Water-Data Report 2012

08173900 Guadalupe River at Gonzales, TX

Guadalupe Basin
Middle Guadalupe Subbasin

LOCATION.--Lat 29°29′03″, long 97°27′00″ referenced to North American Datum of 1927, Gonzales County, TX, Hydrologic Unit 12100202, on right bank on downstream side of U.S. Highway 183 bridge, 4.6 mi downstream from San Marcos River, and at mile 191.1.

DRAINAGE AREA.--3,490 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--July 1915 to Sept. 1922, Oct. 1951 to Sept. 1952 (discharge measurements only), Mar. 1977 to Sept. 1996 (peak stage only), Oct. 1996 to current year. Records for July 1915 to Sept. 1922, published in WSP 408, 438, 458, and 528, are unreliable and should not be used.

PERIOD OF RECORD, Water-Quality.--
CHEMICAL DATA: Apr. 1996 to June 1998.
BIOCHEMICAL DATA: Apr. 1996 to June 1998.
BIOLOGICAL DATA: July 1996 to June 1998.
PESTICIDE DATA: Nov. 1996 to June 1998.
RADIOCHEMICAL DATA: Nov. 1996 to Jan. 1997.
SEDIMENT DATA: Apr. 1996 to June 1998.
STABLE ISOTOPE DATA: Feb. 1998.

GAGE.--Water-stage recorder. Datum of gage is 231.80 ft above NGVD of 1929. July 1915 to Sept. 1922, and Oct. 1951 to Sept. 1952, 0.2 mi downstream, datum not known. Mar. 1977 to Sept. 1996, 1.2 mi upstream at Gonzales hydroelectric plant at National Weather Service datum. Satellite telemeter at station.

REMARKS.--Records good. Since water year 1928, at least 10% of contributing drainage area has been regulated. Some water is diverted for irrigation and municipal use (amounts unknown). Some records listed in the "Period of Record" for surface water and water quality may not be available electronically.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of May 29, 1929, reached a stage of 38.3 ft, National Weather Service datum.

Suggested citation: U.S. Geological Survey, 2013, Water-resources data for the United States, Water Year 2012: U.S. Geological Survey Water-Data Report WDR-US-2012, site 08173900, accessed at http://wdr.water.usgs.gov/wy2012/pdfs/08173900.2012.pdf

08173900 Guadalupe River at Gonzales, TX—Continued

DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2011 TO SEPTEMBER 2012
DAILY MEAN VALUES

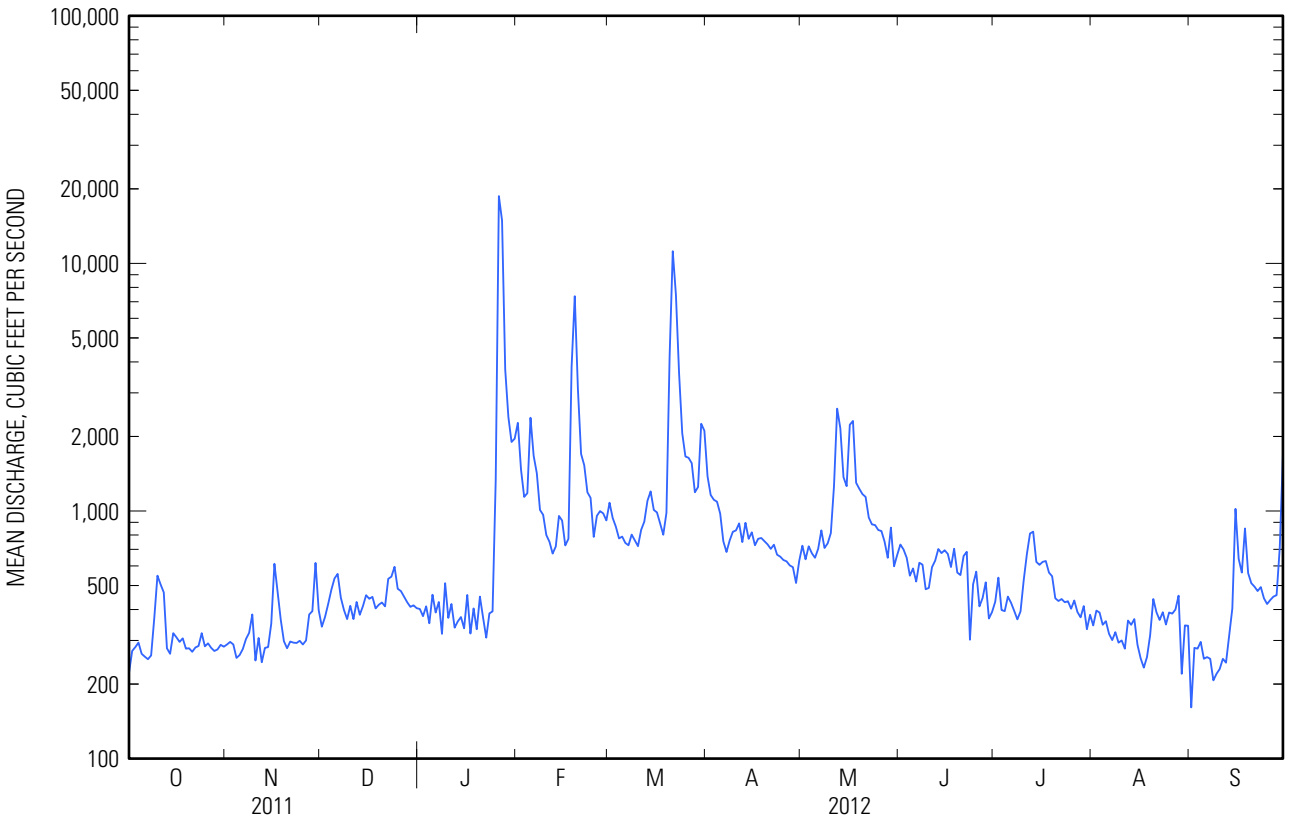
Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	222	289	341	402	2,270	1,080	1,380	724	732	430	345	161
2	272	296	373	376	1,470	937	1,160	638	699	538	396	280
3	282	289	421	412	1,140	864	1,110	720	647	398	389	278
4	294	255	480	352	1,180	775	1,090	675	548	394	347	296
5	265	262	534	459	2,380	788	976	647	586	451	359	253
6	258	277	557	389	1,670	743	754	704	519	426	319	257
7	252	304	447	429	1,420	727	683	835	618	395	301	253
8	261	322	398	319	1,010	803	760	709	607	365	324	207
9	370	382	366	511	965	761	824	740	483	393	294	220
10	548	249	414	370	800	721	835	814	489	524	300	230
11	505	307	366	421	751	839	891	1,260	593	668	278	253
12	469	245	429	338	673	906	749	2,590	630	811	361	244
13	279	280	381	358	719	1,100	896	2,160	702	825	347	314
14	265	282	413	373	955	1,200	772	1,370	676	623	366	404
15	321	351	457	336	915	1,010	820	1,260	694	606	288	1,020
16	309	612	442	458	726	987	727	2,230	671	623	254	641
17	296	472	450	320	772	891	772	2,310	594	628	233	564
18	306	364	404	404	3,820	802	778	1,300	704	564	257	850
19	278	298	418	333	7,370	983	755	1,230	564	545	315	561
20	279	279	427	451	3,100	4,190	733	1,170	551	444	441	511
21	270	297	412	371	1,700	11,200	703	1,140	658	433	390	495
22	281	294	532	308	1,530	7,460	731	941	684	441	363	475
23	285	293	543	386	1,190	3,590	666	883	302	428	390	493
24	321	299	595	393	1,130	2,060	654	877	506	432	348	444
25	284	289	485	1,340	786	1,660	634	838	569	403	389	421
26	292	300	475	18,700	956	1,640	626	830	412	435	385	437
27	280	382	451	14,900	999	1,560	603	752	445	391	400	451
28	272	394	428	3,730	978	1,190	593	647	515	372	455	457
29	276	617	410	2,400	916	1,250	512	857	368	413	220	711
30	288	398	416	1,900	---	2,250	629	598	391	333	345	1,680
31	283	---	405	1,960	---	2,110	---	665	---	381	344	---
Total	9,463	9,978	13,670	54,199	44,291	57,077	23,816	33,114	17,157	15,113	10,543	13,861
Mean	305	333	441	1,748	1,527	1,841	794	1,068	572	488	340	462
Max	548	617	595	18,700	7,370	11,200	1,380	2,590	732	825	455	1,680
Min	222	245	341	308	673	721	512	598	302	333	220	161
Ac-ft	18,770	19,790	27,110	107,500	87,850	113,200	47,240	65,680	34,030	29,980	20,910	27,490

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1997 - 2012, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	2,443	2,564	1,848	1,441	1,612	1,832	1,602	1,273	1,752	2,546	1,413	1,432
Max	18,950	11,960	6,006	2,866	4,230	4,290	3,438	2,735	6,410	13,920	6,972	5,101
(WY)	(1999)	(2005)	(2005)	(2003)	(2003)	(2005)	(2007)	(2007)	(2004)	(2002)	(2007)	(2002)
Min	305	333	441	520	540	568	463	375	308	226	201	191
(WY)	(2012)	(2012)	(2012)	(1997)	(2009)	(2009)	(2011)	(2011)	(2011)	(2011)	(2011)	(2011)

08173900 Guadalupe River at Gonzales, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2011		Water Year 2012		Water Years 1997 - 2012	
Annual total	151,168		302,282			
Annual mean	414		826		1,814	
Highest annual mean					3,471	2002
Lowest annual mean					484	2009
Highest daily mean	1,420	Jan 17	18,700	Jan 26	188,000	Oct 19, 1998
Lowest daily mean	130	Sep 5	161	Sep 1	108	Aug 29, 2006
Annual seven-day minimum	142	Sep 5	238	Sep 6	142	Sep 5, 2011
Maximum peak flow			29,200	Jan 26	[i]340,000	Oct 19, 1998
Maximum peak stage			39.76	Jan 26	[a]50.44	Oct 19, 1998
Annual runoff (ac-ft)	299,800		599,600		1,314,000	
10 percent exceeds	703		1,260		4,110	
50 percent exceeds	346		487		942	
90 percent exceeds	191		280		370	

[i] From indirect measurement of peak flow.
[a] From floodmark.