Water-Data Report 2008

08086212 Hubbard Creek below Albany, TX

Middle Brazos-Clear Fork Basin
Hubbard Subbasin

LOCATION.--Lat 32°43′58″, long 99°08′25″ referenced to North American Datum of 1927, Shackelford County, TX, Hydrologic Unit 12060105, on left bank 0.5 mi downstream from Salt Prong Hubbard Creek, 2.8 mi upstream from Newcomb Creek, 4.5 mi upstream from U.S. Highway 180, 9.1 mi east of Albany, 22.6 mi upstream from Hubbard Creek Reservoir, and 35.2 mi upstream from mouth.

DRAINAGE AREA.--613 mi^2.

SURFACE-WATER RECORDS

PERIOD OF RECORD.--October 1966 to current year.

REVISED RECORDS.--WDR TX-76-2: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,184.99 ft above NGVD of 1929. Prior to June 12, 1968, water-stage recorder at site 2.1 mi downstream at datum 7.63 ft lower. Satellite telemeter at station.

REMARKS.--Records good. No known regulation or diversions. No flow at times.

PEAK DISCHARGES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,180 ft^3/s and (or) maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)
Mar 18	2215	1,970	9.61
Apr 24	0715	*12,800	*21.21
Apr 27	1030	3,860	11.82
Jun 20	1800	2,000	9.64

08086212 Hubbard Creek below Albany, TX—Continued

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

Day	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
1	1.5	0.59	2.3	1.5	1.7	1.1	7.5	75	3.7	0.21	0.02	0.15
2	1.4	0.56	1.5	1.3	1.6	1.0	6.3	58	2.2	0.17	0.07	0.15
3	1.2	0.56	1.4	1.5	1.6	5.3	6.0	43	1.4	0.14	0.06	0.16
4	1.1	0.58	1.1	1.8	1.6	9.8	5.5	33	1.1	0.11	0.04	0.15
5	0.88	0.68	1.0	1.8	1.5	6.1	4.8	28	0.95	0.09	0.02	0.15
6	0.89	0.60	1.0	1.8	1.7	3.7	4.3	30	0.92	0.07	0.01	0.13
7	1.0	0.54	0.96	2.2	1.5	3.0	4.1	28	0.83	0.07	0.02	0.10
8	1.0	0.55	1.1	2.0	1.3	2.1	4.1	26	0.81	0.11	0.02	0.12
9	0.88	0.57	1.1	1.7	1.4	1.7	9.7	23	8.3	0.11	0.00	0.21
10	0.91	0.55	1.1	1.6	1.3	17	123	19	4.9	0.11	0.00	0.16
11	0.93	0.60	1.3	1.5	1.3	29	57	15	2.3	0.14	0.00	0.15
12	0.93	0.64	1.6	1.5	1.3	10	27	13	1.2	0.18	0.00	0.15
13	0.89	0.65	1.9	1.5	1.4	4.7	18	11	0.87	0.19	0.00	0.15
14	0.88	0.68	2.7	1.4	1.2	2.8	15	11	0.80	0.22	0.00	0.16
15	0.87	0.65	2.6	1.5	1.1	1.9	14	12	0.69	0.20	0.00	0.17
16	0.90	0.72	2.5	1.6	2.0	1.5	12	9.8	0.62	0.18	0.03	0.17
17	0.89	0.75	2.3	1.5	2.8	1.5	11	11	0.60	0.17	15	0.17
18	0.86	0.73	1.9	1.5	2.2	837	11	11	0.62	0.18	44	0.16
19	0.84	0.65	1.6	1.5	1.9	657	7.9	8.8	0.65	0.20	16	0.15
20	0.78	0.63	1.7	1.6	2.2	231	6.6	6.7	852	0.23	7.5	0.14
21	0.73	0.67	1.7	1.7	1.9	99	5.8	5.6	238	0.24	6.2	0.12
22	0.75	0.69	1.3	2.1	1.7	59	5.0	4.9	81	0.21	10	0.11
23	0.66	0.70	1.3	1.9	1.9	40	358	4.2	38	0.18	3.8	0.10
24	0.65	0.69	1.4	1.6	1.9	28	5,960	3.4	16	0.15	1.3	0.10
25	0.62	0.84	1.4	1.7	1.9	22	403	4.1	7.2	0.14	0.56	0.08
26	0.57	1.1	1.4	2.0	1.4	19	162	3.3	3.7	0.15	0.31	0.07
27	0.51	2.5	1.4	2.0	1.2	15	1,610	2.5	1.4	0.15	0.23	0.07
28	0.49	2.4	1.4	2.3	1.2	13	380	8.5	0.76	0.10	0.18	0.06
29	0.48	2.7	1.5	2.0	1.0	11	160	8.9	0.38	0.06	0.16	0.06
30	0.50	2.7	1.5	1.9	---	11	101	11	0.26	0.04	0.20	0.06
31	0.59	---	1.6	1.4	---	10	---	6.3	---	0.02	0.21	---
Total	26.08	27.47	48.56	52.9	46.7	2,154.2	9,499.6	535.0	1,272.16	4.52	105.94	3.88
Mean	0.84	0.92	1.57	1.71	1.61	69.5	317	17.3	42.4	0.15	3.42	0.13
Max	1.5	2.7	2.7	2.3	2.8	837	5,960	75	852	0.24	44	0.21
Min	0.48	0.54	0.96	1.3	1.0	1.0	4.1	2.5	0.26	0.02	0.00	0.06
Ac-ft	52	54	96	105	93	4,270	18,840	1,060	2,520	9.0	210	7.7
Cfsm	0.00	0.00	0.00	0.00	0.00	0.11	0.52	0.03	0.07	0.00	0.01	0.00
In.	0.00	0.00	0.00	0.00	0.00	0.13	0.58	0.03	0.08	0.00	0.01	0.00

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1967 - 2008, BY WATER YEAR (WY)

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
Mean	73.9	32.3	38.9	46.9	65.4	44.4	58.2	112	83.6	23.7	94.3	59.5
Max	1,483	803	1,161	1,544	1,532	284	502	906	1,056	400	3,365	1,170
(WY)	(1982)	(2005)	(1992)	(1968)	(1992)	(1998)	(1968)	(1969)	(2007)	(2002)	(1978)	(1974)
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
(WY)	(1969)	(1971)	(1971)	(1969)	(1971)	(1971)	(1971)	(1984)	(1984)	(1974)	(1968)	(1968)

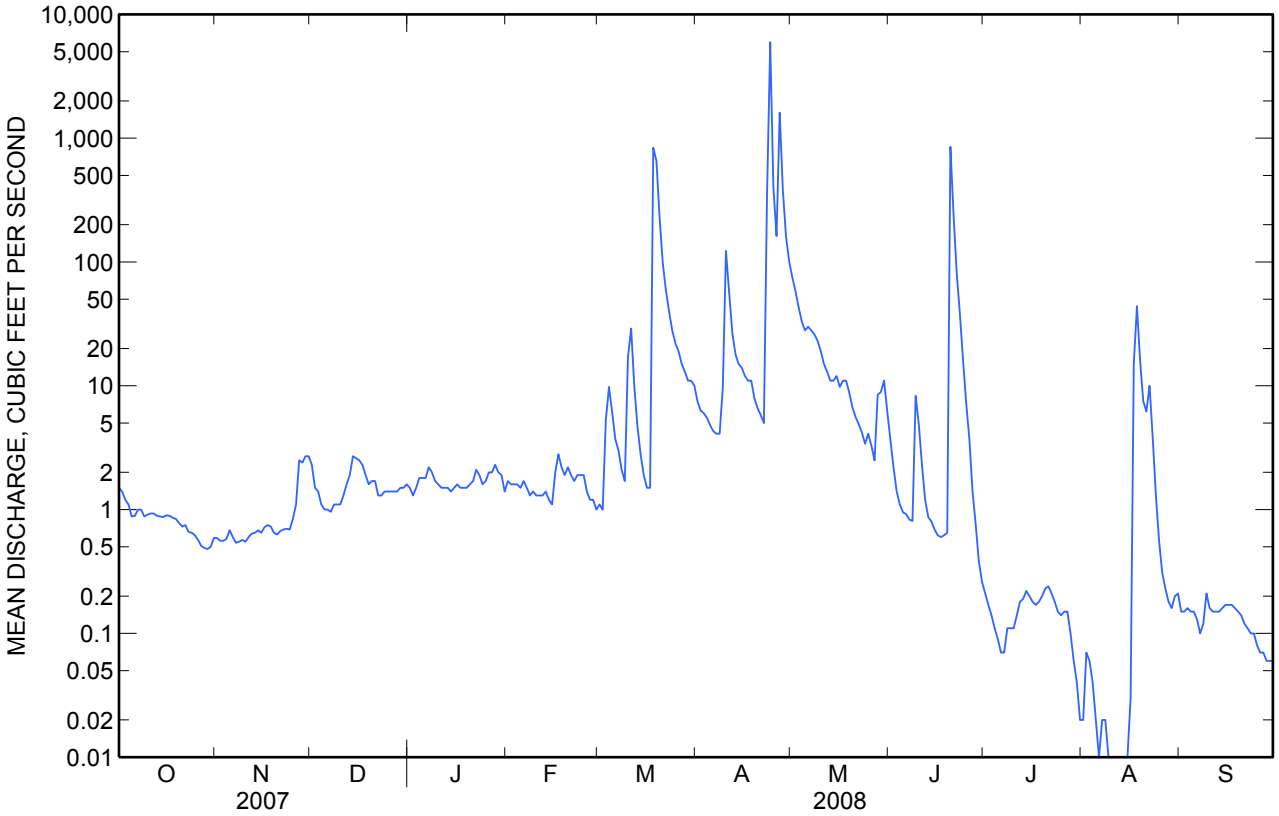
08086212 Hubbard Creek below Albany, TX—Continued

SUMMARY STATISTICS

	Calendar Year 2007		Water Year 2008		Water Years 1967 - 2008	
Annual total	51,496.93		13,777.01			
Annual mean	141		37.6		61.1	
Highest annual mean					303	1992
Lowest annual mean					0.49	1984
Highest daily mean	12,000	Jun 27	5,960	Apr 24	94,700	Aug 4, 1978
Lowest daily mean	0.00	Jan 1	0.00	Aug 9	0.00	Apr 5, 1967
Annual seven-day minimum	0.00	Jan 1	0.00	Aug 9	0.00	Apr 24, 1967
Maximum peak flow			12,800	Apr 24	[i]330,000	Aug 4, 1978
Maximum peak stage			21.21	Apr 24	[a]41.41	Aug 4, 1978
Annual runoff (ac-ft)	102,100		27,330		44,270	
Annual runoff (cfsm)	0.230		0.061		0.100	
Annual runoff (inches)	3.13		0.84		1.35	
10 percent exceeds	81		18		41	
50 percent exceeds	1.3		1.4		0.97	
90 percent exceeds	0.00		0.11		0.00	

[a] From floodmark.

[i] From indirect measurement at site 4.5 mi downstream.



08086212 Hubbard Creek below Albany, TX—Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--
CHEMICAL DATA: October 1966 to current year.
PESTICIDE DATA: November 1972.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1966 to November 1970 (local observer), December 1970 to current year.
WATER TEMPERATURE: October 1966 to July 1980 (local observer), March 1982 to current year.

INSTRUMENTATION.--Specific conductance monitor since December 1970. Water-temperature monitor since March 1982.

REMARKS.--Temperature record good. Specific conductance record good. Interruptions or periods of missing record may be due to instrument failure, or flow conditions, or data corrections exceeding allowable criteria, which were deleted. Other than no flow conditions, minimum and maximum extremes may have occurred during period of missing record.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 21,200 microsiemens/cm, Feb. 15, 21, 1978; minimum recorded, 144 microsiemens/cm, Sept. 8, 2001; minimum estimated, 129 microsiemens/cm, Aug. 4, 1978.
WATER TEMPERATURE: Maximum, 37.5°C, July 20, 1986; minimum, 0.0°C, on several days during winter months.

EXTREMES FOR CURRENT YEAR.--
SPECIFIC CONDUCTANCE: Maximum, 3,156 microsiemens/cm, Jan. 25; minimum, 258 microsiemens/cm, Apr. 27 [THE FOLLOWING FLAG(S) APPEARED IN THE ADAPS END-OF-YEAR SUMMARY RETRIEVAL: #, value is write-protected with a "1"].
WATER TEMPERATURE: Maximum, 34.0°C, July 31; minimum, 4.5°C, Jan. 4.

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 1 of 2
[Remark codes: E, estimated.]

Date	Time	Sample medium and type	Instantaneous discharge, cfs (00061)	pH, water, unfltrd field, std units (00400)	Specific conductance, wat unf µS/cm 25 degC (00095)	Temperature, water, deg C (00010)	Hardness, water, mg/L as CaCO3 (00900)	Noncarb hardness, wat flt field, mg/L as CaCO3 (00904)	Calcium water, fltrd, mg/L (00915)
Mar									
19...	1200	Surface water, regular	E462	8.0	745	12.8	190	93	50.2

WATER-QUALITY DATA
WATER YEAR OCTOBER 2007 TO SEPTEMBER 2008

Part 2 of 2
[Remark codes: E, estimated.]

Date	Magnesium, water, fltrd, mg/L (00925)	Potassium, water, fltrd, mg/L (00935)	Sodium adsorption ratio (00931)	Sodium fraction of cations percent (00932)	Sodium, water, fltrd, mg/L (00930)	Alkalinity, wat flt fxd end field, mg/L as CaCO3 (39036)	Chloride, water, fltrd, mg/L (00940)	Fluoride, water, fltrd, mg/L (00950)	Silica, water, fltrd, mg/L as SiO2 (00955)	Sulfate water, fltrd, mg/L (00945)	Residue water, fltrd, sum of constituents mg/L (70301)
Mar											
19...	15.7	5.60	1.9	40	61.0	96	122	.21	7.9	57.6	378

08086212 Hubbard Creek below Albany, TX—Continued

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	1,864	1,834	1,850	2,441	2,331	2,384	2,381	2,347	2,367	2,685	2,625	2,658
2	1,900	1,860	1,880	2,456	2,305	2,389	2,380	2,357	2,369	2,727	2,656	2,682
3	1,918	1,898	1,907	2,490	2,332	2,437	2,474	2,346	2,440	2,705	2,662	2,679
4	1,931	1,893	1,914	2,484	2,362	2,434	2,505	2,419	2,465	2,693	2,574	2,625
5	1,957	1,916	1,933	2,516	2,355	2,430	2,528	2,479	2,509	2,608	2,562	2,589
6	1,975	1,939	1,956	2,580	2,381	2,468	2,533	2,465	2,504	2,609	2,560	2,581
7	1,988	1,950	1,971	2,520	2,396	2,452	2,569	2,435	2,515	2,591	2,549	2,566
8	2,004	1,964	1,982	2,554	2,406	2,480	2,563	2,504	2,526	2,574	2,529	2,549
9	2,017	1,975	1,993	2,602	2,426	2,515	2,547	2,517	2,533	2,606	2,544	2,588
10	2,016	1,979	1,996	2,642	2,437	2,537	2,559	2,538	2,547	2,627	2,594	2,615
11	2,016	1,989	2,003	2,620	2,477	2,530	2,560	2,528	2,547	2,642	2,613	2,629
12	2,024	1,999	2,013	2,620	2,400	2,541	2,546	2,512	2,529	2,645	2,626	2,635
13	2,046	2,000	2,024	2,660	2,510	2,572	2,548	2,508	2,529	2,669	2,642	2,654
14	2,060	2,025	2,044	2,684	2,523	2,565	2,518	2,498	2,509	2,673	2,646	2,662
15	2,072	2,032	2,053	2,791	2,523	2,608	2,537	2,503	2,519	2,668	2,622	2,648
16	2,161	2,036	2,079	2,738	2,559	2,649	2,538	2,497	2,518	2,680	2,629	2,658
17	2,166	2,148	2,158	2,717	2,581	2,643	2,545	2,510	2,524	2,714	2,671	2,689
18	2,177	2,141	2,160	2,761	2,629	2,682	2,550	2,524	2,538	2,790	2,710	2,733
19	2,185	2,144	2,167	2,749	2,603	2,680	2,558	2,536	2,549	2,734	2,717	2,723
20	2,207	2,163	2,178	2,757	2,620	2,690	2,573	2,552	2,562	2,781	2,732	2,759
21	2,247	2,166	2,207	2,681	2,620	2,638	2,578	2,559	2,567	2,759	2,748	2,754
22	2,260	2,168	2,190	2,683	2,632	2,646	2,607	2,573	2,590	2,769	2,749	2,759
23	2,290	2,201	2,257	2,797	2,645	2,668	2,620	2,574	2,596	2,765	2,739	2,759
24	2,292	2,202	2,259	2,699	2,641	2,670	2,621	2,590	2,602	2,785	2,724	2,746
25	2,323	2,238	2,278	3,088	2,664	2,922	2,617	2,595	2,602	3,156	2,785	2,938
26	2,322	2,260	2,295	3,075	2,618	2,897	2,637	2,604	2,619	2,869	2,765	2,804
27	2,350	2,264	2,305	2,632	2,458	2,562	2,640	2,615	2,628	2,800	2,776	2,787
28	2,349	2,262	2,301	2,578	2,352	2,426	2,656	2,616	2,631	2,778	2,755	2,762
29	2,368	2,264	2,317	2,413	2,334	2,365	2,662	2,614	2,635	2,807	2,765	2,782
30	2,381	2,267	2,330	2,410	2,328	2,365	2,660	2,613	2,628	2,825	2,795	2,807
31	2,423	2,314	2,362	---	---	---	2,645	2,604	2,627	2,852	2,813	2,832
Month	2,423	1,834	2,108	3,088	2,305	2,562	2,662	2,346	2,543	3,156	2,529	2,698

08086212 Hubbard Creek below Albany, TX—Continued

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

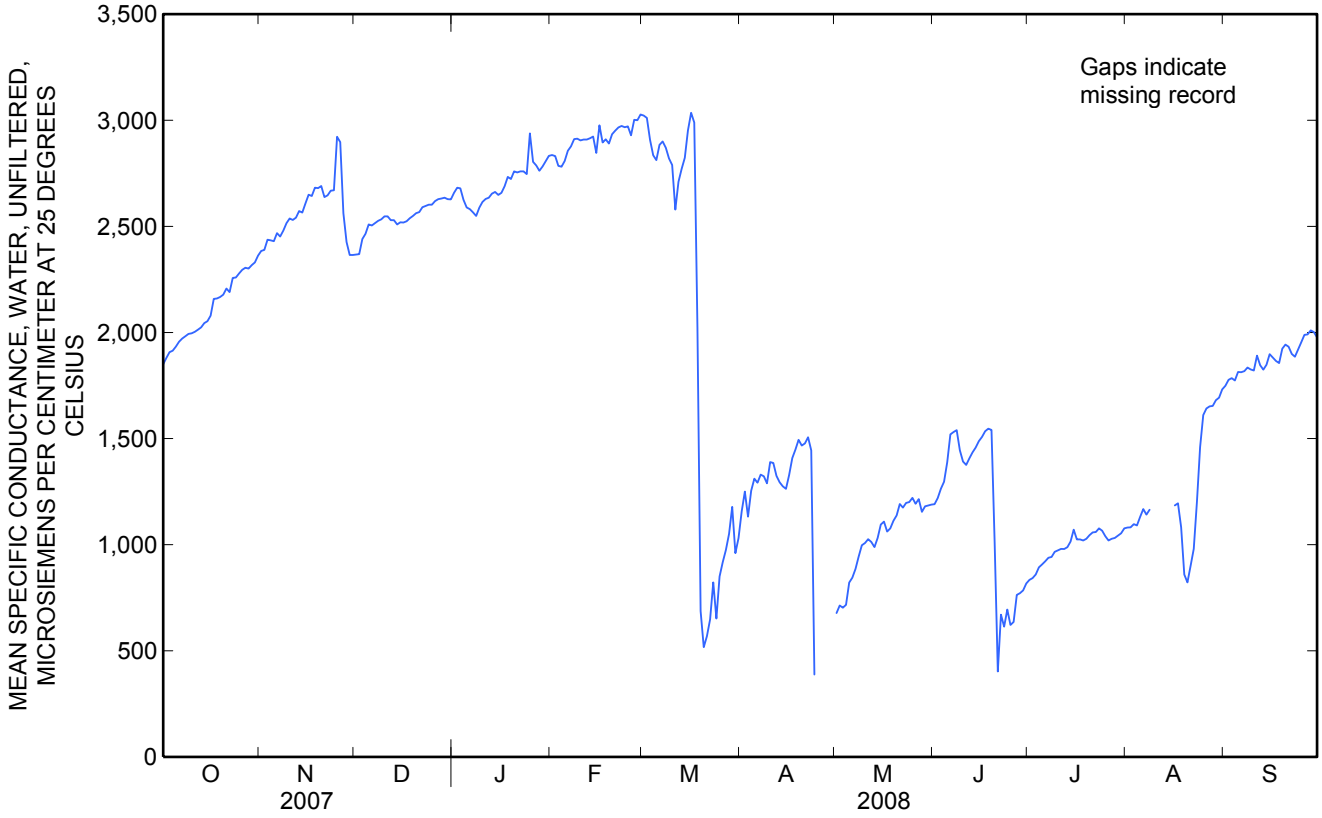
Day	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max	Min	Mean
		February			March			April			May	
1	2,857	2,814	2,836	3,038	3,008	3,022	1,250	1,063	1,157	740	637	678
2	2,847	2,818	2,831	3,026	2,941	3,011	1,298	1,163	1,250	811	611	713
3	2,828	2,707	2,785	3,021	2,858	2,908	1,188	1,108	1,132	783	623	703
4	2,822	2,687	2,781	2,875	2,757	2,835	1,327	1,176	1,254	787	622	717
5	2,963	2,784	2,808	2,919	2,756	2,812	1,325	1,287	1,311	885	708	822
6	2,878	2,806	2,856	2,908	2,830	2,884	1,328	1,282	1,292	878	812	845
7	2,906	2,846	2,877	2,960	2,849	2,900	1,341	1,319	1,330	937	846	886
8	2,939	2,880	2,911	2,964	2,808	2,870	1,366	1,304	1,322	1,003	876	944
9	2,933	2,893	2,913	2,860	2,740	2,820	1,424	837	1,289	1,042	906	997
10	2,926	2,888	2,905	2,831	2,696	2,789	1,527	1,087	1,389	1,058	958	1,008
11	2,927	2,896	2,909	2,707	2,416	2,579	1,516	1,339	1,385	1,058	1,006	1,026
12	2,917	2,900	2,909	2,805	2,664	2,710	1,339	1,314	1,324	1,044	982	1,013
13	2,924	2,905	2,915	2,824	2,716	2,771	1,314	1,282	1,294	1,012	956	989
14	2,934	2,913	2,923	2,838	2,805	2,823	1,293	1,244	1,275	1,124	955	1,032
15	3,013	2,717	2,846	3,122	2,798	2,952	1,290	1,240	1,263	1,129	1,076	1,095
16	3,116	2,909	2,976	3,115	2,982	3,035	1,369	1,290	1,328	1,135	1,064	1,109
17	2,910	2,882	2,895	3,020	2,684	2,989	1,446	1,369	1,408	1,084	1,022	1,062
18	2,926	2,892	2,910	2,852	1,084	2,023	1,481	1,429	1,448	1,154	1,027	1,077
19	2,941	2,832	2,890	1,170	565	687	1,509	1,478	1,494	1,125	1,087	1,113
20	2,956	2,914	2,934	567	489	517	1,480	1,454	1,467	1,250	1,089	1,138
21	2,963	2,942	2,951	693	475	569	1,484	1,469	1,477	1,217	1,171	1,192
22	2,984	2,954	2,966	715	594	648	1,544	1,481	1,506	1,186	1,168	1,175
23	2,997	2,942	2,973	973	654	822	1,610	516	1,444	1,207	1,184	1,197
24	2,981	2,959	2,967	710	598	652	800	284	388	1,261	1,178	1,201
25	2,984	2,954	2,971	945	708	850	---	---	---	1,354	1,128	1,221
26	3,007	2,843	2,929	955	892	917	---	---	---	1,211	1,166	1,193
27	3,018	2,980	3,002	1,040	911	975	---	---	---	1,269	1,139	1,215
28	3,026	2,952	3,000	1,196	986	1,051	---	---	---	1,245	1,038	1,155
29	3,041	3,014	3,027	1,301	974	1,178	---	---	---	1,194	1,169	1,181
30	---	---	---	1,018	926	960	---	---	---	1,194	1,179	1,185
31	---	---	---	1,063	1,013	1,031	---	---	---	1,201	1,180	1,189
Month	3,116	2,687	2,910	3,122	475	1,987	---	---	---	1,354	611	1,035

08086212 Hubbard Creek below Albany, TX—Continued

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	1,216	1,180	1,191	883	785	834	1,106	1,023	1,081	1,758	1,740	1,749
2	1,244	1,207	1,220	881	804	843	1,095	1,062	1,082	1,809	1,755	1,777
3	1,298	1,243	1,264	902	822	860	1,113	1,084	1,097	1,811	1,752	1,785
4	1,308	1,282	1,297	938	855	893	1,121	1,064	1,091	1,815	1,753	1,774
5	1,514	1,305	1,389	953	866	907	1,181	1,109	1,131	1,826	1,790	1,814
6	1,570	1,490	1,520	968	893	922	1,204	1,128	1,168	1,826	1,791	1,813
7	1,548	1,511	1,531	986	908	938	1,164	1,133	1,142	1,824	1,808	1,818
8	1,552	1,525	1,540	994	909	942	1,181	1,153	1,165	1,847	1,822	1,835
9	1,541	1,385	1,445	1,022	922	967	---	---	---	1,848	1,808	1,826
10	1,406	1,372	1,392	1,004	940	973	---	---	---	1,870	1,791	1,821
11	1,391	1,370	1,376	1,010	955	980	---	---	---	1,909	1,862	1,891
12	1,428	1,384	1,407	1,008	958	980	---	---	---	1,862	1,806	1,846
13	1,466	1,396	1,435	998	978	988	---	---	---	1,844	1,806	1,825
14	1,492	1,420	1,458	1,118	862	1,015	---	---	---	1,892	1,805	1,848
15	1,536	1,438	1,488	1,121	1,009	1,071	---	---	---	1,908	1,879	1,898
16	1,541	1,468	1,508	1,040	1,002	1,025	1,244	1,125	1,185	1,900	1,865	1,882
17	1,574	1,495	1,535	1,040	1,018	1,025	1,255	1,107	1,195	1,888	1,854	1,866
18	1,575	1,515	1,547	1,026	1,012	1,020	1,121	953	1,082	1,887	1,820	1,856
19	1,577	988	1,541	1,042	1,005	1,028	956	801	859	1,944	1,870	1,924
20	2,719	343	1,012	1,059	1,033	1,045	872	794	822	1,956	1,932	1,943
21	553	348	403	1,062	1,052	1,058	935	862	901	1,957	1,916	1,933
22	827	553	670	1,074	1,048	1,060	1,063	935	980	1,932	1,840	1,899
23	749	577	614	1,099	1,063	1,077	1,350	1,063	1,202	1,912	1,860	1,886
24	815	583	694	1,080	1,057	1,066	1,551	1,350	1,460	1,939	1,891	1,920
25	649	572	622	1,073	1,011	1,040	1,657	1,551	1,611	1,915	1,935	1,954
26	772	572	636	1,029	1,011	1,020	1,682	1,597	1,642	2,004	1,950	1,989
27	795	716	764	1,035	1,024	1,028	1,673	1,617	1,652	1,999	1,979	1,991
28	788	747	771	1,037	1,028	1,032	1,678	1,622	1,654	2,018	1,998	2,010
29	817	762	785	1,054	1,026	1,043	1,689	1,655	1,681	2,019	1,988	2,002
30	864	771	817	1,072	1,044	1,054	1,704	1,678	1,693	1,989	1,944	1,977
31	---	---	---	1,104	1,056	1,077	1,744	1,704	1,732	---	---	---
Month	2,719	343	1,162	1,121	785	994	---	---	---	2,019	1,740	1,878

08086212 Hubbard Creek below Albany, TX—Continued



08086212 Hubbard Creek below Albany, 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	29.4	25.6	27.4	18.2	14.0	16.1	15.7	11.6	13.4	8.3	6.0	6.9
2	28.6	25.6	27.2	17.1	13.7	15.4	16.9	13.5	15.1	7.3	5.5	6.3
3	30.4	25.7	27.9	18.2	15.9	16.8	14.2	11.0	12.4	7.5	5.0	6.1
4	29.0	25.7	27.3	18.1	15.2	16.9	13.0	10.1	11.7	8.4	4.5	6.6
5	28.8	24.6	26.6	19.9	16.5	17.8	14.6	10.5	12.3	11.6	7.6	9.0
6	28.5	25.1	26.7	17.5	14.7	15.9	13.4	10.8	11.9	12.3	9.4	10.5
7	28.1	25.0	26.5	16.9	14.4	15.6	15.1	12.6	13.6	12.9	11.2	12.0
8	29.8	24.9	26.9	16.8	13.5	15.5	14.2	11.9	12.8	13.0	10.2	12.1
9	27.9	24.2	25.7	18.0	15.0	16.7	11.9	8.9	10.3	11.1	8.1	9.7
10	27.1	22.1	24.4	17.9	15.3	17.0	8.9	8.1	8.6	11.9	8.6	9.9
11	26.2	22.2	23.8	19.0	17.1	17.9	9.9	8.2	8.9	11.0	7.5	9.2
12	25.4	22.1	23.6	19.5	17.9	18.7	8.9	7.8	8.1	11.1	7.7	9.2
13	25.0	21.7	23.4	19.7	17.2	18.6	10.3	7.1	8.5	10.6	6.7	8.6
14	25.0	22.0	23.4	19.3	15.6	17.9	9.4	8.5	8.9	10.5	7.0	8.8
15	25.9	21.7	23.3	17.5	14.1	15.6	8.8	6.5	7.8	9.6	6.6	8.1
16	23.9	20.8	22.1	15.7	12.4	14.2	8.5	5.4	7.0	10.5	7.3	8.4
17	24.1	20.8	22.4	16.5	13.7	15.1	8.3	5.9	7.2	7.9	5.9	6.6
18	22.5	18.8	20.4	17.7	14.2	16.0	9.9	6.7	8.2	8.2	4.8	6.2
19	21.1	16.8	19.0	17.2	15.1	16.4	9.5	7.2	8.4	8.1	5.0	6.4
20	21.5	17.0	19.2	18.8	16.2	17.3	10.6	7.6	9.0	7.2	4.7	5.8
21	21.5	18.2	19.9	17.7	14.0	16.2	10.1	7.6	8.7	6.6	5.7	6.1
22	19.8	15.7	17.8	14.0	10.8	12.5	9.4	6.2	8.1	7.4	5.2	6.1
23	19.3	13.8	16.2	12.1	10.3	10.8	8.3	5.2	6.6	6.2	5.2	5.6
24	20.1	14.4	16.7	10.5	9.4	10	8.8	5.7	7.1	6.2	4.7	5.6
25	19.5	14.2	16.3	10.0	8.8	9.5	8.2	5.6	7.0	7.0	5.7	6.2
26	19.5	13.3	15.7	11.6	7.9	9.3	7.5	5.9	7.0	8.7	5.1	6.7
27	19.5	13.3	15.9	11.0	8.1	9.7	7.9	5.3	6.4	8.4	5.8	7.2
28	18.8	12.9	15.8	12.2	9.6	10.8	8.2	5.4	6.6	11.0	7.8	9.4
29	17.0	13.2	15.4	11.6	9.0	10.4	8.2	5.3	6.7	12.0	8.9	10.7
30	16.7	13.6	15.5	12.0	10.6	11.2	8.4	5.1	7.1	9.9	6.0	8.1
31	19.4	14.2	16.5	---	---	---	8.5	6.3	7.3	9.4	6.2	7.9
Month	30.4	12.9	21.6	19.9	7.9	14.7	16.9	5.1	9.1	13.0	4.5	7.9

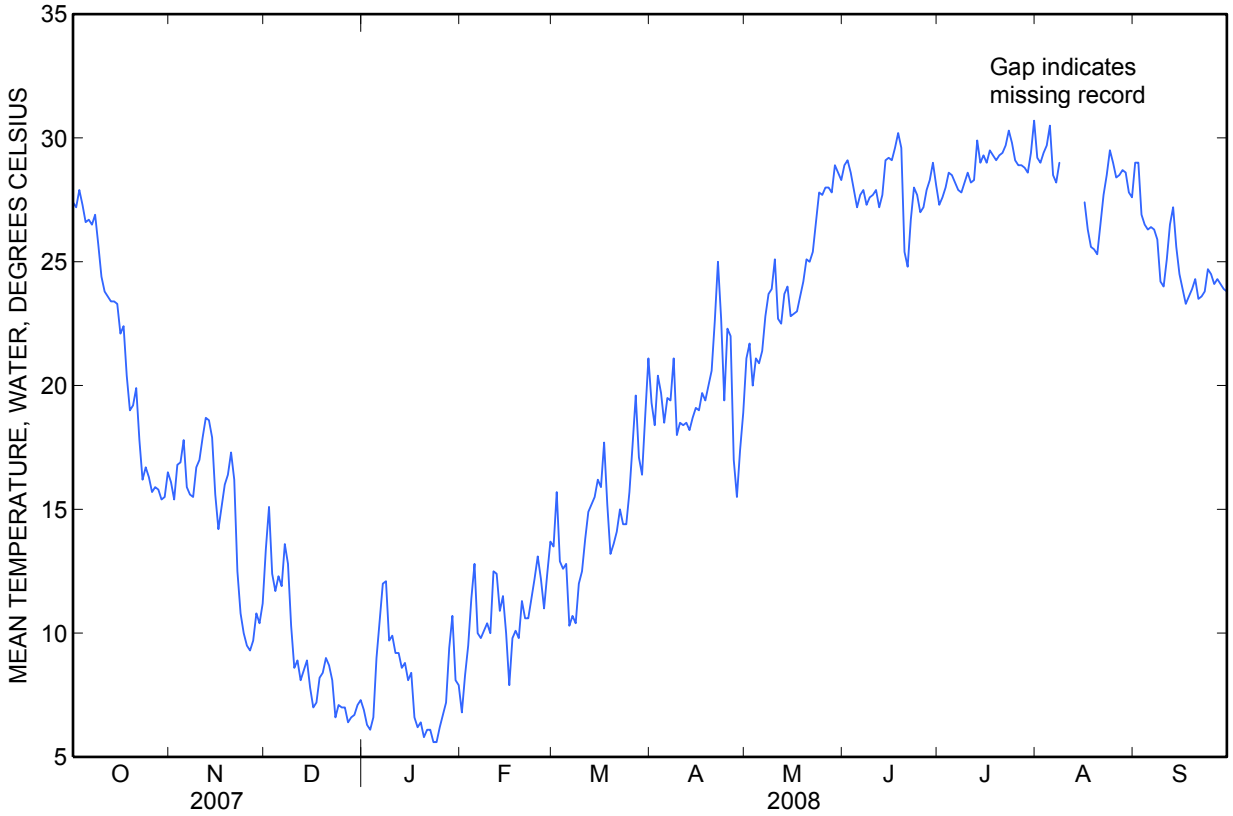
08086212 Hubbard Creek below Albany, TX—Continued

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	8.8	4.8	6.8	15.3	11.7	13.5	21.1	17.8	19.3	23.3	19.4	21.1
2	10.2	6.7	8.3	17.3	14.6	15.7	20.1	16.9	18.4	24.1	20.2	21.7
3	10.7	8.7	9.5	15.6	11.3	12.9	22.6	18.7	20.4	21.5	18.4	20.0
4	12.8	10.3	11.4	15.4	10.6	12.6	21.8	18.0	19.7	23.5	19.4	21.1
5	14.0	10.9	12.8	15.1	11.3	12.8	21.2	15.7	18.5	21.5	20.5	20.9
6	11.8	8.2	10.0	12.3	8.5	10.3	22.9	17.1	19.5	23.1	19.9	21.4
7	12.3	7.7	9.8	13.6	8.3	10.7	22.6	16.6	19.4	24.9	21.6	22.8
8	12.9	7.7	10.1	12.3	7.9	10.4	23.5	19.4	21.1	27.4	21.2	23.7
9	13.2	8.1	10.4	14.8	10.0	12.0	20.0	14.0	18.0	25.2	22.4	23.9
10	11.7	8.1	10.0	14.8	11.2	12.5	19.3	17.7	18.5	27.4	23.3	25.1
11	14.1	11.5	12.5	16.1	11.9	13.8	19.4	17.4	18.4	24.6	20.8	22.7
12	14.0	10.8	12.4	16.9	12.9	14.9	20.0	17.4	18.5	24.9	20.8	22.5
13	13.0	8.9	10.9	17.6	13.4	15.2	20.0	17.1	18.2	26.2	21.9	23.7
14	13.0	9.8	11.5	17.8	13.0	15.5	22.2	16.1	18.7	25.7	22.5	24.0
15	12.4	8.1	10.0	17.8	14.5	16.2	20.9	17.2	19.1	25.1	21.5	22.8
16	8.3	7.5	7.9	17.5	13.9	15.9	21.6	17.0	19.0	25.4	21.1	22.9
17	12.6	7.5	9.8	19.5	16.5	17.7	22.2	18.3	19.7	24.5	21.4	23.0
18	11.4	8.7	10.1	18.3	13.3	15.2	21.9	17.0	19.4	26.2	21.5	23.6
19	11.9	8.2	9.8	13.7	12.6	13.2	22.5	17.6	20.0	27.2	21.9	24.2
20	14.5	9.6	11.3	14.3	12.7	13.6	23.0	18.7	20.6	27.5	23.2	25.1
21	12.3	9.3	10.6	15.1	13.5	14.1	26.1	20.1	22.6	27.7	23.0	25.0
22	13.4	8.3	10.6	16.1	14.2	15.0	28.6	22.7	25.0	27.6	23.9	25.4
23	14.2	9.2	11.4	15.0	13.6	14.4	24.9	17.6	22.7	29.1	25.0	26.6
24	13.8	10.5	12.2	16.4	12.6	14.4	21.7	16.9	19.4	30.3	26.1	27.8
25	14.8	11.3	13.1	18.3	13.5	15.7	23.1	21.7	22.3	30.0	25.6	27.7
26	13.9	10.6	12.2	20.1	15.4	17.6	23.0	21.0	22.0	29.9	26.4	28.0
27	13.4	8.6	11.0	21.9	17.5	19.6	22.3	12.7	17.0	29.0	26.6	28.0
28	15.0	10.2	12.4	19.5	16.1	17.1	17.0	14.3	15.5	30.9	24.6	27.8
29	15.6	11.9	13.7	17.0	15.8	16.4	18.9	16.2	17.4	31.0	27.1	28.9
30	---	---	---	21.6	16.3	18.8	20.6	17.2	18.9	30.9	26.7	28.6
31	---	---	---	23.6	19.1	21.1	---	---	---	30.9	26.4	28.3
Month	15.6	4.8	10.8	23.6	7.9	14.8	28.6	12.7	19.6	31.0	18.4	24.5

08086212 Hubbard Creek below Albany, 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	31.4	27.0	28.9	28.7	25.5	27.3	31.3	28.2	29.2	33.0	26.4	29.0
2	30.5	27.4	29.1	29.1	25.9	27.6	31.5	27.4	29.0	32.4	26.4	29.0
3	30.2	26.5	28.6	29.8	26.3	28.0	30.8	27.9	29.4	28.6	25.5	26.9
4	29.9	25.8	27.9	29.9	26.8	28.6	31.9	27.9	29.7	29.7	24.0	26.5
5	29.2	25.0	27.2	30.0	26.8	28.5	33.4	28.1	30.5	28.2	24.1	26.3
6	29.3	26.0	27.7	29.6	26.6	28.2	30.5	27.5	28.5	27.5	24.7	26.4
7	29.3	26.4	27.9	29.3	26.3	27.9	30.0	27.0	28.2	27.6	24.5	26.3
8	29.1	25.4	27.3	29.2	26.4	27.8	31.3	27.4	29.0	26.8	24.9	25.9
9	29.5	26.1	27.6	29.8	26.8	28.2	---	---	---	25.3	23.6	24.2
10	30.3	25.8	27.7	29.6	27.4	28.6	---	---	---	25.0	23.0	24.0
11	29.3	26.3	27.9	29.1	27.0	28.2	---	---	---	26.4	23.9	25.1
12	28.9	25.2	27.2	29.7	26.7	28.3	---	---	---	28.1	25.0	26.5
13	30.3	25.3	27.7	32.9	27.6	29.9	---	---	---	29.2	25.7	27.2
14	30.9	27.2	29.1	31.1	27.0	29.0	---	---	---	26.8	24.3	25.6
15	30.6	27.3	29.2	31.2	27.9	29.3	---	---	---	27.3	22.6	24.5
16	30.7	27.4	29.1	31.7	27.5	29.0	28.1	26.6	27.4	27.3	21.2	23.9
17	33.0	27.1	29.6	30.6	28.1	29.5	26.7	25.9	26.3	26.7	20.5	23.3
18	33.5	27.7	30.2	30.7	27.8	29.3	26.3	25.2	25.6	26.2	21.1	23.6
19	31.2	26.7	29.6	30.4	27.7	29.1	26.5	24.9	25.5	26.9	21.1	23.9
20	28.5	23.6	25.4	30.8	27.7	29.3	26.4	24.5	25.3	27.9	21.4	24.3
21	26.1	24.0	24.8	30.7	27.7	29.4	30.5	24.0	26.5	24.8	21.5	23.5
22	27.9	25.5	26.7	31.2	28.0	29.7	29.9	25.6	27.7	24.9	21.8	23.6
23	31.5	25.8	28.0	32.2	28.2	30.3	31.0	26.6	28.5	25.3	22.0	23.8
24	29.5	26.3	27.7	31.0	28.5	29.8	32.4	27.3	29.5	27.5	22.3	24.7
25	28.2	26.3	27.0	30.1	28.2	29.1	31.3	26.9	29.0	27.0	22.0	24.5
26	30.0	25.7	27.2	30.6	27.3	28.9	30.1	26.7	28.4	26.8	21.6	24.1
27	30.2	26.4	27.9	30.2	27.4	28.9	30.0	26.9	28.5	27.2	21.4	24.3
28	30.4	27.0	28.3	30.4	27.5	28.8	30.1	26.9	28.7	27.1	21.3	24.1
29	32.5	26.7	29.0	29.9	27.1	28.6	30.5	27.2	28.6	27.1	21.1	23.9
30	30.3	26.5	28.1	31.9	27.8	29.4	29.8	26.6	27.8	26.5	21.2	23.8
31	---	---	---	34.0	27.7	30.7	29.6	25.9	27.6	---	---	---
Month	33.5	23.6	28.0	34.0	25.5	28.9	---	---	---	33.0	20.5	25.1

08086212 Hubbard Creek below Albany, TX—Continued