Water-Data Report 2013

08170000 San Marcos Springs at San Marcos, TX

Guadalupe Basin
San Marcos Subbasin

LOCATION.--Lat 29°53′20″, long 97°56′02″ referenced to North American Datum of 1927, Hays County, TX, Hydrologic Unit 12100203, on left bank at downstream side of bridge on Aquarena Springs Drive (Loop 82), 500 ft downstream from Spring Lake, and 4.2 mi upstream from Blanco River.

DRAINAGE AREA.--Not applicable. This is a springflow station.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--May 1956 to current year. Records prior to Oct. 1997 published as "San Marcos River Springflow at San Marcos".

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: July 1965, Oct. 1995 to Oct. 1996.
BIOCHEMICAL DATA: July 1965.

GAGE.--Water-stage recorder. Datum of gage is 557.67 ft above NGVD of 1929. May 1956 to Sept. 1988, water-stage recorder 0.7 mi downstream from Interstate Highway 35 and 2.1 mi upstream from Blanco River, datum 536.82 ft above NGVD of 1929. Oct. 1988 to Sept. 1994, water-stage recorder at ground-water well No. LR-67-09-110, 0.2 mi southwest of intersection of FM 2439 and McCarty Lane and 3.7 mi south of San Marcos, datum 678.50 ft above NGVD of 1929. Satellite telemeter at station.

REMARKS.--Records good except those for estimated daily discharges, which are fair. Some records listed in the "Period of Record" for surface water and water quality may not be available electronically. Springflow is equal to flow at San Marcos River at San Marcos (station 08170500) except during periods of local runoff. Springflow is separated from runoff using modified Institute of Hydrology base-flow separation program BFI 4.14 (March 2006) (http://www.usbr.gov/pmts/hydraulics_lab/twahl/bfi/texaswater95/comalsprings.html). Selected springflow values computed using the program are revised on the basis of further examination of the base-flow records. The springflow for all days with springflow separations are considered computed daily mean springflow values and only days in which the river flow was estimated, are shown as estimated. San Marcos Springs emerge from the Edwards and associated limestones about 1.1 mi upstream from Interstate Highway 35, in the Balcones Fault Zone.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2012 TO SEPTEMBER 2013
DAILY MEAN VALUES

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	151	143	130	118	119	109	109	102	125	115	114	102
2	151	142	129	117	118	109	109	102	124	115	114	101
3	152	141	129	117	118	109	110	102	124	114	113	100
4	152	140	128	117	118	109	110	102	124	114	112	101
5	154	139	128	117	118	109	109	101	124	113	112	102
6	154	139	128	117	118	109	109	101	123	112	111	101
7	153	139	128	117	118	109	109	100	123	111	111	101
8	153	137	127	118	117	110	109	100	122	111	110	101
9	152	137	127	121	117	109	109	100	122	111	110	102
10	151	137	125	120	116	108	109	101	121	111	109	102
11	151	137	126	120	116	107	108	100	121	111	108	102
12	151	136	124	123	116	107	108	99	121	111	108	102
13	151	137	124	123	115	107	108	98	121	111	107	102
14	151	136	125	123	114	108	108	99	122	114	107	102
15	150	136	125	123	114	108	107	100	122	114	107	102
16	149	135	124	123	113	108	108	101	122	114	107	104
17	149	135	124	123	113	108	108	101	122	114	106	104
18	149	134	124	123	113	108	108	102	121	115	106	104
19	148	133	122	121	113	108	107	101	120	115	105	104
20	148	132	121	121	113	108	107	100	120	115	105	105
21	148	132	121	122	112	108	106	99	120	115	104	105
22	147	132	121	120	111	109	106	100	119	115	104	105
23	146	132	121	120	111	108	106	100	119	115	104	104
24	146	132	120	120	110	108	106	103	118	115	104	104
25	145	130	120	120	110	108	106	106	118	115	104	104
26	145	129	119	120	110	108	106	109	117	115	104	105
27	145	127	119	120	110	108	107	112	116	115	103	105
28	144	129	118	120	109	108	106	115	116	114	103	105
29	144	129	117	119	---	108	104	118	116	114	102	105
30	143	130	117	119	---	109	103	122	115	113	102	103
31	143	---	118	119	---	109	---	125	---	114	103	---
Total	4,616	4,047	3,829	3,721	3,200	3,358	3,225	3,221	3,618	3,521	3,319	3,089
Mean	149	135	124	120	114	108	108	104	121	114	107	103
Max	154	143	130	123	119	110	110	125	125	115	114	105
Min	143	127	117	117	109	107	103	98	115	111	102	100
Ac-ft	9,160	8,030	7,590	7,380	6,350	6,660	6,400	6,390	7,180	6,980	6,580	6,130

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1956 - 2013, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	159	166	171	172	175	176	174	180	186	180	167	159
Max	314	372	365	382	418	445	427	407	415	381	421	393
(WY)	(2008)	(1999)	(2005)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(1992)	(2007)	(2007)
Min	64.6	70.3	72.0	74.3	72.4	89.3	95.5	92.4	63.6	54.5	53.5	59.1
(WY)	(1957)	(1957)	(1957)	(1957)	(1957)	(1964)	(2009)	(2009)	(1956)	(1956)	(1956)	(1956)

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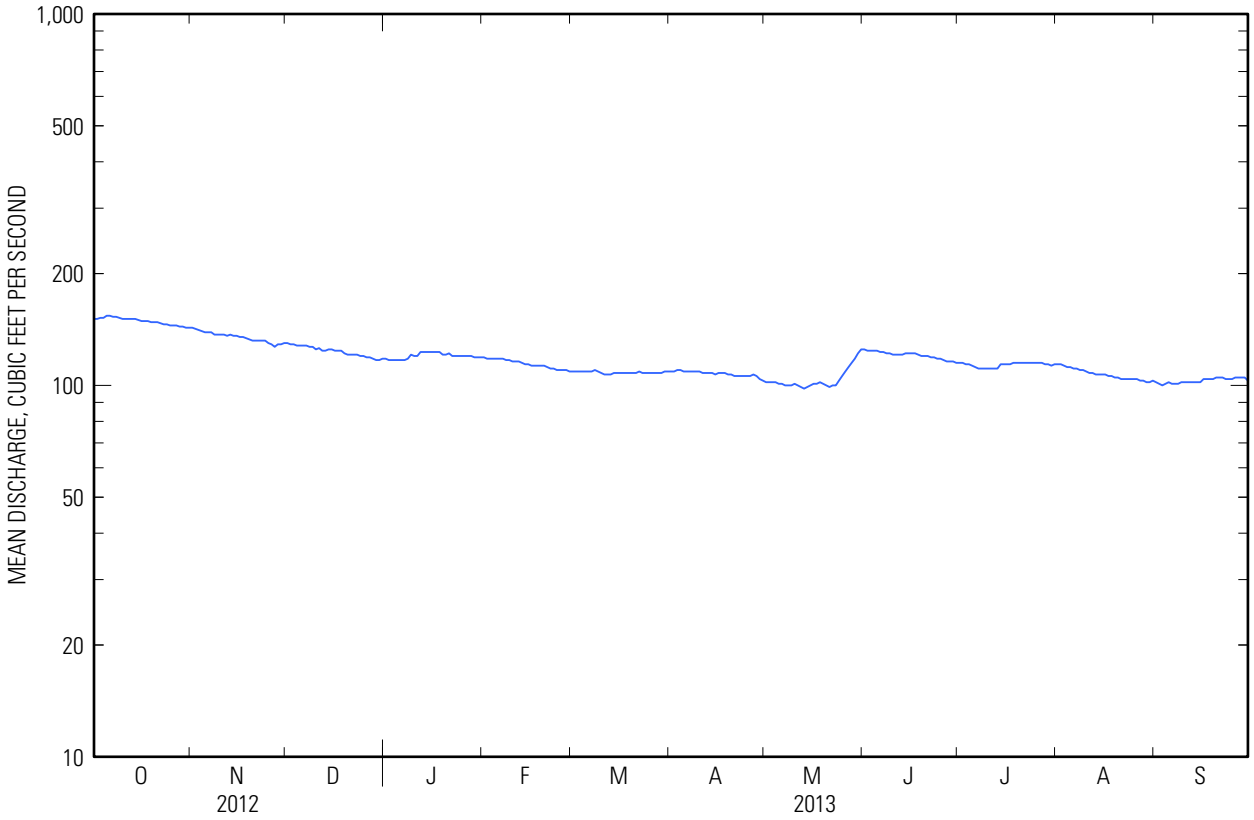
SUMMARY STATISTICS

	Calendar Year 2012		Water Year 2013		Water Years 1956 - 2013	
Annual total	59,804		42,764			
Annual mean	163		117		173	
Highest annual mean					331	1992
Lowest annual mean					92.0	1964
Highest daily mean	230	May 15	154	Oct 5	451	Mar 12, 1992
Lowest daily mean	100	Jan 1	98	May 13	46	Aug 15, 1956
Annual seven-day minimum	100	Jan 12	100	May 8	50	Aug 10, 1956
Annual runoff (ac-ft)	118,600		84,820		125,200	
10 percent exceeds	212		139		257	
50 percent exceeds	154		114		162	
90 percent exceeds	121		102		101