EDWARDS UNDERGROUND WATER DISTRICT

1619 Tower Life Building
San Antonio, Texas

BULLETIN 14

GROUND-WATER DISCHARGE FROM THE EDWARDS AND ASSOCIATED LIMESTONES, SAN ANTONIO AREA, TEXAS, 1966

Compiled by
Paul Rettman, Engineering Technician
United States Geological Survey

Prepared in cooperation with the Geological Survey,
United States Department of the Interior,
the Texas Water Commission, and
the City of San Antonio

JULY 1967
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, the Texas Water Development Board, and the city of San Antonio. This investigation has continued for many years and has resulted in several geologic and hydrologic reports, some of which are listed in the references. This report is one of three basic-data reports published annually by the Edwards Underground Water District.

The 1966 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.
Average discharge, by county and use, from the Edwards and associated limestones in the San Antonio area, 1966,

(in millions of gallons per day)

<table>
<thead>
<tr>
<th>County</th>
<th>Springs</th>
<th>Municipal and Military</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Domestic stock, and miscellaneous</th>
<th>Million gallons per day</th>
<th>Thousand acre-feet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinney</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>0.2</td>
<td>0.2</td>
<td>0.2</td>
</tr>
<tr>
<td>Uvalde</td>
<td>7.4</td>
<td>3.5</td>
<td>30.9</td>
<td>-</td>
<td>1.3</td>
<td>43.1</td>
<td>48.3</td>
</tr>
<tr>
<td>Medina</td>
<td>-</td>
<td>1.0</td>
<td>7.7</td>
<td>-</td>
<td>.6</td>
<td>9.3</td>
<td>10.4</td>
</tr>
<tr>
<td>Bexar</td>
<td>1.9</td>
<td>115.4</td>
<td>21.7</td>
<td>19.7</td>
<td>18.1</td>
<td>176.8</td>
<td>198.2</td>
</tr>
<tr>
<td>Comal</td>
<td>172.6</td>
<td>3.8</td>
<td>.1</td>
<td>.4</td>
<td>.4</td>
<td>177.3</td>
<td>198.7</td>
</tr>
<tr>
<td>Hays</td>
<td>99.4</td>
<td>2.8</td>
<td>.4</td>
<td>.1</td>
<td>.2</td>
<td>102.9</td>
<td>115.4</td>
</tr>
</tbody>
</table>

Total million gallons per day 281.3 126.5 60.8 20.2 20.8 509.6

Total thousand acre-feet per year 315.3 141.8 68.2 22.6 23.3 571.2
The spring discharge was compiled from gages operated by the Geological Survey at the points of discharge. Agriculture pumpage was estimated by the use of power consumption and acreage figures. 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 of this report.

Most of the discharge by wells was in Bexar, Uvalde, and Medina Counties. Wells in Bexar County supplied most of the water for municipal and military use, the largest single 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 of nearly 44,000 acres in this combined area. The remaining discharge, principally from wells in Bexar County, was for industrial, domestic, stock, and miscellaneous purposes.

About 45 percent of the total discharge from the Edwards and associated limestones came from wells, and 77 percent of this discharge was from wells in Bexar County. Municipal, military, agricultural, and industrial uses were slightly greater in 1966 than in 1965. Springflow and the remaining well discharge were slightly lower, and the total discharge in 1966 was about 1 percent less than in 1965.
REFERENCES


