

**EDWARDS UNDERGROUND WATER DISTRICT**

1619 Tower Life Building  
San Antonio, Texas

**BULLETIN 20**

**GROUND-WATER DISCHARGE FROM THE EDWARDS AND ASSOCIATED  
LIMESTONE, SAN ANTONIO AREA, TEXAS, 1968**

Compiled by

Celso Puente

United States Geological Survey

Prepared by the U.S. Geological Survey  
in cooperation with the  
Edwards Underground Water District and  
The Texas Water Development Board

**JULY 1969**

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Records of the ground-water discharge from the Lower Cretaceous Edwards and associated limestones in the San Antonio area are collected yearly as part of an overall hydrologic investigation by the U. S. Geological Survey in cooperation with the Edwards Underground Water District and the Texas Water Development Board. This investigation has continued for many years and has resulted in several geologic and hydrologic reports, some of which are listed in the references.

The 1968 average discharge from the Edwards and associated limestones is presented in the table of this report by county area and by use. The discharge by springs was from San Marcos Springs in Hays County, Comal Springs in Comal County, San Antonio and San Pedro Springs in Bexar County, and the Leona River Springs in Uvalde County. The recorded discharge for Leona River Springs includes underflow.

Average discharge, by county and use, from the Edwards and  
associated limestones in the San Antonio area, 1968,  
(in millions of gallons per day)

County	Springs	<u>USE</u>				<u>T O T A L</u>	
		Municipal and Military	Agriculture	Industry	Domestic, stock & misc.	Million gallons per day	Thousand acre-feet per year
Kinney	-	-	-	-	0.2	0.2	0.2
Uvalde	14.8	3.2	31.7	-	1.8	51.5	57.9
Medina	-	1.4	6.7	.1	.6	8.8	9.9
Bexar	15.1	118.6	13.9	17.3	19.5	184.4	207.1
Comal	206.2	4.8	.2	.4	.4	212.0	238.1
Hays	127.4	2.8	.3	-	.2	130.7	146.8
Total million gallons per day	363.5	130.8	52.8	17.8	22.7	587.6	
Total thousand acre-feet per year	408.3	146.9	59.3	20.0	25.5		660.0

The spring discharge was compiled from records of gages operated by the Geological Survey at the points of discharge. Pumpage for agriculture was estimated from power consumption and acreage. Records of the Texas Water Development Board's annual canvass of the municipal, military, and industrial pumpage in the San Antonio area were used in the preparation of the table in this report.

Major discharge by wells was from Bexar, Uvalde, and Medina Counties, while the major springflow was from Comal and Hays Counties. Wells in Bexar County supplied water for municipal and military use, the largest use in the San Antonio area. Other wells in Bexar County and most of the large wells in Uvalde and Medina Counties supplied the irrigation needs for an estimated 50,000 acres in this combined area. The remaining discharge, principally from wells in Bexar County, was for industrial, domestic, stock, and miscellaneous purposes.

About 38 percent of the total discharge from the Edwards and associated limestones came from wells, and three-fourths of this discharge was from wells in Bexar County. Well discharge in 1968 was 26 percent less than 1967; the total discharge from wells and springs increased by about 18 percent. Compared to the 1934-67 average, the total discharge was 26 percent greater.

## REFERENCES

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