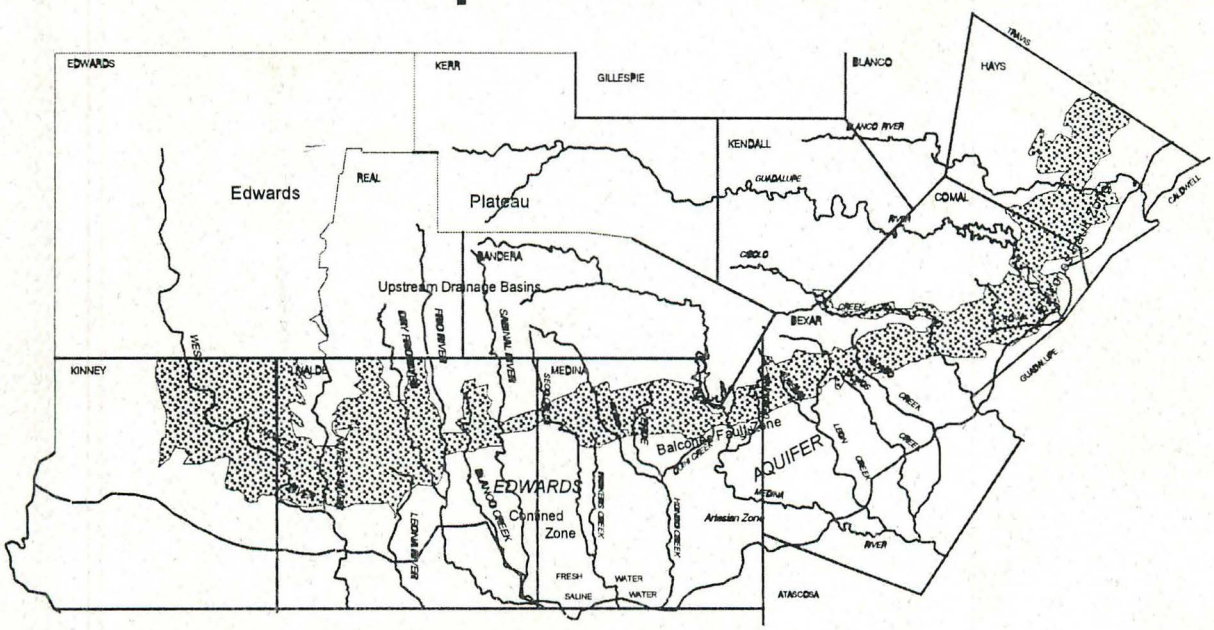
EDWARDS AQUIFER AUTHORITY

1615 N. St. Marys
San Antonio, Texas

Report 96-04

Edwards Aquifer Hydrogeologic Report for 1995



Prepared by: Division of Field Operations

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1615 N. St. Marys
San Antonio, Texas 78215

EDWARDS AQUIFER HYDROGEOLOGIC REPORT FOR 1995

Compiled by:

Steven D. Walthour, Hydrologist III
John R. Waugh, Hydrologist II
Jim O'Connor, Hydrologist I
Greg D. James, Water Resources Technician
Charles Bradley, Water Quality Technician

Robert W. Bader, Division Manager
Field Operations Division

Edwards Aquifer Authority

July 1996

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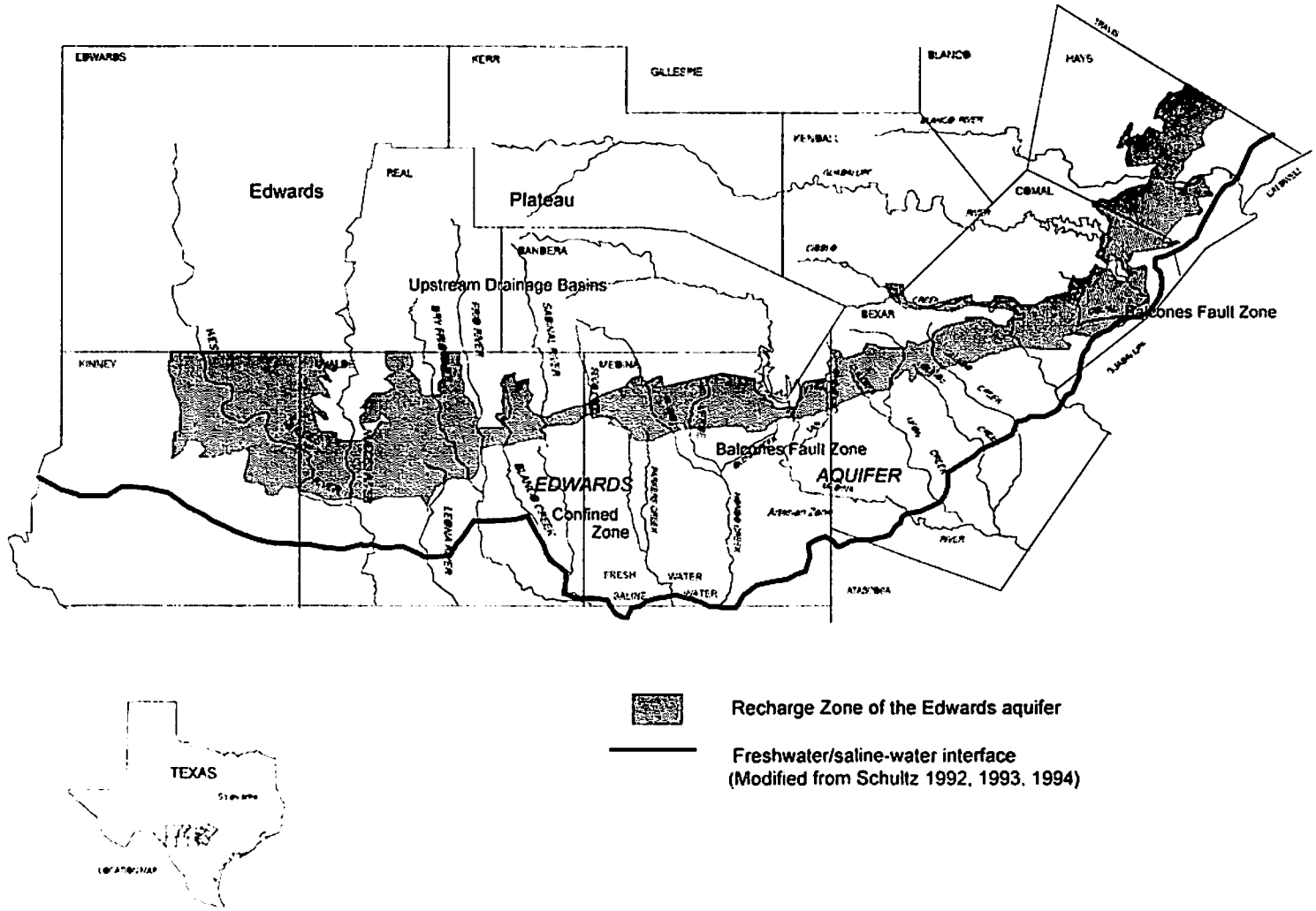
1.0 INTRODUCTION

The Edwards Aquifer Authority (the Authority) was created by the Texas Legislature in 1993 to manage, conserve, protect, recharge and prevent pollution of the groundwater in the Edwards aquifer. This technical data report for calendar year 1995 has been prepared in keeping with the Authority's statutory charge and provides a historical perspective by providing annual data for the period of record (1934-1995).

The following report addresses the portion of the Edwards aquifer that extends through six counties in south central Texas, from the groundwater divide near Brackettville in Kinney County to the groundwater divide near Kyle in central Hays County. **Figure 1.1** is a regional map showing primary physiographic features of the Edwards aquifer within the report area.

Figure 1.1 Edwards aquifer and other physiographic features in the San Antonio area.



2.0 WATER LEVELS

Over 850,000 water level measurements from 28 digital recorder-equipped observation wells, as well as monthly measurements from 22 periodic observation wells were recorded in 1995 as part of the Authority's water level data collection program. **Figure 2.1** shows the locations of the Authority's observation well network within the Edwards aquifer region

Periodic water level measurements from a variety of wells have been compiled in the San Antonio area of the Edwards aquifer region since 1929. These periodic measurements were enhanced with the introduction of continuous water level recorders in some of the observation wells in the 1930s by the United States Geological Survey (USGS). The Authority has further enhanced the data with the introduction of continuous digital recorders, developing a groundwater network from eastern Kinney County to central Hays County.

The digital recorders measure water levels across the aquifer every 15 minutes, 365 days a year. These wells are equipped with a float device or a pressure transducer for water level readings. Data are recorded on digital storage cards and then downloaded during site inspection, or by modem, to the Authority's office in San Antonio. **Table 2.1** shows the annual and period of record high and low water levels measured in five selected Edwards aquifer observation wells.

Figure 2.1 Edwards Aquifer Authority water level observation network.

County	Well I.D. Number	Name (Location)
Hays	LR 67-01-303	City of Kyle (Continuous)
	LR 67-01-609	Kristpel (Index)
	LR 67-09-102	Nicholson
	LR 67-09-111	Southwest Texas
	LR 58-57-602	Gregg
	LR 67-01-304	City of Kyle (Index)
	LR 67-01-612	San Marcos DWL
Comal	DX 68-19-701	State Hwy 306
	DX 68-82-609	Dreson
	DX 68-29-103	Lands Park, New Braunfels (Index)
	DX 68-23-701	Schaeffer
	DX 68-30-208	Bracken
	DX 68-18-601	Jentsch
Atascosa	AL 66-50-201	City of Lytle

County	Well I.D. Number	Name (Location)
Bexar	AY 68-30-211	Cibolo Creek
	AY 68-29-306	Judson Road
	AY 68-29-701	Airport
	AY 68-20-602	Blanco Road (Glen Rose, Cow Creek)
	AY 68-20-620	West Avenue
	AY 68-29-609	Chulen Pass (Glen Rose)
	AY 68-29-103	Hill County
	AY 68-37-603	Dodd Field-J 17 (Index)
	AY 68-27-306	Cedar Creek (Glen Rose)
	AY 68-29-208	Encino Park
	AY 68-43-501	Schirmer
	AY 68-43-608	Verstraten
	AY 68-43-N28	Quinn
	AY 68-43-607	Grothues
	AY 68-19-609	La Escondida (Glen Rose)
	AY 68-19-618	Boerne Stage Road (Glen Rose)

County	Well I.D. Number	Name (Location)
Medina	TD 68-33-604	Stinson
	TD 68-43-102	Muennink
	TD 68-47-302	Hondo Pool
	TD 68-38-604	Tarpley Road
	TD 68-47-306	City of Hondo (Index)
	TD 68-38-601	Seco Creek
	TD 68-41-301	City of Castroville (Index)
Uvalde	YP 68-50-202	Heine
	YP 68-50-101	U.V. Cattle Co.
	YP 68-33-409	Livingston
	YP 70-40-601	Nueces River
	YP 68-35-501	Frio River
	YP 68-37-402	State Hwy. 187
	YP 68-43-401	City of Sabinal
	YP 68-43-607	Knippa
	YP 68-50-302	City of Uvalde (Index)
	YP 68-43-409	North Uvalde
	YP 68-51-406	Ehler
	YP 68-43-709	Seven Mile Hill

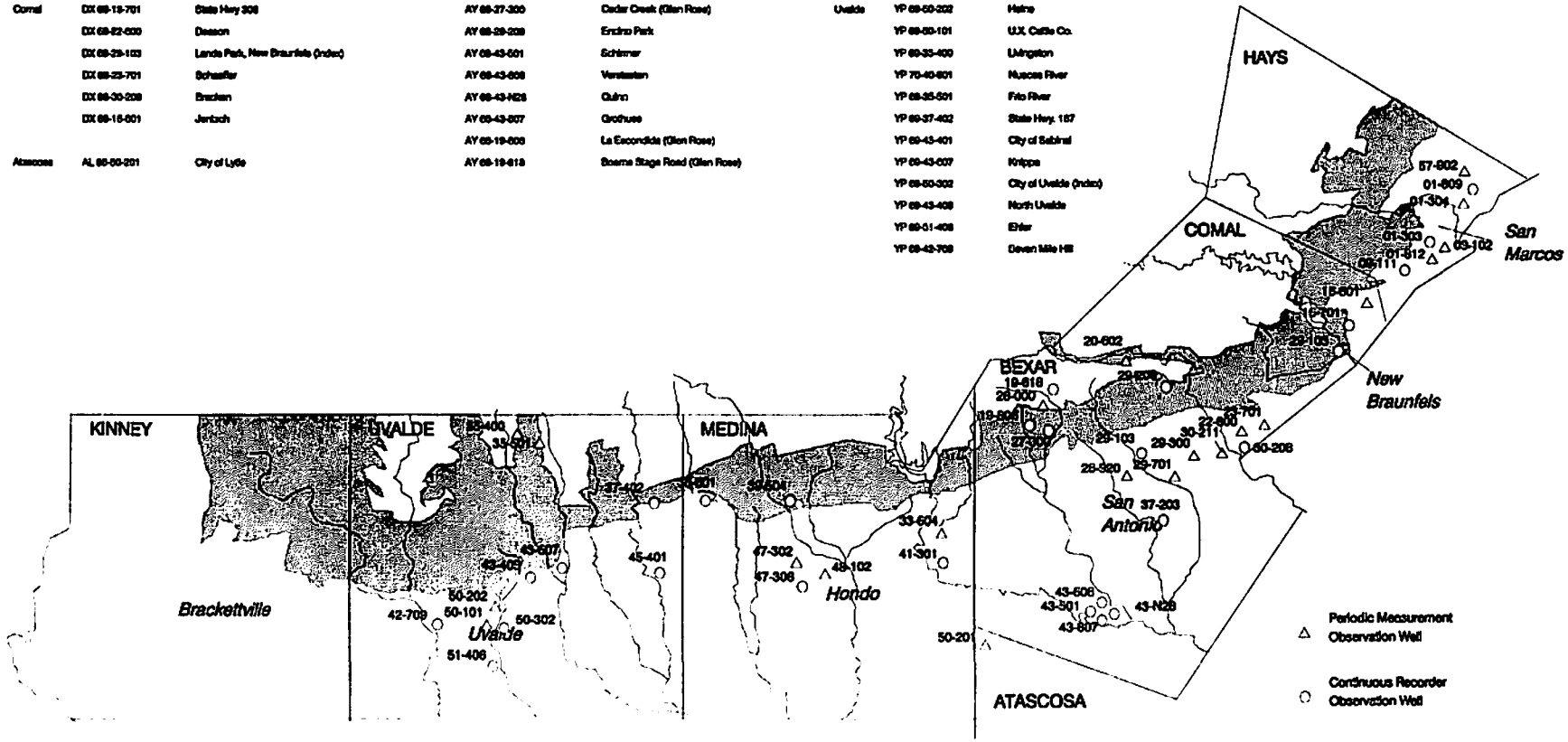


Table 2.1 Annual water level highs and lows for selected index wells in the San Antonio area of the Edwards aquifer, 1934-1995 (Measured in feet above mean sea level).

YEAR	City of Uvalde Uvalde County YP-69-50-302		Castroville Medina County TD-68-41-301		San Antonio Bexar County AY-68-37-203		New Braunfels Comal County DX-68-23-302		San Marcos Hays County LR-61-01-304	
	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW	HIGH	LOW
1934	866.6	---	---	---	675.2	666.8	---	---	---	---
1935	872.1	---	---	---	681.3	666.8	---	---	---	---
1936	876.6	876.5	---	---	683.0	676.6	---	---	---	---
1937	878.1	877.1	---	---	682.1	674.9	---	---	583.4	581.6
1938	875.8	874.0	---	---	681.4	673.6	---	---	590.6	581.5
1939	873.4	869.6	---	---	674.1	665.7	---	---	580.6	569.6
1940	872.3	868.5	---	---	671.4	661.0	---	---	572.2	568.7
1941	875.7	867.7	---	---	682.5	668.3	---	---	587.7	578.6
1942	875.8	871.9	---	---	685.4	669.7	---	---	580.8	573.7
1943	874.5	868.0	---	---	679.6	668.5	---	---	578.2	574.6
1944	869.3	866.8	---	---	677.6	667.1	---	---	580.5	579.3
1945	870.1	865.2	---	---	681.9	668.8	---	---	581.8	---
1946	867.1	862.9	---	---	681.2	663.6	---	---	580.3	---
1947	870.7	867.1	---	---	680.7	665.8	---	---	577.3	577.0
1948	868.4	860.5	---	---	667.7	653.7	624.4	624.3	560.5	559.4
1949	871.2	859.1	---	---	671.6	655.6	626.7	624.1	562.3	561.8
1950	871.2	861.8	687.0	674.9	665.4	653.8	625.2	624.0	575.8	575.2
1951	861.8	846.8	675.2	659.9	656.0	640.6	624.2	622.5	575.3	569.4
1952	846.8	834.9	663.8	649.9	650.5	633.4	623.0	621.5	573.0	569.1
1953	835.2	817.8	665.1	647.7	651.5	630.5	623.6	621.1	584.5	573.2
1954	836.7	823.1	660.3	642.4	646.3	628.9	623.1	620.5	581.8	562.8
1955	834.3	824.1	649.1	635.6	638.5	624.2	621.9	619.8	575.7	558.4
1956	834.2	814.2	641.6	622.3	632.2	612.5	621.0	613.3	569.8	542.2
1957	840.9	811.0	666.1	633.0	653.8	624.4	624.7	620.1	584.9	568.3
1958	866.1	840.8	704.4	665.7	679.6	653.3	626.6	624.6	593.6	580.8
1959	876.1	866.2	703.8	689.0	677.7	661.5	627.1	625.1	591.4	580.5
1960	876.9	873.1	706.3	686.0	679.4	657.9	627.1	624.9	589.4	584.3
1961	878.5	875.6	710.3	693.4	681.2	663.9	627.3	625.7	591.6	573.2
1962	878.3	867.7	703.6	676.3	675.5	646.9	626.3	623.2	584.1	565.0
1963	869.7	860.9	689.1	659.2	665.8	635.0	625.0	621.7	581.6	560.0
1964	860.9	849.0	676.3	654.8	657.1	632.8	624.1	621.6	578.2	562.8
1965	865.8	860.3	689.6	666.8	675.0	645.6	626.6	623.5	590.1	573.4
1966	867.2	860.2	686.1	665.0	668.8	642.7	625.9	623.1	589.0	566.6
1967	867.4	856.4	679.4	645.2	659.7	624.9	624.6	620.0	582.8	556.6
1968	873.3	864.8	702.0	679.2	678.3	655.9	627.2	624.6	593.8	574.4
1969	875.0	866.5	694.8	670.5	676.1	642.8	626.3	623.4	588.7	567.7
1970	876.1	871.3	700.7	678.8	677.1	650.4	627.2	624.3	593.2	575.0
1971	877.7	864.0	701.3	646.4	674.6	627.9	626.2	621.0	577.1	551.3
1972	877.8	874.6	704.6	676.7	679.0	651.2	626.7	624.1	579.7	576.3
1973	881.6	874.5	731.2	690.1	696.5	665.9	629.8	626.1	589.9	572.3
1974	881.4	876.0	723.8	696.0	689.2	660.9	629.1	625.8	593.6	558.5
1975	882.1	879.4	721.0	708.2	686.9	672.0	629.3	626.5	589.8	571.4
1976	884.9	876.0	732.4	694.9	693.1	663.8	629.4	625.8	584.6	571.2
1977	886.2	881.3	737.8	715.3	696.0	675.6	630.2	627.6	587.4	562.1
1978	882.6	875.6	722.4	681.7	684.1	650.1	628.1	624.5	572.0	540.4
1979	882.0	876.1	728.2	710.3	690.5	676.4	629.0	627.3	584.9	572.0
1980	879.1	868.0	716.1	666.8	680.3	640.8	627.5	623.0	572.0	551.8
1981	881.8	867.9	723.2	698.8	686.0	668.6	628.0	625.5	586.2	565.5
1982	881.8	876.4	717.1	682.8	680.5	645.3	627.3	623.6	584.7	544.7
1983	877.1	871.3	698.2	667.7	670.0	642.1	625.6	623.0	588.7	560.4
1984	873.3	856.9	684.5	642.0	657.0	623.3	624.4	619.6	582.5	544.3
1985	876.9	862.2	699.0	670.7	674.5	644.1	626.8	623.3	591.4	561.8
1986	877.8	872.2	704.6	674.2	685.6	649.8	627.7	624.1	595.0	576.3
1987	889.1	877.9	743.5	711.1	699.2	676.9	630.4	627.2	595.9	583.5
1988	887.0	878.0	725.3	679.9	684.9	647.7	627.9	623.9	593.2	585.9
1989	879.0	866.6	695.3	650.5	663.9	626.4	624.9	620.5	571.7	571.5
1990	872.9	861.6	679.5	640.8	658.1	622.7	624.3	620.3	577.6	561.2
1991	873.8	865.4	703.8	666.1	680.3	640.5	627.0	623.3	593.8	575.1
1992	885.2	872.9	743.6	704.3	703.3	680.7	630.9	627.0	595.4	586.2
1993	884.9	877.3	730.2	706.6	692.8	672.0	629.4	626.9	593.7	575.9
1994	---	---	718.6	684.1	679.2	652.1	627.2	624.7	575.0	545.3
1995	877.2	871.1	703.0	681.8	676.5	651.1	626.8	624.5	575.4	552.4
Average	High	Low	High	Low	High	Low	High	Low	High	Low
	871.9	863.1	700.9	672.7	675.2	652.5	626.5	623.5	583.3	567.8
Record	High	Low	High	Low	High	Low	High	Low	High	Low
Level	889.1	811.0	743.6	622.3	703.3	612.5	630.9	613.3	595.9	540.4
Month	June	April	June	Aug.	June	Aug.	June	Aug.	Sept.	July
Year	1987	1957	1992	1956	1992	1956	1992	1956	1987	1978

Data Source - Edwards Aquifer Authority, 1995.

The water level observation wells that are equipped with digital recorders are located in the water-table (unconfined) and the artesian (confined) portions of the Edwards aquifer. In addition to Edwards aquifer water level information, the Authority also collects water level data from the aquifers located in the Glen Rose and Leona formations. These aquifers are hydraulically connected and provide pathways for groundwater flow to and from the Edwards aquifer. The Authority has been collecting water level data in northern Bexar County from the Glen Rose formation since 1991 and data in southern Uvalde County from the Leona formation since 1966. **Figure 2.2** compares the water levels in the Edwards and Glen Rose aquifers for 1995. **Figure 2.3** compares water levels in the Edwards and Leona aquifers for 1995. Water level monitoring assists in research and management of these aquifers by providing information on current and historical aquifer conditions.

Figure 2.2 Water levels in the Edwards aquifer (Bexar County Index Well, AY 68-37-203) compared to the Lower Glen Rose aquifer (AY 68-19-806), 1995.

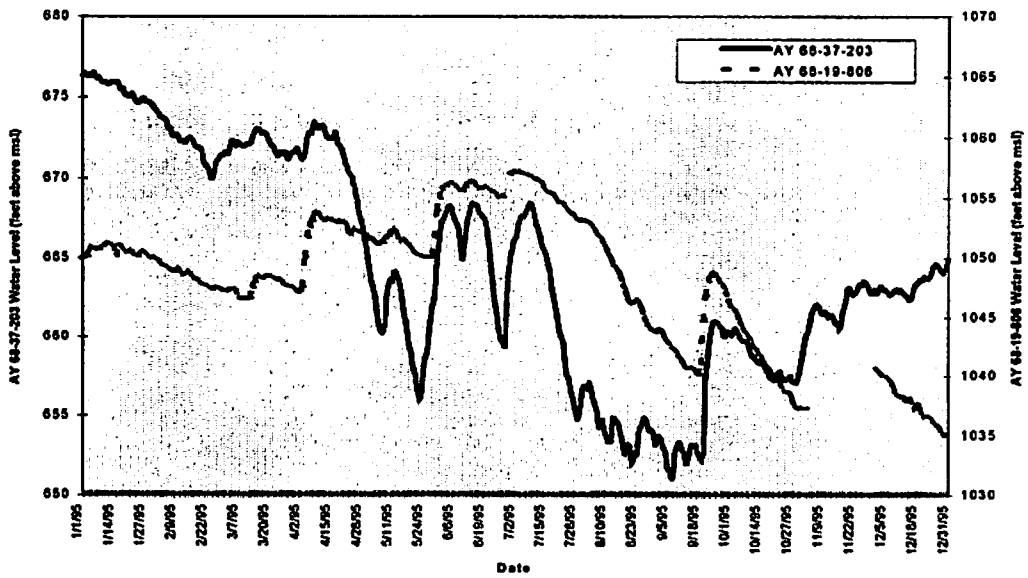
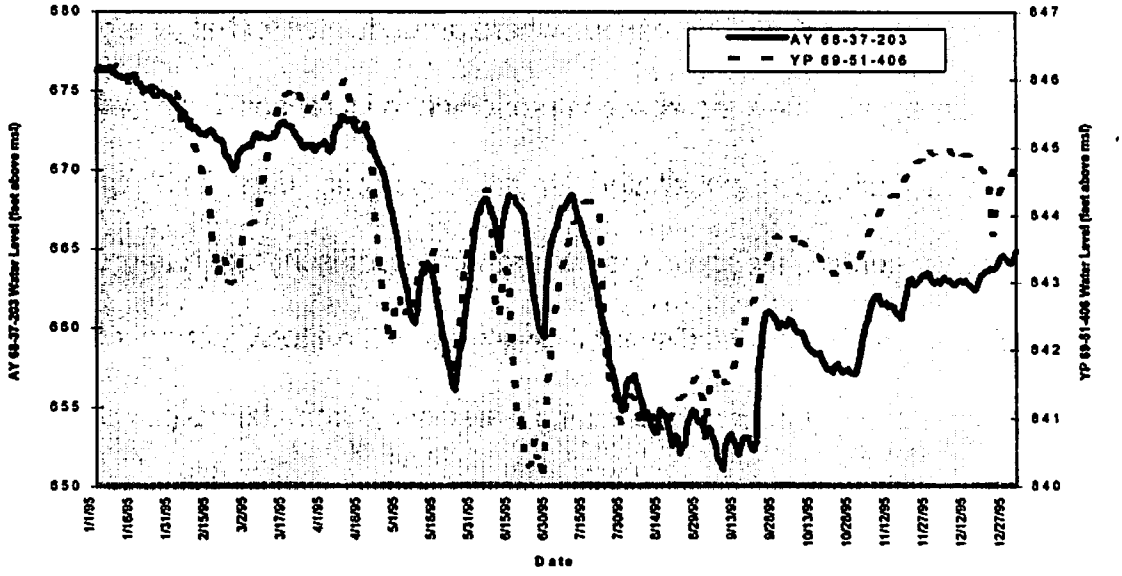


Figure 2.3 Edwards aquifer water levels (Bexar County index well, AY 68-37-203) compared to Leona aquifer water levels (Ehler well, Uvalde County YP69-51-406), 1995.



To augment the digital recorder network, Authority staff measure water levels at 20 observation wells during normal aquifer conditions, on a monthly basis, and at 50 additional wells during periods of extreme high or low water level conditions. These periodic measurements are performed by "tape and chalk method", and occasionally by conductivity meter. Water level data collected by the Authority are forwarded to regional and local entities such as the Texas Water Development Board (TWDB) and the USGS.

Historical water level trends in observation wells, along with corresponding precipitation and discharge information, are necessary to determine the quantity of

groundwater stored in the aquifer during any given period. Water level increases generally indicate greater quantities of water are recharging the aquifer than are being discharged. During periods where groundwater recharge is greater than discharge, springflow increases in proportion to increases in groundwater levels. Likewise, during drought or high demand conditions, water levels and springflows generally decline, reflecting greater groundwater discharge than groundwater recharge. In 1995, total discharge was greater than total recharge as was demonstrated by generally declining water levels from January to December. The net change in water levels at the Bexar County Index Well declined 11.4 feet from January through December.

Water level tables and hydrographs for selected wells depicting water level data collected in 1995 are shown in **Appendix 10.1.**

3.0 PRECIPITATION

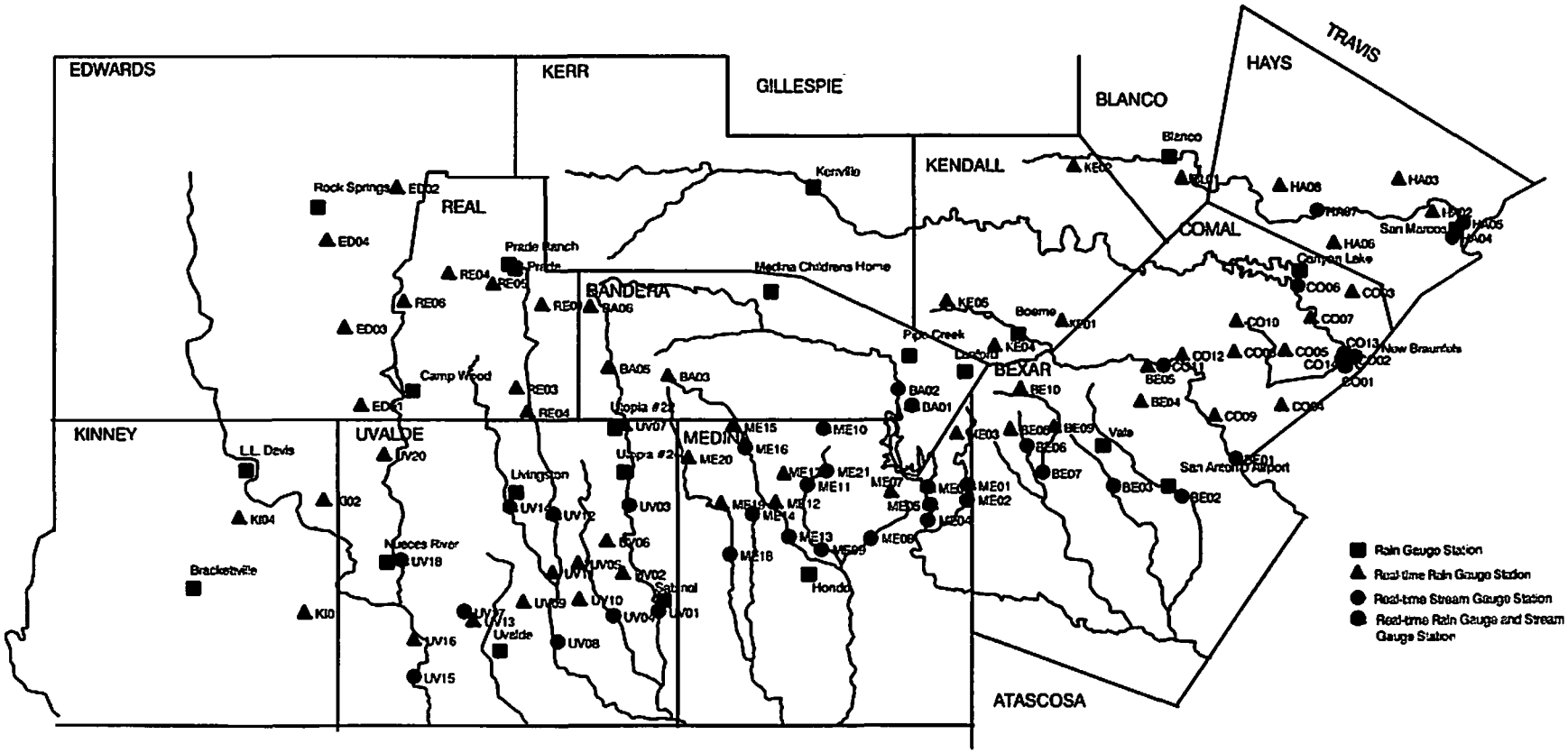
Precipitation is the primary water source of recharge to the Edwards aquifer. Water levels monitored by the Authority's network of observation wells across the artesian zone have risen within hours of a heavy rainfall event on the recharge zone or associated upstream drainage basin in the central Texas hill country.

Annual precipitation and stream discharge in the Edwards aquifer region is monitored by the Authority to determine the volume of groundwater recharge to the aquifer. Precipitation data are gathered from Authority rain gauge stations, National Oceanic and Atmospheric Administration (NOAA) weather stations, and USGS rain gauge stations located across the recharge zone and upstream drainage basins.

A map showing the locations of the precipitation gauging stations and stream gauging stations utilized by the Authority is shown in **Figure 3.1.**

A Real Time Data Network consisting of 64 rain gauge sites and 39 stream gauge sites report precipitation and stream discharge data in 6 minute intervals to the Authority's office. In addition, daily precipitation data are forwarded every month to the Authority from ten rain gauge observation sites located on the recharge zone. This information is augmented with data from 14 weather and

Figure 3.1 Regional rain gauge and stream gauge network utilized by the Edwards Aquifer Authority to monitor precipitation and stream discharge.



rain gauge stations maintained by NOAA and the USGS. The precipitation information is used to calculate recharge and to monitor any precipitation trends that may affect recharge to the Edwards aquifer.

Precipitation data from San Antonio have been maintained since 1871. Historical aquifer water level trends, recharge and springflow are closely related to precipitation and decrease during periods of low precipitation.

The amount of rainfall during 1995 was generaly below normal levels in the Edwards aquifer region. A hydrograph of precipitation for San Antonio from 1900 to 1995 is shown in **Figure 3.2** . **Table 3.1** shows annual precipitation for selected rain gauges in the region. **Table 3.2** shows monthly measurements for 1995 at selected rain gauge stations across the region.

Figure 3.2 Precipitation for San Antonio, 1934-1995.

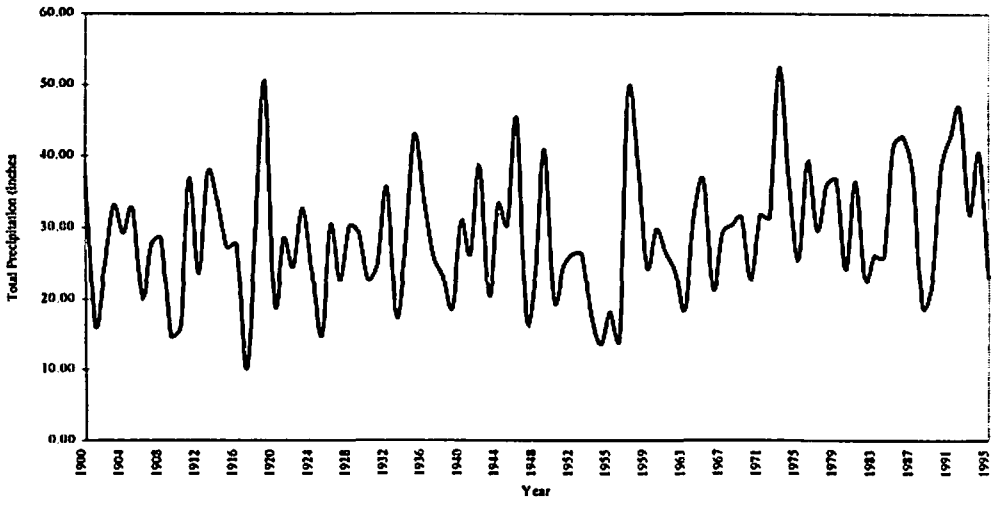


Table 3.1 Annual precipitation for selected rain gauges in the Edwards aquifer region, 1934-1995 (Measured in inches).

Year	Brackettville	Uvalde	Sabinal	Hondo	San Antonio	Boerne	New Braunfels	San Marcos
1934	—	16.70	18.07	23.97	27.65	26.78	30.80	35.67
1935	—	41.17	48.21	58.73	42.93	52.93	41.67	41.09
1936	22.34	24.53	26.53	35.27	34.11	47.59	30.41	33.48
1937	16.85	17.88	b/ 9.57	22.93	26.07	32.81	29.19	b/26.03
1938	19.97	13.12	15.39	27.56	23.26	24.14	28.32	28.17
1939	18.38	25.30	c/13.98	23.14	18.83	26.20	13.35	18.59
1940	22.43	27.66	27.51	28.13	30.79	32.29	38.11	43.57
1941	21.52	31.79	b/33.74	44.07	26.34	41.60	42.99	48.41
1942	21.01	19.01	b/11.37	34.83	38.46	31.12	42.08	44.65
1943	c/23.39	20.63	17.21	31.43	20.51	26.33	29.93	25.45
1944	24.76	32.76	b/27.62	32.46	33.19	42.98	43.14	47.42
1945	15.69	22.37	26.60	29.57	30.46	33.50	39.38	c/31.74
1946	19.10	26.41	b/14.16	29.65	45.17	45.62	61.60	52.24
1947	c/22.92	22.67	—	18.98	17.32	21.89	27.52	27.53
1948	b/20.02	18.31	—	28.82	23.64	23.77	c/19.88	b/21.27
1949	31.32	34.41	—	39.90	40.81	41.15	43.21	36.22
1950	17.70	18.27	b/15.28	24.91	19.86	24.94	21.13	21.10
1951	14.71	16.07	15.63	b/24.05	24.44	18.76	24.84	30.88
1952	12.26	18.24	23.16	25.56	26.24	37.54	33.87	39.91
1953	10.12	18.34	21.44	20.61	17.56	21.42	30.06	33.39
1954	19.38	15.60	14.72	11.92	13.70	10.29	10.12	13.42
1955	26.55	18.36	20.87	21.21	18.18	19.27	23.12	26.44
1956	7.58	9.29	11.29	15.54	14.31	12.05	18.41	18.37
1957	34.21	39.30	40.03	35.09	46.83	52.55	51.88	46.51
1958	45.37	39.03	41.18	41.60	39.69	40.94	36.40	39.08
1959	27.51	31.51	27.02	30.68	24.50	35.64	40.45	43.47
1960	19.12	23.98	26.24	32.37	29.76	32.55	34.28	45.48
1961	17.91	26.26	27.24	27.36	26.47	25.45	b/15.7	30.02
1962	10.87	14.12	13.58	17.85	23.90	25.26	27.40	28.47
1963	15.07	16.70	18.99	18.90	18.65	20.66	23.41	19.90
1964	20.75	22.30	23.78	28.29	31.88	27.36	30.65	30.27
1965	21.48	26.21	29.41	30.80	36.65	42.41	45.16	45.00
1966	21.63	20.87	21.54	29.46	21.44	29.05	25.98	27.12
1967	21.95	20.10	23.89	30.33	29.26	26.75	31.74	26.41
1968	17.26	25.20	c/29.88	31.91	30.40	35.14	35.97	37.13
1969	28.53	33.38	33.05	32.30	31.42	38.07	33.01	36.59
1970	16.50	13.59	22.13	30.96	22.74	27.79	35.23	32.30
1971	29.46	31.01	31.00	32.96	31.80	45.24	29.43	31.10
1972	21.21	15.49	21.10	25.43	31.49	35.09	42.02	31.90
1973	30.61	30.85	c/35.14	47.82	52.28	50.93	51.66	47.91
1974	18.25	30.94	c/20.93	c/36.41	37.00	41.80	42.85	b/37.28
1975	26.62	24.92	23.65	b/25.84	25.67	33.49	35.82	48.64
1976	34.40	46.04	40.82	45.21	39.13	45.24	49.06	47.46
1977	15.06	19.90	17.06	19.40	29.64	32.43	24.83	29.69
1978	19.04	18.48	21.28	24.64	35.99	35.17	c/36.35	33.08
1979	16.34	32.35	31.44	28.83	36.64	39.97	36.72	38.74
1980	18.33	23.05	22.67	21.27	24.23	39.02	33.69	29.56
1981	28.73	26.24	30.19	27.40	36.37	41.05	43.23	49.62
1982	19.10	23.35	18.44	21.99	22.86	27.64	21.04	c/22.47
1983	19.35	b/24.45	23.33	c/20.92	26.11	34.60	34.13	36.95
1984	16.24	c/15.33	20.67	b/21.19	25.95	26.97	20.90	b/ 8.26
1985	18.93	b/ 5.76	23.67	21.94	41.43	37.77	37.26	33.54
1986	27.44	c/29.86	c/29.62	c/36.01	42.73	43.52	47.14	42.20
1987	39.45	36.39	38.36	40.09	37.96	39.86	b/37.33	37.94
1988	12.08	15.20	13.52	c/ 9.81	19.01	19.49	c/16.27	21.50
1989	16.98	18.65	17.26	16.10	22.14	25.14	20.99	25.46
1990	c/38.24	24.73	30.06	27.01	38.31	42.51	b/24.58	c/35.14
1991	23.11	21.77	31.12	34.55	42.76	48.22	56.55	51.07
1992	22.22	b/27.85	37.73	45.34	46.49	64.17	c/38.84	c/40.33
1993	15.18	c/9.32	13.20	16.60	32.00	24.02	c/19.54	c/24.01
1994	b/22.85	39.61	29.32	c/22.38	40.42	40.98	b/35.76	40.85
1995	25.87	19.47	27.55	24.55	23.20	30.29	23.29	32.57
Years of Record (complete)	95	93	78	92	112	93	97	93
Yearly Average (period of record)	21.24	24.66	25.3	28.35	28.68	33.30	32.24	33.86

a/ Precipitation data from the US Department of Commerce (1934-1995)
b/ Partial record not included in long-term average; missing one month.
c/ Partial record not included in long-term average; missing more than one month.

Table 3.2 Monthly precipitation data from selected Edwards Aquifer Authority rain gauge network and National Oceanic and Atmospheric Administration precipitation gauging stations, 1995 (Measured in inches).

Gauge	County	Jan	Feb	Mar	Apr.	May	Jun	Jul.	Aug	Sep	Oct.	Nov	Dec
Pipe Creek	Bandera	0.15	0.10	2.45	2.50	2.25	7.75	2.05	1.55	7.20	0.15	2.75	0.45
Children's Home	Bandera	2.45	0	2.50	1.85	3.8	4.92	1.05	2.20	7.45	2.60	1.95	0.95
BA01	Bandera	-	-	-	0.52	7.49	5.49	0.81	2.46	6.71	0.20	4.79	0.93
BA03	Bandera	-	-	-	1.09	7.10	5.01	0.72	1.40	7.77	0.72	-	1.38
BA04	Bandera	-	-	-	5.67	4.82	4.45	0.91	1.56	8.52	0.57	2.76	0.57
BE04	Bexar	-	-	-	2.68	6.28	5.55	1.08	1.73	8.50	1.57	2.62	0.80
BE08	Bexar	-	-	-	-	-	5.76	1.28	1.00	9.21	1.23	1.19	0.36
Vale	Bexar	0.20	0.36	1.67	2.85	5.45	3.90	1.30	1.10	3.15	trace	0.85	0.80
BL01	Blanco	-	-	-	2.48	-	2.16	0.32	1.52	7.33	0.20	2.57	0.32
CO03	Comal	-	-	-	3.52	8.84	2.70	1.12	1.53	3.99	1.43	1.94	0.12
CO09	Comal	-	-	-	4.32	4.37	3.96	0.56	2.05	3.25	0.63	0.93	0.28
New Braunfels	Comal	0.52	1.30	2.03	2.89	6.73	2.10	1.02	1.24	2.16	1.19	0.97	1.14
ED02	Edwards	-	-	-	0.48	6.76	1.28	trace	1.68	1.04	0.56	1.36	0.64
ED03	Edwards	-	-	-	0.97	5.21	2.79	0.36	1.29	4.45	0.46	1.67	0.38
HA03	Hays	-	-	-	-	-	3.73	1.44	0.44	3.34	1.45	2.22	4.62
HA08	Hays	-	-	-	-	-	2.13	1.36	1.20	5.22	1.62	2.46	4.12
San Marcos	Hays	0.60	1.80	3.25	2.58	7.36	2.57	0.61	2.15	7.41	0.10	3.26	0.88
Boerne	Kendall	0.34	1.06	2.06	2.64	7.89	4.10	1.08	2.14	4.14	0.49	3.63	0.72
Bracketville	Kinney	-	0.86	0.89	0.60	4.79	2.76	trace	3.67	6.48	0.13	3.39	0.27
KI02	Kinney	-	-	-	3.05	3.78	1.46	1.28	1.37	4.4	1.02	1.86	0.84
Hondo	Medina	0.26	2.03	1.89	2.39	4.29	4.24	0.63	0.70	4.01	0.29	3.46	0.36
ME05	Medina	-	-	-	-	2.58	7.04	0.69	0.53	4.59	1.86	2.07	0.20
ME07	Medina	-	-	-	3.10	1.29	5.78	0.56	5.92	1.77	1.75	1.19	1.31
ME19	Medina	-	-	-	-	3.84	5.12	3.45	0.82	0.93	4.32	1.19	1.94
Prade Ranch	Real	-	0.05	1.61	1.70	3.95	4.19	0.35	1.20	7.05	1.00	2.62	-
Livingston	Uvalde	-	-	2.16	1.40	2.75	1.90	1.1	2.35	6.85	0.35	2.8	-
UV02	Uvalde				4.07	5.08	4.14	-	-	-	1.49	1.27	1.24
UV09	Uvalde	-	-	-	3.72	-	2.15	0.96	1.16	4.98	-	1.37	-
Utopia 22	Uvalde	0.15	0.30	2.70	2.30	4.84	1.10	1.65	3.45	6.95	0.45	3.95	-
Utopia 24	Uvalde	-	0.25	2.70	0.98	4.40	2.20	0.70	2.85	6.80	0.50	2.55	0.35

Note: The symbol "---" indicates no data available at time of publication.
Data Source - Edwards Aquifer Authority and US Department of Commerce, 1996.

4.0 GROUNDWATER RECHARGE

The segment of the recharge zone that supplies groundwater to the San Antonio area of the Edwards aquifer extends from central Kinney County to central Hays County. **Figure 4.1** identifies the eight drainage basins that cross the recharge zone of the aquifer. These basins are listed in the following **Table 4.1.**

Table 4.1 - Drainage basins which cross the Edwards aquifer recharge zone

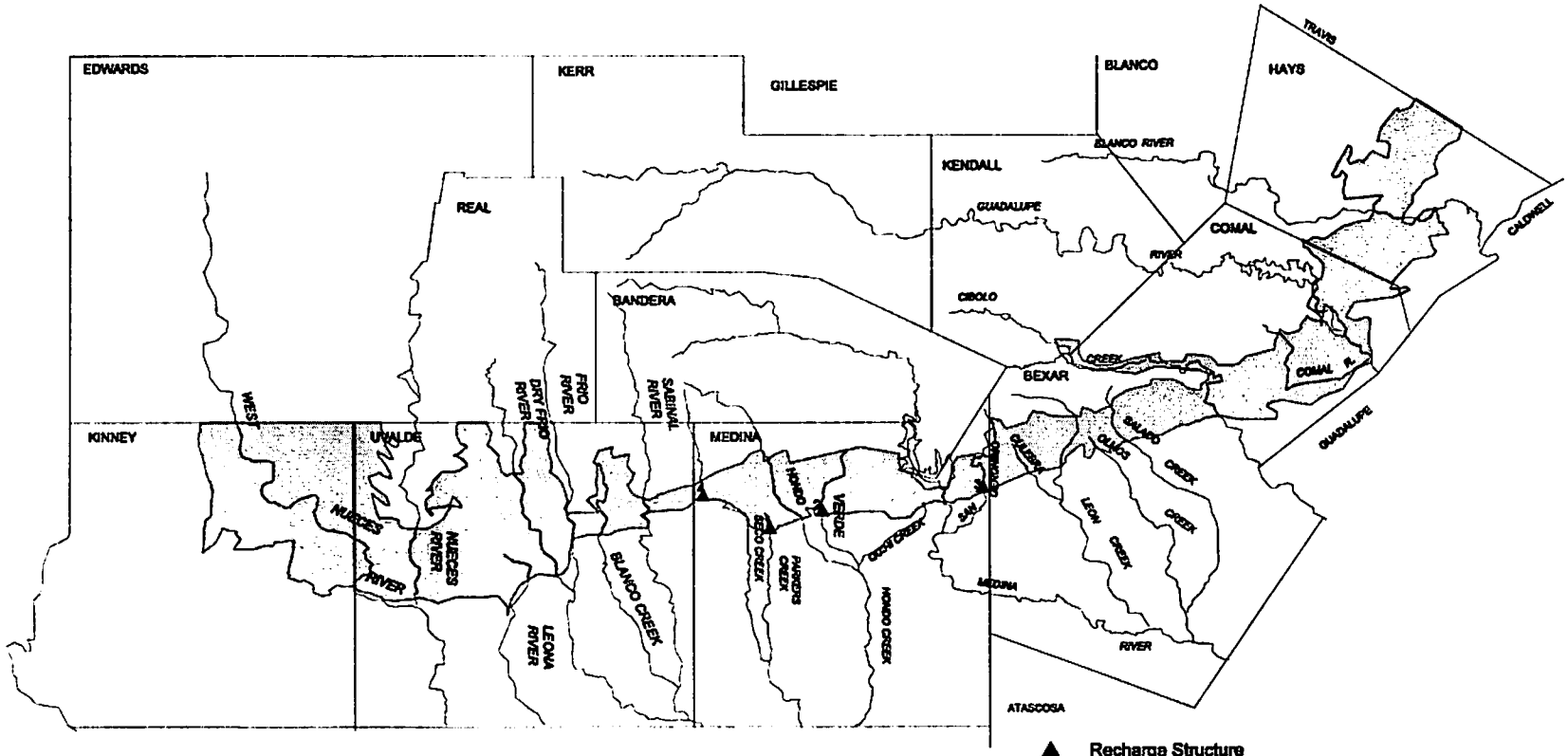
- **Nueces-West Nueces River basin**
- **Frio-Dry Frio River basin**
- **Sabinal River basin**
- **Medina River basin**
- **Comal Creek basin**
- **Cibolo Creek and Dry Comal Creek basin**
- **Guadalupe River basin**
- **Blanco River basin**

Although some recharge to the Edwards aquifer is provided by other hydraulically connected aquifers, this type of recharge has not been quantified. Only surface water data from precipitation and streamflows are utilized to calculate total recharge.

The USGS has been calculating groundwater recharge to the Edwards aquifer since 1934. **Table 4.2** shows annual recharge by river basin from 1934 through 1995, based on the USGS calculations.

The USGS has estimated that annual recharge for the period of record from 1934 to 1995, ranges from 43,700 acre-feet at the height of the drought in

Figure 4.1 Eight major drainage basins and Edwards Aquifer Authority recharge structures in the San Antonio area of the Edwards aquifer.



Primary Drainage Basins

- Nueces - West Nueces River Basin
- Frio-Dry Frio River Basin
- Sabinal River Basin
- Medina River Basin
- Comal Creek Basin
- Cibolo Creek and Dry Comal Creek Basin
- Guadalupe River Basin
- Blanco River Basin

Edwards Underground Water District Recharge Structures

Site Number	Name (Location)
1	Parker
2	Verde
3	San Geronimo
4	Seco

Table 4.2 Estimated annual groundwater recharge to the Edwards aquifer by river basin, 1934-1995(Measured in thousands of acre-feet).

Year	Nueces-West Nueces River basin	Frio-Dry Frio River basin	Sabinal River basin	Area between Sabinal River and Medina River basin	Medina River basin	Area between Medina River and Cibolo - Dry Comal Creek basin	Cibolo- Dry Comal Creek basin	Blanco River basin	Total
1934	8.6	27.9	7.5	19.9	46.5	21	28.4	19.8	179.6
1935	411.3	192.3	56.6	166.2	71.1	138.2	182.7	39.8	1258.2
1936	176.5	157.4	43.5	142.9	91.6	108.9	146.1	42.7	909.6
1937	28.8	75.7	21.5	61.3	80.5	47.8	63.9	21.2	400.7
1938	63.5	69.3	20.9	54.1	65.5	46.2	76.8	36.4	432.7
1939	227	49.5	17	33.1	42.4	9.3	9.6	11.1	399
1940	50.4	60.3	23.8	56.6	38.8	29.3	30.8	18.8	308.8
1941	89.9	151.8	50.6	139	54.1	116.3	191.2	57.8	850.7
1942	103.5	95.1	34	84.4	51.7	66.9	93.6	28.6	557.8
1943	36.5	42.3	11.1	33.8	41.5	29.5	58.3	20.1	273.1
1944	64.1	76	24.8	74.3	50.5	72.5	152.5	46.2	560.9
1945	47.3	71.1	30.8	78.6	54.8	79.6	129.9	35.7	527.8
1946	80.9	54.2	16.5	52	51.4	105.1	155.3	40.7	556.1
1947	72.4	77.7	16.7	45.2	44	55.5	79.5	31.6	422.6
1948	41.1	25.6	26	20.2	14.8	17.5	19.9	13.2	178.3
1949	166	86.1	31.5	70.3	33	41.8	55.9	23.5	508.1
1950	41.5	35.5	13.3	27	23.6	17.3	24.6	17.4	200.2
1951	18.3	28.4	7.3	26.4	21.1	15.3	12.5	10.6	139.9
1952	27.9	15.7	3.2	30.2	25.4	50.1	102.3	20.7	275.5
1953	21.4	15.1	3.2	4.4	36.2	20.1	42.3	24.9	167.6
1954	61.3	31.6	7.1	11.9	25.3	4.2	10	10.7	162.1
1955	128	22.1	0.6	7.7	16.5	4.3	3.3	9.5	192
1956	15.6	4.2	1.6	3.6	6.3	2	2.2	8.2	43.7
1957	108.6	133.6	65.4	129.5	55.6	175.6	397.9	76.4	1142.6
1958	266.7	300	223.8	294.9	95.5	190.9	268.7	70.7	1711.2
1959	109.6	158.9	61.6	96.7	94.7	57.4	77.9	33.6	690.4
1960	88.7	128.1	64.9	127	104	89.7	160	62.4	824.8
1961	85.2	151.3	57.4	105.4	88.3	69.3	110.8	49.4	717.1
1962	47.4	46.6	4.3	23.5	57.3	16.7	24.7	18.9	239.4
1963	39.7	27	5	10.3	41.9	9.3	21.3	16.2	170.7
1964	126.1	57.1	16.3	61.3	43.3	35.8	51.1	22.2	413.2
1965	97.9	83	23.2	104	54.6	78.8	115.3	66.7	623.5
1966	169.2	134	37.7	78.2	50.5	44.5	66.5	34.6	615.2
1967	82.2	137.9	30.4	64.8	44.7	30.2	57.3	19	466.5
1968	130.8	176	66.4	198.7	59.9	83.1	120.5	49.3	884.7
1969	119.7	113.8	30.7	84.2	55.4	60.2	99.9	46.6	610.5
1970	112.6	141.9	35.4	81.6	68	68.8	113.8	39.5	661.6
1971	263.4	212.4	39.2	155.6	68.7	81.4	82.4	22.2	925.3
1972	108.4	144.6	49	154.6	87.9	74.3	104.2	33.4	756.4
1973	190.6	256.9	123.9	286.4	97.6	237.2	211.7	82.2	1486.5
1974	91.1	135.7	36.1	115.3	96.2	68.1	76.9	39.1	658.5
1975	71.8	143.6	47.9	195.9	93.4	138.8	195.7	85.9	973
1976	150.7	238.6	68.2	182	94.5	47.9	54.3	57.9	894.1
1977	102.9	193	82.7	159.5	77.7	97.9	191.6	66.7	952
1978	69.8	73.1	30.9	103.7	76.7	49.6	72.4	26.3	502.5
1979	128.4	201.4	68.6	203.1	89.4	85.4	266.3	75.2	1117.8
1980	58.6	85.6	42.6	25.3	88.3	18.8	55.4	31.8	406.4
1981	205	365.2	105.6	252.1	91.3	165	196.8	67.3	1448.3
1982	19.4	123.4	21	90.9	76.8	22.6	44.8	23.5	422.4
1983	79.2	85.9	20.1	42.9	74.4	31.9	62.5	23.2	420.1
1984	32.4	40.4	8.8	18.1	43.9	11.3	16.9	25.9	197.7
1985	105.9	186.9	50.7	148.5	64.7	136.7	259.2	50.7	1003.3
1986	188.4	192.8	42.2	173.6	74.7	170.2	267.4	44.5	1153.8
1987	308.5	473.3	110.7	405.5	90.4	229.3	270.9	114.9	2003.5
1988	59.2	117.9	17	24.9	69.9	12.6	28.5	25.5	355.5
1989	52.6	52.6	8.4	13.5	46.9	4.6	12.3	23.6	214.5
1990	479.3	255	54.6	131.2	54	35.9	71.8	41.3	1123.1
1991	325.2	421	103.1	315.2	52.8	84.5	109.7	96.9	1508.4
1992	234.1	586.9	201.1	566.1	91.4	290.6	286.6	226.9	2486
1993	32.6	78.5	29.6	60.8	78.5	38.9	90.9	37.8	447.6
1994	124.6	151.5	29.5	45.1	61.1	34.1	55.6	36.6	538.1
1995	107.1	147.6	34.7	62.4	61.7	36.2	51.1	30.6	531.3
For the period of record 1934-1995									
Average	115.4	132.5	41.9	107.0	61.3	69.6	104.7	41.7	674.2
Median	90.5	115.9	30.9	78.4	58.6	49.9	77.4	34.1	547.1
For the period of record 1986-1995									
Average	191.2	247.7	63.1	179.8	68.1	93.7	124.5	67.9	1036.2
Median	156.5	172.2	38.5	96.8	65.8	37.6	81.4	39.6	830.6

Data Source: USGS , 1996.

1956, to 2,486,000 acre-feet in 1992. In 1995, estimated recharge was 531,300 acre-feet. The average annual recharge from 1934 to 1995 is 674,200 acre-feet. However, since 1986, the ten-year average annual recharge is estimated to be approximately 1,036,200 acre-feet. **Figure 4.2** is a graph of yearly recharge and the ten-year floating average recharge estimate for the San Antonio area of the Edwards aquifer from 1934 to 1995.

Recharge directly affects groundwater levels in the aquifer. Water levels rise during years of higher than normal recharge, and generally decline during periods of normal to below normal recharge. Since recharge is a direct result of precipitation, water levels in the aquifer are greatly affected by rainfall.

The Authority operates four recharge dams across the Edwards aquifer recharge zone. The locations of the recharge structures are shown in **Figure 4.1.** These structures contributed approximately 1,028 acre-feet of recharge to the aquifer in 1995. The average annual recharge is 3144 acre-feet . **Table 4.3** shows the 1995 monthly recharge to the Edwards aquifer by each structure and **Table 4.4** shows the annual historical recharge recorded for each site since construction.

Table 4.3 Monthly groundwater recharge at Edwards Aquifer Authority recharge projects, 1995 (Measured in acre-feet).

Month	Parker Creek Dam Adjudication No. 3192	Verde Creek Dam Adjudication No. 3444	San Geronimo Creek Dam Adjudication No. 2956	Seco Creek Dam Adjudication No. 3551
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	49
June	0	12	27	68
July	0	0	0	0
August	0	0	0	0
September	18	67	24	763
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Total	18	79	51	880

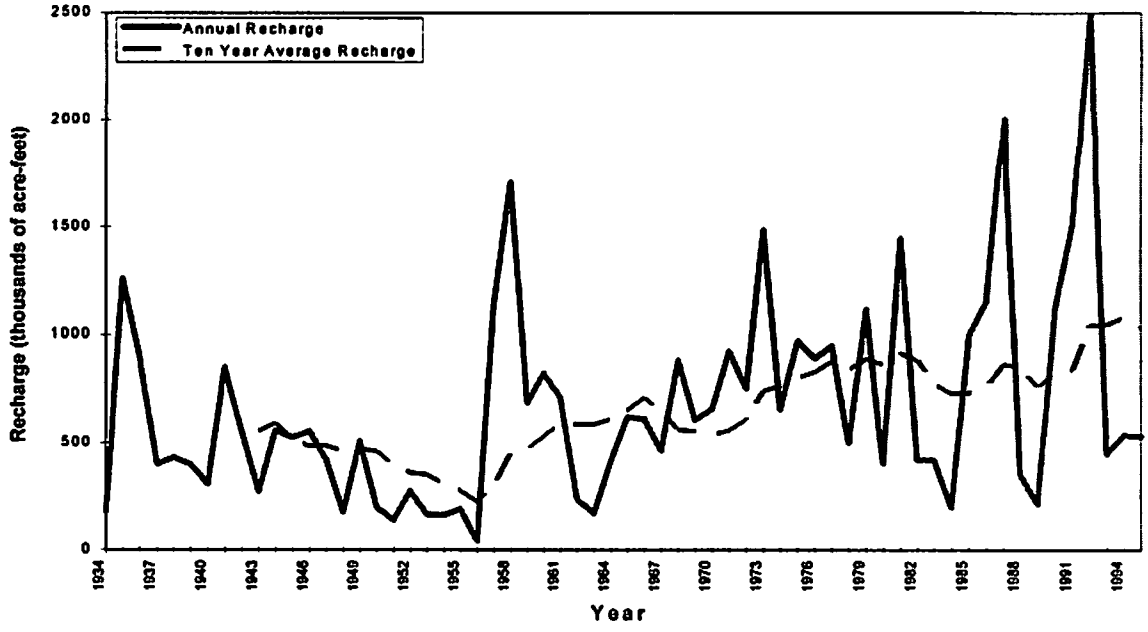
Data Source: USGS and Edwards Aquifer Authority, 1996

Table 4.4 Estimated annual Edwards aquifer recharge from Edwards Aquifer Authority recharge projects (Measured in acre-feet).

Year	Parker (4-20-74)	Verde (4-28-78)	San Geronimo (11-13-79)	Seco (10-21-82)	Yearly Total
1974	160	—	—	—	160
1975	620	—	—	—	620
1976	2,018	—	—	—	2,018
1977	6	—	—	—	6
1978	98	150	—	—	248
1979	2,315	1,725	0	—	4,040
1980	0	371	903	—	1,274
1981	772	1,923	1,407	—	4,102
1982	3	112	91	0	206
1983	0	254	0	0	254
1984	251	246	0	143	640
1985	232	440	1,097	643	2,412
1986	217	889	963	1,580	3,649
1987	2,104	4,141	1,176	12,915	20,336
1988	0	0	0	0	0
1989	0	0	0	0	0
1990	49	176	41	479	745
1991	647	966	1,647	2,160	5,420
1992	723	2,775	2,874	14,631	21,003
1993	0	0	334	508	842
1994	159	0	0	5	164
1995	18	79	51	880	1,028
Total	10,392	14,247	10,584	33,944	69,167
Recharge Average	472	792	623	2425	3144
Median	1160	250	91	494	794

Data Source: Edwards Aquifer Authority, 1996.

Figure 4.2 Yearly recharge and ten-year floating average recharge for San Antonio area of the Edwards aquifer (1934-1995).



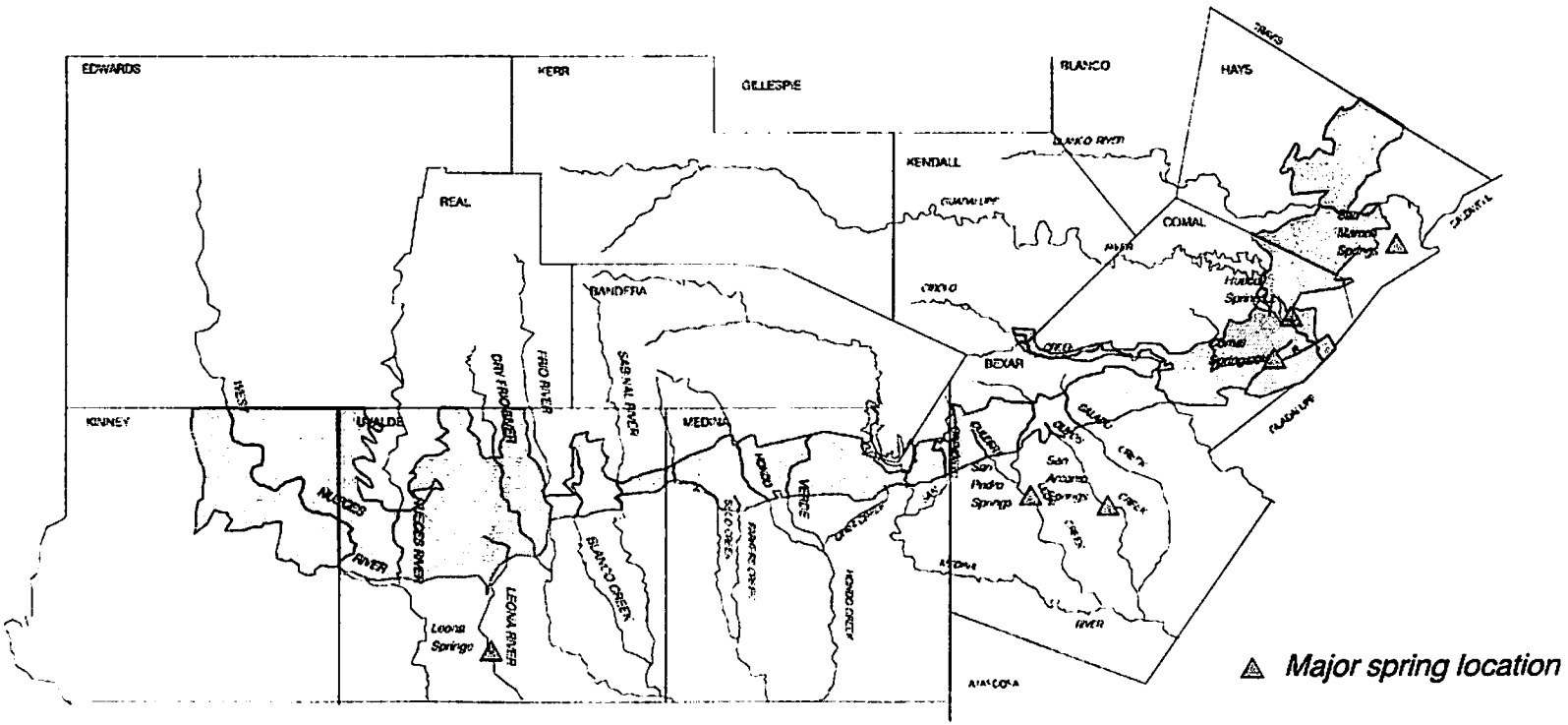
5.0 GROUNDWATER DISCHARGE AND USAGE

The Edwards aquifer provides water for many diverse uses in the south central Texas region, including agricultural, municipal, industrial, domestic and recreational needs. Natural springflow accounts for the majority of groundwater discharge when compared to any of the other above mentioned users. Springflow supports recreational economies in New Braunfels and San Marcos, and provides habitat for threatened and endangered animal and/or plant species.

Groundwater is discharged from the Edwards aquifer through springflow or by pumped or artesian flow from wells. Springflow is calculated by measuring the downstream flow from springs, or by measuring water levels in observation wells near the springs, and making corrections from these values.

Measuring downstream flow provides the most direct method in estimating springflow and is used in this report to determine springflow discharge. Downstream flow from springs is measured on a continuous basis and provides a detailed history of springflow discharge. A location map of the primary springs of the Edwards aquifer is shown in **Figure 5.1.**

Figure 5.1 Major springs in the San Antonio Area of the Edwards aquifer.



Indirectly calculating springflow by measuring groundwater levels in nearby observation wells is an alternative method of determining groundwater discharge. While the method is not as accurate as using downstream flow measurements, this method may be used to fill gaps in incomplete data sets when downstream recorders are not functioning.

Groundwater discharge resulting from pumping is calculated by tabulating reported water use data from public supply, irrigation, agricultural, industrial, commercial and domestic wells.

Estimates for annual groundwater discharge from springflow and pumping for the Edwards aquifer are available from 1934 to 1995 and range from the calculated low of 388,100 acre-feet in 1955, to the calculated high of 1,100,000 acre-feet in 1992. Springflow for the same period has varied from a low of 69,800 acre-feet in 1956 to a high of 802,800 acre-feet in 1992. In 1995, total groundwater discharge from the Edwards aquifer was approximately 761,000 acre-feet. **Table 5.1** contains annual estimated groundwater discharge data for the San Antonio area of the Edwards aquifer from 1934 to 1995.

Spring discharge from the Edwards aquifer for 1995 was calculated at 361,300 acre-feet. Spring discharge from the aquifer is directly related to groundwater levels.

Table 5.1 Annual estimated groundwater discharge data by county for the Edwards aquifer, 1934-1995 (Measured in thousands of acre-feet).

Year	Kinney Uvalde	Medina	Bexar	Comal	Hays	Total	Total Wells	Total Springs
1934	12.6	1.3	109.3	229.1	85.6	437.9	101.9	336.0
1935	12.2	1.5	171.8	237.2	96.9	519.6	103.7	415.9
1936	26.6	1.5	215.2	261.7	93.2	598.2	112.7	485.5
1937	28.3	1.5	201.8	252.5	87.1	571.2	120.2	451.0
1938	25.2	1.6	187.6	250.0	93.4	557.8	120.1	437.7
1939	18.2	1.6	122.5	219.4	71.1	432.8	118.9	313.9
1940	16.1	1.6	116.7	203.8	78.4	416.6	120.1	296.5
1941	17.9	1.6	197.4	250.0	134.3	601.2	136.8	464.4
1942	22.5	1.7	203.2	255.1	112.2	594.7	144.6	450.1
1943	19.2	1.7	172.0	249.2	97.2	539.3	149.1	390.2
1944	11.6	1.7	166.3	252.5	135.3	567.4	147.3	420.1
1945	12.4	1.7	199.8	263.1	137.8	614.8	153.3	461.5
1946	6.2	1.7	180.1	261.9	134.0	583.9	155.0	428.9
1947	13.8	2.0	193.3	256.8	127.6	593.5	167.0	426.5
1948	9.2	1.9	159.2	203.0	77.3	450.6	168.7	281.9
1949	13.2	2.0	165.3	209.5	89.8	479.8	179.4	300.4
1950	17.8	2.2	177.3	191.1	78.3	466.7	193.8	272.9
1951	16.9	2.2	186.9	150.5	69.1	425.6	209.7	215.9
1952	22.7	3.1	187.1	133.2	78.8	424.9	215.4	209.5
1953	27.5	4.0	193.7	141.7	101.4	468.3	229.8	238.5
1954	26.6	6.3	208.9	101.0	81.5	424.3	246.2	178.1
1955	28.3	11.1	215.2	70.1	64.1	388.8	261.0	127.8
1956	59.6	17.7	229.6	33.6	50.4	390.9	321.1	69.8
1957	29.0	11.9	169.4	113.2	113.0	456.5	237.3	219.2
1958	23.7	6.6	199.5	231.8	155.9	617.5	219.3	398.2
1959	43.0	8.3	217.5	231.7	118.5	619.0	234.5	384.5
1960	53.7	7.6	215.4	235.2	143.5	655.4	227.1	428.3
1961	56.5	6.4	230.3	249.5	140.8	683.5	228.2	455.3
1962	64.6	8.1	220.0	197.5	98.8	589.0	267.9	321.1
1963	51.4	9.7	217.3	155.7	81.9	516.0	276.4	239.6
1964	49.3	8.6	201.0	141.8	73.3	474.0	260.2	213.8
1965	46.8	10.0	201.1	194.7	126.3	578.9	256.1	322.8
1966	48.5	10.4	198.0	198.9	115.4	571.2	255.9	315.3
1967	81.1	15.2	239.7	139.1	82.3	557.4	341.3	216.1
1968	58.0	9.9	207.1	238.2	146.8	660.0	251.7	408.3
1969	88.5	13.6	216.3	218.2	122.1	658.7	307.5	351.2
1970	100.9	16.5	230.6	229.2	149.9	727.1	329.4	397.7
1971	117.0	32.4	262.8	168.2	99.1	679.5	406.8	272.7
1972	112.6	28.8	247.7	234.3	123.7	747.1	371.3	375.8
1973	96.5	14.9	273.0	289.3	164.3	838.0	310.4	527.6
1974	133.3	28.6	272.1	286.1	141.1	861.2	377.4	483.8
1975	112.0	22.6	259.0	296.0	178.6	868.2	327.8	540.4
1976	136.4	19.4	253.2	279.7	164.7	853.4	349.5	503.9
1977	156.5	19.9	317.5	295.0	172.0	960.9	380.6	580.3
1978	154.3	38.7	269.5	245.7	99.1	807.3	431.8	375.5
1979	130.1	32.9	294.5	300.0	157.0	914.5	391.5	523.0
1980	151.0	39.9	300.3	220.3	107.9	819.4	491.1	328.3
1981	104.2	26.1	280.7	241.8	141.6	794.4	387.1	407.3
1982	129.2	33.4	305.1	213.2	105.5	786.4	453.1	333.3
1983	107.7	29.7	277.6	186.6	118.5	720.1	418.5	301.6
1984	156.9	46.9	309.7	108.9	85.7	708.1	529.8	178.3
1985	156.9	59.2	295.5	200.0	144.9	856.5	522.5	334.0
1986	91.7	41.9	294.0	229.3	160.4	817.3	429.3	388.0
1987	94.9	15.9	326.6	288.2	198.4	922.0	364.1	557.9
1988	156.7	82.2	317.4	236.5	116.9	909.7	540.0	369.7
1989	156.9	70.5	305.6	147.9	85.6	766.5	542.4	224.1
1990	118.1	69.7	276.8	171.3	94.1	730.0	489.4	240.6
1991	76.6	25.6	315.5	221.9	151.0	790.6	436.0	354.6
1992	78.5	9.3	370.5	412.4	261.3	1130.0	327.2	802.8
1993	107.5	17.8	371.0	349.5	151.0	996.7	407.3	589.4
1994	95.5	41.1	297.7	269.8	110.6	814.8	424.6	390.2
1995	90.8	35.2	**272.1	235.0	127.8	761.0	399.6	361.3
For period of record 1934-1995.								
Average	69.0	17.7	234.0	219.0	117.8	657.5	291.6	365.9
Median	57.3	10.2	217.4	230.5	114.2	618.3	264.5	372.6
For period of Record 1986-1995. (Ten years)								
Average	106.5	40.9	314.7	256.0	145.7	863.9	436.0	427.9
Median	95.2	38.2	310.6	235.8	139.4	816.1	427.0	378.9

Differences may occur due to rounding procedures.

** - The USGS change method of calculating Domestic/Livestock pumping which significantly decreased the estimate for 1995.

Data Source - USGS, 1996.

Generally, the higher the water levels, the greater the springflows. **Table 5.2** shows the monthly estimated discharge in 1995 for six primary Edwards aquifer springs.

Table 5.2 Estimated spring discharge from the Edwards aquifer, 1995 (Measured in acre-feet).

Month	Comal Springs	San Marcos Springs	Hueco Springs	San Antonio Springs	San Pedro Springs	Leona Springs and Leona Springs Underflow	Total monthly discharge combining all springs
January	19,910	9,800	3,210	990	350	2,760	37,020
February	17,090	8,010	1,390	750	360	2,420	30,020
March	18,820	9,540	1,380	490	380	2,410	33,020
April	18,110	9,730	1,620	140	340	2,160	32,100
May	16,790	9,300	2,380	0	240	1,960	30,670
June	17,000	12,410	2,120	0	230	1,670	33,430
July	17,160	11,460	1,550	0	180	1,550	31,900
August	14,920	10,340	1,020	0	60	1,400	27,740
September	17,060	9,180	650	0	100	1,540	25,530
October	15,120	8,660	710	0	170	1,810	26,470
November	15,370	8,030	670	0	180	1,960	26,210
December	16,420	7,850	600	0	210	2,170	27,250
Total	200,770	114,310	17,300	2,370	2,800	23,810	361,300

Differences may occur due to rounding procedures.
Data Source - USGS, 1996

Springs accounted for 48% of total discharge from the Edwards aquifer in 1995. Underflow in the Leona formation has been included in total discharge from Leona Springs.

While springflow can vary greatly from year to year and is dependent on precipitation and aquifer water levels, groundwater pumping has progressively increased since records have been maintained. The lowest

estimated annual aquifer pumping level was 101,900 acre-feet which was recorded in 1934. Since 1934, pumping from the Edwards aquifer has increased more than 400 percent. Average annual well production is estimated to be 291,600 acre-feet per year for the period of record from 1934 to 1995, while the estimated floating ten-year average for pumping from 1986 to 1995 is 436,000 acre-feet. Groundwater pumping accounted for 399,600 acre-feet of water discharged from the Edwards aquifer in 1995. **Figure 5.2** is a graph comparing groundwater pumpage to springflow.

Table 5.3 shows the 1995 discharge data by use for the six counties in the region. **Table 5.4** shows annual estimated Edwards aquifer groundwater discharge by use from 1955 to 1995.

Figure 5.2 Groundwater pumping compared to springflow in the Edwards aquifer, 1934-1995.

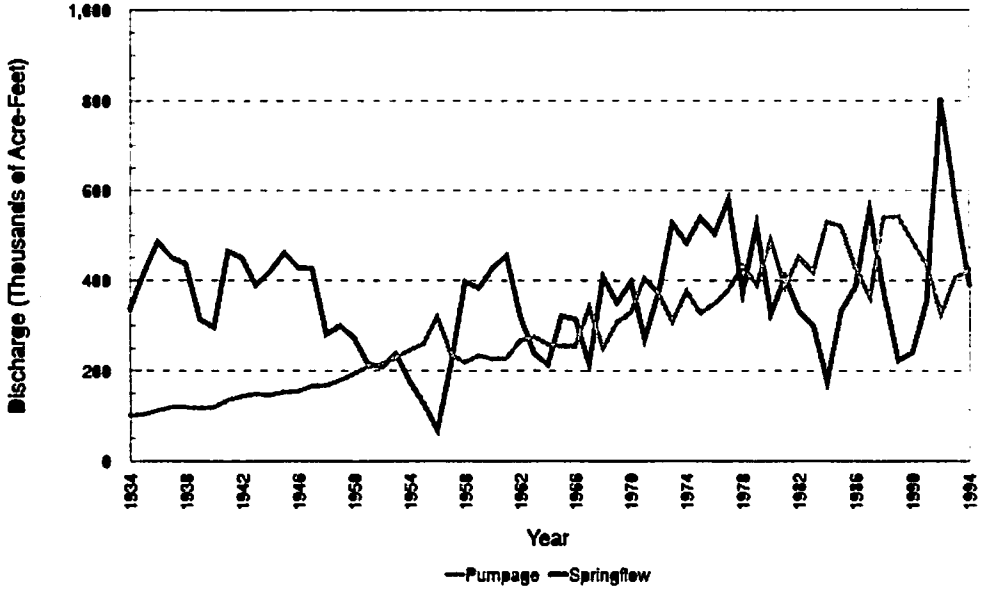


Table 5.3 Groundwater discharge from the Edwards aquifer, 1995 (Measured in thousands of acre-feet).

County	Irrigation	Municipal /Military	Domestic /Stock	Industrial	Springs	Total
Bexar	8.3	229.1	**7.6	22.3	5.2	272.2
Comal	0.2	3.4	0.2	13.2	218.5	235.1
Hays	0.1	11.4	0.6	1.5	114.4	127.9
Medina	28.6	5.8	0.8	–	–	35.2
Uvalde	58.0	4.7	2.0	0.4	23.9	88.9
Kinney	0.6	1.0	0.3	–	–	1.9
Total	95.6	255.0	11.6	37.3	361.5	761.2

Differences may occur due to rounding procedures. ** - The USGS change method of calculating Domestic/Livestock pumping which significantly decreased the estimate for 1995.
Data Source - USGS, 1996.

Table 5.4 Annual estimated Edwards aquifer groundwater discharge by use, 1955-1995 (Measured in thousands of acre-feet).

Year	Irrigation	Municipal	Domestic & Stock	Industrial Commercial	Springs
1955	85.2	120.5	30.1	25.1	127.8
1956	127.2	138.3	28.9	22.4	69.8
1957	68.8	116.1	29.8	22.6	219.2
1958	47.2	113.7	33.4	25.1	398.2
1959	60.0	118.9	31.5	24.2	384.5
1960	54.9	121.1	29.1	23.3	428.3
1961	52.1	124.5	29.6	22.2	455.3
1962	72.7	143.7	28.8	22.8	321.1
1963	75.4	151.8	27.8	21.8	239.6
1964	72.8	140.2	26.3	21.7	213.8
1965	68.0	138.8	27.0	22.3	322.8
1966	68.2	141.8	23.3	22.6	315.3
1967	119.4	171	25.1	25.8	216.1
1968	59.3	146.9	25.5	20.0	408.3
1969	95.2	162.0	29.2	21.1	351.2
1970	110.1	167.5	29.3	22.5	397.7
1971	159.4	196.2	28.6	22.6	272.7
1972	128.8	190.5	30.8	21.1	375.8
1973	82.2	177.1	32.3	18.8	527.6
1974	140.4	174.6	33.5	15.1	483.3
1975	96.4	182.5	33.6	15.3	540.4
1976	118.2	182.1	34.6	14.7	503.9
1977	124.2	205.3	38.1	13.0	560.3
1978	165.8	214.2	40.3	11.5	375.5
1979	126.8	208.9	40.7	15.2	523.0
1980	177.9	256.2	43.3	13.7	328.3
1981	101.8	231.8	40.9	12.6	407.3
1982	130.0	268.6	39.5	15.0	333.3
1983	115.9	249.2	38.8	14.7	301.5
1984	191.2	287.2	36.2	15.2	178.3
1985	203.1	263.7	39.2	16.5	334.0
1986	104.2	266.3	42.0	16.8	388.0
1987	40.9	260.9	43.5	18.7	557.9
1988	193.1	286.2	41.9	18.8	369.7
1989	196.2	285.2	38.2	22.9	224.1
1990	172.9	254.9	37.9	23.7	240.6
1991	88.5	240.5	39.5	67.5	354.6
1992	27.1	236.5	34.8	29.0	602.8
1993	69.3	252.0	49.9	36.1	589.4
1994	104.5	247.0	33.9	39.3	390.2
1995	95.6	255.0	**11.6	37.3	361.3
Average(1955-1995)	107.1	197.3	33.6	22.2	371.0
Median(1955-1995)	101.8	190.5	33.5	21.8	369.7
Average(1985-1995)	109.2	258.5	37.3	31.0	427.9
Median(1985-1995)	99.9	255.0	38.9	26.4	378.9

Differences may occur due to rounding procedures.
Data Source - USGS and Edwards Aquifer Authority, 1996.
** - The USGS change method of calculating Domestic/Livestock pumping which significantly decreased the estimate for 1995.

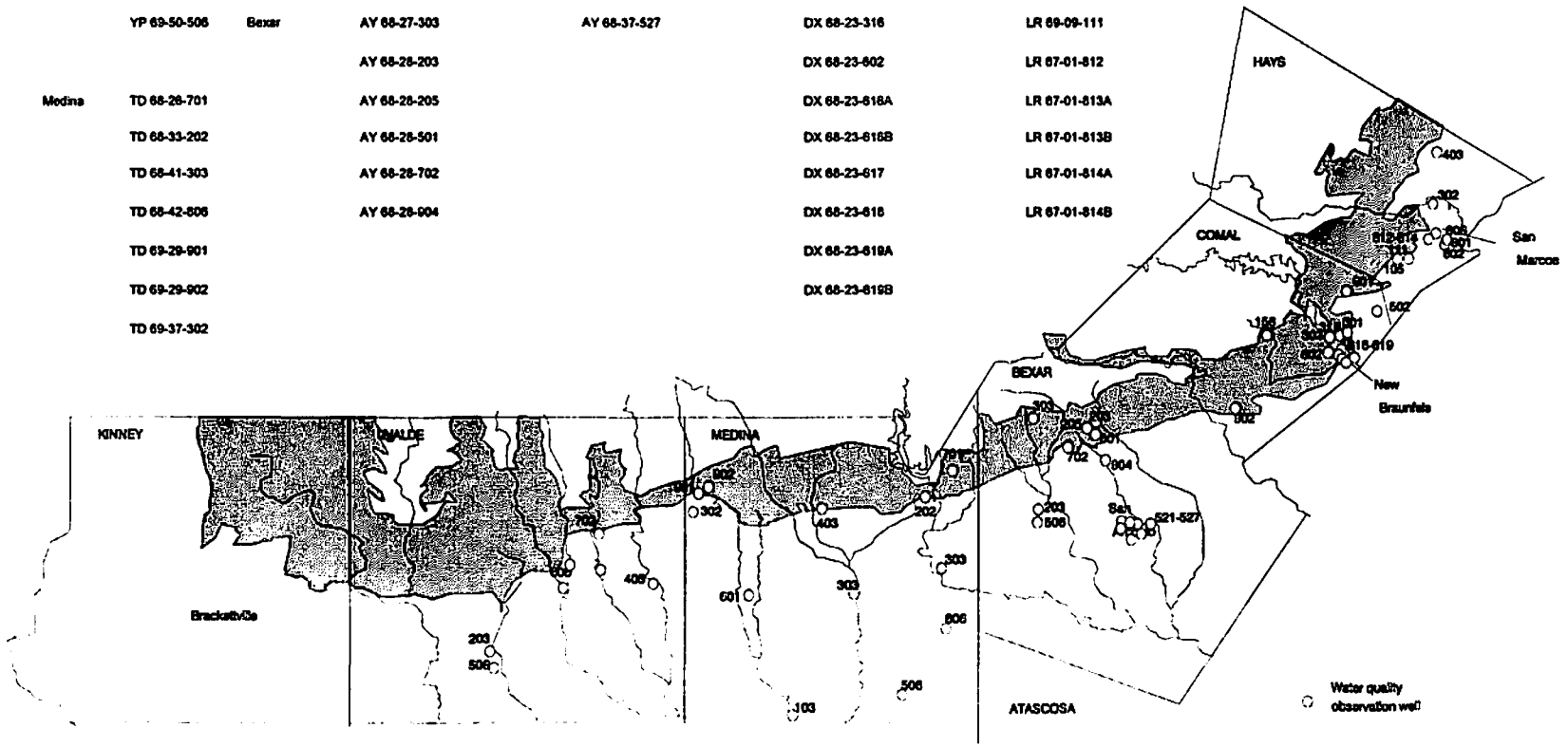
6.0 WATER QUALITY

The Authority, in cooperation with the USGS and the TWDB, has conducted a systematic program of water quality data collection since 1968. Through this cooperative effort, the Authority has monitored and maintained a network of wells, springs, and stream sites across the entire area of the Edwards aquifer. Analyses of these data have been used by the Authority to determine changes in aquifer water quality. A bulletin has been published annually to report the results from the sample analyses obtained from the data collection network.

In 1995, the Authority collected water quality samples from 58 wells and three springs. The location of these wells and springs are shown in **Figure 6.1.** These samples were analyzed for 74 constituents and parameters. The analyses included common organic constituents, nutrients, dissolved organic carbon, metals, pesticides, and volatile organic compounds. Typical standards for these parameters are listed in **Table 6.1.** Minor elements (metals) were sampled in 41 wells during 1995 (**Appendix 10.2**). Laboratory analyses indicated that 33 wells contained metal concentrations slightly above the minimum analytical detection levels for the constituents. These data have been documented by the testing laboratory under detection limits set through duplication of analytical methods to obtain reasonable confidence levels. Concentrations slightly above minimum

Figure 6.1 Edwards Aquifer Authority water quality monitoring sites sampled,1995.

County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number	County	Well I.D. Number
Uvalde	YP 69-38-702	Medina	TD 69-40-403	Bexar	AY 68-37-521	Comal	DX 68-15-901	Hays	LR 58-58-403
	YP 69-43-302	(continued)	TD 69-46-601	(continued)	AY 68-37-522		DX 68-16-502		LR 67-01-302
	YP 69-43-606		TD 69-47-303		AY 68-37-523		DX 68-22-902		LR 67-01-501
	YP 69-44-102		TD 69-56-508		AY 68-37-524		DX 68-23-156		LR 67-01-602
	YP 69-45-404		TD 69-63-103		AY 68-37-525		DX 68-23-301		LR 67-01-606
	YP 69-50-203				AY 68-37-526		DX 68-23-303		LR 67-09-105
	YP 69-50-506	Bexar	AY 68-27-303		AY 68-37-527		DX 68-23-316		LR 69-09-111
			AY 68-28-203				DX 68-23-602		LR 67-01-812
Medina	TD 68-26-701		AY 68-28-205				DX 68-23-616A		LR 67-01-813A
	TD 68-33-202		AY 68-28-501				DX 68-23-616B		LR 67-01-813B
	TD 68-41-303		AY 68-28-702				DX 68-23-617		LR 67-01-814A
	TD 68-42-606		AY 68-28-904				DX 68-23-618		LR 67-01-814B
	TD 69-29-901						DX 68-23-619A		
	TD 69-29-902						DX 68-23-619B		
	TD 69-37-302								



detection levels are not considered to be reproducible quantitative values, and must be viewed with a degree of caution. The American Chemical Society has defined the limit of detection of any analyte concentration to be three times the standard deviation of a mean blank signal, and goes further to define the limit of quantification to be 10 times the standard deviation before the result can be considered as a quantifiable and reproducible value (Analytical Chemistry, vol.52, no.14, 1980). The analytical values in the subject wells are extremely low in magnitude and in no case were any of these parameters more than 20% of the maximum contaminant level (MCL). These analytical values all correspond to typical aquifer results for minor element content, as seen in **Table 6.1**.

Samples from 21 wells in Comal, Hays, Uvalde and Medina Counties were sampled for pesticides. Each well was tested for up to 20 pesticides at analytical detection levels below those of the MCL's posted by the U.S. Environmental Protection Agency (EPA) in the National Primary Drinking Water Regulations. No pesticides were observed at or above the minimum analytical detection level for any of the wells sampled during the 1995 water quality study.

MCLs for nine volatile organic compounds are given in **Table 6.2**. MCLs are established by the EPA, and are enforceable federal standards. While these

Table 6.1 Groundwater Quality Standards

Parameter	Current Maximum or Secondary Contaminant Levels	"Edwards Aquifer Typical Range of Results"
pH	-	6.5-8.0
Hardness (mg/L)	-	250-300
Non-carbonate hardness	-	20-50
Calcium (Ca) (mg/L)	-	80-120
Magnesium (Mg) (mg/L)	-	10-20
Sodium (Na) (mg/L)	-	3-10
Potassium (K) (mg/L)	-	1-2
Bicarbonate (CO_3)	-	250-400
Carbonate (CO3) (mg/L)	-	0
Sulfate (SO4) (mg/L)	250*	10-30
Chloride (Cl) (mg/L)	250*	10-30
Fluoride (F) (mg/L)	4	0.1-0.5
Dissolved Solids (mg/L)	500*	250-450
Silica (SiO2) (mg/L)	-	10-20
Nutrients		
Total Nitrate Nitrogen (mg/L)	10	0-0.1
Total Nitrite Nitrogen (mg/L)	-	0-0.1
Total Ammonia Nitrogen (mg/L)	0.5	
Total Phosphorus (mg/L)	-	
Bacteria & Biological Parameters		
Biochemical Oxygen Demand	-	0-1
Total Organic Carbon	-	1-5
Detergents (MBAS)	-	0-0.1
Total Coliform (colonies/100ml)	10,000 (Raw water for drinking water supplies)	0-5000
Fecal Coliform (colonies/100ml)	2,000 (Raw water for drinking water supplies)	0-150
Fecal Streptococci	-	
Metals		
Arsenic (As) (µg/L)	50	0-2
Cadmium (Cd) (µg/L)	5	0-1
Chromium (Cr) (µg/L)	100	0-15
Copper (Cu) (µg/L)	1000*	0-40
Iron (Fe) (µg/L)	300*	0-500
Lead (Pb) (µg/L)	50	0-10
Manganese (Mn) (µg/L)	50*	0-50
Mercury (Hg) (µg/L)	2	0-1.5
Zinc (Zn) (µg/L)	5000*	0-2000
Nickel (Ni) (µg/L)	-	0-4

Table 6.1 (Continued)

Parameter	Current Maximum or Secondary Contaminant Levels	"Edwards Aquifer Typical Range of Results"
Pesticides		
Aldrin (µg/L)	1	0
Chlordane (µg/L)	3	0
DDD (µg/L)	-	0
DDE (µg/L)	-	0
DDT (µg/L)	50	0
Heptachlor (µg/L)	0.1	0
Heptachlor epoxide (µg/L)	-	0
Lindane (µg/L)	0.2	0
Mirex (µg/L)	-	0
Toxaphene (µg/L)	3	0
Diazinon (µg/L)	-	0
Ethion (µg/L)	-	0
Malathion (µg/L)	-	0
Methyl Parathion (µg/L)	-	0
Methyl Trithion (µg/L)	-	0
Parathion (µg/L)	-	0
Trithion (µg/L)	-	0
2, 4D (µg/L)	70	0
2, 4-DP (µg/L)	-	0
2, 4, 5-T (µg/L)	2	0
Silvex (µg/L)	50	0
PCB (µg/L)	-	0
Endosulfan (µg/L)	-	0
Ethyl trithion (µg/L)	-	0
Perthane (µg/L)	-	0
Toxaphene (µg/L)	-	0

* - Secondary Maximum Contaminant Level

Data Source - EPA maximum contaminant levels, 1993.

levels are detectable, they are well below the limits set by current EPA drinking water standards. Volatile organic sampling in 1995 consisted of 11 wells distributed in all five counties. The samples showed no detectable levels of any volatile organic compounds.

Table 6.2 Volatile Organic Compounds.

Parameter	Maximum Contaminant Level	"Edwards Aquifer Typical Result"
Benzene (µg/L)	5	0
Carbon tetrachloride (µg/L)	5	0
1, 4-Dichlorobenzene (µg/L)	75	0
1, 2-Dichloroethane (µg/L)	5	0
1, 1-Dichloroethylene (µg/L)	7	0
Tetrachloroethylene (µg/L)	5	0
1, 1, 1-Trichloroethane (µg/L)	200	0
Trichloroethylene (µg/L)	5	0
Vinyl Chloride (µg/L)	2	0

Source - EPA maximum contaminant levels, 1993.

Overall, results of the 1995 water quality sampling and analysis program illustrate the continued excellent quality of water in the Edwards aquifer. The classification of groundwater quality is based on the concentration of minerals dissolved in water, termed total dissolved solids (TDS), as shown in **Table 6.3.**

Table 6.3 Classification of groundwater quality based on TDS.

Description	TDS Concentration (mg/L)
Fresh	Less than 1,000
Slightly saline	1,000 to 3,000
Moderately saline	3,000 to 10,000
Very saline	10,000 to 35,000
Brine	More than 35,000

Source - Winslow and Kister, 1956.

A transitional freshwater/saline-water interface (formerly called the bad water line), defined by TDS values greater than 1000 mg/L, represents the downdip hydrologic boundary of the Edwards aquifer. Water updip from this arbitrary

boundary is considered to be fresh potable water. South and southeast of the interface, water from the aquifer is slightly to moderately saline, and contains moderate to large concentrations of dissolved chloride and sulfate. The interface varies both laterally and vertically, as determined in several wells near the boundary. In some of these wells, fresh water has been encountered in the upper portion and saline water in the lower portion of the Edwards aquifer. Other wells along the interface have encountered the opposite vertical distribution with saline-water zones overlying freshwater zones.

Wells adjacent to the freshwater/saline-water interface have been monitored for possible water quality changes by the Authority, USGS, San Antonio Water System (SAWS), TWDB and other entities since the early 1960's. Various reports have theorized that during periods of drought and corresponding low aquifer levels, water quality could deteriorate in wells in close proximity to the interface, due to saline water encroachment updip into the freshwater portion of the aquifer. The possibility of saline water encroachment and subsequent deterioration of water quality in the aquifer led to the construction of three water quality monitor well transects across the freshwater/saline-water interface. The monitor wells were drilled and tested by the Authority and the USGS with the cooperation of local entities. These transects are located in San Marcos, New Braunfels and San Antonio.

Table 6.4 consists of water quality data compiled from transect wells in San Antonio and New Braunfels. These wells have been sampled on a monthly basis since the 1980's. Data from the San Antonio transect well, AY-68-37-526, extends back to 1986, and includes the drought period of 1988 to 1989 represented by lower than normal water levels in well J-17 (the Bexar County index well).

Figure 6.2 illustrates that normal changes in the aquifer water level have little effect on water quality in these wells, which are directly adjacent to the freshwater/saline-water interface. The data suggest, however, that if water levels approach record lows, there may be a slight degradation of water quality in specific wells immediately adjacent to the interface. **Table 6.4** and **Figure 6.2** show that when the water level in well J-17 was below 630 feet, specific conductance values rose slightly in transect well AY-68-37-526.

Figure 6.2 Water quality changes in San Antonio and New Braunfels transect wells compared to water levels in J-17 (Bexar County index well), 1988 - 1995

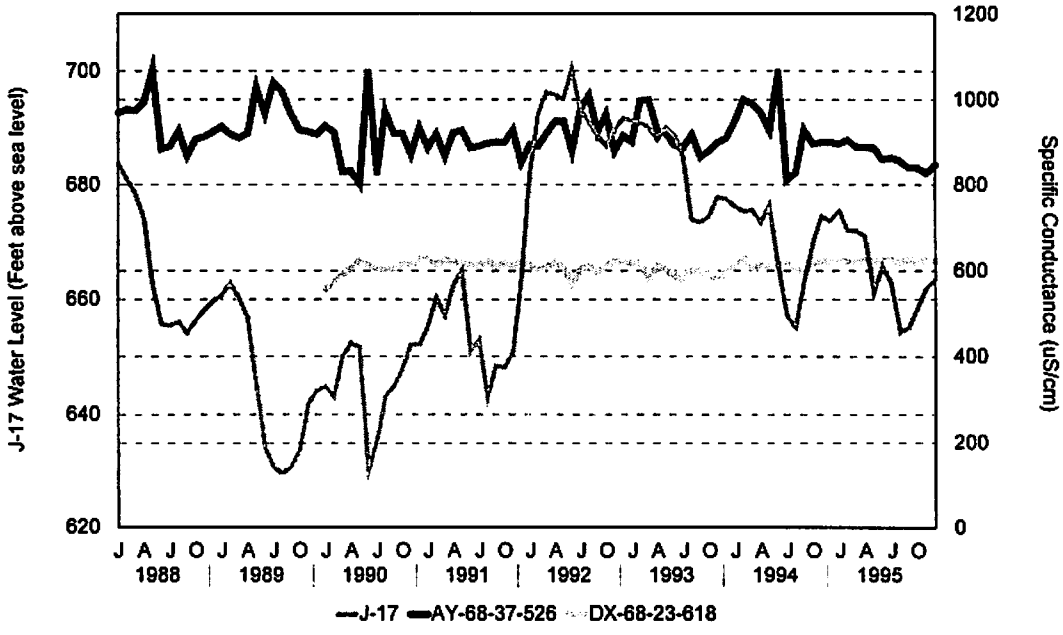


Table 6.4 Water quality data compiled from transect wells in San Antonio and New Braunfels reported as conductivity values as compared to water levels at Bexar County index well (J-17, Dodd Field).

Month	Bexar County index well (feet above sea level)	San Antonio AY-68-37-526 (D-1) (µS/cm)	New Braunfels DX-68-23-618 (µS/cm)
January 1988	683.8	969	—
February	681.1	977	—
March	678.6	974	—
April	674.1	994	—
May	662.9	1070	—
June	655.7	884	—
July	655.5	891	—
August	656.1	926	—
September	654.2	868	—
October	656.4	908	—
November	658.2	914	—
December	659.7	925	—
January 1989	660.8	937	—
February	662.9	920	—
March	660.4	911	—
April	656.8	922	—
May	645.2	1030	—
June	634.3	968	—
July	630.7	1040	—
August	629.6	1020	—
September	630.7	967	—
October	633.8	930	—
November	642.0	—	—
December	644.1	920	—
January 1990	644.9	939	556
February	643.2	924	—
March	650.0	832	—
April	652.4	832	—
May	651.7	803	625
June	630.2	1070	—
July	635.6	830	605
August	643.2	973	—
September	644.9	921	605
October	647.9	922	617
November	652.2	873	616
December	652.1	934	627
January 1991	655.3	888	630
February	660.3	920	615
March	657.2	868	627
April	662.5	923	622
May	665.1	928	619
June	651.0	888	617
July	653.0	891	611
August	643.1	898	626
September	648.5	901	610
October	648.2	—	619
November	650.8	929	612
December	663.3	853	623
January 1992	682.2	895	616
February	692.4	892	604
March	696.3	922	610
April	695.9	949	621
May	695.1	—	606
June	700.3	882	570
July	693.3	978	606
August	691.2	1010	610
September	688.7	925	598
October	686.9	965	—
November	689.7	880	

Table 6.4(Continued)

Month	Bexar County Index well (feet above sea level)	San Antonio AY-68-37-526 (D-1) (µS/cm)	New Braunfels DX-68-23-618 (µS/cm)
December	691.8	916	—
January 1993	691.3	902	620
February	691.0	997	618
March	690.2	1000	580
April	688.1	928	612
May	690.2	923	603
June	688.9	894	—
July	684.9	888	577
August	674.0	918	602
September	673.6	866	600
October	674.5	—	—
November	677.9	900	580
December	677.6	910	600
January 1994	676.3	950	611
February	675.4	1000	630
March	675.7	990	605
April	673.5	970	615
May	676.5	930	610
June	666.1	1060	610
July	657.2	813	622
August	655.1	829	608
September	662.9	930	594
October	669.8	897	616
November	674.5	900	621
December	673.8	901	623
January 1995	675.5	896	620
February	672.2	906	624
March	672.0	889	620
April	671.2	889	626
May	661.3	887	623
June	665.7	861	627
July	662.9	864	626
August	654.3	857	620
September	655.1	840	627
October	658.4	840	619
November	661.9	828	625
December	663.4	846	622

Data Source: Edwards Aquifer Authority, 1995.

Since 1968 the Authority and its predecessor the Edwards Underground Water District, in cooperation with the USGS, has monitored water quality in the Edwards aquifer. Water quality data from these monitoring activities have been presented in various bulletins and reports with detectable concentrations of certain contaminants noted. A short background on several of these contaminants and their significance and potential health effects follows.

Lead - Lead is a highly toxic metal. Exposure to lead in high concentrations can cause anemia, kidney damage and mental retardation. High levels of lead in the blood can delay physical and mental development in infants, and can impair mental abilities in children. It is also classified by the EPA as a probable human carcinogen.

Lead occurs in drinking water primarily as a result of corrosion of pipes and other plumbing materials. Lead levels are monitored in public drinking water systems on a regular basis by the TNRCC. The minimum detection limit for lead in water quality sample analysis is 0.01 μg/L, and the maximum contaminant level (MCL) is 15 μg/L. Detectable concentrations of lead in Edwards wells are predominantly found in or near the saline portion of the aquifer, where corrosion of casing and pumping equipment occurs rapidly. Lead has also been detected in monitor wells adjacent to closed landfills and industrial sites. As of 1994, no significant recurring levels of lead exceeding the MCL have been found in the Edwards aquifer region.

Mercury - Mercury is known to cause damage to the central nervous system, and is a known human carcinogen. It occurs naturally in groundwater associated with highly mineralized fluids in the vicinity of volcanic activity, or due to geothermal heating of deep brines. Mercury is also used in some batteries,

paints, pesticides and some electrical components, and therefore can possibly be detected in the vicinity of landfills and manufacturing sites that produced these items. The MCL for mercury is 2 μg/L. The minimum detection limit is 0.01 μg/L. The primary occurrences of detectable concentrations of mercury have been found in saline-water wells and monitor wells used to investigate abandoned landfills and industrial sites in Bexar County. No detectable concentrations of mercury were measured during the 1995 sampling program.

Volatile Organic Chemicals (VOCs) - At least five of the chemicals on this list are known or suspected carcinogens when ingested by humans. These include benzene, carbon tetrachloride, 1,2-dichloroethane, trichloroethylene (TCE), and vinyl chloride. Several other VOCs are regulated based on chronic toxicity.

These chemicals occur as byproducts of industrial activity, primarily used as solvents or cleaning agents in industrial processes. Because of their toxicity, MCLs for these contaminants are very low, ranging from 2 to 5 μg/L for most of the VOCs. Minimum detection levels for VOCs predominantly range from 0.01 to 0.03 μg/L.

Occurrences of significant detectable concentrations of VOCs have been uncommon in the Edwards aquifer. Specific sites of former industrial and landfill

activity in Uvalde and Bexar counties have been investigated by the Authority, as well as other local, state and federal agencies. No new reported instances of VOC contamination were investigated by Authority staff during 1995.

Secondary Drinking Water Standards - These standards are non-enforceable and are set for contaminants that may affect the aesthetic qualities of drinking water, such as odor or appearance. **Table 6.4** is a list of the current secondary standards. While these contaminants are not considered to affect public health, their presence can result in an adverse effect on public welfare.

Table 6.5 - Secondary drinking water standards.

Contaminant	Secondary Maximum Contaminant Level (SMCL) (mg/L)
Aluminum	0.05-0.2
Chloride	250
Color	15 color units
Corrosivity	noncorrosive
Fluoride	2.0
Iron	0.3
Manganese	0.05
pH	6.5-8.5
Silver	0.10
Sulfate	250
Total Dissolved Solids (TDS)	500-1000
Zinc	5

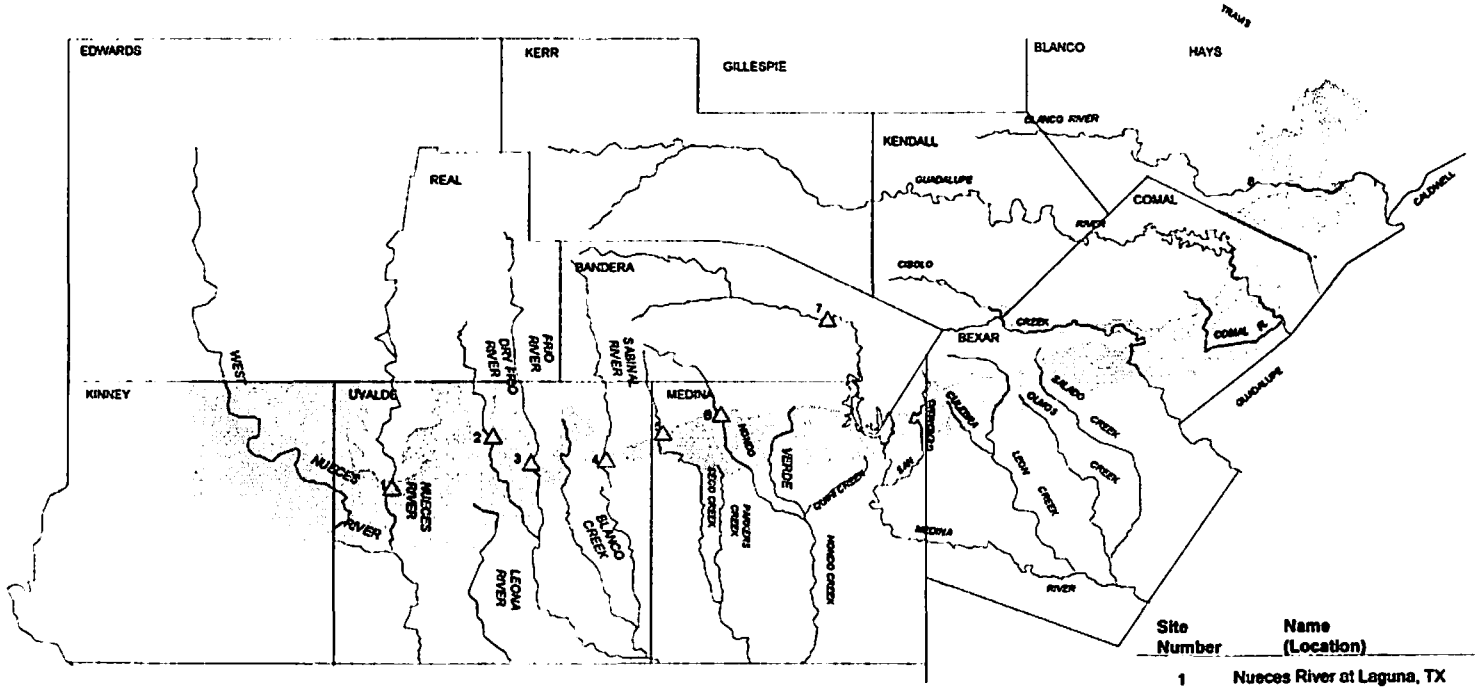
Data Source - EPA, 1993.

The Edwards Aquifer Authority's water quality monitoring program will continue to monitor for these contaminants as well as many others, in order to detect and investigate any occurrences of possible contamination to the aquifer. The

Authority continues its programs to protect the water quality of the aquifer through investigating groundwater contamination, identifying and analyzing anomalous data from the Authority's aquifer-wide sampling program, diligently monitoring development activities over the recharge zone, and locating and causing abandoned wells to be plugged. All of these programs are intended to ensure that the quality of water in the aquifer will remain at its current excellent level.

Surface water data is collected at stations upstream of the recharge zone and at stations located throughout the aquifer area. Data from the network of gauging stations can be used as a base level to evaluate the quality of water recharging the aquifer and the sensitivity of water quality resulting from land use in various areas of the Edwards aquifer region. Locations of data collection sites are illustrated in **Figure 6.4.** Laboratory analyses of the samples collected in 1995, as seen in **Appendix 10.2**, indicate no evidence of detectable concentrations of pesticides, volatile organic compounds, or other constituents or parameters in excess of typical standards.

Figure 6.3 Surface water quality monitoring sites, 1995.



Site Number	Name (Location)
1	Nueces River at Laguna, TX
2	Dry Frio River near Reagan, TX
3	Frio River at Concan, TX
4	Sabinal River near Sabinal, TX
5	Seco Creek at Miller Ranch near Utopia, TX
6	Hondo Creek near Tarpley, TX
7	Medina River at Bandera, Tx

7.0 SUMMARY

The average estimated annual groundwater recharge to the Edwards aquifer in the San Antonio area from 1934 through 1995 was 674,200 acre-feet. Recharge in 1995 was 531,300 acre-feet, which was well below the regional average. The lowest annual recharge of 43,700 acre-feet occurred in 1956 and the highest annual recharge of 2,486,000 acre-feet occurred in 1992.

The estimated annual discharge from the Edwards aquifer through wells and springs in 1995 was 761,000 acre-feet. The lowest annual discharge through wells and springs was 388,800 acre-feet which occurred in 1955.

Water level data for wells during 1995 reflected a general decrease in Edwards aquifer groundwater in storage during the year.

In 1995, the Edwards Aquifer Authority collected water quality samples from 58 wells, three springs, and seven streams and rivers. These samples were analyzed for 74 constituents and parameters which included common organic constituents, nutrients, dissolved organic carbon, metals and VOCs. Laboratory analyses indicated that samples from 33 wells contained detectable metal concentrations. These concentrations were well below the MCLs for those constituents. No detectable concentrations of pesticides or VOCs were measured in the wells sampled in 1995.

Results of the Authority's 1995 water quality monitoring program illustrate the continued excellent quality of water in the Edwards aquifer.

8.0 DEFINITIONS

Technical terms and abbreviations used in this report are defined as follows:

Acre-foot (ac-ft)	The quantity of water required to cover one (1) acre to a depth of one (1) foot and is equivalent to 43,560 ft^3 (cubic feet), about 325,900 gal (gallons), or 1,233 m^3 (cubic meters).
Aquifer	A formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield economical quantities of water to wells and springs.
Artesian well	A well deriving its water from a confined aquifer in which the water level stands above the ground surface.
Artesian zone	An area where the water level from a confined aquifer stands above the top of the strata in which the aquifer is located.
Bacteria	Microscopic unicellular organisms, typically spherical, rodlike, or spiral and threadlike in shape, often clumped in colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials. (Measured in colonies 100 ml)
Conductivity	A measure of the ease with which a current can be caused to flow through a material under the influence of an applied electric field. Generally in water, the higher the total dissolved solids, the higher the electrical conductivity.
Confined aquifer	An artesian aquifer or an aquifer bounded above and below by impermeable strata, or by strata with lower permeability than the aquifer itself.
Discharge	The volume of water that passes a given point within a given period of time.
Drainage basin	A part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.
Edwards Underground Water District	The regional governmental entity that was the predicessor to the Edwards Aquifer Authority.

Freshwater/ saline-water interface	The interface or area which separates TDS values less than 1000 mg/L (freshwater) from TDS values greater than 1000 mg/L (saline-water). Commonly referred to as the "Bad Water Line".
Gauging station	A particular site which systematically collects hydrologic data such as streamflow, springflow or precipitation.
Groundwater Divide	A ridge in the water table or other potentiometric surface from which the ground water represented by that surface moves away in both directions.
Micrograms per liter (UG/L,µg/L)	A unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. 1000 micrograms per liter is equal to 1 milligram per liter.
Milligrams per liter (Mg/L,mg/L)	A unit for expressing the concentration of chemical constituents in solution as mass (milligrams) of solute per unit volume (liter) of water. 1000 milligrams per liter is equal to 1 gram per liter.
Potentiometric surface	An imaginary surface representing the total head of groundwater and defined by the level that water will rise in a well.
Real Time Data	Instantaneous or near instantaneous information used to monitor a current condition such as precipitation, stream flow, spring discharge etc.
Recharge	The process involved in absorption and addition of water to the zone of saturation.
Recharge zone	The area in which water infiltrates into the ground and eventually reaches the zone of saturation in one or more aquifers.
Specific conductance	A measure of the ability of water to conduct an electrical current. Expressed in micro-siemens per centimeter (µS/cm) at 25°C.
Ten-year floating average	The calculated mean of the current year plus the previous nine years in a graph.
Total Dissolved Solids (TDS)	The concentration of dissolved minerals in water, expressed in units of milligrams per liter (mg/l).
Transect wells	A group of water quality monitoring wells located at particular

	a site which are positioned to monitor water quality changes, such as across the freshwater/saline-water interface.
Unconfined aquifer	An aquifer, or a portion of an aquifer, having a water table and containing groundwater that is not under pressure beneath relatively impermeable rocks.
Underflow	The movement of water flowing beneath the bed or alluvial plain of a surface stream.
Water table	The interface between the zone of saturation and the zone of aeration where the surface pressure of unconfined groundwater is equal to the atmospheric pressure.
Water level observation well	A water well used to measure the water level or potentiometric surface of water baring strata such as the Edwards aquifer, Leona Gravel aquifer, and Lower Glen Rose aquifer.
Zone of aeration	The subsurface zone where the voids and pore spaces are filled with water under less pressure than that of the atmosphere and air.
Zone of saturation	The subsurface zone in which all voids and pore spaces are filled with water under pressure greater than that of the atmosphere.

9.0 REFERENCES

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10.0 APPENDIX

Appendix 10.1 - Water Level Data

SWT Farms (LR 67-09-110) Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	585.1	585.1	584.6	585.0	585.2	588.0	586.9	585.7	585.1	585.0	N/D	584.5
2	585.2	585.1	584.6	585.0	585.2	588.3	586.9	585.7	585.1	585.0	N/D	584.5
3	585.2	585.1	584.6	585.0	585.2	588.3	586.8	585.7	585.1	585.0	N/D	584.5
4	585.2	585.0	584.6	585.0	585.2	588.4	586.9	585.7	585.1	585.0	N/D	584.4
5	585.3	585.0	584.6	585.0	585.1	588.4	586.8	585.7	585.1	585.0	N/D	584.4
6	585.3	585.0	584.7	585.1	585.1	588.4	586.7	585.7	585.0	584.9	N/D	584.4
7	585.3	585.0	584.8	585.2	585.1	588.4	586.7	585.6	585.0	584.9	N/D	584.4
8	585.3	585.0	584.7	585.3	585.1	588.3	586.7	585.6	585.0	584.9	N/D	584.4
9	585.3	585.0	584.7	585.3	585.1	588.3	586.6	585.6	584.9	584.9	N/D	584.4
10	585.3	585.0	584.7	585.3	585.1	588.2	586.5	585.6	584.9	584.8	N/D	584.4
11	585.3	585.0	584.7	585.3	585.1	588.1	586.5	585.6	584.9	584.8	N/D	584.4
12	585.3	584.9	584.8	585.3	585.1	588.0	586.5	585.5	584.9	N/D	N/D	584.4
13	585.3	584.9	585.0	585.3	585.1	588.0	586.4	585.5	584.9	N/D	N/D	584.4
14	585.3	584.8	585.1	585.3	585.1	587.9	586.4	585.5	585.1	N/D	N/D	584.4
15	585.3	584.8	585.1	585.3	585.1	587.9	586.3	585.5	584.9	N/D	N/D	584.4
16	585.3	584.8	585.1	585.3	585.1	587.8	586.3	585.5	584.9	N/D	N/D	584.3
17	585.3	584.7	585.1	585.3	585.1	587.7	586.2	585.4	584.9	N/D	N/D	584.4
18	585.3	584.7	585.1	585.3	585.0	587.7	586.2	585.4	584.8	N/D	N/D	584.4
19	585.3	584.7	585.1	585.3	585.0	587.6	586.2	585.4	584.8	N/D	N/D	584.3
20	585.2	584.7	585.1	585.3	585.0	587.6	586.1	585.4	585.1	N/D	N/D	584.3
21	585.2	584.6	585.1	585.3	585.0	587.5	586.1	585.3	585.2	N/D	N/D	584.3
22	585.2	584.5	585.1	585.3	585.0	587.4	586.0	585.3	585.2	N/D	N/D	584.3
23	585.2	584.5	585.0	585.3	585.0	587.4	586.0	585.3	585.2	N/D	N/D	584.3
24	585.2	584.5	585.0	585.3	585.1	587.3	586.0	585.2	585.2	N/D	N/D	584.3
25	585.1	584.5	585.0	585.3	585.0	587.3	586.0	585.2	585.2	N/D	N/D	584.3
26	585.1	584.5	585.0	585.3	584.9	587.2	585.9	585.2	585.1	N/D	N/D	584.3
27	585.1	584.5	585.0	585.3	585.0	587.2	585.9	585.2	585.1	N/D	N/D	584.3
28	585.1	584.5	585.0	585.3	584.9	587.1	585.8	585.2	585.1	N/D	N/D	584.3
29	585.1		585.0	585.3	584.9	N/D	585.8	585.1	585.1	N/D	N/D	584.3
30	585.1		585.0	585.2	584.4	N/D	585.8	585.1	585.0	N/D	584.5	584.3
31	585.1		585.0		587.5		585.7	585.1		N/D		584.3
Landa Park (DX 68-23-302) Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	626.8	626.7	626.4	626.3	626.1	625.7	625.7	625.0	624.6	624.9	624.9	625.1
2	626.8	626.7	626.4	N/D	626.0	625.8	625.8	625.0	624.5	624.9	624.9	625.1
3	626.8	626.7	626.4	N/D	626.0	625.8	625.8	625.0	624.6	625.0	624.9	625.2
4	626.8	626.7	N/D	626.3	625.9	625.8	625.9	625.0	624.6	625.0	625.0	625.2
5	626.8	626.7	N/D	626.4	625.8	625.9	625.9	625.0	624.6	625.0	625.0	625.2
6	626.8	626.7	N/D	626.4	625.8	625.9	625.9	624.9	624.6	625.0	625.0	625.2
7	626.8	626.6	N/D	626.4	625.7	625.9	625.9	624.9	624.6	624.9	625.0	625.1
8	626.8	626.6	N/D	626.4	625.7	625.9	625.9	624.9	624.6	624.9	625.0	625.1
9	626.8	626.6	N/D	626.4	625.7	625.9	625.9	624.8	624.4	624.9	625.0	625.1
10	626.8	626.6	N/D	626.4	625.7	625.8	625.9	624.7	624.4	624.9	625.0	625.2
11	626.8	626.6	N/D	626.4	625.7	626.0	625.9	624.7	624.4	624.9	625.0	625.2
12	626.8	626.5	N/D	626.4	625.7	625.9	625.9	624.7	624.4	624.9	625.0	625.2
13	626.8	626.5	N/D	626.4	625.7	625.9	625.9	624.7	624.4	624.9	625.1	625.1
14	626.8	626.5	N/D	626.4	625.7	626.0	625.8	624.8	624.4	624.8	625.1	625.1
15	626.8	626.5	N/D	626.4	625.7	626.0	625.8	624.8	624.4	624.8	625.0	625.1
16	626.8	626.5	N/D	626.4	625.7	626.0	625.8	624.7	624.4	624.8	625.0	625.2
17	626.8	626.5	N/D	626.4	625.6	626.0	625.8	624.7	624.4	624.8	625.0	625.2
18	626.8	626.5	N/D	626.4	625.5	626.0	625.7	624.6	624.4	624.8	625.0	625.2
19	626.8	626.5	N/D	626.4	625.5	626.0	625.6	624.6	624.3	624.7	625.1	625.2
20	626.8	626.5	626.4	626.4	625.4	626.0	625.5	624.6	624.5	624.7	625.1	625.2
21	626.8	626.5	626.4	626.4	625.3	626.0	625.5	624.6	624.6	624.7	625.1	625.2
22	626.8	626.5	N/D	626.4	625.3	625.9	625.4	624.6	624.7	624.8	625.1	625.2
23	626.8	626.5	N/D	626.4	625.2	625.9	625.4	624.6	624.7	624.8	625.1	N/D
24	626.8	626.5	N/D	626.4	625.4	625.8	625.3	624.6	N/D	624.7	625.1	N/D
25	626.8	626.4	N/D	626.4	625.2	625.7	625.2	624.6	624.9	624.7	625.2	N/D
26	626.7	626.4	N/D	626.3	625.2	625.7	625.1	624.6	624.9	624.7	625.2	625.3
27	626.7	626.4	N/D	626.3	625.3	625.6	625.1	624.6	624.9	624.7	625.2	625.3
28	626.7	626.4	626.4	626.3	625.3	625.5	625.0	624.6	624.9	624.7	625.2	625.2
29	626.7		626.4	626.2	625.4	N/D	625.0	624.6	624.9	624.9	625.2	625.2
30	626.7		626.4	626.2	625.7	N/D	625.0	624.6	624.9	624.7	625.2	625.3
31	626.7		626.3		625.7		625.0	624.6		624.8		625.3

J17 (AY 68-37-203)) Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	676.3	674.2	671.4	671.8	664.6	667.2	665.5	656.8	653.7	660.2	659.4	662.8
2	676.5	674.0	671.6	671.5	663.7	667.5	666.1	656.7	653.6	660.1	660.1	663.0
3	676.3	673.8	671.5	671.2	663.1	667.9	666.4	657.0	653.1	660.5	660.5	663.2
4	676.4	673.7	672.0	671.4	662.4	668.2	667.2	656.4	652.7	660.4	661.3	663.0
5	676.3	673.6	672.3	672.3	661.1	668.2	667.6	655.8	651.7	660.1	661.8	663.0
6	676.5	673.1	672.0	672.8	660.5	667.7	667.6	655.3	651.6	659.8	662.0	662.8
7	676.2	673.1	672.2	672.8	660.3	667.3	667.9	654.3	651.1	659.7	662.0	662.7
8	676.2	672.6	672.1	673.4	661.0	666.9	668.2	654.7	652.6	659.7	661.6	662.9
9	676.0	672.7	672.0	673.3	662.8	666.0	668.4	654.2	653.1	659.4	661.5	663.0
10	675.9	672.6	672.0	673.1	663.6	664.9	668.1	653.8	653.3	658.9	661.6	662.9
11	675.9	672.3	672.1	673.2	663.5	666.4	667.3	653.4	652.9	658.7	661.3	663.0
12	675.8	672.3	672.1	673.2	664.1	667.3	666.9	653.4	652.6	658.5	661.4	662.8
13	675.9	672.2	672.4	672.8	663.9	667.9	666.4	654.8	652.0	658.4	661.3	662.7
14	675.9	672.4	672.8	672.5	663.5	668.4	665.7	654.7	652.6	658.3	660.9	662.5
15	675.9	672.5	673.0	672.5	662.7	668.3	665.4	654.5	653.1	658.4	660.9	662.4
16	675.9	672.4	673.0	672.5	661.5	668.3	664.9	654.0	653.1	658.0	660.6	662.7
17	675.5	672.1	672.8	672.8	660.8	667.9	664.2	653.4	653.1	657.7	661.5	663.3
18	675.5	671.9	672.8	672.2	659.6	667.7	663.1	652.6	652.5	657.4	662.1	663.4
19	675.2	671.9	672.7	672.0	659.0	667.5	662.4	653.2	652.3	657.4	663.0	663.6
20	675.1	671.7	672.4	671.7	658.0	667.2	661.5	653.1	652.8	657.2	663.1	663.6
21	675.1	670.9	672.1	671.1	657.4	666.0	660.6	652.1	657.4	657.6	662.7	663.8
22	675.2	670.8	671.9	670.7	656.5	664.5	660.0	652.7	658.7	657.7	662.8	663.7
23	674.9	670.5	671.6	670.3	656.1	663.2	659.5	652.6	660.1	657.4	663.0	663.8
24	674.7	670.0	671.4	670.1	657.5	661.9	657.7	654.0	660.9	657.2	663.3	664.1
25	674.7	670.2	671.6	669.5	658.6	661.0	657.4	654.4	661.0	657.3	663.3	664.5
26	674.9	671.0	671.5	668.8	659.2	659.9	656.7	654.8	660.9	657.4	663.5	664.6
27	674.9	671.2	671.6	667.8	660.8	659.7	656.0	654.7	660.7	657.2	663.4	664.4
28	674.7	671.4	671.2	667.3	661.9	659.4	655.3	654.1	660.5	657.1	663.0	664.2
29	674.7		671.4	666.5	662.6	663.0	654.8	654.1	660.0	657.1	662.8	664.1
30	674.6		671.6	665.7	664.8	664.6	655.6	653.9	660.3	657.7	663.0	664.4
31	674.4		671.6		666.1		656.6	653.2		658.4		664.9
Seco Creek (TD 69-38-601) Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	885.3	884.0	881.7	880.4	879.3	877.5	876.8	875.3	872.8	874.2	873.9	OOC
2	885.2	883.9	881.6	880.4	879.2	877.4	876.8	875.2	872.8	874.2	873.9	OOC
3	885.2	883.9	881.5	880.4	879.2	877.3	876.8	875.1	872.7	874.1	873.7	OOC
4	885.1	883.6	881.6	880.5	879.0	877.2	876.8	875.1	872.6	874.2	873.6	873.2
5	885.3	883.4	881.5	881.0	878.9	877.1	876.7	874.6	871.5	874.2	873.6	873.2
6	885.3	883.4	881.5	881.0	878.8	877.1	876.6	874.7	870.7	874.0	873.7	873.2
7	885.1	883.4	881.4	880.9	878.9	877.1	876.6	874.6	871.3	874.0	873.6	873.1
8	885.0	883.2	881.1	880.7	878.8	877.0	876.6	874.6	871.7	874.0	873.5	873.1
9	885.0	883.4	881.0	880.8	878.7	876.9	876.6	874.6	871.7	874.0	873.6	872.9
10	885.0	883.4	880.5	880.7	878.6	876.8	876.6	874.5	871.6	874.0	873.6	872.8
11	885.0	882.7	881.0	880.5	878.5	877.5	876.6	874.4	871.3	873.9	873.6	872.8
12	885.0	882.9	881.1	880.3	878.5	877.5	876.6	874.4	871.4	874.0	873.5	872.9
13	885.0	882.9	881.8	880.3	877.9	877.4	876.5	874.3	870.9	874.0	873.5	872.8
14	884.8	882.9	881.8	880.4	878.0	877.3	876.5	874.3	871.1	873.9	873.4	872.8
15	884.8	882.9	881.7	880.3	877.9	877.2	876.4	874.2	871.1	873.4	873.4	872.8
16	884.9	882.8	881.5	879.8	877.9	877.2	876.4	874.1	870.6	873.7	873.3	871.6
17	884.8	882.6	881.4	880.1	877.9	877.1	876.4	874.0	869.9	873.8	873.4	872.0
18	884.8	882.5	881.3	880.0	877.8	877.1	876.3	874.0	870.6	873.4	873.4	872.0
19	884.5	882.5	881.4	880.1	877.6	877.0	876.3	873.9	870.6	873.6	873.5	872.2
20	884.5	882.4	881.3	880.0	876.3	877.0	876.2	873.8	873.1	873.5	873.5	872.2
21	884.5	882.4	881.2	879.9	876.8	877.0	876.2	873.7	874.0	872.8	OOC	872.2
22	884.5	882.3	881.2	879.9	876.8	876.9	876.1	873.6	874.9	873.1	OOC	872.2
23	884.3	882.3	881.1	879.7	876.8	876.8	876.1	873.6	875.1	873.3	OOC	872.0
24	884.2	882.1	881.1	879.7	876.8	876.7	875.2	873.5	875.0	873.3	OOC	872.0
25	884.2	882.1	881.1	879.6	876.7	876.7	875.6	873.4	874.9	873.4	OOC	872.0
26	884.3	882.1	881.0	879.6	876.7	876.6	875.6	873.3	874.7	873.5	OOC	872.0
27	884.4	882.0	880.8	879.5	876.6	876.6	875.5	873.2	874.5	873.5	OOC	872.0
28	884.2	881.9	880.7	879.5	876.6	876.6	875.5	873.1	874.3	873.4	OOC	871.9
29	884.1		880.7	879.5	876.6	876.9	875.5	873.1	874.3	873.3	OOC	871.9
30	884.0		880.6	879.4	876.9		875.4	873.0	874.2	873.3	OOC	871.9
31	884.0		880.5		877.5		875.4	872.9		873.4		872.0

City of Hondo (TD 69-47-306) Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	727.9	726.7	721.5	724.4	713.4	705.1	710.7	704.7	704.5	712.0	710.7	714.2
2	728.3	726.3	722.1	723.9	710.3	706.6	712.1	703.9	704.6	712.2	711.0	714.2
3	728.3	725.9	722.6	724.0	707.9	708.4	713.1	703.7	704.6	712.3	711.2	714.2
4	728.3	725.6	723.0	724.3	706.3	708.4	714.0	704.0	704.6	712.7	711.6	714.1
5	728.9	725.6	723.3	OOC	704.2	706.9	714.5	703.7	704.5	712.6	712.1	714.1
6	728.9	725.0	723.5	OOC	704.3	706.0	715.0	703.0	704.1	712.1	712.7	713.8
7	728.7	724.6	723.4	OOC	OOC	704.5	715.6	703.2	703.9	711.8	712.7	713.7
8	728.7	723.2	723.3	OOC	OOC	702.8	716.2	703.1	704.2	711.9	712.6	713.5
9	728.7	722.8	723.6	OOC	OOC	712.5	716.4	703.8	704.6	711.9	712.6	713.2
10	728.7	722.6	723.8	OOC	OOC	714.6	716.5	703.8	704.7	711.2	712.7	713.3
11	728.7	722.2	724.0	OOC	712.5	OOC	716.3	703.8	704.7	710.9	712.4	713.5
12	728.7	721.3	724.1	OOC	712.9	OOC	715.8	704.1	704.6	710.8	712.4	713.6
13	728.5	721.2	724.4	OOC	712.3	714.6	715.1	704.7	704.2	710.6	712.6	713.7
14	728.3	721.5	724.8	OOC	711.0	715.1	713.9	705.0	704.2	710.4	712.3	713.5
15	728.2	721.6	725.1	OOC	710.3	715.3	712.4	704.6	704.9	710.4	712.3	713.5
16	728.4	721.3	725.3	OOC	707.3	714.9	712.5	704.3	705.0	710.2	711.9	713.5
17	728.3	720.9	725.3	OOC	705.0	713.4	712.2	704.2	704.9	710.0	712.0	713.7
18	728.2	721.3	725.3	OOC	702.3	712.8	711.0	703.4	704.8	710.0	712.6	713.8
19	727.9	720.6	725.3	OOC	699.7	711.8	710.8	703.7	704.8	709.9	713.0	713.7
20	727.9	720.4	725.3	OOC	OOC	707.6	710.0	704.0	705.5	709.5	713.3	713.8
21	727.9	719.9	725.0	OOC	OOC	704.7	711.4	704.0	707.1	709.6	713.4	714.0
22	727.9	718.8	725.0	OOC	OOC	701.7	707.7	704.2	711.6	709.9	713.7	714.0
23	727.6	718.5	724.7	OOC	OOC	699.8	706.9	704.3	OOC	709.8	713.8	714.1
24	727.3	OOC	724.5	OOC	OOC	699.0	706.4	704.5	OOC	709.0	713.6	714.3
25	727.2	OOC	724.4	OOC	OOC	698.5	705.7	704.7	OOC	709.4	713.7	714.5
26	727.4	OOC	724.2	OOC	OOC	698.5	705.5	704.6	OOC	709.6	714.1	714.6
27	727.4	OOC	724.1	OOC	OOC	697.7	704.7	704.6	711.8	709.6	714.2	714.6
28	727.3	721.2	724.0	OOC	OOC	697.7	704.8	704.3	712.0	709.2	714.0	714.2
29	727.3		724.2	OOC	OOC	706.4	704.7	704.4	712.2	709.2	713.9	714.3
30	727.1		724.2	OOC	OOC	709.0	704.8	704.5	712.2	709.7	713.9	714.6
31	726.9		724.3		OOC		705.3	704.3		710.2		714.8
City of Uvalde (YP 69-50-302)Daily High Water Levels (in feet above Mean Sea Level)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	N/D	877.2	876.3	876.4	876.2	874.4	872.2	871.5	871.5	872.2	872.8	873.7
2	N/D	877.2	876.3	876.4	876.1	874.4	872.2	871.5	871.5	872.3	872.9	873.8
3	N/D	877.2	876.4	876.4	875.7	874.0	872.2	871.4	871.5	872.3	872.9	873.8
4	N/D	877.1	876.4	876.5	875.6	874.0	872.3	871.4	871.5	872.4	872.9	873.8
5	877.1	877.1	876.4	876.6	875.4	874.0	872.3	871.3	871.4	872.4	873.0	873.8
6	877.1	877.1	876.4	876.6	875.3	873.9	872.4	871.4	871.4	872.3	873.0	873.8
7	877.0	877.1	876.3	876.7	875.3	873.9	872.5	871.3	871.3	872.3	873.0	873.8
8	877.0	877.1	876.3	876.6	875.2	873.7	872.5	871.3	871.5	872.4	873.0	873.8
9	877.0	877.1	876.3	876.6	875.2	873.6	872.6	871.3	871.5	872.4	873.1	873.8
10	877.1	877.0	876.3	876.8	875.2	873.4	872.6	871.3	871.5	872.4	873.1	873.8
11	877.1	876.9	876.3	876.7	875.1	873.4	872.6	871.2	871.5	872.4	873.1	873.9
12	877.1	876.8	876.3	876.7	875.5	873.4	872.6	871.3	871.5	872.4	873.1	873.9
13	877.1	876.8	876.2	876.8	875.4	873.4	872.6	871.4	871.4	872.4	873.2	873.9
14	877.1	876.7	876.1	876.7	875.3	873.4	872.6	871.4	871.5	872.4	873.2	873.9
15	877.1	876.7	876.0	876.7	875.3	873.4	872.5	871.4	871.5	872.4	873.2	873.9
16	877.2	876.6	876.0	876.7	875.2	873.4	872.5	871.4	871.6	872.5	873.1	873.9
17	877.2	876.5	876.0	876.8	875.0	873.4	872.5	871.3	871.6	872.5	873.4	874.0
18	877.2	876.5	876.0	876.8	874.9	873.3	872.3	871.3	871.5	872.5	873.4	874.0
19	877.2	876.4	876.0	876.8	874.7	873.3	872.2	871.3	871.5	872.5	873.5	874.0
20	877.2	876.3	875.9	876.8	874.6	873.2	872.1	871.3	871.7	872.5	873.5	874.0
21	877.2	876.2	875.9	876.9	874.4	873.1	872.0	871.2	871.7	872.5	873.5	874.0
22	877.2	876.2	875.9	876.8	874.3	873.0	872.0	871.3	871.9	872.5	873.5	874.0
23	877.2	876.1	875.9	876.8	874.2	872.8	871.9	871.3	871.9	872.4	873.5	874.0
24	877.2	876.2	875.9	876.8	874.2	872.7	871.9	871.4	871.9	872.5	873.5	874.0
25	877.2	876.2	875.9	876.7	874.3	872.6	871.7	871.4	872.0	872.6	873.6	874.0
26	877.2	876.2	875.8	876.7	873.9	872.4	871.7	871.4	872.0	872.6	873.6	874.0
27	877.2	876.2	875.8	876.6	873.9	872.4	871.6	871.4	872.0	872.6	873.7	874.0
28	877.2	876.3	875.8	876.6	873.9	872.2	871.5	871.4	872.1	872.6	873.7	874.0
29	877.2		876.3	876.4	873.9	872.2	871.5	871.3	872.1	872.7	873.7	874.1
30	877.2		876.4	876.3	874.0	872.3	871.5	871.3	872.2	872.7	873.7	874.1
31			876.5		874.0		871.5	871.3		872.8		874.1

Appendix 10.2 - Water Quality Data

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
AY-68-27-303	9/6/95	13:15	354	195	3	24.0	540
AY-68-28-203	7/31/95	12:17	435	42	325	24.0	569
AY-68-28-205	7/31/95	11:17	485	42	300	24.0	601
AY-68-28-501	7/31/95	14:52	469	48	125	24.0	564
AY-68-28-702	8/4/95	10:22	450	1440	1400	22.0	575
AY-68-28-904	7/27/95	13:27	640	1440	600	23.0	582
AY-68-35-203	8/10/95	10:40	540	1440	1150	24.0	501
AY-68-37-521	1/18/95	10:45	1275	74	20	31.0	5420
AY-68-37-521	2/22/95	10:15	1275	88	20	31.0	5450
AY-68-37-521	3/24/95	12:15	1275	95	20	31.5	5460
AY-68-37-521	4/14/95	10:47	1275	62	20	31.0	5450
AY-68-37-521	5/5/95	10:33	1275	93	20	31.0	5410
AY-68-37-521	6/1/95	14:25	1275	115	20	32.0	5440
AY-68-37-521	7/11/95	14:35	1275	125	20	32.0	5480
AY-68-37-521	8/2/95	12:25	1275	115	20	31.0	5470
AY-68-37-521	9/7/95	12:03	1275	89	20	31.0	5440
AY-68-37-521	10/31/95	9:55	1275	78	20	31.0	5410
AY-68-37-521	11/21/95	10:40	1275	90	20	32.0	5460
AY-68-37-521	12/5/95	10:36	1275	87	20	31.0	5420
AY-68-37-522	1/18/95	10:50	1075	75	25	30.0	4150
AY-68-37-522	2/22/95	10:20	1075	90	25	30.5	4140
AY-68-37-522	3/24/95	12:16	1075	98	25	30.5	4170
AY-68-37-522	4/14/95	10:50	1075	55	25	30.0	4170
AY-68-37-522	5/5/95	10:53	1075	113	25	31.0	4180
AY-68-37-522	6/1/95	14:50	1075	140	25	31.0	4170
AY-68-37-522	7/11/95	14:35	1075	105	25	31.0	4140
AY-68-37-522	8/2/95	12:12	1075	102	25	30.5	4140
AY-68-37-522	9/7/95	12:10	1075	100	25	31.0	4170
AY-68-37-522	10/31/95	10:00	1075	83	25	30.5	4130
AY-68-37-522	11/21/95	10:48	1075	95	25	31.0	4150
AY-68-37-522	12/5/95	10:42	1075	91	25	31.0	4160
AY-68-37-523	1/18/95	10:40	1175	74	15	30.0	5660
AY-68-37-523	2/22/95	10:15	1175	87	15	30.0	5650
AY-68-37-523	3/24/95	12:20	1175	103	15	30.5	5710
AY-68-37-523	4/14/95	10:55	1175	70	15	30.0	5710

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
AY-68-27-303	9/6/95	7.2	240	250	95	10	8.9
AY-68-28-203	7/31/95	7.0	240	260	100	10	11
AY-68-28-205	7/31/95	7.2	270	280	110	13	10
AY-68-28-501	7/31/95	7.0	250	260	110	5.0	10
AY-68-28-702	8/4/95	7.0	250	270	85	17	11
AY-68-28-904	7/27/95	7.0	260	270	95	16	9.9
AY-68-35-203	8/10/95	7.4	200	210	71	16	9.5
AY-68-37-521	1/18/95	6.9	230	2300	630	240	540
AY-68-37-521	2/22/95	6.9	240	2200	540	200	530
AY-68-37-521	3/24/95	6.9	240	2100	520	200	540
AY-68-37-521	4/14/95	6.8	240	2100	570	200	440
AY-68-37-521	5/5/95	6.9	240	2100	540	190	470
AY-68-37-521	6/1/95	6.8	230	2100	560	190	430
AY-68-37-521	7/11/95	7.1	230	2200	570	220	420
AY-68-37-521	8/2/95	6.9	240	2200	540	210	410
AY-68-37-521	9/7/95	6.7	220	2100	560	210	510
AY-68-37-521	10/31/95	6.8	240	2000	570	210	460
AY-68-37-521	11/21/95	6.8	240	2100	540	220	480
AY-68-37-521	12/5/95	6.8	240	2100	560	200	450
AY-68-37-522	1/18/95	7.1	230	1600	480	160	380
AY-68-37-522	2/22/95	7.1	220	1600	410	140	370
AY-68-37-522	3/24/95	7.1	220	1600	390	150	380
AY-68-37-522	4/14/95	7.1	210	1500	430	150	310
AY-68-37-522	5/5/95	7.0	220	1600	400	130	310
AY-68-37-522	6/1/95	7.1	210	1600	410	140	350
AY-68-37-522	7/11/95	7.0	210	1600	420	160	300
AY-68-37-522	8/2/95	7.1	210	1600	400	150	310
AY-68-37-522	9/7/95	6.9	230	1500	420	160	420
AY-68-37-522	10/31/95	6.9	210	1500	420	160	350
AY-68-37-522	11/21/95	6.9	230	1400	410	160	260
AY-68-37-522	12/5/95	6.9	220	1500	410	150	290
AY-68-37-523	1/18/95	6.9	250	2300	630	250	520
AY-68-37-523	2/22/95	6.9	240	2300	550	210	510
AY-68-37-523	3/24/95	6.9	230	2100	530	220	500
AY-68-37-523	4/14/95	6.8	230	2100	560	210	490

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
AY-68-27-303	9/6/95	<1	16	13	0.15	5.3	236
AY-68-28-203	7/31/95	<1	26	10	0.15	5.2	240
AY-68-28-205	7/31/95	<1	25	9.0	0.22	4.7	196
AY-68-28-501	7/31/95	<1	26	6.0	0.10	5.7	192
AY-68-28-702	8/4/95	<1	21	25	0.30	5.7	304
AY-68-28-904	7/27/95	<1	16	22	0.30	4.5	336
AY-68-35-203	8/10/95	<1	20	33	0.13	7.1	256
AY-68-37-521	1/18/95	50	910	1900	4.5	9.0	4310
AY-68-37-521	2/22/95	33	910	1900	4.3	9.5	4150
AY-68-37-521	3/24/95	34	910	2000	3.8	6.1	4500
AY-68-37-521	4/14/95	34	880	1700	4.8	8.3	4390
AY-68-37-521	5/5/95	34	910	2000	4.5	9.1	4480
AY-68-37-521	6/1/95	36	910	1900	4.0	9.3	4720
AY-68-37-521	7/11/95	36	910	1900	5.3	8.7	4590
AY-68-37-521	8/2/95	31	900	1700	5.3	8.3	4550
AY-68-37-521	9/7/95	37	880	1700	3.5	9.4	4760
AY-68-37-521	10/31/95	37	900	1600	3.0	6.9	4590
AY-68-37-521	11/21/95	40	870	1500	4.7	10	5070
AY-68-37-521	12/5/95	35	890	1800	3.8	8.9	4330
AY-68-37-522	1/18/95	41	660	1300	3.0	8.1	3120
AY-68-37-522	2/22/95	26	660	1200	6.5	7.5	3100
AY-68-37-522	3/24/95	27	640	1400	3.5	5.5	3300
AY-68-37-522	4/14/95	26	670	1300	4.0	9.5	3310
AY-68-37-522	5/5/95	28	660	1400	3.5	8.3	3390
AY-68-37-522	6/1/95	28	660	1300	3.5	9.4	3320
AY-68-37-522	7/11/95	29	660	1400	4.3	8.6	3320
AY-68-37-522	8/2/95	23	680	1400	3.3	10	3280
AY-68-37-522	9/7/95	30	660	1300	2.5	9.1	3560
AY-68-37-522	10/31/95	30	660	1300	3.3	5.2	3480
AY-68-37-522	11/21/95	32	630	1200	5.8	8.5	5320
AY-68-37-522	12/5/95	28	660	1200	2.5	8.7	3220
AY-68-37-523	1/18/95	53	970	1900	9.3	8.9	4440
AY-68-37-523	2/22/95	32	980	1800	7.3	9.3	4300
AY-68-37-523	3/24/95	36	940	1900	3.5	7.2	4740
AY-68-37-523	4/14/95	34	960	1700	4.5	11	4620

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Nitrate Total mg/L as N	Nitrogen, Kjeldahl Total mg/L as N	Phosphorus Total mg/L as P
AY-68-27-303	9/6/95	<0.03	<0.005	0.840	0.280	<0.010
AY-68-28-203	7/31/95	<0.03	<0.005	1.30	0.560	<0.010
AY-68-28-205	7/31/95	<0.03	<0.005	0.920	0.560	0.020
AY-68-28-501	7/31/95	<0.03	<0.005	1.10	0.420	<0.010
AY-68-28-904	7/27/95	<0.1	<0.005	1.20	0.910	0.020
AY-68-35-203	8/10/95	<0.03	<0.005	1.70	0.280	0.030

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
AY-68-37-523	5/5/95	10:22	1175	82	15	30.0	5710
AY-68-37-523	6/1/95	14:18	1175	108	15	31.0	5710
AY-68-37-523	7/11/95	14:30	1175	95	15	31.0	5720
AY-68-37-523	8/2/95	12:04	1175	94	15	30.0	5720
AY-68-37-523	9/7/95	12:12	1175	90	15	30.0	5670
AY-68-37-523	10/31/95	9:58	1175	81	15	30.0	5660
AY-68-37-523	11/21/95	10:44	1175	90	15	30.5	5700
AY-68-37-523	12/5/95	10:39	1175	88	15	30.0	5700
AY-68-37-524	1/18/95	10:00	881	47	27	28.0	910
AY-68-37-524	2/22/95	9:35	881	57	27	28.0	914
AY-68-37-524	3/24/95	11:37	881	67	27	28.0	910
AY-68-37-524	4/14/95	11:33	881	123	27	29.0	910
AY-68-37-524	5/5/95	9:48	881	63	27	28.0	914
AY-68-37-524	6/1/95	13:35	881	74	27	29.0	913
AY-68-37-524	7/11/95	13:42	881	62	27	29.0	906
AY-68-37-524	8/2/95	11:25	881	65	27	28.0	909
AY-68-37-524	9/7/95	11:28	881	68	27	29.0	906
AY-68-37-524	10/31/95	9:13	881	46	27	28.0	899
AY-68-37-524	11/21/95	10:00	881	55	27	28.5	903
AY-68-37-524	12/5/95	9:54	881	55	27	28.0	898
AY-68-37-525	1/18/95	10:10	1150	54	18	29.0	6320
AY-68-37-525	2/22/95	9:40	1150	60	18	28.5	6270
AY-68-37-525	3/24/95	11:33	1150	63	18	28.0	6360
AY-68-37-525	4/14/95	11:17	1150	107	18	29.0	6360
AY-68-37-525	5/5/95	9:57	1150	72	18	28.0	6270
AY-68-37-525	6/1/95	13:25	1150	64	18	29.0	6360
AY-68-37-525	7/11/95	13:37	1150	57	18	29.0	6410
AY-68-37-525	8/2/95	11:22	1150	62	18	28.0	6350
AY-68-37-525	9/7/95	11:30	1150	70	18	27.0	6200
AY-68-37-525	10/31/95	9:18	1150	51	18	28.0	6300
AY-68-37-525	11/21/95	10:05	1150	58	18	28.5	6400
AY-68-37-525	12/5/95	9:57	1150	57	18	28.5	6380
AY-68-37-526	1/18/95	11:16	1223	132	14	26.0	896
AY-68-37-526	2/22/95	10:55	1223	144	14	26.0	906
AY-68-37-526	3/24/95	13:05	1223	160	14	26.0	889

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, mg/L CaCO3	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
AY-68-37-523	5/5/95	6.9	240	2200	540	200	500
AY-68-37-523	6/1/95	6.9	240	2200	550	210	550
AY-68-37-523	7/11/95	7.1	240	2200	580	240	470
AY-68-37-523	8/2/95	6.9	240	2100	540	220	550
AY-68-37-523	9/7/95	6.7	240	2100	560	220	710
AY-68-37-523	10/31/95	6.8	260	2100	580	230	600
AY-68-37-523	11/21/95	6.8	240	2100	550	230	570
AY-68-37-523	12/5/95	6.8	230	2100	560	220	560
AY-68-37-524	1/18/95	7.5	210	360	110	34	48
AY-68-37-524	2/22/95	7.4	200	360	75	33	48
AY-68-37-524	3/24/95	7.3	200	350	78	32	49
AY-68-37-524	4/14/95	7.4	200	340	93	31	45
AY-68-37-524	5/5/95	7.5	190	350	91	30	48
AY-68-37-524	6/1/95	7.2	200	360	91	30	47
AY-68-37-524	7/11/95	7.4	200	340	99	34	43
AY-68-37-524	8/2/95	7.4	205	350	92	32	48
AY-68-37-524	9/7/95	7.4	200	340	96	32	63
AY-68-37-524	10/31/95	7.4	210	330	93	33	49
AY-68-37-524	11/21/95	7.4	200	330	91	32	54
AY-68-37-524	12/5/95	7.3	200	340	95	31	49
AY-68-37-525	1/18/95	6.9	240	2600	610	260	640
AY-68-37-525	2/22/95	7.0	250	2500	580	250	650
AY-68-37-525	3/24/95	7.0	240	2400	600	250	650
AY-68-37-525	4/14/95	7.0	230	2400	580	250	510
AY-68-37-525	5/5/95	6.9	240	2400	580	240	500
AY-68-37-525	6/1/95	7.0	230	2400	580	240	560
AY-68-37-525	7/11/95	7.2	240	2400	620	270	540
AY-68-37-525	8/2/95	7.0	240	2300	580	270	520
AY-68-37-525	9/7/95	6.7	250	2300	600	260	660
AY-68-37-525	10/31/95	6.9	250	2400	610	260	540
AY-68-37-525	11/21/95	6.9	260	2300	590	270	620
AY-68-37-525	12/5/95	6.9	240	2400	600	260	550
AY-68-37-526	1/18/95	7.5	200	360	110	35	44
AY-68-37-526	2/22/95	7.5	200	360	75	33	44
AY-68-37-526	3/24/95	7.4	200	350	75	33	44

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
AY-68-37-523	5/5/95	37	960	2000	4.3	9.7	4810
AY-68-37-523	6/1/95	37	950	1900	3.5	9.8	4780
AY-68-37-523	7/11/95	37	980	2000	3.8	8.6	4760
AY-68-37-523	8/2/95	32	920	1800	4.8	7.0	4760
AY-68-37-523	9/7/95	39	960	1700	3.5	8.6	4950
AY-68-37-523	10/31/95	40	970	1700	2.8	6.8	4810
AY-68-37-523	11/21/95	41	920	1600	4.8	9.6	5440
AY-68-37-523	12/5/95	37	930	1800	4.8	8.3	4510
AY-68-37-524	1/18/95	4.0	75	150	1.1	6.5	564
AY-68-37-524	2/22/95	3.5	74	160	1.2	5.9	548
AY-68-37-524	3/24/95	5.0	80	160	1.2	5.6	600
AY-68-37-524	4/14/95	5.0	98	150	1.4	6.9	528
AY-68-37-524	5/5/95	3.0	80	170	1.2	6.8	568
AY-68-37-524	6/1/95	5.0	80	170	1.2	7.4	620
AY-68-37-524	7/11/95	4.4	80	180	1.2	9.4	536
AY-68-37-524	8/2/95	4.1	80	160	1.2	5.9	608
AY-68-37-524	9/7/95	5.7	78	150	1.3	6.5	600
AY-68-37-524	10/31/95	5.0	76	140	1.2	6.8	616
AY-68-37-524	11/21/95	5.0	74	130	1.4	6.3	620
AY-68-37-524	12/5/95	4.2	76	150	1.3	5.5	560
AY-68-37-525	1/18/95	59	1300	2000	5.3	8.5	4850
AY-68-37-525	2/22/95	38	1200	2100	5.0	9.3	4880
AY-68-37-525	3/24/95	40	1100	2200	6.0	7.4	5130
AY-68-37-525	4/14/95	39	1100	2000	5.0	9.1	5230
AY-68-37-525	5/5/95	39	1100	2200	4.3	9.2	5260
AY-68-37-525	6/1/95	41	1400	2200	3.8	9.3	5540
AY-68-37-525	7/11/95	40	1400	2200	5.8	8.7	5350
AY-68-37-525	8/2/95	35	1400	2200	3.8	8.0	5120
AY-68-37-525	9/7/95	44	1300	2000	3.0	8.0	5820
AY-68-37-525	10/31/95	44	1100	2100	3.5	7.4	5160
AY-68-37-525	11/21/95	47	1300	1900	6.8	8.8	6030
AY-68-37-525	12/5/95	40	1400	1700	5.5	9.1	5260
AY-68-37-526	1/18/95	5.0	77	150	0.71	5.6	552
AY-68-37-526	2/22/95	2.5	77	150	0.84	5.3	536
AY-68-37-526	3/24/95	3.0	80	150	0.81	4.2	576

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
AY-68-37-526	4/14/95	12:07	1223	182	14	26.5	889
AY-68-37-526	5/5/95	11:40	1223	180	14	26.0	887
AY-68-37-526	6/1/95	15:34	1223	197	14	27.0	861
AY-68-37-526	7/11/95	15:40	1223	185	14	27.0	864
AY-68-37-526	8/2/95	13:04	1223	174	14	26.5	857
AY-68-37-526	9/7/95	12:50	1223	155	14	26.0	840
AY-68-37-526	10/31/95	10:55	1223	155	14	26.0	840
AY-68-37-526	11/21/95	11:14	1223	155	14	26.0	828
AY-68-37-526	12/5/95	11:20	1223	145	14	26.0	846
AY-68-37-527	1/18/95	11:13	926	130	100	26.0	510
AY-68-37-527	2/22/95	11:01	926	152	100	27.0	519
AY-68-37-527	3/24/95	13:00	926	154	100	26.0	517
AY-68-37-527	4/14/95	12:32	926	204	100	27.0	522
AY-68-37-527	5/5/95	11:37	926	177	100	27.0	543
AY-68-37-527	6/1/95	15:45	926	208	100	27.5	508
AY-68-37-527	7/11/95	15:33	926	178	100	27.5	508
AY-68-37-527	8/2/95	13:07	926	177	100	27.0	523
AY-68-37-527	9/7/95	12:53	926	158	100	28.0	532
AY-68-37-527	10/31/95	10:40	926	140	100	26.0	510
AY-68-37-527	11/21/95	11:17	926	137	100	27.0	511
AY-68-37-527	12/5/95	11:24	926	151	100	27.0	516

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	pH stdrd units	Alka-linity, Fix End Field, mg/L CaCO3	Hard-ness Total mg/L as CaCO3	Calcium Dis-solved mg/L as CaCO3	Magne-sium, Dis-solved mg/L as Mg	Sodium, Dis-solved mg/L as Na
AY-68-37-526	4/14/95	7.3	190	350	91	33	39
AY-68-37-526	5/5/95	7.5	190	340	89	31	41
AY-68-37-526	6/1/95	7.5	200	340	88	30	38
AY-68-37-526	7/11/95	7.7	200	350	91	33	35
AY-68-37-526	8/2/95	7.5	200	330	85	32	39
AY-68-37-526	9/7/95	7.5	200	320	91	31	48
AY-68-37-526	10/31/95	7.5	200	320	91	32	39
AY-68-37-526	11/21/95	7.5	190	290	84	33	39
AY-68-37-526	12/5/95	7.5	200	330	90	30	40
AY-68-37-527	1/18/95	7.6	200	240	71	19	13
AY-68-37-527	2/22/95	7.3	190	230	49	19	13
AY-68-37-527	3/24/95	7.6	190	220	49	18	14
AY-68-37-527	4/14/95	7.2	200	230	65	18	14
AY-68-37-527	5/5/95	7.1	200	240	62	17	13
AY-68-37-527	6/1/95	7.2	200	230	61	17	12
AY-68-37-527	7/11/95	7.3	200	230	66	19	13
AY-68-37-527	8/2/95	7.3	200	230	65	19	12
AY-68-37-527	9/7/95	7.2	200	220	67	19	17
AY-68-37-527	10/31/95	7.3	200	220	66	19	12
AY-68-37-527	11/21/95	7.3	200	210	65	18	13
AY-68-37-527	12/5/95	7.3	190	220	66	17	13

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
AY-68-37-526	4/14/95	3.0	80	140	0.78	6.4	548
AY-68-37-526	5/5/95	1.8	80	150	0.68	5.0	548
AY-68-37-526	6/1/95	3	76	150	0.76	5.5	544
AY-68-37-526	7/11/95	2.7	78	140	0.71	5.6	460
AY-68-37-526	8/2/95	2.7	78	140	0.62	4.8	520
AY-68-37-526	9/7/95	3.8	74	130	0.55	6.6	560
AY-68-37-526	10/31/95	2.5	72	130	0.66	4.9	484
AY-68-37-526	11/21/95	3.3	72	110	0.77	5.7	569
AY-68-37-526	12/5/95	2.6	74	130	0.72	6.9	520
AY-68-37-527	1/18/95	3	26	29	0.27	5.6	308
AY-68-37-527	2/22/95	<1	29	31	0.40	6.2	296
AY-68-37-527	3/24/95	2	27	29	0.29	4.5	236
AY-68-37-527	4/14/95	1	34	30	0.45	4.7	252
AY-68-37-527	5/5/95	<1	36	37	0.27	6.7	300
AY-68-37-527	6/1/95	1	32	30	0.30	6.5	292
AY-68-37-527	7/11/95	0.8	34	29	0.25	5.0	216
AY-68-37-527	8/2/95	1.1	36	33	0.28	5.8	296
AY-68-37-527	9/7/95	2	36	34	0.27	5.7	264
AY-68-37-527	10/31/95	1	34	27	0.19	5.4	304
AY-68-37-527	11/21/95	1.6	30	11	0.29	5.7	288
AY-68-37-527	12/5/95	1	34	28	0.25	5.7	236

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
DX-68-15-901	8/24/95	12:55	@	NA		22.0	586
DX-68-16-502	8/24/95	10:20	230	30	250	23.0	579
DX-68-22-902	8/24/95	11:30	230	20	800	22.5	532
DX-68-23-156	9/11/95	9:48		1440	240	23.5	583
DX-68-23-301	8/10/95	12:15	@	NA		23.5	543
DX-68-23-303	8/10/95	9:45	1045	25	4200	25.0	558
DX-68-23-316	9/11/95	12:07	350	67	10	23.0	562
DX-68-23-602	8/10/95	10:55	790	115	2750	23.0	532
DX-68-23-616A	1/20/95	12:05	576	50	14	25.0	2950
DX-68-23-616A	2/8/95	12:21	576	46	14	25.0	2930
DX-68-23-616A	3/10/95	12:37	576	67	14	25.0	2960
DX-68-23-616A	4/26/95	14:30	576	60	14	25.5	2920
DX-68-23-616A	5/10/95	14:43	576	53	14	26.0	2990
DX-68-23-616A	6/14/95	12:15	576	45	14	25.5	2900
DX-68-23-616A	7/12/95	12:47	576	47	14	26.0	2890
DX-68-23-616A	8/1/95	12:53	576	53	14	26.0	3000
DX-68-23-616A	9/13/95	13:00	576	45	14	25.5	2950
DX-68-23-616A	10/11/95	12:25	576	50	14	25.5	2930
DX-68-23-616A	11/16/95	12:50	576	45	14	25.0	2900
DX-68-23-616A	12/13/95	12:50	576	52	14	25.0	2900
DX-68-23-616B	1/20/95	12:00	738	45	13	26.0	1710
DX-68-23-616B	2/8/95	12:20	738	45	13	26.0	1710
DX-68-23-616B	3/10/95	12:40	738	70	13	26.0	1720
DX-68-23-616B	4/26/95	14:27	738	57	13	26.0	1710
DX-68-23-616B	5/10/95	14:55	738	65	13	26.0	1740
DX-68-23-616B	6/14/95	12:20	738	50	13	26.0	1730
DX-68-23-616B	7/12/95	12:53	738	53	13	26.0	1710
DX-68-23-616B	8/1/95	12:47	738	47	13	26.5	1720
DX-68-23-616B	9/13/95	13:03	738	48	13	26.0	1710
DX-68-23-616B	10/11/95	12:18	738	43	13	26.0	1690
DX-68-23-616B	11/16/95	13:00	738	55	13	26.0	1720
DX-68-23-616B	12/13/95	12:56	738	58	13	26.0	1710
DX-68-23-617	1/20/95	10:40	916.5	45	14	26.0	560
DX-68-23-617	2/8/95	11:09	916.5	54	14	25.5	560
DX-68-23-617	3/10/95	11:05	916.5	60	13	26.0	566
DX-68-23-617	4/26/95	11:35	916.5	65	13	26.0	557
DX-68-23-617	5/10/95	11:05	916.5	60	13	27.0	563

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, mg/L CaCO3	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
DX-68-15-901	8/24/95	7.0	270	264	93	16	9.6
DX-68-16-502	8/24/95	7.1	260	266	90	17	9.9
DX-68-22-902	8/24/95	7.1	250	248	86	13	8.6
DX-68-23-156	9/11/95	7.1	250	260	66	18	10
DX-68-23-301	8/10/95	7.1	230	244	80	17	14
DX-68-23-303	8/10/95	7.1	230	260	80	19	11
DX-68-23-316	9/11/95	6.8	270	264	92	15	7.6
DX-68-23-602	8/10/95	7.1	230	240	83	15	9.6
DX-68-23-616A	1/20/95	6.9	260	840	170	105	350
DX-68-23-616A	2/8/95	7.0	260	810	170	97	330
DX-68-23-616A	3/10/95	6.9	270	820	160	99	290
DX-68-23-616A	4/26/95	7.0	260	768	160	96	350
DX-68-23-616A	5/10/95	6.9	260	768	160	99	340
DX-68-23-616A	6/14/95	6.9	250	776	160	106	310
DX-68-23-616A	7/12/95	7.1	270	764	170	107	290
DX-68-23-616A	8/1/95	7.0	270	750	170	106	340
DX-68-23-616A	9/13/95	7.0	270	770	160	106	300
DX-68-23-616A	10/11/95	7.0	250	760	160	104	320
DX-68-23-616A	11/16/95	7.1	260	760	170	101	320
DX-68-23-616A	12/13/95	7.0	280	770	160	102	290
DX-68-23-616B	1/20/95	7.1	230	530	100	67	160
DX-68-23-616B	2/8/95	7.3	230	530	99	61	160
DX-68-23-616B	3/10/95	7.2	230	540	100	61	140
DX-68-23-616B	4/26/95	7.2	220	504	95	60	150
DX-68-23-616B	5/10/95	7.1	220	504	96	64	170
DX-68-23-616B	6/14/95	7.1	230	504	100	67	150
DX-68-23-616B	7/12/95	7.2	230	512	99	69	150
DX-68-23-616B	8/1/95	7.2	230	548	110	62	150
DX-68-23-616B	9/13/95	7.1	240	496	99	65	140
DX-68-23-616B	10/11/95	7.1	220	500	99	64	150
DX-68-23-616B	11/16/95	7.3	240	488	100	63	150
DX-68-23-616B	12/13/95	7.2	230	504	98	64	140
DX-68-23-617	1/20/95	7.3	200	268	60	28	12
DX-68-23-617	2/8/95	7.4	220	268	55	27	11
DX-68-23-617	3/10/95	7.3	210	264	51	27	9.5
DX-68-23-617	4/26/95	7.3	210	252	55	25	13
DX-68-23-617	5/10/95	7.3	220	256	55	27	12

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
DX-68-15-901	8/24/95	<1.0	17	19	0.20	5.1	312
DX-68-16-502	8/24/95	<1.0	19	20	0.17	6.8	304
DX-68-22-902	8/24/95	<1.0	15	14	0.13	5.2	264
DX-68-23-156	9/11/95	1.4	24	24	0.22	6.0	304
DX-68-23-301	8/10/95	<1.0	21	26	0.16	5.8	234
DX-68-23-303	8/10/95	<1.0	22	39	0.26	6.5	300
DX-68-23-316	9/11/95	1.4	24	10	0.10	5.8	304
DX-68-23-602	8/10/95	<1.0	19	22	0.23	6.1	224
DX-68-23-616A	1/20/95	25	540	550	3.6	3.4	1900
DX-68-23-616A	2/8/95	24	540	530	3.3	9.3	2000
DX-68-23-616A	3/10/95	24	570	600	3.1	6.0	1900
DX-68-23-616A	4/26/95	26	560	570	3.3	6.4	1900
DX-68-23-616A	5/10/95	25	560	600	3.2	6.2	1940
DX-68-23-616A	6/14/95	24	540	580	4.1	5.6	1960
DX-68-23-616A	7/12/95	24	550	590	3.4	5.9	2120
DX-68-23-616A	8/1/95	22	560	610	3.2	6.9	1950
DX-68-23-616A	9/13/95	23	550	530	2.8	6.4	1950
DX-68-23-616A	10/11/95	25	540	510	3.5	7.8	1800
DX-68-23-616A	11/16/95	2.7	530	580	3.5	6.9	2000
DX-68-23-616A	12/13/95	26	530	520	3.2	5.7	1900
DX-68-23-616B	1/20/95	<1.0	270	290	4.1	4.3	1100
DX-68-23-616B	2/8/95	12	270	280	3.5	5.9	1120
DX-68-23-616B	3/10/95	12	270	320	3.3	6.0	1140
DX-68-23-616B	4/26/95	15	270	300	3.2	6.0	1140
DX-68-23-616B	5/10/95	12	270	300	3.0	6.1	1100
DX-68-23-616B	6/14/95	12	270	300	3.4	6.6	1160
DX-68-23-616B	7/12/95	18	270	310	3.4	6.5	1190
DX-68-23-616B	8/1/95	11	280	310	3.2	6.6	1080
DX-68-23-616B	9/13/95	15	270	310	3.2	6.2	2000
DX-68-23-616B	10/11/95	12	270	270	3.6	7.7	1010
DX-68-23-616B	11/16/95	14	270	290	3.6	6.7	1210
DX-68-23-616B	12/13/95	14	260	260	3.5	6.1	1100
DX-68-23-617	1/20/95	2.0	21	48	1.3	2.5	336
DX-68-23-617	2/8/95	0.5	22	48	1.2	10.5	380
DX-68-23-617	3/10/95	2.0	23	51	1.1	4.9	368
DX-68-23-617	4/26/95	3.2	22	54	1.1	7.1	328
DX-68-23-617	5/10/95	<1.0	21	55	1.1	6.9	324

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Nitrate Total mg/L as N	Nitrogen, Kjeldahl Total mg/L as N	Phosphorus Total mg/L as P
DX-68-15-901	8/24/95	<0.03	<0.005	0.91	0.70	<0.01
DX-68-16-502	8/24/95	<0.03	<0.005	1.03	0.56	<0.01
DX-68-22-902	8/24/95	<0.03	<0.005	1.34	0.42	<0.01
DX-68-23-156	9/11/95	<0.03	<0.005	2.00	0.90	<0.01
DX-68-23-301	8/10/95	<0.03	<0.005	1.94	0.70	0.02
DX-68-23-303	8/10/95	<0.03	<0.005	1.67	1.30	<0.01
DX-68-23-316	9/11/95	<0.03	<0.005	1.80	1.00	<0.01
DX-68-23-602	8/10/95	<0.03	<0.005	1.94	1.10	0.04

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
DX-68-23-617	6/14/95	11:02	916.5	52	13	26.0	562
DX-68-23-617	7/12/95	11:35	916.5	50	13	27.0	560
DX-68-23-617	8/1/95	11:17	916.5	57	13	27.0	566
DX-68-23-617	9/13/95	11:10	916.5	48	13	26.0	561
DX-68-23-617	10/11/95	11:00	916.5	50	13	26.0	569
DX-68-23-617	11/16/95	11:25	916.5	57	13	26.0	561
DX-68-23-617	12/13/95	11:15	916.5	52	13	26.0	566
DX-68-23-618	1/20/95	10:44	660.1	49	13	25.0	620
DX-68-23-618	2/8/95	11:10	660.1	55	13	25.0	624
DX-68-23-618	3/10/95	11:02	660.1	57	13	25.0	620
DX-68-23-618	4/26/95	11:23	660.1	73	13	26.0	626
DX-68-23-618	5/10/95	11:00	660.1	55	13	25.5	623
DX-68-23-618	6/14/95	11:07	660.1	57	13	25.5	627
DX-68-23-618	7/12/95	11:27	660.1	42	13	26.0	626
DX-68-23-618	8/1/95	11:27	660.1	57	13	26.0	620
DX-68-23-618	9/13/95	11:12	660.1	50	13	26.0	627
DX-68-23-618	10/11/95	10:55	660.1	45	13	26.0	619
DX-68-23-618	11/16/95	11:20	660.1	52	13	26.0	625
DX-68-23-618	12/13/95	11:20	660.1	57	13	25.0	622
DX-68-23-619A	1/20/95	9:33	652	38	12	25.0	540
DX-68-23-619A	2/8/95	9:55	652	50	12	25.0	536
DX-68-23-619A	3/10/95	10:25	652	55	13	25.5	530
DX-68-23-619A	4/26/95	9:56	652	51	13	26.0	535
DX-68-23-619A	5/10/95	12:27	652	67	13	26.0	529
DX-68-23-619A	6/14/95	9:43	652	41	13	26.0	535
DX-68-23-619A	7/12/95	10:02	652	47	13	26.0	533
DX-68-23-619A	8/1/95	10:13	652	43	13	26.0	539
DX-68-23-619A	9/13/95	9:55	652	48	13	26.0	541
DX-68-23-619A	10/11/95	13:42	652	42	13	26.0	532
DX-68-23-619A	11/16/95	9:53	652	48	13	25.0	535
DX-68-23-619A	12/13/95	9:53	652	40	13	25.0	535
DX-68-23-619B	1/20/95	9:32	787	37	13	26.0	560
DX-68-23-619B	2/8/95	9:56	787	51	13	26.0	558
DX-68-23-619B	3/10/95	10:25	787	55	13	26.0	560
DX-68-23-619B	4/26/95	9:55	787	50	13	26.0	557
DX-68-23-619B	5/10/95	12:18	787	58	13	27.0	560
DX-68-23-619B	6/14/95	9:45	787	43	13	26.0	561

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, mg/L as CaCO3	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
DX-68-23-617	6/14/95	7.1	210	260	58	28	11
DX-68-23-617	7/12/95	7.3	220	260	59	30	12
DX-68-23-617	8/1/95	7.3	220	260	63	27	11
DX-68-23-617	9/13/95	7.2	220	240	59	28	11
DX-68-23-617	10/11/95	7.3	220	250	58	28	11
DX-68-23-617	11/16/95	7.4	220	250	59	28	12
DX-68-23-617	12/13/95	7.4	220	260	58	28	11
DX-68-23-618	1/20/95	7.3	200	260	55	33	31
DX-68-23-618	2/8/95	7.4	210	260	52	32	29
DX-68-23-618	3/10/95	7.3	200	260	52	32	27
DX-68-23-618	4/26/95	7.4	210	250	48	31	24
DX-68-23-618	5/10/95	7.4	200	250	49	34	23
DX-68-23-618	6/14/95	7.3	200	250	52	35	23
DX-68-23-618	7/12/95	7.4	200	250	52	35	23
DX-68-23-618	8/1/95	7.4	210	250	56	33	22
DX-68-23-618	9/13/95	7.4	200	240	53	34	24
DX-68-23-618	10/11/95	7.4	200	240	52	34	23
DX-68-23-618	11/16/95	7.5	200	240	52	33	25
DX-68-23-618	12/13/95	7.4	200	250	52	33	23
DX-68-23-619A	1/20/95	7.3	200	250	52	32	17
DX-68-23-619A	2/8/95	7.5	210	240	48	30	16
DX-68-23-619A	3/10/95	7.4	210	240	46	30	14
DX-68-23-619A	4/26/95	7.3	200	230	45	29	15
DX-68-23-619A	5/10/95	7.2	200	240	48	30	14
DX-68-23-619A	6/14/95	7.2	200	240	52	31	14
DX-68-23-619A	7/12/95	7.4	200	240	52	32	14
DX-68-23-619A	8/1/95	7.4	200	240	55	30	14
DX-68-23-619A	9/13/95	7.4	200	230	50	31	14
DX-68-23-619A	10/11/95	7.3	210	240	50	31	13
DX-68-23-619A	11/16/95	7.4	200	220	49	30	15
DX-68-23-619A	12/13/95	7.4	210	230	50	31	13
DX-68-23-619B	1/20/95	7.2	230	260	63	27	13
DX-68-23-619B	2/8/95	7.3	210	260	56	26	12
DX-68-23-619B	3/10/95	7.3	210	270	58	25	10
DX-68-23-619B	4/26/95	7.2	210	250	57	24	14
DX-68-23-619B	5/10/95	7.3	210	250	56	26	12
DX-68-23-619B	6/14/95	7.2	220	250	59	28	12

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
DX-68-23-617	6/14/95	1.0	22	53	1.2	6.3	288
DX-68-23-617	7/12/95	<1.0	22	55	1.2	5.4	348
DX-68-23-617	8/1/95	<1.0	23	54	1.2	6.4	248
DX-68-23-617	9/13/95	3.0	22	49	1.0	6.5	316
DX-68-23-617	10/11/95	<1.0	21	49	1.3	5.8	284
DX-68-23-617	11/16/95	2.2	21	50	1.2	6.6	364
DX-68-23-617	12/13/95	1.9	19	47	1.2	5.8	324
DX-68-23-618	1/20/95	2.0	42	59	2.5	3.2	376
DX-68-23-618	2/8/95	1.0	43	55	2.5	7.8	376
DX-68-23-618	3/10/95	2.5	45	63	2.5	5.8	388
DX-68-23-618	4/26/95	4.1	43	60	2.2	6.9	332
DX-68-23-618	5/10/95	<1.0	42	61	2.1	6.2	304
DX-68-23-618	6/14/95	1.9	42	62	2.5	6.3	324
DX-68-23-618	7/12/95	1.1	42	63	2.5	5.5	344
DX-68-23-618	8/1/95	1.8	44	63	2.3	6.4	288
DX-68-23-618	9/13/95	3.5	43	60	2.4	6.4	360
DX-68-23-618	10/11/95	1.6	48	61	2.8	6.3	316
DX-68-23-618	11/16/95	2.6	42	54	2.3	6.0	412
DX-68-23-618	12/13/95	2.6	41	52	2.6	6.0	348
DX-68-23-619A	1/20/95	2.0	27	46	2.4	5.2	368
DX-68-23-619A	2/8/95	0.50	27	41	2.3	13	344
DX-68-23-619A	3/10/95	2.0	27	53	2.3	5.8	360
DX-68-23-619A	4/26/95	3.0	27	43	2.1	5.8	372
DX-68-23-619A	5/10/95	<1.0	26	47	1.9	7.1	268
DX-68-23-619A	6/14/95	0.72	27	45	2.1	7.2	298
DX-68-23-619A	7/12/95	<1.0	26	45	2.6	5.8	296
DX-68-23-619A	8/1/95	1.1	28	46	2.8	7.0	228
DX-68-23-619A	9/13/95	2.1	27	42	2.2	6.1	336
DX-68-23-619A	10/11/95	<1.0	26	42	2.4	6.3	236
DX-68-23-619A	11/16/95	1.6	26	38	2.4	6.3	401
DX-68-23-619A	12/13/95	1.5	24	38	2.7	6.0	290
DX-68-23-619B	1/20/95	1.0	22	46	1.5	2.3	356
DX-68-23-619B	2/8/95	0.50	22	43	1.3	5.0	368
DX-68-23-619B	3/10/95	1.0	23	50	1.5	5.6	358
DX-68-23-619B	4/26/95	3.1	23	46	1.3	4.9	324
DX-68-23-619B	5/10/95	<1.0	22	49	1.3	5.1	288
DX-68-23-619B	6/14/95	0.52	23	50	1.4	5.5	308

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
LR-67-01-801	6/19/95	11:00	@	1440		22.0	592
LR-67-01-806	8/11/95	10:00	115	>60	4200	23.0	613
LR-67-01-802	8/23/95	14:05	900	1440	900	23.0	608
LR-67-01-302	8/23/95	11:05	360	25	600	25.0	713
LR-58-58-403	8/23/95	12:28	390	1440	350	22.0	594
LR-67-01-812	3/31/95	14:20	543	45	13	24.0	14880
LR-67-01-812	6/19/95	13:27	543	42	13	24.5	14870
LR-67-01-812	8/11/95	14:07	543	47	13	25.0	14810
LR-67-01-812	12/20/95	13:18	543	46	13	24.0	14870
LR-67-01-813A	3/31/95	12:15	564	45	9	24.0	14720
LR-67-01-813A	6/19/95	12:18	564	48	9	25.0	14780
LR-67-01-813A	8/11/95	12:57	564	57	9	24.5	14870
LR-67-01-813A	12/20/95	12:03	564	48	9	24.0	14700
LR-67-01-813B	3/31/95	12:10	699	55	13	25.0	14800
LR-67-01-813B	6/19/95	12:12	699	42	13	25.5	14810
LR-67-01-813B	8/11/95	13:00	699	60	13	25.5	14690
LR-67-01-813B	12/20/95	12:06	699	51	13	25.0	14790
LR-67-01-814A	3/31/95	10:35	556	50	13	25.0	14820
LR-67-01-814A	6/19/95	10:28	556	58	13	25.0	14740
LR-67-01-814A	8/11/95	11:35	556	50	13	25.0	13680
LR-67-01-814A	12/20/95	10:44	556	59	13	25.0	14830
LR-67-01-814B	3/31/95	10:35	726	50	13	26.0	14640
LR-67-01-814B	6/19/95	10:25	726	55	13	26.0	14780
LR-67-01-814B	8/11/95	11:30	726	45	13	26.0	14650
LR-67-01-814B	12/20/95	10:38	726	53	13	26.0	14630
LR-67-09-105	8/25/95	10:30	330	1440	300	23.0	627
LR-67-09-111	8/25/95	10:00	264	30	450	23.0	598

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, mg/L CaCO3	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
LR-67-01-801	6/19/95	7.1	250	240	83	20	12
LR-67-01-806	8/11/95	7.0	260	230	91	18	13
LR-67-01-802	8/23/95	7.1	670	280	91	18	12
LR-67-01-302	8/23/95	7.3	220	350	63	40	10
LR-58-58-403	8/23/95	7.2	270	300	75	27	8.3
LR-67-01-812	3/31/95	6.5	370	3900	870	430	1800
LR-67-01-812	6/19/95	6.5	370	4000	870	460	1800
LR-67-01-812	8/11/95	6.7	380	4000	900	470	2000
LR-67-01-812	12/20/95	6.5	360	4200	870	470	1800
LR-67-01-813A	3/31/95	6.4	360	3600	870	430	1700
LR-67-01-813A	6/19/95	6.5	380	4000	940	470	1800
LR-67-01-813A	8/11/95	6.4	400	4000	880	480	1700
LR-67-01-813A	12/20/95	6.4	370	4200	860	470	1700
LR-67-01-813B	3/31/95	6.5	370	3900	880	430	1800
LR-67-01-813B	6/19/95	6.5	360	4000	940	460	1900
LR-67-01-813B	8/11/95	6.3	390	4000	880	460	1900
LR-67-01-813B	12/20/95	6.5	370	4200	870	460	1800
LR-67-01-814A	3/31/95	6.5	390	3600	860	440	1800
LR-67-01-814A	6/19/95	6.5	360	4000	900	470	1800
LR-67-01-814A	8/11/95	6.4	370	3900	880	480	1600
LR-67-01-814A	12/20/95	6.4	380	4200	880	480	1700
LR-67-01-814B	3/31/95	6.4	360	3800	910	430	1800
LR-67-01-814B	6/19/95	6.4	360	3900	880	470	1800
LR-67-01-814B	8/11/95	6.3	360	4000	850	460	1900
LR-67-01-814B	12/20/95	6.4	370	4200	860	470	1700
LR-67-09-105	8/25/95	7.1	250	280	90	18	14
LR-67-09-111	8/25/95	7.0	260	280	89	17	11

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
LR-67-01-801	6/19/95	1.0	27	27	0.31	5.5	236
LR-67-01-806	8/11/95	<1	26	28	0.17	5.3	312
LR-67-01-802	8/23/95	<1	23	23	0.11	6.3	252
LR-67-01-302	8/23/95	1.8	16	135	3.5	7.0	496
LR-58-58-403	8/23/95	<1	15	26	0.34	5.0	280
LR-67-01-812	3/31/95	110	4000	2800	5.3	6.5	11900
LR-67-01-812	6/19/95	100	4200	2800	5.0	6.9	11700
LR-67-01-812	8/11/95	99	4100	2900	6.0	8.0	12200
LR-67-01-812	12/20/95	100	4200	2300	3.5	6.9	11200
LR-67-01-813A	3/31/95	102	4000	2800	7.3	5.8	11500
LR-67-01-813A	6/19/95	101	4200	2900	9.3	8.0	11700
LR-67-01-813A	8/11/95	100	4100	3100	5.5	8.8	13900
LR-67-01-813A	12/20/95	99	4000	2600	3.8	6.8	11300
LR-67-01-813B	3/31/95	110	4000	2700	4.0	7.5	12000
LR-67-01-813B	6/19/95	100	4200	2900	6.0	8.1	11400
LR-67-01-813B	8/11/95	95	4100	2800	7.5	7.3	12500
LR-67-01-813B	12/20/95	96	4100	2200	5.3	7.0	11300
LR-67-01-814A	3/31/95	104	3900	2800	5.8	5.8	11900
LR-67-01-814A	6/19/95	100	4200	2700	5.5	8.0	11400
LR-67-01-814A	8/11/95	97	4100	2900	8.0	6.6	12500
LR-67-01-814A	12/20/95	98	4100	2500	5.5	6.9	11200
LR-67-01-814B	3/31/95	103	4100	2800	5.3	7.0	11300
LR-67-01-814B	6/19/95	100	4200	2900	5.3	7.9	11500
LR-67-01-814B	8/11/95	95	4100	2800	8.0	8.6	12400
LR-67-01-814B	12/20/95	102	4100	2700	5.4	6.9	11600
LR-67-09-105	8/25/95	<1	29	32	0.22	4.6	360
LR-67-09-111	8/25/95	1.1	22	24	0.08	6.3	340

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Nitrate Total mg/L as N	Nitrogen, Kjeldahl Total mg/L as N	Phosphorus Total mg/L as P
LR-67-01-801	6/19/95	<0.03	<0.005	1.01	0.35	<0.01
LR-67-01-806	8/11/95	<0.03	<0.005	1.47	0.60	<0.01
LR-67-01-802	8/23/95	<0.03	<0.005	1.77	0.42	<0.01
LR-67-01-302	8/23/95	<0.03	<0.005	<0.01	0.42	<0.01
LR-58-58-403	8/23/95	<0.03	<0.005	1.37	0.42	<0.01
LR-67-09-105	8/25/95	<0.03	<0.005	0.82	0.84	<0.01
LR-67-09-111	8/25/95	<0.03	<0.005	1.51	0.42	<0.01

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smpling Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
TD-68-26-701	6/23/95	13:07	750	67	1000	24.0	539
TD-69-29-901	9/1/95	10:40	276	35	10	23.0	461
TD-69-29-902	9/1/95	11:35	279	35	10	23.0	542
TD-68-33-202	9/1/95	14:50	279	45	15	23.0	446
TD-69-37-302	9/1/95	12:28	410	25	20	23.0	482
TD-69-40-403	6/8/95	9:45	518	1440	2250	23.5	474
TD-68-41-303	6/23/95	9:47	717	1440	360	24.5	496
TD-69-46-601	6/15/95	9:37	1289	30	290	24.0	477
TD-69-47-303	6/15/95	10:45	1803	165	1000	24.0	476
TD-69-56-508	6/8/95	11:25	2715	1440		35.0	485
City of Lytle #3	11/1/95	9:12		1440	1250	36.0	675
TD-69-63-103	11/17/95	10:30	3410	1440	300	43.0	569

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	pH stdrd units	Alka-linity, Fix End Field, mg/L as CaCO3	Hard-ness Total mg/L as CaCO3	Calcium Dis-solved mg/L as CaCO3	Magne-sium, Dis-solved mg/L as Mg	Sodium, Dis-solved mg/L as Na
TD-68-26-701	6/23/95	7.0	200	250	71	21	8.9
TD-69-29-901	9/1/95	7.2	220	210	84	7.0	7.9
TD-69-29-902	9/1/95	7.1	240	240	98	7.0	11
TD-68-33-202	9/1/95	7.3	190	200	75	11	9.5
TD-69-37-302	9/1/95	7.3	220	220	76	14	9.4
TD-69-40-403	6/8/95	7.1	210	220	79	11	5.4
TD-68-41-303	6/23/95	7.1	190	220	68	16	10
TD-69-46-601	6/15/95	7.3	200	210	69	15	7
TD-69-47-303	6/15/95	7.3	200	220	66	18	7
TD-69-56-508	6/8/95	7.2	190	210	52	22	9.6
City of Lytle #3	11/1/95	7.0	200	300	77	29	9.5
TD-69-63-103	11/17/95	7.2	180	240	58	23	18

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
TD-68-26-701	6/23/95	<1	19	55	0.21	6.3	292
TD-69-29-901	9/1/95	<1	13	10	0.15	7.3	210
TD-69-29-902	9/1/95	<1	18	16	0.18	6.0	260
TD-68-33-202	9/1/95	<1	17	29	0.20	6.1	220
TD-69-37-302	9/1/95	<1	16	15	0.29	6.3	196
TD-69-40-403	6/8/95	<1	16	7	0.16	5.7	244
TD-68-41-303	6/23/95	<1	27	15	0.04	5.6	292
TD-69-46-601	6/15/95	<1	19	18	0.32	5.2	268
TD-69-47-303	6/15/95	<1	20	18	0.30	5.8	264
TD-69-56-508	6/8/95	<1	23	33	0.75	5.7	268
City of Lytle #3	11/1/95	<1	60	72	3.55	5.7	460
TD-69-63-103	11/17/95	2.1	24	74	1.52	8.8	656

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Nitrate Total mg/L as N	Nitrogen, Kjeldahl Total mg/L as N	Phosphorus Total mg/L as P
TD-68-26-701	6/23/95	<0.03	<0.005	1.19	0.30	0.027
TD-69-29-901	9/1/95	<0.03	<0.005	1.2	0.28	<0.01
TD-69-29-902	9/1/95	<0.03	<0.005	1.5	0.42	<0.01
TD-68-33-202	9/1/95	<0.03	<0.005	0.58	0.42	<0.01
TD-69-37-302	9/1/95	<0.03	<0.005	1.4	0.56	<0.01
TD-69-40-403	6/8/95	<0.03	<0.005	1.75	1.3	<0.01
TD-68-41-303	6/23/95	<0.03	<0.005	2.15	0.40	0.029
TD-69-46-601	6/15/95	<0.03	<0.005	1.12	0.30	<0.01
TD-69-47-303	6/15/95	<0.03	<0.005	1.53	0.31	<0.01
TD-69-56-508	6/8/95	<0.03	<0.005	0.57	0.19	<0.01
City of Lytle #3	11/1/95	<0.03	<0.005	<0.01	2.5	<0.01
TD-69-63-103	11/17/95	<0.03	<0.005	<0.01	0.80	<0.01

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Time	Depth of Well, Total Feet	Pump or Flow Period Prior to Smplng Min	Flow Rate, Inst G/M	Water Temp Deg C	Specific Conductance us/cm
YP-69-36-702	6/22/95	13:02	538	1440	1400	23.0	466
YP-69-43-302	6/22/95	14:37	630	1440	2000	23.0	528
YP-69-43-606	6/22/95	11:42	698	17	850	24.0	511
YP-69-44-102	7/3/95	11:48	659	1440	1350	23.0	502
YP-69-45-404	6/22/95	10:22	1200	37	1000	23.0	663
YP-69-50-506	6/30/95	10:17	525	22	425	24.0	606
YP-69-50-203	6/30/95	11:12	525	1440	1300	23.0	577

State Well ID Number	Date	pH stdrd units	Alkalinity, Fix End Field, CaCO3 mg/L	Hardness Total mg/L as CaCO3	Calcium Dissolved mg/L as CaCO3	Magnesium, Dissolved mg/L as Mg	Sodium, Dissolved mg/L as Na
YP-69-36-702	6/22/95	7.3	180	200	58	16	10
YP-69-43-302	6/22/95	7.2	180	220	77	12	13
YP-69-43-606	6/22/95	7.2	200	210	75	11	12
YP-69-44-102	7/3/95	7.3	190	220	70	13	11
YP-69-45-404	6/22/95	7.3	200	280	88	23	20
YP-69-50-506	6/30/95	7.1	200	250	91	9.0	16
YP-69-50-203	6/30/95	7.1	210	240	84	11	16

Data for common constituents, nutrients, selected parameters, and dissolved organic carbon in Edwards Aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Potassium, Dissolved mg/L as K	Chloride, Dissolved mg/L as Cl	Phosphorus Total mg/L as P	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2
YP-69-36-702	6/22/95	<1.0	30	0.027	13	0.26	6.1
YP-69-43-302	6/22/95	<1.0	37	0.028	13	0.04	6.0
YP-69-43-606	6/22/95	<1.0	32	0.074	13	0.05	6.7
YP-69-44-102	7/3/95	<1.0	32	<0.010	11	0.07	6.0
YP-69-45-404	6/22/95	1.9	28	0.04	130	0.42	6.3
YP-69-50-506	6/30/95	<1.0	41	<0.010	22	0.14	5.8
YP-69-50-203	6/30/95	<1.0	40	<0.010	17	0.18	6.6

State Well ID Number	Date	Solids, Sum of Constituents, Dissolved mg/L	Nitrogen, Ammonia Total mg/L as N	Nitrogen, Nitrite Total mg/L as N	Nitrogen, Nitrate Total mg/L as N	Nitrogen, Kjeldahl Total mg/L as N	
YP-69-36-702	6/22/95	204	<0.03	<0.005	1.6	<0.3	
YP-69-43-302	6/22/95	260	<0.03	<0.005	3.0	0.4	
YP-69-43-606	6/22/95	270	<0.03	<0.005	3.0	0.4	
YP-69-44-102	7/3/95	268	<0.03	<0.005	1.2	<0.1	
YP-69-45-404	6/22/95	432	<0.03	<0.005	1.9	0.3	
YP-69-50-506	6/30/95	304	<0.03	<0.005	3.5	0.3	
YP-69-50-203	6/30/95	276	<0.03	<0.005	3.5	0.6	

Data for minor elements in water from Edwards aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Arsenic Dissolved ug/L as As	Barium, Dissolved ug/L as Ba	Cadmium, Dissolved ug/L as Cd	Chromium, Dissolved ug/L as Cr	Copper, Dissolved ug/L as Cu	Iron, Dissolved ug/L as Fe
AY-68-27-303	9/6/95	<1	30	<1.0	<1	<1	<3
AY-68-28-203	7/31/95	2	40	<1.0	<1	3	<3
AY-68-28-205	7/31/95	1	50	1.0	<1	<1	5
AY-68-28-501	7/31/95	2	50	<1.0	<1	10	<3
AY-68-28-702	8/4/95	1	40	<1.0	<1	1	<3
AY-68-28-904	7/27/95	2	30	<1.0	<1	1	<3
AY-68-35-203	8/10/95	<1	40	<1.0	<1	1	<3

State Well ID Number	Date	Lead, Dissolved ug/L as Pb	Manganese, Dissolved ug/L as Mn	Silver, Dissolved ug/L as Ag	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
AY-68-27-303	9/6/95	<1	2	<1.0	440	1	<2.0
AY-68-28-203	7/31/95	2	<1	<1.0	10	1	<2.0
AY-68-28-205	7/31/95	1	<1	<1.0	<10	<1	<2.0
AY-68-28-501	7/31/95	2	<1	<1.0	30	<1	<2.0
AY-68-28-702	8/4/95	1	<1	<1.0	<10	<1	<2.0
AY-68-28-904	7/27/95	2	<1	<1.0	10	<1	<2.0
AY-68-35-203	8/10/95	1	<1	<1.0	<10	<1	<2.0

Data for minor elements in Edwards aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Arsenic Dissolved ug/L as As	Barium, Dissolved ug/L as Ba	Cadmium, Dissolved ug/L as Cd	Chromium, Dissolved ug/L as Cr	Copper, Dissolved ug/L as Cu	Iron, Dissolved ug/L as Fe
DX-68-15-901	8/24/95	<1.0	30	<1.0	<1	1.0	11
DX-68-16-502	8/24/95	<1.0	40	<1.0	<1	2.0	3.0
DX-68-22-902	8/24/95	<1.0	30	<1.0	<1	4.0	<3.0
DX-68-23-156	9/11/95	<1.0	50	<1.0	<1	14	<3
DX-68-23-301	8/10/95	<1.0	40	<1.0	<1	<1.0	<3.0
DX-68-23-303	8/10/95	<1.0	50	<1.0	<1	4.0	<3.0
DX-68-23-316	9/11/95	<1.0	30	<1.0	<1	8.0	<3.0
DX-68-23-602	8/10/95	<1.0	30	<1.0	<1	3.0	8.0

State Well ID Number	Date	Lead, Dissolved ug/L as Pb	Manganese, Dissolved ug/L as Mn	Silver, Dissolved ug/L as Ag	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
DX-68-15-901	8/24/95	1	3	<1.0	<10	<1	<2.0
DX-68-16-502	8/24/95	1	1	<1.0	<10	<1	<2.0
DX-68-22-902	8/24/95	1	2	<1.0	<10	<1	<2.0
DX-68-23-156	9/11/95	6	<1	<1.0	60	1	<2.0
DX-68-23-301	8/10/95	<1	<1	<1.0	<10	1	<2.0
DX-68-23-303	8/10/95	1	<1	<1.0	40	<1	<2.0
DX-68-23-316	9/11/95	5	<1	<1.0	410	<1	<2.0
DX-68-23-602	8/10/95	1	<1	<1.0	<10	2	<2.0

Data for minor elements in water from Edwards aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Arsenic Dis-solved ug/L as As	Barium, Dis-solved ug/L as Ba	Cadmium, Dis-solved ug/L as Cd	Chro-mium, Dis-solved ug/L as Cr	Copper, Dis-solved ug/L as Cu	Iron, Dis-solved ug/L as Fe
LR-67-01-801	6/19/95	<1	40	<1.0	<1	<1	39
LR-67-01-806	8/11/95	<1	50	<1.0	<1	5	10
LR-67-01-802	8/23/95	<1	40	<1.0	1	3	18
LR-67-01-302	8/23/95	<1	60	<1.0	1	<1	71
LR-58-58-403	8/23/95	2	150	<1.0	<1	<1	14
LR-67-09-105	8/25/95	1	40	<1.0	<1	5	3
LR-67-09-111	8/25/95	<1	40	<1.0	<1	8	4

State Well ID Number	Date	Lead, Dis-solved ug/L as Pb	Manga-nese, Dis-solved ug/L as Mn	Silver, Dis-solved ug/L as Ag	Zinc, Dis-solved ug/L as Zn	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg
LR-67-01-801	6/19/95	1	<1	<1.0	10	<1	<2.0
LR-67-01-806	8/11/95	5	<1	<1.0	10	1	<2.0
LR-67-01-802	8/23/95	1	2	<1.0	10	<1	<2.0
LR-67-01-302	8/23/95	1	2	<1.0	<10	<1	<2.0
LR-58-58-403	8/23/95	1	2	<1.0	10	1	<2.0
LR-67-09-105	8/25/95	1	2	<1.0	10	<1	<2.0
LR-67-09-111	8/25/95	1	2	<1.0	10	<1	<2.0

Data for minor elements in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Arsenic Dissolved ug/L as As	Barium, Dissolved ug/L as Ba	Cadmium, Dissolved ug/L as Cd	Chromium, Dissolved ug/L as Cr	Copper, Dissolved ug/L as Cu	Iron, Dissolved ug/L as Fe
TD-68-26-701	6/23/95	<1	40	<1.0	<1	3	3
TD-69-29-901	9/1/95	2	30	<1.0	<1	4	8
TD-69-29-902	9/1/95	<1	30	<1.0	<1	9	6
TD-68-33-202	9/1/95	<1	30	<1.0	<1	7	10
TD-69-37-302	9/1/95	<1	30	<1.0	<1	8	5
TD-69-40-403	6/8/95	<1	40	<1.0	<1	6	6
TD-68-41-303	6/23/95	<1	50	<1.0	<1	17	3
TD-69-46-601	6/15/95	<1	40	<1.0	<1	3	5
TD-69-47-303	6/15/95	<1	40	<1.0	<1	<1	10
TD-69-56-508	6/8/95	1	190	<1.0	<1	2	12
City of Lytle #3	11/1/95	<1	100	<1.0	<1	1	351
TD-69-63-103	11/17/95	<1	120	<1.0	<1	1	966

Data for minor elements in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Lead, Dissolved ug/L as Pb	Manganese, Dissolved ug/L as Mn	Silver, Dissolved ug/L as Ag	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
TD-68-26-701	6/23/95	2	<1	<1.0	<10	1	<2.0
TD-69-29-901	9/1/95	1	4	<1.0	280	1	<2.0
TD-69-29-902	9/1/95	1	2	<1.0	190	1	<2.0
TD-68-33-202	9/1/95	1	2	<1.0	110	<1	<2.0
TD-69-37-302	9/1/95	1	1	<1.0	<10	<1	<2.0
TD-69-40-403	6/8/95	5	<1	<1.0	30	<1	<2.0
TD-68-41-303	6/23/95	2	<1	<1.0	40	<1	<2.0
TD-69-46-601	6/15/95	4	<1	<1.0	<10	<1	<2.0
TD-69-47-303	6/15/95	2	<1	<1.0	10	<1	<2.0
TD-69-56-508	6/8/95	1	<1	<1.0	20	<1	<2.0
City of Lytle #3	11/1/95	<1	5		<10	<1	<2.0
TD-69-63-103	11/17/95	<1	13	<1.0	20	<1	<2.0

Data for minor elements in water from Edwards aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Arsenic, Dissolved ug/L as As	Barium, Dissolved ug/L as Ba	Cadmium, Dissolved ug/L as Cd	Chromium, Dissolved ug/L as Cr	Copper, Dissolved ug/L as Cu	Iron, Dissolved ug/L as Fe
YP-69-36-702	6/22/95	<1	40	<1.0	<1	<1	<3
YP-69-43-302	6/22/95	<1	50	<1.0	2	4	3
YP-69-43-606	6/22/95	<1	50	<1.0	<1	7	<3
YP-69-44-102	7/3/95	<1	30	<1.0	<1	3	<3
YP-69-45-404	6/22/95	<1	40	<1.0	<1	3	9
YP-69-50-506	6/30/95	<1	50	<1.0	3	8	3
YP-69-50-203	6/30/95	<1	40	<1.0	<1	4	<3

State Well ID Number	Date	Lead, Dissolved ug/L as Pb	Manganese, Dissolved ug/L as Mn	Silver, Dissolved ug/L as Ag	Zinc, Dissolved ug/L as Zn	Selenium, Dissolved ug/L as Se	Mercury Dissolved ug/L as Hg
YP-69-36-702	6/22/95	<1	<1	<1.0	10	<1	<2.0
YP-69-43-302	6/22/95	2	<1	<1.0	10	<1	<2.0
YP-69-43-606	6/22/95	3	<1	<1.0	10	<1	<2.0
YP-69-44-102	7/3/95	1	<1	<1.0	<10	<1	<2.0
YP-69-45-404	6/22/95	4	3	<1.0	20	<1	<2.0
YP-69-50-506	6/30/95	4	<1	<1.0	<10	<1	<2.0
YP-69-50-203	6/30/95	2	<1	<1.0	<10	<1	<2.0

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
AY-68-28-203	7/31/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
AY-68-28-205	7/31/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010

State Well ID Number	Date	Dieldrin Total ug/L	Endosulfan I, Alpha Total ug/L	Endosulfan II, Beta Total ug/L	Endrin Water Unfiltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Toatl ug/L
AY-68-28-203	7/31/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
AY-68-28-205	7/31/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

State Well ID Number	Date	Perthane Total ug/L	Toxaphene, Total ug/L	PCB, Total ug/L	Napthalenes, Polychlor., Total ug/L	Diazinon, Total ug/L	Ethion, Total ug/L
AY-68-28-203	7/31/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
AY-68-28-205	7/31/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01

State Well ID Number	Date	Malathion, Total ug/L	Methyl Parathion Total ug/L	Mirex, Total ug/L	Parathion, Total ug/L	Trithion, Total ug/L	2,4-D Total ug/L
AY-68-28-203	7/31/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
AY-68-28-205	7/31/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	2,4,5-T Total ug/L	2,4,5-TP Silvex, Total ug/L
AY-68-28-203	7/31/95	<0.01	<0.01
AY-68-28-205	7/31/95	<0.01	<0.01

Data for pesticides in Edwards aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
DX-68-15-901	8/24/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
DX-68-16-502	8/24/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
DX-68-22-902	8/24/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
DX-68-23-301	8/10/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
DX-68-23-303	8/10/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010

State Well ID Number	Date	Dieldrin Total ug/L	Endosulfan I, Alpha Total ug/L	Endosulfan II, Beta Total ug/L	Endrin Water Unfltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Toatl ug/L
DX-68-15-901	8/24/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
DX-68-16-502	8/24/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
DX-68-22-902	8/24/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
DX-68-23-301	8/10/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
DX-68-23-303	8/10/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

State Well ID Number	Date	Perthane Total ug/L	Toxaphene, Total ug/L	PCB, Total ug/L	Napthalenes, Polychlor., Total ug/L	Diazinon, Total ug/L	Ethion, Total ug/L
DX-68-15-901	8/24/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
DX-68-16-502	8/24/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
DX-68-22-902	8/24/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
DX-68-23-301	8/10/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
DX-68-23-303	8/10/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01

Data for pesticides in Edwards aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Mala-thion, Total ug/L	Methyl Para-thion Total ug/L	Mirex, Total ug/L	Para-thion, Total ug/L	Total Tri-thion ug/L	2,4-D Total ug/L
DX-68-15-901	8/24/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX-68-16-502	8/24/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX-68-22-902	8/24/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX-68-23-301	8/10/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
DX-68-23-303	8/10/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

State Well ID Number	Date	2,4,5-T Total ug/L	2,4,5-TP Silvex, Total ug/L
DX-68-15-901	8/24/95	<0.01	<0.01
DX-68-16-502	8/24/95	<0.01	<0.01
DX-68-22-902	8/24/95	<0.01	<0.01
DX-68-23-301	8/10/95	<0.01	<0.01
DX-68-23-303	8/10/95	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
LR-67-01-801	6/19/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
LR-67-01-806	8/11/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
LR-67-01-302	8/23/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
LR-58-58-403	8/23/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
LR-67-09-105	8/25/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010

State Well ID Number	Date	Dieldrin Total ug/L	Endosulfan I, Alpha Total ug/L	Endosulfan II, Beta Total ug/L	Endrin Water Unfiltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Toatl ug/L
LR-67-01-801	6/19/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
LR-67-01-806	8/11/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
LR-67-01-302	8/23/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
LR-58-58-403	8/23/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
LR-67-09-105	8/25/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

State Well ID Number	Date	Perthane Total ug/L	Toxaphene, Total ug/L	PCB, Total ug/L	Napthalenes, Polychlor., Total ug/L	Diazinon, Total ug/L	Ethion, Total ug/L
LR-67-01-801	6/19/95	<0.1	<1	<0.1		<0.01	<0.01
LR-67-01-806	8/11/95	<0.1	<1	<0.1	<0.1	<0.01	<0.01
LR-67-01-302	8/23/95	<0.1	<1	<0.1	<0.1	<0.01	<0.01
LR-58-58-403	8/23/95	<0.1	<1	<0.1	<0.1	<0.01	<0.01
LR-67-09-105	8/25/95	<0.1	<1	<0.1	<0.1	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Malathion, Total ug/L	Methyl Parathion Total ug/L	Mirex, Total ug/L	Parathion, Total ug/L	Total Trithion ug/L	2,4-D Total ug/L
LR-67-01-801	6/19/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR-67-01-806	8/11/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR-67-01-302	8/23/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR-58-58-403	8/23/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
LR-67-09-105	8/25/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

State Well ID Number	Date	2,4,5-T Total ug/L	2,4,5-TP Silvex, Total ug/L
LR-67-01-801	6/19/95	<0.01	<0.01
LR-67-01-806	8/11/95	<0.01	<0.01
LR-67-01-302	8/23/95	<0.01	<0.01
LR-58-58-403	8/23/95	<0.01	<0.01
LR-67-09-105	8/25/95	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
TD-68-26-701	6/23/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
TD-69-29-901	9/1/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
TD-69-37-302	9/1/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
TD-69-40-403	6/8/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
TD-69-56-508	6/8/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010

State Well ID Number	Date	Dieldrin Total ug/L	Endosulfan I, Alpha Total ug/L	Endosulfan II, Beta Total ug/L	Endrin Water Unfltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Toatl ug/L
TD-68-26-701	6/23/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
TD-69-29-901	9/1/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
TD-69-37-302	9/1/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
TD-69-40-403	6/8/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
TD-69-56-508	6/8/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

State Well ID Number	Date	Perthane Total ug/L	Toxaphene, Total ug/L	PCB, Total ug/L	Napthalenes, Polychlor., Total ug/L	Diazinon, Total ug/L	Ethion, Total ug/L
TD-68-26-701	6/23/95	<0.1	<1	<0.1		<0.01	<0.01
TD-69-29-901	9/1/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
TD-69-37-302	9/1/95	<0.1	<1	<0.1	<0.10	<0.01	<0.01
TD-69-40-403	6/8/95	<0.1	<1	<0.1		<0.01	<0.01
TD-69-56-508	6/8/95	<0.1	<1	<0.1		<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Malathion, Total ug/L	Methyl Parathion Total ug/L	Mirex, Total ug/L	Parathion, Total ug/L	Total Trithion ug/L	2,4-D Total ug/L
TD-68-26-701	6/23/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD-69-29-901	9/1/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD-69-37-302	9/1/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD-69-40-403	6/8/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
TD-69-56-508	6/8/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

State Well ID Number	Date	2,4,5-T Total ug/L	2,4,5-TP Silvex, Total ug/L
TD-68-26-701	6/23/95	<0.01	<0.01
TD-69-29-901	9/1/95	<0.01	<0.01
TD-69-37-302	9/1/95	<0.01	<0.01
TD-69-40-403	6/8/95	<0.01	<0.01
TD-69-56-508	6/8/95	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
YP-69-36-702	6/22/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
YP-69-43-302	6/22/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010
YP-69-44-102	7/3/95	<0.010	<0.010	<0.1	<0.010	<0.010	<0.010

State Well ID Number	Date	Dieldrin Total ug/L	Endosulfan I, Alpha Total ug/L	Endosulfan II, Beta Total ug/L	Endrin Water Unfltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Toatl ug/L
YP-69-36-702	6/22/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
YP-69-43-302	6/22/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
YP-69-44-102	7/3/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

State Well ID Number	Date	Perthane Total ug/L	Toxaphene, Total ug/L	PCB, Total ug/L	Diazinon, Total ug/L	Ethion, Total ug/L	Malathion, Total ug/L
YP-69-36-702	6/22/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
YP-69-43-302	6/22/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
YP-69-44-102	7/3/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01

State Well ID Number	Date	Methyl Parathion Total ug/L	Mirex, Total ug/L	Parathion, Total ug/L	Total Trithion ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L
YP-69-36-702	6/22/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
YP-69-43-302	6/22/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
YP-69-44-102	7/3/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

Data for pesticides in water from Edwards aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	2,4,5-TP Silvex, Total ug/L
YP-69-36-702	6/22/95	<0.01
YP-69-43-302	6/22/95	<0.01
YP-69-44-102	7/3/95	<0.01

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	Benzene Total ug/L	Bromodichloromethane Total ug/L	Bromoform Total ug/L	Bromomethane Total ug/L	Carbon tetrachloride Total ug/L	Chlorobenzene Total ug/L
AY-68-27-303	9/6/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Chloroethane Total ug/L	2-Chloroethylvinyl ether Total ug/L	Chloroform Total ug/L	Chloromethane Total ug/L	Dibromochloromethane Total ug/L	1,2-Dichlorobenzene Total ug/L
AY-68-27-303	9/6/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	1,3-Dichlorobenzene Total ug/L	1,4-Dichlorobenzene Total ug/L	Dichlorodifluoromethane Total ug/L	1,1-Dichloroethane Total ug/L	1,2-Dichloroethane Total ug/L	1,1-Dichloroethene Total ug/L
AY-68-27-303	9/6/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Trans-1,2-Dichloroethene Total ug/L	1,2-Dichloropropane Total ug/L	Cis-1,3-Dichloropropene Total ug/L	Ethylbenzene Total ug/L	Methylene chloride Total ug/L	Styrene Total ug/L
AY-68-27-303	9/6/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95	<0.2	>0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Bexar County

State Well ID Number	Date	1,1,1,2-Tetrachloroethane Total ug/L	1,1,2,2-Tetrachloroethane Total ug/L	Tetrachloroethene Total ug/L	Toluene Total ug/L	1,1,1-Trichloroethane Total ug/L	1,1,2-Trichloroethane Total ug/L
AY-68-27-303	9/6/95		<0.2	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95		<0.2	<0.35	<0.2	<0.2	<0.2

State Well ID Number	Date	Trichloroethene Total ug/L	Trichlorofluoromethane Total ug/L	Vinyl chloride Total ug/L	Xylene Total ug/L
AY-68-27-303	9/6/95	<0.2	<0.2	<0.2	<0.2
AY-68-28-904	7/27/95	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	Benzene Total ug/L	Bromodichloromethane Total ug/L	Bromoform Total ug/L	Bromomethane Total ug/L	Carbon tetrachloride Total ug/L	Chlorobenzene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Chloroethane Total ug/L	2-Chloroethylvinyl ether Total ug/L	Chloroform Total ug/L	Chloromethane Total ug/L	Dibromochloromethane Total ug/L	1,2-Dichlorobenzene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	1,3-Dichlorobenzene Total ug/L	1,4-Dichlorobenzene Total ug/L	Dichlorodifluoromethane Total ug/L	1,1-Dichloroethane Total ug/L	1,2-Dichloroethane Total ug/L	1,1-Dichloroethene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Trans-1,2-Dichloroethene Total ug/L	1,2-Dichloropropane Total ug/L	Cis-1,3-Dichloropropene Total ug/L	Ethyl benzene Total ug/L	Methylene chloride Total ug/L	Styrene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in Edwards aquifer wells and springs sampled in 1995

Comal County

State Well ID Number	Date	1,1,2,2-Tetrachloro-ethane Total ug/L	Tetrachloro-ethene Total ug/L	Toluene Total ug/L	1,1,1-Trichloro-ethane Total ug/L	1,1,2-Trichloro-ethane Total ug/L	Trichloro-ethene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Trichloro-fluoro-methane Total ug/L	Vinyl chloride Total ug/L	Xylene Total ug/L
DX-68-16-502	8/24/95	<0.2	<0.2	<0.2
DX-68-23-301	8/10/95	<0.2	<0.2	<0.2

Data for volatile organics in water from Edwards aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	Benzene Total ug/L	Bromo-dichloro-methane Total ug/L	Bromoform Total ug/L	Bromo-methane Total ug/L	Carbon tetra-chloride Total ug/L	Chloro-benzene Total ug/L
LR-67-01-801	6/19/95	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Chloro-ethane Total ug/L	2-Chloro-ethylvinyl ether Total ug/L	Chloroform Total ug/L	Chloro-methane Total ug/L	Dibromo-chloro-methane Total ug/L	1,2-Dichloro-benzene Total ug/L
LR-67-01-801	6/19/95	<5.0	<5.0	<3.0	<5.0	<3.0	<3.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	1,3-Dichloro-benzene Total ug/L	1,4-Dichloro-benzene Total ug/L	Dichloro-difluoro-methane Total ug/L	1,1-Dichloro-ethane Total ug/L
LR-67-01-801	6/19/95	<3.0	<3.0	<5.0	<3.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2

Data for volatile organics in water from Edwards aquifer wells and springs sampled in 1995

Hays County

State Well ID Number	Date	1,2-Dichloroethane Total ug/L	1,1-Dichloroethene Total ug/L	Trans-1,2-Dichloroethene Total ug/L	1,2-Dichloropropane Total ug/L	Cis-1,3-Dichloropropene Total ug/L	Trans-1,3-Dichloropropene Total ug/L
LR-67-01-801	6/19/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	Ethylbenzene Total ug/L	Methylene chloride Total ug/L	Styrene Total ug/L	1,1,2,2-Tetrachloroethane Total ug/L	Tetrachloroethene Total ug/L	Toluene Total ug/L
LR-67-01-801	6/19/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

State Well ID Number	Date	1,1,1-Trichloroethane Total ug/L	1,1,2-Trichloroethane Total ug/L	Trichloroethene Total ug/L	Trichlorofluoromethane Total ug/L	Vinyl chloride Total ug/L	Xylene Total ug/L
LR-67-01-801	6/19/95	<3.0	<3.0	<3.0	<5.0	<5.0	<8.0
LR-67-01-802	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-67-01-302	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
LR-58-58-403	8/23/95	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Acetone Total ug/L	aceton-itrile Total ug/L	Acrolein Total ug/L	Acrylon-itrile Total ug/L	Ally alcohol Total ug/L	Ally chloride Total ug/L
TD-68-41-303	6/23/95						
TD-69-47-303	6/15/95	<10.0	<10.0	<10.0	<10.0	<5.0	<5.0

State Well ID Number	Date	Benzene Total ug/L	Benzyl chloride Total ug/L	Bromo-acetone Total ug/L	Bromo-dichloro-methane Total ug/L	Bromoform Total ug/L	Bromo-methane Total ug/L
TD-68-41-303	6/23/95	<3.0			<3.0	<3.0	<5.0
TD-69-47-303	6/15/95	<3.0	<3.0	<10.0	<3.0	<3.0	<5.0

State Well ID Number	Date	2-Butanone Total ug/L	Carbon disulfide Total ug/L	Carbon tetra-chloride Total ug/L	Chloro-benzene Total ug/L	Chloro-dibromo-methane Total ug/L	Chloro-ethane Total ug/L
TD-68-41-303	6/23/95			<3.0	<3.0		<5.0
TD-69-47-303	6/15/95	<10.0	<3.0	<3.0	<3.0	<3.0	<5.0

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	2-Chloro-ethanol Total ug/L	2-Chloro-ethylvinyl ether Total ug/L	Chloroform Total ug/L	Chloro-methane Total ug/L	Dibromo-chloro-methane Total ug/L	Chloro-prene Total ug/L
TD-68-41-303	6/23/95		<5.0	<3.0	<5.0	<3.0	
TD-69-47-303	6/15/95	<5.0	<5.0	<3.0	<5.0		<5.0

State Well ID Number	Date	1,2-Dibromo-3-chloro-propane Total ug/L	1,2-Dibromo-ethane Total ug/L	Dibromo-ethane Total ug/L	1,2-Dichloro-benzene Total ug/L	1,3-Dichloro-benzene Total ug/L	1,4-Dichloro-benzene Total ug/L
TD-68-41-303	6/23/95				<3.0	<3.0	<3.0
TD-69-47-303	6/15/95	<3.0	<3.0	<3.0			

State Well ID Number	Date	1,4-Dichloro-2-butene Total ug/L	Dichloro-difluoro-methane Total ug/L	1,1-Dichloro-ethane Total ug/L	1,2-Dichloro-ethane Total ug/L	1,1-Dichloro-ethene Total ug/L	Cis-1,2-Dichloro-ethene Total ug/L
TD-68-41-303	6/23/95		<5.0	<3.0	<3.0	<3.0	
TD-69-47-303	6/15/95	<3.0	<5.0	<3.0	<3.0	<3.0	<3.0

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Trans-1,2-Dichloroethene Total ug/L	1,2-Dichloropropane Total ug/L	1,3-Dichloro-2-propanol Total ug/L	Cis-1,3-Dichloropropene Total ug/L	Trans-1,3-Dichloropropene Total ug/L	1,4-Dioxane Total ug/L
TD-68-41-303	6/23/95	<3.0	<3.0		<3.0	<3.0	
TD-69-47-303	6/15/95	<3.0	<3.0	<100.0	<3.0	<3.0	<100.0

State Well ID Number	Date	Ethyl benzene Total ug/L	Ethyl methacrylate Total ug/L	Ethylene oxide Total ug/L	2-Hexanone Total ug/L	Isobutyl alcohol Total ug/L	Methacrylonitrile Total ug/L
TD-68-41-303	6/23/95	<3.0					
TD-69-47-303	6/15/95	<3.0	<10.0	<10.0	<10.0	<10.0	<10.0

State Well ID Number	Date	Methylene chloride Total ug/L	Methyl iodide Total ug/L	Methyl methacrylate Total ug/L	4-Methyl-2-pentanone Total ug/L	Pentachloroethane Total ug/L	Propargyl alcohol Total ug/L
TD-68-41-303	6/23/95	<3.0					
TD-69-47-303	6/15/95	<3.0	<3.0	<10.0	<10.0	<3.0	<100.0

Data for volatile organic compounds in water from Edwards aquifer wells and springs sampled in 1995

Medina County

State Well ID Number	Date	Propionitrile Total ug/L	Styrene Total ug/L	1,1,1,2-Tetrachloroethane Total ug/L	1,1,2,2-Tetrachloroethane Total ug/L	Tetrachloroethene Total ug/L	Toluene Total ug/L
TD-68-41-303	6/23/95		<3.0		<3.0	<3.0	<3.0
TD-69-47-303	6/15/95	<10.0	<3.0	<3.0	<3.0	<3.0	<3.0

State Well ID Number	Date	1,1,1-Trichloroethane Total ug/L	1,1,2-Trichloroethane Total ug/L	Trichloroethene Total ug/L	Trichlorofluoromethane Total ug/L	1,2,3-Trichloropropane Total ug/L	Vinyl acetate Total ug/L
TD-68-41-303	6/23/95	<3.0	<3.0	<3.0	<5.0		
TD-69-47-303	6/15/95	<3.0	<3.0	<3.0		<3.0	<5.0

State Well ID Number	Date	Vinyl chloride Total ug/L	Xylene Total ug/L
TD-68-41-303	6/23/95	<5.0	<8.0
TD-69-47-303	6/15/95	<5.0	<8.0

Data for volatile organic compounds from Edwards aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Benzene Total ug/L	Bromodichloromethane Total ug/L	Bromoform Total ug/L	Bromomethane Total ug/L	Carbon tetrachloride Total ug/L	Chlorobenzene Total ug/L
YP-69-50-506	6/30/95	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0
YP-69-50-203	6/30/95	<3.0	<3.0	<3.0	<5.0	<3.0	<3.0

State Well ID Number	Date	Chloroethane Total ug/L	2-Chloroethylvinyl ether Total ug/L	Chloroform Total ug/L	Chloromethane Total ug/L	Dibromochloromethane Total ug/L	1,2-Dichlorobenzene Total ug/L
YP-69-50-506	6/30/95	<5.0	<5.0	<3.0	<5.0	<3.0	<3.0
YP-69-50-203	6/30/95	<5.0	<5.0	<3.0	<5.0	<3.0	<3.0

State Well ID Number	Date	1,3-Dichlorobenzene Total ug/L	1,4-Dichlorobenzene Total ug/L	Dichlorodifluoromethane Total ug/L	1,1-Dichloroethane Total ug/L	1,2-Dichloroethane Total ug/L	1,1-Dichloroethene Total ug/L
YP-69-50-506	6/30/95	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0
YP-69-50-203	6/30/95	<3.0	<3.0	<5.0	<3.0	<3.0	<3.0

State Well ID Number	Date	Trans-1,2-Dichloroethene Total ug/L	1,2-Dichloropropane Total ug/L	Cis-1,3-Dichloropropene Total ug/L	Trans-1,3-Dichloropropene Total ug/L	Ethyl benzene Total ug/L	Methylene chloride Total ug/L
YP-69-50-506	6/30/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
YP-69-50-203	6/30/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

Data for volatile organic compounds from Edwards aquifer wells and springs sampled in 1995

Uvalde County

State Well ID Number	Date	Styrene Total ug/L	1,1,2,2-Tetrachloro-ethane Total ug/L	Tetrachloro-ethene Total ug/L	Toluene Total ug/L	1,1,1-Trichloro-ethane Total ug/L	1,1,2-Trichloro-ethane Total ug/L
YP-69-50-506	6/30/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
YP-69-50-203	6/30/95	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

State Well ID Number	Date	Trichloro-ethene Total ug/L	Trichloro-fluoro-methane Total ug/L	Vinyl chloride Total ug/L	Xylene Total ug/L
YP-69-50-506	6/30/95	<3.0	<5.0	<5.0	<8.0
YP-69-50-203	6/30/95	<3.0	<5.0	<5.0	<8.0

Water Quality Data from streams and rivers crossing Edwards Aquifer region sampled in 1995

Surface Water Data-1995

River or Stream	Date	Time	Dis-charge, Ins. Cubic Feet/ Second	Water Temp Deg C	Speci-fic Con-duct-ance us/cm	pH stdrd units	Alka-linity, Fix End Field, CaCO3 mg/L
Dry Frio Riv@Reagan Wells	06/07/95	10:45		26.0	385	7.3	170
Frio River@Concan	06/07/95	11:55		26.0	396	7.0	170
Hondo Creek@Tarpley	05/17/95	11:50		25.0	413	7.6	160
Medina River@Bandera	05/17/95	09:55		25.0	507	7.6	160
Nueces River@Laguna	05/24/95	10:45		22.0	368	7.4	160
Sabinal Riv Nr. Sabinal	05/17/95	13:35		25.5	437	7.4	190
Seco Creek Nr. Miller Ranch	05/24/95	13:30		23.0	373	7.4	140
Dry Frio Riv@Reagan Wells	9/26/95	10:45		23.0	448	8.1	200
Frio River@Concan	9/26/95	9:00		23.0	425	8.1	190
Hondo Creek@Tarpley	9/25/95	10:50		21.0	424	8.2	170
Medina River@Bandera	9/20/95	14:40		24.5	379	8.0	150
Nueces River@Laguna	9/26/95	13:50		25.0	421	8.1	190
Sabinal Riv Nr. Sabinal	9/25/95	12:55		22.0	444	8.1	200
Seco Creek Nr. Miller Ranch	9/21/95	11:45		23.0	349	8.1	150

			Water Quality Data from streams and rivers			
			crossing Edwards Aquifer region			
			sampled in 1995			
			Surface Water Data-1995			
River or Stream	Date	Hard-ness Total mg/L as CaCO3	Calcium Dis-solved mg/L as CaCO3	Magne-sium, Dis-solved mg/L as Mg	Sodium, Dis-solved mg/L as Na	Potas-sium, Dis-solved mg/L as K
Dry Frio Riv@Reagan Wells	06/07/95	180	56	13	6.4	<1
Frio River@Concan	06/07/95	180	53	15	7.0	<1
Hondo Creek@Tarpley	05/17/95	180	57	10	9.0	<1
Medina River@Bandera	05/17/95	240	66	17	8.9	<1
Nueces River@Laguna	05/24/95	160	49	12	8.6	<1
Sabinal Riv Nr. Sabinal	05/17/95	200	59	12	9.3	<1
Seco Creek Nr. Miller Ranch	05/24/95	160	49	11	8.3	<1
Dry Frio Riv@Reagan Wells	9/26/95	190	71	12	8.7	<1
Frio River@Concan	9/26/95	180	64	13	8.9	<1
Hondo Creek@Tarpley	9/25/95	180	70	9.0	8.9	<1
Medina River@Bandera	9/20/95	170	52	12	8.3	2.9
Nueces River@Laguna	9/26/95	170	62	12	9.4	<1
Sabinal Riv Nr. Sabinal	9/25/95	180	69	13	8.9	<1
Seco Creek Nr. Miller Ranch	9/21/95	160	57	8.0	7.9	<1

			Water Quality Data from streams and rivers			
			crossing Edwards Aquifer region			
			sampled in 1995			
			Surface Water Data-1995			
River or Stream	Date	Chloride, Dissolved mg/L as Cl	Sulfate dissolved mg/L as SO4	Fluoride, dissolved mg/L as F	Silica Dissolved mg/L as SiO2	Solids, Sum of Constituents, Dissolved mg/L
Dry Frio Riv@Reagan Wells	06/07/95	15	17	0.13	5.3	204
Frio River@Concan	06/07/95	17	16	0.18	5.2	220
Hondo Creek@Tarpley	05/17/95	15	38	0.25	6.2	220
Medina River@Bandera	05/17/95	15	83	0.21	4.8	316
Nueces River@Laguna	05/24/95	16	16	0.10	4.8	180
Sabinal Riv Nr. Sabinal	05/17/95	16	29	0.14	7.0	232
Seco Creek Nr. Miller Ranch	05/24/95	14	49	0.20	5.9	220
Dry Frio Riv@Reagan Wells	9/26/95	16	21	0.11	6.4	248
Frio River@Concan	9/26/95	15	20	0.12	5.6	236
Hondo Creek@Tarpley	9/25/95	12	30	0.19	6.3	224
Medina River@Bandera	9/20/95	9.0	75	0.25	3.6	220
Nueces River@Laguna	9/26/95	18	13	0.10	6.6	208
Sabinal Riv Nr. Sabinal	9/25/95	14	26	0.23	7.0	248
Seco Creek Nr. Miller Ranch	9/21/95	9.0	29	0.20	5.2	248

Water Quality Data from streams and rivers crossing Edwards Aquifer region sampled in 1995

Surface Water Data-1995

River or Stream	Date	Ammonia Dissolved mg/L as N	Nitro-gen, Nitrate Dissolved mg/L as N	Nitro-gen, Nitrite Dissolved mg/L as N	Nitro-gen, Kjeldahl Total mg/L as N	Phos-phorus Total mg/L as P	Carbon, Organic Total (mg/l as C)
Dry Frio Riv@Reagan Wells	06/07/95	<0.03	0.31	<0.005	0.46	<0.01	2.4
Frio River@Concan	06/07/95	<0.03	0.48	<0.005	0.56	<0.01	1.2
Hondo Creek@Tarpley	05/17/95	<0.03	<0.01	<0.005	0.47	0.02	2.1
Medina River@Bandera	05/17/95	<0.03	0.05	<0.005	0.48	0.03	1.5
Nueces River@Laguna	05/24/95	<0.03	0.71	0.005	0.37	0.02	3
Sabinal Riv Nr. Sabinal	05/17/95	<0.03	0.11	<0.005	0.47	0.03	1
Seco Creek Nr. Miller Ranch	05/24/95	<0.03	<0.01	<0.005	0.28	<0.01	1.5
Dry Frio Riv@Reagan Wells	9/26/95	<0.03	1.1	<0.005	1.7	<0.01	1.9
Frio River@Concan	9/26/95	<0.03	1.7	<0.005	1.3	<0.01	1.4
Hondo Creek@Tarpley	9/25/95	<0.03	0.55	0.005	0.8	<0.01	1.2
Medina River@Bandera	9/20/95	<0.03	0.07	0.009	0.8	<0.01	3.9
Nueces River@Laguna	9/26/95	<0.03	0.95	<0.005	0.7	<0.01	<1.0
Sabinal Riv Nr. Sabinal	9/25/95	<0.03	0.46	<0.005	0.6	<0.01	1.5
Seco Creek Nr. Miller Ranch	9/21/95	<0.03	0.56	<0.005	1.1	<0.01	1.9

			Water Quality Data from streams and rivers				
			crossing Edwards Aquifer region				
			sampled in 1995				
			Surface Water Data-1995				
					Chro-		
		Arsenic	Barium,	Cadmium,	mium,	Lead,	Silver,
River		Dis-	Dis-	Dis-	Dis-	Dis-	Dis-
or		solved	solved	solved	solved	solved	solved
Stream	Date	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
		as As	as Ba	as Cd	as Cr	as Pb	as Ag
Dry Frio Riv@Reagan Wells	06/07/95	2	50	<1.0	<1	1	<1.0
Frio River@Concan	06/07/95	<2	40	<1.0	<1	<1	<1.0
Hondo Creek@Tarpley	05/17/95	<1	30	<1.0	<1	1	<1.0
Medina River@Bandera	05/17/95	<1	30	<1.0	<1	1	<1.0
Nueces River@Laguna	05/24/95	<1	30	<1.0	<1	<1	<1.0
Sabinal Riv Nr. Sabinal	05/17/95	<1	40	<1.0	<1	1	<1.0
Seco Creek Nr. Miller Ranch	05/24/95	<1	20	<1.0	<1	<1	<1.0
Dry Frio Riv@Reagan Wells	9/26/95	<1	40	<1.0	1	1	<1.0
Frio River@Concan	9/26/95	<1	30	<1.0	1	1	<1.0
Hondo Creek@Tarpley	9/25/95	<1	20	<1.0	1	1	<1.0
Medina River@Bandera	9/20/95	1	10	<1.0	<1	3	<1.0
Nueces River@Laguna	9/26/95	<1	30	<1.0	<1	<1	<1.0
Sabinal Riv Nr. Sabinal	9/25/95	<1	20	<1.0	2	1	<1.0
Seco Creek Nr. Miller Ranch	9/21/95	<1	10	<1.0	<1	2	<1.0

Water Quality Data from streams and rivers crossing Edwards Aquifer region sampled in 1995

Surface Water Data-1995

River or Stream	Date	Sele-nium, Dis-solved ug/L as Se	Mercury Dis-solved ug/L as Hg	Zinc Dis-solved ug/L as Zn	Copper Dis-solved ug/L as Cu	Iron Dis-solved ug/L as Fe	Manganese Dis-solved ug/L as Mn
Dry Frio Riv@Reagan Wells	06/07/95	<2	<2.0	20	<1	3	<1
Frio River@Concan	06/07/95	<2	<2.0	10	<1	<3	<1
Hondo Creek@Tarpley	05/17/95	<1	<2.0	20	13	6	2
Medina River@Bandera	05/17/95	<1	<2.0	10	<1	3	2
Nueces River@Laguna	05/24/95	<1	<2.0	<10	<1	<3	1
Sabinal Riv Nr. Sabinal	05/17/95	<1	<2.0	10	4	<3	1
Seco Creek Nr. Miller Ranch	05/24/95	<1	<2.0	10	<1	18	1
Dry Frio Riv@Reagan Wells	9/26/95	<1	<2.0	10	2	5	2
Frio River@Concan	9/26/95	<1	<2.0	10	4	<3	<1
Hondo Creek@Tarpley	9/25/95	1	<2.0	<10	2	3	1
Medina River@Bandera	9/20/95	<1	<2.0	<10	<1	38	4
Nueces River@Laguna	9/26/95	<1	<2.0	10	2	<3	<1
Sabinal Riv Nr. Sabinal	9/25/95	<1	<2.0	<10	1	<3	<1
Seco Creek Nr. Miller Ranch	9/21/95	<1	<2.0	10	<1	21	1

Water Quality Data from streams and rivers
crossing Edwards Aquifer region
sampled in 1995

Surface Water Data-1995

River or Stream	Date	Aldrin, Total ug/L	Lindane, Total ug/L	Chlordane, Total ug/L	DDD, Total ug/L	DDE, Total ug/L	DDT, Total ug/L
Dry Frio Riv@Reagan Wells	06/07/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Frio River@Concan	06/07/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Hondo Creek@Tarpley	05/17/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Medina River@Bandera	05/17/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Nueces River@Laguna	05/24/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Sabinal Riv Nr. Sabinal	05/17/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Seco Creek Nr. Miller Ranch	05/24/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Dry Frio Riv@Reagan Wells	9/26/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Frio River@Concan	9/26/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Hondo Creek@Tarpley	9/25/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Medina River@Bandera	9/20/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Nueces River@Laguna	9/26/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Sabinal Riv Nr. Sabinal	9/25/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010
Seco Creek Nr. Miller Ranch	9/21/95	<0.010	<0.010	<0.10	<0.010	<0.010	<0.010

Water Quality Data from streams and rivers
crossing Edwards Aquifer region
sampled in 1995

Surface Water Data-1995

River or Stream	Date	Dieldrin Total ug/L	Endosulfan I (Alpha) ug/L	Endosulfan II (Beta) ug/L	Endrin Water Unfiltrd Rec ug/L	Heptachlor, Total ug/L	Heptachlor Epoxide Total ug/L
Dry Frio Riv@Reagan Wells	06/07/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Frio River@Concan	06/07/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Hondo Creek@Tarpley	05/17/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Medina River@Bandera	05/17/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nueces River@Laguna	05/24/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sabinal Riv Nr. Sabinal	05/17/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Seco Creek Nr. Miller Ranch	05/24/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Dry Frio Riv@Reagan Wells	9/26/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Frio River@Concan	9/26/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Hondo Creek@Tarpley	9/25/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Medina River@Bandera	9/20/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nueces River@Laguna	9/26/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sabinal Riv Nr. Sabinal	9/25/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Seco Creek Nr. Miller Ranch	9/21/95	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010

Water Quality Data from streams and rivers crossing Edwards Aquifer region sampled in 1995

Surface Water Data-1995

River or Stream	Date	Per-thane Total ug/L	Tox-aphene, Total ug/L	PCB, Total ug/L	Diazinon Total ug/L	Ethion Total ug/L	Malathion Total ug/L
Dry Frio Riv@Reagan Wells	06/07/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Frio River@Concan	06/07/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Hondo Creek@Tarpley	05/17/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Medina River@Bandera	05/17/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Nueces River@Laguna	05/24/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Sabinal Riv Nr. Sabinal	05/17/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Seco Creek Nr. Miller Ranch	05/24/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Dry Frio Riv@Reagan Wells	9/26/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Frio River@Concan	9/26/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Hondo Creek@Tarpley	9/25/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Medina River@Bandera	9/20/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Nueces River@Laguna	9/26/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Sabinal Riv Nr. Sabinal	9/25/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01
Seco Creek Nr. Miller Ranch	9/21/95	<0.1	<1	<0.1	<0.01	<0.01	<0.01

Water Quality Data from streams and rivers
crossing Edwards Aquifer region
sampled in 1995

Surface Water Data-1995

River or Stream	Date	Methyl Parathion Total ug/L	Mirex Total ug/L	Parathion Total ug/L	Trithion Total ug/L	2,4-D Total ug/L	2,4,5-T Total ug/L
Dry Frio Riv@Reagan Wells	06/07/95	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Frio River@Concan	06/07/95	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Hondo Creek@Tarpley	05/17/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Medina River@Bandera	05/17/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nueces River@Laguna	05/24/95	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Sabinal Riv Nr. Sabinal	05/17/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Seco Creek Nr. Miller Ranch	05/24/95	<0.01	<0.01	<0.01	<0.01	<0.05	<0.05
Dry Frio Riv@Reagan Wells	9/26/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Frio River@Concan	9/26/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Hondo Creek@Tarpley	9/25/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Medina River@Bandera	9/20/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Nueces River@Laguna	9/26/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Sabinal Riv Nr. Sabinal	9/25/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Seco Creek Nr. Miller Ranch	9/21/95	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01

			Water Quality Data from streams and rivers				
			crossing Edwards Aquifer region				
			sampled in 1995				
			Surface Water Data-1995				
				Oxygen	Coliform,	Strep-	
				Demand,	Fecal,	tococci	
River		2,4,5-TP	Oxygen	Biochem-	0.7	fecal,	Coliform,
or		Silvex	Dis-	ical,	um-mf	kf agar	Total,
Stream	Date	Total	solved	5 day	(cols./	(cols./	(cols./
		ug/L	mg/l	(mg/l)	100 ml)	100 ml)	100 ml)
Dry Frio Riv@Reagan Wells	06/07/95	<0.05	7.0	<1	26	30	
Frio River@Concan	06/07/95	<0.05	6.5	<1	38	44	
Hondo Creek@Tarpley	05/17/95	<0.01	7.6	<1	80	12	
Medina River@Bandera	05/17/95	<0.01	7.5	<1	72	60	
Nueces River@Laguna	05/24/95	<0.05	7.8	<1	440	220	
Sabinal Riv Nr. Sabinal	05/17/95	<0.01	7.8	<1	60	8	
Seco Creek Nr. Miller Ranch	05/24/95	<0.05	7.8	<1	160	83	
Dry Frio Riv@Reagan Wells	9/26/95	<0.01	7.7	<1	300	180	500
Frio River@Concan	9/26/95	<0.01	7.8	<1	260	201	1000
Hondo Creek@Tarpley	9/25/95	<0.01	8.5	<1	110	150	300
Medina River@Bandera	9/20/95	<0.01	7.7	2	7000	5500	11,000
Nueces River@Laguna	9/26/95	<0.01	8.5	<1	100	92	100
Sabinal Riv Nr. Sabinal	9/25/95	<0.01	8.7	<1	270	150	600
Seco Creek Nr. Miller Ranch	9/21/95	<0.01	7.5	1	800	370	1000

		Water Quality Data from streams and rivers
		crossing Edwards Aquifer region
		sampled in 1995
		Surface Water Data-1995
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River		Solids,
or		Total,
Stream	Date	Suspended
		(mg/l)
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Dry Frio Riv@Reagan Wells	06/07/95	
Frio River@Concan	06/07/95	
Hondo Creek@Tarpley	05/17/95	
Medina River@Bandera	05/17/95	
Nueces River@Laguna	05/24/95	
Sabinal Riv Nr. Sabinal	05/17/95	
Seco Creek Nr. Miller Ranch	05/24/95	
Dry Frio Riv@Reagan Wells	9/26/95	<1
Frio River@Concan	9/26/95	<1
Hondo Creek@Tarpley	9/25/95	<1
Medina River@Bandera	9/20/95	38
Nueces River@Laguna	9/26/95	<1
Sabinal Riv Nr. Sabinal	9/25/95	<1
Seco Creek Nr. Miller Ranch	9/21/95	2