55	266	45	35	23	21	13	24	16	17
18	58	56	54	168	43	34	22	21	14	23	15	16
19	58	54	53	111	43	34	23	22	14	23	14	15
20	58	54	53	87	44	33	24	21	13	23	13	16
21	59	54	56	73	43	32	24	21	13	27	13	16
22	57	56	57	65	43	33	24	21	21	34	13	16
23	56	59	56	60	43	33	23	21	38	30	12	16
24	56	59	57	57	43	32	23	21	89	25	12	15
25	55	57	60	55	41	30	23	20	59	23	13	15
26	58	59	65	53	41	28	23	21	43	21	13	16
27	61	57	62	50	41	28	23	20	37	21	13	17
28	58	55	59	48	40	28	21	19	33	20	14	17
29	54	56	60	47	---	28	21	18	32	20	14	17
30	55	58	60	47	---	30	21	18	31	19	13	23
31	55	---	59	47	---	30	---	17	---	18	13	---
Total	1,863	1,775	1,749	2,470	1,266	1,043	739	643	693	766	442	451
Mean	60.1	59.2	56.4	79.7	45.2	33.6	24.6	20.7	23.1	24.7	14.3	15.0
Max	73	87	65	266	53	40	29	25	89	34	17	23
Min	54	54	51	47	40	28	21	17	13	18	12	12
Ac-ft	3,700	3,520	3,470	4,900	2,510	2,070	1,470	1,280	1,370	1,520	877	895

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1924 - 2011[h], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	103	45.8	33.7	60.3	64.2	72.4	224	75.8	68.0	181	84.6	80.7
Max	736	155	71.3	261	450	329	1,874	236	182	1,746	723	606
(WY)	(2010)	(2010)	(2010)	(2010)	(2010)	(2007)	(1926)	(2007)	(2007)	(2007)	(2007)	(2010)
Min	12.6	11.0	13.0	14.9	12.0	13.6	16.2	14.5	12.1	11.4	7.84	9.18
(WY)	(1925)	(1928)	(1928)	(1928)	(1929)	(1925)	(1925)	(1925)	(1925)	(2009)	(1928)	(1928)

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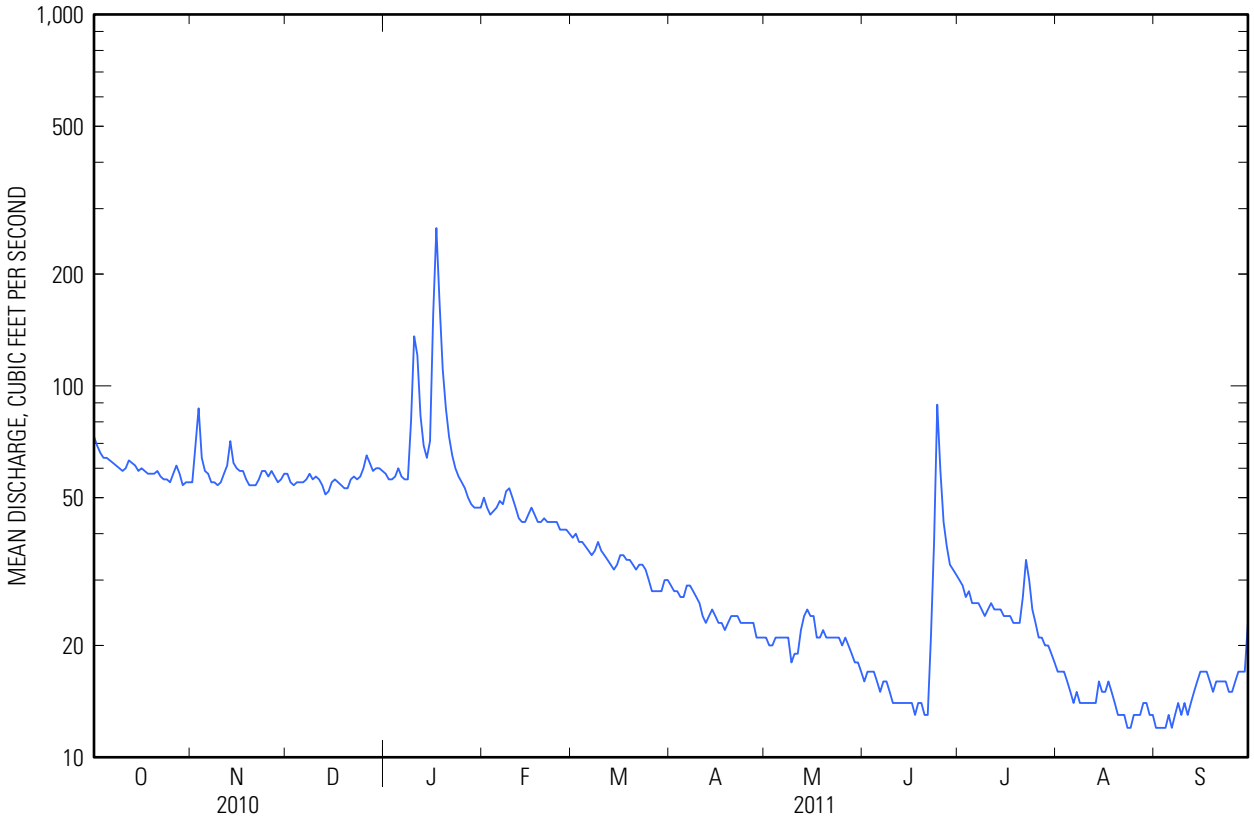
SUMMARY STATISTICS

	Calendar Year 2010		Water Year 2011		Water Years 1924 - 2011[h]	
Annual total	59,874		13,900			
Annual mean	164		38.1		103	
Highest annual mean					318	2007
Lowest annual mean					14.7	1925
Highest daily mean	6,980	Sep 8	266	Jan 17	18,300	Apr 23, 1926
Lowest daily mean	21	Aug 29	12	Aug 23	4.4	Nov 12, 1928
Annual seven-day minimum	22	Aug 24	12	Aug 31	5.3	Dec 27, 1928
Maximum peak flow			283	Jan 17	23,800	Apr 21, 1926
Maximum peak stage			8.60	Jan 17	38.82	Oct 5, 2009
Annual runoff (ac-ft)	118,800		27,570		74,740	
10 percent exceeds	173		60		95	
50 percent exceeds	58		32		21	
90 percent exceeds	36		14		11	

[h] See Period of Record paragraph.



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CLIMATOLOGICAL RECORDS

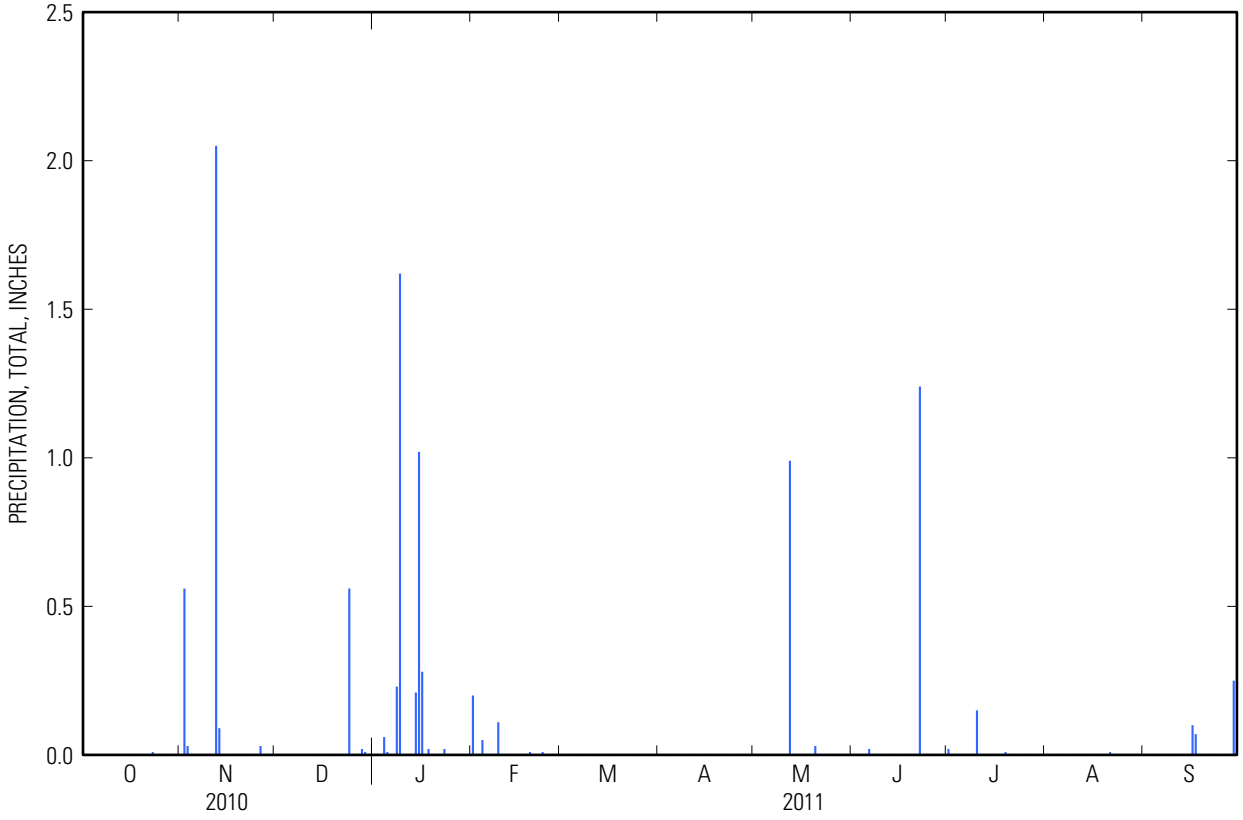
PERIOD OF RECORD.--Oct. 2010 to Sept. 2011.

INSTRUMENTATION.--Unshielded, standard 8-in. diameter, tipping-bucket raingage, mounted on top of the gage shelter 10 ft above land surface, with satellite telemetry. Datum of gage is 372.01 ft above NAVD88.

REMARKS.--Records good.

EXTREMES FOR CURRENT YEAR.--Maximum daily rainfall, 2.05 inches, Nov. 12.

PRECIPITATION, TOTAL, INCHES
WATER YEAR OCTOBER 2010 TO SEPTEMBER 2011
DAILY SUM VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	0.00	0.00	0.00	0.00	0.20	0.00	0.00	0.00	0.00	0.02	0.00	0.00
2	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.06	0.05	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.23	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9	0.00	0.00	0.00	1.62	0.11	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.00	0.00
11	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
12	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.99	0.00	0.00	0.00	0.00
13	0.00	0.09	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14	0.00	0.00	0.00	0.21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
15	0.00	0.00	0.00	1.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
16	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.10
17	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.07
18	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
19	0.00	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.01	0.00	0.00
20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.00	0.00
21	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.00
22	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.24	0.00	0.00	0.00
23	0.01	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.56	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26	0.00	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
28	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
29	0.00	0.00	0.01	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.25
30	0.00	0.00	0.00	0.00	---	0.00	0.00	0.00	0.00	0.00	0.00	0.00
31	0.00	---	0.00	0.00	---	0.00	---	0.00	---	0.00	0.00	---
Total	0.01	2.76	0.59	3.47	0.38	0.00	0.00	1.02	1.26	0.18	0.01	0.42
Mean	0.00	0.09	0.02	0.11	0.01	0.00	0.00	0.03	0.04	0.01	0.00	0.01
Max	0.01	2.05	0.56	1.62	0.20	0.00	0.00	0.99	1.24	0.15	0.01	0.25
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

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