Water-Data Report 2008

08181500 Medina River at San Antonio, TX

San Antonio Basin
Medina Subbasin

LOCATION.--Lat 29°15′50″, long 98°29′26″ referenced to North American Datum of 1927, Bexar County, TX, Hydrologic Unit 12100302, on right bank at downstream side of bridge on Old Pleasanton Rd. in San Antonio, and 8.0 mi upstream from mouth.

DRAINAGE AREA.--1,317 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Oct. 1929 to Dec. 1930, July 1939 to current year. Oct. 1929 to Dec. 1930, records below about 50 ft^3/s in connection with seepage investigation, published as "at Losoya". Published as "near San Antonio" July 1939 to Sept. 1970.

REVISED RECORDS.--WSP 1562: 1957. WSP 1923: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 439.03 ft above NGVD of 1929 (levels by U.S. Army Corps of Engineers). Oct. 1929 to Dec. 1930, nonrecording gage at Losoya 1.5 mi downstream at different datum. July 27, 1939 to Sept. 30, 1987, at site near left bank at downstream side of pier of upstream Hwy 281 bridge at same datum. Oct. 1, 1987 to Apr. 1, 2003, near right bank at upstream side of pier of upstream Hwy 281 bridge at same datum. Apr. 2, 2003 to Mar. 9, 2005, at right end of downstream side of downstream Hwy 281 bridge at same datum. Satellite telemeter at station.

REMARKS.--Records fair. Since installation of gage in water year 1939, at least 10% of contributing drainage area has been regulated. Streamflow is lost into the Edwards and associated limestones in the Balcones Fault Zone that cross the basin between the upstream end of Medina Lake and about 5 mi downstream from Medina Dam, or 0.9 mi downstream from the Medina Diversion Dam. Several small diversions below Medina Diversion Lake. Wastewater effluent from the Mitchell Lake, Leon Creek, and Medio Creek plants was discharged into the Medina River above this station.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum stage, 55 ft, prior to construction of Medina Dam in 1913, from information by Texas Department of Transportation.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,800 ft^3/s, Aug. 20, gage height, 10.17 ft; minimum discharge, 52 ft^3/s, June 22, gage height, 3.33 ft.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008
DAILY MEAN VALUES
[e, estimated]

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	704	395	306	250	188	176	198	180	112	106	135	162
2	683	390	316	254	190	176	189	182	111	104	134	159
3	666	376	315	247	192	176	186	168	105	114	135	153
4	647	362	310	252	193	170	181	159	105	138	132	143
5	638	361	314	260	191	177	177	163	101	143	127	140
6	628	347	307	255	183	175	177	158	105	142	126	133
7	614	334	305	258	183	172	185	158	104	141	127	129
8	611	347	298	254	186	176	196	157	105	170	123	136
9	618	357	e282	242	185	175	195	155	102	186	118	135
10	586	358	276	239	185	189	197	153	101	155	113	141
11	569	347	270	236	186	206	195	143	97	138	113	143
12	549	339	258	232	185	194	188	142	91	124	114	143
13	532	342	252	232	183	185	189	143	87	123	165	145
14	523	342	252	231	181	190	185	148	103	121	150	138
15	513	319	253	228	183	187	184	154	106	114	127	135
16	489	325	253	231	182	175	182	150	101	110	114	123
17	488	327	250	226	184	180	183	142	94	111	128	119
18	476	333	245	224	183	185	225	139	87	118	152	115
19	464	337	238	221	179	186	198	140	78	111	205	123
20	452	340	236	219	180	192	192	138	81	108	1,250	123
21	441	337	234	225	181	194	195	133	79	115	455	122
22	438	309	226	228	185	191	195	133	81	115	212	123
23	420	302	218	214	180	173	193	149	106	106	414	122
24	425	310	221	204	184	178	191	154	102	238	551	127
25	403	323	213	201	184	178	189	135	94	522	268	119
26	400	332	211	202	176	179	203	128	91	226	228	115
27	391	322	212	200	176	180	188	127	97	167	195	106
28	387	313	221	200	177	179	184	124	99	152	185	105
29	393	305	238	200	174	179	181	116	97	134	172	111
30	398	304	240	191	---	188	178	111	104	128	166	110
31	397	---	252	186	---	201	---	111	---	137	162	---
Total	15,943	10,135	8,022	7,042	5,319	5,662	5,699	4,493	2,926	4,617	6,796	3,898
Mean	514	338	259	227	183	183	190	145	97.5	149	219	130
Max	704	395	316	260	193	206	225	182	112	522	1,250	162
Min	387	302	211	186	174	170	177	111	78	104	113	105
Ac-ft	31,620	20,100	15,910	13,970	10,550	11,230	11,300	8,910	5,800	9,160	13,480	7,730

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1939 - 2008[h], BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	254	216	175	178	225	196	206	265	394	380	205	218
Max	2,151	2,238	961	979	2,923	2,558	1,620	2,018	7,006	9,434	3,119	1,533
(WY)	(1999)	(2005)	(1992)	(1968)	(1992)	(1992)	(1992)	(1992)	(1987)	(2002)	(2007)	(2002)
Min	7.60	8.50	12.7	5.58	12.7	9.77	6.63	8.71	6.52	6.13	6.40	8.24
(WY)	(1956)	(1956)	(1955)	(1957)	(1953)	(1956)	(1956)	(1953)	(1956)	(1954)	(1952)	(1954)

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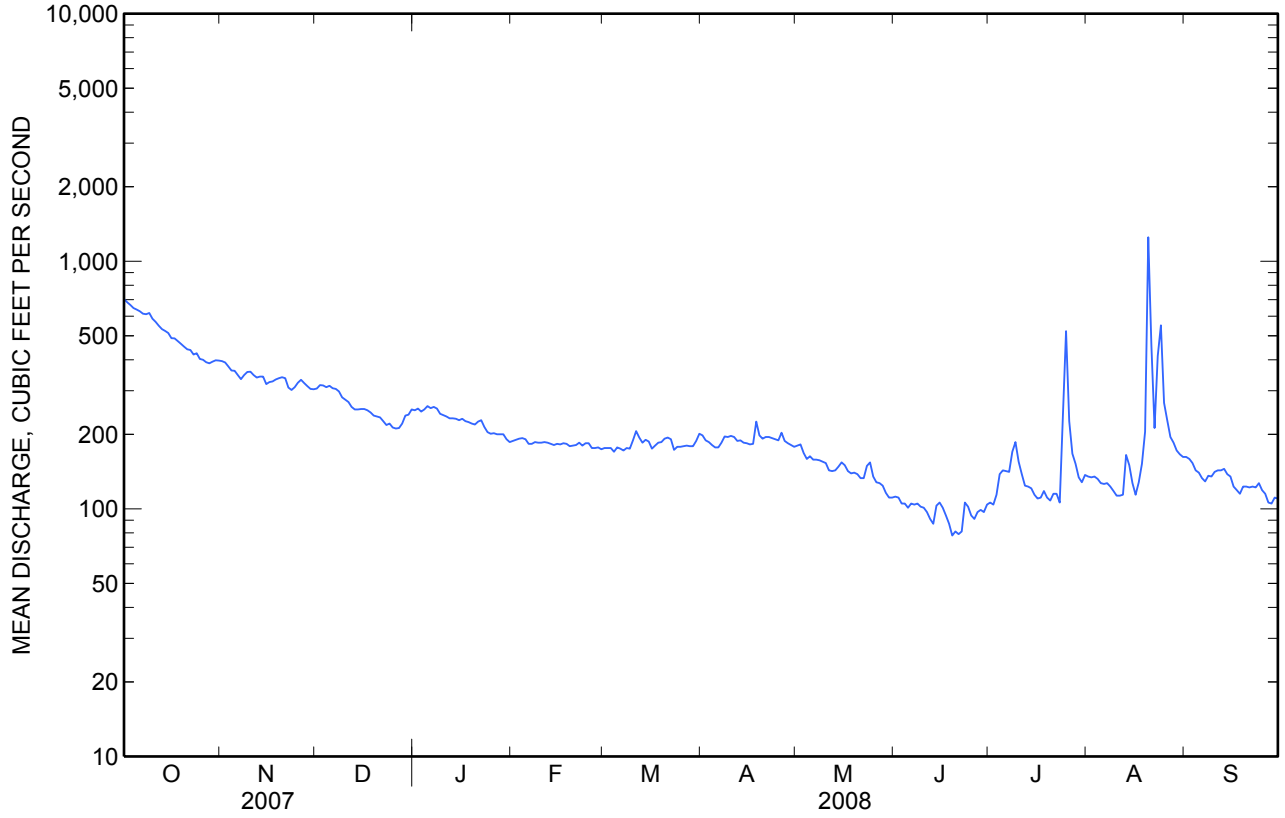
SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1939 - 2008[h]	
Annual total	307,046		80,552			
Annual mean	841		220		231	
Highest annual mean					1,218	1992
Lowest annual mean					14.3	1956
Highest daily mean	24,000	Aug 17	1,250	Aug 20	51,300	Jul 6, 2002
Lowest daily mean	74	Mar 11	78	Jun 19	3.3	Apr 18, 1956
Annual seven-day minimum	86	Mar 5	86	Jun 16	4.0	Jan 21, 1957
Maximum peak flow			1,800	Aug 20	67,000	Jul 4, 2002
Maximum peak stage			10.17	Aug 20	[a]56.10	Jul 4, 2002
Annual runoff (ac-ft)	609,000		159,800		167,000	
10 percent exceeds	1,900		390		403	
50 percent exceeds	327		184		102	
90 percent exceeds	104		111		22	

[h] See Period of Record paragraph.

[a] From floodmark.



WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: June 1965, Jan. 1968, Apr. 1971 to Aug. 1995, Feb. 1997 to Mar. 1998.
BIOCHEMICAL DATA: June 1965, Jan. 1968, Apr. 1971 to Aug. 1995, Feb. 1997 to Mar. 1998.
BIOLOGICAL DATA: June 1986, Dec. 1992 to Mar. 1998.
PESTICIDE DATA: Apr. 1971 to May 1984, Dec. 1992 to Mar. 1998.
RADIOCHEMICAL DATA: Dec. 1980 to June 1981.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Jan. 1987 to Sept. 2000; Mar. 2005 to current year.
pH: Jan. 1987 to Sept. 2000; Mar. 2005 to current year.
WATER TEMPERATURE: Jan. 1987 to Sept. 2000; Mar. 2005 to current year.
DISSOLVED OXYGEN: Jan. 1987 to Sept. 2000; Mar. 2005 to current year.
TURBIDITY: Mar. 2005 to current year.

INSTRUMENTATION.--Water-quality monitor from Jan. 1987 to Sept. 2000; Mar. 2005 to current year.

REMARKS.--Specific conductance record is excellent, water temperature record is excellent, pH record is excellent, dissolved oxygen record is excellent/good and turbidity record is good. Interruptions or periods of missing record may be due to instrument failure, no flow conditions, or data corrections exceeding allowable criteria, which were deleted. Other than on flow conditions, minimum and maximum extremes may have occurred during period of missing record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1220 microsiemens/cm, Sept. 11, 2006, Mar. 7, 8, 2007; minimum, 30 microsiemens/cm, July 16, 1990.
pH: Maximum, 8.8 units, Dec. 4, 5, 1998; minimum, 7.6 units, July 8, 2007 and June 17 and 18,2008.
WATER TEMPERATURE: Maximum, 32.6°C, Aug. 16, 27, 2006; minimum, 9.0°C, Jan. 11, 1988, Dec. 23, 1989.
DISSOLVED OXYGEN: Maximum, 14.3 mg/L, Feb. 18, 1997; minimum, 1.4 mg/L, Sept. 25, 2000.
TURBIDITY: Maximum, 1,530 FNU June 29, 2007; minimum, 1.7 FNU, Nov. 18, 2005.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 1,110 microsiemens/cm, June 19; minimum, 269 microsiemens/cm, Aug. 20.
pH: Maximum, 8.4 standard units, Aug. 7, 8, 9, 10; minimum, 7.6 standard units, June 17, 18.
WATER TEMPERATURE: Maximum, 31.9°C, Aug. 10; minimum, 11.6°C, Jan. 3, 20.
DISSOLVED OXYGEN: Maximum, 12.0 mg/L, Jan. 3; minimum, 5.7 mg/L, Aug. 12.
TURBIDITY: Maximum, 1,040 FNU, Aug. 20; minimum, 6.0 FNU, Dec. 26, 27.

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	669	641	657	804	768	790	815	771	796	848	790	818
2	688	655	671	806	770	792	815	767	794	820	783	801
3	692	666	682	811	775	795	818	760	790	810	767	793
4	693	668	683	821	770	794	806	762	787	806	770	790
5	693	664	681	823	763	795	807	755	785	801	762	788
6	700	664	687	817	782	800	805	742	778	803	742	780
7	699	660	683	824	768	800	789	733	770	796	745	774
8	700	667	685	821	783	804	791	740	769	804	746	778
9	741	683	699	820	784	801	800	748	776	811	761	788
10	703	668	690	821	768	803	816	767	795	817	771	796
11	703	671	689	821	761	796	834	777	813	827	779	807
12	703	681	691	810	758	786	847	800	830	826	780	804
13	711	674	693	808	758	789	851	802	833	835	763	810
14	718	678	701	826	779	809	848	815	834	835	774	807
15	731	696	714	834	792	814	860	818	841	824	780	803
16	743	693	724	829	793	810	861	826	843	830	773	801
17	752	716	733	832	784	808	863	818	840	824	779	802
18	747	716	735	822	770	795	864	832	848	823	770	799
19	759	732	745	808	759	790	862	825	843	831	787	809
20	763	722	746	809	765	792	864	833	848	833	786	810
21	766	723	747	808	775	791	873	839	854	827	771	802
22	771	716	746	817	771	791	867	829	851	838	771	810
23	762	728	747	810	763	788	868	824	849	887	828	860
24	758	706	739	816	760	796	871	820	853	902	858	879
25	761	716	749	833	774	801	868	829	849	903	860	881
26	772	742	759	838	788	811	863	818	844	899	856	880
27	784	738	763	827	796	810	866	828	851	902	835	876
28	780	740	767	831	778	804	860	814	841	890	831	869
29	785	746	768	811	762	795	841	795	824	895	851	881
30	792	757	776	815	774	799	832	770	811	909	870	890
31	798	768	783	---	---	---	835	807	824	913	860	892
Month	798	641	720	838	758	798	873	733	821	913	742	822

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	919	878	901	951	898	931	947	878	916	902	838	874
2	924	890	907	959	894	932	907	863	891	920	827	878
3	925	863	897	960	888	922	933	853	900	928	837	897
4	919	868	893	954	892	926	932	848	907	949	850	910
5	920	865	899	954	904	925	937	866	916	968	858	914
6	927	888	910	945	892	918	949	874	915	972	882	932
7	928	882	906	954	888	926	940	865	897	966	888	926
8	925	877	902	948	913	931	918	850	884	978	898	936
9	920	860	897	952	902	929	896	826	863	972	895	940
10	925	869	898	959	872	918	894	824	858	978	888	949
11	924	860	894	948	862	898	884	807	854	1,000	888	947
12	921	880	903	926	873	889	885	816	861	991	885	950
13	935	904	917	940	904	921	892	819	857	1,020	933	976
14	931	881	909	938	877	907	902	797	847	1,020	936	983
15	930	892	911	931	863	902	887	813	854	1,020	922	973
16	937	890	913	942	881	916	903	819	864	1,000	943	970
17	937	868	905	932	873	902	894	823	868	1,000	951	983
18	923	868	894	922	867	893	979	835	892	1,010	927	977
19	921	870	897	912	854	884	869	798	830	1,020	924	969
20	927	838	897	903	827	871	896	816	859	1,020	951	990
21	925	835	896	888	831	862	909	824	870	1,040	966	1,000
22	926	884	907	880	818	857	908	837	873	1,040	968	1,000
23	925	869	904	886	822	857	897	830	864	1,010	928	973
24	967	906	933	896	811	861	890	828	856	981	906	950
25	977	914	940	904	851	877	879	799	848	986	923	960
26	955	883	922	917	835	884	880	743	832	1,010	928	970
27	955	902	929	931	874	904	891	799	853	1,030	921	976
28	954	899	925	919	847	888	896	800	849	1,040	979	1,010
29	944	892	921	923	868	897	899	820	866	1,040	963	996
30	---	---	---	937	852	904	916	827	877	1,020	945	987
31	---	---	---	932	853	894	---	---	---	1,020	955	996
Month	977	835	908	960	811	901	979	743	871	1,040	827	958

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SPECIFIC CONDUCTANCE, WATER, UNFILTERED, MICROSIEMENS PER CENTIMETER AT 25 DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	1,030	932	987	1,020	953	988	963	861	920	891	813	855
2	1,020	952	983	1,040	922	993	975	848	922	921	838	871
3	1,030	971	1,010	1,050	952	998	983	853	921	907	839	875
4	1,080	970	1,040	1,010	959	985	978	856	921	916	830	885
5	1,080	997	1,040	995	898	950	999	901	948	945	840	895
6	1,070	1,010	1,030	961	854	914	1,010	866	937	945	839	900
7	1,080	1,010	1,040	947	838	891	992	886	941	949	844	898
8	1,080	999	1,030	921	828	864	984	862	930	958	836	895
9	1,070	992	1,020	927	787	824	990	890	952	932	866	905
10	1,080	987	1,040	847	779	816	995	886	947	948	856	905
11	1,080	997	1,040	901	846	876	1,020	920	970	952	863	908
12	1,090	985	1,040	945	869	914	1,040	947	994	950	857	908
13	1,080	967	1,030	952	855	911	1,030	904	945	944	849	905
14	1,100	1,040	1,060	963	868	916	957	910	928	961	855	906
15	1,100	1,020	1,050	964	908	941	987	937	958	966	834	896
16	1,080	992	1,030	1,010	903	961	987	888	940	949	852	909
17	1,090	999	1,040	1,000	927	971	1,000	882	937	958	851	915
18	1,100	1,020	1,050	1,030	945	989	969	875	916	955	885	919
19	1,110	1,020	1,050	1,010	929	987	962	753	838	966	867	924
20	1,100	1,050	1,070	1,030	918	978	811	269	447	970	882	931
21	1,100	1,040	1,070	1,000	912	960	616	466	525	974	869	930
22	1,090	1,000	1,050	1,020	936	989	745	599	657	982	859	922
23	1,080	1,020	1,040	1,040	958	991	754	330	561	982	895	939
24	1,090	1,010	1,050	1,010	475	908	618	349	467	978	866	932
25	1,090	996	1,050	763	484	666	682	618	654	978	925	951
26	1,060	981	1,020	850	718	767	782	682	717	992	910	955
27	1,070	985	1,020	878	769	817	800	725	769	992	912	959
28	1,040	939	995	897	825	858	818	759	787	1,010	910	964
29	1,020	931	972	939	856	898	825	769	796	1,010	897	948
30	1,000	894	956	970	853	912	869	797	830	1,000	909	960
31	---	---	---	978	864	922	880	808	844	---	---	---
Month	1,110	894	1,030	1,050	475	915	1,040	269	833	1,010	813	916

	Max	Min	Mean
Year	1,110	269	874

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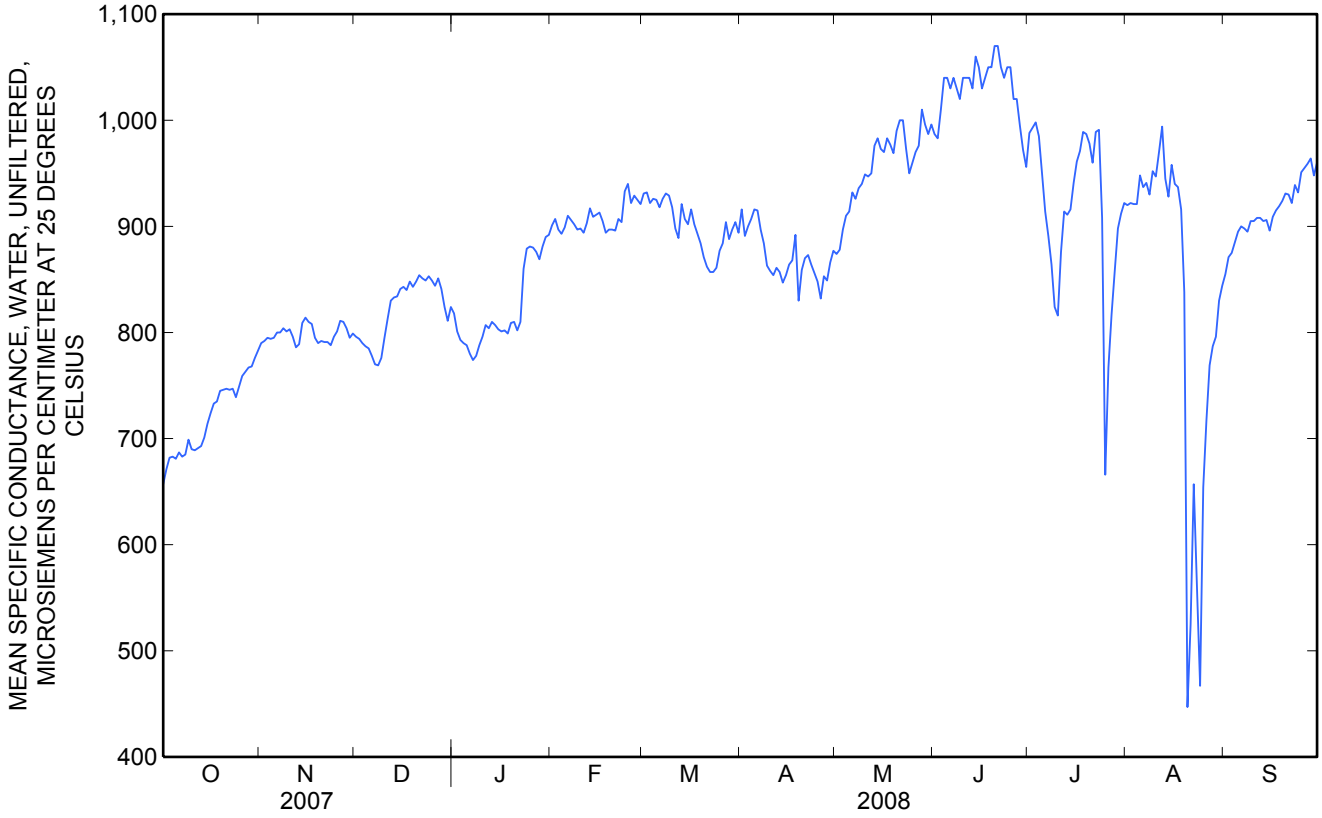


08181500 Medina River at San Antonio, TX—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		October			November			December			January	
1	8.1	8.0	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.2	8.1	8.1
2	8.1	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.1
3	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.0	8.0	8.1	8.0	8.1
4	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.0	8.0	8.1	8.0	8.0
5	8.1	8.0	8.0	8.0	8.0	8.0	8.1	7.9	8.0	8.1	8.0	8.0
6	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.1	7.9	8.0
7	8.0	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	8.0
8	8.0	8.0	8.0	8.1	8.0	8.0	7.9	7.9	7.9	8.0	7.9	8.0
9	8.0	8.0	8.0	8.1	8.0	8.0	7.9	7.9	7.9	8.1	7.9	8.1
10	8.0	8.0	8.0	8.1	7.9	7.9	7.9	7.9	7.9	8.2	8.1	8.1
11	8.0	8.0	8.0	8.0	7.9	7.9	8.0	7.9	8.0	8.2	8.1	8.1
12	8.0	8.0	8.0	8.0	7.9	7.9	8.0	8.0	8.0	8.2	8.1	8.1
13	8.1	8.0	8.0	8.0	7.9	7.9	8.1	8.0	8.0	8.2	8.0	8.1
14	8.0	7.9	8.0	8.1	7.9	8.0	8.0	8.0	8.0	8.1	8.0	8.0
15	8.1	7.9	8.1	8.1	8.0	8.1	8.1	8.0	8.0	8.0	8.0	8.0
16	8.1	8.1	8.1	8.1	8.0	8.1	8.1	8.0	8.0	8.0	7.9	8.0
17	8.1	8.0	8.1	8.1	8.0	8.0	8.1	8.0	8.1	8.1	8.0	8.0
18	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.0	8.0	8.0	8.0	8.0
19	8.1	8.0	8.1	8.1	8.0	8.0	8.0	8.0	8.0	8.1	8.0	8.0
20	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.0	8.0	8.1	8.0	8.0
21	8.1	8.1	8.1	8.1	8.0	8.0	8.1	8.0	8.1	8.0	8.0	8.0
22	8.1	7.9	8.0	8.1	8.0	8.1	8.1	8.0	8.1	8.0	7.9	8.0
23	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.0	8.1	8.0	7.9	7.9
24	8.0	8.0	8.0	8.1	8.1	8.1	8.1	8.1	8.1	7.9	7.8	7.9
25	8.0	8.0	8.0	8.1	8.1	8.1	8.2	8.1	8.1	7.9	7.9	7.9
26	8.0	8.0	8.0	8.1	8.1	8.1	8.2	8.1	8.1	7.9	7.9	7.9
27	8.0	8.0	8.0	8.1	7.9	8.0	8.2	8.1	8.1	7.9	7.9	7.9
28	8.1	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.1	7.9	7.8	7.9
29	8.0	8.0	8.0	8.1	8.0	8.0	8.2	8.1	8.1	8.1	7.8	8.0
30	8.0	8.0	8.0	8.0	8.0	8.0	8.2	8.1	8.1	8.1	8.0	8.1
31	8.0	8.0	8.0	---	---	---	8.2	8.1	8.1	8.1	8.0	8.1
Max	8.1	8.1	8.1	8.1	8.1	8.1	8.2	8.1	8.1	8.2	8.1	8.1
Min	8.0	7.9	8.0	8.0	7.9	7.9	7.9	7.9	7.9	7.9	7.8	7.9

08181500 Medina River at San Antonio, TX—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		February			March			April			May	
1	8.1	8.0	8.1	8.1	7.9	8.0	8.0	7.9	7.9	8.0	7.9	8.0
2	8.1	8.0	8.0	8.1	7.9	8.0	8.0	7.9	7.9	8.0	7.8	7.9
3	8.1	8.0	8.0	8.1	7.9	8.0	7.9	7.9	7.9	8.0	7.8	7.9
4	8.1	8.0	8.0	8.2	7.9	8.0	8.0	7.9	7.9	8.0	7.8	7.9
5	8.1	7.9	8.0	8.1	8.0	8.0	8.0	7.9	7.9	8.0	7.8	7.9
6	8.1	8.0	8.0	8.0	7.9	8.0	8.0	7.9	7.9	8.0	7.8	7.9
7	8.1	8.0	8.0	8.1	7.8	8.0	8.0	7.9	7.9	8.0	7.8	7.9
8	8.1	8.0	8.0	8.2	8.0	8.0	8.0	7.9	7.9	8.0	7.7	7.8
9	8.1	8.0	8.0	8.1	8.0	8.0	8.0	7.9	8.0	7.9	7.7	7.8
10	8.1	8.0	8.0	8.0	7.9	8.0	8.0	7.9	8.0	8.0	7.7	7.8
11	8.0	7.9	8.0	8.0	7.9	8.0	8.0	7.9	8.0	8.0	7.7	7.8
12	8.0	7.9	8.0	8.1	8.0	8.1	8.0	7.8	8.0	7.9	7.7	7.8
13	8.1	8.0	8.0	8.1	8.0	8.0	8.0	7.8	7.9	7.9	7.7	7.8
14	8.1	8.0	8.0	8.1	8.0	8.0	7.9	7.8	7.9	7.9	7.7	7.8
15	8.0	7.9	8.0	8.1	8.0	8.0	8.0	7.8	8.0	7.9	7.7	7.8
16	8.0	7.9	7.9	8.1	7.9	8.0	8.0	7.9	8.0	8.0	7.7	7.8
17	8.1	7.9	8.0	8.1	7.9	8.0	8.0	7.9	8.0	8.0	7.8	7.8
18	8.1	7.9	8.0	8.1	7.9	8.0	7.9	7.9	7.9	8.0	7.7	7.8
19	8.1	7.9	8.0	8.1	7.9	8.0	8.0	7.9	7.9	7.9	7.7	7.8
20	8.0	7.9	8.0	8.1	8.0	8.0	8.0	7.9	7.9	7.9	7.7	7.8
21	8.0	7.9	8.0	8.1	8.0	8.0	8.0	7.9	7.9	8.0	7.8	7.9
22	8.1	7.9	8.0	8.1	8.0	8.0	8.0	7.8	7.9	8.0	7.8	7.9
23	8.1	8.0	8.0	8.1	7.9	8.0	8.0	7.9	7.9	8.0	7.8	8.0
24	8.1	7.9	8.0	8.1	7.9	8.0	8.0	7.9	7.9	8.1	7.9	8.0
25	8.0	7.9	8.0	8.1	7.9	8.0	8.0	7.9	7.9	8.1	7.9	7.9
26	8.0	7.9	8.0	8.1	7.9	8.0	7.9	7.8	7.9	8.0	7.8	7.9
27	8.1	7.9	8.1	8.1	7.9	8.0	8.0	7.8	7.9	7.9	7.8	7.9
28	8.1	8.0	8.1	8.0	7.9	8.0	7.9	7.7	7.8	7.9	7.7	7.8
29	8.1	8.0	8.0	8.1	7.9	8.0	7.9	7.8	7.8	8.0	7.8	7.8
30	---	---	---	8.0	7.9	7.9	8.0	7.8	8.0	8.0	7.8	7.9
31	---	---	---	8.0	7.9	8.0	---	---	---	8.1	7.8	7.9
Max	8.1	8.0	8.1	8.2	8.0	8.1	8.0	7.9	8.0	8.1	7.9	8.0
Min	8.0	7.9	7.9	8.0	7.8	7.9	7.9	7.7	7.8	7.9	7.7	7.8

08181500 Medina River at San Antonio, TX—Continued

PH, WATER, UNFILTERED, FIELD, STANDARD UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Median	Max	Min	Median	Max	Min	Median	Max	Min	Median
		June			July			August			September	
1	8.1	7.8	7.9	8.3	7.7	8.0	8.2	8.0	8.1	7.9	7.8	7.8
2	8.0	7.8	7.9	8.2	7.9	8.0	8.2	8.0	8.0	7.9	7.8	7.9
3	8.2	7.8	8.0	8.1	7.9	8.0	8.2	8.0	8.0	7.9	7.8	7.9
4	8.2	7.9	8.0	8.2	7.9	8.0	8.1	8.0	8.1	7.9	7.9	7.9
5	8.1	7.9	8.0	8.2	7.9	8.0	8.2	8.0	8.1	8.0	7.8	7.9
6	8.2	7.9	8.0	8.2	7.9	8.0	8.3	8.1	8.2	8.0	7.8	7.9
7	8.2	7.9	8.0	8.1	7.9	8.0	8.4	8.2	8.2	8.0	7.7	7.9
8	8.1	7.8	7.9	8.1	7.9	7.9	8.4	8.1	8.2	7.8	7.7	7.8
9	8.0	7.7	7.9	8.1	7.9	8.0	8.4	8.2	8.3	8.0	7.7	8.0
10	8.1	7.7	7.9	8.1	7.9	8.0	8.4	8.2	8.3	8.0	7.9	8.0
11	8.1	7.7	7.9	8.0	7.8	7.9	8.3	8.2	8.2	8.0	7.9	8.0
12	8.1	7.8	7.9	8.1	7.8	7.9	8.2	7.9	8.0	8.1	7.9	8.0
13	8.1	7.8	7.9	8.1	7.8	7.8	8.1	7.9	8.0	8.1	7.9	8.0
14	8.2	7.8	7.8	8.0	7.7	7.8	8.2	8.0	8.1	8.0	7.9	8.0
15	8.2	7.7	7.8	8.2	7.8	8.0	8.1	7.9	8.0	8.0	7.9	8.0
16	8.1	7.7	7.8	8.1	7.9	8.0	8.1	7.9	8.0	8.1	7.9	8.0
17	8.1	7.6	7.8	8.2	7.9	8.0	8.0	7.9	7.9	8.1	8.0	8.0
18	8.3	7.6	8.0	8.2	7.9	8.0	8.0	7.9	7.9	8.1	8.0	8.0
19	8.3	7.8	8.0	8.1	7.8	7.9	8.0	7.8	7.9	8.1	8.0	8.0
20	8.3	7.8	7.9	8.1	7.8	7.9	8.0	7.7	7.8	8.1	7.9	8.0
21	8.3	7.8	7.9	8.1	7.8	7.9	7.8	7.8	7.8	8.1	7.9	8.0
22	8.2	7.8	7.9	8.1	7.8	7.9	7.8	7.7	7.8	8.0	7.9	8.0
23	8.2	7.8	7.9	8.1	7.8	7.9	7.9	7.7	7.8	8.0	7.9	8.0
24	8.2	7.8	7.9	7.9	7.7	7.9	7.8	7.7	7.8	8.0	7.9	8.0
25	8.2	7.7	7.9	7.9	7.7	7.9	7.8	7.7	7.8	8.1	7.9	8.0
26	8.1	7.7	7.9	7.9	7.7	7.8	7.9	7.7	7.9	8.1	7.9	8.0
27	8.1	7.7	7.8	7.8	7.7	7.7	8.0	7.9	7.9	8.1	7.9	8.0
28	8.1	7.7	7.8	8.0	7.7	7.9	8.0	7.9	7.9	8.0	7.9	7.9
29	8.1	7.7	7.8	8.0	7.9	7.9	8.0	7.9	7.9	8.0	7.8	7.9
30	8.1	7.7	7.8	8.1	7.9	8.0	8.0	7.8	7.9	8.1	7.9	8.0
31	---	---	---	8.2	8.0	8.1	7.9	7.8	7.8	---	---	---
Max	8.3	7.9	8.0	8.3	8.0	8.1	8.4	8.2	8.3	8.1	8.0	8.0
Min	8.0	7.6	7.8	7.8	7.7	7.7	7.8	7.7	7.8	7.8	7.7	7.8

	Max	Min	Median
Year Maximum	8.4	8.2	8.3
Year Minimum	7.8	7.6	7.7

08181500 Medina River at San Antonio, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	26.9	26.2	26.6	21.0	19.3	20.3	19.5	18.2	18.7	15.0	13.0	14.1
2	27.1	26.2	26.7	21.4	19.4	20.6	20.4	18.9	19.6	14.3	12.1	13.3
3	26.9	25.8	26.4	22.2	20.3	21.2	19.8	17.9	18.7	13.7	11.6	12.9
4	26.4	25.4	26.0	22.2	20.2	21.3	18.1	16.2	17.3	14.5	12.2	13.4
5	26.3	25.1	25.7	22.5	20.8	21.8	17.6	15.7	17.0	16.3	13.8	14.9
6	26.4	25.3	25.9	22.2	20.8	21.4	18.2	16.3	17.5	17.4	15.0	16.1
7	26.2	25.2	25.7	20.8	19.5	20.1	19.6	17.9	18.8	18.5	16.5	17.5
8	26.5	25.5	26.0	20.8	19.0	19.9	20.8	19.1	19.9	19.0	17.8	18.5
9	26.5	25.6	26.1	21.6	20.0	20.8	21.6	20.3	20.9	18.2	16.3	17.4
10	26.5	25.4	26.0	22.5	20.9	21.7	21.2	19.3	19.9	17.7	16.1	17.1
11	26.4	25.3	25.9	22.8	21.5	22.2	21.0	19.3	20.1	17.1	15.3	16.5
12	26.0	25.0	25.5	22.8	21.6	22.3	21.0	19.0	19.9	17.1	15.0	16.2
13	25.7	24.4	25.1	23.2	21.9	22.7	19.1	17.9	18.6	16.5	14.5	15.6
14	25.8	24.4	25.0	23.5	22.2	22.8	18.8	17.9	18.4	16.1	13.6	15.1
15	26.0	24.8	25.4	22.7	20.4	21.3	18.8	17.7	18.3	15.8	14.3	15.0
16	25.6	24.6	25.1	20.4	18.6	19.6	17.7	15.6	16.5	15.6	14.2	15.1
17	25.8	24.6	25.2	20.6	19.1	19.8	16.3	14.3	15.6	15.4	13.5	14.4
18	26.0	24.9	25.4	21.2	19.8	20.5	17.2	15.2	16.4	14.3	12.7	13.6
19	25.6	24.0	24.7	21.6	20.0	20.9	17.9	16.3	17.2	14.3	12.2	13.3
20	24.6	23.1	24.0	22.2	20.9	21.6	18.4	17.1	17.8	14.2	11.6	13.0
21	24.7	23.1	23.9	22.8	21.5	22.1	17.8	16.2	17.2	15.2	12.9	14.0
22	24.6	22.2	23.4	21.6	18.9	20.0	17.9	16.8	17.4	16.3	14.2	15.4
23	22.2	20.6	21.3	18.9	17.3	17.9	16.9	14.9	15.9	15.8	14.0	14.8
24	21.3	19.7	20.7	17.5	16.1	16.8	16.0	13.8	15.1	15.0	13.5	14.4
25	21.0	19.6	20.5	16.8	15.5	16.2	15.7	13.5	14.6	14.7	13.2	14.1
26	20.6	19.0	20.0	16.4	14.6	15.8	16.2	14.3	15.3	16.4	13.6	14.8
27	20.5	18.7	19.8	16.3	14.7	15.7	15.8	13.7	15.0	16.9	14.3	15.7
28	20.6	18.5	19.6	16.7	14.9	16.0	16.1	14.4	15.4	17.4	15.5	16.6
29	20.7	18.7	19.9	17.4	15.5	16.7	15.5	13.3	14.6	18.5	16.9	17.7
30	20.6	18.8	19.9	18.4	16.8	17.6	15.2	12.9	14.2	17.6	15.5	16.6
31	20.8	19.0	20.1	---	---	---	15.6	13.1	14.4	17.2	15.8	16.7
Month	27.1	18.5	23.9	23.5	14.6	19.9	21.6	12.9	17.3	19.0	11.6	15.3

08181500 Medina River at San Antonio, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	16.3	14.2	15.6	21.7	19.5	20.6	24.5	22.6	23.4	25.1	23.3	24.0
2	17.4	14.5	16.0	21.8	20.3	21.1	23.6	22.3	23.0	26.3	23.9	25.0
3	19.1	16.5	17.8	21.9	19.9	21.1	24.0	22.5	23.3	26.3	24.3	25.2
4	20.0	18.1	19.2	20.0	17.8	19.1	24.3	22.7	23.5	25.0	23.4	24.3
5	21.1	19.3	20.2	19.9	17.3	18.7	23.8	21.3	22.6	25.9	23.8	24.8
6	19.9	17.7	18.7	19.7	17.7	18.8	24.4	21.6	22.9	26.6	24.4	25.3
7	18.4	16.4	17.6	18.4	15.8	17.3	25.0	22.8	23.8	26.7	24.6	25.5
8	18.3	16.0	17.3	18.4	15.5	17.0	25.5	23.7	24.4	26.8	23.5	25.1
9	19.2	16.5	17.9	18.3	16.4	17.3	24.8	24.0	24.4	27.9	24.9	26.2
10	19.8	17.7	18.8	19.5	17.3	18.3	25.8	23.8	24.7	28.5	25.9	27.1
11	20.3	18.6	19.5	19.2	16.6	18.0	25.4	23.5	24.5	27.6	25.8	26.6
12	20.3	19.1	19.7	19.9	17.1	18.6	24.3	22.5	23.5	25.8	24.3	25.1
13	19.1	17.3	18.4	20.7	18.3	19.5	23.5	21.2	22.4	27.2	24.8	25.8
14	18.9	16.8	18.0	22.7	19.9	21.1	23.1	20.6	22.0	27.6	25.5	26.7
15	19.8	18.4	19.1	22.7	20.2	21.5	22.9	20.2	21.6	27.4	25.7	26.6
16	19.6	18.3	18.9	21.9	20.3	21.2	22.8	20.8	21.8	27.2	25.0	26.0
17	19.3	16.9	18.3	22.8	20.9	21.8	23.8	21.3	22.5	26.5	24.7	25.6
18	19.0	17.0	18.2	23.4	21.9	22.5	23.5	22.1	22.8	27.3	24.3	25.6
19	18.7	16.6	17.8	22.2	20.3	21.3	23.8	21.1	22.4	27.8	24.6	26.1
20	20.0	17.4	18.8	21.4	18.8	20.3	23.3	21.6	22.5	28.6	25.4	26.8
21	21.3	18.9	20.1	21.5	19.2	20.4	23.7	22.4	23.1	29.3	26.6	27.7
22	21.2	19.4	20.4	22.3	19.5	20.9	25.2	22.8	23.9	28.8	27.0	27.8
23	20.7	18.5	19.7	21.7	20.0	20.9	25.0	23.8	24.5	29.6	27.2	28.2
24	21.9	19.8	20.7	21.7	19.2	20.5	25.2	23.9	24.5	29.9	27.7	28.6
25	22.3	19.8	21.0	21.6	19.4	20.6	25.0	24.1	24.6	30.1	28.0	28.8
26	21.5	19.5	20.4	23.3	20.4	21.7	25.8	23.3	24.5	29.9	28.1	28.8
27	19.9	17.6	18.9	23.5	21.6	22.5	25.0	23.8	24.4	29.8	28.0	28.7
28	19.8	17.1	18.5	23.1	22.2	22.7	24.6	22.1	23.4	29.9	27.8	28.6
29	20.7	18.4	19.5	22.8	21.4	22.2	24.1	21.6	22.9	29.5	27.7	28.5
30	---	---	---	23.5	22.2	22.8	24.6	22.0	23.2	29.9	27.4	28.4
31	---	---	---	23.4	22.5	23.0	---	---	---	30.6	27.6	28.7
Month	22.3	14.2	18.8	23.5	15.5	20.4	25.8	20.2	23.4	30.6	23.3	26.7

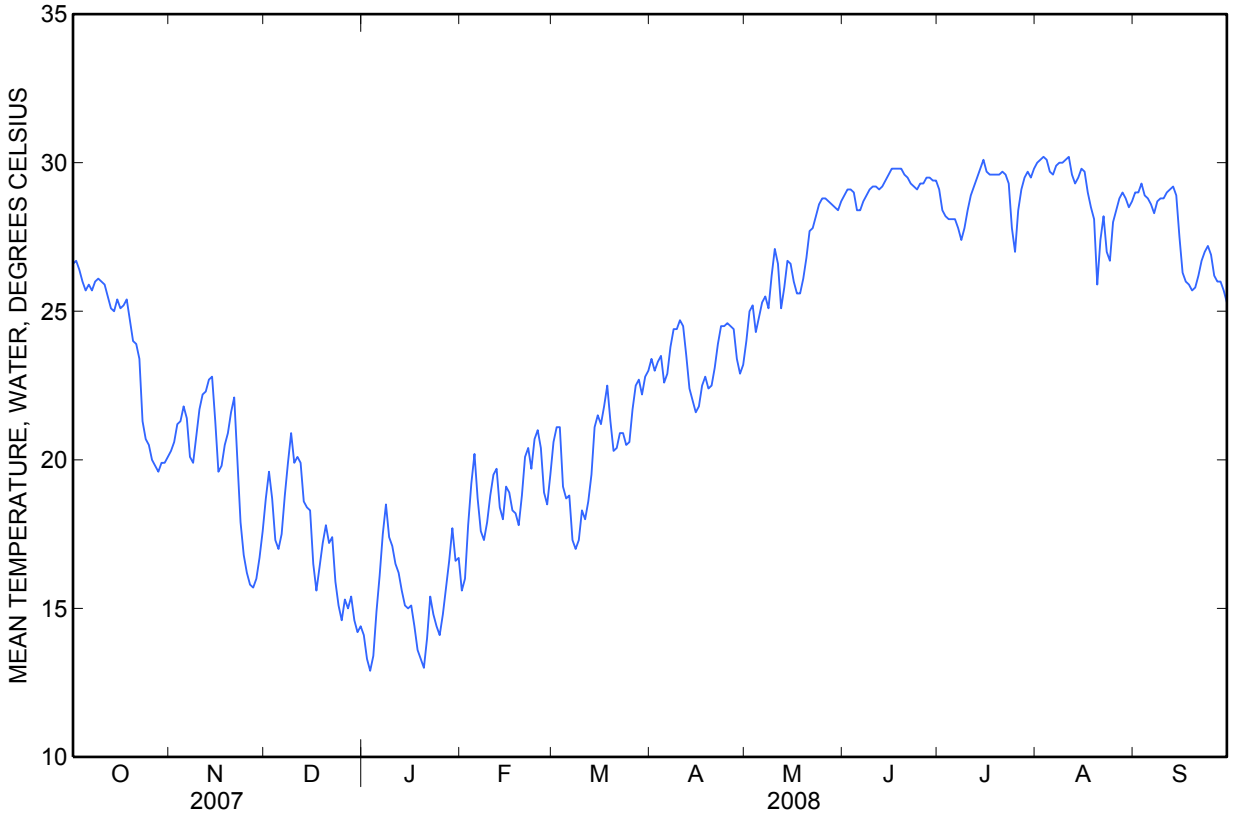
08181500 Medina River at San Antonio, TX—Continued

TEMPERATURE, WATER, DEGREES CELSIUS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	30.7	27.9	28.9	30.4	28.4	29.1	31.3	29.1	30.0	30.3	27.9	29.0
2	30.6	28.1	29.1	29.2	27.7	28.4	31.6	29.3	30.1	30.3	27.7	29.0
3	30.7	28.0	29.1	29.0	27.5	28.2	31.8	29.3	30.2	30.4	28.1	29.3
4	30.3	28.0	29.0	29.1	27.3	28.1	31.5	29.1	30.1	30.1	27.8	28.9
5	29.1	28.0	28.4	29.4	27.1	28.1	30.6	29.1	29.7	30.1	27.5	28.8
6	29.7	27.4	28.4	29.4	27.0	28.1	31.1	28.6	29.6	29.9	27.4	28.6
7	30.2	27.9	28.7	28.4	27.1	27.8	31.4	28.9	29.9	29.6	27.0	28.3
8	30.4	28.0	28.9	27.9	26.8	27.4	31.6	29.0	30.0	30.0	27.5	28.7
9	30.6	28.1	29.1	29.1	26.9	27.8	31.7	29.0	30.0	29.7	27.8	28.8
10	30.8	28.2	29.2	29.7	27.5	28.4	31.9	29.0	30.1	29.8	27.8	28.8
11	30.9	28.2	29.2	30.4	27.9	28.9	31.5	29.2	30.2	30.0	27.9	29.0
12	30.8	28.0	29.1	30.9	28.1	29.2	30.3	29.2	29.6	30.0	28.1	29.1
13	30.9	28.2	29.2	31.1	28.5	29.5	30.4	28.4	29.3	30.4	28.2	29.2
14	31.0	28.4	29.4	31.4	28.8	29.8	30.8	28.5	29.5	29.4	28.3	28.9
15	31.4	28.3	29.6	31.6	29.1	30.1	30.9	28.9	29.8	28.7	26.6	27.5
16	31.6	28.5	29.8	30.6	29.1	29.7	31.0	29.0	29.7	27.0	25.0	26.3
17	31.5	28.7	29.8	31.0	28.6	29.6	29.7	28.6	29.0	27.3	24.3	26.0
18	31.4	28.7	29.8	31.0	28.7	29.6	28.9	28.0	28.5	26.8	24.7	25.9
19	31.7	28.5	29.8	31.1	28.7	29.6	29.3	27.2	28.1	27.1	24.0	25.7
20	31.2	28.6	29.6	31.1	28.5	29.6	28.0	24.0	25.9	27.4	24.0	25.8
21	31.5	28.3	29.5	31.2	28.7	29.7	28.3	26.6	27.4	27.7	24.6	26.2
22	31.1	27.9	29.3	31.0	28.6	29.6	29.0	27.7	28.2	27.8	25.1	26.7
23	30.4	28.0	29.2	29.9	28.9	29.3	28.1	25.4	27.0	28.0	25.9	27.0
24	30.6	28.2	29.1	28.9	26.0	27.8	27.9	25.7	26.7	28.1	26.0	27.2
25	30.9	28.3	29.3	28.2	26.0	27.0	28.8	27.2	28.0	28.0	25.8	26.9
26	30.8	28.3	29.3	29.7	27.4	28.4	29.4	27.4	28.4	27.3	24.7	26.2
27	31.1	28.4	29.5	30.7	28.1	29.1	29.9	28.0	28.8	27.5	24.5	26.0
28	31.1	28.4	29.5	31.0	28.4	29.5	30.1	28.2	29.0	27.5	24.3	26.0
29	30.9	28.4	29.4	31.1	28.7	29.7	29.2	28.3	28.8	27.1	23.8	25.7
30	30.5	28.6	29.4	30.7	28.8	29.5	29.7	27.6	28.5	26.5	23.5	25.3
31	---	---	---	31.2	28.8	29.8	29.9	27.6	28.7	---	---	---
Month	31.7	27.4	29.3	31.6	26.0	28.9	31.9	24.0	29.0	30.4	23.5	27.5

	Max	Min	Mean
Year	31.9	11.6	23.4

08181500 Medina River at San Antonio, TX—Continued



08181500 Medina River at San Antonio, TX—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	8.3	8.0	8.2	9.3	8.4	8.7	9.2	8.8	9.0	11.6	9.8	10.5
2	8.2	7.8	8.0	9.3	8.2	8.7	9.1	8.6	8.8	11.7	10.2	10.8
3	8.1	7.7	7.9	9.4	8.2	8.6	9.4	8.7	9.0	12.0	10.3	11.0
4	8.2	7.7	7.9	9.3	8.0	8.5	9.7	9.0	9.3	11.5	10.3	10.8
5	8.1	7.9	8.0	9.0	7.8	8.3	9.8	9.0	9.3	11.4	9.8	10.4
6	8.1	7.7	7.9	8.7	7.7	8.2	9.8	9.0	9.3	11.0	9.4	10.0
7	8.0	7.7	7.8	8.7	7.9	8.3	9.4	8.7	9.0	10.0	8.9	9.4
8	7.9	7.6	7.7	9.1	8.2	8.5	9.2	8.5	8.8	9.9	8.6	9.2
9	7.9	7.6	7.7	8.9	8.1	8.4	8.9	8.3	8.5	10.2	8.9	9.4
10	8.0	7.5	7.7	8.8	8.0	8.3	9.0	8.3	8.6	10.3	8.9	9.5
11	7.9	7.5	7.7	8.6	7.8	8.1	9.0	8.4	8.6	10.5	9.1	9.7
12	8.0	7.4	7.7	8.5	7.8	8.1	8.7	8.3	8.5	10.7	9.2	9.8
13	8.0	7.6	7.7	8.6	7.8	8.1	9.2	8.6	8.9	10.8	9.3	9.9
14	7.9	7.4	7.6	8.5	7.7	8.0	8.9	8.7	8.8	10.6	9.4	10
15	7.8	7.4	7.6	8.8	7.8	8.2	9.3	8.6	8.9	10.0	9.4	9.7
16	7.7	7.4	7.5	9.1	8.2	8.6	9.8	9.0	9.4	10.3	9.4	9.8
17	7.9	7.4	7.6	8.6	8.3	8.4	10.1	9.4	9.7	10.6	9.5	10
18	7.8	7.3	7.5	8.7	8.1	8.4	10.0	9.3	9.6	10.2	9.7	10
19	8.0	7.4	7.6	8.7	8.2	8.4	9.7	9.1	9.4	11.3	9.8	10.4
20	8.2	7.6	7.8	8.6	8.0	8.2	9.7	8.8	9.2	11.3	10.1	10.6
21	8.2	7.6	7.8	8.5	7.9	8.2	9.8	9.0	9.4	10.5	9.9	10.1
22	8.0	7.6	7.8	8.9	8.1	8.5	10.0	8.8	9.4	10.3	9.4	9.9
23	8.5	7.9	8.2	9.2	8.6	8.9	10.4	9.3	9.7	10.1	9.3	9.7
24	8.7	8.2	8.4	9.2	8.9	9.0	10.8	9.6	10.0	10.5	9.4	9.9
25	8.7	8.2	8.4	9.6	9.0	9.3	10.9	9.7	10.2	10.3	9.6	9.9
26	8.8	8.2	8.5	9.8	9.3	9.5	10.7	9.5	10.0	11.0	9.6	10.1
27	9.1	8.4	8.7	9.9	9.4	9.7	10.8	9.5	10.0	10.7	9.4	9.9
28	9.2	8.4	8.7	10.0	9.4	9.7	10.9	9.4	10.0	10.0	9.1	9.5
29	9.1	8.4	8.7	9.8	9.3	9.5	11.1	9.6	10.2	10.0	8.7	9.3
30	9.2	8.3	8.7	9.5	9.1	9.3	11.2	9.7	10.3	10.1	8.9	9.4
31	9.3	8.3	8.7	---	---	---	11.1	9.7	10.3	10.4	8.9	9.5
Month	9.3	7.3	8.0	10.0	7.7	8.6	11.2	8.3	9.4	12.0	8.6	9.9

08181500 Medina River at San Antonio, TX—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	10.7	9.2	9.8	10.3	8.2	9.1	8.0	7.1	7.4	8.1	7.4	7.7
2	10.8	9.3	9.9	9.5	7.9	8.5	7.8	7.3	7.5	8.1	7.3	7.6
3	10.3	8.8	9.4	9.8	7.5	8.5	7.8	7.1	7.4	8.5	7.2	7.7
4	9.8	8.3	8.9	10.6	8.2	9.1	7.9	7.2	7.5	8.5	7.3	7.8
5	9.6	7.9	8.6	10.8	8.3	9.3	8.3	7.5	7.8	8.2	7.3	7.7
6	10.1	8.2	9.0	9.2	8.2	8.6	8.2	7.4	7.7	8.3	7.1	7.5
7	10.3	8.5	9.3	10.8	8.4	9.4	7.8	7.1	7.5	8.4	7.2	7.6
8	10.4	8.7	9.4	11.3	8.9	9.8	7.8	6.9	7.3	8.7	7.3	7.8
9	10.5	8.6	9.3	10.3	8.7	9.4	7.5	6.8	7.2	8.6	7.1	7.7
10	9.9	8.5	9.0	9.5	8.3	8.8	7.9	7.0	7.3	8.7	6.9	7.5
11	9.4	8.2	8.7	9.8	8.6	9.1	8.1	7.2	7.6	8.9	6.9	7.5
12	9.5	7.9	8.5	10.6	8.7	9.6	8.4	7.4	7.8	8.3	7.1	7.5
13	10.2	8.4	9.1	10.3	8.5	9.3	8.6	7.7	8.1	8.6	7.0	7.6
14	10.1	8.7	9.3	10.4	8.1	9.1	8.6	7.9	8.2	8.2	7.1	7.5
15	9.2	8.5	8.8	10.6	7.8	8.9	8.9	7.9	8.3	8.4	7.0	7.6
16	9.0	8.2	8.6	9.7	7.7	8.5	8.7	8.0	8.2	8.8	7.2	7.8
17	9.8	8.3	8.9	9.4	7.6	8.4	8.7	7.8	8.1	8.8	7.3	7.9
18	9.9	8.5	9.1	9.2	7.2	8.0	8.4	7.6	7.9	9.1	7.3	7.9
19	10.1	8.5	9.2	9.9	7.4	8.4	8.7	7.7	8.1	8.8	7.2	7.8
20	9.6	8.4	8.9	10.0	7.8	8.7	8.3	7.6	7.9	8.5	7.0	7.6
21	9.6	8.0	8.7	10.0	7.9	8.7	7.9	7.4	7.7	8.3	6.8	7.4
22	9.7	7.9	8.7	10.0	7.9	8.6	8.2	7.3	7.6	8.1	6.8	7.2
23	10.1	8.1	8.8	9.8	7.7	8.5	7.9	7.3	7.5	8.3	6.7	7.3
24	9.8	8.0	8.8	9.9	8.0	8.7	7.9	7.2	7.5	8.4	6.6	7.2
25	9.6	8.0	8.7	9.6	7.9	8.6	7.8	7.3	7.4	8.1	6.4	7.1
26	9.8	7.9	8.8	9.6	7.8	8.5	7.6	7.1	7.4	8.0	6.3	7.0
27	10.4	8.3	9.2	9.1	7.5	8.1	7.9	7.1	7.5	7.7	6.4	7.0
28	10.6	8.7	9.5	8.2	7.3	7.7	8.3	7.3	7.7	8.0	6.4	7.0
29	10.3	8.5	9.3	8.5	7.3	7.7	8.6	7.6	7.9	8.3	6.5	7.2
30	---	---	---	8.1	7.2	7.5	8.6	7.6	8.0	8.7	6.5	7.3
31	---	---	---	7.6	7.1	7.3	---	---	---	9.1	6.6	7.3
Month	10.8	7.9	9.0	11.3	7.1	8.7	8.9	6.8	7.7	9.1	6.3	7.5

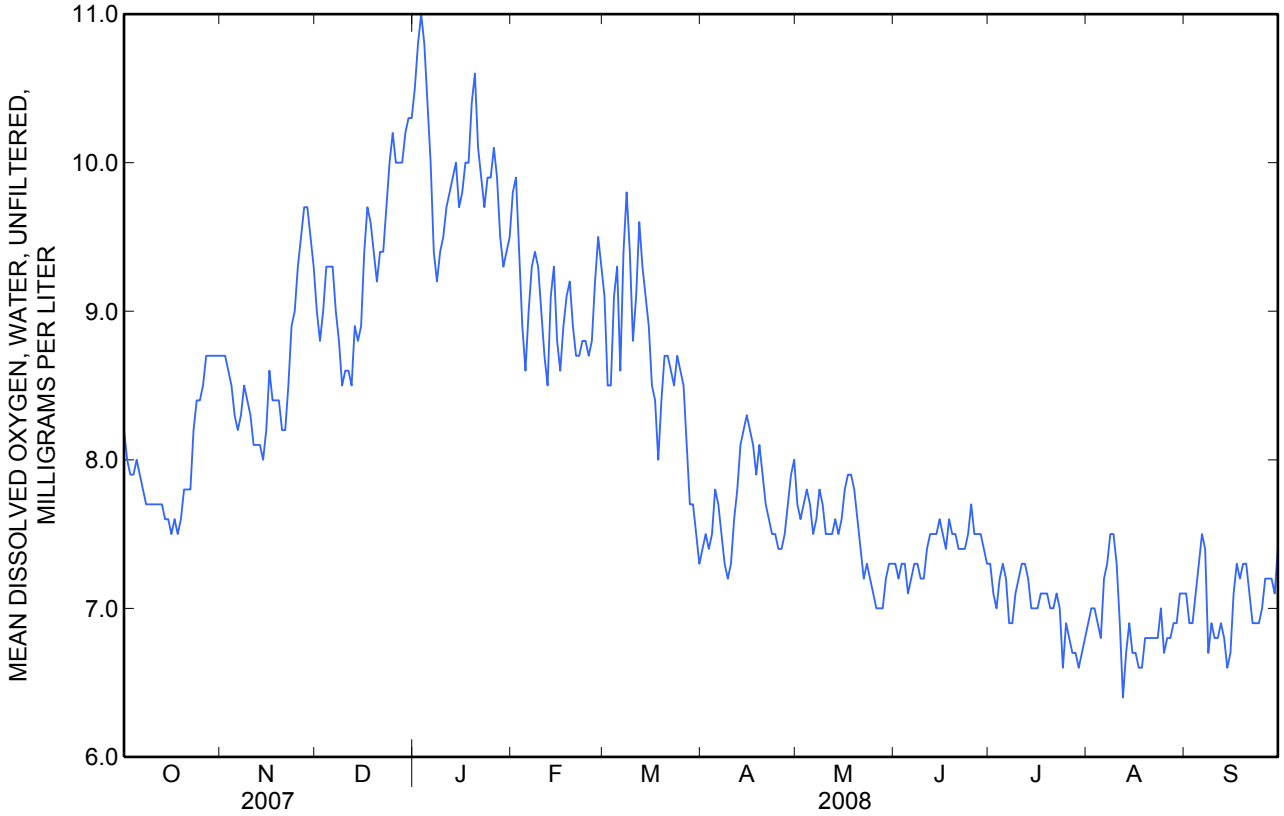
08181500 Medina River at San Antonio, TX—Continued

DISSOLVED OXYGEN, WATER, UNFILTERED, MILLIGRAMS PER LITER
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	9.1	6.4	7.3	9.4	6.5	7.3	7.9	6.3	6.9	7.8	6.8	7.1
2	8.7	6.3	7.2	8.6	6.3	7.1	8.1	6.5	7.0	7.5	6.6	6.9
3	8.9	6.4	7.3	8.1	6.3	7.0	8.2	6.4	7.0	7.7	6.4	6.9
4	8.9	6.4	7.3	8.7	6.4	7.2	8.1	6.2	6.9	7.8	6.6	7.1
5	8.4	6.4	7.1	8.9	6.5	7.3	7.8	5.9	6.8	8.3	6.8	7.3
6	8.6	6.4	7.2	8.8	6.5	7.2	8.7	6.4	7.2	8.6	7.0	7.5
7	9.0	6.3	7.3	7.9	6.5	6.9	8.8	6.5	7.3	8.5	6.8	7.4
8	8.8	6.2	7.3	7.6	6.3	6.9	9.2	6.7	7.5	7.1	6.1	6.7
9	8.8	6.5	7.2	8.0	6.6	7.1	9.3	6.7	7.5	7.7	6.4	6.9
10	9.1	6.3	7.2	8.2	6.7	7.2	8.9	6.3	7.3	7.6	6.1	6.8
11	9.5	6.3	7.4	8.5	6.7	7.3	7.9	6.0	6.9	7.7	6.3	6.8
12	9.4	6.4	7.5	9.0	6.6	7.3	6.9	5.7	6.4	7.7	6.4	6.9
13	9.5	6.3	7.5	8.7	6.5	7.2	7.6	6.1	6.7	7.6	6.4	6.8
14	9.9	6.3	7.5	8.2	6.2	7.0	7.6	6.4	6.9	7.3	6.1	6.6
15	10.3	6.2	7.6	8.4	6.3	7.0	7.6	6.2	6.7	7.3	6.3	6.7
16	10.0	6.1	7.5	8.2	6.3	7.0	7.7	6.1	6.7	7.9	6.5	7.1
17	9.7	5.9	7.4	8.4	6.3	7.1	7.1	6.3	6.6	8.0	6.9	7.3
18	10.1	6.1	7.6	8.4	6.4	7.1	6.9	6.2	6.6	7.8	6.9	7.2
19	10.1	5.8	7.5	8.7	6.3	7.1	7.3	6.5	6.8	8.0	7.0	7.3
20	10.3	5.9	7.5	8.3	6.4	7.0	7.2	6.4	6.8	8.1	7.0	7.3
21	10.7	6.0	7.4	8.4	6.4	7.0	6.9	6.7	6.8	7.7	6.6	7.1
22	9.8	6.2	7.4	8.6	6.4	7.1	6.9	6.6	6.8	7.5	6.5	6.9
23	9.3	6.3	7.4	8.0	6.3	7.0	7.0	6.6	6.8	7.7	6.5	6.9
24	9.8	6.3	7.5	7.0	6.4	6.6	7.1	6.8	7.0	7.6	6.6	6.9
25	10.1	6.4	7.7	7.1	6.6	6.9	6.8	6.6	6.7	7.8	6.6	7.0
26	9.6	6.1	7.5	7.0	6.7	6.8	6.9	6.7	6.8	7.9	6.8	7.2
27	9.8	6.3	7.5	7.0	6.5	6.7	7.0	6.6	6.8	7.9	6.8	7.2
28	9.8	6.2	7.5	7.0	6.4	6.7	7.1	6.7	6.9	8.0	6.7	7.2
29	9.7	5.9	7.4	7.3	6.3	6.6	7.2	6.6	6.9	7.8	6.7	7.1
30	9.2	6.2	7.3	7.5	6.3	6.7	7.6	6.8	7.1	8.1	6.9	7.4
31	---	---	---	7.6	6.4	6.8	7.6	6.8	7.1	---	---	---
Month	10.7	5.8	7.4	9.4	6.2	7.0	9.3	5.7	6.9	8.6	6.1	7.0

	Max	Min	Mean
Year	12.0	5.7	8.1

08181500 Medina River at San Antonio, TX—Continued



08181500 Medina River at San Antonio, TX—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		October			November			December			January	
1	27	18	20	15	9.0	10	14	11	13	9.0	7.1	8.2
2	25	17	20	14	8.0	9.9	16	12	14	9.0	7.1	7.8
3	24	18	20	12	9.0	9.8	18	12	14	12	6.1	7.6
4	27	18	20	12	9.0	10	15	11	13	8.1	6.1	6.9
5	35	19	24	13	8.9	11	14	9.9	12	9.1	7.1	8.0
6	23	16	19	14	8.9	11	16	11	12	11	8.1	9.3
7	28	15	18	13	9.9	11	15	11	13	14	9.1	10
8	18	14	16	14	9.9	12	18	11	14	17	10	13
9	19	13	15	15	11	13	16	12	14	16	10	12
10	15	13	14	15	11	12	16	11	12	14	11	12
11	16	12	13	15	11	13	17	11	13	15	10	11
12	15	11	13	21	11	13	16	11	13	14	10	11
13	14	10	12	24	11	14	14	11	13	13	9.3	11
14	13	9.5	11	17	12	14	16	11	13	16	9.4	11
15	16	9.5	13	17	12	14	16	12	13	14	9.5	11
16	19	14	16	19	9.8	12	13	10	12	16	11	12
17	17	14	15	18	11	13	13	9.0	10	15	9.7	12
18	20	14	16	15	12	13	11	9.0	9.6	17	9.7	11
19	20	15	16	20	12	13	12	9.0	11	12	8.8	10
20	20	14	16	22	11	13	13	10	11	11	7.7	8.9
21	18	14	15	18	12	14	12	9.0	9.8	14	7.8	9.7
22	21	12	15	20	12	14	13	8.0	9.8	18	10	12
23	18	12	13	20	11	13	11	8.0	9.2	14	11	12
24	15	10	12	19	11	13	10	7.0	8.0	16	9.1	12
25	15	9.5	11	14	11	12	8.0	7.0	7.3	12	9.2	9.9
26	12	10	11	14	10	12	13	6.0	8.1	13	9.2	10
27	14	9.4	11	12	10	10	9.0	6.0	7.2	13	9.3	11
28	12	9.3	11	13	10	11	10	7.0	7.8	64	10	13
29	13	9.3	11	13	10	11	10	7.0	8.5	18	9.0	11
30	12	8.3	9.9	13	10	11	13	7.0	9.4	18	7.9	9.6
31	12	9.0	10	---	---	---	10	7.1	8.3	13	7.9	9.8
Month	35	8.3	15	24	8.0	12	18	6.0	11	64	6.1	10

08181500 Medina River at San Antonio, TX—Continued

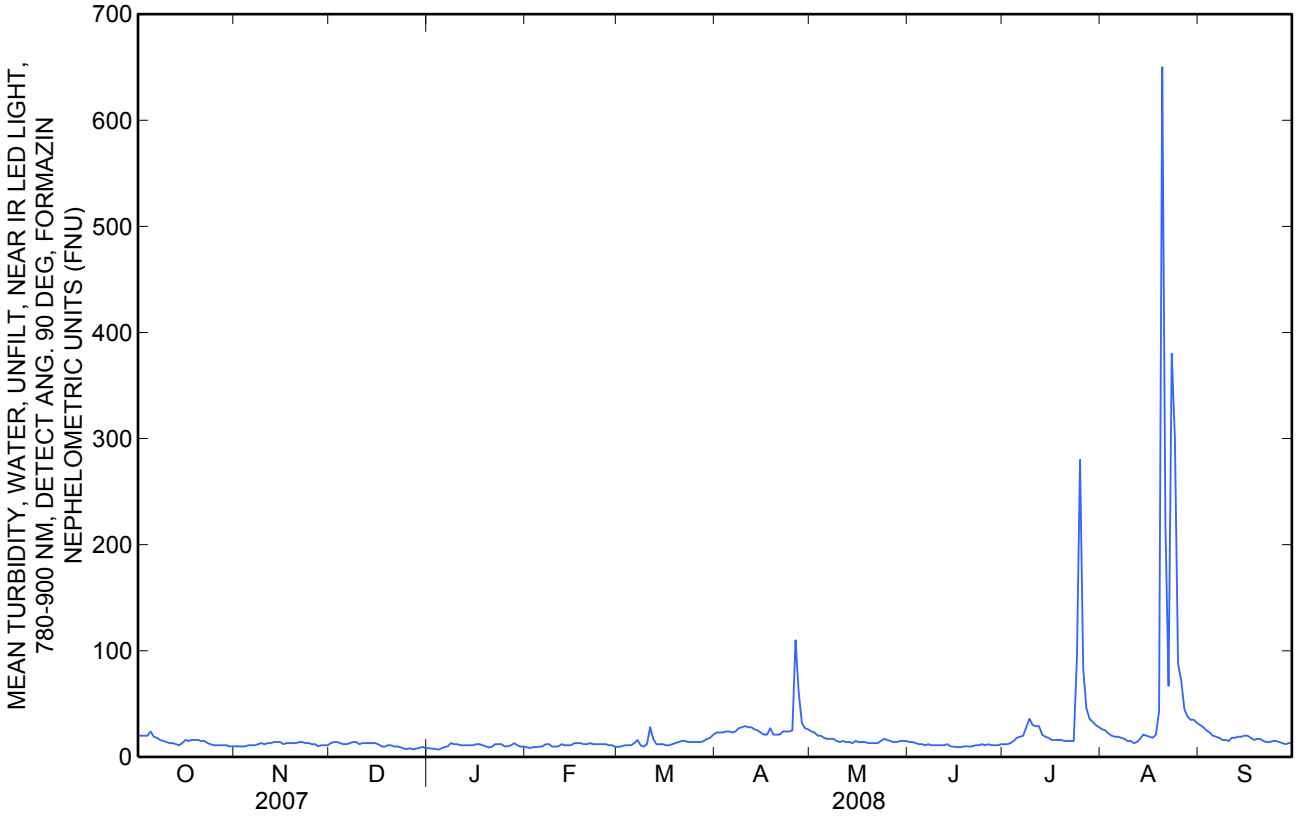
TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	13	7.9	9.1	13	7.1	9.5	26	19	23	30	21	24
2	11	6.9	8.4	14	8.2	10	32	20	23	28	20	23
3	13	7.8	9.2	20	9.2	11	32	21	23	25	16	20
4	14	7.8	9.4	16	9.3	11	31	19	24	25	16	20
5	13	8.7	9.6	16	9.3	11	29	21	24	24	15	18
6	15	8.7	10	20	9.4	13	29	20	23	22	15	17
7	23	8.7	12	30	9.4	16	28	20	24	21	14	17
8	41	8.6	12	15	8.4	11	36	23	27	21	14	17
9	16	8.6	9.8	15	7.4	9.7	40	23	28	21	12	15
10	12	7.6	9.7	23	8.5	12	44	25	29	19	12	14
11	12	8.5	9.9	52	16	28	33	23	28	20	11	15
12	23	9.5	12	28	10	17	34	24	28	19	12	14
13	15	9.0	11	15	9.0	12	30	22	26	17	11	14
14	13	9.0	11	15	10	12	34	22	25	25	11	13
15	16	9.0	11	17	9.1	12	28	20	23	21	11	15
16	17	11	13	14	8.1	11	26	19	21	19	11	14
17	24	10	13	15	9.2	11	30	18	21	19	11	14
18	17	10	13	19	10	12	47	19	27	18	10	14
19	16	10	12	21	11	13	26	17	21	19	11	13
20	16	11	12	19	12	14	26	18	21	18	10	13
21	17	10	13	20	11	15	26	18	21	17	10	13
22	14	10	12	19	11	15	29	20	24	18	10	13
23	15	10	12	19	12	14	31	21	24	22	11	15
24	16	9.0	12	19	11	14	31	21	24	23	13	17
25	16	10	12	18	11	14	34	21	25	21	12	16
26	17	10	12	18	11	14	180	24	110	22	11	15
27	14	9.0	11	20	12	14	110	33	61	22	11	14
28	14	8.1	11	20	12	15	42	28	32	20	12	14
29	14	8.1	9.6	22	14	17	33	24	27	19	12	15
30	---	---	---	20	16	18	30	22	26	21	13	15
31	---	---	---	26	18	21	---	---	---	18	10	15
Month	41	6.9	11	52	7.1	14	180	17	29	30	10	16

08181500 Medina River at San Antonio, TX—Continued

TURBIDITY, WATER, UNFILT, NEAR IR LED LIGHT, 780-900 NM, DETECT ANG. 90 DEG, FORMAZIN NEPHELOMETRIC UNITS
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		June			July			August			September	
1	18	10	14	18	10	12	38	19	26	38	24	30
2	17	12	14	18	10	12	34	19	25	35	23	28
3	16	10	13	17	10	13	29	17	22	34	20	25
4	15	10	12	18	12	15	29	16	20	30	19	23
5	16	8.9	12	22	14	18	38	15	19	27	17	20
6	14	8.9	11	23	15	19	25	15	19	24	16	19
7	15	9.9	12	28	15	20	22	15	18	24	14	18
8	14	8.9	11	36	20	28	22	14	17	21	12	16
9	15	8.9	11	51	25	36	20	12	15	20	12	16
10	16	8.8	11	39	24	30	19	12	15	19	13	15
11	17	8.8	11	39	20	29	19	9.7	13	23	14	18
12	16	8.8	11	47	19	29	18	9.7	14	24	15	18
13	16	8.8	12	28	15	21	21	12	17	24	16	19
14	14	7.8	10	26	15	19	26	18	21	24	15	19
15	13	7.7	9.6	23	13	18	24	16	20	26	14	20
16	12	7.7	9.3	23	13	16	24	14	19	25	16	20
17	12	7.7	9.2	21	13	16	24	14	18	27	14	18
18	13	7.7	9.7	21	13	16	28	17	21	21	14	16
19	14	7.9	10	22	13	16	140	19	43	23	14	17
20	13	7.8	9.7	24	12	15	1,040	70	650	25	12	17
21	14	7.8	10	19	12	15	450	100	220	20	11	15
22	16	7.8	11	22	12	15	100	43	67	20	11	14
23	14	8.7	11	18	12	15	1,030	39	380	18	12	14
24	14	9.6	12	480	14	93	1,030	120	300	20	12	15
25	16	9.5	11	410	150	280	120	76	88	20	12	15
26	20	9.5	12	150	49	83	97	47	72	19	11	14
27	17	8.4	11	58	33	46	56	38	45	18	10	13
28	14	9.3	11	45	29	36	48	32	38	16	10	12
29	15	9.3	11	46	23	33	45	30	35	18	9.1	13
30	15	10	12	46	23	30	42	28	35	18	10	13
31	---	---	---	39	22	28	40	26	32	---	---	---
Month	20	7.7	11	480	10	35	1,040	9.7	76	38	9.1	18

	Max	Min	Mean
Year	1,040	6.0	21

08181500 Medina River at San Antonio, TX—Continued