



**WATER-LEVEL, RECHARGE, DISCHARGE,  
SPECIFIC-CAPACITY, WELL-YIELD, AND  
AQUIFER-TEST DATA FOR THE  
EDWARDS AQUIFER IN THE  
SAN ANTONIO AREA, TEXAS**

**LP-133**

**TEXAS DEPARTMENT OF WATER RESOURCES**

**DECEMBER 1980**

TABLES

	Page
Table 1. Hydrologic characteristics of the drainage basins contributing recharge to the Edwards aquifer in the San Antonio area-----	37
2. Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area-----	38
3. Index of water-level maps of the Edwards aquifer in the San Antonio area-----	50
4. Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76-----	51
5. Calculated annual recharge to the Edwards aquifer, by basin, 1934-77-----	82
6. Annual discharge from the Edwards aquifer, by county, 1934-77-----	83

## METRIC CONVERSIONS

For readers interested in using the metric system, the inch-pound units used in this report may be converted to metric units by the following factors:

Unit	From		Multiply by	To obtain	
	Unit	Abbreviation		Unit	Abbreviation
acre-foot	--		1,233	cubic meter	m <sup>3</sup>
atmosphere	--		1.0333	kilogram per square centimeter	kg/cm <sup>2</sup>
foot	--		0.3048	meter	m
foot squared per day		ft <sup>2</sup> /d	0.0929	meter squared per day	m <sup>2</sup> /d
gallon per minute		gal/min	0.06309	liter per second	l/s
gallon per minute per foot		(gal/min)/ft	0.207	liter per second per meter	(l/s)/m
inch	--		2.54	centimeter	cm
mile	--		1.609	kilometer	km
pound per square inch		lb/in <sup>2</sup>	0.07031	kilogram per square centimeter	kg/cm <sup>2</sup>

WATER-LEVEL, RECHARGE, DISCHARGE, SPECIFIC-CAPACITY,  
WELL-YIELD, AND AQUIFER-TEST DATA FOR THE EDWARDS AQUIFER  
IN THE SAN ANTONIO AREA, TEXAS

By

Robert W. Maclay, Ted A. Small,  
and Paul L. Rettman  
U.S. Geological Survey

ABSTRACT

This report presents data and information, and indicates other sources of data, on water levels, recharge, discharge, specific capacity, well yields, and aquifer tests for the Edwards aquifer in the San Antonio area, Texas.



## INTRODUCTION

The purpose of this report, which was prepared in cooperation with the City Water Board of San Antonio and the Texas Department of Water Resources, is to document the availability of hydrologic data for the Edwards aquifer in the San Antonio area. The report includes data on precipitation, water levels, recharge, discharge, specific capacity, well yields, and aquifer tests.

The San Antonio area, as used in this report, includes parts of Kinney, Uvalde, Medina, Bexar, Comal, and Hays Counties adjacent to the Balcones Fault Zone (fig. 1). The area includes the part of the Edwards aquifer that supplies large amounts of water for municipal supply and agricultural use and to the major springs in Uvalde, Bexar, Comal, and Hays Counties.

The freshwater part of the aquifer, which varies in width from 5 to 40 miles, is bounded by ground-water divides in Kinney County on the west and Hays County on the east, by the faulted outcrop of the Edwards Group on the north, and by the interface between fresh and saline water (the "bad-water" line) on the south (fig. 1). In the saline zone, the water contains 1,000 mg/L (milligrams per liter) or more of dissolved solids.

### Drainage Basins

The drainage basins that form the catchment area for recharge to the Edwards aquifer in the San Antonio area are shown on figure 2. Table 1 gives the areal extent, range in surface-water discharge, and runoff characteristics of each recharge basin.

### Climate

The climate of the area is characterized by hot summers and cool winters. The mean annual temperature is about 70.0°F. The mean annual precipitation ranges from about 28 inches in the eastern part of the area to about 22 inches in the western part. Hydrologic records for the area indicate that recurring patterns of droughts are followed by periods of heavy precipitation. The prolonged drought of 1947 through 1956 was followed by heavy precipitation in 1957 and 1958. Since 1970, precipitation has been higher than normal.

Daily precipitation data are available for the stations operated by the National Oceanic and Atmospheric Administration and by the U.S. Geological Survey shown on figure 2. The length of records vary, but most stations have more than 25 years of record.

Isohyetal maps of the annual precipitation in the San Antonio area for 1954-71 are available in the files of the U.S. Geological Survey in San Antonio.

## Well-Numbering Systems

Several systems of well identification have been used in earlier reports on the water resources of the San Antonio area. Some of these reports, such as U.S. Geological Survey Water-Supply Paper 773-B, show the locations of unnumbered wells on a small scale map of Medina, Bexar, and Comal Counties. The location of a particular well is identified by the well owner and the general direction and distance in miles from the courthouse in San Antonio. The exact locations of most of these wells are very difficult or impossible to obtain. Although the exact location cannot be determined, records of water levels are valuable and are useful in the analysis of the aquifer. No attempt was made to assign new State well numbers to these wells.

Wells are also identified in the early literature by a local name, such as the "Brackenridge Park well." The exact location of this well and other named wells have been lost. Another well-numbering system was used in the studies of the water resources of individual counties within the San Antonio area in the 1950's and early 1960's. The county map was divided into 10-minute quadrangles of latitude and longitude. The wells and springs were numbered within each lettered quadrangle, and all well numbers were given by the letters and numbers shown on the map.

The Texas Department of Water Resources (formerly the Texas Water Development Board) instituted the present well-numbering system for use throughout the State. Under this system, each 1-degree quadrangle is given a number consisting of two digits. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7-1/2-minute quadrangles which are given two-digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7-1/2-minute quadrangle is divided into 2-1/2-minute quadrangles which are given a single-digit number from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2-1/2-minute quadrangle is given a two-digit number in the order in which it was inventoried, starting with 01. These are the last two digits of the well number.

On the well-location maps, only the last three digits of the well number are shown at each well location; the second two digits are shown at the top of each 7-1/2-minute quadrangle; and the first two digits are shown by the large block numerals 58, 67, 68, 69, and 70. In addition to the seven-digit well number, a two-letter prefix is used to identify the county. The prefixes for the San Antonio area are as follows: Bexar, AY; Comal, DX; Hays, LR; Kinney, RP; Medina, TD; and Uvalde, YP.

Water-level information available in the files of the U.S. Geological Survey in San Antonio was processed by the Texas Department of Water Resources for computer storage by using the State well-numbering system. This process of data storage is continuing, but information on some wells having published records and old well numbers is not yet available from computer storage.

## WATER-LEVEL DATA Observation-Well Network

The stage of the Edwards aquifer has been measured in about 200 observation wells distributed throughout the San Antonio area (fig. 3). These wells are cased to the upper part of the aquifer and extend as open holes into the aquifer. Most of the observation wells partially penetrate the aquifer; however, several of the recorder wells penetrate the entire thickness of the aquifer.

A listing of available water-level records for observation wells in the San Antonio area is given in table 2, which indicates the frequency of measurement and the period of record. This listing is a tabulation of the water-level measurements that are available on computer printouts in the offices of the U.S. Geological Survey in San Antonio. This listing is not comprehensive, but includes those wells for which accurate field locations are available.

### Profiles of Water Levels

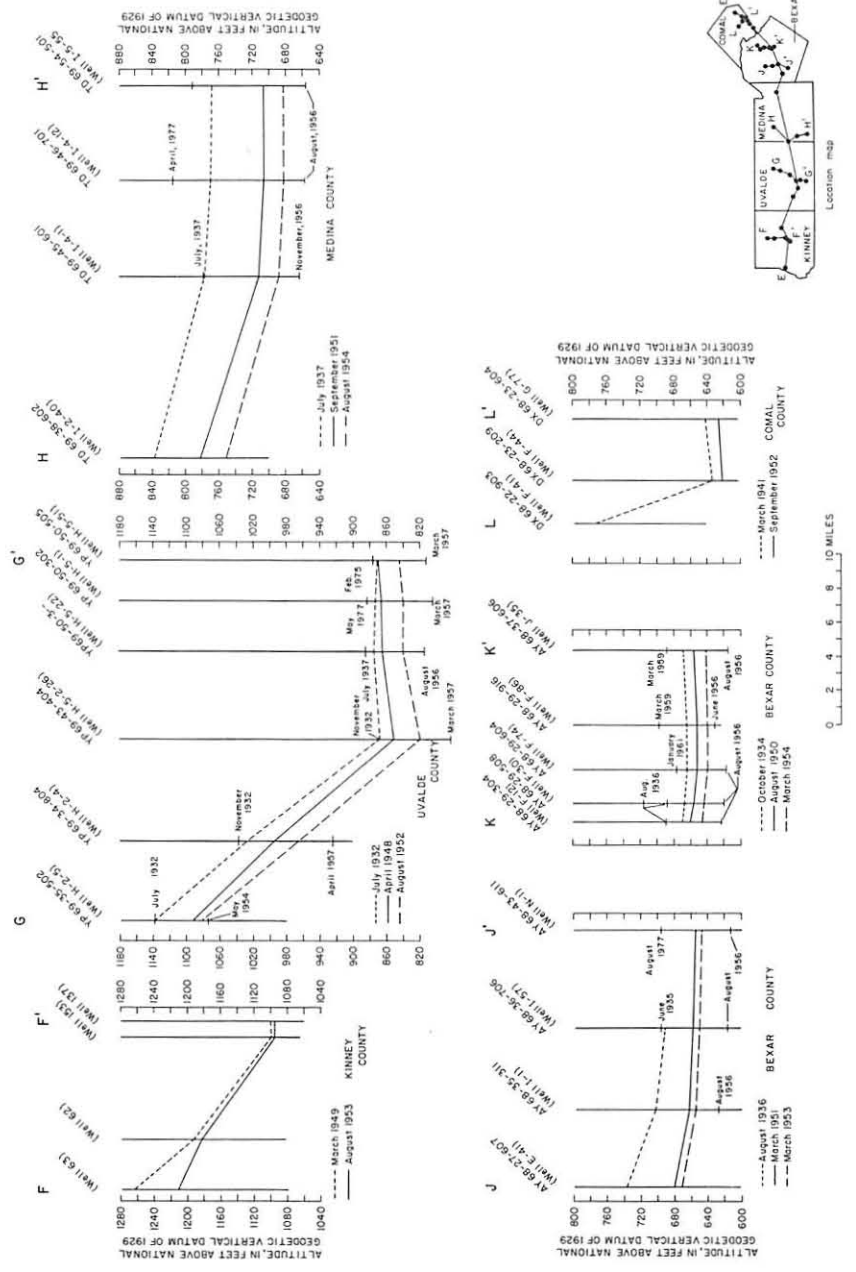
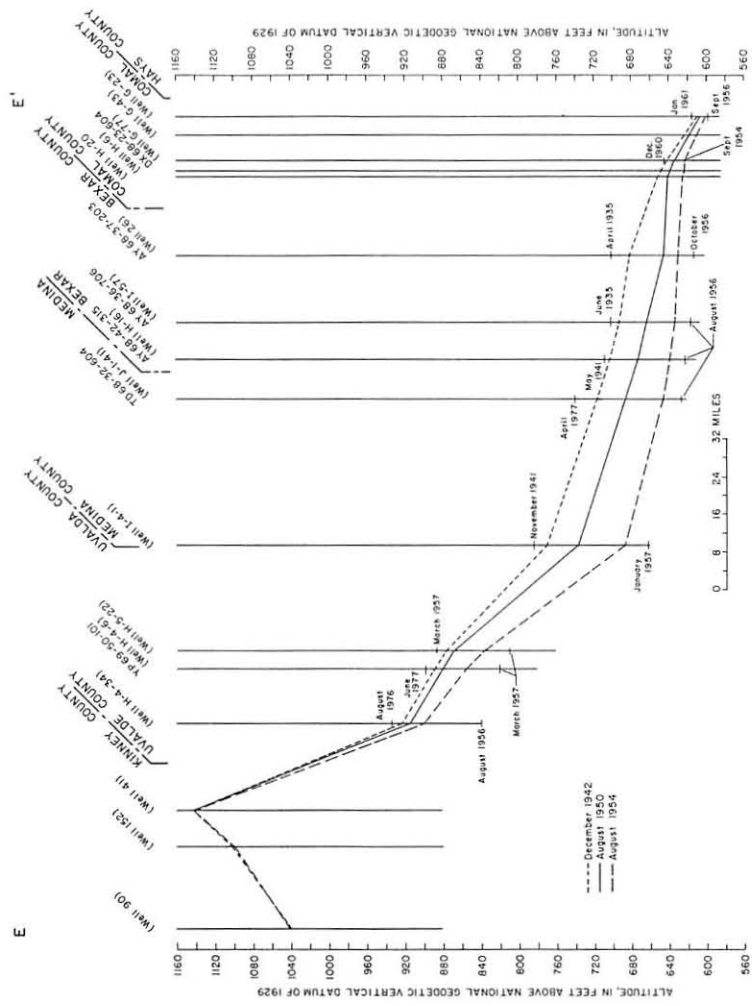
Profiles of water levels for high, medium, and low hydrologic conditions, including the record high and low stages for the control wells, are shown on figure 4. The hydraulic gradients between wells remain relatively constant, and the gradients for the lowest stage do not significantly vary from the gradients of higher stages.

A wider range in water-level stage occurs toward the west where transmissivities are generally less than in the eastern part of the San Antonio area. Variations in the total flow rate in the aquifer is greater in the western part of the area.

### Synoptic Water-Level Maps

Many synoptic water-level maps of the Edwards aquifer have been prepared since the 1930's (table 3). To compile these maps, water levels were measured in many wells throughout the area during a period of a few days (fig. 5). Although pumping or other stresses may cause the water levels to fluctuate several feet during the period of measurement, a regionally representative stage can be approximated from the water-level (potentiometric head) measurements.

The availability of potentiometric-surface or water-level maps for the Edwards aquifer in the San Antonio area is given in table 3. A tabulation of the water-level measurements used to prepare the semiannual synoptic maps for 1972-76 is given in table 4. The locations of the observation wells are shown on figure 5. A representative synoptic water-level map is shown on figure 6. The effect of partial penetration of the aquifer by an observation well may cause small differences in water levels in nearby wells, but these differences are not sufficient to significantly change the configuration of the regional potentiometric map.



Modified from Peiritt and Geery, (1956)

FIGURE 4.-Profiles of water levels along with record highs and lows in the Edwards aquifer in the San Antonio area

### Long-Term Hydrographs of Water Levels

A continuous record of daily water levels in San Antonio has been maintained since 1911 by the city of San Antonio or by State and Federal agencies. A composite hydrograph, based on water-level records of wells in the downtown area of San Antonio (the Brackenridge Park well, the Beverly Lodges well no. 26, and the Dodd Field well J-17) is shown on figure 7. In general, water levels in the downtown area reflect imbalances between annual recharge and discharge (fig. 7). In recent years, water levels have risen to record highs because of much greater than normal recharge, but the amplitudes of the water-level fluctuations within a given year are increasing mainly because of increased pumping in San Antonio.

The hydrograph indicates periods of rapid rises in water levels in 1913, 1919, 1929, 1940, 1957, and 1967. These rises in water levels are related to recharge resulting from substantial precipitation within the catchment and recharge areas. A period of declining water levels followed each period of rising water levels, the longest of which occurred from 1947 to 1956. The highest stage occurred in late 1976 and the first part of 1977. During this period, water levels in the Dodd Field well (J-17) were above an altitude of 690 feet for more than 7 months. The lowest stage occurred in 1956, when water levels were below an altitude of 620 feet for 4 months.

### Water-Level Changes in Response to Barometric Pressure and Earth Tides

Water-level fluctuations resulting from changes in barometric pressure were observed at three wells in the confined freshwater zone of the aquifer (fig. 8). The barometric pressure shows a sinusoidal pattern with a period of about 12 hours. The barometric pressure, which reflects the combined effects of solar heating and the gravitational pull of the sun, is highest around midnight and noon and lowest around 6:00 a.m. and 6:00 p.m.

The barometric efficiencies of the aquifer at the sites of the three wells (fig. 8) were calculated to be 87 percent at TD-69-39-504, 89 percent at DX-68-23-807, and 95 percent at DX-78-23-706. The barometric efficiency (BE) of the Edwards aquifer was calculated by the equation (Ferris and others, 1962, p. 85):

$$BE = S_w/S_b$$

where  $S_w$  = the change in water level in the well, in feet, and

$S_b$  = the corresponding change in atmospheric pressure, in feet.

The pattern of water-level fluctuations in well I-120 (fig. 9) also suggests that the water levels respond to earth tides. The period is about 12 hours.



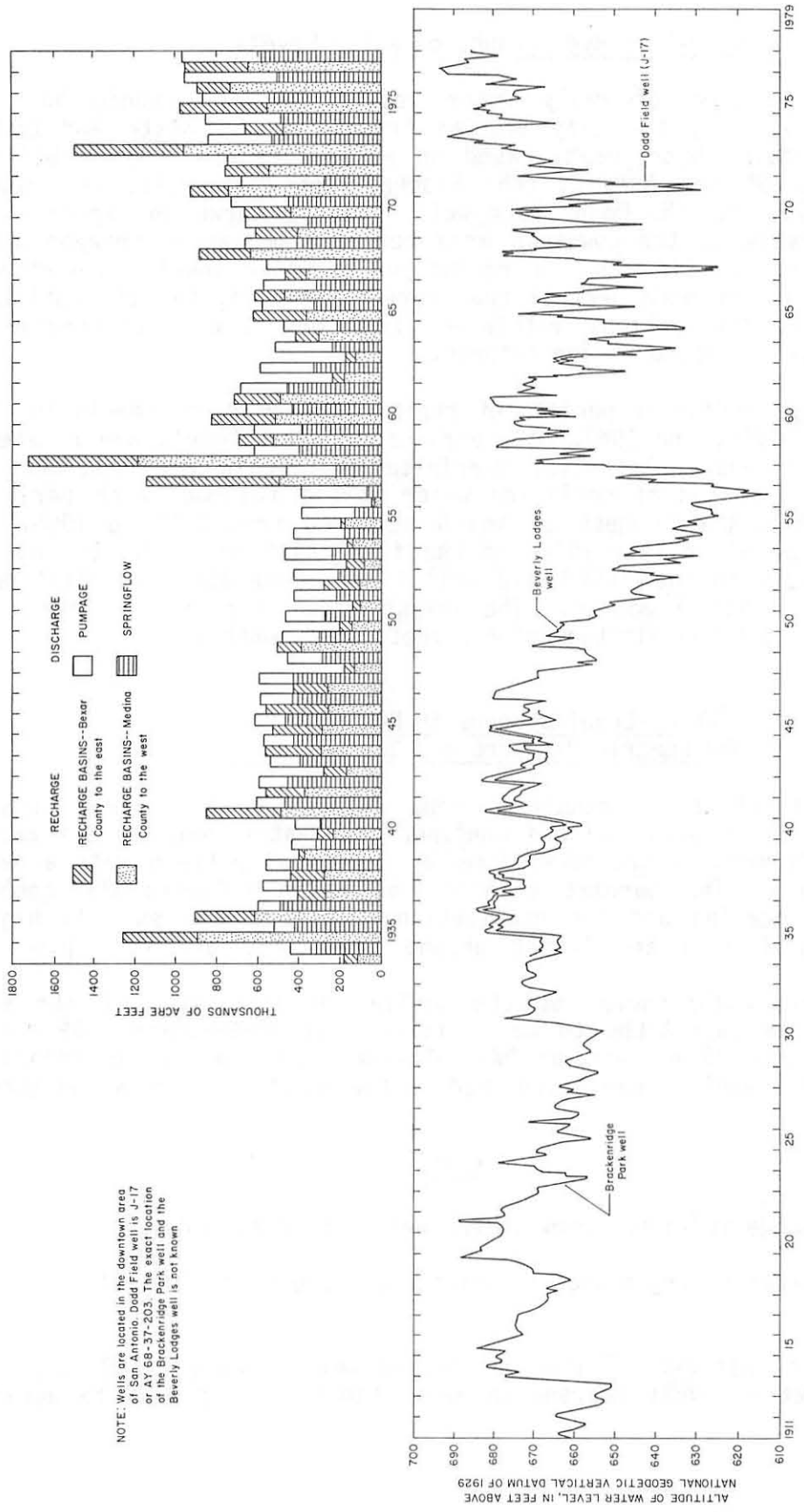


FIGURE 7. Relation of water levels in downtown San Antonio to changes in the annual water balance for the Edwards aquifer

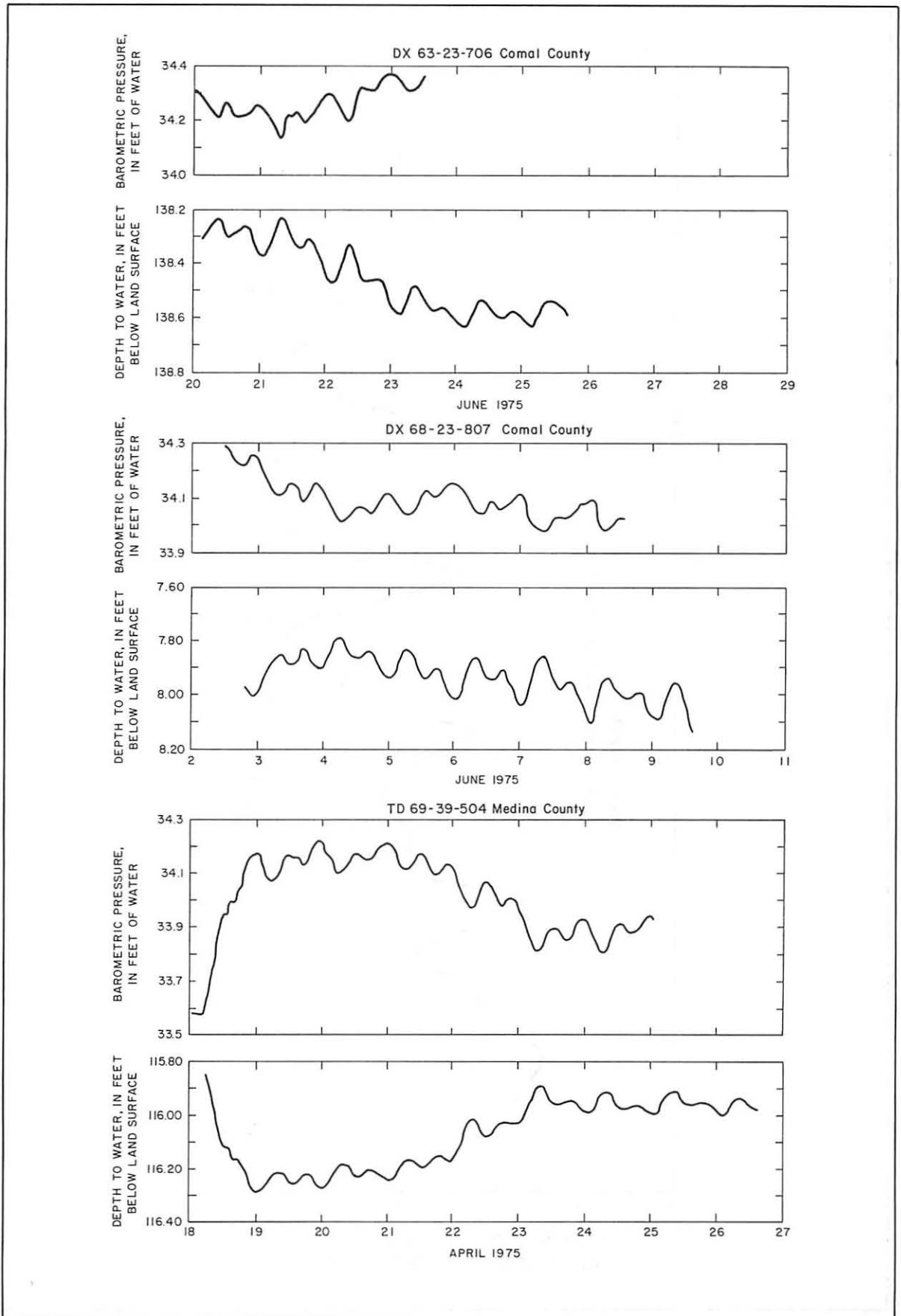


FIGURE 8.-Relation of water-level fluctuations to barometric-pressure fluctuations

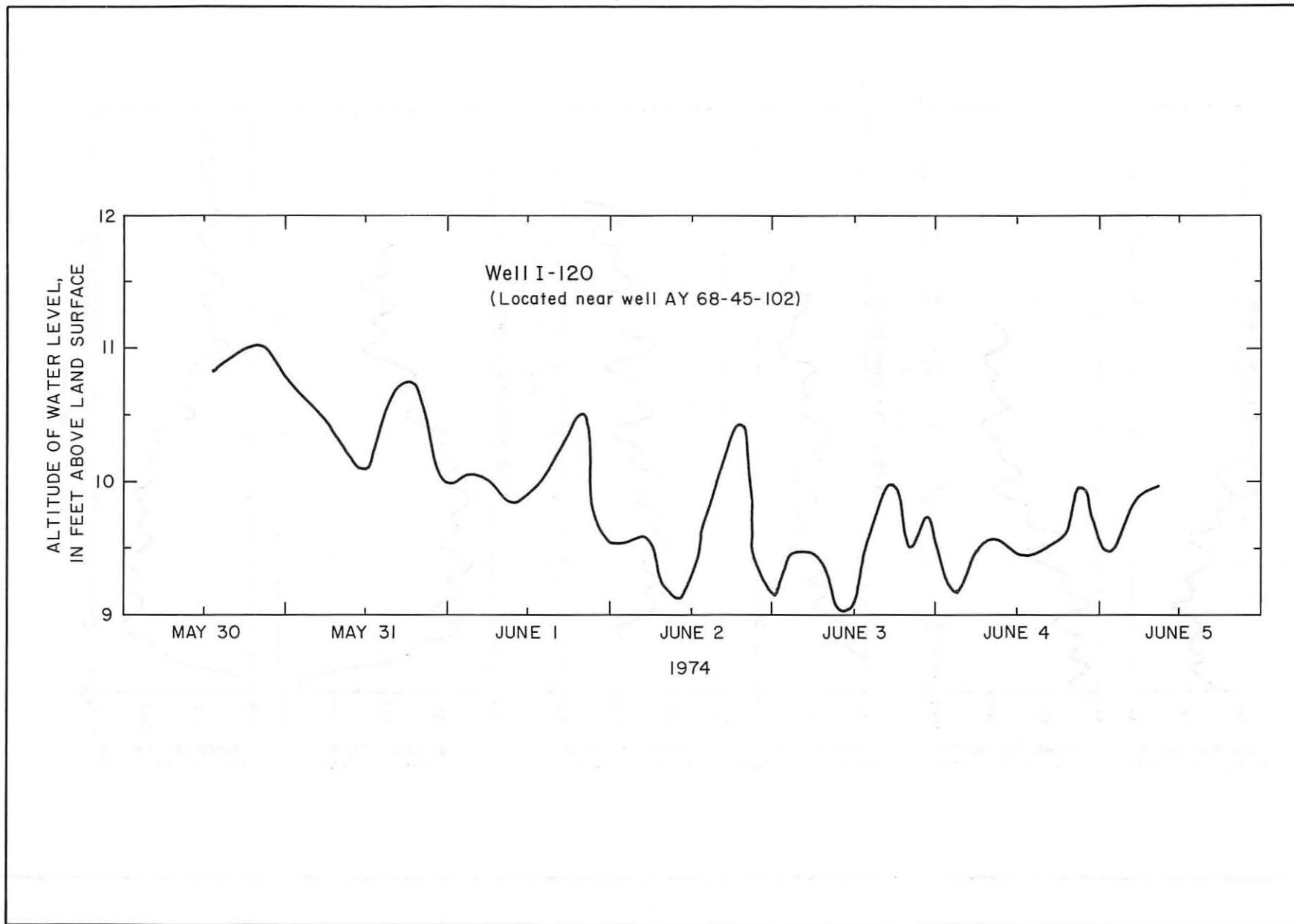


FIGURE 9.-Relation of water-level fluctuations to earth tides



# CONTENTS

	Page
Metric conversions-----	vi
Abstract-----	1
Introduction-----	2
Drainage basins-----	2
Climate-----	2
Well-numbering systems-----	7
Water-level data-----	8
Observation-well network-----	8
Profiles of water levels-----	8
Synoptic water-level maps-----	8
Long-term hydrographs of water levels-----	17
Water-level changes in response to barometric pressure and earth tides-----	17
Water-level fluctuations in relation to pumping-----	21
Water-level fluctuations resulting from a major storm in Bexar County-----	21
Recharge data-----	27
Discharge data-----	27
Specific capacities and well yields-----	27
Aquifer tests-----	31
Selected references-----	36

## ILLUSTRATIONS

	Page
Figure 1. Map showing location and hydrologic features of the San Antonio area-----	3
2. Map showing drainage basins and data-collection sites-----	5
3. Map showing location of observation wells in the Edwards aquifer-----	9
4. Profiles of water levels along with record highs and lows in the Edwards aquifer in the San Antonio area-----	11
5. Map showing location of wells measured for synoptic observation of water levels in the Edwards aquifer-----	13
6. Map showing water levels in the Edwards aquifer in July 1974-----	15
7. Graph showing relation of water levels in downtown San Antonio to changes in the annual water balance for the Edwards aquifer-----	18
8. Graph showing relation of water-level fluctuations to barometric-pressure fluctuations-----	19
9. Graph showing relation of water-level fluctuations to earth tides-----	20
10. Graph showing water-level fluctuations resulting from pumping-----	22
11. Map showing locations of pumping stations and major supply wells along with transient water-level changes in the San Antonio area-----	23
12. Map showing response of water levels in San Antonio to the rainstorm of May 7, 1976-----	25
13. Mass curves showing accumulated annual recharge, discharge, pumpage, and springflow, 1934-77-----	28
14. Map showing specific capacities of selected production wells penetrating the Edwards aquifer-----	29
15. Graphs showing distribution of reported well yields in Uvalde and Bexar Counties-----	32
16. Graph showing water-level measurements during an aquifer test near New Braunfels, Texas-----	33
17. Graphs showing water-level measurements during an aquifer test at Mission station in San Antonio-----	35

## Water-Level Fluctuations in Relation to Pumping

The pumping schedule of wells in San Antonio produces a cyclic pattern of water-level fluctuations in the confined zone of the Edwards aquifer, and the hydrograph of water-level fluctuations forms a sinusoidal curve (fig. 10). In the freshwater zone, a daily high-water level occurs about 6:00 a.m., and a daily low-water level occurs about 10:00 p.m. The fluctuations of daily water levels at Dodd Field well (AY-68-37-203) ranges from about 2 to 5 feet depending upon water demands. The hydrograph of water levels at the Morrill School well (AY-68-45-102), which is in the saline zone of the Edwards aquifer, shows a sinusoidal pattern similar to that of Dodd Field; however, the cycles at Morrill School lag behind the cycles at Dodd Field by approximately 12 hours. Figure 11 shows the locations of pumping stations and major supply wells in the San Antonio area.

The transmission of pumping stresses and the relative amount of water-level change were investigated in the freshwater zone of the aquifer in Bexar County in relation to observation well AY-68-37-203 in Dodd Field (fig. 11). A continuous record of water levels in well AY-68-37-203 is made by a water-stage recorder. A recorder was temporarily installed at another location, and a record of water levels was collected until a sufficient amount of record was obtained. The recorder was then removed and installed on another well.

During the period of data collection, the pumping rates at the stations varied with local changes in water demands. The water-level records for each temporary observation well were compared with the records of the permanent observation well, and the relative changes in water levels between the reference well and the observation well were estimated. The data suggest a rapid and significant water-level response to pumping in the freshwater zone, but the changes in water levels vary with direction.

## Water-Level Fluctuations Resulting from Major Storm

A storm front moved across northern Bexar and Medina Counties at about 4:00 a.m. on May 7, 1976. This storm produced large amounts of rainfall for about 6 hours (fig. 12). The largest amounts of rainfall occurred in the central part of Bexar County and in western Medina County south of Medina Lake, where precipitation was more than 4 inches.

Water levels immediately began to rise in wells throughout the area as a result of decreasing pumping in the city and from recharge to the aquifer. Figure 12 shows that the water-level rises ranged from 0.5 foot to about 22 feet. The water level rose 21.65 feet in the Helotes area where the highly faulted rocks of the Edwards Group are exposed. The rapid rise resulted from rapid infiltration of precipitation along nearby fractures of high capacity to transmit water and a relatively low capacity of the aquifer to store water. Generally, rises of water levels in the recharge area ranged from about 1 to 3 feet. In the confined area of the aquifer, water-level rises were generally about 3 to 6 feet. In an artesian area just east of the Bexar-Comal County line near the Comal Springs Fault, the water level in one well rose about 10 feet.

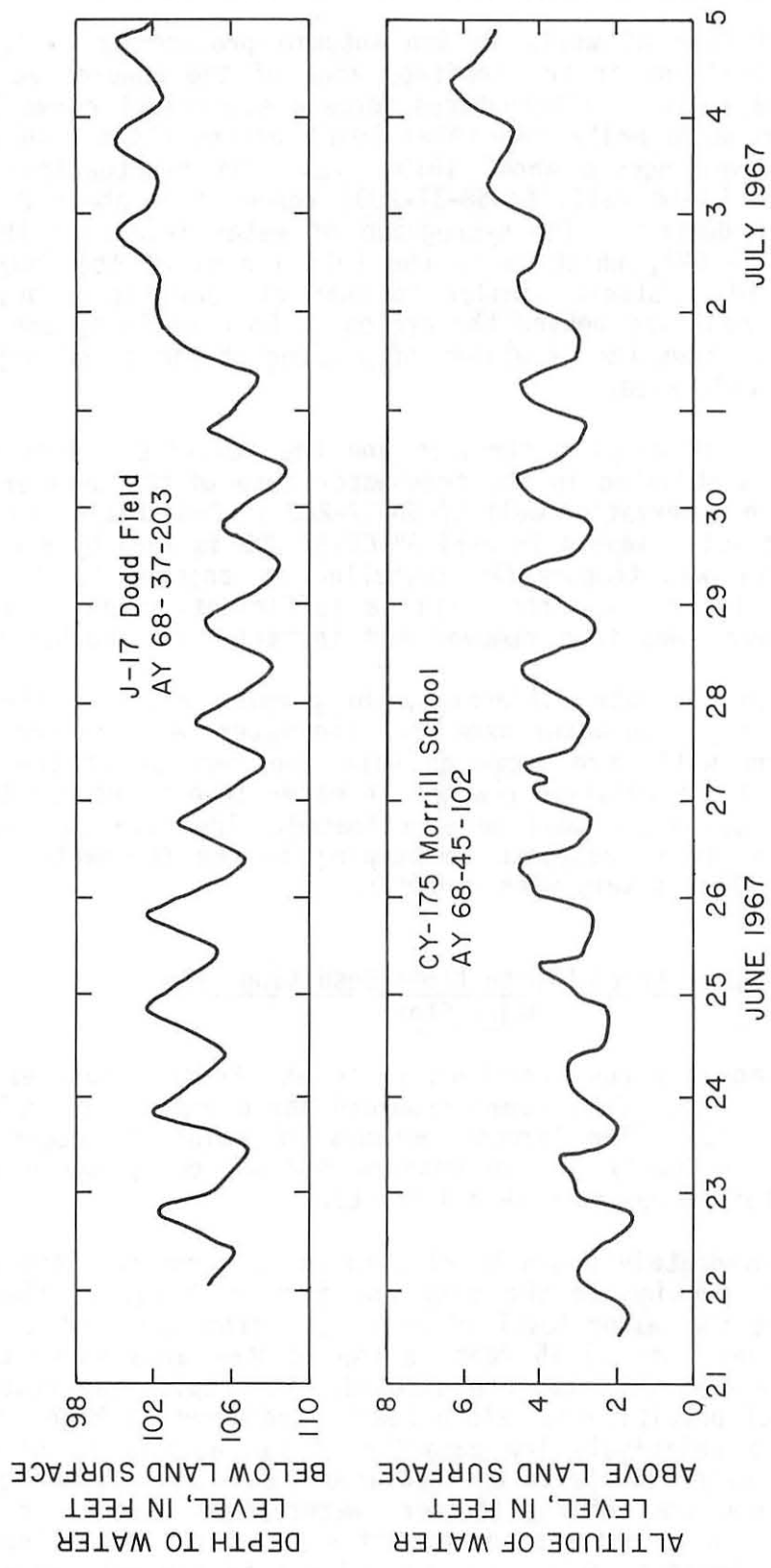


FIGURE 10.-Water-level fluctuations resulting from pumping

## RECHARGE DATA

Recharge to the Edwards aquifer occurs within the outcrop area where water quickly seeps from the streams to the aquifer. All major streams crossing the recharge area, except the Guadalupe River, lose water to the Edwards. In addition, some recharge results from infiltration of precipitation in the interstream areas. Within most recharge basins, however, the percentage of recharge occurring along the stream channels is greater than the percentage of recharge occurring in the interstream areas. The differences between these two percentages varies according to climatic conditions. More than 66 percent of the recharge occurs west of Bexar County.

A listing of the annual recharge, by basin, within the San Antonio area is given in table 5. The locations of the recharge basins are shown on figure 2. The methods for computing recharge are documented by Puente (1978).

## DISCHARGE DATA

Discharge from the Edwards aquifer is mostly by springflow and partly by wells (fig. 13). Annual pumpage is increased from about 102,000 acre-feet in 1934 to 381,000 acre-feet in 1977. If storage within the aquifer does not change then an increase in pumpage results in a decrease in total springflow by an equivalent amount. Annual discharge from the Edwards aquifer in the San Antonio area is tabulated in table 6.

The accumulated discharge and recharge are shown on figure 13. On an annual basis, the accumulated discharge has most frequently exceeded the accumulated recharge. However, the graph shows that the accumulated recharge exceeds the accumulated discharge. The largest difference between accumulated recharge and discharge occurred during the drought from 1948 to 1956, when a maximum deficit of 2 million acre-feet occurred in 1956.

Records of annual pumpage by wells used for municipal supply, irrigation, and industrial use are available in the files of the U.S. Geological Survey in San Antonio. The pumpage of most irrigation wells is estimated on the basis of power consumption. Pumpage by municipalities is generally metered.

## SPECIFIC CAPACITIES AND WELL YIELDS

The specific capacity of a well is a function of the well construction and the capacity of the aquifer to yield water. Specific capacity is defined as the unit volume of water discharged per unit drawdown of water level in the well.

The specific capacities of wells in the San Antonio area are shown on figure 14. The wells with the highest specific capacities are usually irrigation or municipal-supply wells that have large diameters and penetrate a substantial part of the total thickness of the aquifer. Many of these wells

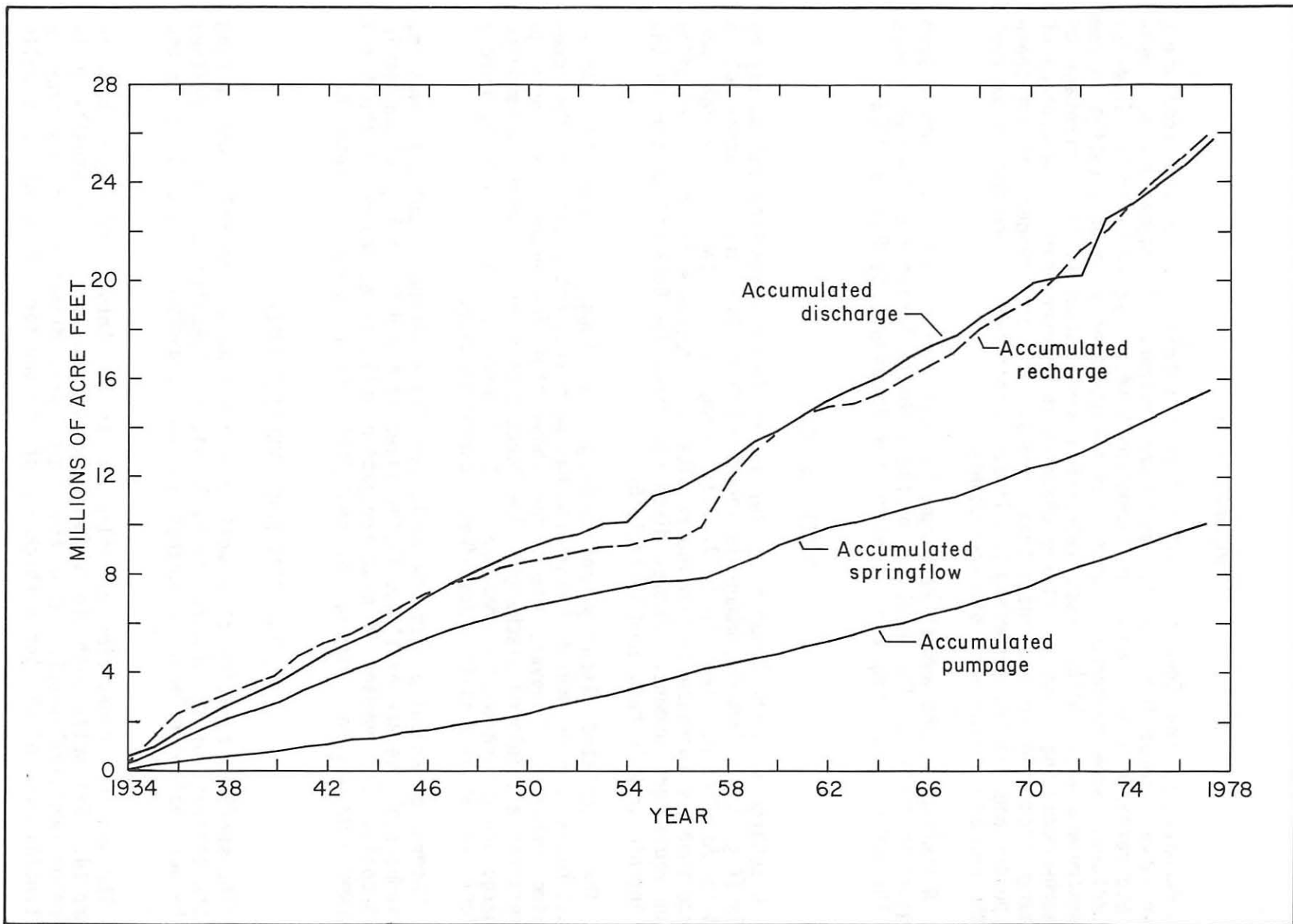


FIGURE 13.-Mass curves showing accumulated annual recharge, discharge, pumpage, and springflow, 1934-77



have been treated with acid and subsequently pumped at a high rate to develop the maximum yield. The highest specific capacity occurs in northeastern Bexar County, where several wells have specific capacities in excess of 6,000 gallons per minute per foot of drawdown.

The reported yields of irrigation and municipal-supply wells range from several hundred gallons per minute to more than 10,000 gallons per minute. Figure 15 shows a distribution of the yields of wells used for irrigation, municipal supply, and industrial purposes in Uvalde and Bexar Counties. At many wells, higher specific capacities could be obtained by drilling the wells deeper, which would probably cause the well to tap additional permeable zones. Well yield is a function of the available head for drawdown and specific capacity; therefore, many of the wells shown on figure 14 could be pumped at a higher rate because a considerable amount of available head for drawdown still occurs below the normal pumping level.

#### AQUIFER TESTS

Data collected during an aquifer test near New Braunfels are shown on figure 16.

The test site is within the freshwater zone about 600 feet from the Comal Springs Fault, which coincides with the bad-water line. The Guadalupe River is about 100 feet from the pumped well. The static water in the pumped well was several feet above the surface of the Guadalupe River at the site, and several small springs were observed on the low flat banks of the river downstream from the pumped well.

Observation well no. 2 was logged to a depth of 120 feet before an obstruction in the well stopped the logging device. The pumped well and observation were closed and could not be logged. The caliper log indicated a rugose surface on the borehole, which ranged in diameter from 10 to 18 inches.

At a later date after the aquifer test, salt was injected into observation well no. 1 between the static level and a depth of 114 feet. The pumped well, at a distance of 279 feet, was then turned on at a rate of 3,900 gal/min and operated for different periods of time ranging up to 2 hours. Four logging runs of fluid conductivity in observation well no. 1 were made, but no significant change in fluid conductivity was detected. The test results suggest that the connection between the two wells is restricted or that the effect of pumping at 3,900 gal/min is not sufficient to change ground-water velocities near observation well no. 1.

The temperature of the water discharged from the pumped well remained constant at 72.6°F for more than several days. The temperature of the river water at this time was about 15°F cooler.

Water levels in a third observation well, at a distance of 4,800 feet north of the pumped well, were recorded for 210 minutes after pumping started. The total drawdown in the well was 0.23 foot and the initial reaction of water level occurred about 15 minutes after pumping began. This observation well was a cored test hole (DX-68-16-701) of the Texas Department of Water Resources.

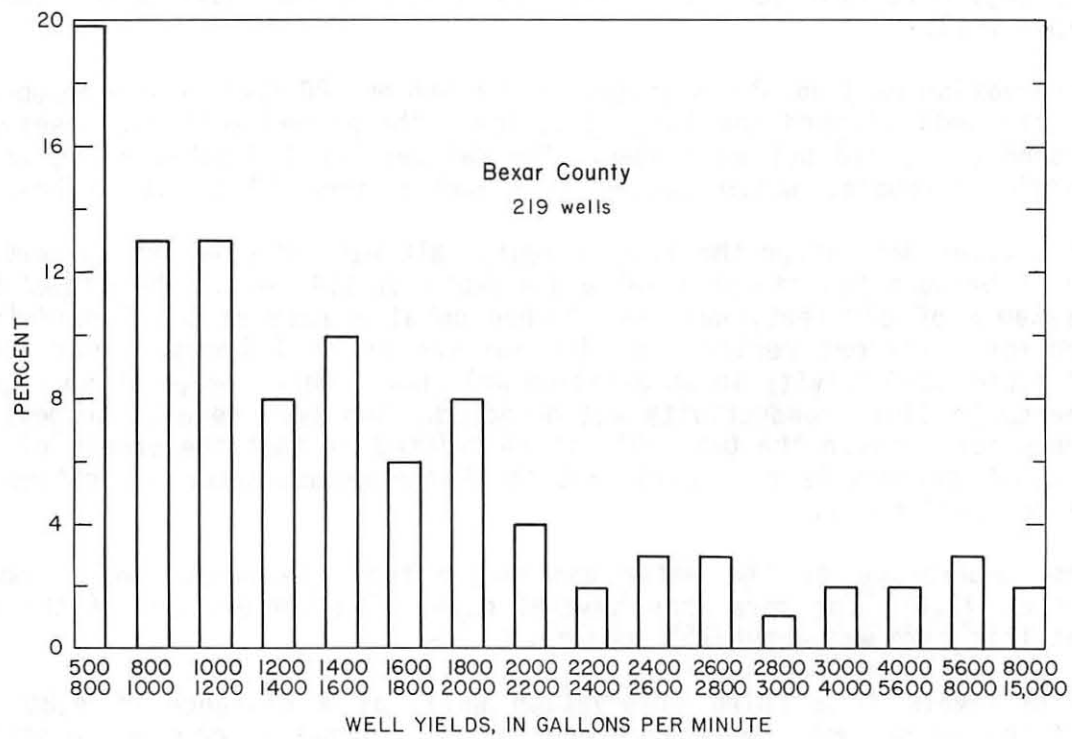
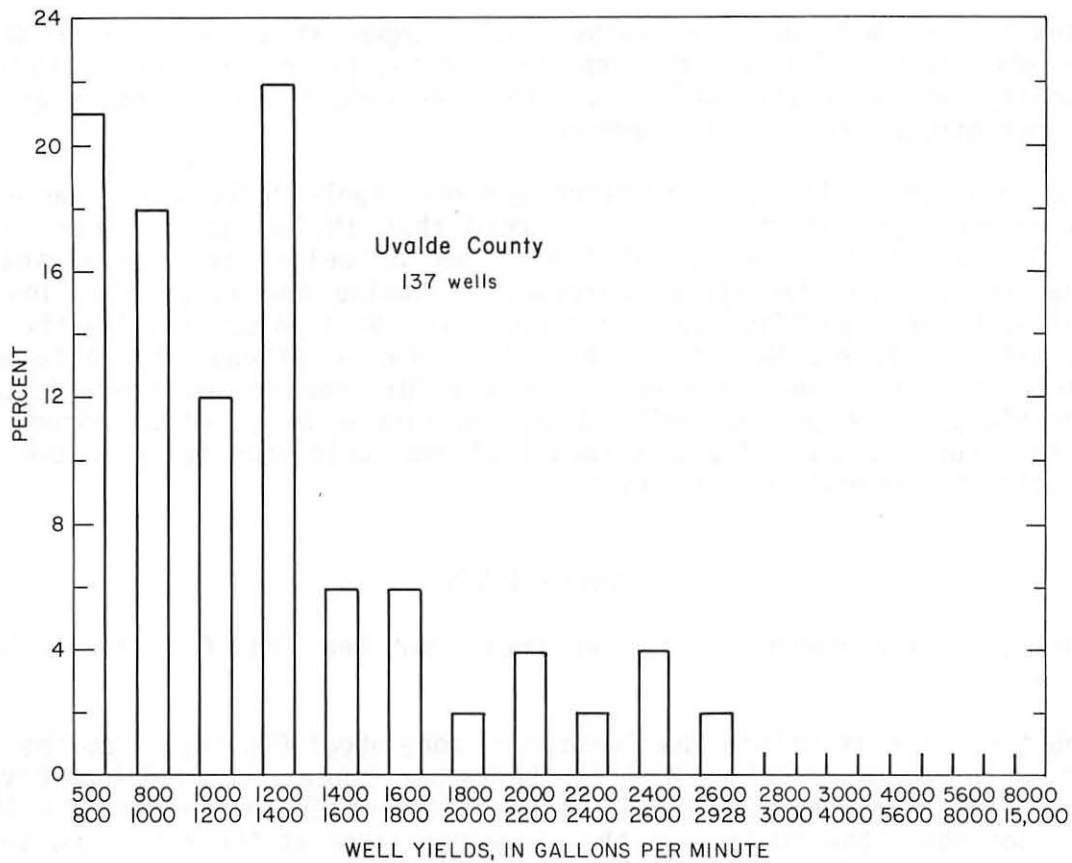


FIGURE 15.-Distribution of reported well yields in Uvalde and Bexar Counties



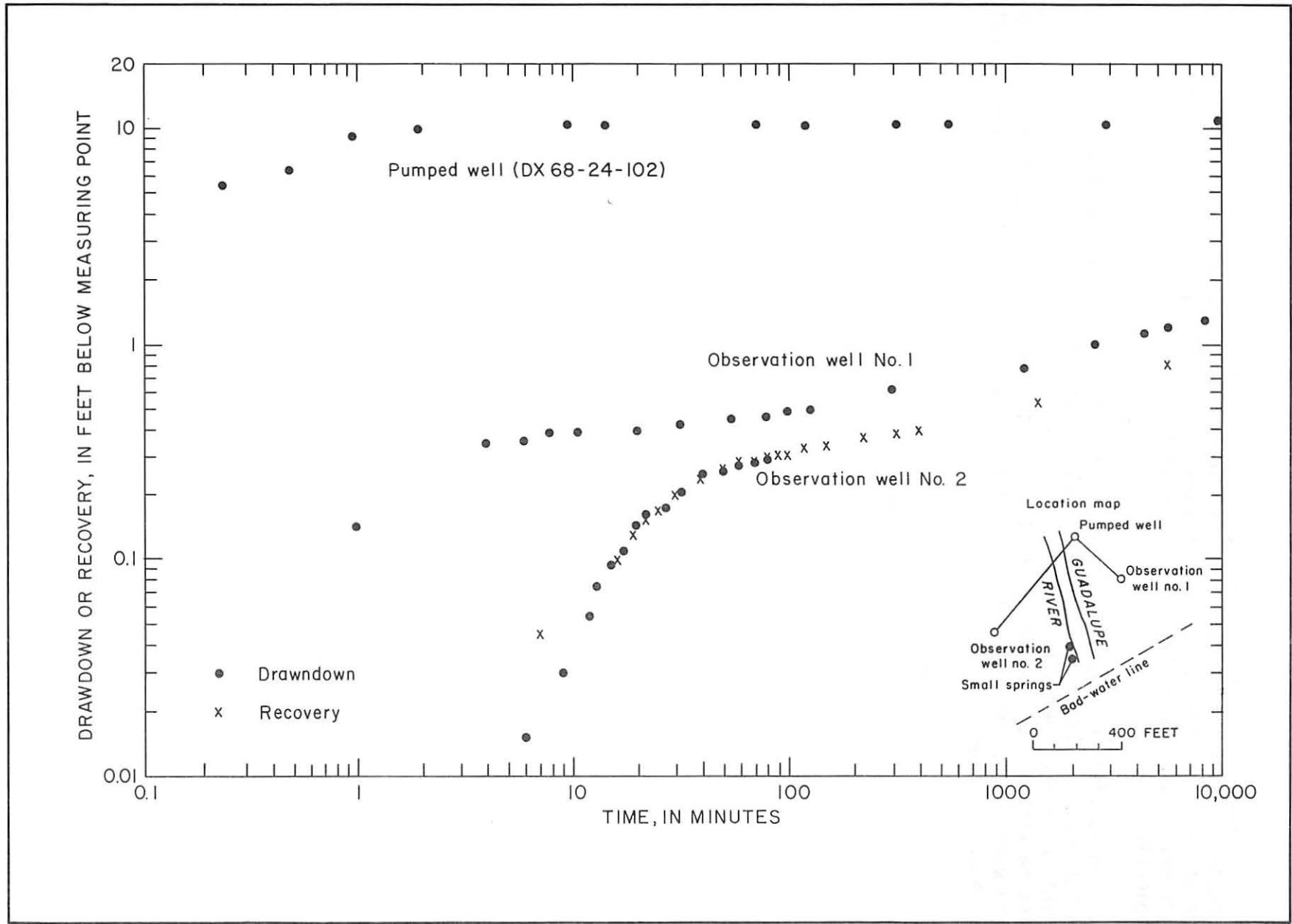


FIGURE 16.-Water-level measurements during an aquifer test near New Braunfels, Texas

A hydraulic barrier occurs along the bad-water line at the test site. The complications of the barrier, leaky boundary conditions, slow drainage, vertical anisotropy, and different completion depths of the pumped well and the observation wells make the analysis of the aquifer-test data very difficult and highly subjective.

An aquifer test was conducted at Mission station in downtown San Antonio on October 7, 1974. The purpose of this test was to obtain water-level data within both the freshwater and saline zones of the aquifer when the wells at Mission station were pumped at full capacities and other wells in the downtown area were not pumping. A summary of the data collected during the pumping test is shown on figure 17.

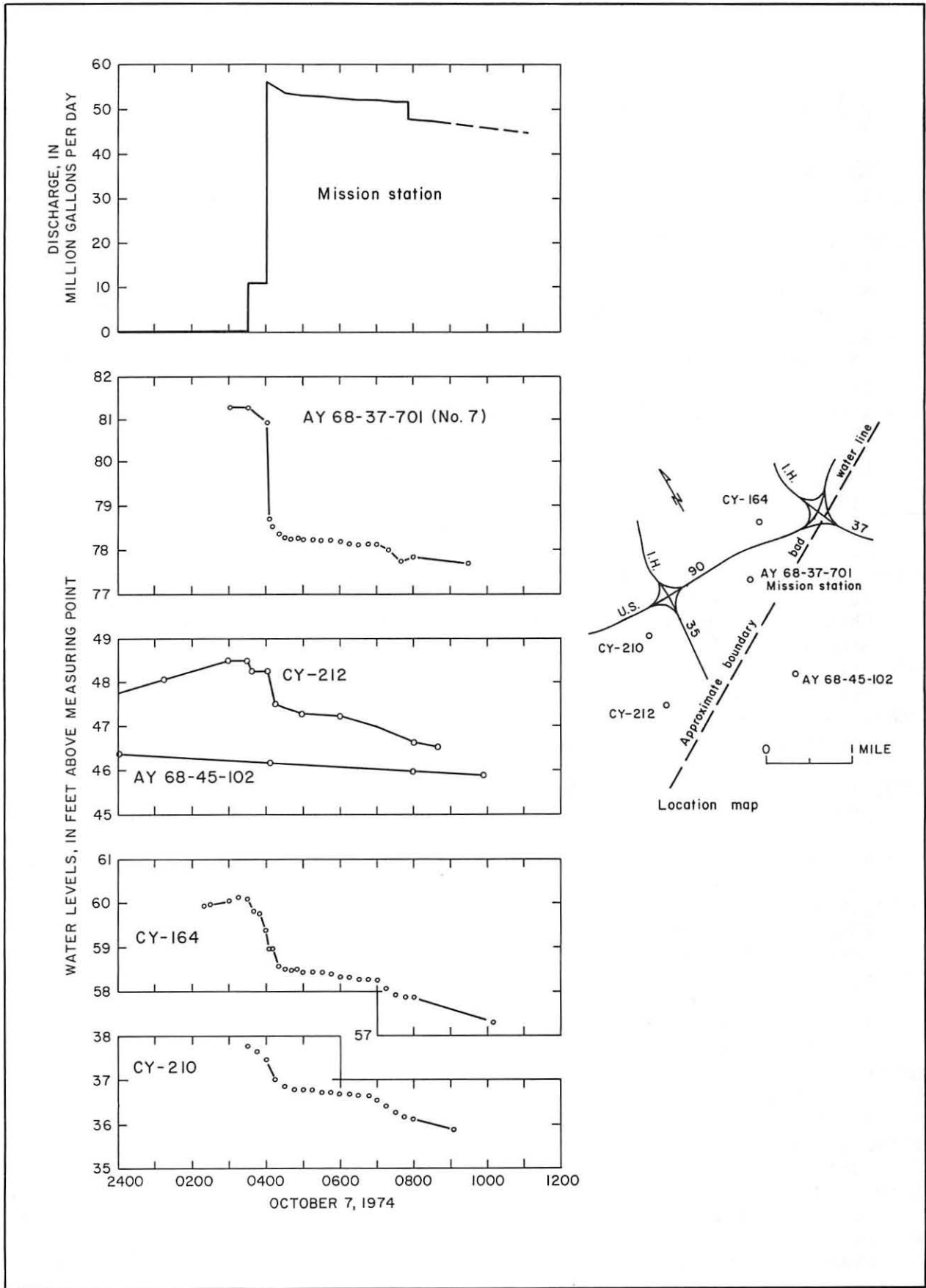


FIGURE 17.- Water-level measurements during an aquifer test at Mission Station in San Antonio

## SELECTED REFERENCES

- Arnow, Ted, 1959, Ground-water geology of Bexar County, Texas: Texas Board of Water Engineers Bulletin 5911, 62 p.
- \_\_\_\_\_, 1963, Ground-water geology of Bexar County, Texas: U.S. Geological Survey Water-Supply Paper 1588, 36 p.
- Bennett, R. R., and Sayre, A. N., 1962, Geology and ground-water resources of Kinney County, Texas: Texas Water Commission Bulletin 6216, 163 p.
- Bredehoeft, J. D., 1967, Response of well-aquifer systems to earth tides: Reprint, Journal of Geophysical Research, vol. 72, no. 12, p. 3075-3087.
- DeCook, K. J., 1960, Geology and ground-water resources of Hays County, Texas: Texas Board of Water Engineers Bulletin 6004, 167 p.
- Ferris, J. G., Knowles, D. B., Brown, R. H., and Stallman, R. W., 1962, Theory of aquifer tests: U.S. Geological Survey Water-Supply Paper 1536-E, 106 p.
- Garza, Sergio, 1962, Recharge, discharge, and changes in ground-water storage in the Edwards and associated limestones, San Antonio area, Texas, a progress report on studies, 1955-59: Texas Board of Water Engineers Bulletin 6201, 51 p.
- \_\_\_\_\_, 1966, Ground-water resources of the San Antonio area, Texas, a progress report on studies, 1960-64: Texas Water Development Board Report 34, 36 p.
- George, W. O., 1952 [1953], Geology and ground-water resources of Comal County, Texas, with sections on Surface-water runoff, by S. D. Breeding, and Chemical character of the water, by W. W. Hastings: U.S. Geological Survey Water-Supply Paper 1138, 126 p.
- Holt, C. L. R., Jr., 1959, Geology and ground-water resources of Medina County, Texas: U.S. Geological Survey Water-Supply Paper 1422, 213 p.
- Klemt, W. B., Knowles, T. R., Elder, G. R., Sieh, T. W., 1975, Ground-water resources and model applications for the Edwards (Balcones Fault Zone) aquifer: Texas Water Development Board unnumbered publication, 93 p.
- Lang, J. W., 1954, Ground-water resources of the San Antonio area, Texas, progress report of current studies: Texas Board of Water Engineers Bulletin 5412, 30 p.
- Livingston, Penn, 1947, Ground-water resources of Bexar County, Texas: Texas Board of Water Engineers miscellaneous publication, 234 p.
- Livingston, Penn, Sayre, A. N., and White, W. N., 1936, Water resources of the Edwards limestone in the San Antonio area, Texas: U.S. Geological Survey Water-Supply Paper 773-B, p. 59-113.
- Petitt, B. M., Jr., and George, W. O., 1956, Ground-water resources of the San Antonio area, Texas; volume I, progress report on current studies; volume II, part I, records of wells and springs: Texas Board of Water Engineers Bulletin 5608, vol. I, 80 p., vol. II, pt. I, 252 p.
- Puente, Celso, 1978, Method of estimating natural recharge to the Edwards aquifer in the San Antonio area, Texas: U.S. Geological Survey Water-Resources Investigations 78-10, 34 p.
- Rettman, Paul, 1969, Records of wells and springs, San Antonio area, Texas: Edwards Underground Water District report, 29 p.
- Sayre, A. N., 1936, Geology and ground-water resources of Uvalde and Medina Counties, Texas: U.S. Geological Survey Water-Supply Paper 678, 146 p.
- Welder, F. A., and Reeves, R. D., 1962, Geology and ground-water resources of Uvalde County, Texas: Texas Water Commission Bulletin 6212, 252 p.

Table 1.--Hydrologic characteristics of the drainage basins contributing recharge to the Edwards aquifer in the San Antonio area

Map no.	Recharge basin	Gaging station		Average annual recharge <sup>1</sup> (thousands of acre-feet per year)	Discharge				Runoff		
		Years of record	Map no.		Drainage area (square miles)	Average annual <sup>2</sup> (thousands of acre-feet per year)	Maximum annual <sup>2</sup> (thousands of acre-feet per year)	Minimum annual <sup>2</sup> (thousands of acre-feet per year)	Average annual (acre-feet per square mile)	Inches per square mile per year	
1	Nueces-West Nueces River			103.3							
		32	1	700	27.0	171.6	1958	0	1969	38.6	0.7
		54	2	764	109.4	442.3	1935	16.6	1953	143.2	2.7
		38	3	1,947	86.2	325.1	1958	.7	1956	44.3	.8
2	Frio-Dry Frio River			104.1							
		25	4	117	25.7	73.1	1958	2.2	1956	219.7	4.1
		52	5	405	79.0	306.3	1932	3.5	1957	195.1	3.7
		25	6	661	19.0	68.1	1958	6.4	1956	28.7	.5
3	Sabinal River			36.8							
		35	7	206	37.4	125.2	1958	.6	1955	181.6	3.4
		25	8	247	21.6	97.8	1958	.1	1963	87.4	1.6
4	Area between Sabinal River and Medina River basins			89.8							
		16	9	43.1	13.8	31.1	1968	1.0	1963	320.2	6.0
		16	10	168	6.5	52.8	1971	0	1963	38.7	.7
		25	11	86.2	27.9	89.8	1958	.3	1956	323.7	6.1
		17	12	142	10.3	62.3	1971	0	1963	72.5	1.4
5	Medina River			57.2							
		37	13	474	96.4	270.8	1958	3.7	1956	203.4	3.8
		21	14	56.3	9.2	24.6	1973	0	1966	163.4	3.1
6	Area between Medina River and Cibolo Creek basins	--	15	--	--	26.8	1973	.2	1962	--	--
7	Cibolo-Dry Comal Creeks			97.1							
		15	16	68.4	21.4	43.4	1975	1.1	1963	312.9	5.9
		31	17	274	11.3	72.4	1973	0	1956	41.2	.8
		45	18	130	214.5	306.2	1975	36.9	1956	1,650.0	<sup>3</sup> 30.9
8	Guadalupe River <sup>4</sup>			negligible							
		38	19	838	121.0	326.5	1975	10.1	1956	144.4	2.7
		17	20	10.9	4.0	8.7	1965	.4	1962	367.0	6.9
		55	21	1,315	212.3	588.6	1975	9.4	1956	161.4	3.0
		15	22	1,436	265.2	647.2	1975	68.1	1964	184.7	3.5
		34	23	1,518	332.5	745.7	1958	10.1	1956	219.0	4.1
9	Blanco River			36.0							
		51	24	355	89.1	257.7	1958	4.6	1956	251.0	4.7
		21	25	412	114.5	262.1	1975	3.3	1964	277.9	5.2
		16	26	112	--	119.5	1975	.4	1971	--	--

<sup>1</sup>Based on 44 years of record.

<sup>2</sup>Based on mean discharge for the water year ending September 30.

<sup>3</sup>Runoff values affected by large discharge of Comal Springs.

<sup>4</sup>Only a small area of the Edwards aquifer crops out within the recharge basin. No measurable losses occur from Guadalupe River to the Edwards aquifer.

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area

Type of record: M, monthly; P, periodic; R, recorder.

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
HAYS COUNTY							
LR-58-57-001	--	1949	P	LR-67-01-702	--	1937-54	P
101	--	1937-76	P	808	--	1953-65	P
201	--	1975-76	P	809	--	1937-76	P
301	--	1937-76	P	08-807	--	1937-53	P
401	--	1937-71	P	09-102	--	1937-78	P
602	--	1975-76	P	110	--	1973-78	R
802	--	1975-76	P	68-08-301	--	1950-76	P
58-101	--	1937-76	P	601	--	1950-76	P
104	--	1937-76	P	16-605	--	1937-76	P
406	--	1971-76	P				
703	--	1937-76	P				
902	--	1943-78	P				
67-002	--	1937	P				
67-01-001	--	1940	P				
203	--	1969-76	P				
304	--	1937-78	P				
305	--	1961-76	P				
307	--	1937-58	P				
401	--	1954-76	P				
501	--	1955-76	P				
701	--	1954-78	P				

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
COMAL COUNTY							
DX-68-14-901	--	1940-51	P	DX-68-22-301	--	1945-75	P
902	--	1940-46	P	302	--	1936-60	P
15-401	--	1956-60	P	303	--	1933-52	P
701	--	1956-60	M	502	--	1945-61	P
801	--	1956-58	M	503	--	1945-52	P
802	--	1955	P	601	--	1933-58	P
803	--	1957-58	M	803	--	1933-52	P
902	--	1965-76	R	804	--	1936-54	P
903	--	1956-76	M	903	F-41	1962-76	P
904	--	1936-61	P	23-101	--	1945-75	P
905	--	1956-58	M	102	--	1937-51	P
906	--	1956-57	P	206	--	1936-75	P
16-401	--	1956-60	M	207	--	1959-61	P
501	--	1971-76	P	208	--	1956-74	P-R
602	--	1971-76	P	209	F-44	1939-52	M
702	--	1956-76	M	210	--	1934-54	P
703	--	1936-76	P	211	--	1956-58	M
704	--	1937-56	P	212	--	1936-61	P
801	--	1936-78	P	302	--	1948-76	R
803	--	1971-76	P	306	--	1936-76	M
804	G-23	1937-61	M	307	--	1956-58	M
22-201	--	1958-66	P	308	--	1936-58	P

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
COMAL COUNTY--Continued							
DX-68-23-309	--	1937-54	P				
310	--	1936-61	P				
507	--	1934-60	P				
603	--	1958-71	P				
604	G-77	1936-71	P				
701	--	1934-78	P				
705	--	1934-54	P				
807	--	1971-75	P				
808	--	1971-76	P				
809	--	1934-61	P				
24-102	--	1956-76	P				
104	--	1959-76	P				
105	--	1959-75	P				
106	--	1936-51	P				
30-208	--	1945-78	R				
216	--	1945-54	P				
217	--	1948-64	R				
312	--	1962-75	P				
313	H-44	1937-61	P				



Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
BEXAR COUNTY							
AY-68-22-701	--	1933-60	P	AY-68-28-910	--	1974-77	P
702	--	1933-61	M	29-103	--	1957-78	R
26-804	--	1933-61	P	107	--	1972	P
901	--	1933-61	P	207	--	1932-56	P
27-501	--	1946-76	M	304	F-12	1932-76	P
505	--	1958-76	R	411	--	1933-60	P
512	--	1971-77	M	506	--	1972-77	P
514	--	1932-50	P	507	--	1933-37	P
515	--	1932-71	M	508	--	1932-73	M
607	F-41	1932-53	M	604	--	1946-61	P
608	--	1954-61	P	605	--	1946-75	P
701	--	1933-52	M	701	--	1942-78	R
702	--	1946-61	P	708	--	1932-50	P
28-102	--	1957-60	M	709	--	1952-56	P
201	--	1933-61	P	710	--	1950-52	P
404	--	1973-77	P	811	--	1954-77	P
507	--	1933-76	M	913	--	1972-76	P
704	--	1933-51	M	914	--	1972-76	P
705	--	1950-77	P	916	F-86	1933-60	M
901	--	1972-76	P	917	--	1954-70	M
908	--	1952-61	M	30-101	--	1933-77	M-P
909	--	1972-76	P	211	--	1964-78	R

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
BEXAR COUNTY--Continued							
AY-68-30-404	--	1939-57	P	AY-68-36-109	--	1932-36	P
513	--	1950-61	P	110	--	1932-55	M
514	--	1949-76	M	112	--	1957-61	M
612	--	1933-61	P	301	--	1950-54	P
705	--	1972-77	P	302	--	1946-57	M
706	--	1933-50	P	303	--	1934-72	M
707	--	1948-61	P	407	--	1970-77	R
801	--	1933-56	P	410	--	1947-61	P
802	--	1954-77	M	505	--	1933-36	M
807	--	1973-77	M	506	--	1933-53	M
901	--	1950-71	P	507	--	1956-59	P
34-301	--	1950-61	P	602	--	1956-61	M
602	--	1934-77	P	603	--	1932-37	M
603	--	1934-76	P	604	--	1933-58	M
35-202	--	1933-77	M	605	--	1952-55	M
311	I-1	1933-56	P	606	--	1933-37	M
312	--	1946-76	M-P	706	I-57	1933-64	M
504	--	1952-61	P	910	--	1933-36	M
807	--	1933-77	M	911	--	1955-58	M
907	--	1960-65	M	912	--	1952-58	P
911	--	1937-59	M	913	--	1952-57	P
36-105	--	1970-75	P	37-103	--	1971-77	P

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
BEXAR COUNTY--Continued							
AY-68-37-114	--	1933-61	M	AY-68-43-611	--	1933-77	M
203	--	1962-78	R	807	--	1954-77	M
204	--	1932-63	R	812	--	1933-56	P
205	--	1932-51	P	813	--	1933-54	P
407	--	1933-71	P	44-213	--	1952-57	P
408	--	1933-36	M	214	--	1958-77	P
409	--	1933-77	M	401	--	1958-61	P
505	--	1952-57	M	405	--	1934-56	P
511	--	1952-75	M	45-102	--	1933-76	R
512	--	1952-58	M	301	--	1958-75	P
513	--	1952-57	M	901	--	1969-77	P
514	--	1944-57	M				
515	--	1957-61	M				
606	--	1932-77	M				
707	--	1933-76	M				
38-109	--	1934-71	P				
301	--	1934-67	M				
42-314	--	1933-60	M-P				
315	--	1934-65	M				
43-303	--	1951-54	P				
505	--	1960-61	M				
507	--	1953-61	M				

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
MEDINA COUNTY							
TD-68-26-702	--	1951-61	P	TD-69-38-904	--	1950-64	R
33-303	--	1934-61	P	39-503	--	1972-75	P
601	--	1955-75	P	505	--	1971-75	P
604	--	1930-78	p	507	--	1930-49	P
702	--	1951-75	P	903	--	1930-60	P
34-506	--	1973-75	P	40-101	--	1950-75	R
41-101	--	1937-58	P	405	--	1930-58	P
202	--	1951-56	P	45-601	--	1930-61	P
301	--	1950-78	R	46-601	--	1954-75	P
403	--	1951-58	P	701	--	1930-78	P
42-106	--	1972-75	P	901	--	1965-75	P
504	--	1930-75	P	47-204	--	1951-75	P
49-813	--	1973-75	P	301	--	1951-61	P
902	--	1952-71	R	302	--	1960-78	R
69-32-702	--	1955-58	P	305	--	1950-56	P
801	--	1950-58	P	402	--	1951-61	P
37-301	--	1950-52	P	604	--	1967-75	P
38-601	--	1957-78	R	701	--	1959-75	P
602	--	1930-54	P	48-102	--	1958-78	M
901	--	1968-75	P	402	--	1951-61	P
902	--	1972-75	P	53-801	--	1950-56	P
903	--	1951-54	P	54-501	--	1930-74	P

WATER-LEVEL, RECHARGE, DISCHARGE, SPECIFIC-CAPACITY  
WELL-YIELD, AND AQUIFER-TEST DATA FOR THE EDWARDS AQUIFER  
IN THE SAN ANTONIO AREA, TEXAS

by

Robert W. Maclay, Ted A. Small, and Paul L. Rettman  
U.S. Geological Survey

cooperators

Texas Department of Water Resources  
U.S. Geological Survey  
City Water Board of San Antonio

Texas Department of Water Resources

LP-133

December 1980

# TEXAS DEPARTMENT OF WATER RESOURCES

Harvey Davis, Executive Director

## TEXAS WATER DEVELOPMENT BOARD

Louis A. Beecherl Jr., Chairman  
George W. McCleskey  
Glen E. Roney

John H. Garrett, Vice Chairman  
W. O. Bankston  
Lonnie A. "Bo" Pilgrim

## TEXAS WATER COMMISSION

Felix McDonald, Chairman

Dorsey B. Hardeman, Commissioner

Joe R. Carroll, Commissioner

*Authorization for use or reproduction of any original material contained in this publication, i.e., not obtained from other sources, is freely granted. The Department would appreciate acknowledgement.*

Published and distributed  
by the  
Texas Department of Water Resources  
Post Office Box 13087  
Austin, Texas 78711

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
MEDINA COUNTY--Continued							
TD-69-55-202	--	1951-61	P				
501	--	1971-75	P				
56-501	--	1971-75	P				

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
UVALDE COUNTY							
YP-69-33-601	H-25	1955-57	P	YP-69-42-604	--	1956-57	P
901	--	1955-78	R	43-103	--	1969-76	P
35-501	--	1957-78	R	106	--	1956-76	P
502	--	1929-57	P	202	--	1957-76	R
601	--	1929-51	P	204	--	1929-57	P
804	--	1929-76	P	301	--	1971-76	P
901	--	1955-57	P	404	--	1929-61	P
36-601	--	1958-76	R	405	--	1962-63	P
37-401	--	1956-71	P	501	--	1956-57	P
402	--	1974-78	R	603	--	1968-76	P
701	--	1930-61	P	604	--	1929-48	P
41-101	--	1954-76	P	802	--	1965-75	P
202	--	1954-59	P	804	--	1971-78	P
502	--	1965-76	P	902	--	1971-75	P
504	--	1960-76	P	903	--	1968-76	P
701	--	1939-76	P	908	--	1968-75	P
702	--	1939-60	P	909	--	1968-69	P
901	--	1971-76	P	910	--	1954-76	P
903	--	1954-63	P	911	--	1929-60	P
42-101	--	1956-57	P	914	--	1954-65	P
601	--	1971-76	P	44-301	--	1971-76	P
603	--	1956-57	P	402	--	1970-76	P



Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
UVALDE COUNTY--Continued							
YP-69-44-403	--	1929-61	P	YP-69-50-408	--	1954-76	P
701	--	1968-75	P	409	--	1929-38	P
703	--	1968-76	P	504	--	1929-56	P
704	--	1968-75	P	505	--	1929-76	P
705	--	1929-61	P	507	--	1956-57	P
803	--	1968-71	P	608	--	1962-65	P
804	--	1968-75	P	609	--	1929-57	P
805	--	1958-72	P	610	--	1956-58	P
901	--	1934-54	P	611	--	1957-58	P
45-401	--	1954-78	R	612	--	1956-58	P
49-301	--	1929-52	P	901	--	1954-62	P
302	--	1967-76	P	902	--	1956-57	P
304	--	1929-38	P	51-101	--	1956-76	P
50-101	--	1929-78	P	202	--	1969-76	P
202	--	1956-78	P	401	--	1961-75	P
204	--	1929-76	P	406	--	1956-78	R
302	--	1929-78	R	407	--	1956-57	P
304	--	1929-54	P	502	--	1929-75	P
305	--	1956-57	M	602	--	1962-75	P
403	--	1954-78	P	701	--	1957-59	P
405	--	1956-57	M	801	--	1945-53	P
406	--	1955-57	M	52-201	--	1966-75	P

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
-----------------	-----------------	------------------	----------------	-----------------	-----------------	------------------	----------------

UVALDE COUNTY--Continued

YP-69-52-401	--	1954-69	P				
402	--	1966-75	P				
53-703	--	1971-73	P				
70-40-901	--	1957-78	R				
56-101	--	1937-64	P				
201	--	1937-78	P				

Table 2.--Listing of available water-level records for observation wells penetrating the Edwards aquifer in the San Antonio area--Continued

New well number	Old well number	Period of record	Type of record	New well number	Old well number	Period of record	Type of record
KINNEY COUNTY							
RP-70-35-802	M-1	1938-52	P	RP-70-47-101	R-11	1937-56	P
803	M-2	1937-65	P	102	R-10	1937-54	P
36-201	--	1938-69	P	201	R-12	1937-52	P
202	H-2	1938-54	P	301	R-14	1937-56	P
701	G-13	1938-54	P	302	R-15	1937-56	P
37-101	I-5	1938-56	P	303	R-13	1937-56	P
201	I-3	1938-60	P	48-701	--	1938-52	P
501	I-9	1938-75	P	56-102	R-6	1937-61	P
38-601	K-4	1938-52	P				
602	K-3	1938-54	P				
702	P-2	1938-75	P				
39-401	L-7	1938-54	P				
44-101	M-14	1937-70	P				
601	U-2	1937-55	P				
901	U-8	1938-65	P				
45-302	P-4	1938-56	P				
402	V-14	1938-72	P				
403	V-23	1956-75	P				
404	V-10	1937-58	P				
502	V-6	1937-71	P-R				
602	W-2	1939-63	P				
46-801	X-2	1937-67	P				

Table 3.--Index of water-level maps of the Edwards aquifer  
in the San Antonio area

<u>Date of map</u>	<u>Area covered</u>	<u>Source of information</u>
1930	Uvalde and Medina Counties	Sayre (1936)
Oct. 1934	Bexar County and parts of Medina and Comal Counties	Livingston and others (1936)
Oct. 1934	Bexar County	Arnaw (1959)
Jan. 1947	Kinney, Uvalde, Medina, Bexar, Comal, and Hays Counties	Klemt and others (1975)
Jan. 1951	Medina County	Holt (1959)
Jan. 1952	Kinney, Uvalde, Medina, Bexar, Comal, and Hays Counties	Petitt and George (1956)
Jan. 1952	Bexar County	Arnaw (1959)
Aug. 1952	Medina, Bexar, and Comal Counties	Lang (1954)
Aug. 1954	Bexar County	Arnaw (1959)
Aug. 1954	Kinney, Uvalde, Medina, Bexar, Comal, and Hays Counties	Petitt and George (1956)
Aug. 1956	do.	Garza (1962)
Jan. 1957	Bexar County	Arnaw (1959)
Mar. 1958	Kinney, Uvalde, Medina, Bexar, Comal, and Hays Counties	Garza (1962)
Jan. 1961	do.	Garza (1966)
Jan. 1972	do.	Klemt and others (1975)
Feb. 1972	do.	Files of U.S. Geological Survey in San Antonio
June 1972	do.	do.
Feb. 1973	do.	do.
July 1973	do.	do.
Feb. 1974	do.	do.
July 1974	do.	do.
July 1975	do.	do.
Feb. 1976	do.	do.
Aug. 1976	do.	do.

Table 4.—Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76 (feet below land surface)

H A Y S C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: E-17		Well no.: LR-58-57-802		Well no.: LR-58-57-903--Cont.	
New well no.: LR-58-57-101		Altitude: 838.0		July 18, 1974	241.00
Altitude: 992.5				Feb. 10, 1975	238.40
Jan. 31, 1972	52.20	Aug. 11, 1976	157.90	July 15, 1975	187.20
June 5, 1972	50.10	Old well no.: E-65		Feb. 23, 1976	220.30
Feb. 6, 1973	16.70	New well no.: LR-58-57-902		Aug. 10, 1976	192.00
July 24, 1973	8.44	Altitude: 821.55			
Feb. 11, 1974	13.37	Jan. 31, 1972	203.50	Old well no.: E-36	
July 18, 1974	39.10	June 5, 1972	218.60	New well no.: LR-58-58-101	
Feb. 10, 1975	6.55	Feb. 6, 1973	206.30	Altitude: 707.2	
July 15, 1975	11.00	July 24, 1973	183.45	Feb. 7, 1972	96.20
Feb. 23, 1976	27.25	Feb. 11, 1974	186.92	June 5, 1972	99.30
Aug. 11, 1976	26.30	July 18, 1974	220.70	Feb. 6, 1973	79.93
		Feb. 10, 1975	208.10	Apr. 26, 1973	61.80
Well no.: LR-58-57-201		July 15, 1975	183.50	July 20, 1973	55.27
Altitude: 925.0		Feb. 23, 1976	217.55	July 18, 1974	101.50
Aug. 11, 1976	158.45	Aug. 10, 1976	188.00	Feb. 10, 1975	70.50
				July 15, 1975	57.00
Well no.: LR-58-57-301		Old well no.: E-48		Feb. 23, 1976	99.50
Altitude: 882.4		New well no.: LR-58-57-903		Aug. 11, 1976	73.30
Aug. 11, 1976	214.71	Altitude: 827.8			
		Jan. 31, 1972	206.20	Old well no.: E-31	
Well no.: LR-58-57-602		June 5, 1972	218.85	New well no.: LR-58-58-104	
Altitude: 792.0		Feb. 6, 1973	218.67	Altitude: 730.3	
Aug. 11, 1976	84.14	July 24, 1973	182.40	Jan. 31, 1972	133.30
		Feb. 11, 1974	195.10	June 5, 1972	134.80

Table 4.—Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76—Continued

H A Y S C O U N T Y—Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: LR-58-58-104--Cont.		Old well no.: H-1012		Old well no.: H-9a, H-114	
Feb. 6, 1973	120.62	New well no.: LR-67-01-203		New well no.: LR-67-01-305	
		Altitude: 691.0		Altitude: 705.32	
July 24, 1973	95.90				
Feb. 11, 1974	94.74	June 6, 1972	105.25	Jan. 31, 1972	127.09
July 18, 1974	96.00	Feb. 6, 1973	127.25	June 5, 1972	134.90+
Feb. 10, 1975	106.75	Feb. 18, 1975	93.25	Feb. 6, 1973	130.40
July 15, 1975	97.30	Feb. 24, 1976	105.78	July 24, 1973	130.40
Feb. 23, 1976	124.25	Aug. 10, 1976	111.30	Feb. 11, 1974	127.40
Aug. 11, 1976	103.90			July 18, 1974	134.80
		Old well no.: H-23		Feb. 10, 1975	126.10
Well no.: LR-58-58-406		New well no.: LR-67-01-304		July 15, 1975	127.10
Altitude: 743.0		Altitude: 718.0		Feb. 23, 1976	131.50
Jan. 31, 1972	141.38	Jan. 31, 1972	141.98	Aug. 10, 1976	126.65
June 5, 1972	150.60+	June 1, 1972	148.75		
Feb. 6, 1973	122.50	Feb. 6, 1973	137.83		
Feb. 11, 1974	97.90	July 20, 1973	127.20	Old well no.: H-1002	
July 18, 1974	148.00	Feb. 11, 1974	128.66	New well no.: LR-67-01-401	
Feb. 10, 1975	107.10	July 18, 1974	159.50	Altitude: 806.07	
July 15, 1975	100.80	Feb. 10, 1975	132.45	Feb. 18, 1975	205.60
Feb. 23, 1976	138.32	July 15, 1975	129.80		
Aug. 11, 1976	114.80	Feb. 23, 1976	137.65	Old well no.: H-108	
		Aug. 10, 1976	140.97	New well no.: LR-67-01-501	
				Altitude: 686.97	
				Jan. 31, 1972	117.31
Well no.: LR-58-58-703				Feb. 18, 1975	103.47
Altitude: 740.4				July 15, 1975	110.20
Aug. 11, 1976	120.22			Feb. 24, 1976	114.55
				Aug. 10, 1976	114.50

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

H A Y S C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: H-75a New well no.: LR-67-01-701 Altitude: 734.4		Well no.: LR-67-01-809 Feb. 24, 1976	26.61	Well no.: LR-67-09-110 Altitude: 685.0	
Feb. 7, 1972	164.75	Aug. 10, 1976	23.90	Feb. 7, 1973	98.90
June 5, 1972	172.45	Old well no.: H-20 New well no.: LR-67-02-103 Altitude: 704.2		July 20, 1973	95.36
Feb. 6, 1973	157.78	Jan. 31, 1972	125.25	Feb. 11, 1974	97.41
July 27, 1973	153.19	June 5, 1972	130.90	July 18, 1974	99.22
Feb. 11, 1974	156.07	Feb. 6, 1973	122.55	Feb. 1975	95.13
July 18, 1974	171.34	July 24, 1973	112.20	Aug. 11, 1976	97.72
Feb. 10, 1975	157.15	Feb. 11, 1974	108.41	Old well no.: G-26 New well no.: LR-68-08-601 Altitude: 971.0	
July 14, 1975	154.40	July 18, 1974	137.80	Jan. 31, 1972	163.05
Feb. 23, 1976	169.56	Feb. 10, 1975	112.46	June 5, 1972	175.70
Aug. 10, 1976	165.35	July 15, 1975	104.60	Feb. 6, 1973	151.10
Old well no.: H-49 New well no.: LR-67-01-809 Altitude: 602.47		Old well no.: H-95 New well no.: LR-67-09-102 Altitude: 696.8		July 20, 1973	156.87
Jan. 31, 1972	25.85	Jan. 31, 1972	119.03	Feb. 11, 1974	169.65
June 6, 1972	25.35	July 23, 1974	118.27	July 18, 1974	174.30
Feb. 6, 1973	26.26	Feb. 10, 1975	116.80	Feb. 10, 1975	160.90
July 24, 1973	22.48	July 14, 1975	117.55	July 14, 1975	154.10
Feb. 11, 1974	24.59	Feb. 23, 1976	125.20	Feb. 23, 1976	188.73
July 18, 1974	26.25	Aug. 10, 1976	120.45	Aug. 10, 1976	178.45
Feb. 11, 1975	22.70				
July 15, 1975	21.80				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

H A Y S C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: G-48					
New well no.: LR-68-16-301					
Altitude: 830.9					
Feb. 8, 1972	237.85				
June 6, 1972	242.85				
July 25, 1973	181.60				
Feb. 11, 1974	223.79				
Feb. 10, 1975	218.60				
July 14, 1975	226.50				
Feb. 24, 1976	234.00				
Aug. 11, 1976	232.55				
Old well no.: K-4					
New well no.: LR-68-16-605					
Altitude: 729.85					
Feb. 1, 1972	142.87				
June 5, 1972	150.30				
Feb. 7, 1973	153.10				
July 24, 1973	123.70				
Feb. 11, 1974	138.70				
July 17, 1974	150.05				
Feb. 10, 1975	122.80				
July 14, 1975	118.60				
Feb. 24, 1976	156.32				
Aug. 10, 1976	141.00				



Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

C O M A L C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: DX-68-15-902 Altitude: 659.23		Old well no.: G-84 New well no.: DX-68-16-501 Altitude: 750.00		Well no.: DX-68-16-602--Cont. Feb. 11, 1975 2.12	
Feb. 7, 1973	16.39	Feb. 1, 1972	133.80	July 14, 1975	.43
Feb. 12, 1974	18.18	June 5, 1972	189.15	Feb. 23, 1976	6.90
July 17, 1974	19.34	Feb. 7, 1973	154.40	Aug. 3, 1976	4.50
Feb. 11, 1975	13.80	May 3, 1973	158.10	Well no.: DX-68-16-701 Altitude: 715.00	
July 16, 1975	18.0	July 25, 1973	147.45	May 25, 1972	94.60
Feb. 20, 1976	22.00	Feb. 12, 1974	149.84	Feb. 26, 1973	95.95
Aug. 4, 1976	23.10	July 17, 1974	177.25	Apr. 26, 1973	94.42
Old well no.: G-101 New well no.: DX-68-15-903 Altitude: 676.68		Feb. 11, 1975	153.30	July 25, 1973	94.54
Feb. 1, 1972	45.90	July 14, 1975	147.60	Feb. 27, 1974	93.20
June 6, 1972	42.35	Feb. 23, 1976	172.60	July 17, 1974	109.45
Feb. 7, 1973	43.26	Aug. 3, 1976	179.20	Feb. 11, 1975	102.80
Apr. 18, 1973	38.35	Old well no.: G-115 New well no.: DX-68-16-602 Altitude: 600.00		Feb. 20, 1976	96.75
July 25, 1973	37.35	Feb. 1, 1972	8.63	Aug. 3, 1976	94.80
Feb. 12, 1974	35.40	June 5, 1972	6.70	Old well no.: G-95 New well no.: DX-68-16-702 Altitude: 930.00	
July 17, 1974	45.45	Feb. 7, 1973	7.65	Feb. 20, 1976	295.41
Feb. 11, 1975	36.42	Apr. 18, 1973	6.15	Aug. 9, 1976	284.83
July 16, 1975	36.20	July 25, 1973	2.55		
Feb. 20, 1976	44.05	Feb. 12, 1974	2.62		
Aug. 4, 1976	40.30	July 17, 1974	5.50		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

C O M A L C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: G-34		Well no.: DX-68-16-801--Cont.		Well no.: DX-68-22-301--Cont.	
New well no.: DX-68-16-703		Feb. 11, 1975	137.06	July 25, 1973	239.10
Altitude: 700.60		July 14, 1975	136.30	Feb. 12, 1974	255.10
Feb. 1, 1972	89.00	Feb. 23, 1976	145.60	July 17, 1974	272.50
June 6, 1972	90.20	Aug. 3, 1976	141.90	Feb. 11, 1975	240.40
Feb. 7, 1973	88.55			July 17, 1975	252.50
Apr. 18, 1973	87.04	Old well no.: G-86		Feb. 24, 1976	274.20
July 25, 1973	89.15	New well no.: DX-68-16-803		Aug. 9, 1976	252.68
Feb. 12, 1974	84.34	Altitude: 725.00			
July 17, 1974	86.82	Feb. 1, 1972	106.40	Well no. DX-68-22-501	
Feb. 18, 1975	83.57	June 5, 1972	114.05	Altitude: 908.0	
July 14, 1975	82.60	Feb. 7, 1973	108.95	Feb. 10, 1972	247.50
Feb. 23, 1976	88.80	July 25, 1973	110.08	May 25, 1972	239.77
Aug. 3, 1976	90.85	July 17, 1974	122.22	Feb. 26, 1973	252.80
		Feb. 11, 1975	109.20	Apr. 26, 1973	236.54
		July 14, 1975	113.22	July 23, 1973	223.77
Old well no.: G-25		Feb. 23, 1976	115.63	Jan. 28, 1974	228.63
New well no.: DX-68-16-801		Aug. 3, 1976	112.05	July 29, 1974	230.15
Altitude: 752.70					
Feb. 1, 1972	149.10	Old well no.: F-50		Well no.: DX-68-22-903	
June 5, 1972	143.20	New well no.: DX-68-22-301		Altitude: 761.00	
Feb. 7, 1973	143.90	Altitude: 921.40		July 26, 1973	95.77
Apr. 18, 1973	141.30	Feb. 8, 1972	278.99	Feb. 13, 1974	95.60
July 25, 1973	139.01	June 6, 1972	233.74	July 16, 1974	110.56
Feb. 12, 1974	139.56	Feb. 7, 1973	273.04	Feb. 12, 1975	113.70
July 17, 1974	154.45	May 3, 1973	243.15		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

C O M A L C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: DX-68-22-903--Cont.		Well no.: DX-68-23-202--Cont.		Well no.: DX-68-23-302--Cont.	
July 16, 1975	99.95	Jan. 28, 1974	277.32	July 25, 1973	14.44
Feb. 20, 1976	109.50	July 30, 1974	284.13	Feb. 12, 1974	13.94
Aug. 3, 1976	107.05	July 17, 1975	278.90	July 17, 1974	16.36
		Feb. 20, 1976	289.76	Feb. 12, 1975	14.35
		Aug. 9, 1976	289.60	July 16, 1975	14.60
Old well no.: F-29				Feb. 20, 1976	16.51
New well no.: DX-68-23-101		Old well no.: F-26		Aug. 3, 1976	15.38
Altitude: 966.40		New well no.: DX-68-23-206			
Feb. 3, 1972	311.75	Altitude: 849.10		Old well no.: G-32	
June 6, 1972	277.00	Feb. 1, 1972	184.74	New well no.: DX-68-23-306	
Feb. 7, 1973	304.10	June 6, 1972	193.70+	Altitude: 806.50	
May 3, 1973	319.10	Feb. 7, 1973	175.20	Feb. 1, 1972	148.45
July 25, 1973	315.20	Apr. 18, 1973	185.20	Feb. 7, 1973	175.80
July 17, 1974	323.50	July 17, 1974	150.20	Feb. 12, 1974	155.70
Feb. 18, 1975	283.54	Feb. 11, 1975	193.58	July 16, 1975	155.70
July 17, 1975	328.00	July 16, 1975	148.10	Feb. 20, 1976	176.50
Feb. 20, 1976	303.50	Feb. 24, 1976	205.88	Aug. 4, 1976	174.00
Aug. 9, 1976	297.05				
		Old well no.: G-49		Old well no.: H-20	
Well no.: DX-68-23-202		New well no.: DX-68-23-302		New well no.: DX-68-23-701	
Altitude: 937.00		Altitude: 642.70		Altitude: 684.50	
Jan. 27, 1972	300.0	Feb. 1, 1972	16.60	Feb. 2, 1972	34.09
Feb. 26, 1973	297.20	June 6, 1972	16.48	June 6, 1972	41.05
Apr. 26, 1973	295.75	Feb. 7, 1973	16.48	Feb. 10, 1973	34.28
July 23, 1973	287.00	Apr. 18, 1973	15.82	Apr. 17, 1973	31.06

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

C O M A L C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: DX-68-23-701--Cont.		Old well no.: H-51		Well no.: DX-68-24-102--Cont.	
July 26, 1973	24.36	New well no.: DX-68-23-808		Feb. 18, 1975	18.94
Feb. 13, 1974	23.64	Altitude: 728.00		July 14, 1975	25.10
July 16, 1974	36.40	Feb. 2, 1972	83.73	Feb. 20, 1976	23.14
Feb. 12, 1975	24.30	June 6, 1972	85.47	Aug. 3, 1976	21.16
July 16, 1975	27.50	Feb. 7, 1973	83.10		
Feb. 24, 1976	36.43	Apr. 17, 1973	81.60	Old well no.: G-89	
Aug. 3, 1976	31.79	July 26, 1973	77.46	New well no.: DX-68-24-104	
		Feb. 13, 1974	72.58	Altitude: 678.00	
Old well no.: H-49		July 16, 1974	77.55	Feb. 7, 1972	68.84
New well no.: DX-68-23-807		Feb. 12, 1975	79.90	June 6, 1972	71.15
Altitude: 660.00		July 16, 1975	77.20	Feb. 7, 1973	68.72
Feb. 7, 1972	14.30	Feb. 24, 1976	82.53	May 3, 1973	67.95
June 6, 1972	13.08	Aug. 3, 1976	80.50	July 25, 1973	64.35
Feb. 10, 1973	14.10			Feb. 12, 1974	64.74
Apr. 17, 1973	12.46	Old well no.: G-94		July 17, 1974	69.90
July 26, 1973	7.46	New well no.: DX-68-24-102		Feb. 11, 1975	64.14
Feb. 13, 1974	4.36	Altitude: 643.00		July 14, 1975	63.13
July 16, 1974	13.76	Feb. 7, 1972	23.51	Feb. 23, 1976	68.53
Feb. 12, 1975	7.20	June 6, 1972	21.81	Aug. 3, 1976	66.05
July 16, 1975	7.00	Feb. 7, 1973	23.19		
Feb. 20, 1976	13.34	May 3, 1973	21.25		
Aug. 3, 1976	10.03	July 25, 1973	19.45		
		Feb. 12, 1974	22.35		
		July 17, 1974	22.06		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

C O M A L C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: G-41		Well no.: DX-68-30-208--Cont.			
New well no.: DX-68-24-105		July 16, 1975	127.35		
Altitude: 688.00		Feb. 20, 1976	138.54		
Feb. 1, 1972	66.85	Aug. 3, 1976	130.10		
Feb. 7, 1973	62.37				
Apr. 18, 1973	61.09	Old well no.: H-55			
July 25, 1973	58.61	New well no.: DX-68-30-312			
Feb. 12, 1974	50.98	Altitude: 765.00			
July 17, 1974	58.17	Feb. 2, 1972	116.94		
Feb. 11, 1975	51.60	June 6, 1972	114.05		
Aug. 6, 1975	50.21	Feb. 10, 1973	113.29		
Feb. 20, 1976	51.18	May 2, 1973	105.41		
Aug. 3, 1976	51.83	July 26, 1973	100.00		
		Feb. 13, 1974	100.20		
Old well no.: H-36		July 16, 1974	114.60		
New well no.: DX-68-30-208		Feb. 12, 1975	108.80		
Altitude: 797.81		July 16, 1975	104.80		
Feb. 1, 1972	135.53	Feb. 24, 1976	119.45		
June 6, 1972	134.33	Aug. 3, 1976	110.75		
Feb. 7, 1973	135.31				
Apr. 17, 1973	131.30				
July 25, 1973	120.81				
Feb. 12, 1974	121.83				
July 11, 1974	139.22				
Feb. 12, 1975	121.81				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: D-56 New well no.: AY-68-27-501 Altitude: 1043.0		Well no.: AY-68-27-512 Altitude: 992		Old well no.: E-60 New well no.: AY-68-28-507 Altitude: 894.14	
Feb. 3, 1972	89.30	Feb. 3, 1972	193.89	Feb. 3, 1972	228.55
June 7, 1972	95.95	June 7, 1972	191.79	June 8, 1972	215.40
Feb. 6, 1973	88.57	Feb. 6, 1973	202.80	Feb. 10, 1973	231.05
July 26, 1973	67.71	July 26, 1973	156.93	Apr. 16, 1973	210.65
Feb. 13, 1974	84.82	Feb. 13, 1974	176.18	July 27, 1973	189.40
July 15, 1974	104.69	July 15, 1974	211.60	Feb. 14, 1974	202.70
Feb. 13, 1975	72.93	Feb. 13, 1975	173.04	July 15, 1974	288.80
July 17, 1975	91.70	July 17, 1975	197.70	Feb. 13, 1975	238.80
Aug. 2, 1976	84.87	Feb. 23, 1976	214.10	July 18, 1975	202.05
		Aug. 2, 1976	203.14	Feb. 25, 1976	226.74
Old well no.: D-59 New well no.: AY-68-27-505 Altitude: 979.84		Well no.: AY-68-28-404 Altitude: 920		Aug. 2, 1976	217.10
Feb. 3, 1972	239.61	Apr. 19, 1973	209.28	Old well no.: E-143 New well no.: AY-68-28-705 Altitude: 874.76	
June 7, 1972	219.60	July 27, 1973	193.25	Feb. 3, 1972	189.14
Feb. 6, 1973	228.30	Feb. 14, 1974	164.60	Feb. 8, 1973	198.30
July 26, 1973	166.95	July 15, 1974	188.07	Apr. 16, 1973	176.70
Feb. 13, 1974	175.44	Feb. 13, 1975	199.40	July 27, 1973	171.50
July 15, 1974	213.42	July 18, 1975	192.40	Feb. 14, 1974	171.10
Feb. 13, 1975	198.52	Feb. 25, 1976	207.90	July 16, 1974	192.58
July 17, 1975	216.70	Aug. 2, 1976	199.80	Feb. 13, 1975	167.61
Aug. 2, 1976	209.08				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: AY-68-28-705--Cont. July 17, 1975	176.28	Well no.: AY-68-28-909--Cont. July 17, 1975	97.31	Well no.: AY-68-29-103--Cont. Aug. 2, 1976	252.65
Mar. 5, 1976	197.36	Feb. 23, 1976	111.62	Old well no.: F-12 New well no.: AY-68-29-304 Altitude: 907.65	
Aug. 2, 1976	179.66	Aug. 2, 1976	101.04	Feb. 10, 1973	242.60
Old well no.: E-208 New well no.: AY-68-28-901 Altitude: 877.5		Well no.: AY-68-28-910 Altitude: 815		July 15, 1974	251.00
Feb. 4, 1972	195.25	July 16, 1974	138.84	Mar. 5, 1976	235.33
June 8, 1972	204.66	Feb. 12, 1975	116.22	Well no.: AY-68-29-506 Altitude: 788	
Feb. 9, 1973	192.93	July 17, 1975	125.75	July 26, 1973	98.65
July 26, 1973	166.47	Feb. 23, 1976	143.23	Feb. 13, 1974	92.88
July 16, 1974	195.15	Aug. 2, 1976	129.08	July 16, 1974	113.35
Feb. 12, 1975	171.40	Old well no.: F-214 New well no.: AY-68-29-103 Altitude: 952.67		Feb. 13, 1975	107.20
July 17, 1975	182.47	Feb. 4, 1972	270.28	July 17, 1975	105.20
Feb. 23, 1976	200.21	June 8, 1972	264.55	Feb. 25, 1976	120.20
Aug. 2, 1976	186.23	Feb. 9, 1973	267.23	Aug. 2, 1976	104.40
Old well no.: E-172 New well no.: AY-68-28-909 Altitude: 783.00		Apr. 16, 1973	261.70	Old well no.: F-30 New well no.: AY-68-29-508 Altitude: 874.32	
Feb. 4, 1972	106.80	July 26, 1973	249.35	June 7, 1972	200.01
June 8, 1972	108.56	Feb. 13, 1974	235.27	Feb. 10, 1973	206.00
Feb. 9, 1973	106.00	July 15, 1974	244.34	May 1, 1973	192.18
Feb. 13, 1974	91.25	Feb. 12, 1975	244.10	July 27, 1973	183.70
July 16, 1974	111.47	July 17, 1975	244.82		
Feb. 12, 1975	89.25	Feb. 23, 1976	256.29		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: F-75 New well no.: AY-68-29-605 Altitude: 808.51		Old well no.: F-190 New well no.: AY-68-29-811 Altitude: 735.8		Well no.: AY-68-29-914 Altitude: 737.85	
Feb. 3, 1972	139.59	Feb. 4, 1972	66.55	Feb. 4, 1972	68.18
June 8, 1972	141.90	June 8, 1972	69.08	June 8, 1972	71.21
Feb. 10, 1973	144.22	Feb. 9, 1973	65.64	Feb. 9, 1973	67.52
Apr. 16, 1973	134.10	July 26, 1973	51.08	July 26, 1973	53.18
July 26, 1973	124.35	Feb. 13, 1974	52.72	Feb. 13, 1974	54.36
July 15, 1974	147.09	July 15, 1974	78.22	July 15, 1974	79.26
July 17, 1975	127.10	Feb. 13, 1975	51.33	Feb. 13, 1975	52.91
		July 17, 1975	58.21	July 17, 1975	60.30
Old well no.: F-172 New well no.: AY-68-29-701 Altitude: 778.8		Feb. 23, 1976	71.57	Feb. 23, 1976	73.42
Feb. 4, 1972	104.86	Aug. 2, 1976	61.06	Aug. 2, 1976	62.83
June 8, 1972	106.55	Well no.: AY-68-29-913 Altitude: 811.19		Old well no.: F-24 New well no.: AY-68-30-101 Altitude: 917.61	
Feb. 9, 1973	103.96	Feb. 4, 1972	142.54	Feb. 3, 1972	250.10
Apr. 16, 1973	96.53	June 8, 1972	145.13	June 7, 1972	255.65
July 26, 1973	85.89	Feb. 9, 1973	141.98	Feb. 6, 1973	252.35
Feb. 13, 1974	89.50	July 26, 1973	127.60	July 26, 1973	234.68
July 15, 1974	109.08	Feb. 13, 1974	129.10	Feb. 13, 1974	236.12
Feb. 12, 1975	87.57	July 15, 1974	147.50	July 15, 1974	253.67
July 17, 1975	95.97	Feb. 13, 1975	127.41	Feb. 13, 1975	235.60
Feb. 23, 1976	110.62	July 17, 1975	134.51	July 17, 1975	243.53
Aug. 2, 1976	98.75	Feb. 23, 1976	148.16	Aug. 2, 1976	235.37
		Aug. 2, 1976	131.68		



Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: G-69		Well no.: AY-68-30-514--Cont.		Well no.: AY-68-30-802--Cont.	
New well no.: AY-68-30-211		Feb. 12, 1975	85.80	Feb. 13, 1974	27.90
Altitude: 776.45					
Feb. 4, 1972	113.76	July 16, 1975	100.30	July 15, 1974	45.32
June 8, 1972	113.53	Feb. 24, 1976	103.80	Feb. 13, 1975	26.70
Feb. 9, 1973	113.29	Aug. 4, 1976	95.15	July 16, 1975	33.45
Apr. 16, 1973	109.42			Feb. 23, 1976	45.86
July 26, 1973	98.24	Well no.: AY-68-30-705		Aug. 2, 1976	31.71
Feb. 13, 1974	100.04	Altitude: 920			
July 15, 1974	115.95	Feb. 4, 1972	242.71	Well no.: AY-68-30-807	
Feb. 13, 1975	100.25	June 8, 1972	245.15	Altitude: 750.00	
July 17, 1975	105.31	Feb. 9, 1973	242.20	Feb. 10, 1973	86.90±
Feb. 23, 1976	116.92	July 26, 1973	228.06	Apr. 16, 1973	78.60
Aug. 2, 1976	107.95	Feb. 13, 1974	229.32	July 26, 1973	68.55
		July 15, 1974	256.87	Feb. 13, 1974	69.10
		Feb. 13, 1975	228.52	July 15, 1974	86.60
		July 16, 1975	234.91	Feb. 12, 1975	68.40
Old well no.: G-5		Feb. 23, 1976	247.42	July 8, 1975	75.13
New well no.: AY-68-30-514		Aug. 2, 1976	237.70	Feb. 24, 1976	88.13
Altitude: 768.15				Aug. 2, 1976	75.80
Feb. 3, 1972	99.20	Well no.: AY-68-30-802			
June 8, 1972	107.80	Altitude: 710.10		Old well no.: H-3	
Feb. 10, 1973	103.54	Feb. 3, 1972	40.59	New well no.: AY-68-34-602	
May 3, 1973	90.60	June 7, 1972	44.46	Altitude: 976.17	
July 26, 1973	87.08	Feb. 6, 1973	40.45	Feb. 4, 1972	276.65
Feb. 13, 1974	86.40	July 26, 1973	26.50	June 8, 1972	287.28
July 16, 1974	102.55			Feb. 8, 1973	276.70

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: AY-68-34-602--Cont.		Old well no.: H-1		Old well no.: H-13	
May 1, 1973	253.20	New well no.: AY-68-35-202		New well no.: AY-68-35-807	
		Altitude: 848.52		Altitude: 788.15	
July 27, 1973	253.50	Feb. 4, 1972	154.55	Feb. 3, 1972	102.04
Feb. 14, 1974	263.70	June 8, 1972	154.20	June 7, 1972	107.62
July 15, 1974	282.30	Feb. 8, 1973	156.80	Feb. 6, 1973	101.06
Feb. 13, 1975	258.10	Apr. 16, 1973	140.20	July 26, 1973	81.64
July 18, 1975	248.10	July 27, 1973	119.80	Feb. 12, 1974	85.79
Feb. 26, 1976	284.50	Feb. 14, 1974	130.70	July 15, 1974	105.73
Aug. 2, 1976	284.90	July 15, 1974	158.36	Feb. 12, 1975	82.01
Old well no.: H-5		Feb. 13, 1975	142.60	July 16, 1975	89.90
New well no.: AY-68-34-603		July 18, 1975	142.50	Feb. 23, 1976	108.58
Altitude: 808.93		Feb. 25, 1976	160.37	Aug. 2, 1976	97.61
Feb. 4, 1972	116.75	Old well no.: I-2		Well no.: AY-68-36-105	
June 8, 1972	125.42	New well no.: AY-68-35-312		Altitude: 886.95	
Feb. 8, 1973	114.38	Altitude: 821.34		Feb. 4, 1972	207.48
May 1, 1973	97.60	Feb. 3, 1972	131.37	June 8, 1972	210.33
Feb. 14, 1974	98.8	Feb. 6, 1973	130.43	Feb. 9, 1973	206.35
July 15, 1974	118.75	July 25, 1973	101.55	Feb. 13, 1974	190.62
July 18, 1975	102.38	Feb. 13, 1974	112.94	July 15, 1974	211.34
Feb. 26, 1976	127.00	July 15, 1974	134.39	Feb. 12, 1975	189.17
Aug. 2, 1976	123.30	Feb. 13, 1975	112.63	July 17, 1975	205.20
		July 17, 1975	118.57		
		Aug. 2, 1976	126.07		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: CY-159 New well no.: AY-68-37-707 Altitude: 627.05		Old well no.: M-45 New well no.: AY-68-43-807 Altitude: 625.79		Well no.: AY-68-45-102--Cont. Apr. 16, 1973	+46.0
Feb. 4, 1972	+47.6	Feb. 4, 1972	+29.50	July 26, 1973	+54.0
June 8, 1972	+43.1	June 8, 1972	+28.50	Feb. 14, 1974	+50.0
Feb. 8, 1973	+45.7	Feb. 8, 1973	+49.30	July 13, 1974	+35.0
July 26, 1973	+59.0	July 22, 1974	+52.6	Feb. 13, 1975	+55.6
Feb. 13, 1974	+57.1	Feb. 13, 1975	+73.5	July 16, 1975	+50.9
July 15, 1974	+39.4	July 17, 1975	+68.0	Old well no.: J-55b New well no.: AY-68-45-301 Altitude: 611.00	
Feb. 13, 1975	+59.3	Feb. 25, 1976	+53.44	June 8, 1972	+9.5
July 17, 1975	+53.23	Old well no.: I-195 New well no.: AY-68-44-214 Altitude: 654.00		Feb. 8, 1973	+18.2
Feb. 25, 1976	+37.59	Feb. 4, 1972	+28.6	Feb. 13, 1974	+23.9
Aug. 2, 1976	+49.03	June 8, 1972	+24.0	July 15, 1974	+20.0
Old well no.: N-1 New well no.: AY-68-43-611 Altitude: 621.62		July 15, 1974	+16.0	Jan. 20, 1975	+52.2
Jan. 21, 1972	+57.00	Feb. 13, 1975	+34.9	Well no.: AY-68-45-901 Altitude: 510.00	
June 8, 1972	+51.00	July 17, 1975	+28.3	Feb. 1, 1972	+116.80
Feb. 8, 1973	+53.35	Feb. 25, 1976	+11.88	June 8, 1972	+121.5
Feb. 13, 1974	+67.0	Aug. 2, 1976	+25.36	Jan. 30, 1973	+126.1
July 15, 1974	+47.4	Old well no.: CY-175 New well no.: AY-68-45-102 Altitude: 621.60		July 26, 1973	+116.8
Feb. 13, 1975	+69.4	Feb. 4, 1972	+39.9	Feb. 13, 1974	+123.8
July 17, 1975	+63.04	June 13, 1972	+40.0	July 15, 1974	+131.8
Feb. 13, 1975	+69.4	Feb. 9, 1973	+42.4	Feb. 4, 1975	+139.35
Feb. 25, 1976	+44.45			July 18, 1975	+142.02
Aug. 2, 1976	+60.43			July 21, 1976	+141.0

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

B E X A R C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: I-223 New well no.: AY-68-36-407 Altitude: 730.83		Old well no.: J-17 New well no.: AY-68-37-203 Altitude: 730.81		Well no.: AY-68-37-409--Cont. Feb. 25, 1976	+21.73
Feb. 4, 1972	46.67	Feb. 4, 1972	58.24	Aug. 2, 1976	+32.16
June 8, 1972	51.22	June 8, 1972	62.10	Old well no.: J-24 New well no.: AY-68-37-511 Altitude: 642.75	
Feb. 9, 1973	46.00	Feb. 8, 1973	57.77	Feb. 4, 1972	+31.7
Apr. 16, 1973	40.16	Apr. 16, 1973	52.87	June 8, 1972	+26.7
July 26, 1973	27.29	July 26, 1973	43.70	Feb. 8, 1973	+31.35
Feb. 6, 1974	29.60	Feb. 13, 1974	45.39	Feb. 13, 1974	+41.85
July 15, 1974	51.52	July 15, 1974	63.12	July 15, 1974	+23.6
Feb. 12, 1975	28.21	Feb. 12, 1975	44.04	Old well no.: J-35 New well no.: AY-68-37-606 Altitude: 676.47	
July 16, 1975	32.09	July 17, 1975	50.69	Feb. 4, 1972	4.54
Feb. 23, 1976	53.98	Feb. 23, 1976	63.94	June 8, 1972	9.17
Aug. 2, 1976	42.21	Aug. 2, 1976	53.43	Feb. 9, 1973	4.41
Well no.: AY-68-37-103 Altitude: 728.65		Old well no.: CY-148 New well no.: AY-68-37-409 Altitude: 644.50		July 26, 1973	+8.05
Feb. 4, 1972	59.97	Feb. 4, 1972	+30.5	Feb. 13, 1974	+8.30
June 8, 1972	67.70	June 8, 1972	+28.0	July 15, 1974	10.43
Feb. 9, 1973	55.55	Feb. 8, 1973	+29.8	Feb. 13, 1975	+9.10
Feb. 13, 1974	40.26	Feb. 13, 1974	+42.6	July 16, 1975	+1.60
July 18, 1974	64.10	July 15, 1974	+23.0	Feb. 23, 1976	10.65
July 16, 1975	47.77	Feb. 13, 1975	+42.6	Aug. 2, 1976	.97
Feb. 23, 1976	61.55	July 17, 1975	+28.02		
Aug. 2, 1976	50.98				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

M E D I N A   C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: J-1-91		Well no.: TD-68-34-506		Old well no.: J-1-101	
New well no.: TD-68-33-601		Altitude: 1042		New well no.: TD-68-42-106	
Altitude: 827				Altitude: 774	
Feb. 2, 1972	114.60	July 16, 1974	346.95	Feb. 2, 1972	71.26
June 6, 1972	123.72	Feb. 12, 1975	322.10	June 6, 1972	78.98
Feb. 7, 1973	116.00	July 16, 1975	330.46	Feb. 6, 1973	71.34
July 25, 1973	96.83	Mar. 5, 1976	353.32	July 25, 1973	50.98
July 16, 1974	115.09	Aug. 3, 1976	332.08	Feb. 12, 1974	53.48
Feb. 12, 1975	89.28	Old well no.: J-1-82		July 16, 1974	73.92
July 16, 1975	97.33	New well no.: TD-68-41-301		Feb. 12, 1975	49.09
Aug. 3, 1976	98.11	Altitude: 756.8		July 16, 1975	56.50
Old well no.: J-1-41		Feb. 2, 1972	56.78	Aug. 3, 1976	58.37
New well no.: TD-68-33-604		June 6, 1972	62.31	Old well no.: J-5-3	
Altitude: 846		Feb. 6, 1973	56.27	New well no.: TD-68-42-504	
Feb. 2, 1972	138.03	July 25, 1973	37.47	Altitude: 724.4	
June 6, 1972	158.10	Feb. 12, 1974	38.73	Feb. 2, 1972	27.75
Feb. 7, 1973	137.72	July 16, 1974	58.12	June 8, 1972	35.79
July 25, 1973	114.74	Feb. 12, 1975	36.64	Feb. 6, 1973	27.10
Feb. 12, 1974	118.81	July 16, 1975	42.82	July 24, 1973	6.61
July 16, 1974	139.36	Feb. 24, 1976	61.42	Feb. 12, 1974	11.85
Feb. 12, 1975	114.02	Aug. 3, 1976	43.82	July 16, 1974	31.98
July 16, 1975	121.79			Feb. 12, 1975	7.53
Feb. 24, 1976	146.43			July 16, 1975	15.03
Aug. 3, 1976	122.99			Aug. 4, 1976	18.15

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

M E D I N A C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: TD-68-49-813 Altitude: 664		Well no.: TD-69-38-601 Altitude: 1008.3		Old well no.: I-2-102 New well no.: TD-69-38-902 Altitude: 942	
Mar. 8, 1973	+34.6	Feb. 2, 1972	156.01	Feb. 1, 1972	177.47
May 2, 1973	+40.1	June 6, 1972	154.25	June 6, 1972	199.40
July 27, 1973	+44.4	Feb. 6, 1973	148.88	Feb. 6, 1973	177.88
Feb. 11, 1974	+55.9	July 24, 1973	131.39	July 24, 1973	148.68
July 16, 1974	+43.8	Feb. 12, 1974	115.45	Feb. 11, 1974	146.56
Feb. 12, 1975	+52.80	July 16, 1974	114.95	July 17, 1974	167.36
July 15, 1975	+51.67	Feb. 12, 1975	107.71	Feb. 11, 1975	142.87
Feb. 25, 1976	+45.76	July 16, 1975	99.69	July 15, 1975	146.96
Aug. 4, 1976	+49.74	Feb. 24, 1976	108.45	Feb. 24, 1976	175.05
		Aug. 3, 1976	96.77	Aug. 3, 1976	145.68
Old well no.: I-1-7 New well no.: TD-69-37-301 Altitude: 1167		Well no.: TD-69-38-901 Altitude: 984		Well no.: TD-69-39-503 Altitude: 1000	
Feb. 1, 1972	326.28	Feb. 1, 1972	178.13	Feb. 3, 1972	180.81
June 5, 1972	326.58	June 5, 1972	177.92	June 6, 1972	193.30
Feb. 7, 1973	321.46	July 24, 1973	139.54	Feb. 7, 1973	175.11
July 24, 1973	306.00	Feb. 11, 1974	139.14	July 25, 1973	163.59
Feb. 11, 1974	289.54	July 17, 1974	148.44	Feb. 12, 1974	153.38
July 17, 1974	291.98	Feb. 11, 1975	123.52	July 17, 1974	143.98
Feb. 11, 1975	283.09	July 15, 1975	129.07	Feb. 12, 1975	137.37
July 16, 1975	274.89	Aug. 3, 1976	125.54	July 16, 1975	131.15
Feb. 23, 1976	288.00				
Aug. 3, 1976	275.55				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

M E D I N A C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: TD-69-39-503--Cont.		Old well no.: C-9-53		Old well no.: I-5-80 (I-5-2a)	
Feb. 23, 1976	156.55	New well no.: TD-69-40-101		New well no.: TD-69-46-601	
Aug. 4, 1976	134.35	Altitude: 1022.1		Altitude: 883.76	
		Feb. 2, 1972	157.52	Feb. 1, 1972	151.85
Well no.: TD-69-39-504		June 6, 1972	153.82	June 5, 1972	141.71
Altitude: 1021		Feb. 7, 1973	156.49	Feb. 6, 1973	138.32
July 27, 1973	139.16	July 25, 1973	137.33	July 25, 1973	100.33
Feb. 12, 1974	127.84	Feb. 12, 1974	118.37	Feb. 11, 1974	92.49
July 17, 1974	129.08	July 16, 1974	124.49	July 17, 1974	115.03
Feb. 12, 1975	117.31	Feb. 11, 1975	115.55	Feb. 12, 1975	100.0
July 16, 1975	112.54	July 15, 1975	111.34	July 15, 1975	105.0
Well no.: TD-69-39-505		Feb. 23, 1976	121.95	Aug. 11, 1976	95.0
Altitude: 1025		Aug. 3, 1976	118.25		
Feb. 2, 1972	173.16			Old well no.: I-4-12	
June 6, 1972	185.79	Old well no.: J-1-44		New well no.: TD-69-46-701	
Feb. 7, 1973	170.75	New well no.: TD-69-40-901		Altitude: 950.01	
July 25, 1973	162.52	Altitude: 875.40		Feb. 1, 1972	196.45
Feb. 12, 1974	134.93	Feb. 2, 1972	159.92	June 5, 1972	198.57
July 17, 1974	136.82	June 6, 1972	169.10	Feb. 2, 1973	187.82
Feb. 12, 1975	126.63	Feb. 7, 1973	159.01	July 24, 1973	164.84
July 16, 1975	119.90	July 18, 1973	138.45	July 17, 1974	179.34
Feb. 23, 1976	137.70	July 16, 1974	157.51	Feb. 11, 1975	156.69
Aug. 4, 1976	123.53	Feb. 12, 1975	132.90	July 15, 1975	158.52
		July 16, 1975	139.45	Feb. 24, 1976	188.01
		Feb. 23, 1976	162.65	Aug. 3, 1976	158.76
		Aug. 4, 1976	141.30		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

M E D I N A C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: I-5-83 New well no.: TD-69-46-901 Altitude: 840		Well no.: TD-69-47-302 Altitude: 956.1		Old well no.: I-5-78 New well no.: TD-69-47-701 Altitude: 810	
Feb. 1, 1972	84.65	Feb. 1, 1972	231.21	Feb. 1, 1972	53.10
June 5, 1972	93.25	June 5, 1972	239.40	June 5, 1972	55.18
Feb. 6, 1973	84.79	Feb. 6, 1973	230.74	Feb. 6, 1973	49.80
July 25, 1973	56.66	July 25, 1973	207.44	July 24, 1973	22.52
Feb. 11, 1974	50.31	Feb. 11, 1974	207.31	Feb. 11, 1974	14.96
July 17, 1974	71.62	July 17, 1974	227.71	July 16, 1974	36.70
Feb. 11, 1975	48.82	Feb. 11, 1975	202.94	Feb. 11, 1975	13.12
		July 15, 1975	208.89		
Old well no.: I-2-85 New well no.: TD-69-47-204 Altitude: 996.8		Feb. 24, 1976	234.6	Old well no.: I-3-148 (I-3-128) New well no.: TD-69-48-102 Altitude: 867	
Feb. 2, 1972	255.21	Aug. 3, 1976	210.07	Feb. 1, 1972	143.60
June 6, 1972	255.68	Well no.: TD-69-47-604 Altitude: 832		Feb. 7, 1973	142.84
Feb. 7, 1973	244.45	Feb. 3, 1972	100.32	July 25, 1973	120.00
July 25, 1973	218.85	Feb. 7, 1973	98.61	Feb. 12, 1974	119.44
Feb. 12, 1974	217.24	July 25, 1973	86.41	July 16, 1974	139.92
July 16, 1974	237.03	Feb. 12, 1974	75.08	Feb. 11, 1975	113.50
Feb. 12, 1975	211.84	July 16, 1974	96.02	July 15, 1975	120.05
July 15, 1975	216.86	Feb. 11, 1975	70.38	Aug. 3, 1976	120.90
Aug. 3, 1976	219.00	July 15, 1975	75.92		
		Feb. 23, 1976	101.96		
		Aug. 3, 1976	76.34		



Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

M E D I N A C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.:	I-5-55	Well no.:	TD-69-56-501--Cont.		
New well no.:	TD-69-54-501	Feb. 12, 1975	+43.09		
Altitude:	780				
Feb. 1, 1972	23.31	July 15, 1975	+38.06		
June 5, 1972	32.20	Feb. 25, 1976	+13.40		
Feb. 6, 1973	23.12	Aug. 4, 1976	+37.42		
July 24, 1973	.21				
Feb. 21, 1974	2.71				
July 17, 1974	14.90				
Old well no.:	I-5-86				
New well no.:	TD-69-55-501				
Altitude:	735				
Feb. 12, 1975	+47.37				
July 16, 1975	+43.75				
Feb. 26, 1976	+16.67				
Aug. 4, 1976	+43.18				
Well no.:	TD-69-56-501				
Altitude:	712				
Feb. 2, 1972	+19.80				
June 5, 1972	+20.75				
Feb. 6, 1973	+18.00				
July 27, 1973	+37.7				
Feb. 11, 1974	+38.3				
July 16, 1974	+20.2				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: H-1-19 New well no.: YP-69-33-901 Altitude: 1259		Well no.: YP-69-35-501--Cont. Mar. 13, 1976	66.04	Well no.: YP-69-36-601 Feb. 24, 1976	248.02
Feb. 3, 1972	123.28	Aug. 3, 1976	26.10	Aug. 3, 1976	234.90
June 6, 1972	123.37	Old well no.: H-2-4 New well no.: YP-69-35-804 Altitude: 1153		Well no.: YP-69-37-402 Altitude: 1156	
Feb. 8, 1973	123.12	July 24, 1973	116.70	Feb. 11, 1974	296.05
July 25, 1973	122.34	Feb. 12, 1974	109.19	July 18, 1974	304.73
Feb. 12, 1974	120.63	July 18, 1974	117.42	Feb. 11, 1975	298.93
July 18, 1974	123.38	Feb. 11, 1975	110.58	July 14, 1975	286.45
Feb. 11, 1975	120.87	July 14, 1975	108.01	Feb. 17, 1976	307.25
July 15, 1975	121.29	Feb. 24, 1976	124.38	Aug. 3, 1976	295.44
Feb. 25, 1976	122.47	Aug. 3, 1976	114.26	Old well no.: H-1-1 New well no.: YP-69-41-101 Altitude: 1048	
Aug. 4, 1976	120.82	Old well no.: H-3-23 New well no.: YP-69-36-601 Altitude: 1075		Feb. 3, 1972	38.00
Old well no.: H-2-23 New well no.: YP-69-35-501 Altitude: 1145		Feb. 3, 1972	270.97	June 6, 1972	39.72
Feb. 3, 1972	63.67	June 6, 1972	274.43	Feb. 8, 1973	40.10
June 6, 1972	61.75	Feb. 8, 1973	266.05	July 25, 1973	37.23
Feb. 8, 1973	65.84	July 24, 1973	253.64	Feb. 12, 1974	35.14
July 24, 1973	29.73	Feb. 1974	233.11	July 17, 1974	38.44
Feb. 12, 1974	65.70	July 17, 1974	243.58	Feb. 11, 1975	35.67
July 18, 1974	65.93	Feb. 10, 1975	245.65	July 15, 1975	38.27
Feb. 11, 1975	49.87	July 14, 1975	238.65	Feb. 25, 1976	39.06
July 14, 1975	61.74			Aug. 4, 1976	35.82

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: YP-69-41-502 Altitude: 1022		Well no.: YP-69-41-504 Aug. 4, 1976 67.39		Well no.: YP-69-41-901--Cont. July 15, 1975 118.39	
Feb. 3, 1972	47.36			Feb. 25, 1976	121.10
June 6, 1972	48.77	Old well no.: H-4-34 New well no.: YP-69-41-701 Altitude: 1082		Aug. 4, 1976	116.83
Feb. 8, 1973	47.76	Feb. 3, 1972	146.16	Old well no.: H-5-289 New well no.: YP-69-42-601 Altitude: 1035	
July 25, 1973	46.76	June 6, 1972	150.01	Jan. 31, 1972	159.57
Feb. 12, 1974	43.86	Feb. 8, 1973	154.16	June 6, 1972	167.70
July 18, 1974	48.39	July 25, 1973	151.50	Feb. 7, 1973	156.96
Feb. 11, 1975	44.41	Feb. 12, 1974	143.17	July 24, 1973	155.80
July 15, 1975	48.13	July 18, 1974	149.56	July 18, 1974	156.78
Feb. 25, 1976	48.66	Feb. 11, 1975	144.11	Feb. 11, 1975	156.32
Aug. 4, 1976	45.70	July 15, 1975	148.58	July 14, 1975	153.57
Old well no.: H-4-113 New well no.: YP-69-41-504 Altitude: 1000		Feb. 25, 1976	151.43	Feb. 24, 1976	157.97
Feb. 3, 1972	67.07	Aug. 4, 1976	144.24	Aug. 3, 1976	155.36
June 6, 1972	69.22	Old well no.: H-4-122 New well no.: YP-69-41-901 Altitude: 1025		Well no.: YP-69-42-709 Altitude: 1005	
Feb. 8, 1973	69.11	Feb. 3, 1972	120.85	July 24, 1973	105.39
July 25, 1973	68.21	June 6, 1972	122.53	Feb. 12, 1974	101.30
Feb. 12, 1974	64.11	July 25, 1973	121.13	July 18, 1974	104.34
July 18, 1974	70.19	Feb. 12, 1974	117.46	Feb. 11, 1975	101.25
Feb. 11, 1975	65.73	July 18, 1974	120.41	July 15, 1975	101.35
July 15, 1975	70.47	Feb. 11, 1975	117.92	Feb. 25, 1976	104.50
Feb. 25, 1976	72.26			Aug. 4, 1976	99.84

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: YP-69-43-103 Altitude: 1089		Old well no.: H-2-30 New well no.: YP-69-43-202 Altitude: 1067		Old well no.: H-6-87 New well no.: YP-69-43-603 Altitude: 982	
Jan. 31, 1972	189.90	June 6, 1972	139.36	Jan. 31, 1972	184.89
June 6, 1972	224.36	Feb. 7, 1973	133.09	June 5, 1972	213.89
Feb. 7, 1973	173.65	July 24, 1973	119.83	Feb. 7, 1973	199.62
July 24, 1973	194.07	Feb. 12, 1974	121.16	July 25, 1973	206.75
Feb. 12, 1974	169.99	July 18, 1974	123.74	Feb. 11, 1974	160.21
July 18, 1974	173.45	Feb. 11, 1975	119.88	July 17, 1974	229.60
Feb. 11, 1975	165.21	July 14, 1975	119.25	Feb. 10, 1975	174.41
July 14, 1975	164.70	Feb. 24, 1976	134.44	July 14, 1975	206.83
Feb. 24, 1976	227.72	Aug. 3, 1976	121.61	Feb. 24, 1976	266.26
Aug. 3, 1976	165.92			Aug. 3, 1976	251.41
Old well no.: H-2-32 New well no.: YP-69-43-106 Altitude: 1081		Well no.: YP-69-43-301 Altitude: 1072		Old well no.: H-5-288 New well no.: YP-69-43-802 Altitude: 953	
Jan. 31, 1972	147.50	Jan. 31, 1972	220.49	Jan. 31, 1972	88.55
June 6, 1972	143.47	June 5, 1972	224.24	June 7, 1972	126.55
Feb. 7, 1973	139.88	Feb. 7, 1973	217.70	Feb. 7, 1973	96.90
July 24, 1973	135.87	July 24, 1973	204.67	July 24, 1973	75.45
Feb. 12, 1974	125.00	Feb. 11, 1974	198.90	Feb. 11, 1974	86.57
July 18, 1974	120.89	July 17, 1974	227.28	July 19, 1974	129.42
Feb. 11, 1975	121.91	Feb. 10, 1975	205.90	Feb. 10, 1975	67.97
July 14, 1975	120.68	July 14, 1975	197.00	July 14, 1975	73.18
Feb. 24, 1976	122.76	Feb. 24, 1976	244.91	Aug. 3, 1976	75.56
Aug. 3, 1976	113.12	Aug. 3, 1976	188.61		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: YP-69-43-804 Altitude: 980		Well no.: YP-69-43-903 July 14, 1975 76.57		Well no.: YP-69-44-301 Altitude: 1002	
Feb. 11, 1974	97.05	Feb. 24, 1976	220.68	Jan. 31, 1972	227.00
July 19, 1974	139.26			June 5, 1972	235.10
Feb. 10, 1975	89.75	Well no.: YP-69-43-908 Altitude: 949		Feb. 7, 1973	227.04
July 14, 1975	94.06	June 5, 1972	217.17	July 24, 1973	203.40
Aug. 3, 1976	105.44	Feb. 7, 1973	160.41	Feb. 11, 1974	194.10
		July 24, 1973	58.42	July 17, 1974	212.82
Old well no.: H-6-92 New well no.: YP-69-43-902 Altitude: 957		Feb. 11, 1975	58.27	Feb. 10, 1975	195.28
Feb. 7, 1973	173.70	July 14, 1975	64.96	July 14, 1975	193.37
July 24, 1973	65.70	Aug. 3, 1976	47.35	Feb. 24, 1976	222.82
Feb. 11, 1974	165.00			Aug. 3, 1976	190.07
July 17, 1974	240.70	Old well no.: H-6-23 New well no.: YP-69-43-910 Altitude: 930		Well no.: YP-69-44-402 Altitude: 997	
Feb. 11, 1975	69.24	Jan. 31, 1972	129.05	Jan. 31, 1972	230.37
July 14, 1975	75.97	June 5, 1972	211.08	June 5, 1972	234.33
Aug. 3, 1976	53.77	Feb. 7, 1973	152.55	Feb. 7, 1973	220.72
		July 24, 1973	45.19	July 24, 1973	195.08
Well no.: YP-69-43-903 Altitude: 954		Feb. 11, 1974	145.43	Feb. 11, 1974	184.84
Feb. 7, 1973	157.63	July 17, 1974	244.70	July 17, 1974	208.26
July 24, 1973	83.36	Feb. 11, 1975	54.18	Feb. 12, 1975	188.27
Feb. 11, 1974	181.37	July 14, 1975	61.27	July 14, 1975	198.33
July 17, 1974	245.28	Feb. 24, 1976	231.21	Feb. 24, 1976	225.71
Feb. 11, 1975	69.82	Aug. 3, 1976	59.44	Aug. 3, 1976	182.72

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: H-6-83 New well no.: YP-69-44-701 Altitude: 940		Old well no.: H-6-89 New well no.: YP-69-44-704 Altitude: 922		Old well no.: I-4-35(4) New well no.: YP-69-45-401 Altitude: 954	
Jan. 31, 1972	201.06	Jan. 31, 1972	111.76	Feb. 2, 1972	181.33
Feb. 7, 1973	222.61	June 5, 1972	140.87	June 6, 1972	190.44
July 24, 1973	170.16	Feb. 7, 1973	132.96	Feb. 7, 1973	181.57
Feb. 11, 1974	162.87	July 24, 1973	132.43	July 24, 1973	158.02
July 17, 1974	189.18	Feb. 11, 1974	122.64	Feb. 11, 1974	149.80
Feb. 11, 1975	127.35	July 17, 1974	133.12	July 17, 1974	171.15
July 14, 1975	140.24	Feb. 11, 1975	124.87	Feb. 1975	149.06
Aug. 3, 1976	152.21	July 14, 1975	119.28	July 14, 1975	150.01
		Aug. 3, 1976	127.16	Feb. 24, 1976	179.81
Well no.: YP-69-44-703 Altitude: 936		Old well no.: H-6-85 New well no.: YP-69-44-804 Altitude: 954		Well no.: YP-69-49-302 Altitude: 966	
Jan. 31, 1972	208.57	Jan. 31, 1972	185.90	Feb. 2, 1972	70.01
June 5, 1972	239.30	June 5, 1972	197.15	June 6, 1972	71.46
Feb. 7, 1973	240.90	July 24, 1973	152.62	Feb. 8, 1973	71.38
July 24, 1973	208.40	Feb. 11, 1974	147.27	July 24, 1973	69.05
Feb. 11, 1974	201.56	July 17, 1974	154.78	Feb. 12, 1974	63.78
July 17, 1974	214.15	Feb. 12, 1975	142.82	July 18, 1974	69.52
Feb. 11, 1975	126.08	July 14, 1975	142.18	Feb. 11, 1975	65.47
July 14, 1975	141.04	Aug. 3, 1976	146.86	July 15, 1975	69.26
Feb. 24, 1976	277.08				
Aug. 3, 1976	156.50				

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: YP-69-49-302--Cont. Feb. 25, 1976	70.69	Well no.: YP-69-50-204 June 6, 1972	48.04	Old well no.: H-5-201 New well no.: YP-69-50-306 Altitude: 951	
Aug. 3, 1976	67.41	Feb. 8, 1973	47.97	Feb. 2, 1972	73.77
Old well no.: H-4-6 New well no.: YP-69-50-101 Altitude: 950		July 24, 1973	44.80	June 5, 1972	75.90
Feb. 12, 1974	57.36	Feb. 12, 1974	39.77	Feb. 7, 1973	73.88
July 18, 1974	60.90	July 17, 1974	46.61	July 25, 1973	72.60
Feb. 11, 1975	50.81	Feb. 11, 1975	39.88	Feb. 12, 1974	67.22
July 15, 1975	57.05	July 15, 1975	43.73	July 17, 1974	73.42
Feb. 25, 1976	58.76	Feb. 25, 1976	46.08	Feb. 10, 1975	66.95
Aug. 4, 1976	55.53	Aug. 4, 1976	43.86	July 15, 1975	71.66
Old well no.: H-5-209 New well no.: YP-69-50-202 Altitude: 927		Old well no.: H-5-1 New well no.: YP-69-50-302 Altitude: 904		Feb. 25, 1976	74.11
Feb. 12, 1974	41.32	Feb. 2, 1972	27.71	Aug. 3, 1976	67.50
July 17, 1974	46.40	June 6, 1972	30.08	Old well no.: H-4-60 New well no.: YP-69-50-403 Altitude: 918	
Feb. 11, 1975	41.44	Feb. 7, 1973	28.42	Feb. 12, 1974	43.57
July 15, 1975	41.46	July 24, 1973	27.15	July 18, 1974	47.70
Feb. 25, 1976	46.53	Feb. 12, 1974	23.92	Feb. 11, 1975	42.97
Aug. 3, 1976	41.20	July 17, 1974	28.46	July 15, 1975	44.46
Old well no.: H-5-13 New well no.: YP-69-50-204 Altitude: 927		Feb. 11, 1975	23.58	Feb. 25, 1976	45.81
Feb. 2, 1972	45.72	July 15, 1975	24.12	Aug. 4, 1976	41.88
		Feb. 25, 1976	27.90		
		Aug. 3, 1976	23.83		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Old well no.: H-4-55 New well no.: YP-69-50-408 Altitude: 951		Well no.: YP-69-51-202 Altitude: 916		Old well no.: H-5-259 New well no.: YP-69-51-406 Altitude: 875	
July 25, 1973	64.52	June 5, 1972	197.20	Feb. 2, 1972	28.76
Feb. 12, 1974	66.20	Feb. 7, 1973	206.43	June 6, 1972	32.14
July 18, 1974	69.46	July 24, 1973	81.20	Feb. 7, 1973	29.17
Feb. 11, 1975	67.32	Feb. 11, 1974	152.47	July 25, 1973	27.48
July 15, 1975	68.61	July 17, 1974	111.80	Feb. 12, 1974	29.69
Feb. 25, 1976	70.73	Feb. 11, 1975	74.63	July 17, 1974	31.71
Aug. 4, 1976	61.04	July 14, 1975	79.39	Feb. 10, 1975	27.36
		Feb. 24, 1976	221.45	July 15, 1975	28.28
Old well no.: H-5-51 New well no.: YP-69-50-505 Altitude: 907		Aug. 3, 1976	71.38	Feb. 25, 1976	31.30
Feb. 2, 1972	34.34	Old well no.: H-5-284 New well no.: YP-69-51-401 Altitude: 893		Aug. 4, 1976	26.95
June 6, 1973	36.36	Feb. 2, 1972	32.71	Old well no.: H-5-72 New well no.: YP-69-51-502 Altitude: 887	
Feb. 7, 1973	34.62	June 6, 1972	35.20	Feb. 2, 1972	55.89
July 25, 1973	33.99	July 25, 1973	34.37	June 6, 1972	55.05
Feb. 12, 1974	31.56	Feb. 12, 1974	36.68	Feb. 8, 1973	59.30
July 17, 1974	35.44	Feb. 10, 1975	34.92	July 25, 1973	80.29
Feb. 10, 1975	31.48	July 15, 1975	35.51	Feb. 12, 1974	80.80
July 15, 1975	32.35	Aug. 4, 1976	43.00	July 17, 1974	53.24
Feb. 25, 1976	34.90			Feb. 10, 1975	61.56
Aug. 4, 1976	31.22			July 15, 1975	52.38
				Aug. 4, 1976	52.20



Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

U V A L D E C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: YP-69-51-602 Altitude: 866		Well no.: YP-69-52-402--Cont. Aug. 4, 1976			108.00
Feb. 8, 1973	39.66				
July 25, 1973	40.10	Old well no.: G-3-19 New well no.: YP-70-40-901 Altitude: 1130			
Feb. 12, 1974	40.61	Feb. 2, 1972	41.95		
July 17, 1974	41.11	June 5, 1972	41.82		
Feb. 10, 1975	39.86	Feb. 8, 1973	42.29		
July 15, 1976	40.32	July 25, 1973	41.62		
Aug. 4, 1976	39.37	Feb. 12, 1974	41.49		
Old well no.: H-6-95 New well no.: YP-69-52-201 Altitude: 888		July 17, 1974	41.15		
Feb. 11, 1974	155.65	Feb. 11, 1975	42.06		
July 17, 1974	236.31	July 14, 1975	41.60		
Feb. 11, 1975	79.05	Feb. 24, 1976	41.81		
July 14, 1975	87.82	Aug. 3, 1976	41.47		
Aug. 3, 1976	127.55	Old well no.: G-6-4 New well no.: YP-70-56-201 Altitude: 1010			
Well no.: YP-69-52-402 Altitude: 877		Feb. 12, 1974	40.51		
Feb. 2, 1972	216.38	July 18, 1974	42.34		
July 25, 1973	100.90	Feb. 11, 1975	46.42		
July 17, 1974	179.43	July 15, 1975	46.60		
Feb. 10, 1975	54.42	Feb. 25, 1976	43.43		
July 15, 1975	85.92	Aug. 4, 1976	41.25		

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

K I N N E Y C O U N T Y

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
New well no.: RP-70-36-101 Altitude: 1220		Well no.: RP-70-38-902 Altitude: 1380		Well no.: RP-70-45-603--Cont. July 25, 1973	37.83
July 26, 1976	70.67	Feb. 12, 1974	180.23	Feb. 12, 1974	41.84
Well no.: RP-70-36-203 Altitude: 1286		July 18, 1974	186.63	July 18, 1974	50.12
July 14, 1976	33.92	Feb. 11, 1975	187.51	Feb. 11, 1975	46.77
Well no.: RP-70-36-601 Altitude: 1216		July 15, 1975	186.97	July 15, 1975	45.64
July 14, 1976	12.48	Feb. 25, 1976	189.19	Feb. 25, 1976	51.92
Well no.: RP-70-38-701 Altitude: 1342.0		July 29, 1976	177.82	July 29, 1976	35.48
Feb. 25, 1976	184.53	Well no.: RP-70-43-302 Altitude: 1084.6		Well no.: RP-70-46-101 Altitude: 1225.7	
July 29, 1976	85.98	July 16, 1976	40.44	July 29, 1976	97.03
Old well no.: Q-5		Well no.: RP-70-44-801 Altitude: 1065		Well no.: RP-70-46-201 Altitude: 1238.8	
New well no.: RP-70-38-901 Altitude: 1366.6		July 16, 1976	55.26	July 29, 1976	100.00
Feb. 3, 1972	170.04	Well no.: RP-70-45-401 Altitude: 1130		Well no.: RP-70-46-302 Altitude: 1202.2	
June 27, 1972	174.92	July 14, 1976	19.50	July 14, 1976	94.72
Feb. 27, 1973	176.93	Old well no.: 152A		Old well no.: W-17	
Apr. 3, 1973	177.34	New well no.: RP-70-45-603 Altitude: 1150.49		New well no.: RP-70-46-401 Altitude: 1140	
July 25, 1973	171.84	Feb. 3, 1972	49.67	Feb. 3, 1972	50.77
		June 28, 1972	52.13	June 6, 1972	52.20
		Jan. 30, 1973	51.86	Feb. 8, 1973	52.55
		Apr. 4, 1973	52.29	July 25, 1973	53.42

Table 4.--Tabulation of water-level measurements made for synoptic maps of water-level stage in the Edwards aquifer, 1972-76--Continued

K I N N E Y C O U N T Y--Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well no.: RP-70-46-401--Cont.					
Feb. 12, 1974	52.25				
July 18, 1974	53.17				
Feb. 11, 1975	52.78				
July 15, 1975	53.93				
Feb. 25, 1976	54.54				
July 29, 1976	54.36				
Old well no.: X-5					
New well no.: RP-70-46-901					
Altitude: 1123.2					
Feb. 3, 1972	72.00				
June 28, 1972	71.00				
Feb. 8, 1973	71.31				
Apr. 4, 1973	72.25				
July 25, 1973	73.23				
Feb. 12, 1974	71.44				
July 18, 1974	71.33				
Feb. 11, 1975	72.15				
July 15, 1975	72.78				
Feb. 25, 1976	72.03				
July 29, 1976	71.90				
Well no.: RP-70-47-501					
Altitude: 1285.6					
July 29, 1976	248.12				

Table 5.--Calculated annual recharge to the Edwards aquifer, by basin, 1934-77  
(in thousands of acre-feet)

Calendar year	Nueces-West Nueces River basin	Frio-Dry Frio River basin <sup>1</sup>	Sabinal River basin <sup>1</sup>	Area between Sabinal River and Medina River basins	Medina Lake	Area between Cibolo Creek and Medina River basins	Cibolo-Dry Comal Creek basin	Blanco River basin <sup>1</sup>	Total
1934	8.6	27.9	7.5	19.9	46.5	21.0	28.4	19.8	179.6
1935	411.3	192.3	56.6	166.2	71.1	138.2	182.7	39.8	1,258.2
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	227.0	49.5	17.0	33.1	42.4	9.3	9.6	11.1	399.0
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	139.0	54.1	116.3	191.2	57.8	850.7
1942	103.5	95.1	34.0	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	76.0	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	52.0	51.4	105.1	155.3	40.7	556.1
1947	72.4	77.7	16.7	45.2	44.0	55.5	79.5	31.6	422.6
1948	41.1	25.6	26.0	20.2	14.8	17.5	19.9	13.2	178.3
1949	166.0	86.1	31.5	70.3	33.0	41.8	55.9	23.5	508.1
1950	41.5	35.3	13.3	27.0	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	10.0	10.7	162.1
1955	128.0	22.1	.6	7.7	16.5	4.3	3.3	9.5	192.0
1956	15.6	4.2	1.6	3.6	6.3	2.0	2.2	8.2	43.7
1957	108.6	133.6	65.4	129.5	55.6	175.6	397.9	76.4	1,142.6
1958	266.7	300.0	223.8	294.9	95.5	190.9	268.7	70.7	1,711.2
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	127.0	104.0	89.7	160.0	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	27.0	5.0	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	83.0	23.2	104.0	54.6	78.8	115.3	66.7	623.5
1966	169.2	134.0	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	19.0	466.5
1968	130.8	176.0	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	68.0	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	49.0	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	1,486.5
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	973.0
1976	150.7	238.6	68.2	182.0	94.5	47.9	54.3	57.9	894.1
1977	102.9	193.0	62.7	159.5	77.7	97.9	191.6	66.7	952.0
AVERAGE	103.3	104.1	36.8	89.8	57.2	64.9	97.1	36.0	589.2

<sup>1</sup> Includes recharge from gaged and ungaged areas within the basin.

Table 6.--Annual discharge from the Edwards aquifer, by county, 1934-77  
(in thousands of acre-feet)

Year	Kinney- Uvalde Counties	Medina County	Bexar County	Comal County	Hays County	Total	Total spring discharge	Total well discharge
1934	12.6	1.3	109.3	229.1	85.6	437.9	336.0	101.9
1935	12.2	1.5	171.8	237.2	96.9	519.6	415.9	103.7
1936	26.6	1.5	215.2	261.7	93.2	598.2	485.5	112.7
1937	28.3	1.5	201.8	252.5	87.1	571.2	451.0	120.2
1938	25.2	1.6	187.6	250.0	93.4	557.8	437.7	120.1
1939	18.2	1.6	122.5	219.4	71.1	432.8	313.9	118.9
1940	16.1	1.6	116.7	203.8	78.4	416.6	296.5	120.1
1941	17.9	1.6	197.4	250.0	134.3	601.2	464.4	136.8
1942	22.5	1.7	203.2	255.1	112.2	594.7	450.1	144.6
1943	19.2	1.7	172.0	249.2	97.2	539.3	390.2	149.1
1944	11.6	1.7	166.3	252.5	135.3	567.4	420.1	147.3
1945	12.4	1.7	199.8	263.1	137.8	614.8	461.5	153.3
1946	6.2	1.7	180.1	261.9	134.0	583.9	428.9	155.0
1947	13.8	2.0	193.3	256.8	127.6	593.5	426.5	167.0
1948	9.2	1.9	159.2	203.0	77.3	450.6	281.9	168.7
1949	13.2	2.0	165.3	209.5	89.8	479.8	300.4	179.4
1950	17.8	2.2	177.3	191.1	78.3	466.7	272.9	193.8
1951	16.9	2.2	186.9	150.5	69.1	425.6	215.9	209.7
1952	22.7	3.1	187.1	133.2	78.8	424.9	209.5	215.4
1953	27.5	4.0	193.7	141.7	101.4	468.3	238.5	229.8
1954	26.6	6.3	208.9	101.0	81.5	424.3	178.1	246.2
1955	28.3	11.1	215.2	70.1	64.1	388.8	127.8	261.0
1956	59.6	17.7	229.6	33.6	50.4	390.9	69.8	321.1
1957	29.0	11.9	189.4	113.2	113.0	456.5	219.2	237.3
1958	23.7	6.6	199.5	231.8	155.9	617.5	398.2	219.3
1959	43.0	8.3	217.5	231.7	118.5	619.0	384.5	234.5
1960	53.7	7.6	215.4	235.2	143.5	655.4	428.3	227.1
1961	56.5	6.4	230.3	249.5	140.8	683.5	455.3	228.2
1962	64.6	8.1	220.0	197.5	98.8	589.0	321.1	267.9
1963	51.4	9.7	217.3	155.7	81.9	516.0	239.6	276.4
1964	49.3	8.6	201.0	141.8	73.3	474.0	213.8	260.2
1965	46.8	10.0	201.1	194.7	126.3	578.9	322.8	256.1
1966	48.5	10.4	198.0	198.9	115.4	571.2	315.3	255.9
1967	81.1	15.2	239.7	139.1	82.3	557.4	216.1	341.3
1968	58.0	9.9	207.1	238.2	146.8	660.0	408.3	251.7
1969	88.5	13.6	216.3	218.2	122.1	658.7	351.2	307.5
1970	100.9	16.5	230.6	229.2	149.9	727.1	397.7	329.4
1971	117.0	32.4	262.8	168.2	99.1	679.5	272.7	406.8
1972	112.6	28.8	247.7	234.3	123.7	747.1	375.8	371.3
1973	96.5	14.9	273.0	289.3	164.3	838.0	527.6	310.4
1974	133.3	28.6	272.1	286.1	141.1	861.2	483.8	377.4
1975	112.0	22.6	259.0	296.0	178.6	868.2	540.4	327.8
1976	136.4	19.4	253.2	279.7	164.7	853.4	503.9	349.5
1977	156.5	19.9	317.5	295.0	172.0	960.9	580.3	380.6