



## **TEXAS WATER DEVELOPMENT BOARD**

### **REPORT 294**

## **SURVEYS OF IRRIGATION IN TEXAS 1958, 1964, 1969, 1974, 1979, AND 1984**

Based on surveys made cooperatively  
by the Soil Conservation Service,  
U.S. Department of Agriculture; the Texas  
State Soil and Water Conservation Board;  
and the Texas Water Development Board.

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## ABSTRACT

Due to higher energy costs, declining well yields, unavailability of labor, and depressed farm prices, less acreage was irrigated and less water applied in 1984 than in prior surveys. Irrigation in Texas in 1984 was 6.8 million acres using a total of 9.3 million acre-feet of on-farm use of water. This is a decrease of 1.0 million acres and 380,000 acre-feet from the 1979 survey. "Surveys of Irrigation in Texas, 1958, 1964, 1969, 1974, 1979, and 1984" is based on cooperative surveys by the Texas Department of Water Resources, the U.S. Department of Agriculture's Soil Conservation Service, and the Texas State Soil and Water Conservation Board. Information provided includes irrigated acreage and crops, water use, sprinkler irrigation, irrigation operations, and irrigation conservation practices. Irrigation acreage and water use are summarized by counties, river and coastal basins, soil and water conservation districts, and 11 principal irrigation regions of the State.

In much of Texas, irrigation water prevalently is applied in climatic provinces where natural rainfall may contribute significantly to the soil moisture condition. Irrigation, thus practiced, eliminates the risk of recurring lean rainfall periods and improves the seasonal moisture supply for crop-growing efficiency. The amounts of water consequently used for irrigation fluctuates from year to year with changes in climatic conditions and the amount of acres irrigated. During the survey period, on-farm water use for irrigation jumped, along with irrigated acres, from 9.6 million acre-feet on 6.7 million acres in 1958 to 12.5 million acre-feet on 7.7 million acres, in the dry year 1964. Irrigation water use then declined to 11.6 million acre-feet used on an expanding 8.2 million acres in 1969, a relatively wet year, then increased to 13.1 million acre-feet on 8.6 million acres in 1974, then declined to 9.7 million acre-feet on 7.8 million acres in 1979, and declined again to 9.3 million acre-feet on 6.7 million acres in 1984.

About 50 percent of the total dollar value of harvested crops in Texas comes from irrigated crops, planted on only about 25 percent of the cropland. Leading irrigated crops in 1984 were cotton, 2,112,000 acres; wheat, 1,180,000 acres; grain sorghum, 1,068,000 acres; and corn, 777,000 acres.

Irrigation wells continue to increase in number, even though some of the older wells have been abandoned. There were 55,000 irrigation wells in Texas in 1958; 70,000 in 1964; 83,000 in 1969; 90,000 in 1974; 95,000 in 1979; and 100,000 in 1984. In the 1984 survey, ground water from these wells constitutes 74 percent of the total on-farm water use for irrigation in the State, while 26 percent is supplied from surface water.

Water conservation measures are being practiced by Texas irrigators to "stretch" and conserve their precious water supply. In many areas, water losses due to seepage and evaporation are being reduced by adding concrete linings to the delivery ditches or by replacing ditches with underground pipeline. Surveys of water conveyance methods in 1984 showed there were 1,062 miles of concrete-lined ditches serving 138,000 acres and 21,000 miles of underground pipeline serving 4.6 million acres. These conservation measures have thus been

applied to 71 percent of Texas irrigated land in 1984. New methods of applying water to crops also hold promise for water savings. Foremost among the newer methods being applied in Texas is trickle irrigation, by which a slow, continuous or nearly continuous flow of water is delivered to the root zone of each plant from plastic tubing. Trickle irrigation was used on 29,900 acres in 1984 compared to 19,800 acres in 1979 and 4,000 acres in 1974. Leading trickle irrigated crops in 1984 were pecans, 20,600 acres; citrus, 4,000 acres; and grapes 2,200 acres.

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# **SURVEYS OF IRRIGATION IN TEXAS**

## **1958, 1964, 1969, 1974, 1979, AND 1984**

### **ACKNOWLEDGEMENTS**

Each of the six irrigation surveys was made cooperatively by the Soil Conservation Service of the United States Department of Agriculture, the Texas State Soil and Water Conservation Board, and the Texas Department of Water Resources, or the Department's predecessor agencies. Results of 1958, 1964, 1969, 1974, and 1979 surveys have been published previously. To facilitate comparisons, this report includes most of the basic data from the previous reports as well as data from the new 1984 irrigation survey.

The preparation of maps showing location of irrigated land, and the compilation of acreages of crops, amounts of water used, and other survey data, was accomplished by the Soil Conservation Service in its various field offices, by district conservationists and technicians under general direction of the area conservationists and area engineers. These activities in the 1984 irrigation survey were directed by Civil Engineers James Hailey, L. Dennis Medlin, and Tom Gray and coordinated by Water Management Engineer (Irrigation) Eugene Lindemann, under the general guidance of State Conservation Engineer Gene C. Vittetoe and State Conservationist Billy Griffin. Messrs. Hailey, Medlin, Gray, and Lindemann conducted the training meetings of Soil Conservation Service area engineers who gave leadership to the work done by area and field office personnel.

The Texas State Soil and Water Conservation Board, under the supervision of Harvey Davis, Executive Director, assisted in developing procedures for making the 1984 irrigation survey, and provided soil and water conservation district boundary delineations on the county maps used in making the survey. These delineations made possible the compositing of survey data for each soil and water conservation district.

The State Department of Highways and Public Transportation provided county maps, which were used as base maps for recording irrigation survey data.

Within the Texas Department of Water Resources, the Economics, Water Requirements and Uses Section, and the Agriculture Use Unit, guided the planning, development of procedures, and scheduling of the 1984 irrigation survey; assisted the Soil Conservation Service staff in giving training to the area engineers; and prepared the survey data for machine processing. Atlan Pfluger, Terrell Robison, and Comer Tuck of the Agriculture Use Unit worked on all these activities and prepared the final report with other staff assistance. Dr. Gerald Higgins, Chief, Economics, Water Requirements and Uses Section, provided general support and guidance to the irrigation survey. Other Department staff supported the survey and this report with assistance in typing, drafting, and data processing activities.

## HISTORY OF IRRIGATION<sup>1</sup>

Irrigation farming in Texas antedates any historical records available. Some believe that irrigation has been practiced for a longer period in Texas than in any other part of the United States (Nagle and Fortier, 1910). The earliest record of irrigation in Texas is that reported by Coronado, an early Spanish explorer, who found Indians irrigating crops in the vicinity of the present City of El Paso when his expedition reached there in 1541 (Hutson, 1989). However, this was not the first irrigation practiced in the State. Evidence of ancient irrigation systems in some of the valleys of the Trans-Pecos area indicate that irrigation had helped support a prehistoric population (Hutson, 1898).

A revolt by the Pueblo Indians in 1680 drove the Spaniards and many Christian Indians out of New Mexico. They fled down the Rio Grande to the Mission of Guadalupe, where the City of Juarez, Mexico, now stands. The towns of Ysleta and Socorro were founded by these Christian Pueblo Indians (Harrington, 1952), who used irrigation as a means of producing their crops in that area of scanty rainfall.

The Spanish Mission of San Antonio de Valero, the Alamo, was established on the San Antonio River in 1718. The San Jose, Concepcion, San Juan de Capistrano, and La Espada Missions were established later. San Antonio, the center of Spanish power in the territory, had the largest area of early irrigation in Texas (Harrington, 1952).

The United States Senate passed a resolution on August 4, 1886 inquiring into the status of irrigation in that portion of the United States largely west of the one-hundredth meridian and from the Rio Grande to the border of the British Territory on the north. Responding to this resolution, a report of the U.S. Department of Agriculture (Hinton, 1886, p. 118) includes a quotation from James B. Newcomb of San Antonio that stated there was 50,000 acres of irrigated land in Bexar County valued at \$50.00 to \$300.00 per acre. Irrigation water, sold by hours of use and at nominal price, was used only on gardens as the rainfall was considered adequate for small grains and fruits.

Other early references to the use of irrigation in Texas include its application by Indians in the vicinity of the present City of Wichita Falls and by the Spanish who founded the City of Laredo (Harrington, 1952). Irrigation was also used by the Franciscan fathers who established the San Saba Mission and built canals at the presidio on the San Saba River in 1756 (Hughes and Motheral, 1950).

One of the first irrigation developments by Anglo-Americans occurred in 1853 near the present town of Balmorhea in the Trans-Pecos area of the State (Hughes and Motheral, 1950). Other developments in the Trans-Pecos utilized water of the Rio Grande and the perennial springs of the area. Large-scale development of water supplies in the Rio Grande and the Pecos River came after 1880 when railroads were extended into the area. Development along the Pecos River soon exceeded the dependable supply of water, and some of the irrigation projects were actually abandoned before completion (Hughes and Motheral, 1950). Irrigation along the Rio Grande developed rather slowly until completion of the Elephant Butte project in 1916. Development in

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<sup>1</sup>This section is extracted largely from a Texas A&M University publication, *Agricultural Resources Related to Water Development in Texas*, March 1968.

the Upper Rio Grande Valley has remained nearly constant since 1925. More recent developments in the Trans-Pecos have utilized ground water available in some of the valleys and basins of the area.

Irrigation was being practiced to some extent in most parts of the Rio Grande Plain by 1897 (Hutson, 1898). Irrigation farming had begun in the Lower Rio Grande Valley in 1876. However, little progress was made in this area until a railroad for the area was built in 1904. Water from artesian wells was used for irrigation in Zavala County and Bexar County in the late 1890's. The first flowing well was completed in Atascosa County in 1904 (Lonsdale, 1935). Completion of a similar well in Frio County in 1905 marked the beginning of irrigation in that area. Irrigation development in the Rio Grande Plain, centered primarily in the Lower Rio Grande Valley and the Winter Garden area, has expanded. Some irrigation has developed in the Coastal Bend, using the limited quantities of surface water and relatively poor quality ground water that are available.

Irrigated rice production began in the Coast Prairie before 1900. However, production of this crop was not significant until about 1910. Rice has continued to be the principal irrigated crop in the area.

Irrigation began on the High Plains with the completion of the first successful irrigation well on the J. H. Slaton farm, four miles west of Plainview, in 1911 (White, Broadhurst, and Lang, 1946). Development of the vast ground-water resource of the High Plains progressed very slowly until 1935. Drought and improved efficiency of pumps and power units stimulated increased interest in irrigation by 1936 (Jones and Gaines, 1941). Irrigation farming soon expanded from the early centers around Plainview, Hereford, and Muleshoe into every county of the High Plains. After World War II, irrigated acreage increased at a phenomenal rate.

Irrigation in other parts of the State has been developed primarily on isolated tracts by individuals who desired to eliminate the crop production hazards of droughts. The extent of development has depended primarily upon the ease with which ground water supplies can be developed. Although many of the individual developments have utilized surface waters, most of the irrigated acreage in these isolated areas is supported with ground water. Significant acreages have been developed in the alluvial valleys of some of the major streams, particularly the Brazos River.

Through 1974, the statewide trend in irrigated acreage had been upward since the first historical developments, but the increase has not occurred at a constant rate. Some periods have shown rapid increases in irrigation development, while others have shown only slight increases (Figure 1). General economic conditions, technological improvement in irrigation equipment, climatic conditions, and other factors have influenced interest in irrigation and the development of irrigated agriculture in the State.

In 1979, weather conditions caused a downward trend in irrigated acreage. A downward trend continued in 1984 but this trend was not for the most part weather related. Economic conditions such as higher energy costs, declining well yields, depressed farm prices, and other related economic conditions dropped irrigated acreage from 7.8 million acres in 1979 to 6.7 million acres in 1984.

The census for the crop year of 1889 reported over 18,000 acres irrigated on 623 farms. By 1899, the area irrigated approached 50,000 acres on 1,325 farms. Comparatively rapid development occurred during the period 1900-09. The area irrigated in 1909 was about 451,000 acres.

Development was much slower from 1910 to 1929 when about 594,000 acres was irrigated. Irrigated acreage increased by about 300,000 acres during the next 10 years. The census of 1939 reported nearly 895,000 acres irrigated. Particularly rapid irrigation development followed the end of World War II. The 1949 census of agriculture reported 3.1 million acres irrigated, and the 1958 irrigation survey showed 6.7 million acres irrigated. Subsequent surveys reported 7.7 million acres in 1964; 8.2 million acres in 1969; 8.6 million acres in 1974; and 7.8 million acres in 1979. By 1984 the area irrigated in the State was 6.7 million acres, as was learned in the 1984 irrigation survey (Figure 1).

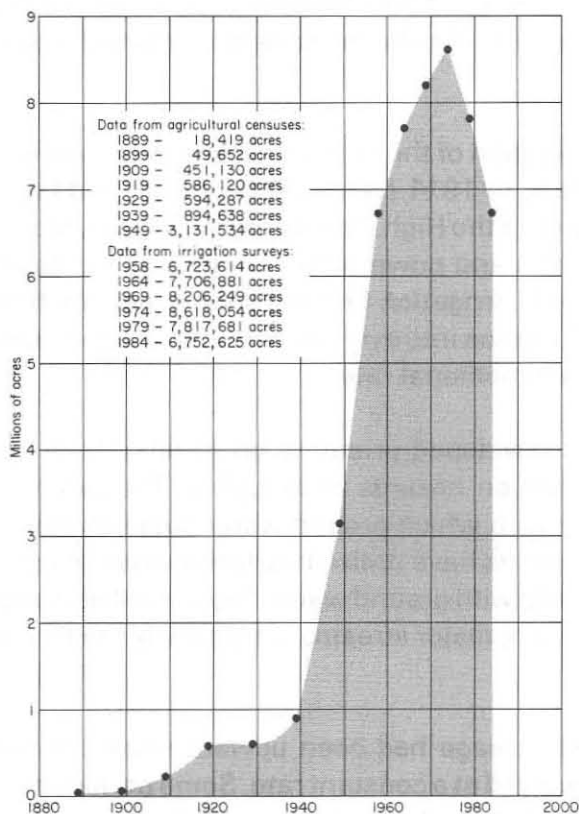


Figure 1.—Texas Irrigation Development, 1889-1984

cropland which was irrigated.<sup>2</sup> Data for 1984 indicate cash receipts from statewide crop production were approximately 3.4 billion. Of this amount, receipts from irrigated crops were estimated at about 50 percent of total crop production from an estimated 25 percent of the total cropland in the State.

Maintaining water conditions in the soil favorable to plant growth continues to be an especially important requirement in the arid and semi-arid parts of the State where the rainfall is

The history of irrigation in Texas has recorded some failures because of inadequate water supply, poor water quality, poor soil conditions, inadequate irrigation systems, or inefficient water management. On the other hand, successful irrigation enterprises have been developed in every area of the State including the eastern humid areas.

Irrigated agriculture was vital to the existence of the early historical settlements, especially those in the arid sections of the State. Today, irrigation plays a significant role in the agricultural economy of the State. The irrigated cropland harvested in 1948 amounted to about 10 percent of the State's total harvested cropland and accounted for about 30 percent of the value of crops produced (Hughes and Motheral, 1950).

In 1957, a year of above average rainfall, approximately 42 percent of the total value of all the principal crops grown in Texas was produced on the 18 percent of the harvested

<sup>2</sup>Burleigh, H. P., Paper presented at the Irrigation Short Course, Texas A&M University, College Station, Texas, January 1958.

## **DEVELOPMENT OF SURVEYS**

Data on irrigated lands have been inadequate and irrigation water-use data, which are necessary to assess and project agricultural water use and needs accurately, have not been generally available. For other forms of water use, data are generally collected annually and are more readily available. While irrigation acreage surveys have been made annually in some areas of the State, these do not fully meet the planning needs of State and Federal agencies.

Cooperative arrangements were made in 1958 with the Soil Conservation Service of the United States Department of Agriculture to survey Texas irrigation. After this first survey, it was agreed to re-survey at intervals of approximately five years. As a result, we now have results of irrigation surveys for 1958, 1964, 1969, 1974, 1979, and 1984. The data from each of these surveys are included in this report. Texas Board of Water Engineers Bulletin 6018, "Irrigation in Texas in 1958," contained the data from the first survey.

Since the first survey report, four more have been published: Texas Water Commission Bulletin 6515, "Inventory of Texas Irrigation, 1958 and 1964"; Texas Water Development Board Report 127, "Inventories of Irrigation in Texas, 1958, 1964, and 1969"; Texas Water Development Board Report 196, "Inventories of Irrigation in Texas, 1958, 1964, 1969, 1974"; and Texas Department of Water Resources Report 263, "Inventories of Irrigation in Texas, 1958, 1964, 1969, 1974, and 1979."

Reliable water use data are difficult to obtain. Most of the water that is applied to irrigation is unmetered and normally unrecorded, and the amount of water applied is affected by many variables. The rainfall during the survey year influences the amount of water used and the number of acres irrigated. A wet spell or dry spell during the growing season, and the period of peak crop demand for water will affect to a degree how much water is applied by irrigation to a particular crop. The cropping patterns of an area affect the water demand. Consumptive use of water by crops is dependent upon the characteristics of the crop as related to rooting depth and rates of transpiration.

While annually collected irrigation data are desirable and needed, to date no economic means have been developed to obtain such on a statewide basis. Periodic surveys as presented in this report provide some urgently needed basic data and must suffice until other methods are available.

## **1984 SURVEY PROCEDURES**

Survey forms and the field data gathering, recording, and computational procedures were jointly developed by the cooperating agencies. The Soil Conservation Service collected the basic data, using technical support staff to provide statewide leadership and area engineers to provide local leadership. Area conservationists and district conservationists and their staffs at the field office level, thoroughly familiar with irrigation and the land and water resources of their respective areas, did much of the detailed work. The Texas Department of Water Resources processed the maps and data sheets and compiled the report.

variable as to amounts and seasons of occurrences, and where most crop plants cannot be grown without irrigation water or where the risk without irrigation water is great.

County highway maps were used to record much of the survey information. Data recorded on the maps were subsequently used to prepare summary tabulations by river and coastal basins and zones, soil and water conservation districts, and counties.

Other data, including irrigated acreage and water use for each irrigated crop, were recorded on standardized forms on a countywide basis. The amounts of water used countywide were prorated among soil and water conservation districts, and among river and coastal basins and zones according to the proportionate acreage irrigated from a given source of water supply that was located in each area.

The Appendix presents additional details of the survey procedures; it contains the specific Soil Conservation Service instructions to its personnel for making the 1984 survey, a sample of the survey data sheets, and a sample county survey map.

Accuracy of survey data differs from county to county, according to the quantity and accuracy of records available, the degree of familiarity with the area of the assigned personnel, and the amount of field observation that could be made in making the survey. In general, Soil Conservation Service field personnel making the survey considered that their estimates were within a 5 to 10 percent range of accuracy.

## **PRESENTATION OF DATA**

### **Acreage and Water Use Summary Data (Tables 1, 2, and 3)**

Summary survey data are contained in Table 1 for counties, in Table 2 for river and coastal basins and zones, and in Table 3 for soil and water conservation districts. These tables each list the total irrigated acreage, the acreage irrigated by each source from which water was obtained, estimated amount of water from each source that was used, and the percentage of the combined supplies of water used that was surface water. Shown, also, is the acreage irrigated by sprinkler systems; and Table 1 additionally shows the estimated number of irrigation wells in each county considered to be operable, but not necessarily used during the given survey year. Tables 1 and 2 provide data from all six surveys; Table 3 provides data for 1984 only.

Brief discussion of individual columns of Tables 1, 2, and 3 is warranted to prevent misapplication of the data: *All Irrigation* includes the total acreage irrigated and the total acre-feet of water applied on-farm on that acreage, regardless of the amount of double cropping (if any) and regardless of the source of water used. Amounts of water applied *do not include all transmission losses* but only the amounts of ground water pumped and transmitted to irrigated fields and the amounts of surface water transmitted to fields from farm headgates (on-farm use).

Instructions for making the 1984 irrigation survey (in the Appendix) stressed that the estimated amounts of irrigation water were to reflect the amounts of ground water pumped that

were actually transmitted to irrigated fields, and the amounts of surface water that were transmitted to fields from farm headgates (on-farm use). Thus, these amounts (Tables 1, 2, and 3) include all water losses (inefficiencies) of the field irrigation systems (Figure 2), but do not include any losses sustained before conveyed water reached farm headgates. Estimates of initial surface water diversions will, in most cases, be larger than the survey estimates of on-farm use of surface water.

*Surface-Water Irrigation Only* includes that portion of the acreage and acre-feet of water applied for *All Irrigation* that was supplied from *only* surface-water sources, measured from the farm headgate, not the points of diversion.

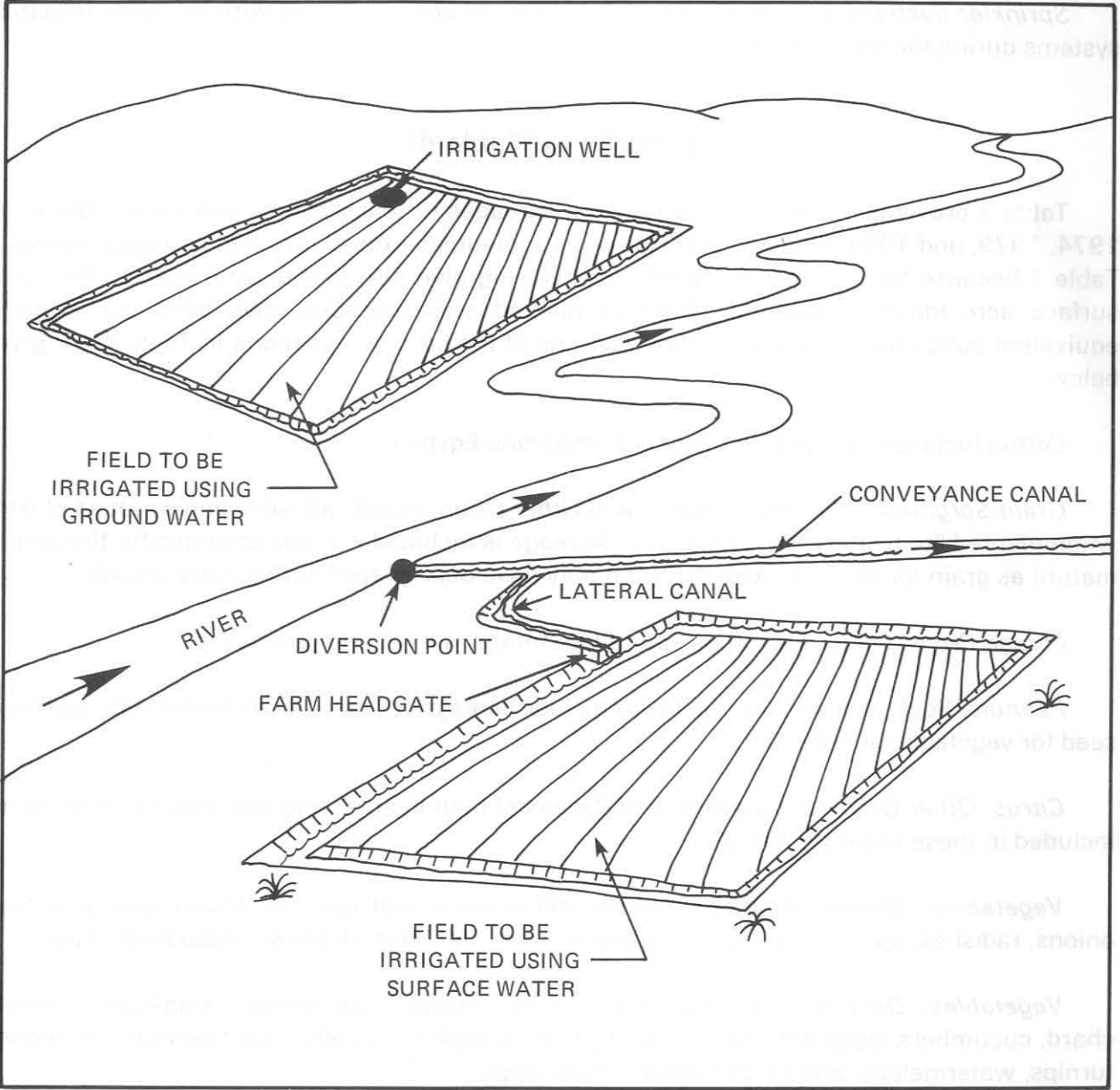


Figure 2.—Irrigation Systems Using Ground Water and Surface Water

*Ground-Water Irrigation Only* includes that portion of the acreage and acre-feet of water applied for *All Irrigation* that was supplied from *only* ground-water sources.

*Irrigation Using Combined Supplies* includes that portion of the acreage of *All Irrigation* where both surface and ground water were used on the same acreage or where surface and ground water irrigation was so intermingled that it was impractical to outline the areas where each was used. The part of the combined supply used that was surface water is shown as a percentage.

*Irrigation Wells* is the estimated total number of operable wells in the applicable area at the time of the survey.

*Sprinkler Systems* gives the estimated number of acres irrigated with sprinkler irrigation systems during the survey years.

### **Crop Data (Table 4)**

Table 4 provides estimated irrigated crop acreages for each county and for the State, for 1974, 1979, and 1984. Irrigated crop acreages sometimes exceed irrigated acreages shown in Table 1 because two or more irrigated crops were grown during the same year on the same surface acre (double cropping). Skip-row planted crop acreages have been converted to equivalent solid-planted acreages. Explanations of the crop designations in Table 4 are given below:

*Cotton* includes all types and varieties, including Egyptian.

*Grain Sorghum, Corn, Rice, Wheat, and Other Grain* include all types and varieties of each when planted "to be harvested for grain." Acreage is included if it was intended for the crop to mature as grain for harvest, even though it may have been grazed during early growth.

*Forage Crops* includes all crops planted for forage, silage, and greenchop.

*Peanuts, Soybeans, or Other Oil Crops* include acreages of each harvested for nuts, beans, or seed for vegetable oil extraction.

*Citrus, Other Orchard, Vineyard, and Pecans* of both bearing and non-bearing acreage are included in these separate items.

*Vegetables—Shallow Root* includes brussel sprouts, cabbage, cauliflower, celery, lettuce, onions, radishes, spinach, strawberries, sweet corn, and other shallow-rooted truck crops.

*Vegetables—Deep Root* includes beans, beets (except sugar beets), cantaloupes, carrots, chard, cucumbers, eggplant, okra, peas, peppers, pumpkin, squash, sweet potatoes, tomatoes, turnips, watermelons, and other deeper-rooted crops.

*Alfalfa, Other Permanent Hay and Pasture, Sugar Beets, Sugar Cane, and Irish Potatoes* are the remaining specific crop categories.



An *All Other Crops* category is included for recording acreage of any irrigated crop not otherwise classified.

### **Miscellaneous Countywide Data (Table 5)**

Table 5 provides countywide data from the 1984 survey only. Survey items having significance to the current status of Texas irrigation have been tabulated.

The number of miles of lined ditches and underground pipelines, and acreages served, and the number of on-farm impoundments used for irrigation, and acreages served, are shown as improved conservation measures being used by Texas irrigators.

An irrigated operating unit reflects the acreage under the control of an individual operator as being an operating unit regardless of the number or location of the parcels of land that the producer operated.

The number of acres served by sprinkler systems is shown for mobile systems and stationary systems for each county. Mobile sprinkler systems include center pivot, side roll, mobile dragline, and traveling systems. The stationary systems include solid set, dragline, and hand moved. This table also shows the number of acres served by trickle irrigation in each county.

Table 5 includes the estimated acreage that is equipped for irrigation and that was irrigated previously, but not in 1984. An adequately producing well for ground water irrigation use, or turnouts and other required facilities for surface water use, were considered minimal facilities to qualify acreage for this item.

### **Major Irrigation Areas (Table 6)**

In Table 6, the county data in Table 1 are selectively regrouped to show the total acreage irrigated and the total water used in those counties comprising major irrigation areas of the State. The data are presented for the six survey years—1958, 1964, 1969, 1974, 1979, and 1984. Discussion of trends in the major irrigation areas is given in subsequent portions of the text.

## **RESULTS AND SUMMARY**

### **General**

Irrigation is practiced in many parts of Texas under various climatic conditions. In the arid, far-western part of the State, irrigation supplies almost all of the water used by crops, while in the subhumid parts of the State, a significant part of the crop water requirement is derived from rainfall in most years. To the east in the humid climatic zone, rainfall is adequate for crop production most years, but crop yields are often assured or increased with irrigation during infrequent, critical dry periods.

Water supply adequate to meet the present and future demands of irrigated agriculture is very important. Irrigation production of food and fiber crops has, to a degree, been accomplished through a partial depletion of our ground-water supplies, a situation calling for judicious use and conservation of remaining supplies.

Texas irrigation has increased from 6.7 million acres in 1958 to 7.7 million acres in 1964, to 8.2 million acres in 1969, to 8.6 million acres in 1974, and decreased to 7.8 million acres in 1979, to 6.7 million acres in 1984 (Figure 1 and Tables 1, 2, and 6). The decrease in acres irrigated in 1984 was largely due to economic conditions. Many acres were not irrigated in 1984 because of higher energy costs, declining well yields, unavailability of labor, and depressed farm prices.

Ground water (only) was used for irrigating about 80 percent of the land irrigated in 1984; 16 percent of the acreage was irrigated from surface-water (only) supplies, and 4 percent from mixed supplies of ground and surface water.

### **Irrigation Water Use**

Crop year 1984 was a difficult year to survey because of the rainfall distribution (Figure 3). Much of western Texas went into the spring months with below normal rainfall. Rainfall and soil moisture were above average during the last part of the growing season of the 1984 crops. Heavy irrigation water application was needed for preplant and early plant development. However, from mid crop development until crop maturity less water was used in much of the area. This was beneficial to the declining ground-water supplies being used for irrigation. Those areas usually planted as dryland did fairly well this year. For instance, the average dryland cotton yield for the South High Plains was 252 pounds of lint per acre compared to 415 pounds of lint per irrigated acre.

In the area south, southwest, and west of San Antonio, dry weather plagued the farmer in early spring, delaying planting of many crops. Many irrigation wells were used to capacity all season long, which increased the demand on the ground-water supply. The Brazos River Valley and Gulf Coast Prairie areas were drier than usual.

Irrigation water use increased from 9.6 million acre-feet in 1958 to 12.5 million in 1964. From 1964, however, water use decreased somewhat despite a large gain in irrigated acreage, and in 1969 was 11.6 million acre-feet, a reduction of 0.9 million acre-feet from 1964. The total water used in 1974 on irrigated crops was 13.1 million acre-feet, a 13 percent increase since 1969 in the total water used. While 1964 was abnormally dry, 1958 and 1969 were relatively wet years (Figure 4). The winter, spring, and early summer months in 1974 were very dry although the annual rainfall was near normal. The total water used in 1979 on irrigated crops was 9.7 million acre-feet, a 26 percent decrease since 1974. The first three months and last three months of 1979 in many areas of the State were fairly dry, with about average precipitation the other six months.

The total water used in 1984 on irrigated crops was 9.3 million acre-feet, a 5 percent decrease since 1979, a reduction of 380,000 acre-feet. The year 1984 was dry overall, with a very dry spring and early summer but with very good rains beginning in late summer and fall. The first eight months in many areas of the State were very dry; the last four months had above average precipitation.

The amount of surface water used on-farm in 1984 on irrigated crops was 2.06 million acre-feet, an increase of 11 percent from that used in 1979, which was 1.85 million acre-feet. In 1974, 2.19 million acre-feet was used; in 1969, 2.35 million acre-feet; in 1964, 1.99 million acre-feet; and in 1958, 2.17 million acre-feet.

Ground-water use decreased in 1984 to 6.79 million acre-feet, which was only a decrease of 2 percent from the amount used in 1979. Ground-water use was 6.92 million acre-feet in 1979, 10.28 million acre-feet in 1974, 8.62 million acre-feet in 1969, 9.99 million acre-feet in 1964, and 6.95 million acre-feet in 1958.

The amount of water use from combined supplies of surface and ground water in 1984 was 497,000 acre-feet, 452,000 acre-feet less than in 1979. Much of this decrease in combined water use was in the High Plains, where only a small amount of playa water was used.

Water use per acre irrigated in 1984, statewide, was 1.38 acre-feet per acre; it was 1.24 acre-feet per acre in 1979, 1.52 acre-feet per acre in 1974, 1.41 acre-feet per acre in 1969, 1.62 acre-feet per acre in 1964, and 1.43 acre-feet per acre in 1958.

Irrigation wells continue to increase in number even though some of the old well casings have deteriorated and wells have been abandoned. There were 100,000 wells in 1984, 95,000 wells in 1979, 90,000 in 1974, 83,000 in 1969, 70,000 in 1964, and 55,000 in 1958. Not all of these wells were necessarily used in the survey year referenced, although all were considered operable during that year. The average acreage served per well in 1984 in the North High Plains was 183; 48 acres was served per well in the South High Plains, and 54 acres per well in the Trans-Pecos area.

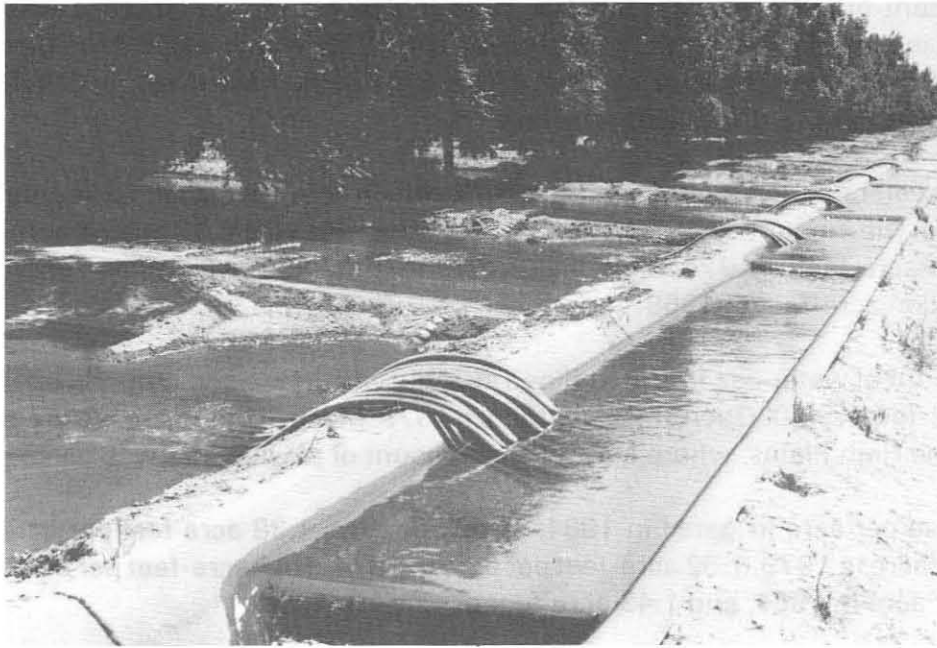
Most irrigators in the State are aware of the critical importance of their water supplies. Since total ground-water use constitutes 74 percent of the on-farm water use for irrigation in the State, the diminution of this resource is a threat to Texas' agricultural economy and will ultimately have an adverse effect on the overall economy of the State and the Nation.

The Ogallala aquifer, which furnishes most of the water for the High Plains area, is a declining ground-water supply. Over two-thirds (4.6 million acres) of the total irrigation in the State is in the High Plains area where water levels are generally declining and saturated aquifer thickness is dwindling.

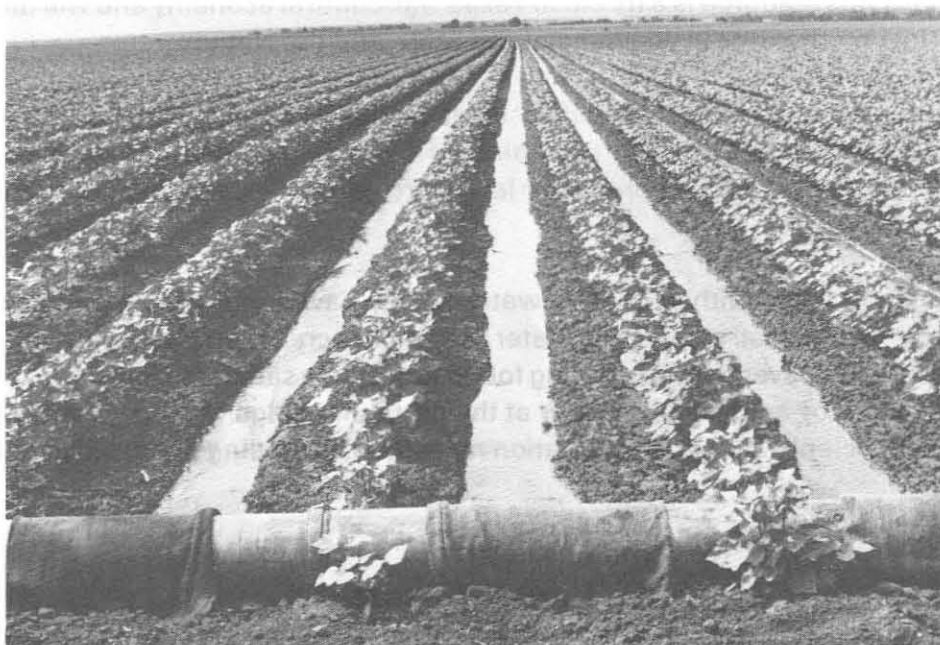
Many irrigators faced with dwindling water supply have tried to compensate by using less water per acre—in effect, stretching the water over more acres than the supply will irrigate fully. Through research, however, ways are being found to produce satisfactory levels of crop yields per acre with less water by applying the water at the particular stage of crop growth when the crop can use it most efficiently. Other conservation measures now being practiced are discussed in a later section.

## **Irrigated Crops**

Acreage of irrigated crops decreased in the State in 1984. There was 7.0 million acres in 1958, 8.0 million acres in 1964, 8.3 million acres in 1969, and 8.8 million acres in 1974, 8.1



**Pecans using the border irrigation system, in the Trans-Pecos area.**



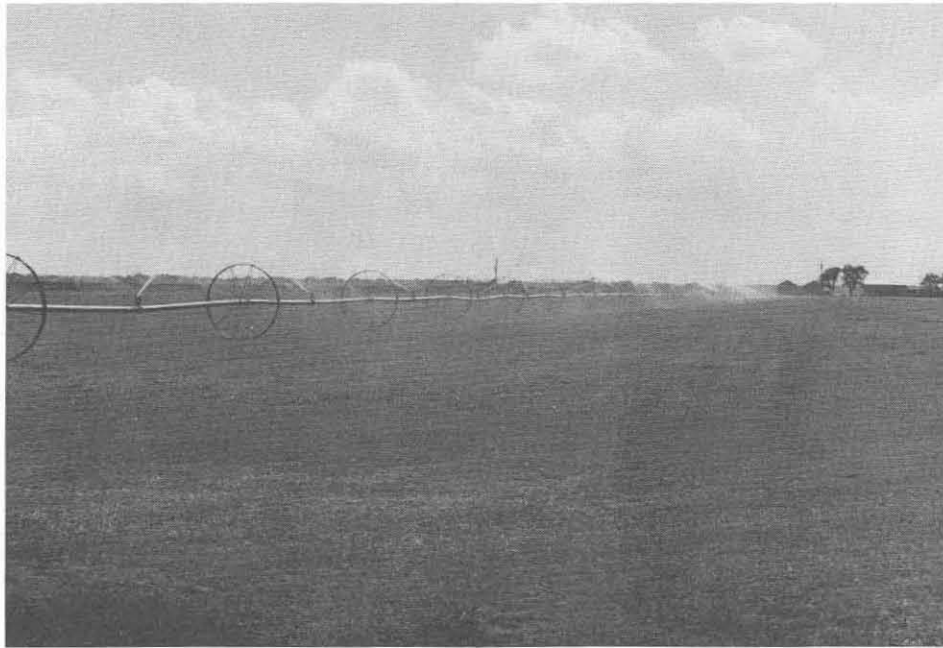
**Cotton using furrow irrigation in the Rolling Plains.**



**Onions being irrigated by furrow systems in the Lower Rio Grande Valley.**



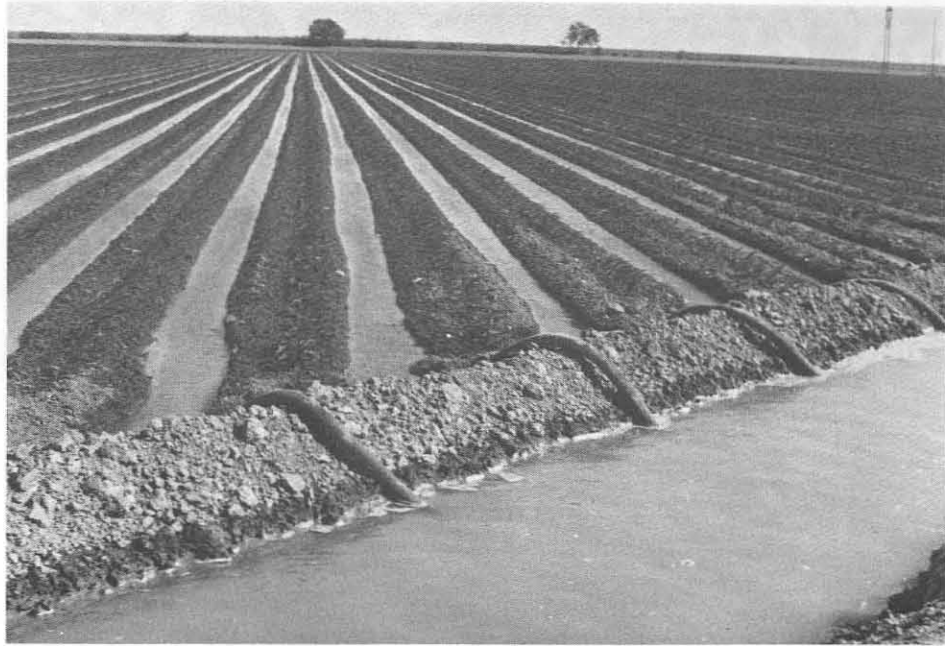
**Sugarcane provided with furrow irrigation in the Lower Rio Grande Valley.**



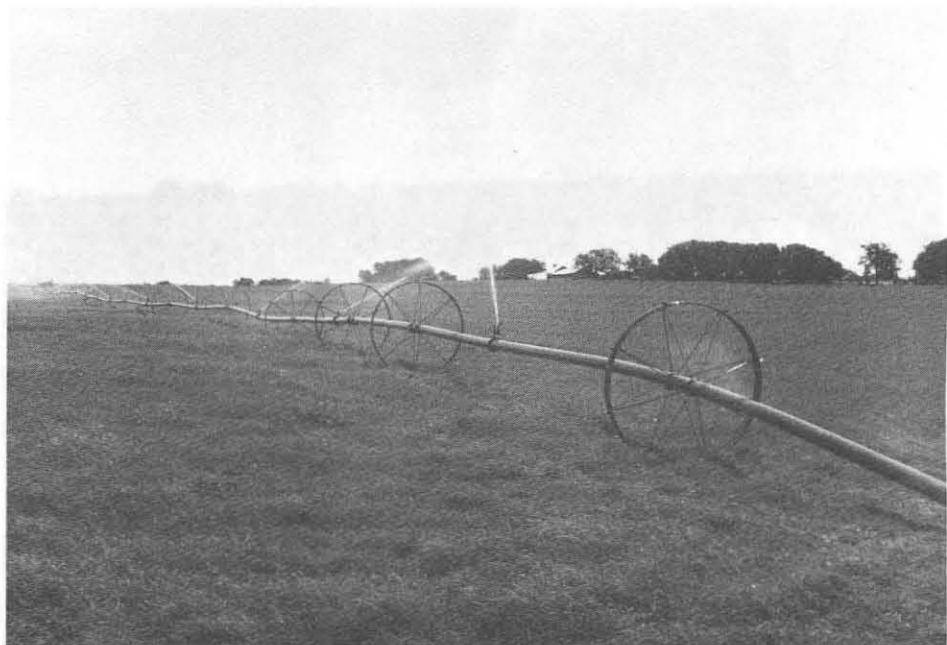
**Irrigated turf grass using the side roll system in the Gulf Coast area.**



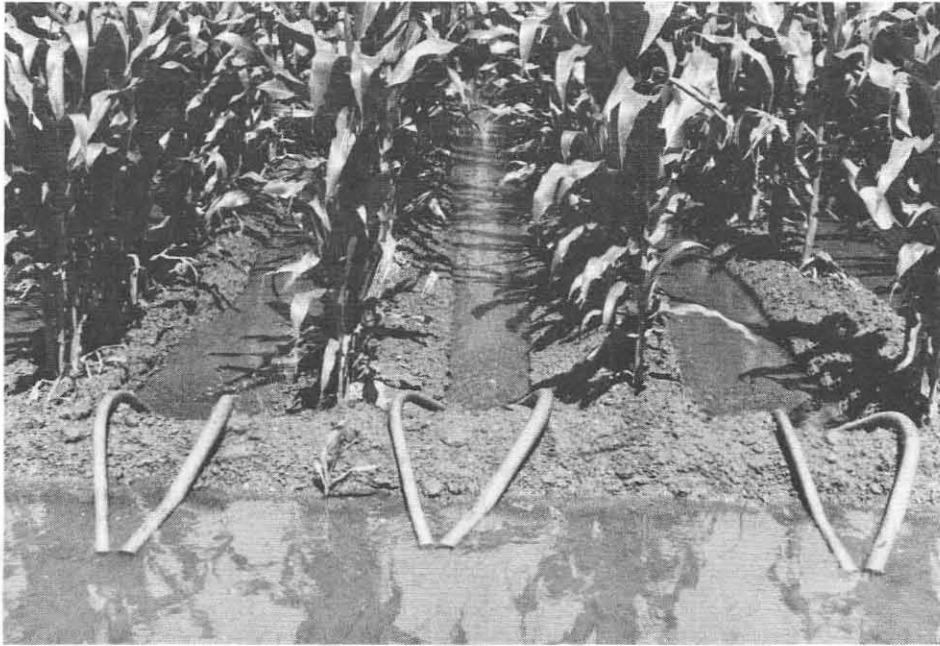
**Rice undergoing flood irrigation in the Gulf Coast area.**



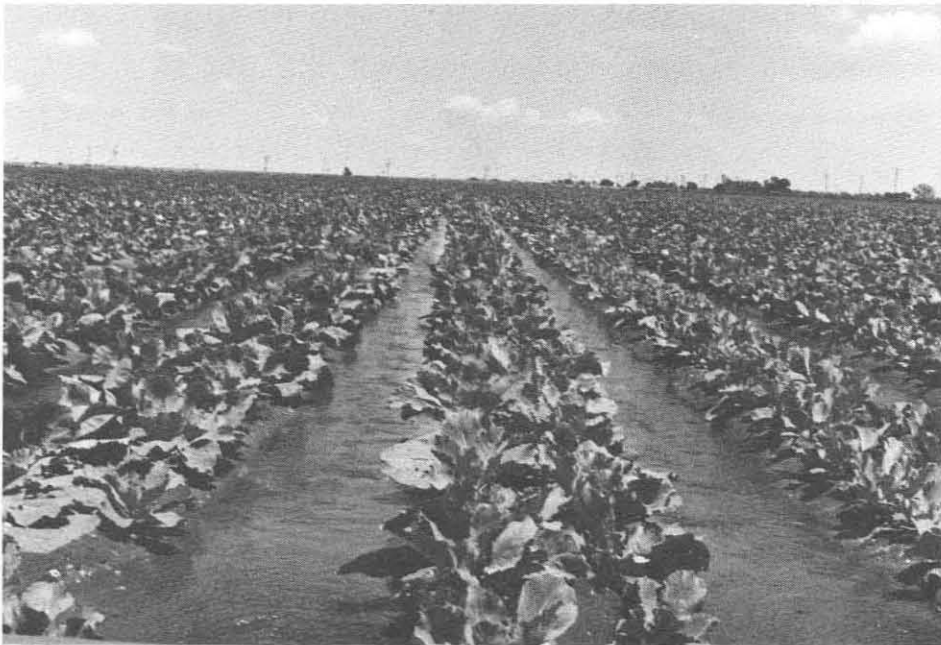
**Grain sorghum being irrigated by furrows in the Lower Rio Grande Valley.**



**Coastal Bermuda being irrigated by sprinkler in the Cross Timbers area.**



**Corn being irrigated using the furrow method in the High Plains.**



**Cabbage being irrigated by the furrow method in the Winter Garden area.**





**Trickle irrigation system on pecans in the Cross Timbers area.**



**Side roll sprinkler system irrigating cotton in the Rolling Plains.**

million acres in 1979, and 6.9 million acres in 1984 (Table 4). The difference in acreage between the acreage irrigated and the irrigated crop acreage results from double cropping—growing two or more crops on the same acre during the survey year. Double cropping was done on 153,000 acres in 1984, which was 89,000 acres less than in 1979.

The following tabulation shows that the irrigated acreage of grain sorghum has trended downward since 1969. Irrigated acreage in pasture, hay, and other feed as a group trended upward strongly through 1969, but declined by 1984 to only 9 percent of the irrigated acreage. Wheat accounts for 17 percent of the 1984 irrigated acreage.

#### Percentage of Total Acreage of Irrigated Crops

	<u>1958</u>	<u>1964</u>	<u>1969</u>	<u>1974</u>	<u>1979</u>	<u>1984</u>
Grain sorghum	31	32	33	28	16	15
Cotton	29	29	22	24	28	31
Pasture, hay and other feed	12	13	17	11	8	9
Wheat	11	11	11	14	15	17
Vegetables	7	5	4	3	3	3
Rice	6	6	7	6	7	6
Corn	2	1	3	8	12	11
All other	2	3	3	6	11	8
Total	100	100	100	100	100	100

In examining the data in Table 4, it is noted that cotton is still the leading irrigated crop in 1984. Most of the cotton acreage is located in the Southern High Plains. Many acres of grain sorghum have been replaced with cotton and corn. Irrigated cotton acreage has increased in many parts of the State, including the Lower Rio Grande Valley, High Plains, and El Paso areas. Grain sorghum was 15 percent lower in 1984 than in 1979, or 195,000 acres less, but much lower than previous survey levels. Corn had a 21 percent decrease in 1984 over 1979, or 207,000 acres less. Wheat decreased 4 percent or 49,093 acres in 1984 compared with 1979, although its percentage of total acreage increased somewhat due to relative changes in other crops; and rice acreage decreased by about 31 percent or 168,110 acres. Cotton, wheat, grain sorghum, and corn are the leading irrigated crops in 1984, in the order listed (see Table 4).

Pecans show a 48 percent increase in 1984 over 1979, or an increase of 18,000 acres. The acreage of this crop is expanding in the El Paso Valley, parts of the Winter Garden-San Antonio area, parts of the South High Plains, parts of the Edwards Plateau, Cross Timbers, and in small tracts in many other parts of the State. Trickle irrigation systems are being used in many of the new pecan orchards.

Alfalfa acreage decreased in 1984 by 49,000 acres over 1979. About 31 percent of the State's acreage of alfalfa was planted in the sandhill country of Yoakum, Bailey, Lamb, Deaf

Smith, and Gaines Counties in 1984. Alfalfa acreage in El Paso, Hudspeth, Pecos, and Reeves Counties of the Trans-Pecos was about 23 percent of the State's total in 1984. This percentage is about the same as in the 1979 survey.

Oil crops other than cotton—principally peanuts, soybeans, castorbeans, guar, flaxseed, and sunflowers—accounted for 249,000 acres in 1984. Of this total, peanuts accounted for 130,000 acres and soybeans 97,000 acres. There was 7,000 more acres of peanuts in 1984 than in 1979, and 207,000 less acres of soybeans.

Soybeans were produced with irrigation mostly on the High Plains, either as a regular rotation crop or from late seedings on land where earlier cotton plantings had been damaged by hail or other causes. In some instances, soybeans were planted following wheat where double cropping is practiced. Some of the dryland soybeans were concentrated in the more humid, eastern part of the State where dryland soybeans work very well in a rice-soybean rotation system.

Irrigated fruits are important to the economy of Texas agriculture. Grapefruit and oranges were grown on only 38,850 irrigated acres in the four Lower Rio Grande Valley counties in 1984. The December 1983 freeze had a devastating effect on the Texas citrus industry. Pruning and hedging operations began in early February 1984 and were still continuing in February 1985. The freeze inflicted severe damage on the trees. The acreage of citrus was 99,000 acres in 1979; 98,000 acres in 1974; 101,000 acres in 1969; 85,000 acres in 1964; and 69,000 acres in 1958. Peaches and apples are grown both under irrigation and dryland in many parts of the State.

Sugarcane is grown only in the Lower Rio Grande Valley of Texas. About 35,500 acres of sugarcane was irrigated in 1984 in the Valley compared to 35,000 acres in 1979. This is a reappearance of an industry of economic importance to the Valley. Sugarcane was grown in the Valley as early as 1830 when it was processed for local use, and reached a peak around 1913. Adverse markets hastened abandonment of production in the 1920's.

Grapes are a crop that has expanded in acreage in the last few years in the South High Plains and Trans-Pecos area. In 1984 there was 4,400 acres of irrigated vineyards.

## **Major Irrigation Areas**

Figure 11 shows the approximate location of the lands irrigated in the State in 1984 and the kind of water used—ground water or surface water. In preparing Figure 11, the mixed supplies were included with the ground-water or surface-water designations according to their relative predominance. If a mixed supply was 50 percent or more surface water, it is shown as surface water on the map; if less than 50 percent, it is shown as ground water. Figure 10 shows the general outline of the major irrigation areas which are discussed below. As indicated in Table 6, these major irrigation areas account for more than 99 percent of the irrigated land in Texas in 1984.

## The High Plains

The High Plains accounts for nearly 4.6 million acres or 68 percent of the total 1984 irrigated acreage in the State, and most of it is irrigated with ground water, mostly from the Ogallala aquifer. This is a declining water supply of uneven distribution. In some areas the saturated thickness of the aquifer is less than 50 feet while in other areas it is more than 300 feet. Severe diminution of the water supply occurs in the thin sections, and in some areas in the South High Plains the water is essentially depleted and cropping has been converted to dryland.

The amount of ground water used on the High Plains in 1984 was 5.0 million acre-feet, which is 73 percent of the ground water used for irrigation in the State in 1984. This is a decrease of 400,000 acre-feet from 1979, and 759,000 fewer acres was irrigated than in 1979.

During the winter months of 1984, the moisture level in the soil was low in the High Plains and most areas required a large application of preplant irrigation. Rains were timely during the growing season; therefore, total water pumped for each crop during the growing season was less than usual. Many counties surveyed showed there was less irrigation water applied due to high energy costs. However, the North Plains (above the Canadian River) experienced timely rains during the spring of 1984, which saved some on pre-irrigation, and was very dry during summer which required maximum irrigation by farmers.

In a few areas of the High Plains, playa lake water was available for irrigation in 1984, especially in Floyd and Crosby Counties. It was utilized mostly through tailwater recovery systems.

Many farmers are practicing conservation tillage to try to keep from pumping so much water. Many irrigation farmers are also timing their irrigations for optimum production and a better profit margin rather than for peak production. Of the wells in the South Plains, many were not used to their maximum capacity. A common practice among farmers in the South Plains area is to install electric powered submersible pumps into their small wells. As a means of combining weakly producing wells into one irrigation system, some farmers have installed "collector" tanks such as fiber glass tanks on their land to provide central collection of the water supply for sprinkler systems, as many wells are producing low yields and water tables are declining. Some areas that are usually irrigated with weak wells were not irrigated this year.

Due to high energy costs, especially in the North High Plains (above the Canadian River), the low efficiency furrow systems and high pressure sprinkler systems are being converted to low pressure sprinkler systems to reduce production costs. The water yields of some of the older wells in the area have decreased. This is due in part to a declining water table and partially to worn out bowls on pumps. The land served by many of these wells is being converted to dryland. If fuel costs continue to rise, more land will be converted to dryland. Crop yields in 1984 were high for most major crops such as wheat, corn, and grain sorghum.

The use of surge irrigation on furrow irrigated land and the low energy precision application (LEPA) system on sprinklers are being experimented with and are gaining in popularity. As a result of rising power costs, there is an increased effort to improve irrigation efficiency. Methods to measure soil moisture and irrigation system efficiency are being promoted and applied.

Side-roll and center-pivot sprinkler systems have replaced much of the older sprinkler equipment and helped reduce the labor costs in irrigation. The furrow method remains the most popular method on the "hardland soils," and sprinkler systems predominate on the "mixed" and "sandy" soils.

Water conservation is being practiced by more irrigators. The installation of underground pipelines has expanded, and this along with bench leveling, shortening the rows on furrow irrigation, installation of tailwater recovery systems, judicious use of water at critical crop growth periods, and fewer irrigations have reduced total water use, thereby conserving the precious water supply. Parallel terraces and furrow diking systems for moisture conservation are gaining in popularity as means of better utilizing the rainfall on dryland areas.

### **Lower Rio Grande Valley**

The Lower Rio Grande Valley consists of a four-county area—Cameron, Willacy, Hidalgo, and Starr. In 1984, 731,300 acres was irrigated; in 1979, 789,400 acres; in 1974, 794,000 acres; in 1969, 808,000 acres; in 1964, 819,000 acres; and in 1958, 768,000 acres. Irrigated acreage is fairly stable because of the adjudicated water rights to the use of Rio Grande waters.

Approximately 58,000 acres of the normal irrigated area was not irrigated in the Valley in 1984. An estimated one-half of the citrus orchards were killed by the freeze in December 1983. Much of the orchard acreage was not irrigated in 1984, along with the set-aside acreages for cotton and grain sorghum. Mobile home parks, housing development, and shopping centers have also reduced the irrigated acreage in the Valley.

Most of the water used for irrigation is obtained from Falcon Reservoir on the Rio Grande. In 1984, there was 1,004,300 acre-feet of on-farm use of surface water from Falcon Reservoir, which is 97 percent of the total water used for irrigation in the Valley. Ground water accounted for only 3 percent.

The water supply for the Lower Rio Grande Valley was good in 1984, as water stored in Falcon Reservoir was adequate to supply full irrigation to crops in early summer which is the peak irrigation season. This made unnecessary any large-scale use of ground water in 1984.

### **North-Central Texas**

The general designation of North-Central Texas, in this report, includes 26 counties in parts of the Rolling Plains, Reddish Prairies, and northern Edwards Plateau in which irrigation is concentrated in relatively small, scattered areas (Figures 10 and 11).

The use of irrigation water in this region is largely dependent upon the amount of rainfall and the availability of ground water of usable quality. Some of the surface and ground water is high in soluble salts and cannot be used for irrigation or it must be used with caution or on very salt tolerant crops. Most of the wells are shallow and weak.

In this region 173,000 acres was irrigated in 1984; 230,000 acres in 1979; 257,000 acres in 1974; 245,000 acres in 1969; 227,000 acres in 1964; and 135,000 acres in 1958. Haskell, Knox, Hall, Wilbarger, and Wichita Counties each had more than 15,000 acres of irrigated land in 1984. All other counties had less than 15,000 acres each.

The North Central Texas area was very dry during the growing season. This resulted in an increase in the amount of water applied. Increasing utility costs, declining well yields, unavailability of labor, and depressed farm prices are forcing some irrigators to revert to dryland.

### **Trans-Pecos**

The irrigated land in the Trans-Pecos consists of a number of separated, individual areas in 12 counties.

Irrigation in El Paso and Hudspeth Counties along the Rio Grande principally uses surface water from the Rio Grande. Major storage for this water is the reservoir behind Elephant Butte Dam in New Mexico. This dam and the delivery canals and drainage ditches make up the irrigation project that was completed in 1916. All water delivery from the reservoir to farms is by gravity flow. The water supply from Elephant Butte Project into the El Paso Valley area was abundant in 1984. Very little water was pumped from wells this year in the El Paso Valley, but many wells are equipped and ready for use.

In 1984, 64,900 acres was irrigated and the amount of water used for irrigation was 214,000 acre-feet. The irrigation water contains from 0.7 to 1.3 tons of soluble salt per acre-foot, so extra water is used before planting to leach the soluble salts below the root zone in the soil.

The water used in the Valley in Hudspeth County is the Rio Grande water not used in El Paso County, plus the return flow from the irrigated land in El Paso County and sewage effluent from El Paso. The water is usually of lower quality than normal river flows and fluctuates greatly in amount. In seasons with insufficient streamflow to meet the irrigation needs of the crops, irrigators apply poor-quality water obtained from shallow wells in the alluvium.

Pecos and Reeves Counties were thriving irrigated areas until 1976-1977. However, rising fuel costs for irrigation pumping has changed that. Now there are many acres of idle cropland, empty concrete-lined irrigation canals, wells with pump motors removed, and vacant cotton gins. A different method of irrigating this area is now being tried. Some producers are switching from the graded furrow method to center pivot, low pressure systems to save on labor and energy cost. Some cotton producers are using different varieties, less fertilizer, and less water to produce less yield per acre, but at a better return for their investment.

In the Trans-Pecos farming areas the growing season started very dry, requiring heavy irrigation in the early season. Mild temperatures and effective rainfall during the rest of the growing season helped production. There was no surface water available in the Pecos Valley this year. Several large farms in the Trans-Pecos area were idle during 1984 because of economic conditions.

The total area irrigated was 163,000 acres in 1984; 210,000 acres in 1979; 225,000 acres in 1974; 255,000 acres in 1969; 357,000 acres in 1964; and 320,000 acres in 1958. A number of

areas along the Pecos River in Reeves County are no longer cultivated because of poor water quality and inadequate amounts in most years.

The ground water used in Reeves County is high in soluble salts, averaging about 4 tons per acre-foot. Heavy water applications, salt-tolerant crops such as cotton, and the moderate permeability of the soils permit the use of this water for irrigation.

The salt content of the ground water is relatively high also in the Wild Horse area in Culberson County and the Dell City area in Hudspeth County; but, the soils here are moderately permeable and high in gypsum, and maintain a low total salt and sodium content, indicating that much of the salts applied in the irrigation water have been leached out of the root zone of the soil.

The soils irrigated and the water used for irrigation are such in the Trans-Pecos area that continued monitoring of the amounts and kinds of salt in the soils and waters is needed along with soil evaluations and good soil management.

### **Winter Garden-San Antonio Area**

The Winter Garden-San Antonio area extends from San Antonio west to Brackettville and south to Carrizo Springs, including eight counties as outlined in Figure 10. Here, the winter climate is mild and the growing season is long, permitting the growing of vegetables, corn, sorghum, and cotton and favoring double cropping.

In 1984, there was 291,611 acres irrigated; in 1979, 309,000 acres irrigated; in 1974, 322,000 acres; in 1969, 322,000 acres; in 1964, 321,000 acres; and in 1958, 215,000 acres. The amount of water used for irrigation was 564,000 acre-feet in 1984; 486,000 acre-feet in 1979; 495,000 acre-feet in 1974; 517,000 acre-feet in 1969; 549,000 acre-feet in 1964; and 271,000 acre-feet in 1959.

The Winter Garden-San Antonio area was unusually dry from January to October in 1984. Fewer acres were irrigated, but due to the strong winds and high temperature the crops that were irrigated received larger amounts of water than normal. Since rainfall throughout the area was below normal, most rivers were dry during the irrigation season, and, consequently, acreage irrigated with surface water was reduced.

Some acreages in the Winter Garden-San Antonio area are being withdrawn from irrigation due to deterioration of the wells, high labor and fuel costs, and changes in cropping systems. On the other hand, in other areas of the Winter Garden, new land is being brought into production, new wells are being drilled, and new crops planted, with the new land being brought into cultivation out of brush.

### **Middle Rio Grande Valley**

The Middle Rio Grande Valley is an area along the Rio Grande between Falcon and Amistad Reservoirs in Maverick, Webb, and Zapata Counties and includes the Maverick Irrigation District area. The water used for irrigation is from the Rio Grande and is delivered by gravity flow. The

Maverick Irrigation District had used up its water allocation by August 26th, and irrigation water was cut off to users. However, timely rainfall occurred during October.

There was 49,000 acres irrigated in 1984; 51,000 acres in 1979; 59,000 acres in 1974; 70,000 acres in 1969; 55,000 acres in 1964; and 46,000 acres in 1958. Most of the irrigation acreage is on the alluvial and terrace soils of the Rio Grande; however, some of the upland soils in Maverick County are irrigated from local surface or ground-water supplies. This area was very dry in 1984 from January to October. Irrigation water applications to crops were larger than normal throughout the year because of the drought.

### **San Angelo Area**

The general designation of the San Angelo area, in this report, includes 13 counties in parts of the Rolling Plains, Reddish Prairies, and central Edwards Plateau in which irrigation is concentrated in small, scattered areas (Figures 10 and 11). The use of irrigation water in this region is largely dependent upon the amount of rainfall and the availability of ground water of usable quality. Most of the wells are shallow and weak.

Drought conditions prevailed throughout the San Angelo area in 1984. Surface water for irrigation from the Concho and Colorado Rivers was limited due to drought. There was no release of water from Twin Buttes Reservoir for irrigation in 1984. Approximately 90 percent of the farmers who normally receive an allotment from the reservoir used well water sources, while the remaining 10 percent reverted to dryland farming.

In this region, 123,000 acres was irrigated in 1984; 122,000 acres in 1979; 97,000 acres in 1974; 78,000 acres in 1969; 63,000 acres in 1964; and 34,000 acres in 1958. Tom Green, Glasscock, and Reagan Counties each had more than 25,000 acres of irrigated land in 1984.

### **Gulf Coast Prairie**

The Gulf Coast Prairie is the rice producing area of Texas, situated in the coastal plain north and east of the Coastal Bend in an area between Victoria and Orange, Texas. In addition to rice, and along with cotton, corn, grain sorghum, and soybeans, which are not typically irrigated, many cattle are raised in this area. Much of the rice is double harvested. Surface water is principally used in the eastern part of the area and ground water in the western part.

The area of irrigation was 413,000 acres in 1984; 558,000 acres in 1979; 575,000 acres in 1974; 575,000 acres in 1969; 503,000 acres in 1964; and 464,000 acres in 1958.

Irrigated rice acreage decreased in 1984 due to the government set aside program. Rapid urbanization also reduced irrigated rice acreage approximately 50 percent in Harris and Galveston Counties. Much of the rice land that has been in the rotation schedule of 1 year rice with 2 to 3 years of native grass is going into a shorter rotation of 1 year rice and 1 year grass, soybeans, or corn—or 2 years rice and 2 years of grass, soybeans, or corn.

The rainfall was adequate in 1984 for dryland crops. The amount of double-harvested rice varied from 80 percent of the total irrigated rice acreage in Wharton County to 10 percent in



Liberty County. Double harvesting increases water usage, as additional irrigation water is required for the second growth of the rice.

### **West Cross Timbers**

The West Cross Timbers is an area of sandy soils that has supported a scattered growth of hardwoods and tall grasses. It occurs in the North-Central part of the State between the North-Central Prairies and the Grand Prairie (see Figure 10). Peanuts, pecans, and peaches are the major irrigated crops, and irrigation became widespread in the peanut area beginning in the late 1960's.

There was 83,024 acres irrigated in 1984; 76,000 acres in 1979; 65,000 acres in 1974; 56,000 acres in 1969; 18,000 acres in 1964; and 14,000 acres in 1958.

The Cross Timbers area was extremely dry in 1984 causing the irrigation season to be longer than usual. The wells in the area are shallow and comparatively low yielding. In late summer, during stress periods, most well yields drop drastically. The acreage irrigated with surface water in 1984 was less than in previous years, due to lack of runoff into on-farm impoundments.

### **Brazos River Valley**

The Brazos River Valley is a six-county area along the Brazos River where most of the irrigated land is on the floodplain or terrace soils adjacent to the river. Cotton is usually the principal irrigated crop; however, grain sorghum is replacing cotton on some acreage. The areas irrigated totaled 49,000 acres in 1984; 46,000 acres in 1979; 62,000 acres in 1974; 74,000 acres in 1969; 103,000 acres in 1964; and 7,000 acres in 1958.

In the Brazos River Valley the need for irrigation varies with the amount and distribution of rainfall. In 1984, rainfall was below normal during the growing season; therefore irrigation water use was above normal. Most irrigation facilities were used, and they served a few more acres in 1984 than in 1979. The 1984 federal farm program resulted in less than average acres of irrigated cotton being planted.

Some formerly irrigated land in McLennan County has succumbed to urban development and gravel pits.

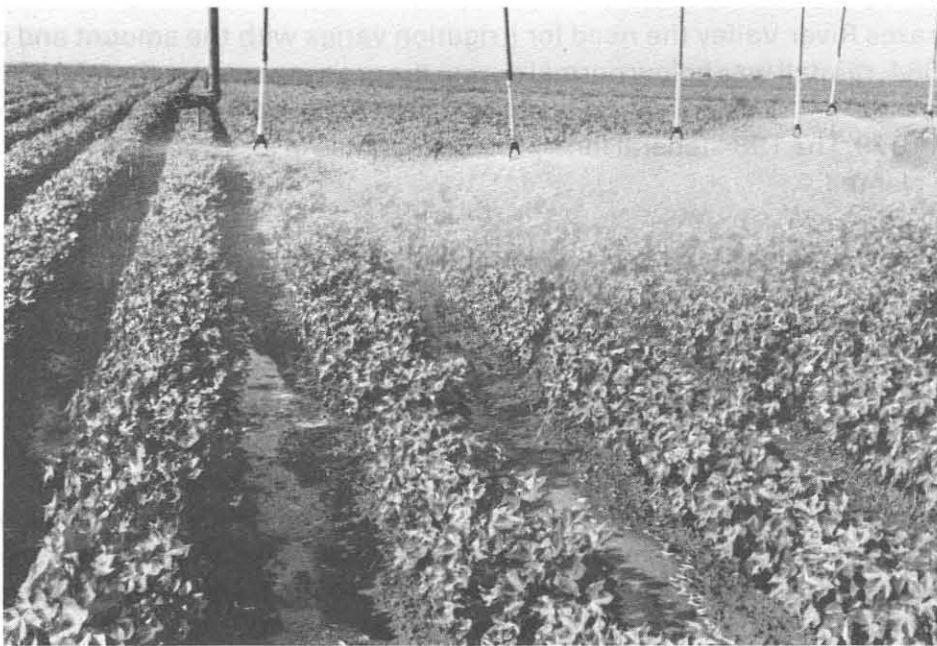
## **Land Resources for Irrigation**

The kinds, amounts, and locations of the soils physically suitable for irrigation in Texas have been determined from completed soil surveys, conservation needs inventories, and irrigation surveys. Data from these studies show that about 38 million acres of *land* in the State is physically suitable for irrigation, although much of this acreage does not have water available for irrigation use. This 38 million acres includes the presently irrigated land.

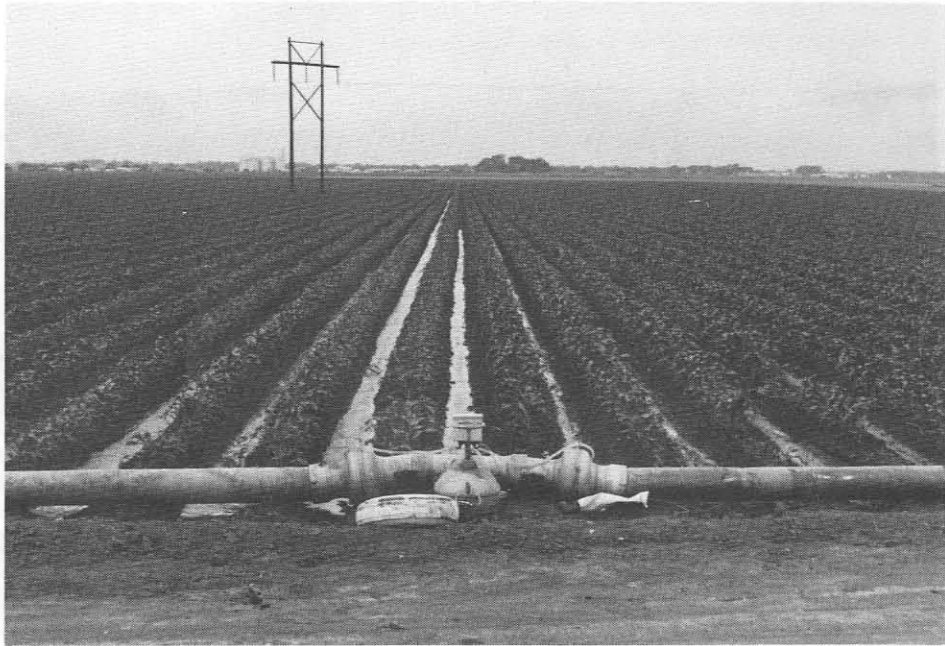
The acreage of land previously irrigated and still equipped for irrigation, but not irrigated in 1984, was obtained during the field survey (Table 5). By definition, this is land having at least an



**Solid set sprinkler system irrigating alfalfa in the Rolling Plains.**



**Low pressure sprinkler system irrigating cotton in the Trans-Pecos.**



**Surge system irrigating grain sorghum in the Winter Garden.**



**Big Gun system irrigating coastal bermuda in the San Antonio area.**

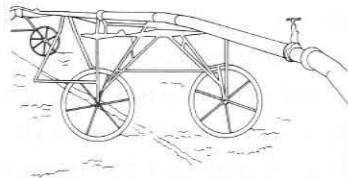


**Side-roll-drag line system irrigating cotton in the Trans-Pecos.**

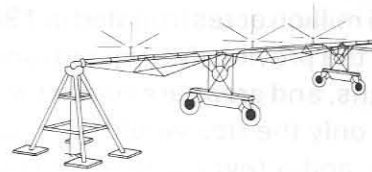


**Furrow dikes in place on cotton in the High Plains.**

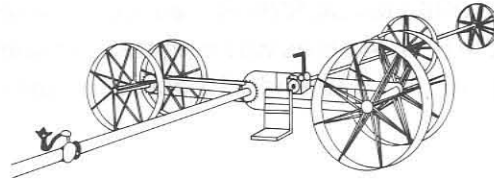
**SELF PROPELLED**



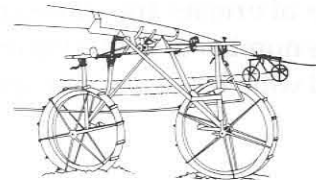
**LATERAL MOVE**



**CENTER-PIVOT**

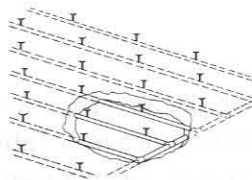


**SIDE-WHEEL-ROLL**

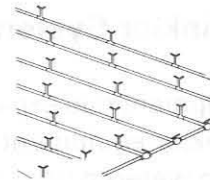


**SIDE-MOVE**

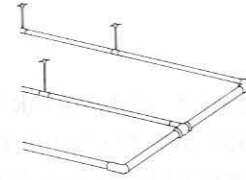
**PERMANENT**



**SOLID-SET**



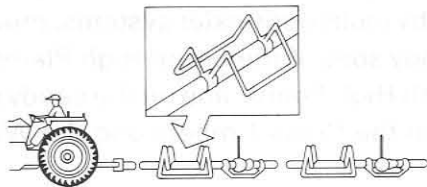
**SEMI-PORTABLE**



**PORTABLE**

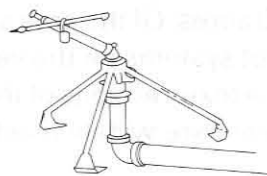
**HAND MOVED**

**TRACTOR-MOVED**

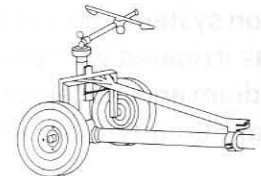


**SKID-MOUNTED**

**HAND OR TRACTOR-MOVED**

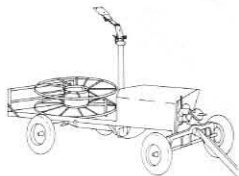


**TRIPOD-MOUNTED**

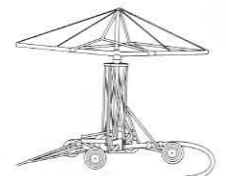
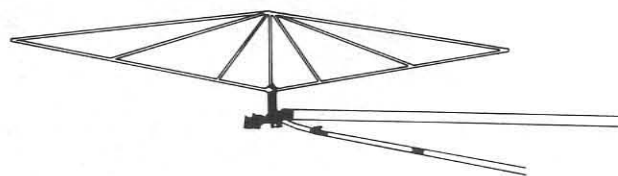


**WHEEL-MOUNTED**

**SELF PROPELLED**



**TRACTOR-MOVED OR SELF-PROPELLED OR WENCH**



**TRACTOR-MOVED**

**Figure 5  
Sprinkler Irrigation Systems**

adequately producing well for ground-water use or minimum turnouts and other facilities for using surface water, or both. Approximately 2.35 million acres was recorded in this category, in addition to the 6.75 million acres irrigated in 1984. All of this acreage is readily available for future irrigation. Much of the previously irrigated land is in the rice-producing area of the Coast Prairie where rice, soybeans, and grass are rotated with 1 or 2 years of rice and 1 or 2 years of soybeans or grass, although only the rice would be irrigated, typically. Two counties in the Trans-Pecos, Reeves and Pecos, and a few counties in the High Plains account for most of the remaining acreage of land previously irrigated but not irrigated in 1984.

The number of irrigated operating units in 1984 was 34,826. Based on the acreage irrigated (Table 1) and the number of operating units (Table 5), 194 acres was irrigated per operating unit in 1984 compared with 209 acres per operating unit in 1979 and 213 acres per operating unit in 1974.

Urban development continues to expand onto irrigable land, especially in the Houston-Galveston area, El Paso area, San Antonio area, and in the suburbs of smaller cities. In the Lower Rio Grande Valley, large blocks of formerly irrigated land have been converted to trailer parks.

### Sprinkler Systems

Water application with sprinkler equipment has expanded rapidly as labor has become more expensive and less plentiful and as sprinkler equipment has been improved. Tables 1, 2, and 3 include the acreage of land that has been watered with some kind of sprinkler equipment.

Since 1974, many irrigators have invested in new equipment including side-roll and center-pivot sprinkler systems. In 1984, 2,141,000 acres was irrigated with sprinkler equipment. Mobile sprinkler irrigation systems served 1,994,000 of these acres, 93 percent, and stationary sprinkler irrigation systems served 146,500 acres. Of the area served by mobile sprinkler systems, much of this was irrigated with center-pivot systems on the very sandy soils of the South High Plains, on the medium and moderately coarse textured soils of the South High Plains, and on the sandy soils in Dallam County. Sprinkler systems are widely used also in the Cross Timbers and the Winter

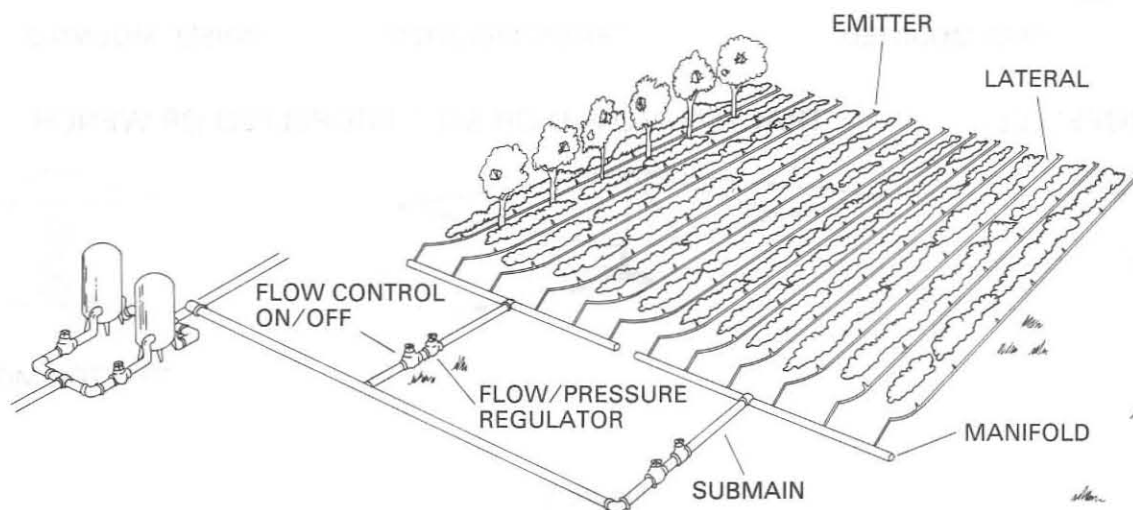


Figure 6.—Trickle Irrigation Systems

Garden-San Antonio area where the sandy soils have gently sloping and uneven surfaces. Statewide, 2,197,000 acres was irrigated with sprinkler systems in 1979; 1,854,000 acres in 1974; 1,548,000 acres in 1969; 1,077,000 acres in 1964; and 668,000 acres in 1958.

### **Trickle Irrigation**

A somewhat recent approach to irrigation, called trickle or drip irrigation, had its origin in Israel. Its use in American irrigated agriculture is largely restricted at present to perennial crops.

Essentially, trickle irrigation spot-irrigates crops—mostly citrus, pecans, grapes, and fruit orchards currently—by applying water only to the base of each plant. The system utilizes plastic tubes that have emitters located near each plant and the emitters are designed to provide the amount of water needed for maximum plant growth.

Water is saved with this method because the total soil area is not wetted as with sprinkler or flood irrigation. Trickle irrigation applies smaller amounts of water than conventional methods, and runoff water is nearly eliminated.

Other advantages include labor savings, increased plant vigor and yields, use of low-volume wells, and better adaptation to sandy soils. Fertilizers can be applied in the irrigation water.

Some of the researchers caution that there are problems associated with trickle irrigation. The development in Israel took place on deep, very sandy soils that take water rapidly and where the soil-water-plant relationships are quite different than on most Texas irrigated soils. Emitters will clog if the irrigation water is not properly filtered; there are problems in controlling emitter output; and rodent damage may be a problem in some areas. Installation costs are high, also.

The 1984 irrigation survey shows that 29,900 acres in Texas was being irrigated with trickle systems compared to 19,800 acres in 1979 and 4,000 acres in 1974. This is an increase of almost 51 percent in 5 years, or almost 11,100 acres. Leading crops were pecans, on 20,586 acres; and citrus, 4,000 acres. Other crops irrigated with trickle systems and the acreage of each in 1984 are as follows: grapes, 2,168 acres; peaches, 1,745 acres; windbreaks, 330 acres; apples, 214 acres; Christmas trees, 175 acres; and other crops, 614 acres.

It is expected that the use of trickle irrigation will continue to increase in the future, but the increased cost of plastic pipe may slow the progress. The possible use of trickle irrigation, with its water-saving characteristics, on row crops is being researched. This would be an important development for water-short areas.

### **Conservation Irrigation Measures**

Declining ground-water supplies, rising costs of pumping, and limited supplies of surface water are requiring that irrigation water-use efficiency be increased to the fullest extent feasible. The purposes of agricultural water conservation are to allow existing, but exhaustible, ground-water reserves to support present irrigated acreages for longer periods of time, to reduce the costs of production, and, to the extent possible, allow for an increase in irrigated agriculture to meet growing market demands for food and fiber in future decades.

Significant savings in water use can be accomplished with improvements in conveyance systems, the use of more efficient irrigation application systems, soil moisture monitoring, the development and use of drought-tolerant strains and varieties of crops, use of growth regulators, and evaporation suppressants. Along with use of water-saving equipment and practices to reduce the quantities of irrigation water applied to crops, appropriate farming practices need to be developed and used to capture and hold rainfall in the soil profile. The capture and retention in the soil profile of rainfall, or reducing runoff from fields, applies beneficially to dryland farming operations as well as to irrigation operations. Furrow diking and conservation tillage are the leading practices currently in use to reduce rainwater runoff, along with control of weeds and brush that use water for no beneficial purposes. In order to realize these potentials, public and private agencies, institutions, and establishments need to expand water conservation research and extension programs.

Public agencies can perform a role in agricultural water conservation by disseminating information and materials on irrigation techniques and equipment that are water efficient. Agricultural water conservation work will be done to the extent that resources are available for programs of public information, training, assistance, and demonstrations to local-area soil and water conservation districts, underground water conservation districts, and farmers, and through cooperation and support of all federal, State, and local agencies with related responsibilities. It is in the private sector, however, that most of the actual investment, production, financing, and finally purchase and use of irrigation water conservation equipment must be made.

The declines in ground and surface-water supplies available for irrigation have convinced many people of the need for water conservation and good water management. In a properly planned and well managed irrigation system, all necessary equipment and control structures are installed, the quantity of water used for each irrigation is determined by the need of the crop (especially the stage of growth), and the water-holding capacity of the soil is determined. Water then is applied at a rate and in such a manner that the crops are able to use it efficiently and significant soil erosion does not occur.

The system design should make efficient use of irrigation water applied and rainfall. When planning the system, the peak use rates and seasonal and monthly demands of each crop must be considered in determining the irrigation water requirements. Research and experience have been the basis for using soil moisture balance studies to calculate irrigation water requirements. Research in recent times has provided data on when to irrigate and how much water to apply for maximum efficiency in irrigation water application. Following these findings produces maximum yields per inch of water applied or acceptable yields with much less water, acceptable meaning a yield from irrigating that has a positive net economic benefit.

Additional activity has been in the area of assisting irrigators to evaluate the efficiency of their irrigation systems. The High Plains Underground Water Conservation District No. 1, other underground water conservation districts, the U.S. Department of Agriculture, Soil Conservation Service (SCS), and local soil and water conservation districts, with assistance from the Texas Department of Water Resources, have initiated an efficiency testing program using mobile units called Field Water Conservation Laboratories. These units contain various types of measuring instruments to test irrigation systems efficiency. Based on test results, SCS personnel provide recommendations to improve the irrigation systems. This helps the irrigator use water more efficiently (less waste) and also cut down on his fuel cost.



Many irrigators are installing water-saving conveyance measures which have been accounted for in the irrigation surveys. The data for 1984 show 1,062 miles of concrete-lined ditches serving 138,000 acres of irrigated land, and 21,000 miles of underground pipelines serving 4.6 million acres of irrigated land. Seventy-one percent of 1984 irrigated land was supplied with these kinds of water conserving facilities. Most of these facilities are in the Lower Rio Grande Valley, Winter Garden-San Antonio area, and the High Plains.

Storage reservoirs are being built in water-short areas to hold water being pumped from weak wells in order to have sufficient water when needed for irrigation. In some areas playa lakes are being modified to concentrate the water in deep pools. This reduces the area exposed to surface evaporation and provides the maximum amount of water available for irrigation. Some systems are modified to pump back the runoff from row-irrigated land (tailwater) and thus conserve water through reuse. Some producers, as well as researchers, are using recharge wells to put playa lake water into the Ogallala aquifer.

There were 478 on-farm water impoundments, exclusive of playa lakes, serving 40,000 acres of irrigated land in 1984. These impoundments of surface-water supplies enable the irrigator to utilize the water when it is needed.

Furrow diking is a method of mechanically mounding soil in furrows at select intervals perpendicular to the farming direction, forming a series of micro dams and water-impounding basins. An important and primary method of improving rainfall effectiveness in crop production is to increase infiltration of rainfall on cropland, thereby storing moisture in the soil for use by plants. Furrow diking is an excellent way to accomplish this without extra modification or additional trips through the fields. The practice applies beneficially to both irrigated and dryland farming.

Several new methods of irrigating have been developed or implemented in the last ten years. Texas has the honor of being partly, in one case, and almost fully in another, the principal area of first development in two of these methods (surge flow and LEPA system).<sup>3</sup>

### **Surge Flow Irrigation<sup>3</sup>**

Surge flow irrigation is an innovative method of furrow (and basin) irrigation that capitalizes on a natural, soil physical phenomenon. It entails irrigating with two sets of gated pipe, switching water back and forth between these sets. This shunting of water is done with a valve located at a "T" or "Y". The valve is controlled by a timer, such that one set of gated pipe is discharging the furrow streams while the other remains closed. At the predetermined interval the valve opens to allow water down the previously dry side and closes access to the gated pipe which had just had water. At the appropriate time, the switch is made again. Typical on times range from 15 minutes to an hour.

During the off period of the cycle, the water that was in the furrow infiltrates into the soil. This infiltration action creates a surface sealing effect that reduces subsequent infiltration. Reductions are on the order of 50 percent. This infiltration rate reduction helps to lower deep percolation loss at the top of fields.

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<sup>3</sup>Henggeler, J. C., material from paper presented at Water for the 21st Century, Southern Methodist University, Dallas, Texas, April 1984.

Apart from its enhancement of furrow irrigation performance because of the surge flow effect, these valves are leading toward automation of furrow watering. Valves may also be used to establish cut-back irrigation (large furrow streams are used to get the water to the bottom of fields quickly, then cut back to avoid runoff) by simply opening both sides of the valve, reducing furrow streams by 50 percent. This method of irrigation is well recognized as being highly efficient.

### **LEPA System**

The Low Energy Precision Application (LEPA) system is an irrigation concept in which an irrigation system, typically center pivot although it can be linear move, has been nozzled for lower energy application. Water is discharged right into furrows, which run in concentric circles. The furrows are also furrow diked. The idea behind the system is to eliminate as much wind-induced water loss as possible. In essence, it has some of the attributes of center pivot, furrow, and trickle irrigation. The furrow dikes keep the water in place and prevent uniformity imbalances arising from water running off higher elevations into lower areas.

Application efficiency of 99 percent is possible with a LEPA system. This high efficiency (conventional sprinkler pivots averaged only 77 percent) is also coupled with less energy use over the traditional center pivot.

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TABLE I.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
ANDERSON	1958	1,825	967	1,275	629	350	188	200	150	75	8	840
	1964	1,124	457	424	215	280	139	420	103	74	9	282
	1969	960	324	960	324	0	0	0	0	0	0	200
	1974	1,745	743	1,035	470	160	90	550	183	80	1	720
	1979	275	67	275	67	0	0	0	0	0	1	160
	1984	605	460	415	346	190	113	0	0	0	2	370
ANDREWS	1958	1,200	1,699	0	0	1,200	1,699	0	0	0	14	1,200
	1964	8,000	16,393	0	0	8,000	16,393	0	0	0	85	8,000
	1969	2,389	1,198	0	0	2,389	1,198	0	0	0	104	2,389
	1974	5,353	5,278	0	0	5,353	5,278	0	0	0	80	5,353
	1979	9,207	9,132	0	0	8,957	8,882	250	250	50	85	9,207
	1984	4,871	3,605	0	0	4,871	3,605	0	0	0	150	4,754
ANGELINA	1958	61	22	61	22	0	0	0	0	0	0	61
	1964	44	13	40	12	4	1	0	0	0	0	44
	1969	46	36	40	33	4	2	2	1	60	43	34
	1974	185	462	0	0	185	462	0	0	0	0	185
	1979	225	563	0	0	225	563	0	0	0	0	225
	1984	225	563	0	0	225	563	0	0	0	0	225
ARANSAS	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	1	0
	1984	0	0	0	0	0	0	0	0	0	0	0
ARCHER	1958	500	367	500	367	0	0	0	0	0	0	0
	1964	500	791	500	791	0	0	0	0	0	0	0
	1969	795	846	795	846	0	0	0	0	0	0	165
	1974	795	846	795	846	0	0	0	0	0	0	165
	1979	200	167	200	167	0	0	0	0	0	0	0
	1984	200	333	200	333	0	0	0	0	0	0	0
ARMSTRONG	1958	24,845	21,509	0	0	24,845	21,509	0	0	0	162	430
	1964	27,825	43,782	0	0	27,825	43,782	0	0	0	195	250
	1969	25,518	33,968	0	0	25,518	33,968	0	0	0	212	300
	1974	26,348	30,308	0	0	26,348	30,308	0	0	0	219	330
	1979	24,370	12,837	0	0	24,370	12,837	0	0	0	225	1,660
	1984	11,460	7,097	0	0	11,460	7,097	0	0	0	200	640

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
ATASCOSA	1958	23,200	30,915	0	0	23,200	30,915	0	0	0	201	16,100
	1964	28,505	43,479	175	201	28,330	43,278	0	0	0	253	21,630
	1969	33,050	52,155	175	178	32,875	51,977	0	0	0	290	33,050
	1974	34,735	57,096	175	134	34,560	56,962	0	0	0	315	34,735
	1979	31,175	55,799	175	134	31,000	55,665	0	0	0	330	31,175
	1984	31,988	35,039	0	0	31,988	35,039	0	0	0	350	31,988
AUSTIN	1958	2,958	4,055	0	0	2,958	4,055	0	0	0	23	450
	1964	4,292	7,004	199	105	3,921	6,727	172	172	50	28	612
	1969	4,697	8,236	164	107	4,533	8,129	0	0	0	33	750
	1974	3,663	10,246	0	0	3,663	10,246	0	0	0	33	0
	1979	4,050	10,017	0	0	4,050	10,017	0	0	0	33	0
	1984	3,015	8,754	0	0	3,015	8,754	0	0	0	33	0
BAILEY	1958	147,000	256,887	0	0	147,000	256,887	0	0	0	1,600	18,496
	1964	149,210	354,508	0	0	149,210	354,508	0	0	0	1,820	36,480
	1969	157,170	184,883	0	0	157,170	184,883	0	0	0	1,900	81,490
	1974	166,518	375,874	0	0	166,518	375,874	0	0	0	1,600	91,998
	1979	182,338	252,185	0	0	182,338	252,185	0	0	0	2,438	103,224
	1984	142,283	149,132	0	0	142,283	149,132	0	0	0	5,600	102,889
BANDERA	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	315	284	226	190	89	94	0	0	0	5	282
	1969	318	321	207	237	111	84	0	0	0	10	318
	1974	127	95	79	59	48	36	0	0	0	10	127
	1979	258	532	200	432	58	100	0	0	0	10	207
	1984	213	168	152	107	61	61	0	0	0	12	150
BASTROP	1958	1,000	1,110	935	1,065	65	45	0	0	0	2	25
	1964	2,300	2,166	2,030	1,929	270	237	0	0	0	6	1,910
	1969	3,351	2,142	2,138	1,332	633	423	580	387	20	11	2,411
	1974	3,195	3,015	2,100	1,920	515	515	580	580	29	12	2,305
	1979	25	15	25	15	0	0	0	0	0	10	0
	1984	1,598	1,130	890	663	28	37	680	430	33	6	1,078
BAYLOR	1958	3,736	3,371	0	0	3,736	3,371	0	0	0	121	467
	1964	6,256	6,092	100	53	6,156	6,039	0	0	0	155	614
	1969	7,220	6,483	700	375	6,520	6,108	0	0	0	165	2,220
	1974	7,220	5,661	700	297	6,520	5,364	0	0	0	175	2,220
	1979	1,777	794	0	0	1,777	794	0	0	0	175	532
	1984	2,965	1,670	40	20	2,925	1,650	0	0	0	175	855

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
BEE	1958	1,340	772	0	0	1,340	772	0	0	0	16	70
	1964	3,503	2,406	0	0	3,503	2,406	0	0	0	38	1,170
	1969	4,170	2,106	0	0	4,170	2,106	0	0	0	46	393
	1974	4,479	1,611	0	0	4,479	1,611	0	0	0	48	360
	1979	575	467	0	0	575	467	0	0	0	55	0
	1984	3,930	1,373	25	38	3,905	1,335	0	0	0	54	40
BELL	1958	1,175	887	795	594	380	293	0	0	0	3	673
	1964	1,749	1,356	1,339	1,058	410	298	0	0	0	4	1,472
	1969	1,552	958	1,372	838	30	20	150	100	70	5	1,552
	1974	2,246	1,802	2,066	1,622	30	30	150	150	60	5	2,246
	1979	775	340	735	306	40	33	0	0	0	5	775
	1984	980	708	930	666	50	42	0	0	0	5	968
BEXAR	1958	27,100	39,195	10,500	14,845	16,600	24,350	0	0	0	102	1,600
	1964	29,961	61,771	14,700	29,371	15,261	32,400	0	0	0	133	4,603
	1969	29,229	34,534	6,573	7,053	7,521	10,311	15,135	17,170	46	135	4,823
	1974	26,462	27,652	14,218	13,953	12,244	13,699	0	0	0	140	7,639
	1979	24,051	35,250	13,521	19,418	10,530	15,832	0	0	0	133	6,119
	1984	20,104	38,815	9,565	15,266	10,499	23,449	40	100	60	133	5,478
BLANCO	1958	225	232	125	126	100	106	0	0	0	3	225
	1964	375	384	185	196	190	188	0	0	0	5	345
	1969	135	131	37	48	98	83	0	0	0	5	118
	1974	207	118	47	35	160	83	0	0	0	10	207
	1979	263	197	87	76	176	121	0	0	0	13	187
	1984	233	419	27	62	206	357	0	0	0	14	117
BORDEN	1958	1,400	808	0	0	1,400	808	0	0	0	40	500
	1964	1,400	709	0	0	1,400	709	0	0	0	40	1,400
	1969	1,401	716	11	16	1,390	700	0	0	0	62	11
	1974	741	628	11	18	730	610	0	0	0	60	21
	1979	291	303	11	23	280	280	0	0	0	60	21
	1984	531	266	0	0	531	266	0	0	0	60	0
BOSQUE	1958	429	440	429	440	0	0	0	0	0	0	399
	1964	971	1,207	841	1,141	0	0	130	66	25	3	365
	1969	3,453	4,203	2,804	3,394	325	377	324	432	10	9	2,877
	1974	2,742	1,059	1,636	614	435	175	671	270	38	10	2,241
	1979	1,183	571	1,123	556	60	15	0	0	0	10	1,183
	1984	1,857	1,275	1,471	1,082	100	50	286	143	9	10	1,270

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
BOWIE	1958	4,858	4,315	4,045	3,346	563	344	250	625	60	13	1,550
	1964	2,886	3,902	2,098	2,095	220	103	568	1,704	20	20	738
	1969	1,612	2,495	1,034	1,519	78	26	500	950	23	19	45
	1974	1,710	3,029	1,278	1,733	432	1,278	0	0	0	19	0
	1979	2,282	6,496	1,842	5,526	440	970	0	0	0	20	140
	1984	3,492	9,018	2,095	5,865	857	1,533	540	1,620	25	40	351
	BRAZORIA	1958	51,295	167,389	43,950	146,775	4,995	12,389	2,350	8,225	21	43
1964		56,355	133,783	52,650	126,318	2,555	4,878	1,150	2,587	30	18	0
1969		69,560	218,068	59,170	192,303	7,940	18,211	2,450	7,554	50	30	0
1974		59,368	158,315	50,399	134,397	6,219	16,584	2,750	7,334	50	30	0
1979		67,098	141,760	56,890	123,262	4,387	6,371	5,821	12,127	60	40	1,630
1984		44,274	127,159	35,876	111,956	7,344	12,041	1,054	3,162	60	58	5,028
BRAZOS		1958	17,600	15,079	5,250	4,415	11,850	10,257	500	407	50	238
	1964	24,830	25,730	9,140	10,001	15,590	15,696	100	33	50	295	1,070
	1969	20,690	17,776	1,170	1,003	8,750	7,297	10,770	9,476	71	305	1,060
	1974	8,700	5,908	0	0	2,800	1,975	5,900	3,933	66	300	300
	1979	10,950	8,258	350	313	3,100	2,325	7,500	5,620	60	300	450
	1984	9,793	9,501	340	340	2,953	2,862	6,500	6,299	25	300	0
	BREWSTER	1958	234	588	234	588	0	0	0	0	0	0
1964		220	715	200	665	20	50	0	0	0	1	0
1969		0	0	0	0	0	0	0	0	0	3	0
1974		148	379	83	249	65	130	0	0	0	4	0
1979		248	627	97	316	151	311	0	0	0	6	0
1984		233	427	0	0	233	427	0	0	0	10	135
BRISCOE		1958	55,000	38,817	0	0	55,000	38,817	0	0	0	539
	1964	70,200	111,348	0	0	70,200	111,348	0	0	0	607	2,700
	1969	63,970	96,069	260	367	63,710	95,702	0	0	0	650	2,520
	1974	66,196	103,045	672	1,026	65,524	102,019	0	0	0	821	4,189
	1979	65,776	95,350	252	315	65,524	95,035	0	0	0	815	4,887
	1984	60,133	45,644	426	213	59,707	45,431	0	0	0	746	6,689
	BROOKS	1958	690	173	0	0	690	173	0	0	0	25
1964		2,270	1,675	0	0	2,270	1,675	0	0	0	22	2,270
1969		1,970	1,025	0	0	1,970	1,025	0	0	0	30	1,970
1974		2,619	1,632	0	0	2,619	1,632	0	0	0	38	2,619
1979		285	123	0	0	285	123	0	0	0	27	285
1984		450	135	0	0	450	135	0	0	0	29	450



TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
BROWN	1958	3,696	1,384	3,696	1,384	0	0	0	0	0	0	0
	1964	4,997	7,247	4,997	7,247	0	0	0	0	0	0	60
	1969	10,466	25,887	9,739	24,855	727	1,032	0	0	0	25	1,322
	1974	11,016	28,104	10,289	27,072	727	1,032	0	0	0	25	1,407
	1979	7,904	5,732	7,177	5,030	727	702	0	0	0	49	1,507
	1984	6,531	7,472	5,463	6,226	1,068	1,245	0	0	0	56	1,500
BURLESON	1958	10,460	10,447	640	640	9,820	9,807	0	0	0	222	300
	1964	18,605	19,745	2,524	3,306	16,081	16,439	0	0	0	247	170
	1969	14,040	17,132	2,069	2,229	11,971	14,903	0	0	0	225	0
	1974	14,635	9,762	1,995	1,369	12,640	8,393	0	0	0	235	130
	1979	11,613	8,798	250	175	11,363	8,623	0	0	0	240	25
	1984	11,739	7,723	0	0	10,824	7,200	915	523	50	260	23
BURNET	1958	370	388	280	313	90	75	0	0	0	1	260
	1964	486	1,064	448	1,026	38	38	0	0	0	3	448
	1969	970	1,408	889	1,287	81	121	0	0	0	3	889
	1974	690	518	509	382	181	136	0	0	0	5	589
	1979	81	176	0	0	81	176	0	0	0	5	50
	1984	140	291	0	0	140	291	0	0	0	8	50
CALDWELL	1958	1,105	990	850	777	255	213	0	0	0	5	700
	1964	780	681	400	347	380	334	0	0	0	10	525
	1969	382	225	206	79	176	146	0	0	0	10	206
	1974	1,755	1,660	1,620	1,563	135	97	0	0	0	10	1,675
	1979	337	262	264	213	73	49	0	0	0	10	250
	1984	646	694	373	269	135	149	138	276	80	9	501
CALHOUN	1958	7,947	14,739	7,427	14,479	520	260	0	0	0	7	120
	1964	7,627	22,480	6,947	21,886	680	594	0	0	0	7	0
	1969	8,832	38,579	7,993	37,035	839	1,544	0	0	0	7	0
	1974	11,019	43,171	10,114	40,456	905	2,715	0	0	0	4	0
	1979	12,196	35,843	9,214	27,642	2,982	8,201	0	0	0	15	0
	1984	9,161	28,143	8,048	24,897	1,113	3,246	0	0	0	20	0
CALLAHAN	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	319	160	160	81	159	79	0	0	0	12	319
	1969	1,002	1,670	465	775	537	895	0	0	0	41	1,002
	1974	1,425	1,819	685	868	740	951	0	0	0	66	1,385
	1979	1,155	698	435	266	720	432	0	0	0	74	1,155
	1984	846	519	178	105	499	313	169	101	50	85	846

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
CAMERON	1958	280,823	585,132	261,840	537,091	716	1,670	18,267	46,371	59	80	3,000
	1964	282,800	366,500	274,400	355,100	400	400	8,000	11,000	70	40	200
	1969	287,445	414,528	287,445	414,528	0	0	0	0	0	40	0
	1974	287,445	392,245	287,445	392,245	0	0	0	0	0	40	0
	1979	287,445	330,067	287,445	330,067	0	0	0	0	0	0	0
	1984	268,707	376,457	268,207	375,707	0	0	500	750	75	10	500
CAMP	1958	2	1	2	1	0	0	0	0	0	0	2
	1964	340	117	25	12	0	0	315	105	20	1	340
	1969	287	192	137	92	50	25	100	75	70	1	287
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	67	152	7	7	60	145	0	0	0	2	7
CARSON	1958	65,400	61,065	0	0	65,400	61,065	0	0	0	206	0
	1964	104,310	149,906	0	0	104,310	149,906	0	0	0	495	0
	1969	124,725	175,800	0	0	124,725	175,800	0	0	0	565	150
	1974	130,420	184,354	0	0	130,420	184,354	0	0	0	724	350
	1979	134,050	160,365	0	0	134,050	160,365	0	0	0	788	3,790
	1984	114,000	105,924	0	0	114,000	105,924	0	0	0	750	5,575
CASS	1958	29	16	29	16	0	0	0	0	0	0	29
	1964	130	62	130	62	0	0	0	0	0	0	130
	1969	100	50	100	50	0	0	0	0	0	0	100
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
CASTRO	1958	401,670	354,475	0	0	401,670	354,475	0	0	0	2,600	0
	1964	406,500	634,300	0	0	406,500	634,300	0	0	0	3,150	1,000
	1969	411,500	548,634	0	0	411,500	548,634	0	0	0	3,350	480
	1974	408,948	546,160	0	0	408,948	546,160	0	0	0	3,950	4,900
	1979	368,650	411,731	0	0	368,650	411,731	0	0	0	3,950	16,150
	1984	231,657	321,357	0	0	231,657	321,357	0	0	0	3,760	29,494
CHAMBERS	1958	39,273	117,819	36,339	109,017	0	0	2,934	8,802	75	4	0
	1964	45,315	113,262	45,315	113,262	0	0	0	0	0	0	15
	1969	51,383	128,457	51,383	128,457	0	0	0	0	0	4	0
	1974	50,105	125,262	50,105	125,262	0	0	0	0	0	4	0
	1979	53,090	106,180	53,090	106,180	0	0	0	0	0	0	0
	1984	32,393	113,091	32,308	112,878	85	213	0	0	0	1	80

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS	
	YEAR	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
CHEROKEE	1958	580	152	580	152	0	0	0	0	0	0	580
	1964	660	147	580	116	80	31	0	0	0	2	660
	1969	202	121	170	87	32	34	0	0	0	6	109
	1974	123	70	18	3	40	13	65	54	50	2	118
	1979	131	152	66	22	0	0	65	130	50	1	131
	1984	274	658	185	434	24	8	65	217	50	5	246
CHILDRESS	1958	7,500	12,499	0	0	7,500	12,499	0	0	0	91	700
	1964	11,356	17,261	0	0	11,356	17,261	0	0	0	137	1,976
	1969	11,601	8,903	0	0	11,601	8,903	0	0	0	142	2,680
	1974	12,033	9,383	0	0	12,033	9,383	0	0	0	145	3,167
	1979	11,746	9,747	0	0	11,746	9,747	0	0	0	150	5,077
	1984	10,770	10,002	0	0	10,770	10,002	0	0	0	130	3,755
CLAY	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	155	215	20	30	135	185	0	0	0	10	155
	1969	190	330	35	70	155	260	0	0	0	8	190
	1974	345	543	175	240	170	303	0	0	0	8	345
	1979	469	317	225	156	244	162	0	0	0	10	469
	1984	644	441	350	215	294	226	0	0	0	19	594
COCHRAN	1958	65,600	108,784	0	0	65,600	108,784	0	0	0	1,200	46,000
	1964	88,600	125,266	0	0	88,600	125,266	0	0	0	1,375	61,100
	1969	84,600	65,312	0	0	84,600	65,312	0	0	0	1,543	77,400
	1974	104,474	85,564	0	0	104,474	85,564	0	0	0	1,586	94,806
	1979	105,195	28,095	0	0	105,195	28,095	0	0	0	1,647	104,318
	1984	105,512	73,917	0	0	105,512	73,917	0	0	0	1,540	104,635
COKE	1958	173	219	141	176	32	43	0	0	0	3	0
	1964	639	931	639	931	0	0	0	0	0	2	358
	1969	718	1,306	555	1,128	163	178	0	0	0	3	323
	1974	497	766	477	746	20	20	0	0	0	5	477
	1979	316	554	88	132	228	422	0	0	0	7	316
	1984	310	513	0	0	310	513	0	0	0	7	75
COLEMAN	1958	350	242	350	242	0	0	0	0	0	0	190
	1964	439	830	439	830	0	0	0	0	0	0	439
	1969	1,238	1,407	1,238	1,407	0	0	0	0	0	0	1,068
	1974	2,147	2,836	2,147	2,836	0	0	0	0	0	0	1,836
	1979	2,420	3,609	2,420	3,609	0	0	0	0	0	0	2,149
	1984	2,219	2,064	2,219	2,064	0	0	0	0	0	0	2,083



TABLE I.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT		
COOKE	1958	0	0	0	0	0	0	0	0	0	0
	1964	288	187	132	66	156	121	0	0	4	256
	1969	397	217	168	84	115	47	86	50	9	367
	1974	379	169	168	81	131	55	33	60	12	349
	1979	384	120	159	60	225	60	0	0	7	194
1984	540	424	50	17	306	193	184	215	20	9	450
CORYELL	1958	355	185	345	180	10	5	0	0	1	115
	1964	645	331	635	324	10	7	0	0	1	300
	1969	665	700	640	675	25	25	0	0	1	465
	1974	665	609	640	588	25	21	0	0	1	465
	1979	490	314	490	314	0	0	0	0	1	340
1984	310	338	300	325	10	13	0	0	2	150	
COTTLE	1958	11,973	18,385	0	0	11,973	18,385	0	0	125	9,075
	1964	13,250	13,688	0	0	13,250	13,688	0	0	156	10,000
	1969	5,450	5,463	0	0	5,450	5,463	0	0	130	2,610
	1974	6,800	4,683	0	0	6,800	4,683	0	0	135	2,920
	1979	1,455	1,298	0	0	1,455	1,298	0	0	135	963
1984	1,712	1,913	20	5	1,632	1,758	60	150	10	1,373	
CRANE	1958	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0
1984	115	90	0	0	115	90	0	0	20	111	
CROCKETT	1958	805	1,964	0	0	765	1,839	40	125	50	0
	1964	1,320	3,197	0	0	1,320	3,197	0	0	16	1,010
	1969	1,718	3,167	0	0	1,718	3,167	0	0	19	1,439
	1974	908	2,090	0	0	908	2,090	0	0	20	888
	1979	909	1,305	0	0	909	1,305	0	0	22	909
1984	450	338	0	0	450	338	0	0	8	450	
CROSBY	1958	200,000	139,148	0	0	200,000	139,148	0	0	1,551	5,000
	1964	168,400	188,448	0	0	168,400	188,448	0	0	2,050	2,120
	1969	167,350	215,809	160	170	165,990	214,106	1,200	1,533	10	3,145
	1974	164,855	232,800	20	13	163,315	230,814	1,520	1,973	50	5,690
	1979	52,800	43,088	0	0	2,072	2,380	50,728	40,708	55	2,124
1984	158,618	123,113	0	0	142,944	113,643	15,674	9,469	50	10,345	

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
CULBERSON	1958	9,905	29,176	0	0	9,905	29,176	0	0	0	86	150
	1964	10,480	24,512	0	0	10,480	24,512	0	0	0	124	400
	1969	8,974	31,861	0	0	8,974	31,861	0	0	0	110	400
	1974	8,429	28,935	0	0	8,429	28,935	0	0	0	122	560
	1979	21,105	46,885	0	0	21,105	46,885	0	0	0	182	13,619
	1984	9,819	20,051	0	0	9,819	20,051	0	0	0	175	3,069
DALLAM	1958	42,225	49,874	0	0	42,225	49,874	0	0	0	271	660
	1964	76,970	120,083	0	0	76,970	120,083	0	0	0	342	9,620
	1969	128,600	160,985	0	0	128,600	160,985	0	0	0	712	49,902
	1974	155,905	243,520	0	0	155,905	243,520	0	0	0	900	93,120
	1979	220,515	323,345	0	0	220,515	323,345	0	0	0	1,200	148,950
	1984	213,375	285,751	0	0	213,375	285,751	0	0	0	1,200	188,502
DALLAS	1958	1,765	977	1,765	977	0	0	0	0	0	0	1,365
	1964	1,495	563	1,045	412	0	0	450	151	70	2	1,045
	1969	240	240	165	157	75	83	0	0	0	6	75
	1974	265	248	120	118	145	130	0	0	0	8	195
	1979	0	0	0	0	0	0	0	0	0	6	0
	1984	80	115	40	55	40	60	0	0	0	6	20
DAWSON	1958	70,000	105,116	0	0	70,000	105,116	0	0	0	570	70,000
	1964	100,000	148,783	0	0	100,000	148,783	0	0	0	1,400	99,500
	1969	74,570	42,192	30	23	74,540	42,169	0	0	0	1,500	74,010
	1974	52,020	31,245	0	0	52,020	31,245	0	0	0	1,520	52,020
	1979	56,700	9,700	0	0	56,700	9,700	0	0	0	1,540	56,700
	1984	32,390	21,362	0	0	32,390	21,362	0	0	0	1,600	32,390
DEAF SMITH	1958	282,660	407,293	0	0	282,660	407,293	0	0	0	2,300	0
	1964	304,400	469,145	0	0	304,400	469,145	0	0	0	2,300	300
	1969	275,100	481,525	0	0	275,100	481,525	0	0	0	2,800	200
	1974	310,000	514,799	0	0	310,000	514,799	0	0	0	3,522	4,400
	1979	294,500	315,706	0	0	294,500	315,706	0	0	0	3,722	18,750
	1984	285,530	297,892	0	0	285,530	297,892	0	0	0	3,609	15,240
DELTA	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	1,300	3,900	1,300	3,900	0	0	0	0	0	0	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
DENTON	1958	2,165	1,325	2,165	1,325	0	0	0	0	0	0	1,165
	1964	390	290	390	290	0	0	0	0	0	0	390
	1969	410	179	310	121	100	58	0	0	0	1	410
	1974	360	154	30	8	330	146	0	0	0	6	360
	1979	470	208	30	8	440	201	0	0	0	10	470
	1984	570	502	0	0	570	502	0	0	0	11	570
DEWITT	1958	770	1,005	340	446	430	559	0	0	0	13	480
	1964	1,996	1,953	181	220	1,787	1,710	28	23	4	28	1,738
	1969	891	789	157	225	734	564	0	0	0	25	839
	1974	1,256	987	157	166	1,099	821	0	0	0	30	1,204
	1979	440	147	60	20	380	127	0	0	0	30	440
	1984	445	148	60	20	385	128	0	0	0	33	250
DICKENS	1958	10,504	10,504	0	0	10,504	10,504	0	0	0	453	420
	1964	11,994	11,994	0	0	11,994	11,994	0	0	0	472	1,925
	1969	19,047	16,916	410	385	18,337	16,281	300	250	40	550	7,390
	1974	19,137	15,288	320	267	18,817	15,021	0	0	0	550	4,240
	1979	12,957	3,279	420	112	12,537	3,167	0	0	0	550	7,220
	1984	9,472	5,816	1,123	468	7,859	5,058	490	290	60	184	4,746
DIMMIT	1958	21,100	26,213	0	0	13,950	18,303	7,150	7,910	50	362	433
	1964	19,718	28,241	0	0	12,085	14,873	7,633	13,368	38	382	790
	1969	28,289	34,862	1,002	1,440	18,423	20,785	8,864	12,637	48	65	728
	1974	23,576	33,522	315	394	14,744	18,781	8,517	14,347	45	65	2,292
	1979	14,093	21,558	6,021	9,029	5,722	9,078	2,350	3,451	20	104	698
	1984	11,169	18,873	1,250	617	6,696	12,472	3,223	5,785	10	104	1,038
DONLEY	1958	3,460	2,156	0	0	3,460	2,156	0	0	0	20	2,110
	1964	12,600	21,187	0	0	12,600	21,187	0	0	0	150	6,720
	1969	16,679	11,786	0	0	16,679	11,786	0	0	0	235	10,617
	1974	18,663	26,020	0	0	18,663	26,020	0	0	0	244	11,992
	1979	17,128	8,379	0	0	17,128	8,379	0	0	0	170	11,166
	1984	11,795	6,715	0	0	11,795	6,715	0	0	0	160	7,886
DUVAL	1958	305	142	0	0	305	142	0	0	0	4	305
	1964	1,014	958	0	0	1,014	958	0	0	0	7	1,014
	1969	4,111	2,369	20	10	4,091	2,359	0	0	0	32	4,111
	1974	3,845	2,909	0	0	3,845	2,909	0	0	0	33	3,845
	1979	4,752	2,208	0	0	4,752	2,208	0	0	0	51	4,432
	1984	2,755	2,517	0	0	2,755	2,517	0	0	0	51	2,755

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
EASTLAND	1958	265	163	31	16	234	147	0	0	0	13	265
	1964	978	831	218	97	700	709	60	25	10	33	978
	1969	10,045	10,007	1,240	1,308	6,927	6,838	1,878	1,861	40	600	10,045
	1974	10,386	10,459	1,330	1,403	7,178	7,178	1,878	1,878	39	650	10,386
	1979	12,051	13,088	1,905	2,096	8,130	8,808	2,016	2,184	38	665	12,051
	1984	11,939	11,939	1,765	1,765	8,158	8,158	2,016	2,016	43	685	11,939
ECTOR	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	2,200	5,712	0	0	2,200	5,712	0	0	0	200	2,200
	1969	4,100	3,708	0	0	3,500	2,716	600	992	90	300	4,100
	1974	2,980	3,607	0	0	2,640	3,308	340	299	90	500	2,980
	1979	3,280	3,693	0	0	2,910	3,374	370	319	90	600	3,280
	1984	2,367	5,527	0	0	1,757	3,448	610	2,079	90	650	1,723
EDWARDS	1958	277	210	277	210	0	0	0	0	0	0	277
	1964	325	326	325	326	0	0	0	0	0	0	315
	1969	310	248	310	248	0	0	0	0	0	0	265
	1974	375	315	225	207	150	108	0	0	0	3	275
	1979	325	282	175	173	150	108	0	0	0	3	225
	1984	53	177	53	177	0	0	0	0	0	0	53
ELLIS	1958	270	136	235	118	35	18	0	0	0	1	35
	1964	0	0	0	0	0	0	0	0	0	1	0
	1969	58	28	58	28	0	0	0	0	0	5	58
	1974	0	0	0	0	0	0	0	0	0	5	0
	1979	0	0	0	0	0	0	0	0	0	5	0
	1984	0	0	0	0	0	0	0	0	0	0	0
EL PASO	1958	55,551	193,002	0	0	976	4,681	54,575	188,321	95	547	0
	1964	55,000	140,681	0	0	1,600	4,828	53,400	135,853	15	550	10
	1969	57,919	206,014	0	0	1,193	4,685	56,726	201,329	99	593	300
	1974	56,375	179,310	0	0	1,180	4,055	55,195	175,255	99	601	448
	1979	53,810	165,075	0	0	510	1,760	53,300	163,315	99	590	90
	1984	47,526	159,709	0	0	215	833	47,311	158,876	99	590	40
ERATH	1958	1,984	2,293	576	538	1,408	1,755	0	0	0	45	1,962
	1964	3,174	2,908	1,077	1,145	1,879	1,542	218	221	29	46	3,174
	1969	6,453	6,831	1,680	1,971	4,295	4,346	478	514	61	221	6,453
	1974	12,524	12,861	2,846	2,340	8,457	9,509	1,221	1,012	49	218	12,509
	1979	12,524	11,987	2,782	2,738	8,497	8,067	1,245	1,182	48	218	12,509
	1984	14,095	12,534	2,552	1,485	10,270	9,983	1,273	1,066	48	285	13,758



TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
FALLS	1958	5,525	4,574	1,000	929	3,995	3,198	530	447	95	100	995
	1964	6,413	8,250	1,710	1,312	4,173	6,278	530	660	95	108	1,170
	1969	7,606	6,906	2,465	2,144	5,141	4,762	0	0	0	107	3,006
	1974	7,606	6,970	2,465	2,129	5,141	4,841	0	0	0	107	3,006
	1979	3,946	2,649	0	0	3,946	2,649	0	0	0	104	496
	1984	6,635	6,947	2,010	2,247	4,625	4,700	0	0	0	110	860
FANNIN	1958	1,445	961	1,295	860	90	61	60	40	50	7	1,295
	1964	1,780	1,638	1,070	1,093	390	311	320	234	50	14	1,680
	1969	1,245	811	812	559	220	110	213	142	25	10	1,023
	1974	935	335	470	172	270	98	195	65	25	12	735
	1979	3,148	787	3,148	787	0	0	0	0	0	18	3,148
	1984	4,478	3,113	3,336	2,372	1,142	740	0	0	0	20	3,648
FAYETTE	1958	1,180	2,980	980	2,705	150	208	50	67	50	6	580
	1964	1,716	1,910	1,261	1,315	365	430	90	165	2	12	1,433
	1969	1,613	1,281	1,166	900	230	205	217	176	20	21	1,477
	1974	615	301	298	139	172	90	145	72	14	25	615
	1979	2,229	925	1,075	398	1,009	455	145	73	13	28	2,084
	1984	1,309	457	993	331	221	111	95	16	60	25	1,136
FISHER	1958	2,350	1,958	0	0	2,350	1,958	0	0	0	76	0
	1964	4,140	7,777	0	0	4,140	7,777	0	0	0	144	3,640
	1969	3,080	2,675	795	552	2,070	1,825	215	298	54	160	1,330
	1974	3,305	2,762	815	384	1,880	1,851	610	527	54	170	1,370
	1979	2,715	2,519	240	167	1,865	1,826	610	527	55	170	1,330
	1984	1,333	1,977	30	50	1,128	1,813	175	113	90	190	1,150
FLOYD	1958	300,250	188,592	0	0	300,250	188,592	0	0	0	2,500	0
	1964	321,910	256,026	0	0	321,910	256,026	0	0	0	3,500	320
	1969	315,000	317,646	0	0	315,000	317,646	0	0	0	3,950	350
	1974	306,320	287,400	0	0	306,320	287,400	0	0	0	4,100	900
	1979	277,295	176,968	0	0	277,295	176,968	0	0	0	4,394	4,002
	1984	207,600	184,504	0	0	188,400	174,904	19,200	9,600	50	4,500	3,255
FOARD	1958	1,581	2,685	0	0	1,581	2,685	0	0	0	66	1,581
	1964	2,089	2,160	0	0	2,089	2,160	0	0	0	88	2,089
	1969	2,300	2,687	0	0	2,300	2,687	0	0	0	95	2,300
	1974	2,980	3,533	0	0	2,980	3,533	0	0	0	52	2,980
	1979	4,820	5,300	0	0	4,820	5,300	0	0	0	84	4,820
	1984	4,220	4,080	0	0	4,220	4,080	0	0	0	84	4,220

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
FORT BEND	1958	27,362	65,193	7,022	20,249	19,140	44,194	1,200	750	60	74	600
	1964	26,713	51,075	7,483	16,910	18,030	33,148	1,200	1,017	60	79	100
	1969	33,540	85,869	8,800	24,483	24,740	61,386	0	0	0	110	450
	1974	27,150	68,491	7,650	21,908	19,500	46,583	0	0	0	120	450
	1979	26,627	55,254	6,856	17,140	19,771	38,114	0	0	0	120	1,070
	1984	25,201	86,108	6,987	29,622	18,214	56,487	0	0	0	130	1,775
FRANKLIN	1958	40	20	40	20	0	0	0	0	0	0	40
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	35	9	20	7	15	2	0	0	0	1	35
	1974	0	0	0	0	0	0	0	0	0	1	0
	1979	250	63	250	63	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
FREESTONE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
FRIO	1958	24,200	30,373	0	0	24,200	30,373	0	0	0	135	18,650
	1964	44,595	56,300	0	0	44,595	56,300	0	0	0	217	35,977
	1969	54,474	74,327	40	27	54,434	74,300	0	0	0	280	43,864
	1974	61,484	72,794	40	27	61,444	72,767	0	0	0	295	53,394
	1979	68,404	76,685	40	27	67,589	75,583	775	1,075	60	305	60,234
	1984	60,285	90,007	340	453	58,970	88,051	975	1,503	18	305	53,165
GAINES	1958	108,000	153,467	0	0	108,000	153,467	0	0	0	900	101,000
	1964	225,000	285,084	0	0	225,000	285,084	0	0	0	1,600	205,000
	1969	319,920	446,885	0	0	319,820	446,835	100	50	50	2,300	313,920
	1974	350,500	310,826	0	0	350,500	310,826	0	0	0	2,850	350,500
	1979	359,670	413,032	0	0	359,670	413,032	0	0	0	3,300	359,670
	1984	261,920	282,872	0	0	261,920	282,872	0	0	0	2,905	261,920
GALVESTON	1958	10,850	37,975	10,850	37,975	0	0	0	0	0	2	0
	1964	12,200	29,848	11,990	29,735	210	113	0	0	0	5	150
	1969	6,571	19,762	6,121	19,383	450	379	0	0	0	6	0
	1974	6,850	17,508	6,500	17,333	350	175	0	0	0	2	0
	1979	11,143	24,009	11,073	23,992	70	18	0	0	0	2	0
	1984	5,337	18,335	5,207	18,225	130	110	0	0	0	5	60

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
GARZA	1958	14,000	15,000	0	0	14,000	15,000	0	0	0	540	0
	1964	14,843	18,014	0	0	14,843	18,014	0	0	0	580	100
	1969	15,513	16,484	90	94	15,423	16,390	0	0	0	300	784
	1974	12,000	15,667	0	0	12,000	15,667	0	0	0	275	580
	1979	11,900	11,894	0	0	11,900	11,894	0	0	0	600	480
	1984	6,105	5,125	0	0	6,105	5,125	0	0	0	600	340
GILLESPIE	1958	1,500	1,500	1,150	1,150	350	350	0	0	0	9	1,500
	1964	1,544	1,812	1,064	1,216	480	596	0	0	0	19	1,544
	1969	1,360	1,359	1,002	1,019	358	340	0	0	0	20	1,360
	1974	1,721	832	981	461	740	371	0	0	0	30	1,721
	1979	1,176	1,434	356	529	820	904	0	0	0	36	796
	1984	1,201	2,039	175	153	1,026	1,887	0	0	0	40	700
GLASSCOCK	1958	10,800	11,597	0	0	10,800	11,597	0	0	0	94	1,850
	1964	17,540	24,577	0	0	17,540	24,577	0	0	0	327	3,047
	1969	23,139	34,185	0	0	23,139	34,185	0	0	0	468	4,159
	1974	28,186	55,103	0	0	28,186	55,103	0	0	0	873	4,793
	1979	33,614	38,956	0	0	33,614	38,956	0	0	0	950	1,834
	1984	31,854	41,647	0	0	31,854	41,647	0	0	0	1,150	1,961
GOLIAD	1958	1,810	451	1,365	342	315	80	130	29	50	5	767
	1964	3,408	2,905	2,125	1,826	1,043	873	240	206	50	7	1,808
	1969	2,695	1,276	2,153	1,076	542	200	0	0	0	9	542
	1974	2,031	955	1,552	776	479	179	0	0	0	9	379
	1979	0	0	0	0	0	0	0	0	0	9	0
	1984	992	327	912	304	80	23	0	0	0	3	430
GONZALES	1958	2,489	2,379	2,107	2,103	382	276	0	0	0	7	1,912
	1964	2,378	2,588	1,090	1,196	1,288	1,392	0	0	0	19	1,833
	1969	2,839	2,623	1,145	972	1,683	1,641	11	10	50	25	2,328
	1974	2,330	2,107	560	527	1,720	1,538	50	42	50	35	2,150
	1979	2,060	645	660	187	1,350	442	50	17	50	37	1,880
	1984	2,395	1,636	860	498	1,405	1,008	130	130	38	45	2,265
GRAY	1958	8,880	8,356	0	0	8,880	8,356	0	0	0	49	620
	1964	16,790	22,869	0	0	16,010	21,654	780	1,215	35	119	1,630
	1969	29,252	39,190	0	0	29,252	39,190	0	0	0	198	3,116
	1974	33,559	45,719	0	0	33,559	45,719	0	0	0	222	3,454
	1979	31,683	27,546	0	0	31,683	27,546	0	0	0	226	7,164
	1984	18,423	16,293	0	0	18,423	16,293	0	0	0	220	4,322

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TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
GRAYSON	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	727	482	345	234	382	248	0	0	0	10	727
	1969	749	580	176	137	365	279	208	164	75	21	616
	1974	1,973	1,741	709	630	1,056	938	208	173	75	24	1,973
	1979	2,427	1,149	560	227	1,476	727	391	196	50	26	2,377
	1984	2,232	1,570	524	319	1,589	1,166	119	85	42	29	2,032
GREGG	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	10	7	10	7	0	0	0	0	0	0	10
	1969	10	3	10	3	0	0	0	0	0	0	10
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
GRIMES	1958	774	740	375	375	399	365	0	0	0	5	449
	1964	1,219	855	804	594	415	261	0	0	0	6	819
	1969	1,325	1,012	775	612	550	400	0	0	0	8	625
	1974	220	115	0	0	220	115	0	0	0	28	220
	1979	580	145	0	0	580	145	0	0	0	28	580
	1984	624	479	0	0	624	479	0	0	0	8	620
GUADALUPE	1958	2,049	2,142	868	750	1,181	1,392	0	0	0	24	1,351
	1964	2,336	2,237	910	818	1,426	1,419	0	0	0	33	1,827
	1969	2,359	1,796	1,042	825	1,317	971	0	0	0	41	1,864
	1974	3,599	2,725	2,187	1,645	1,412	1,080	0	0	0	50	3,039
	1979	4,302	2,343	2,393	1,013	1,909	1,330	0	0	0	53	3,531
	1984	5,728	7,443	2,520	3,487	3,208	3,956	0	0	0	35	5,080
HALE	1958	533,455	575,752	0	0	533,455	575,752	0	0	0	4,500	1,490
	1964	461,800	1,105,616	0	0	461,800	1,105,616	0	0	0	4,378	8,000
	1969	352,520	680,167	0	0	352,520	680,167	0	0	0	4,400	13,000
	1974	431,495	826,357	0	0	430,595	824,614	900	1,743	20	4,600	18,000
	1979	386,891	356,949	0	0	0	0	386,891	356,949	25	4,463	28,000
	1984	354,900	526,631	0	0	354,000	525,273	900	1,358	20	4,700	51,500
HALL	1958	8,827	12,079	0	0	8,827	12,079	0	0	0	120	8,177
	1964	19,729	26,647	0	0	19,729	26,647	0	0	0	187	19,029
	1969	22,271	23,171	0	0	22,271	23,171	0	0	0	212	21,611
	1974	28,018	25,213	0	0	28,018	25,213	0	0	0	235	27,238
	1979	23,401	17,712	0	0	23,401	17,712	0	0	0	235	23,191
	1984	17,094	12,324	0	0	17,094	12,324	0	0	0	239	16,450

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT	NUMBER	ACRES
HAMILTON	1958	900	485	545	293	20	9	335	183	58	9	735
	1964	1,705	693	415	168	0	0	1,290	525	71	14	1,255
	1969	1,925	1,882	1,390	1,380	265	247	270	255	56	20	1,720
	1974	2,775	1,710	2,140	1,303	365	229	270	178	56	20	2,570
	1979	550	290	270	150	190	95	90	45	50	15	550
	1984	1,266	2,302	480	880	590	769	196	653	50	20	1,051
HANSFORD	1958	69,150	80,717	0	0	69,150	80,717	0	0	0	231	0
	1964	164,000	197,062	0	0	164,000	197,062	0	0	0	652	400
	1969	239,450	357,867	0	0	239,450	357,867	0	0	0	1,000	1,280
	1974	252,450	409,471	0	0	251,810	408,831	640	640	20	1,160	1,320
	1979	251,750	390,678	0	0	251,110	390,038	640	640	20	1,150	4,776
	1984	148,306	252,284	0	0	148,306	252,284	0	0	0	1,200	7,880
HARDEMAN	1958	10,000	12,000	0	0	10,000	12,000	0	0	0	300	750
	1964	15,110	22,932	0	0	15,110	22,932	0	0	0	280	1,290
	1969	15,150	20,158	130	238	15,020	19,920	0	0	0	285	3,340
	1974	15,200	17,411	130	173	15,070	17,238	0	0	0	286	3,440
	1979	4,380	1,418	180	60	4,200	1,358	0	0	0	295	890
	1984	6,671	6,592	120	170	6,551	6,422	0	0	0	295	1,505
HARDIN	1958	1,300	2,167	0	0	1,300	2,167	0	0	0	15	0
	1964	1,218	2,436	0	0	1,218	2,436	0	0	0	6	0
	1969	2,360	4,720	0	0	2,360	4,720	0	0	0	18	0
	1974	2,473	5,770	0	0	2,473	5,770	0	0	0	20	0
	1979	1,731	3,174	0	0	1,731	3,174	0	0	0	23	0
	1984	430	1,141	0	0	430	1,141	0	0	0	14	15
HARRIS	1958	35,350	103,633	4,000	12,000	31,350	91,633	0	0	0	320	150
	1964	38,050	85,410	3,650	9,065	34,400	76,345	0	0	0	336	0
	1969	36,619	121,527	4,339	14,824	32,280	106,703	0	0	0	200	448
	1974	31,932	90,941	2,800	8,400	29,132	82,541	0	0	0	190	0
	1979	22,844	49,933	1,977	4,943	18,953	40,525	1,914	4,466	50	140	405
	1984	16,375	33,484	585	1,755	15,790	31,729	0	0	0	184	2,000
HARRISON	1958	65	21	5	1	60	20	0	0	0	7	62
	1964	205	110	165	90	40	20	0	0	0	6	205
	1969	60	47	54	45	6	2	0	0	0	7	60
	1974	60	47	54	45	6	2	0	0	0	7	60
	1979	5	3	0	0	5	3	0	0	0	7	5
	1984	48	21	8	1	40	20	0	0	0	7	48

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
HARTLEY	1958	18,330	19,822	0	0	18,330	19,822	0	0	0	75	0
	1964	47,365	75,312	0	0	47,365	75,312	0	0	0	170	5,620
	1969	121,990	146,467	0	0	121,990	146,467	0	0	0	501	12,455
	1974	140,000	187,972	0	0	140,000	187,972	0	0	0	850	35,300
	1979	200,000	251,417	0	0	200,000	251,417	0	0	0	864	65,000
	1984	200,000	219,511	0	0	200,000	219,511	0	0	0	865	97,910
HASKELL	1958	15,755	29,533	0	0	15,755	29,533	0	0	0	528	5,050
	1964	48,310	66,247	90	155	48,200	66,075	20	17	20	904	28,650
	1969	37,410	38,070	420	374	36,990	37,696	0	0	0	900	30,631
	1974	33,915	41,714	40	60	33,860	41,639	15	15	50	900	18,680
	1979	34,020	38,288	340	275	33,680	38,013	0	0	0	910	18,600
	1984	24,644	21,026	0	0	24,644	21,026	0	0	0	920	20,676
HAYS	1958	1,526	2,063	861	1,197	665	866	0	0	0	10	1,301
	1964	2,187	2,457	1,011	1,132	1,176	1,325	0	0	0	16	1,692
	1969	2,367	2,724	779	837	1,588	1,887	0	0	0	16	2,049
	1974	1,719	1,725	842	822	877	903	0	0	0	16	1,550
	1979	891	572	682	455	209	118	0	0	0	10	603
	1984	1,025	876	864	726	161	150	0	0	0	6	757
HEMPHILL	1958	180	206	0	0	180	206	0	0	0	6	180
	1964	1,249	1,693	0	0	1,249	1,693	0	0	0	19	1,169
	1969	1,921	2,506	0	0	1,921	2,506	0	0	0	31	1,741
	1974	3,678	5,180	0	0	3,478	4,997	200	183	20	38	3,498
	1979	4,357	6,899	0	0	4,117	6,675	240	224	40	59	4,357
	1984	3,201	5,260	0	0	2,961	5,060	240	200	40	50	3,201
HENDERSON	1958	1,695	1,348	1,625	1,287	70	61	0	0	0	2	1,695
	1964	685	661	375	351	50	50	260	260	33	6	685
	1969	1,032	342	872	290	160	52	0	0	0	5	1,032
	1974	0	0	0	0	0	0	0	0	0	7	0
	1979	210	35	0	0	210	35	0	0	0	7	0
	1984	13	29	0	0	0	0	13	29	30	7	5
HIDALGO	1958	419,900	596,999	354,000	492,449	5,800	9,919	60,100	94,631	65	359	5,100
	1964	466,471	507,170	354,571	344,653	2,500	3,000	109,400	159,517	50	540	8,400
	1969	450,292	608,865	365,292	502,865	5,000	6,000	80,000	100,000	75	400	6,200
	1974	443,650	602,650	378,650	513,317	5,000	6,333	60,000	83,000	85	300	6,000
	1979	438,650	552,175	372,650	472,425	6,000	6,750	60,000	73,000	95	100	10,000
	1984	399,563	552,313	339,063	466,063	500	250	60,000	86,000	90	50	8,000

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
HILL	1958	200	170	200	170	0	0	0	0	0	0	200
	1964	455	421	350	368	105	53	0	0	0	16	390
	1969	1,120	808	540	450	580	358	0	0	0	15	1,120
	1974	1,140	562	580	324	560	238	0	0	0	15	1,140
	1979	800	101	390	33	410	68	0	0	0	15	800
	1984	0	0	0	0	0	0	0	0	0	0	0
HOCKLEY	1958	160,000	165,014	0	0	160,000	165,014	0	0	0	4,700	8,000
	1964	194,400	397,983	0	0	194,400	397,983	0	0	0	5,088	49,000
	1969	194,225	214,696	0	0	194,225	214,696	0	0	0	5,835	62,840
	1974	223,406	345,502	0	0	223,406	345,502	0	0	0	6,009	85,585
	1979	100,500	45,017	0	0	100,500	45,017	0	0	0	6,165	91,964
	1984	150,900	100,958	0	0	150,740	100,852	160	107	70	6,295	101,420
HOOD	1958	1,250	976	1,150	893	5	3	95	80	69	6	1,050
	1964	900	853	900	853	0	0	0	0	0	1	400
	1969	1,345	795	1,295	762	0	0	50	33	10	1	910
	1974	1,000	500	960	480	40	20	0	0	0	2	860
	1979	3,748	1,874	3,452	1,726	185	93	111	56	50	4	3,488
	1984	3,423	5,254	3,265	5,096	93	93	65	65	25	9	3,165
HOPKINS	1958	170	81	95	29	25	10	50	42	4	3	170
	1964	155	101	65	33	40	30	50	38	4	2	155
	1969	127	72	127	72	0	0	0	0	0	2	127
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	137	58	137	58	0	0	0	0	0	0	136
HOUSTON	1958	5,100	2,449	4,550	2,174	250	125	300	150	50	3	3,075
	1964	2,588	1,228	2,488	1,178	0	0	100	50	25	3	1,798
	1969	4,520	2,062	4,420	2,012	0	0	100	50	25	3	3,060
	1974	4,340	1,887	3,010	1,378	0	0	1,330	509	43	6	4,280
	1979	77	19	77	19	0	0	0	0	0	6	77
	1984	353	161	254	112	5	2	94	47	50	8	171
HOWARD	1958	1,000	1,533	0	0	1,000	1,533	0	0	0	25	1,000
	1964	1,200	2,167	0	0	1,200	2,167	0	0	0	45	1,000
	1969	1,966	1,379	96	124	1,870	1,255	0	0	0	50	1,266
	1974	2,446	2,504	96	144	2,350	2,360	0	0	0	60	1,746
	1979	791	856	16	24	775	832	0	0	0	60	781
	1984	506	613	51	112	455	502	0	0	0	60	506

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FOOT	SURFACE SOURCE- PERCENT		
HUDSPETH	1958	27,844	93,327	0	0	20,700	70,992	7,144	22,335	33	219	1,000
	1964	40,670	114,969	0	0	30,970	98,760	9,700	16,209	12	271	840
	1969	35,927	137,899	100	250	21,954	89,551	13,873	48,098	95	307	40
	1974	45,472	172,741	150	250	33,452	135,905	11,870	36,586	95	332	1,600
	1979	50,591	176,609	0	0	40,081	148,744	10,510	27,866	95	335	2,730
	1984	37,491	158,055	220	393	19,491	103,175	17,780	54,487	95	305	4,680
HUNT	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	197	147	173	135	24	12	0	0	0	2	197
	1969	0	0	0	0	0	0	0	0	0	1	0
	1974	15	7	15	7	0	0	0	0	0	1	15
	1979	155	103	155	103	0	0	0	0	0	0	155
	1984	155	103	155	103	0	0	0	0	0	0	155
HUTCHINSON	1958	35,010	43,495	0	0	35,010	43,495	0	0	0	97	0
	1964	40,780	53,175	0	0	40,780	53,175	0	0	0	202	200
	1969	62,000	78,200	0	0	62,000	78,200	0	0	0	275	630
	1974	69,954	87,558	0	0	69,954	87,558	0	0	0	325	1,280
	1979	80,389	102,539	0	0	80,389	102,539	0	0	0	375	1,100
	1984	44,895	60,142	0	0	44,895	60,142	0	0	0	270	1,408
IRION	1958	1,550	2,457	1,135	1,900	400	522	15	35	73	4	60
	1964	2,130	3,526	1,835	3,073	236	385	59	68	32	10	78
	1969	2,292	3,325	1,674	2,318	559	894	59	113	40	13	184
	1974	2,427	2,479	1,973	1,938	404	516	50	25	50	15	247
	1979	1,973	3,348	1,556	2,882	417	466	0	0	0	14	586
	1984	1,673	2,660	1,359	2,281	314	379	0	0	0	16	562
JACK	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
JACKSON	1958	28,165	97,808	0	0	26,245	91,858	1,920	5,950	26	160	102
	1964	28,481	89,327	85	42	26,797	84,221	1,599	5,064	29	410	105
	1969	33,750	116,417	0	0	33,096	114,128	654	2,289	63	535	0
	1974	41,784	125,506	563	1,782	40,856	122,568	365	1,156	50	585	0
	1979	41,489	131,382	0	0	38,209	120,995	3,280	10,387	27	605	176
	1984	30,685	96,669	0	0	28,265	89,006	2,420	7,663	24	645	250



TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
JASPER	1958	180	168	50	33	80	120	50	15	90	3	100
	1964	87	159	10	5	77	154	0	0	0	2	10
	1969	100	67	100	67	0	0	0	0	0	2	100
	1974	120	40	120	40	0	0	0	0	0	0	120
	1979	135	120	35	70	0	0	100	50	25	2	135
	1984	135	172	35	105	0	0	100	67	25	2	135
JEFF DAVIS	1958	1,370	3,509	0	0	990	2,809	380	700	50	26	0
	1964	1,310	2,895	0	0	910	2,190	400	705	50	26	0
	1969	846	2,235	0	0	729	1,901	117	334	50	0	0
	1974	320	792	10	17	240	608	70	167	50	14	0
	1979	9,433	12,328	0	0	9,433	12,328	0	0	0	36	8,615
	1984	1,976	2,310	25	38	1,951	2,273	0	0	0	54	1,760
JEFFERSON	1958	54,100	162,300	54,100	162,300	0	0	0	0	0	0	0
	1964	60,485	151,212	60,485	151,212	0	0	0	0	0	0	0
	1969	70,970	177,425	70,970	177,425	0	0	0	0	0	0	0
	1974	69,470	173,675	69,470	173,675	0	0	0	0	0	0	0
	1979	64,172	106,953	64,172	106,953	0	0	0	0	0	0	0
	1984	30,830	107,905	30,830	107,905	0	0	0	0	0	0	222
JIM HOGG	1958	290	328	0	0	290	328	0	0	0	5	240
	1964	1,050	1,195	0	0	1,050	1,195	0	0	0	10	1,030
	1969	2,400	1,541	0	0	2,400	1,541	0	0	0	18	2,400
	1974	385	129	0	0	385	129	0	0	0	16	385
	1979	0	0	0	0	0	0	0	0	0	10	0
	1984	450	450	0	0	450	450	0	0	0	12	450
JIM WELLS	1958	2,920	1,014	760	356	1,860	433	300	225	50	28	2,920
	1964	3,141	1,696	768	378	2,073	1,093	300	225	50	38	2,171
	1969	6,385	2,807	80	40	4,805	2,142	1,500	625	50	32	4,885
	1974	6,335	2,961	140	47	6,195	2,914	0	0	0	40	4,475
	1979	6,635	2,931	0	0	6,635	2,931	0	0	0	40	4,855
	1984	5,505	2,648	0	0	5,505	2,648	0	0	0	42	3,865
JOHNSON	1958	250	103	250	103	0	0	0	0	0	0	190
	1964	130	60	130	60	0	0	0	0	0	0	130
	1969	363	217	183	67	180	150	0	0	0	3	363
	1974	0	0	0	0	0	0	0	0	0	3	0
	1979	50	13	0	0	50	13	0	0	0	3	0
	1984	0	0	0	0	0	0	0	0	0	3	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
JONES	1958	2,350	1,829	1,200	1,150	1,150	679	0	0	0	40	300
	1964	5,534	6,776	3,370	4,211	2,164	2,565	0	0	0	58	5,384
	1969	6,200	4,076	2,350	1,533	3,850	2,543	0	0	0	80	2,530
	1974	6,005	4,263	1,280	854	4,005	2,995	720	414	74	160	3,505
	1979	8,970	5,562	4,315	2,142	3,970	3,023	685	397	76	160	3,510
	1984	7,354	4,540	3,835	1,640	3,519	2,900	0	0	0	160	3,719
KARNES	1958	936	528	140	77	796	451	0	0	0	10	856
	1964	1,492	2,178	182	254	1,310	1,924	0	0	0	13	1,310
	1969	1,451	1,098	558	253	893	845	0	0	0	12	1,326
	1974	1,493	4,663	655	1,986	838	2,677	0	0	0	11	1,193
	1979	582	1,220	32	10	550	1,210	0	0	0	11	582
	1984	1,109	1,775	157	107	952	1,668	0	0	0	11	1,104
KAUFMAN	1958	90	20	90	20	0	0	0	0	0	0	30
	1964	510	208	510	208	0	0	0	0	0	0	490
	1969	155	94	155	94	0	0	0	0	0	0	155
	1974	100	42	100	42	0	0	0	0	0	0	100
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	897	943	886	932	11	11	0	0	0	2	892
KENDALL	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	315	250	198	171	117	79	0	0	0	6	307
	1969	571	514	320	267	251	247	0	0	0	11	571
	1974	734	517	437	300	297	217	0	0	0	11	734
	1979	84	100	15	23	69	78	0	0	0	12	50
	1984	114	320	15	38	99	282	0	0	0	12	65
KENEDY	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	400	200	400	200	0	0	0	0	0	0	400
	1974	400	192	400	192	0	0	0	0	0	0	400
	1979	400	158	400	158	0	0	0	0	0	0	400
	1984	0	0	0	0	0	0	0	0	0	0	0
KENT	1958	1,800	1,800	0	0	1,800	1,800	0	0	0	45	1,000
	1964	1,400	1,867	0	0	1,400	1,867	0	0	0	50	1,000
	1969	2,260	2,589	0	0	2,260	2,589	0	0	0	54	2,260
	1974	2,070	2,080	0	0	2,070	2,080	0	0	0	65	1,775
	1979	794	845	0	0	794	845	0	0	0	60	624
	1984	598	902	0	0	598	902	0	0	0	78	454

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
KERR	1958	705	982	408	562	297	420	0	0	0	12	629
	1964	977	1,576	614	968	363	608	0	0	0	10	827
	1969	1,495	1,650	865	981	630	669	0	0	0	14	1,266
	1974	596	406	470	311	126	95	0	0	0	14	500
	1979	921	1,294	670	541	251	753	0	0	0	14	850
	1984	826	2,255	597	1,017	94	158	135	1,080	80	14	762
KIMBLE	1958	1,252	850	1,252	850	0	0	0	0	0	0	920
	1964	1,935	4,992	1,791	4,532	74	210	70	250	50	3	1,459
	1969	2,766	4,494	2,195	3,221	331	615	240	658	50	13	1,831
	1974	3,617	4,619	2,885	2,961	492	1,032	240	626	50	20	2,625
	1979	1,012	513	880	430	132	83	0	0	0	20	648
	1984	1,914	1,328	1,523	1,051	391	277	0	0	0	30	1,292
KING	1958	620	1,033	0	0	620	1,033	0	0	0	9	0
	1964	1,030	1,583	200	200	830	1,383	0	0	0	15	180
	1969	670	337	100	17	570	320	0	0	0	14	350
	1974	1,090	556	100	33	990	523	0	0	0	15	630
	1979	457	280	150	100	307	180	0	0	0	15	207
	1984	600	436	0	0	600	436	0	0	0	6	600
KINNEY	1958	2,335	3,173	600	692	1,535	2,301	200	180	30	14	0
	1964	5,900	11,147	600	1,000	5,300	10,147	0	0	0	36	0
	1969	8,986	16,658	2,550	4,325	6,436	12,333	0	0	0	61	0
	1974	8,550	14,317	2,500	3,497	6,050	10,820	0	0	0	50	0
	1979	7,566	12,862	2,500	3,500	5,000	9,203	66	159	20	50	413
	1984	4,706	10,335	671	1,212	4,035	9,123	0	0	0	28	1,555
KLEBERG	1958	1,088	903	370	185	718	718	0	0	0	0	1,088
	1964	933	893	80	40	853	853	0	0	0	1	161
	1969	1,505	640	730	311	775	329	0	0	0	3	1,105
	1974	1,080	505	60	40	940	412	80	53	60	5	1,080
	1979	1,080	437	60	40	940	343	80	53	60	5	1,080
	1984	600	373	60	40	460	280	80	53	60	5	300
KNOX	1958	21,000	19,276	0	0	21,000	19,276	0	0	0	400	2,250
	1964	33,891	35,277	521	324	33,320	34,894	50	59	50	687	6,165
	1969	69,273	50,168	441	294	68,832	49,874	0	0	0	1,068	16,000
	1974	67,315	44,998	440	293	66,875	44,705	0	0	0	1,085	18,000
	1979	68,000	51,283	0	0	68,000	51,283	0	0	0	1,200	19,630
	1984	42,225	35,142	0	0	42,225	35,142	0	0	0	1,200	24,000

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
LAMAR	1958	160	60	160	60	0	0	0	0	0	0	160
	1964	300	100	270	93	30	7	0	0	0	1	290
	1969	790	209	770	202	20	7	0	0	0	1	790
	1974	205	68	205	68	0	0	0	0	0	10	205
	1979	205	68	205	68	0	0	0	0	0	10	205
	1984	1,760	4,667	1,760	4,667	0	0	0	0	0	10	1,760
LAMB	1958	292,460	395,982	0	0	292,460	395,982	0	0	0	5,000	5,060
	1964	331,180	683,252	0	0	331,180	683,252	0	0	0	5,350	19,000
	1969	317,847	388,875	0	0	317,847	388,875	0	0	0	6,000	68,680
	1974	326,070	413,872	0	0	326,070	413,872	0	0	0	6,600	83,200
	1979	296,600	320,033	0	0	296,600	320,033	0	0	0	6,700	125,000
	1984	279,400	533,192	0	0	279,400	533,192	0	0	0	6,775	134,000
LAMPASAS	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	318	355	286	312	32	43	0	0	0	3	307
	1969	581	855	542	792	39	63	0	0	0	5	581
	1974	625	409	518	331	107	78	0	0	0	8	625
	1979	120	60	120	60	0	0	0	0	0	7	120
	1984	201	218	201	218	0	0	0	0	0	4	186
LA SALLE	1958	6,570	6,981	1,470	1,442	5,100	5,539	0	0	0	53	4,000
	1964	10,175	15,273	1,221	1,210	8,724	13,820	230	243	50	57	7,949
	1969	11,716	13,879	1,313	1,807	9,943	11,744	460	328	10	53	11,407
	1974	12,296	12,885	1,000	703	9,706	10,900	1,590	1,282	22	57	12,130
	1979	13,055	10,707	1,820	1,378	9,695	8,333	1,540	996	27	40	13,055
	1984	6,510	10,893	700	1,275	4,970	8,362	840	1,257	30	40	6,510
LAVACA	1958	5,667	13,579	0	0	5,667	13,579	0	0	0	60	400
	1964	6,480	15,691	0	0	6,480	15,691	0	0	0	62	450
	1969	8,242	23,695	40	27	8,067	23,512	135	156	32	85	915
	1974	8,222	24,325	40	50	7,941	23,965	241	310	49	90	879
	1979	9,054	26,779	40	33	8,773	26,560	241	187	49	90	1,054
	1984	6,304	22,320	0	0	6,304	22,320	0	0	0	70	270
LEE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	250	188	0	0	250	188	0	0	0	3	250
	1974	880	683	425	349	455	334	0	0	0	8	880
	1979	215	91	35	18	180	73	0	0	0	9	215
	1984	178	140	106	88	40	27	32	25	70	6	158

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FOOT	SURFACE SOURCE- PERCENT	NUMBER	ACRES
LEON	1958	250	300	50	33	200	267	0	0	0	3	30
	1964	60	30	0	0	60	30	0	0	0	4	0
	1969	0	0	0	0	0	0	0	0	0	2	0
	1974	45	34	0	0	45	34	0	0	0	4	45
	1979	0	0	0	0	0	0	0	0	0	4	0
	1984	0	0	0	0	0	0	0	0	0	0	0
LIBERTY	1958	34,205	102,615	20,556	61,668	13,649	40,947	0	0	0	32	0
	1964	36,698	88,403	23,016	57,540	13,682	30,863	0	0	0	66	0
	1969	43,556	101,828	25,808	64,521	14,125	28,250	3,623	9,057	48	90	0
	1974	44,372	103,694	26,274	65,687	14,475	28,950	3,623	9,057	48	92	0
	1979	32,400	78,714	22,061	55,153	4,572	9,144	5,767	14,418	50	84	0
	1984	25,286	75,714	15,527	51,757	6,812	16,590	2,947	7,368	55	80	220
LIMESTONE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	95	95	65	65	30	30	0	0	0	3	95
	1974	40	40	0	0	40	40	0	0	0	4	40
	1979	0	0	0	0	0	0	0	0	0	4	0
	1984	0	0	0	0	0	0	0	0	0	0	0
LIPSCOMB	1958	1,685	1,480	20	15	1,665	1,465	0	0	0	14	680
	1964	2,660	2,420	55	63	2,605	2,357	0	0	0	26	1,695
	1969	8,246	5,158	0	0	7,946	5,008	300	150	30	53	5,706
	1974	15,766	21,099	0	0	15,466	20,974	300	125	20	154	13,096
	1979	33,180	38,417	0	0	32,880	38,267	300	150	20	186	28,790
	1984	20,945	17,823	0	0	20,645	17,673	300	150	20	221	18,470
LIVE OAK	1958	1,280	921	100	139	980	603	200	179	50	14	430
	1964	2,538	1,831	341	195	1,713	1,233	484	403	46	38	1,413
	1969	4,923	2,109	690	430	4,233	1,679	0	0	0	65	4,050
	1974	3,713	2,157	600	433	3,113	1,724	0	0	0	65	2,330
	1979	1,010	673	120	80	890	593	0	0	0	8	420
	1984	1,230	1,533	260	433	970	1,100	0	0	0	8	1,230
LLANO	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	340	518	190	328	150	190	0	0	0	6	340
	1969	1,128	2,697	280	634	848	2,063	0	0	0	45	1,128
	1974	1,125	679	540	270	585	409	0	0	0	51	1,125
	1979	982	1,359	231	289	751	1,070	0	0	0	44	957
	1984	711	1,048	50	42	661	1,007	0	0	0	50	665

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FOOT	SURFACE SOURCE- PERCENT	NUMBER	ACRES
LOVING	1958	200	700	200	700	0	0	0	0	0	0	0
	1964	100	273	100	273	0	0	0	0	0	0	0
	1969	17	68	17	68	0	0	0	0	0	1	0
	1974	17	51	17	51	0	0	0	0	0	1	0
	1979	30	40	30	40	0	0	0	0	0	1	0
	1984	0	0	0	0	0	0	0	0	0	0	0
LUBBOCK	1958	350,000	291,264	0	0	350,000	291,264	0	0	0	5,055	200
	1964	350,014	213,298	0	0	350,014	213,298	0	0	0	5,410	2,000
	1969	325,000	189,850	0	0	325,000	189,850	0	0	0	6,200	1,000
	1974	300,000	278,409	0	0	295,000	270,284	5,000	8,125	80	6,720	12,600
	1979	95,395	25,980	0	0	90,045	8,313	5,350	17,667	78	6,454	15,530
	1984	168,360	123,257	0	0	163,010	114,907	5,350	8,350	65	9,200	22,130
LYNN	1958	65,000	79,501	0	0	65,000	79,501	0	0	0	1,500	1,500
	1964	79,200	79,067	0	0	79,200	79,067	0	0	0	2,175	3,400
	1969	92,070	23,477	430	183	91,640	23,294	0	0	0	2,466	2,650
	1974	72,485	72,382	130	108	72,355	72,274	0	0	0	2,532	4,120
	1979	64,559	38,290	300	175	63,959	37,815	300	300	75	2,730	18,060
	1984	84,980	60,393	0	0	80,980	54,793	4,000	5,600	75	2,500	17,820
MCCULLOCH	1958	1,172	1,098	348	292	824	806	0	0	0	20	1,012
	1964	1,154	1,493	474	433	680	1,060	0	0	0	21	1,093
	1969	1,973	2,290	583	645	1,390	1,645	0	0	0	44	1,877
	1974	2,284	2,180	481	501	1,803	1,679	0	0	0	38	2,228
	1979	2,859	2,651	476	568	2,383	2,083	0	0	0	40	2,859
	1984	2,973	3,334	100	50	2,873	3,284	0	0	0	48	2,973
MCLENNAN	1958	4,015	1,942	0	0	0	0	4,015	1,942	62	71	1,745
	1964	7,233	3,213	0	0	0	0	7,233	3,213	97	75	5,805
	1969	6,642	5,181	5,680	4,421	962	760	0	0	0	80	3,611
	1974	6,509	4,907	5,657	4,255	852	652	0	0	0	80	3,389
	1979	0	0	0	0	0	0	0	0	0	60	0
	1984	1,255	2,300	430	738	825	1,562	0	0	0	60	470
MCMULLEN	1958	127	97	27	14	100	83	0	0	0	5	127
	1964	282	145	27	9	255	136	0	0	0	8	252
	1969	0	0	0	0	0	0	0	0	0	8	0
	1974	0	0	0	0	0	0	0	0	0	12	0
	1979	0	0	0	0	0	0	0	0	0	12	0
	1984	0	0	0	0	0	0	0	0	0	0	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
MADISON	1958	540	734	500	667	40	67	0	0	0	1	0
	1964	790	693	560	540	80	53	150	100	50	4	250
	1969	994	687	664	444	180	130	150	113	50	4	350
	1974	40	40	0	0	40	40	0	0	0	4	40
	1979	108	59	108	59	0	0	0	0	0	4	0
	1984	211	93	211	93	0	0	0	0	0	0	50
MARION	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	160	80	160	80	0	0	0	0	0	0	160
	1969	120	40	120	40	0	0	0	0	0	0	120
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
MARTIN	1958	26,200	40,675	0	0	26,200	40,675	0	0	0	289	23,200
	1964	22,000	45,665	0	0	22,000	45,665	0	0	0	300	21,700
	1969	28,952	29,187	0	0	28,952	29,187	0	0	0	350	28,952
	1974	26,715	29,825	0	0	26,715	29,825	0	0	0	325	26,715
	1979	25,000	15,625	0	0	25,000	15,625	0	0	0	325	25,000
	1984	15,024	16,537	0	0	15,024	16,537	0	0	0	356	14,991
MASON	1958	4,345	4,737	0	0	4,345	4,737	0	0	0	67	4,345
	1964	5,254	8,583	132	203	5,122	8,380	0	0	0	92	5,144
	1969	8,437	16,804	242	384	8,195	16,420	0	0	0	300	8,410
	1974	8,414	6,464	242	160	8,172	6,304	0	0	0	350	8,374
	1979	6,957	14,867	125	178	6,832	14,689	0	0	0	289	6,951
	1984	5,889	13,640	125	264	5,764	13,376	0	0	0	280	5,841
MATAGORDA	1958	35,200	140,460	27,100	110,450	3,700	12,650	4,400	17,360	60	41	0
	1964	45,952	213,577	37,386	180,349	5,296	19,058	3,270	14,170	21	40	230
	1969	55,400	216,050	46,001	184,004	5,899	18,921	3,500	13,125	30	109	690
	1974	55,686	208,659	22,401	89,604	7,050	20,674	26,235	98,381	84	114	1,600
	1979	56,759	206,231	22,743	88,302	8,184	21,059	25,832	96,870	84	120	3,924
	1984	46,886	158,139	30,128	115,952	12,571	27,751	4,187	14,436	80	126	8,875
MAVERICK	1958	29,431	35,001	28,256	33,667	1,175	1,334	0	0	0	6	0
	1964	38,449	110,696	36,820	108,282	1,629	2,414	0	0	0	14	0
	1969	46,629	117,706	45,000	113,520	1,629	4,186	0	0	0	14	0
	1974	42,729	100,930	41,100	97,600	1,629	3,330	0	0	0	14	400
	1979	42,030	63,337	40,400	61,097	1,630	2,240	0	0	0	14	640
	1984	40,194	85,569	39,300	84,162	894	1,407	0	0	0	14	640

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
MEDINA	1958	13,400	21,893	5,400	10,661	8,000	11,232	0	0	0	40	0
	1964	19,564	38,169	10,500	23,708	9,064	14,461	0	0	0	54	800
	1969	26,210	62,635	13,100	29,967	13,110	32,668	0	0	0	117	2,210
	1974	34,450	69,667	13,250	28,634	21,200	41,033	0	0	0	154	3,505
	1979	38,050	65,370	13,250	21,733	24,800	43,637	0	0	0	175	5,985
	1984	46,868	126,194	13,840	37,762	30,804	81,390	2,224	7,043	50	185	10,648
MENARD	1958	3,500	5,210	3,300	4,922	200	288	0	0	0	6	30
	1964	2,154	3,051	1,873	2,661	281	390	0	0	0	9	20
	1969	2,930	3,790	2,900	3,730	30	60	0	0	0	9	30
	1974	3,005	3,331	2,900	3,016	105	315	0	0	0	12	105
	1979	3,254	2,431	3,154	2,348	100	83	0	0	0	14	120
	1984	3,398	2,588	3,202	2,425	196	163	0	0	0	21	270
MIDLAND	1958	12,175	24,866	0	0	12,175	24,866	0	0	0	260	12,175
	1964	11,826	14,847	0	0	11,826	14,847	0	0	0	389	10,297
	1969	28,505	33,429	0	0	28,505	33,429	0	0	0	250	26,200
	1974	29,385	37,457	0	0	28,276	35,753	1,109	1,704	70	300	21,545
	1979	17,745	24,571	0	0	16,545	22,071	1,200	2,500	75	350	14,100
	1984	19,794	23,852	0	0	15,727	18,997	4,067	4,855	74	390	13,172
MILAM	1958	2,365	1,836	1,930	1,479	35	23	400	334	50	9	295
	1964	4,504	3,434	3,854	2,844	250	190	400	400	60	9	2,114
	1969	1,945	787	1,475	594	220	110	250	83	80	10	1,005
	1974	2,025	1,316	1,535	1,001	240	123	250	192	80	12	1,055
	1979	165	117	165	117	0	0	0	0	0	12	80
	1984	1,037	1,532	1,010	1,487	27	45	0	0	0	12	140
MILLS	1958	1,880	3,066	1,880	3,066	0	0	0	0	0	0	50
	1964	2,387	2,455	2,387	2,455	0	0	0	0	0	0	476
	1969	2,083	4,092	2,083	4,092	0	0	0	0	0	0	679
	1974	3,120	6,559	3,120	6,559	0	0	0	0	0	0	1,738
	1979	1,945	1,637	1,710	1,480	235	157	0	0	0	4	475
	1984	2,658	2,468	2,510	2,408	132	44	16	16	80	4	1,043
MITCHELL	1958	15,000	23,741	0	0	15,000	23,741	0	0	0	140	15,000
	1964	12,000	23,291	0	0	12,000	23,291	0	0	0	110	12,000
	1969	5,243	2,682	120	60	4,953	2,556	170	66	32	310	5,233
	1974	6,413	4,380	220	110	6,023	4,204	170	66	32	335	6,403
	1979	2,940	2,525	150	150	2,790	2,375	0	0	0	300	2,940
	1984	2,798	2,739	0	0	2,798	2,739	0	0	0	275	2,783



TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		IRRIGATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT		
MONTAGUE	1958	0	0	0	0	0	0	0	0	0	0
	1964	211	144	104	43	107	101	0	0	6	211
	1969	320	137	240	89	80	48	0	0	8	320
	1974	512	359	202	94	105	77	205	188	10	512
	1979	435	179	5	2	90	15	340	163	12	345
	1984	506	191	150	108	307	44	49	39	21	277
MONTGOMERY	1958	120	80	60	40	60	40	0	0	2	120
	1964	260	81	100	11	160	70	0	0	5	240
	1969	135	135	35	35	100	100	0	0	4	135
	1974	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0
	1984	13	13	0	0	13	13	0	0	0	0
MOORE	1958	81,280	83,828	0	0	81,280	83,828	0	0	0	0
	1964	113,180	160,534	0	0	113,180	160,534	0	0	256	190
	1969	212,780	218,828	0	0	212,780	218,828	0	0	564	790
	1974	230,136	327,908	0	0	230,136	327,908	0	0	890	840
	1979	233,725	304,033	0	0	233,725	304,033	0	0	1,007	5,830
	1984	210,100	287,913	0	0	210,100	287,913	0	0	1,190	24,000
MORRIS	1958	170	64	60	19	0	0	110	45	2	140
	1964	160	79	10	4	0	0	150	75	2	160
	1969	470	273	450	265	0	0	20	8	2	470
	1974	470	273	450	265	0	0	20	8	2	450
	1979	275	85	275	85	0	0	0	0	0	275
	1984	475	506	20	43	0	0	455	463	4	475
MOTLEY	1958	2,932	2,401	0	0	2,932	2,401	0	0	75	2,453
	1964	3,915	4,038	0	0	3,915	4,038	0	0	82	3,715
	1969	7,164	7,131	0	0	7,164	7,131	0	0	100	7,164
	1974	7,384	6,559	80	60	7,304	6,499	0	0	110	7,384
	1979	7,544	2,975	40	37	7,504	2,938	0	0	118	7,164
	1984	9,460	4,309	360	200	9,100	4,109	0	0	125	9,080
NACOGDOCHES	1958	40	7	40	7	0	0	0	0	3	40
	1964	9	4	5	2	4	2	0	0	1	9
	1969	0	0	0	0	0	0	0	0	0	0
	1974	25	21	25	21	0	0	0	0	0	25
	1979	0	0	0	0	0	0	0	0	0	0
	1984	53	23	9	5	44	19	0	0	2	44

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
NAVARRO	1958	1,130	565	880	440	250	125	0	0	0	6	840
	1964	240	120	40	20	200	100	0	0	0	9	0
	1969	0	0	0	0	0	0	0	0	0	8	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
NEWTON	1958	640	861	70	23	550	825	20	13	50	5	90
	1964	595	1,177	0	0	585	1,170	10	7	50	5	10
	1969	536	1,032	0	0	506	1,012	30	20	25	4	30
	1974	525	767	0	0	500	750	25	17	25	1	25
	1979	1,130	1,068	0	0	0	0	1,130	1,068	25	2	30
	1984	1,130	1,175	0	0	0	0	1,130	1,175	25	2	30
NOLAN	1958	2,890	2,848	150	150	2,740	2,698	0	0	0	105	1,250
	1964	3,779	3,248	383	364	3,396	2,884	0	0	0	136	1,110
	1969	3,450	3,511	411	414	2,939	2,947	100	150	10	160	2,511
	1974	3,180	2,922	270	216	2,910	2,706	0	0	0	160	2,030
	1979	2,002	2,399	365	623	1,602	1,729	35	47	30	170	1,765
	1984	2,210	2,262	140	140	1,730	1,629	340	493	73	172	1,911
NUECES	1958	5,240	3,419	4,640	3,192	600	227	0	0	0	2	935
	1964	10,304	6,445	9,103	5,703	1,201	742	0	0	0	12	1,715
	1969	6,301	3,432	5,200	2,630	1,101	802	0	0	0	11	0
	1974	250	83	240	80	10	3	0	0	0	10	10
	1979	0	0	0	0	0	0	0	0	0	17	0
	1984	3,400	2,500	1,300	542	2,100	1,958	0	0	0	14	0
OCHILTREE	1958	16,820	19,078	0	0	16,820	19,078	0	0	0	59	0
	1964	40,380	47,607	0	0	40,380	47,607	0	0	0	225	50
	1969	107,060	115,192	0	0	107,060	115,192	0	0	0	432	1,560
	1974	140,420	207,640	0	0	140,000	206,867	420	773	20	566	4,260
	1979	120,000	108,717	0	0	120,000	108,717	0	0	0	556	4,260
	1984	101,000	128,609	0	0	101,000	128,609	0	0	0	560	4,342
OLDHAM	1958	19,289	24,110	0	0	19,289	24,110	0	0	0	65	0
	1964	25,440	38,571	0	0	25,440	38,571	0	0	0	130	150
	1969	28,710	30,084	0	0	28,710	30,084	0	0	0	164	460
	1974	32,709	31,688	0	0	32,709	31,688	0	0	0	242	1,330
	1979	16,830	16,722	0	0	16,830	16,722	0	0	0	186	1,030
	1984	6,136	5,661	0	0	6,136	5,661	0	0	0	186	848

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		IRRIGATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET		
ORANGE	1958	4,321	7,202	4,050	6,750	271	452	0	0	2	0
	1964	4,846	14,403	4,575	13,725	271	678	0	0	0	0
	1969	4,232	10,300	3,673	9,182	559	1,118	0	0	4	0
	1974	4,232	10,300	3,673	9,182	559	1,118	0	0	4	0
	1979	1,739	3,188	1,739	3,188	0	0	0	0	1	0
	1984	1,321	4,403	1,321	4,403	0	0	0	0	1	0
	1984	1,183	1,071	1,183	1,071	0	0	0	0	0	1,183
PALO PINTO	1964	373	208	370	206	3	2	0	0	1	373
	1969	2,077	1,327	1,938	1,258	139	69	0	0	2	2,077
	1974	1,680	840	1,544	772	136	68	0	0	2	1,680
	1979	308	55	308	55	0	0	0	0	2	308
	1984	126	98	114	95	12	3	0	0	1	114
	1984	45	8	45	8	0	0	0	0	2	40
	1984	96	42	66	27	30	15	0	0	2	95
PANOLA	1969	21	30	26	6	30	15	0	0	3	56
	1974	10	3	0	0	10	3	0	0	2	10
	1979	0	0	0	0	0	0	0	0	0	0
	1984	32	64	32	64	0	0	0	0	0	32
	1984	1,542	529	1,542	529	0	0	0	0	0	1,242
	1964	1,152	1,270	1,152	1,270	0	0	0	0	0	782
	1969	1,139	1,116	1,139	1,116	0	0	0	0	0	769
PARKER	1974	800	504	745	472	55	32	0	0	3	800
	1979	647	363	647	363	0	0	0	0	3	647
	1984	621	328	418	170	103	58	100	100	3	647
	1984	404,222	773,936	404,222	773,936	0	0	0	0	12	350
	1964	377,000	574,020	377,000	574,020	0	0	0	0	0	250
	1969	318,647	493,295	318,647	492,817	0	0	0	0	0	1,480
	1974	382,210	605,697	381,920	605,214	290	478	290	478	0	6,100
PARNER	1979	417,986	592,805	417,696	592,289	290	483	290	483	3	22,150
	1984	291,970	278,193	291,710	277,873	260	320	260	320	3	57,630
	1984	117,413	345,266	104,113	313,900	13,300	31,366	13,300	31,366	12	67,460
	1964	119,313	367,455	111,113	339,397	8,200	28,058	8,200	28,058	636	0
	1969	55,043	201,748	50,591	187,157	4,452	14,591	4,452	14,591	1,166	0
	1974	51,795	183,669	48,462	171,240	3,333	12,429	3,333	12,429	912	0
	1979	27,291	94,462	26,323	90,147	968	4,316	968	4,316	915	0
PECOS	1984	31,232	90,022	31,232	90,022	0	0	0	0	0	3,079
	1984	117,413	345,266	104,113	313,900	13,300	31,366	13,300	31,366	12	350
	1964	119,313	367,455	111,113	339,397	8,200	28,058	8,200	28,058	636	0
	1969	55,043	201,748	50,591	187,157	4,452	14,591	4,452	14,591	1,166	0
	1974	51,795	183,669	48,462	171,240	3,333	12,429	3,333	12,429	912	0
	1979	27,291	94,462	26,323	90,147	968	4,316	968	4,316	915	0
	1984	31,232	90,022	31,232	90,022	0	0	0	0	0	3,079

TABLE I.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		IRRIGATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET		
POLK	1958	0	0	0	0	0	0	0	0	0	0
	1964	50	25	50	25	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0
	1979	85	82	65	22	20	60	0	0	0	0
	1984	76	228	0	0	76	228	0	0	0	2
POTTER	1958	11,000	10,000	0	0	11,000	10,000	0	0	0	0
	1964	14,300	22,548	0	0	14,300	22,548	0	0	0	0
	1969	17,757	20,844	0	0	17,757	20,844	0	0	0	0
	1974	18,233	24,327	0	0	18,233	24,327	0	0	0	0
	1979	15,240	20,715	0	0	12,840	16,515	2,400	4,200	70	95
	1984	8,705	13,253	0	0	6,185	8,857	2,520	4,396	70	85
PRESIDIO	1958	5,188	18,926	0	0	228	517	4,960	18,409	80	60
	1964	5,445	17,307	0	0	480	1,192	4,965	16,115	80	60
	1969	5,861	23,709	78	195	576	2,345	5,207	21,169	85	60
	1974	6,374	23,471	0	0	1,077	4,018	5,297	19,453	80	65
	1979	8,649	31,917	4,838	23,600	3,811	8,317	0	0	0	78
	1984	6,769	23,944	4,998	20,596	1,771	3,349	0	0	0	83
RAINS	1958	60	30	60	30	0	0	0	0	0	0
	1964	15	5	5	2	10	3	0	0	0	1
	1969	140	30	140	30	0	0	0	0	0	2
	1974	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0
	1984	20	47	20	47	0	0	0	0	0	0
RANDALL	1958	95,000	86,986	0	0	95,000	86,986	0	0	0	160
	1964	91,000	147,717	0	0	91,000	147,717	0	0	0	400
	1969	84,659	87,545	0	0	83,659	86,512	1,000	1,033	80	675
	1974	85,219	96,883	0	0	84,219	95,850	1,000	1,033	80	1,285
	1979	74,446	79,955	350	325	72,496	78,020	1,600	1,610	65	3,580
	1984	58,255	53,503	350	350	55,625	50,423	2,280	2,730	60	3,860
REAGAN	1958	2,620	4,270	0	0	2,620	4,270	0	0	0	150
	1964	10,247	15,334	0	0	10,247	15,334	0	0	0	360
	1969	16,451	15,434	0	0	16,451	15,434	0	0	0	250
	1974	11,085	14,531	0	0	11,085	14,531	0	0	0	346
	1979	23,065	26,937	0	0	23,065	26,937	0	0	0	785
	1984	25,017	33,721	0	0	25,017	33,721	0	0	0	825

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
REAL	1958	900	1,090	900	1,090	0	0	0	0	0	0	200
	1964	1,410	1,066	1,410	1,066	0	0	0	0	0	0	700
	1969	1,035	725	1,035	725	0	0	0	0	0	0	805
	1974	885	941	885	941	0	0	0	0	0	0	700
	1979	455	232	455	232	0	0	0	0	0	0	326
	1984	243	348	243	348	0	0	0	0	0	0	201
RED RIVER	1958	450	184	0	0	0	0	450	184	37	6	87
	1964	733	300	135	62	40	13	558	225	37	7	100
	1969	651	326	265	142	186	94	200	100	20	16	445
	1974	80	40	0	0	80	40	0	0	0	16	80
	1979	1,080	367	1,000	333	80	33	0	0	0	4	1,080
	1984	375	613	375	613	0	0	0	0	0	7	205
REEVES	1958	96,000	368,568	11,000	33,400	85,000	335,168	0	0	0	850	0
	1964	118,200	414,217	7,200	12,200	111,000	402,017	0	0	0	975	0
	1969	82,035	334,392	100	333	74,558	310,192	7,377	23,867	28	1,010	640
	1974	78,170	319,785	80	317	68,993	286,856	9,097	32,612	50	995	1,100
	1979	36,502	127,469	245	613	28,614	105,103	7,643	21,754	80	975	11,370
	1984	27,061	89,688	0	0	20,725	63,226	6,336	26,463	50	935	7,774
REFUGIO	1958	650	271	0	0	650	271	0	0	0	1	400
	1964	890	498	25	17	650	338	215	143	20	3	215
	1969	0	0	0	0	0	0	0	0	0	3	0
	1974	0	0	0	0	0	0	0	0	0	2	0
	1979	0	0	0	0	0	0	0	0	0	2	0
	1984	50	17	0	0	50	17	0	0	0	2	0
ROBERTS	1958	3,320	4,602	0	0	3,320	4,602	0	0	0	15	60
	1964	6,330	8,348	0	0	6,330	8,348	0	0	0	25	350
	1969	9,160	8,810	0	0	9,160	8,810	0	0	0	55	1,096
	1974	9,551	13,518	0	0	9,551	13,518	0	0	0	56	1,526
	1979	11,634	14,184	0	0	11,634	14,184	0	0	0	58	3,230
	1984	8,436	5,204	0	0	8,436	5,204	0	0	0	36	2,852
ROBERTSON	1958	34,910	26,897	5,695	4,918	28,515	21,429	700	550	50	421	400
	1964	41,315	39,008	5,770	6,461	34,385	31,391	1,160	1,156	51	428	870
	1969	23,415	19,741	4,650	3,342	17,715	15,474	1,050	925	50	440	630
	1974	22,295	20,064	4,150	3,592	17,095	15,547	1,050	925	50	450	675
	1979	19,740	14,591	2,200	1,646	17,540	12,945	0	0	0	451	355
	1984	18,938	18,534	2,538	2,484	16,400	16,050	0	0	0	400	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
ROCKWALL	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	15	22	15	22	0	0	0	0	0	0	15
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
RUNNELS	1958	2,713	3,768	2,593	3,578	100	150	20	40	50	3	0
	1964	3,524	6,042	3,108	5,412	326	495	90	135	50	14	216
	1969	3,502	5,743	2,851	4,895	561	778	90	70	50	25	428
	1974	5,592	7,836	4,510	6,614	989	1,122	93	100	37	54	2,175
	1979	5,498	6,466	4,030	4,837	1,138	1,264	330	365	60	83	2,508
	1984	3,049	3,887	1,942	2,578	749	871	358	438	60	95	1,225
RUSK	1958	295	130	275	120	20	10	0	0	0	1	295
	1964	305	121	235	89	20	7	50	25	24	2	180
	1969	150	41	150	41	0	0	0	0	0	1	150
	1974	2	1	2	1	0	0	0	0	0	1	2
	1979	10	3	5	2	5	1	0	0	0	1	7
	1984	47	87	27	54	20	33	0	0	0	1	27
SABINE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
SAN AUGUSTINE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
SAN JACINTO	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	2	0
	1984	0	0	0	0	0	0	0	0	0	0	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
SAN PATRICIO	1958	17,000	20,785	0	0	17,000	20,785	0	0	0	79	0
	1964	19,960	8,840	400	400	19,560	8,440	0	0	0	87	200
	1969	13,839	6,253	205	156	13,634	6,097	0	0	0	96	0
	1974	10,730	5,986	90	60	10,640	5,926	0	0	0	98	0
	1979	2,123	1,375	94	94	2,029	1,281	0	0	0	100	94
	1984	6,428	3,555	40	13	6,388	3,542	0	0	0	100	54
SAN SABA	1958	2,970	4,716	2,610	4,213	360	503	0	0	0	6	35
	1964	4,564	7,642	3,759	6,355	805	1,287	0	0	0	16	935
	1969	5,830	5,564	5,295	4,979	535	585	0	0	0	16	1,075
	1974	8,063	11,018	6,748	9,385	1,315	1,633	0	0	0	19	1,230
	1979	5,763	5,111	4,603	4,455	1,160	657	0	0	0	24	895
	1984	7,168	6,351	5,838	5,425	1,330	926	0	0	0	30	2,336
SCHLEICHER	1958	2,577	4,635	166	135	2,411	4,500	0	0	0	26	0
	1964	4,118	7,766	82	143	4,036	7,623	0	0	0	53	795
	1969	4,502	4,951	122	164	4,380	4,787	0	0	0	79	998
	1974	2,589	2,006	82	55	2,507	1,951	0	0	0	77	615
	1979	1,183	793	0	0	1,183	793	0	0	0	42	491
	1984	1,017	1,438	0	0	1,017	1,438	0	0	0	45	304
SCURRY	1958	2,656	1,331	0	0	2,656	1,331	0	0	0	26	2,656
	1964	3,150	1,728	0	0	3,150	1,728	0	0	0	70	3,150
	1969	5,694	3,323	0	0	5,494	3,223	200	100	80	145	4,364
	1974	5,610	5,943	0	0	5,610	5,943	0	0	0	150	4,450
	1979	4,565	5,532	350	917	4,215	4,615	0	0	0	155	3,755
	1984	3,952	3,952	330	633	3,622	3,319	0	0	0	150	3,552
SHACKELFORD	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	144	118	144	118	0	0	0	0	0	2	132
	1969	293	673	293	673	0	0	0	0	0	0	218
	1974	320	366	300	341	20	25	0	0	0	3	305
	1979	388	361	142	138	246	223	0	0	0	8	388
	1984	397	259	273	178	124	81	0	0	0	8	397
SHELBY	1958	3	1	3	1	0	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	40	13	30	8	10	5	0	0	0	1	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
SHERMAN	1958	50,000	60,200	0	0	50,000	60,200	0	0	0	200	0
	1964	137,200	182,000	0	0	137,200	182,000	0	0	0	690	900
	1969	252,578	284,537	0	0	252,578	284,537	0	0	0	1,018	12,220
	1974	273,651	330,277	0	0	273,171	329,857	480	420	20	1,190	21,650
	1979	231,000	268,267	0	0	230,300	267,417	700	850	30	1,357	57,735
	1984	140,200	225,833	0	0	140,200	225,833	0	0	0	1,200	43,830
SMITH	1958	780	169	390	65	390	104	0	0	0	7	780
	1964	850	466	310	192	100	33	440	241	64	7	850
	1969	1,545	566	795	316	0	0	750	250	50	7	1,210
	1974	700	267	400	167	0	0	300	100	50	7	700
	1979	595	226	195	93	0	0	400	133	75	7	580
	1984	784	1,959	784	1,959	0	0	0	0	0	7	710
SOMERVELL	1958	195	190	130	147	65	43	0	0	0	3	130
	1964	211	204	196	196	15	8	0	0	0	4	211
	1969	524	338	524	338	0	0	0	0	0	5	501
	1974	478	180	420	127	58	53	0	0	0	4	458
	1979	715	484	450	267	265	218	0	0	0	7	715
	1984	652	787	374	266	278	521	0	0	0	7	652
STARR	1958	35,441	41,097	35,141	40,863	300	234	0	0	0	3	300
	1964	33,450	47,367	200	342	250	125	33,000	46,900	70	202	750
	1969	32,500	44,421	0	0	0	0	32,500	44,421	75	40	0
	1974	25,576	26,155	25,576	26,155	0	0	0	0	0	25	0
	1979	25,576	25,909	25,576	25,909	0	0	0	0	0	10	0
	1984	25,751	30,777	25,251	30,277	500	500	0	0	0	16	400
STEPHENS	1958	388	259	358	241	30	18	0	0	0	1	135
	1964	458	517	356	364	42	84	60	69	70	3	105
	1969	1,169	1,479	1,078	1,343	0	0	91	136	50	1	908
	1974	855	855	765	765	0	0	90	90	30	1	825
	1979	1,157	876	997	781	0	0	160	95	39	4	797
	1984	1,279	932	1,169	882	40	27	70	23	50	5	1,169
STERLING	1958	215	224	0	0	145	163	70	61	20	8	0
	1964	1,356	2,336	0	0	1,099	1,819	257	517	20	36	1,027
	1969	2,081	4,824	95	190	1,986	4,634	0	0	0	52	368
	1974	2,252	4,169	0	0	2,252	4,169	0	0	0	56	2,227
	1979	633	1,468	0	0	633	1,468	0	0	0	63	633
	1984	505	1,206	0	0	505	1,206	0	0	0	63	499



TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
STONEWALL	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	2,115	3,004	0	0	2,115	3,004	0	0	0	50	965
	1969	1,480	1,515	0	0	1,480	1,515	0	0	0	50	1,300
	1974	425	663	20	30	405	633	0	0	0	32	370
	1979	208	236	0	0	208	236	0	0	0	30	76
	1984	272	179	0	0	272	179	0	0	0	22	272
SUTTON	1958	407	544	167	237	240	307	0	0	0	6	280
	1964	666	1,483	96	237	570	1,246	0	0	0	9	260
	1969	1,177	2,899	168	350	1,009	2,549	0	0	0	17	633
	1974	989	1,721	112	212	877	1,509	0	0	0	17	445
	1979	569	826	124	196	445	630	0	0	0	17	236
	1984	617	937	91	143	526	794	0	0	0	17	278
SWISHER	1958	319,200	265,026	0	0	319,200	265,026	0	0	0	2,630	0
	1964	279,012	471,623	0	0	279,012	471,623	0	0	0	3,608	1,160
	1969	249,700	369,637	0	0	245,840	363,920	3,860	5,717	41	4,596	1,500
	1974	316,800	474,878	0	0	316,800	474,878	0	0	0	4,600	3,500
	1979	132,624	157,952	0	0	132,624	157,952	0	0	0	4,900	8,500
	1984	125,425	150,758	0	0	125,425	150,758	0	0	0	3,800	11,220
TARRANT	1958	2,020	1,124	1,420	857	600	267	0	0	0	35	1,365
	1964	2,160	1,667	1,560	1,169	0	0	600	498	50	15	2,020
	1969	550	950	550	950	0	0	0	0	0	10	300
	1974	400	800	400	800	0	0	0	0	0	10	150
	1979	266	219	181	181	0	0	85	38	25	10	219
	1984	127	107	127	107	0	0	0	0	0	10	15
TAYLOR	1958	1,371	2,452	40	53	1,331	2,399	0	0	0	49	817
	1964	2,221	2,459	325	502	1,896	1,957	0	0	0	107	1,714
	1969	1,306	1,581	611	798	605	508	90	275	90	125	370
	1974	3,040	3,433	150	155	2,890	3,278	0	0	0	98	1,090
	1979	1,638	936	505	253	1,133	683	0	0	0	100	1,093
	1984	1,340	753	345	173	995	581	0	0	0	90	900
TERRELL	1958	111	501	111	501	0	0	0	0	0	0	56
	1964	207	1,035	207	1,035	0	0	0	0	0	0	56
	1969	277	1,250	40	200	237	1,050	0	0	0	2	0
	1974	106	257	0	0	106	257	0	0	0	3	0
	1979	194	565	38	76	156	489	0	0	0	6	54
	1984	166	242	0	0	166	242	0	0	0	7	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT	NUMBER	ACRES
TERRY	1958	136,034	135,586	0	0	136,034	135,586	0	0	0	1,125	136,034
	1964	130,000	170,313	0	0	130,000	170,313	0	0	0	1,550	130,000
	1969	169,700	58,057	0	0	169,500	57,897	200	160	50	1,630	168,670
	1974	173,230	145,570	0	0	173,030	145,410	200	160	50	1,700	172,240
	1979	166,336	57,712	0	0	166,136	57,645	200	67	50	1,700	165,330
	1984	146,799	66,119	0	0	146,449	65,244	350	875	91	2,650	146,494
THROCKMORTON	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	65	48	65	48	0	0	0	0	0	0	65
	1969	0	0	0	0	0	0	0	0	0	6	0
	1974	85	42	30	15	55	27	0	0	0	1	55
	1979	0	0	0	0	0	0	0	0	0	1	0
	1984	0	0	0	0	0	0	0	0	0	0	0
TITUS	1958	115	40	110	38	0	0	5	2	40	2	115
	1964	0	0	0	0	0	0	0	0	0	2	0
	1969	0	0	0	0	0	0	0	0	0	1	0
	1974	0	0	0	0	0	0	0	0	0	1	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0
TOM GREEN	1958	10,775	12,415	5,324	6,746	4,511	4,582	940	1,087	50	88	108
	1964	16,858	28,551	4,694	10,139	11,414	17,065	750	1,347	61	241	1,055
	1969	13,820	13,464	5,463	6,715	8,257	6,604	100	145	80	248	1,982
	1974	26,316	23,449	12,773	12,476	10,923	8,306	2,620	2,667	66	318	2,843
	1979	30,560	50,495	15,900	33,188	13,500	15,880	1,160	1,427	66	525	2,500
	1984	33,600	49,085	7,100	17,938	26,500	31,146	0	0	0	800	3,950
TRAVIS	1958	1,430	1,254	1,105	980	325	274	0	0	0	9	525
	1964	1,270	1,002	995	814	275	188	0	0	0	11	378
	1969	2,604	1,685	2,337	1,510	267	175	0	0	0	9	1,737
	1974	1,256	978	1,036	804	100	74	120	100	70	5	1,023
	1979	260	170	40	40	100	50	120	80	70	5	260
	1984	1,090	1,354	670	1,008	300	267	120	80	70	4	1,090
TRINITY	1958	50	8	0	0	50	8	0	0	0	1	50
	1964	0	0	0	0	0	0	0	0	0	1	0
	1969	0	0	0	0	0	0	0	0	0	1	0
	1974	0	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		IRRIGATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT		
TYLER	1958	13	5	1	1	8	3	4	1	3	8
	1964	0	0	0	0	0	0	0	0	2	0
	1969	84	51	68	40	15	10	1	1	5	83
	1974	35	9	35	9	0	0	0	0	1	35
	1979	0	0	0	0	0	0	0	0	0	0
	1984	39	21	35	18	4	4	0	0	2	35
UPSHUR	1958	0	0	0	0	0	0	0	0	3	0
	1964	0	0	0	0	0	0	0	0	2	0
	1969	10	4	0	0	0	0	10	4	1	10
	1974	14	7	14	7	0	0	0	0	1	14
	1979	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0
UPTON	1958	550	698	0	0	550	698	0	0	9	210
	1964	2,810	3,594	0	0	2,810	3,594	0	0	33	2,660
	1969	5,676	5,438	0	0	5,676	5,438	0	0	80	2,050
	1974	6,486	9,015	0	0	6,486	9,015	0	0	130	0
	1979	14,002	17,493	0	0	14,002	17,493	0	0	428	440
	1984	12,067	15,235	0	0	12,067	15,235	0	0	460	1,225
UVALDE	1958	13,945	18,030	420	408	12,525	17,622	900	571	137	390
	1964	21,379	33,939	925	496	20,454	33,443	200	116	180	400
	1969	35,596	49,402	1,100	879	34,496	48,523	0	0	245	900
	1974	40,412	70,312	1,290	1,633	38,122	67,679	1,000	1,367	285	2,580
	1979	39,612	78,105	1,500	1,890	38,112	76,215	1,200	2,000	305	12,261
	1984	51,370	151,774	1,750	2,005	49,620	149,769	1,200	3,208	319	15,348
VAL VERDE	1958	2,200	2,369	0	0	2,200	2,369	0	0	10	140
	1964	1,300	2,174	0	0	1,300	2,174	0	0	14	0
	1969	1,575	2,342	130	187	1,445	2,155	0	0	5	130
	1974	1,095	1,745	820	1,344	275	401	0	0	8	25
	1979	870	1,350	620	1,130	250	220	0	0	12	230
	1984	1,022	2,348	620	1,612	402	736	0	0	20	90
VAN ZANDT	1958	330	130	240	88	90	42	0	0	5	330
	1964	575	257	505	224	70	33	0	0	5	575
	1969	311	117	311	117	0	0	0	0	0	311
	1974	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0
	1984	0	0	0	0	0	0	0	0	0	0

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT		
VICTORIA	1958	4,635	16,014	358	299	4,277	15,715	0	0	0	36	458
	1964	5,096	13,112	150	45	4,946	13,067	0	0	0	28	130
	1969	5,385	17,338	0	0	5,385	17,338	0	0	0	37	0
	1974	5,160	16,092	326	109	4,834	15,983	0	0	0	56	191
	1979	7,874	25,836	176	176	7,698	25,660	0	0	0	64	176
	1984	6,293	20,334	160	133	6,133	20,201	0	0	0	65	160
WALKER	1958	123	82	0	0	123	82	0	0	0	2	123
	1964	120	13	120	13	0	0	0	0	0	1	0
	1969	1,325	745	1,325	745	0	0	0	0	0	2	48
	1974	405	273	405	273	0	0	0	0	0	2	0
	1979	30	8	30	8	0	0	0	0	0	3	30
	1984	310	207	210	132	100	75	0	0	0	3	110
WALLER	1958	17,493	25,446	256	341	16,300	24,212	937	893	37	89	243
	1964	15,957	23,068	356	252	15,355	22,637	246	179	20	71	185
	1969	17,759	28,915	406	277	17,107	28,523	246	115	50	77	539
	1974	18,361	29,984	200	200	18,161	29,784	0	0	0	80	416
	1979	16,577	25,255	0	0	16,577	25,255	0	0	0	80	1,000
	1984	9,774	28,259	367	184	9,407	28,075	0	0	0	80	0
WARD	1958	5,660	14,739	0	0	960	1,822	4,700	12,917	75	43	560
	1964	5,447	18,240	0	0	1,181	2,844	4,266	15,396	10	100	1,181
	1969	6,496	23,806	242	627	1,357	2,918	4,897	20,261	50	60	1,001
	1974	5,536	22,975	127	317	590	2,136	4,819	20,522	50	62	314
	1979	1,788	7,549	100	333	225	577	1,463	6,639	72	64	45
	1984	284	357	0	0	284	357	0	0	0	20	0
WASHINGTON	1958	1,284	1,543	210	210	400	435	674	898	60	19	360
	1964	974	959	150	143	824	816	0	0	0	14	384
	1969	698	637	240	320	108	54	350	263	50	10	108
	1974	190	105	40	30	150	75	0	0	0	13	150
	1979	20	20	0	0	20	20	0	0	0	14	0
	1984	122	122	0	0	122	122	0	0	0	12	0
WEBB	1958	8,110	9,891	8,060	9,851	50	40	0	0	0	3	100
	1964	12,050	22,937	12,050	22,937	0	0	0	0	0	0	0
	1969	16,572	23,305	16,572	23,305	0	0	0	0	0	0	0
	1974	12,564	14,934	12,564	14,934	0	0	0	0	0	0	243
	1979	4,979	3,556	4,979	3,556	0	0	0	0	0	0	1,849
	1984	5,400	5,400	5,400	5,400	0	0	0	0	0	0	783

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS NUMBER	SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT		
WHARTON	1958	67,630	167,185	20,550	54,829	44,580	110,506	2,500	1,850	20	350	0
	1964	71,040	146,598	16,510	38,533	54,530	108,065	0	0	0	421	0
	1969	82,253	239,068	15,205	48,770	67,048	190,298	0	0	0	420	0
	1974	89,848	255,226	19,910	59,730	63,408	175,906	6,530	19,590	80	438	480
	1979	85,175	163,195	26,160	56,180	47,415	84,265	11,600	22,750	61	443	1,425
	1984	83,700	268,953	22,770	91,832	53,030	147,496	7,900	29,625	62	430	4,360
WHEELER	1958	1,150	1,543	40	50	1,110	1,493	0	0	0	14	810
	1964	3,860	4,780	220	350	3,640	4,430	0	0	0	40	3,360
	1969	4,310	3,085	310	235	4,000	2,850	0	0	0	60	3,730
	1974	8,030	10,378	350	293	7,590	9,995	90	90	20	90	7,710
	1979	13,035	7,788	0	0	13,035	7,788	0	0	0	200	13,035
	1984	4,438	4,145	100	67	4,338	4,078	0	0	0	190	4,438
WICHITA	1958	10,790	24,445	10,790	24,445	0	0	0	0	0	0	0
	1964	18,007	25,807	18,007	25,807	0	0	0	0	0	0	0
	1969	19,610	28,138	19,460	27,888	150	250	0	0	0	2	150
	1974	20,150	29,038	20,000	28,788	150	250	0	0	0	2	150
	1979	20,941	27,517	20,941	27,517	0	0	0	0	0	2	0
	1984	17,230	62,772	17,230	62,772	0	0	0	0	0	2	120
WILBARGER	1958	6,285	5,735	0	0	6,285	5,735	0	0	0	153	5,633
	1964	10,175	11,325	1,775	1,942	8,400	9,383	0	0	0	180	8,575
	1969	11,156	12,106	1,776	1,732	9,380	10,374	0	0	0	380	9,756
	1974	11,510	17,433	1,550	1,700	9,960	15,733	0	0	0	650	10,110
	1979	14,575	24,793	875	768	13,700	24,025	0	0	0	497	13,860
	1984	13,190	27,437	710	917	12,480	26,520	0	0	0	540	12,842
WILLACY	1958	31,400	49,084	31,100	48,717	0	0	300	367	90	6	1,700
	1964	36,500	58,992	36,500	58,992	0	0	0	0	0	0	400
	1969	37,723	49,268	37,723	49,268	0	0	0	0	0	0	0
	1974	37,723	53,896	37,723	53,896	0	0	0	0	0	0	0
	1979	37,723	28,112	37,723	28,112	0	0	0	0	0	0	0
	1984	37,235	54,235	37,235	54,235	0	0	0	0	0	0	0
WILLIAMSON	1958	164	129	154	121	10	8	0	0	0	5	124
	1964	249	214	239	207	10	7	0	0	0	1	209
	1969	653	572	653	572	0	0	0	0	0	1	653
	1974	348	267	328	237	20	30	0	0	0	3	328
	1979	80	60	70	47	10	13	0	0	0	4	80
	1984	88	136	67	134	21	2	0	0	0	3	67

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT	NUMBER	ACRES
WILSON	1958	10,190	14,857	2,390	3,036	7,800	11,821	0	0	0	32	7,800
	1964	18,491	15,519	4,000	3,346	14,491	12,173	0	0	0	84	12,931
	1969	16,618	13,669	1,845	877	11,695	10,821	3,078	1,971	10	190	14,839
	1974	19,621	17,707	2,890	2,848	15,587	13,750	1,144	1,109	3	220	17,676
	1979	8,117	6,388	120	80	7,997	6,308	0	0	0	230	7,987
	1984	12,051	8,395	1,707	1,146	10,164	7,116	180	133	28	240	11,863
WINKLER	1958	530	934	0	0	530	934	0	0	0	4	530
	1964	470	1,664	0	0	470	1,664	0	0	0	3	470
	1969	1,360	5,382	0	0	1,360	5,382	0	0	0	12	1,320
	1974	1,843	3,466	0	0	1,843	3,466	0	0	0	12	1,803
	1979	1,240	4,797	0	0	1,240	4,797	0	0	0	12	1,240
	1984	240	360	0	0	240	360	0	0	0	12	240
WISE	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	491	269	463	255	28	14	0	0	0	3	491
	1969	525	324	525	324	0	0	0	0	0	4	525
	1974	1,515	757	1,115	557	400	200	0	0	0	5	1,515
	1979	1,070	535	960	480	110	55	0	0	0	5	1,070
	1984	1,170	585	940	470	230	115	0	0	0	7	1,170
WOOD	1958	213	95	203	89	10	6	0	0	0	3	203
	1964	360	189	230	124	0	0	130	65	50	4	360
	1969	460	160	450	155	10	5	0	0	0	3	460
	1974	50	13	40	10	10	3	0	0	0	3	50
	1979	0	0	0	0	0	0	0	0	0	3	0
	1984	412	680	120	113	110	275	182	292	35	4	402
YOAKUM	1958	38,370	67,910	0	0	38,370	67,910	0	0	0	421	34,144
	1964	68,500	61,825	0	0	68,500	61,825	0	0	0	1,030	57,800
	1969	88,740	74,295	0	0	88,740	74,295	0	0	0	1,100	88,740
	1974	102,340	138,651	0	0	102,340	138,651	0	0	0	1,127	101,540
	1979	121,910	122,912	0	0	121,910	122,912	0	0	0	1,200	121,310
	1984	100,427	61,515	0	0	100,427	61,515	0	0	0	1,230	99,797
YOUNG	1958	0	0	0	0	0	0	0	0	0	0	0
	1964	292	213	222	120	70	93	0	0	0	3	292
	1969	453	261	322	178	131	83	0	0	0	4	326
	1974	774	337	460	169	314	168	0	0	0	10	774
	1979	5	1	0	0	5	1	0	0	0	13	5
	1984	575	228	115	58	460	171	0	0	0	6	555

TABLE 1.--IRRIGATION SUMMARY FOR COUNTIES, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

COUNTY	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			IRRI- GATION WELLS	SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	NUMBER	ACRES
ZAPATA	1958	8,339	12,985	8,339	12,985	0	0	0	0	0	0	0
	1964	4,100	8,300	4,100	8,300	0	0	0	0	0	0	300
	1969	6,738	8,756	6,738	8,756	0	0	0	0	0	0	0
	1974	4,134	4,588	4,134	4,588	0	0	0	0	0	0	0
	1979	3,691	4,199	3,691	4,199	0	0	0	0	0	0	1,130
	1984	3,286	3,300	3,286	3,300	0	0	0	0	0	0	684
ZAVALA	1958	82,400	89,247	1,700	2,025	70,700	76,514	10,000	10,708	50	364	3,300
	1964	138,652	271,938	1,500	2,400	119,852	232,739	17,300	36,799	30	536	4,059
	1969	108,656	195,361	1,683	2,104	91,673	169,419	15,300	23,838	94	540	4,200
	1974	81,382	146,315	1,183	1,479	64,899	114,723	15,300	30,113	94	550	4,000
	1979	85,510	146,793	1,363	1,704	68,847	118,700	15,300	26,389	93	565	8,184
	1984	57,776	95,144	1,185	658	49,091	81,777	7,500	12,708	30	550	6,780
STATE TOTALS	1958	6,723,614	9,605,605	1,126,521	2,170,313	5,387,663	6,946,620	209,430	488,672	73	55,473	667,678
	1964	7,706,881	12,509,652	1,184,961	1,992,067	6,235,614	9,989,649	286,306	527,936	38	70,565	1,076,729
	1969	8,206,249	11,569,024	1,267,607	2,352,335	6,648,553	8,622,041	290,089	594,648	78	83,115	1,548,002
	1974	8,618,054	13,082,262	1,272,397	2,186,062	7,089,624	10,279,992	256,033	616,208	80	90,469	1,814,293
	1979	7,817,681	9,723,403	1,248,855	1,850,222	5,885,102	6,924,044	683,724	949,153	60	95,217	2,197,001
	1984	6,752,625	9,342,950	1,093,158	2,055,844	5,415,859	6,790,592	243,608	496,526	78	100,275	2,140,598





TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES	
CANADIAN												
ZONE 1	1958	256,885	292,863	20	15	256,865	292,848	0	0	0	980	
	1964	517,470	682,640	55	63	517,415	682,577	0	0	0	7,295	
	1969	922,400	1,115,201	0	0	922,100	1,115,051	300	150	30	36,642	
	1974	1,024,307	1,449,662	0	0	1,022,467	1,447,704	1,840	1,958	20	72,113	
	1979	1,055,763	1,363,892	0	0	1,054,123	1,362,252	1,640	1,640	25	162,285	
	1984	782,996	1,105,708	0	0	782,696	1,105,558	300	150	20	173,255	
ZONE 2	1958	99,023	108,116	0	0	99,023	108,116	0	0	0	600	
	1964	160,998	236,812	0	0	160,998	236,812	0	0	0	12,443	
	1969	286,564	347,019	0	0	286,564	347,019	0	0	0	51,027	
	1974	331,629	466,172	0	0	331,429	465,989	200	183	20	102,373	
	1979	390,823	512,294	0	0	390,103	511,230	720	1,064	63	164,731	
	1984	343,978	419,621	0	0	343,138	418,374	840	1,247	65	218,319	
BASIN TOTAL	1958	355,908	400,979	20	15	355,888	400,964	0	0	0	1,580	
	1964	678,468	919,452	55	63	678,413	919,389	0	0	0	19,738	
	1969	1,208,964	1,462,220	0	0	1,208,664	1,462,070	300	150	30	87,669	
	1974	1,355,936	1,915,834	0	0	1,353,896	1,913,693	2,040	2,141	20	174,486	
	1979	1,446,586	1,876,186	0	0	1,444,226	1,873,482	2,360	2,704	40	327,016	
	1984	1,126,974	1,525,329	0	0	1,125,834	1,523,932	1,140	1,397	60	391,574	
RED												
ZONE 1	1958	1,036,783	1,184,866	0	0	1,036,783	1,184,866	0	0	0	1,412	
	1964	1,066,445	1,683,909	0	0	1,065,665	1,682,694	780	1,215	35	12,280	
	1969	996,172	1,465,122	0	0	991,022	1,457,894	5,150	7,228	45	14,649	
	1974	1,108,689	1,638,513	160	244	1,107,239	1,636,753	1,290	1,516	64	33,748	
	1979	892,707	1,011,129	350	325	888,547	1,005,317	3,810	5,487	64	69,356	
	1984	716,015	742,067	350	350	711,205	735,318	4,460	6,399	64	58,932	
ZONE 2	1958	238,264	208,317	40	50	238,224	208,267	0	0	0	40,509	
	1964	293,011	337,693	780	821	292,231	336,872	0	0	0	50,725	
	1969	295,639	331,398	1,456	1,444	294,183	329,954	0	0	0	65,716	
	1974	317,883	370,317	1,377	1,735	316,416	368,492	90	90	20	80,929	
	1979	255,944	219,589	772	601	247,923	212,705	7,249	6,283	37	85,354	
	1984	228,991	211,977	2,046	1,383	217,325	205,782	9,620	4,812	50	74,141	
ZONE 3	1958	12,701	26,554	11,290	24,812	1,411	1,742	0	0	0	0	
	1964	36,158	45,191	20,037	28,319	16,121	16,872	0	0	0	10,611	
	1969	31,573	38,917	22,230	30,440	9,343	8,477	0	0	0	4,130	
	1974	34,450	39,858	22,982	31,678	11,408	8,125	60	55	50	5,442	
	1979	26,818	31,760	22,141	28,491	4,407	3,140	270	129	55	2,174	
	1984	21,946	67,088	18,340	63,914	3,353	2,802	253	372	16	3,169	

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
RED--CONTINUED											
ZONE 4	1958	6,183	5,225	5,050	4,094	573	382	560	749	48	2,562
	1964	5,753	6,118	3,568	3,407	997	656	1,188	2,055	32	3,295
	1969	4,703	4,252	2,847	2,430	821	480	1,035	1,342	31	2,775
	1974	4,070	4,473	2,492	2,452	1,175	1,783	403	238	61	2,160
	1979	8,154	8,380	6,755	6,941	1,008	1,243	391	196	50	5,962
	1984	10,627	17,576	7,910	13,552	2,177	2,404	540	1,620	25	6,551
BASIN TOTAL	1958	1,293,931	1,424,962	16,380	28,956	1,276,991	1,395,257	560	749	48	44,483
	1964	1,401,367	2,072,911	24,385	32,547	1,375,014	2,037,094	1,188	3,270	33	76,911
	1969	1,328,087	1,839,689	26,533	34,314	1,295,369	1,796,805	6,185	8,570	42	87,270
	1974	1,465,092	2,053,161	27,011	36,109	1,436,238	2,015,153	1,843	1,899	61	122,279
	1979	1,183,623	1,270,858	30,018	36,358	1,141,885	1,222,405	11,720	12,095	50	162,846
	1984	977,579	1,038,708	28,646	79,199	934,060	946,306	14,873	13,203	53	142,793
SULPHUR											
BASIN TOTAL	1958	882	376	527	201	105	33	250	142	33	682
	1964	640	308	228	120	154	80	258	108	40	207
	1969	486	240	245	129	41	11	200	100	20	286
	1974	0	0	0	0	0	0	0	0	0	0
	1979	250	63	250	63	0	0	0	0	0	0
	1984	1,607	4,236	1,607	4,236	0	0	0	0	0	136
CYPRESS											
BASIN TOTAL	1958	339	131	224	84	0	0	115	47	50	309
	1964	928	407	463	227	0	0	465	180	33	928
	1969	981	556	801	444	50	25	130	87	64	981
	1974	494	293	474	285	0	0	20	8	95	474
	1979	275	85	275	85	0	0	0	0	0	275
	1984	650	909	35	51	160	395	455	463	45	590
SABINE											
ZONE 1	1958	158	46	143	41	15	5	0	0	0	158
	1964	430	240	420	236	10	4	0	0	0	430
	1969	243	92	243	92	0	0	0	0	0	243
	1974	15	7	15	7	0	0	0	0	0	15
	1979	235	141	235	141	0	0	0	0	0	235
	1984	395	669	395	669	0	0	0	0	0	375

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
SABINE --CONTINUED											
ZONE 2	1958	1,085	321	625	191	460	130	0	0	0	1,067
	1964	1,478	750	628	310	180	71	670	369	53	1,477
	1969	1,984	722	1,188	450	46	22	750	250	50	1,984
	1974	695	269	369	161	26	8	300	100	50	695
	1979	433	149	28	13	5	3	400	133	75	430
	1984	486	769	234	399	70	78	182	292	35	406
ZONE 3	1958	3	1	3	1	0	0	0	0	0	0
	1964	0	0	0	0	0	0	0	0	0	0
	1969	0	0	0	0	0	0	0	0	0	0
	1974	0	0	0	0	0	0	0	0	0	0
	1979	0	0	0	0	0	0	0	0	0	0
	1984	30	8	30	8	0	0	0	0	0	0
ZONE 4	1958	4,920	7,863	3,949	6,438	901	1,397	70	28	79	190
	1964	5,097	14,471	4,154	12,462	933	2,002	10	7	50	10
	1969	4,240	10,012	3,145	7,862	1,065	2,130	30	20	25	30
	1974	4,229	9,747	3,145	7,862	1,059	1,868	25	17	25	25
	1979	2,579	3,725	1,449	2,657	0	0	1,130	1,068	25	30
	1984	2,451	5,578	1,321	4,403	0	0	1,130	1,175	25	30
BASIN TOTAL	1958	6,166	8,231	4,720	6,671	1,376	1,532	70	28	79	1,415
	1964	7,005	15,461	5,202	13,008	1,123	2,077	680	376	52	1,917
	1969	6,467	10,826	4,576	8,404	1,111	2,152	780	270	48	2,257
	1974	4,939	10,023	3,529	8,030	1,085	1,876	325	117	46	735
	1979	3,247	4,015	1,712	2,811	5	3	1,530	1,201	30	695
	1984	3,362	7,024	1,980	5,479	70	78	1,312	1,467	26	811
NECHES											
ZONE 1	1958	2,552	1,058	2,407	973	145	85	0	0	0	2,476
	1964	2,103	859	1,920	788	163	68	20	3	50	1,978
	1969	2,184	973	2,146	936	36	36	2	1	60	1,714
	1974	3,150	1,780	1,720	786	385	565	1,045	429	50	3,100
	1979	468	764	173	70	230	564	65	130	50	438
	1984	1,357	2,685	703	1,711	495	710	159	264	50	1,254
ZONE 2	1958	10,193	28,519	6,721	19,868	3,468	8,650	4	1	50	8
	1964	6,519	15,879	5,301	13,443	1,218	2,436	0	0	0	10
	1969	14,086	33,093	10,012	24,717	3,575	7,130	499	1,246	41	183
	1974	14,220	34,199	10,049	24,784	3,673	8,170	498	1,245	42	155
	1979	6,395	11,695	4,277	7,857	1,979	3,690	139	148	41	155
	1984	4,828	15,652	3,965	13,593	763	1,992	100	67	25	225

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
NECHES--CONTINUED											
BASIN TOTAL	1958	12,745	29,577	9,128	20,841	3,613	8,735	4	1	50	2,484
	1964	8,622	16,738	7,221	14,231	1,381	2,504	20	3	50	1,988
	1969	16,270	34,066	12,158	25,653	3,611	7,166	501	1,247	41	1,897
	1974	17,370	35,979	11,769	25,570	4,058	8,735	1,543	1,674	44	3,255
	1979	6,863	12,459	4,450	7,927	2,209	4,254	204	278	45	593
	1984	6,185	18,337	4,668	15,304	1,258	2,702	259	331	44	1,479
NECHES-TRINITY											
ZONE 1	1958	55,546	166,638	55,546	166,638	0	0	0	0	0	0
	1964	58,135	145,337	58,135	145,337	0	0	0	0	0	0
	1969	66,052	165,130	66,052	165,130	0	0	0	0	0	0
	1974	64,552	161,380	64,552	161,380	0	0	0	0	0	0
	1979	62,088	105,823	62,088	105,823	0	0	0	0	0	0
	1984	30,558	106,728	30,558	106,728	0	0	0	0	0	222
ZONE 2	1958	39,013	117,039	39,013	117,039	0	0	0	0	0	0
	1964	45,621	114,027	45,621	114,027	0	0	0	0	0	15
	1969	40,926	102,315	40,926	102,315	0	0	0	0	0	0
	1974	39,739	99,348	39,739	99,348	0	0	0	0	0	0
	1979	52,675	105,765	52,675	105,765	0	0	0	0	0	0
	1984	21,482	74,874	21,397	74,661	85	213	0	0	0	80
BASIN TOTAL	1958	94,559	283,677	94,559	283,677	0	0	0	0	0	0
	1964	103,756	259,364	103,756	259,364	0	0	0	0	0	15
	1969	106,978	267,445	106,978	267,445	0	0	0	0	0	0
	1974	104,291	260,728	104,291	260,728	0	0	0	0	0	0
	1979	114,763	211,588	114,763	211,588	0	0	0	0	0	0
	1984	52,040	181,602	51,955	181,389	85	213	0	0	0	302
TRINITY											
ZONE 1	1958	7,882	4,336	6,927	3,865	955	471	0	0	0	5,192
	1964	6,461	3,811	4,951	2,871	460	291	1,050	649	59	5,529
	1969	3,556	2,782	3,109	2,487	447	295	0	0	0	3,031
	1974	4,512	3,281	2,608	1,988	1,679	1,127	225	166	39	4,162
	1979	3,613	1,704	1,395	775	2,063	858	155	71	41	3,136
	1984	5,001	3,658	2,153	1,662	2,689	1,879	159	117	41	4,480

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
TRINITY--CONTINUED											
ZONE 2	1958	11,126	14,030	6,700	4,142	3,926	9,588	500	300	62	4,488
	1964	4,287	2,482	3,152	1,875	375	197	760	410	53	1,905
	1969	7,415	4,460	7,040	4,257	275	153	100	50	25	2,829
	1974	4,240	2,712	3,255	2,321	85	74	900	317	56	2,430
	1979	540	171	540	171	0	0	0	0	0	332
	1984	1,361	1,557	1,343	1,526	5	2	13	29	30	352
ZONE 3	1958	8,454	25,362	6,048	18,144	2,406	7,218	0	0	0	0
	1964	23,120	55,963	15,770	39,425	7,350	16,538	0	0	0	0
	1969	34,635	81,950	24,585	61,463	9,275	18,550	775	1,937	50	0
	1974	35,045	82,975	24,995	62,488	9,275	18,550	775	1,937	50	0
	1979	20,436	47,825	15,628	37,433	3,257	6,514	1,551	3,878	50	0
	1984	23,431	75,962	19,197	65,533	2,427	5,911	1,807	4,518	58	0
BASIN TOTAL	1958	27,462	43,728	19,675	26,151	7,287	17,277	500	300	62	9,680
	1964	33,868	62,256	23,873	44,171	8,185	17,026	1,810	1,059	56	7,434
	1969	45,606	89,192	34,734	68,207	9,997	18,998	875	1,987	49	5,860
	1974	43,797	88,968	30,858	66,797	11,039	19,751	1,900	2,420	50	6,592
	1979	24,589	49,700	17,563	38,379	5,320	7,372	1,706	3,949	49	3,468
	1984	29,793	81,177	22,693	68,721	5,121	7,792	1,979	4,664	57	4,832
TRINITY--SAN JACINTO											
BASIN TOTAL	1958	11,673	35,019	3,888	11,664	4,851	14,553	2,934	8,802	75	0
	1964	12,790	30,701	7,170	17,925	5,620	12,776	0	0	0	0
	1969	12,226	32,236	9,176	25,111	1,000	2,000	2,050	5,125	50	0
	1974	12,682	32,605	9,632	25,480	1,000	2,000	2,050	5,125	50	0
	1979	12,468	30,062	6,957	16,953	1,434	2,916	4,077	10,193	50	347
	1984	12,452	32,242	3,950	13,060	7,362	16,332	1,140	2,850	50	2,220
SAN JACINTO											
ZONE 1	1958	15,929	41,420	60	40	15,869	41,380	0	0	0	320
	1964	17,312	36,939	120	24	17,192	36,915	0	0	0	490
	1969	16,275	42,215	233	574	15,742	40,891	300	750	50	681
	1974	22,082	53,820	0	0	21,782	53,070	300	750	50	50
	1979	11,872	22,659	0	0	9,858	17,943	2,014	4,716	50	1,058
	1984	6,718	15,051	0	0	6,718	15,051	0	0	0	100

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	SURFACE SOURCE - PERCENT	ACRES	
SAN JACINTO--CONTINUED												
ZONE 2	1958	29,160	80,934	1,050	3,150	28,110	77,784	0	0	0	0	50
	1964	30,970	65,105	900	2,190	30,070	62,915	0	0	0	0	0
	1969	37,280	107,205	1,590	5,432	35,690	101,773	0	0	0	0	0
	1974	27,212	66,600	0	0	27,212	66,600	0	0	0	0	40
	1979	24,200	46,798	0	0	24,200	46,798	0	0	0	0	0
	1984	16,314	41,753	0	0	16,314	41,753	0	0	0	0	0
BASIN TOTAL	1958	45,089	122,354	1,110	3,190	43,979	119,164	0	0	0	0	370
	1964	48,282	102,044	1,020	2,214	47,262	99,830	0	0	0	0	490
	1969	53,555	149,420	1,823	6,006	51,432	142,664	300	750	50	681	
	1974	49,294	120,420	0	0	48,994	119,670	300	750	50	90	
	1979	36,072	69,457	0	0	34,058	64,741	2,014	4,716	50	1,058	
	1984	23,032	56,804	0	0	23,032	56,804	0	0	0	100	
SAN JACINTO-BRAZOS												
BASIN TOTAL	1958	59,595	199,897	50,650	175,800	7,845	20,247	1,100	3,850	20	200	
	1964	70,350	168,383	62,090	151,965	7,360	14,393	900	2,025	25	150	
	1969	74,211	232,544	63,721	205,990	8,990	21,929	1,500	4,625	50	0	
	1974	64,924	171,430	57,074	152,463	5,800	13,500	2,050	5,467	50	0	
	1979	73,219	157,790	68,563	148,754	3,520	6,669	1,136	2,367	65	200	
	1984	44,588	140,721	40,054	127,824	3,480	9,735	1,054	3,162	60	680	
BRAZOS												
ZONE 1	1958	2,488,870	2,823,402	0	0	2,488,870	2,823,402	0	0	0	74,961	
	1964	2,544,792	4,100,554	50	88	2,544,742	4,100,466	0	0	0	166,675	
	1969	2,427,465	2,918,843	1,401	1,100	2,424,564	2,915,960	1,500	1,783	14	332,714	
	1974	2,546,465	3,639,406	621	534	2,538,409	3,627,016	7,435	11,856	66	391,310	
	1979	2,040,029	1,998,122	851	452	1,603,088	1,588,270	436,090	409,400	30	528,325	
	1984	1,961,045	2,260,654	463	230	1,924,268	2,230,358	36,314	30,066	57	611,342	
ZONE 2	1958	44,793	55,018	1,643	1,498	43,150	53,520	0	0	0	7,726	
	1964	99,347	122,635	5,344	5,868	93,873	116,622	130	145	54	45,273	
	1969	89,447	68,528	6,239	5,505	82,752	62,286	456	737	51	27,696	
	1974	85,767	61,051	4,565	3,196	79,782	56,824	1,420	1,031	59	29,325	
	1979	83,986	63,142	6,479	4,060	76,117	58,076	1,390	1,006	59	28,700	
	1984	57,160	46,079	5,552	2,838	51,158	42,665	450	576	70	33,462	

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		SPRINKLER SYSTEMS	
		ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	ACRE-FOOT	ACRES	PERCENT
ZONE 3	1958	7,911	5,834	5,348	3,881	883	1,206	1,680	747	46	7,099
	1964	13,697	9,658	4,975	5,218	1,057	943	7,665	3,497	93	10,698
	1969	18,873	16,633	14,367	12,460	3,663	3,224	843	949	31	14,891
	1974	20,402	14,323	13,301	8,483	5,501	4,798	1,600	1,042	45	17,136
	1979	13,633	9,406	8,414	5,072	4,155	3,399	1,054	935	49	13,358
	1984	15,466	16,874	7,853	8,418	6,062	6,722	1,551	1,734	41	13,201
ZONE 4	1958	6,464	4,923	3,800	2,694	2,329	2,046	335	183	58	4,232
	1964	11,869	8,822	6,998	5,261	3,432	2,590	1,439	971	63	9,301
	1969	39,046	37,503	13,726	12,523	21,329	21,112	3,991	3,868	45	37,601
	1974	45,180	40,373	16,674	13,600	24,381	22,973	4,125	3,800	45	43,765
	1979	54,567	42,137	22,469	13,779	24,505	24,953	3,593	3,405	41	48,709
	1984	62,547	66,601	24,888	26,319	32,688	34,796	4,971	5,486	47	53,050
ZONE 5	1958	74,300	61,589	13,951	12,138	54,959	45,447	5,390	4,004	63	4,868
	1964	95,473	96,205	21,194	22,656	71,493	70,904	2,786	2,645	60	5,103
	1969	70,381	64,817	12,715	10,523	44,850	43,319	12,816	10,975	68	6,817
	1974	56,041	44,843	9,925	8,100	38,916	31,693	7,200	5,050	63	5,806
	1979	47,064	34,559	2,830	2,149	36,734	26,790	7,500	5,620	60	2,116
	1984	48,659	44,164	5,528	5,659	31,696	31,667	7,435	6,838	27	1,919
ZONE 6	1958	33,888	67,319	13,462	35,652	17,495	26,792	2,931	4,875	42	699
	1964	24,628	37,561	9,922	20,368	13,084	15,442	1,622	1,751	57	657
	1969	26,543	63,701	9,904	28,071	16,089	33,934	550	1,696	50	1,566
	1974	21,231	50,392	6,940	19,672	13,841	29,520	450	1,200	50	741
	1979	22,953	46,241	6,256	15,640	12,737	22,351	3,960	8,250	60	171
	1984	16,707	55,223	7,089	29,085	9,618	26,138	0	0	0	1,882
BASIN TOTAL	1958	2,656,226	3,018,085	38,204	55,863	2,607,686	2,952,413	10,336	9,809	51	99,585
1964	2,789,806	4,375,435	48,483	59,459	2,727,681	4,306,967	13,642	9,009	72	237,707	
1969	2,671,755	3,170,025	58,352	70,182	2,593,247	3,079,835	20,156	20,008	54	421,285	
1974	2,775,086	3,850,388	52,026	53,585	2,700,830	3,772,824	22,230	23,979	60	488,083	
1979	2,262,232	2,193,607	47,299	41,152	1,761,336	1,723,839	453,597	428,616	31	621,379	
1984	2,161,584	2,489,595	51,373	72,549	2,059,490	2,372,346	50,721	44,700	51	714,856	
BASIN TOTAL	1958	32,797	86,833	21,700	65,450	8,297	18,483	2,800	2,900	21	500
1964	51,167	163,689	34,518	130,060	16,330	32,513	319	1,116	75	350	
1969	70,799	237,807	39,793	154,419	30,606	82,155	400	1,233	50	590	
1974	64,893	213,863	37,353	134,229	17,960	49,577	9,580	30,057	59	1,645	
1979	73,744	196,375	39,310	120,065	22,409	49,287	12,025	27,023	51	6,587	
1984	74,160	249,613	36,524	142,405	29,285	76,525	8,351	30,683	65	14,966	

BRAZOS-COLORADO

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES	ACRE- FEET
COLORADO												
ZONE 1	1958	507,007	668,521	1,441	1,958	505,566	666,563	0	0	0	412,163	
	1964	617,583	831,991	706	1,017	616,877	830,974	0	0	0	574,125	
	1969	757,932	430,222	1,229	1,944	755,433	426,910	1,270	1,368	80	741,936	
	1974	810,932	779,475	1,130	1,457	807,978	775,784	1,824	2,234	70	794,871	
	1979	824,377	688,012	1,051	1,760	821,306	683,116	2,020	3,136	73	814,434	
	1984	643,752	531,154	809	1,287	637,916	522,058	5,027	7,809	80	628,686	
ZONE 2	1958	41,936	51,682	20,557	24,928	20,334	25,531	1,045	1,223	48	5,127	
	1964	73,412	113,181	24,473	40,119	47,783	70,995	1,156	2,067	48	14,132	
	1969	97,213	133,893	33,018	55,592	63,906	77,851	289	450	68	19,930	
	1974	116,747	168,932	45,922	70,764	68,067	95,381	2,758	2,787	64	22,643	
	1979	135,326	170,787	41,574	58,466	92,262	110,529	1,490	1,792	64	20,660	
	1984	135,023	176,317	30,311	41,312	104,224	134,483	488	522	59	23,547	
ZONE 3	1958	6,204	6,149	3,124	2,812	3,080	3,337	0	0	0	5,590	
	1964	8,872	14,467	5,134	8,869	3,668	5,348	70	250	50	7,512	
	1969	14,590	22,632	7,029	8,635	7,321	13,339	240	658	50	12,302	
	1974	14,283	12,708	6,125	5,267	7,918	6,815	240	626	50	12,592	
	1979	7,946	11,720	2,189	2,041	5,757	9,679	0	0	0	6,615	
	1984	8,579	12,878	3,189	3,323	5,390	9,555	0	0	0	7,009	
ZONE 4	1958	20,245	43,370	12,965	31,085	7,280	12,285	0	0	0	1,430	
	1964	24,991	55,893	13,684	37,517	10,565	15,779	742	2,597	50	3,661	
	1969	27,286	79,247	14,920	44,173	11,396	33,400	970	1,674	42	3,934	
	1974	27,587	82,059	16,595	52,272	9,990	28,335	1,002	1,452	31	3,803	
	1979	26,569	70,161	17,662	52,031	8,485	17,329	422	801	32	2,874	
	1984	28,120	87,264	14,384	50,321	12,748	36,138	988	805	33	3,159	
BASIN TOTAL	1958	575,392	769,722	38,087	60,783	536,260	707,716	1,045	1,223	48	424,310	
	1964	724,858	1,015,532	43,997	87,522	678,893	923,096	1,968	4,914	49	599,430	
	1969	897,021	665,994	56,196	110,344	838,056	551,500	2,769	4,150	58	778,102	
	1974	969,549	1,043,174	69,772	129,760	893,953	906,315	5,824	7,099	58	833,909	
	1979	994,218	940,680	62,476	114,298	927,810	820,653	3,932	5,729	65	844,583	
	1984	815,474	807,613	48,693	96,243	760,278	702,234	6,503	9,136	74	662,401	
COLORADO-LAVACA												
BASIN TOTAL	1958	57,354	200,600	26,600	106,450	25,294	73,580	5,460	20,570	55	60	
	1964	47,232	176,429	20,100	97,150	23,862	65,109	3,270	14,170	21	30	
	1969	53,308	188,781	22,491	89,964	27,317	85,692	3,500	13,125	30	100	
	1974	61,753	202,554	1,000	4,000	34,518	100,173	26,235	98,381	84	135	
	1979	63,400	191,750	1,000	3,883	33,381	82,050	29,019	105,817	78	467	
	1984	45,952	144,795	13,256	51,018	27,604	76,814	5,092	16,963	56	1,525	



TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
<b>LAVACA</b>											
BASIN TOTAL	1958	74,843	222,559	18,350	54,246	54,883	163,406	1,610	4,907	34	652
	1964	72,802	220,070	15,926	70,325	55,266	143,928	1,610	5,817	46	713
	1969	84,958	281,620	17,155	75,501	67,005	204,065	798	2,054	54	1,217
	1974	100,051	311,164	20,090	78,047	77,230	224,363	2,731	8,754	25	1,241
	1979	85,202	234,447	19,822	66,065	60,658	156,333	4,722	12,049	33	1,199
	1984	69,568	225,570	16,387	63,017	51,044	154,897	2,137	7,656	37	897
<b>LAVACA-GUADALUPE</b>											
BASIN TOTAL	1958	11,529	30,123	6,927	14,229	4,602	15,894	0	0	0	120
	1964	18,370	53,442	7,032	21,928	9,875	26,881	1,463	4,633	27	145
	1969	20,203	76,824	7,993	37,035	12,062	39,271	148	518	80	0
	1974	21,555	76,297	10,651	42,156	10,904	34,141	0	0	0	0
	1979	24,976	77,613	9,214	27,642	15,325	48,587	437	1,384	50	0
	1984	19,675	62,046	8,048	24,897	11,627	37,149	0	0	0	0
<b>GUADALUPE</b>											
ZONE 1	1958	755	1,029	438	592	317	437	0	0	0	679
	1964	1,255	1,796	795	1,124	460	672	0	0	0	1,105
	1969	2,036	2,137	1,169	1,235	867	902	0	0	0	1,807
	1974	1,303	904	894	602	409	302	0	0	0	1,207
	1979	1,067	1,418	703	569	364	849	0	0	0	962
	1984	1,101	2,778	719	1,192	247	506	135	1,080	80	978
ZONE 2	1958	2,758	3,003	2,068	2,224	690	779	0	0	0	1,961
	1964	2,935	3,131	1,344	1,450	1,591	1,681	0	0	0	1,991
	1969	2,300	2,326	1,113	1,011	1,187	1,315	0	0	0	1,789
	1974	3,740	3,487	2,804	2,628	936	859	0	0	0	3,386
	1979	2,367	1,288	1,713	991	654	297	0	0	0	1,780
	1984	2,907	3,124	2,076	2,228	693	620	138	276	80	2,317
ZONE 3	1958	5,242	5,860	2,918	2,945	2,324	2,915	0	0	0	3,794
	1964	4,746	5,260	1,997	2,040	2,749	3,220	0	0	0	3,765
	1969	4,782	4,096	2,004	1,657	2,767	2,429	11	10	50	3,724
	1974	5,021	4,129	1,680	1,364	3,291	2,723	50	42	50	4,334
	1979	4,890	2,249	2,253	861	2,587	1,371	50	17	50	4,129
	1984	6,380	6,718	2,479	2,724	3,771	3,864	130	130	38	5,634

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
GUADALUPE--CONTINUED											
ZONE 4	1958	1,538	1,165	1,008	755	400	381	130	29	50	918
	1964	1,890	1,350	315	249	1,445	993	130	108	50	1,328
	1969	751	1,131	140	201	611	930	0	0	0	383
	1974	1,239	1,232	466	257	773	975	0	0	0	834
	1979	861	1,590	236	196	625	1,394	0	0	0	466
	1984	1,012	2,332	220	153	792	2,179	0	0	0	330
	BASIN TOTAL	1958	10,293	11,057	6,432	6,516	3,731	4,512	130	29	50
	1964	10,826	11,537	4,451	4,863	6,245	6,566	130	108	50	8,189
	1969	9,869	9,690	4,426	4,104	5,432	5,576	11	10	50	7,703
	1974	11,303	9,752	5,844	4,851	5,409	4,859	50	42	50	9,761
	1979	9,185	6,545	4,905	2,617	4,230	3,911	50	17	50	7,337
	1984	11,400	14,952	5,494	6,297	5,503	7,169	403	1,486	76	9,259
SAN ANTONIO											
ZONE 1	1958	32,320	46,518	11,020	15,203	21,300	31,315	0	0	0	3,100
	1964	30,643	60,838	14,089	26,727	16,554	34,111	0	0	0	3,171
	1969	31,069	42,224	6,575	7,667	9,359	17,387	15,135	17,170	69	2,314
	1974	29,886	37,118	14,472	14,774	15,414	22,344	0	0	0	6,230
	1979	28,281	43,311	13,115	18,916	15,166	24,395	0	0	0	5,025
	1984	27,197	58,321	8,406	14,011	18,353	42,950	438	1,360	50	5,681
	BASIN TOTAL	1958	6,777	6,190	2,555	1,948	4,222	4,242	0	0	0
	1964	19,737	17,760	6,342	5,453	13,285	12,209	110	98	50	11,558
	1969	19,123	15,264	4,721	2,384	12,269	11,514	2,133	1,366	10	14,863
	1974	20,402	20,984	6,179	6,498	13,399	13,687	824	799	4	16,460
	1979	7,329	7,141	669	832	6,660	6,309	0	0	0	6,348
	1984	12,280	10,958	2,935	1,803	9,245	9,081	100	74	35	11,117
BASIN TOTAL	1958	39,097	52,708	13,575	17,151	25,522	35,557	0	0	0	7,465
	1964	50,380	78,598	20,431	32,180	29,839	46,320	110	98	50	14,729
	1969	50,192	57,488	11,296	10,051	21,628	28,901	17,268	18,536	64	17,177
	1974	50,288	58,102	20,651	21,272	28,813	36,031	824	799	4	22,690
	1979	35,610	50,452	13,784	19,748	21,826	30,704	0	0	0	11,373
	1984	39,477	69,279	11,341	15,814	27,598	52,031	538	1,434	49	16,798

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES	
SAN ANTONIO-NUECES												
BASIN TOTAL	1958	13,110	14,415	0	0	13,110	14,415	0	0	0	0	30
	1964	16,328	7,557	0	0	16,113	7,414	215	143	20	0	1,055
	1969	12,797	5,986	105	80	12,692	5,906	0	0	0	0	313
	1974	12,909	6,318	30	20	12,879	6,298	0	0	0	0	320
	1979	2,596	1,760	34	34	2,562	1,726	0	0	0	0	34
	1984	10,101	4,786	65	51	10,036	4,735	0	0	0	0	94
NUECES												
ZONE 1	1958	189,469	229,277	12,014	18,109	159,405	191,979	18,050	19,189	51	46,997	
	1964	290,618	496,278	17,190	32,687	248,065	413,065	25,363	50,526	32	79,341	
	1969	304,155	483,418	19,808	36,828	258,778	409,182	25,569	37,408	66	105,060	
	1974	291,406	460,670	17,863	33,071	246,816	380,180	26,727	47,419	74	118,667	
	1979	290,617	451,429	24,888	36,492	244,564	381,026	21,165	33,911	77	137,209	
	1984	263,369	511,574	20,493	44,279	227,232	436,993	15,644	30,302	27	129,621	
ZONE 2	1958	8,700	9,537	1,680	1,271	6,520	7,862	500	404	50	1,670	
	1964	17,570	11,147	7,355	5,450	9,431	5,069	784	628	47	3,011	
	1969	16,570	7,642	5,390	2,833	9,680	4,184	1,500	625	50	4,265	
	1974	8,393	4,528	860	540	7,533	3,988	0	0	0	2,770	
	1979	3,292	1,717	180	140	3,112	1,577	0	0	0	880	
	1984	5,537	3,879	1,560	975	3,977	2,904	0	0	0	1,630	
BASIN TOTAL	1958	198,169	238,814	13,694	19,380	165,925	199,841	18,550	19,593	50	48,667	
	1964	308,188	507,425	24,545	38,137	257,496	418,134	26,147	51,154	32	82,352	
	1969	320,725	491,060	25,198	39,661	268,458	413,366	27,069	38,033	65	109,325	
	1974	299,799	465,198	18,723	33,611	254,349	384,168	26,727	47,419	74	121,437	
	1979	293,909	453,146	25,068	36,632	247,676	382,603	21,165	33,911	77	138,089	
	1984	268,906	515,453	22,053	45,254	231,209	439,897	15,644	30,302	27	131,251	
NUECES-RIO GRANDE												
ZONE 1	1958	7,823	4,115	4,190	2,601	3,633	1,514	0	0	0	4,498	
	1964	10,825	7,135	3,337	1,266	7,488	5,869	0	0	0	7,088	
	1969	13,297	6,837	1,430	664	11,867	6,173	0	0	0	11,396	
	1974	11,574	6,836	240	100	11,254	6,683	80	53	60	11,454	
	1979	10,572	4,735	60	40	10,432	4,642	80	53	60	10,252	
	1984	8,910	6,360	60	40	8,770	6,267	80	53	60	7,220	

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRES
NUECES-RIO GRANDE--CONTINUED											
ZONE 2											
	1958	830	622	0	0	830	622	0	0	0	780
	1964	480	376	0	0	480	376	0	0	0	480
	1969	1,100	588	400	200	700	388	0	0	0	1,100
	1974	960	483	400	192	560	291	0	0	0	960
	1979	400	158	400	158	0	0	0	0	0	400
	1984	200	60	0	0	200	60	0	0	0	200
ZONE 3											
	1958	762,264	1,266,661	682,081	1,119,120	6,516	11,589	73,667	135,952	62	9,700
	1964	741,771	865,795	653,471	741,545	2,900	3,400	85,400	120,850	52	9,000
	1969	750,015	1,038,848	680,015	951,598	5,000	6,000	65,000	81,250	75	6,000
	1974	744,723	1,016,033	679,723	926,700	5,000	6,333	60,000	83,000	85	6,000
	1979	737,723	878,520	671,723	798,770	6,000	6,750	60,000	73,000	95	7,000
	1984	680,235	948,002	619,235	861,002	500	250	60,500	86,750	89	5,500
BASIN TOTAL											
	1958	770,917	1,271,398	686,271	1,121,721	10,979	13,725	73,667	135,952	62	14,978
	1964	753,076	873,506	656,808	742,811	10,868	9,645	85,400	120,850	52	16,568
	1969	764,412	1,046,273	681,845	952,462	17,567	12,561	65,000	81,250	75	18,496
	1974	757,257	1,023,352	680,363	926,992	16,814	13,307	60,080	83,053	84	18,414
	1979	748,695	883,413	672,183	798,968	16,432	11,392	60,080	73,053	94	17,652
	1984	689,345	954,422	619,295	861,042	9,470	6,577	60,580	86,803	89	12,920
RIO GRANDE											
ZONE 1											
	1958	62,395	214,037	0	0	976	4,681	61,419	209,356	88	0
	1964	64,200	156,098	0	0	1,600	4,828	62,600	151,270	14	10
	1969	71,274	252,316	0	0	1,193	4,685	70,081	247,631	98	300
	1974	67,825	214,389	150	250	1,180	4,055	66,495	210,084	98	448
	1979	63,815	191,602	0	0	510	1,760	63,305	189,842	98	90
	1984	65,526	214,589	220	393	215	833	65,091	213,363	97	40
ZONE 2											
	1958	5,778	21,094	290	868	228	517	5,260	19,709	77	56
	1964	6,751	20,382	256	945	1,030	2,530	5,465	16,907	77	96
	1969	6,696	26,640	178	445	793	3,230	5,725	22,965	85	0
	1974	6,620	24,010	83	249	670	2,551	5,867	21,210	81	10
	1979	6,962	28,957	4,935	23,916	1,522	3,702	505	1,339	95	380
	1984	5,890	22,265	4,998	20,596	892	1,669	0	0	0	535
ZONE 3											
	1958	31,595	102,977	0	0	31,595	102,977	0	0	0	1,150
	1964	41,810	124,124	0	0	41,810	124,124	0	0	0	1,240
	1969	31,371	122,183	0	0	31,371	122,183	0	0	0	440
	1974	42,435	166,616	0	0	42,435	166,616	0	0	0	2,800
	1979	72,860	212,540	0	0	72,860	212,540	0	0	0	27,514
	1984	32,066	127,149	0	0	32,066	127,149	0	0	0	10,509

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
RIO GRANDE --CONTINUED											
ZONE 4	1958	690	1,151	0	0	690	1,151	0	0	0	690
	1964	0	0	0	0	0	0	0	0	0	0
	1969	1,752	5,458	0	0	1,752	5,458	0	0	0	1,712
	1974	1,983	3,613	0	0	1,983	3,613	0	0	0	1,963
	1979	1,555	5,267	0	0	1,555	5,267	0	0	0	1,505
	1984	385	502	0	0	385	502	0	0	0	371
ZONE 5	1958	220,313	731,816	11,255	34,321	190,678	652,512	18,380	44,983	57	400
	1964	245,444	806,648	7,451	13,228	225,127	749,261	12,866	44,159	16	2,724
	1969	145,656	565,015	399	1,228	128,414	504,734	16,843	59,053	44	3,004
	1974	136,800	529,420	254	735	119,227	462,955	17,319	65,730	50	2,312
	1979	66,698	231,350	433	1,098	56,191	197,543	10,074	32,709	77	15,300
	1984	59,282	180,973	25	38	52,921	154,472	6,336	26,463	50	11,785
ZONE 6	1958	1,762	3,128	0	0	1,722	3,003	40	125	50	280
	1964	2,767	5,304	0	0	2,767	5,304	0	0	0	813
	1969	3,184	5,167	0	0	3,184	5,167	0	0	0	1,007
	1974	2,235	2,839	0	0	2,235	2,839	0	0	0	546
	1979	1,075	1,175	0	0	1,075	1,175	0	0	0	555
	1984	1,084	1,451	0	0	1,084	1,451	0	0	0	497
ZONE 7	1958	33,771	40,791	30,036	36,151	3,535	4,460	200	180	30	80
	1964	55,150	142,863	48,850	131,003	6,300	11,860	0	0	0	0
	1969	71,763	155,273	64,252	141,337	7,511	13,936	0	0	0	130
	1974	63,089	128,271	56,964	117,342	6,125	10,929	0	0	0	668
	1979	53,632	78,529	48,479	69,247	5,087	9,123	66	159	20	2,329
	1984	50,181	101,735	45,991	92,386	4,190	9,349	0	0	0	2,293
ZONE 8	1958	19,234	25,366	14,219	19,934	15	15	5,000	5,417	80	100
	1964	81,650	123,188	16,650	26,621	0	0	65,000	96,567	60	800
	1969	64,683	86,990	17,183	23,819	0	0	47,500	63,171	75	200
	1974	53,805	63,501	53,805	63,501	0	0	0	0	0	0
	1979	55,362	61,942	55,362	61,942	0	0	0	0	0	4,130
	1984	54,307	69,080	53,807	68,580	500	500	0	0	0	4,084
BASIN TOTAL	1958	375,538	1,140,360	55,800	91,274	229,439	769,316	90,299	279,770	82	2,756
	1964	497,772	1,378,607	73,207	171,797	278,634	897,907	145,931	308,903	32	5,683
	1969	396,379	1,219,042	82,012	166,829	174,218	659,393	140,149	392,820	85	6,793
	1974	374,792	1,132,659	111,256	182,077	173,855	653,558	89,681	297,024	86	8,747
	1979	321,959	811,362	109,209	156,203	138,800	431,110	73,950	224,049	95	51,803
	1984	268,721	717,744	105,041	181,993	92,253	295,925	71,427	239,826	92	30,114

TABLE 2.--IRRIGATION SUMMARY FOR RIVER AND COASTAL BASINS, 1958, 1964, 1969, 1974, 1979, AND 1984--CONTINUED

BASIN AND ZONE	YEAR	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		SPRINKLER SYSTEMS	
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
STATE TOTAL	1958	6,723,614	9,605,605	1,126,521	2,170,313	5,387,663	6,946,620	209,430	488,672	71	667,678
	1964	7,706,881	12,509,652	1,184,961	1,992,067	6,235,614	9,989,649	286,306	527,936	37	1,076,729
	1969	8,206,249	11,569,024	1,267,607	2,352,335	6,648,553	8,622,041	290,089	594,648	77	1,548,002
	1974	8,618,054	13,082,262	1,272,397	2,186,062	7,089,624	10,279,992	256,033	616,208	80	1,814,293
	1979	7,817,681	9,723,413	1,248,855	1,850,225	5,885,102	6,924,037	683,724	949,151	59	2,197,001
	1984	6,752,625	9,342,957	1,093,158	2,055,843	5,415,859	6,790,588	243,608	496,526	78	2,140,598

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984

NO.	DISTRICT NAME	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	SURFACE SOURCE-PERCENT	
104	FLOYD COUNTY	207,600	184,504	0	0	188,400	174,904	19,200	9,600	50	3,255
107	RIO BLANCO	158,618	123,113	0	0	142,944	113,643	15,674	9,469	50	10,345
108	LUBBOCK COUNTY	168,360	123,257	0	0	163,010	114,907	5,350	8,350	65	22,130
109	HALL-CHILDRESS	27,864	22,326	0	0	27,864	22,326	0	0	0	20,205
110	TULE CREEK	125,425	150,758	0	0	125,425	150,758	0	0	0	11,220
111	BLACKWATER VALLEY	142,283	149,132	0	0	142,283	149,132	0	0	0	102,889
115	UPPER COLORADO	4,483	4,218	330	633	4,153	3,585	0	0	0	3,552
119	LYNN COUNTY	84,980	60,392	0	0	80,980	54,792	4,000	5,600	75	17,820
124	DAWSON COUNTY	32,390	21,361	0	0	32,390	21,361	0	0	0	32,390
125	GRAY COUNTY	18,423	16,293	0	0	18,423	16,293	0	0	0	4,322
126	CAP ROCK	60,133	45,643	426	213	59,707	45,430	0	0	0	6,689
127	DONLEY COUNTY	11,795	6,715	0	0	11,795	6,715	0	0	0	7,886
129	HOCKLEY COUNTY	150,900	100,959	0	0	150,740	100,852	160	107	70	101,420
130	LAMB COUNTY	279,400	533,192	0	0	279,400	533,192	0	0	0	134,000
131	DALLAM	213,375	285,751	0	0	213,375	285,751	0	0	0	188,502
132	HALE COUNTY	354,900	526,632	0	0	354,000	525,274	900	1,358	20	51,500
133	SALT FORK	5,314	5,884	40	45	5,274	5,839	0	0	0	4,864
134	LIPSCOMB	20,945	17,824	0	0	20,645	17,674	300	150	20	18,470
136	RUNNING WATER	231,657	321,357	0	0	231,657	321,357	0	0	0	29,494
137	MOORE COUNTY	210,100	287,913	0	0	210,100	287,913	0	0	0	24,000
138	HEMPHILL COUNTY	3,201	5,260	0	0	2,961	5,060	240	200	40	3,201

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT		ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
NO.	NAME	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
140	PARMER	291,970	278,193	0	0	291,710	277,873	260	320	50	67,460
141	WHEELER COUNTY	4,438	4,145	100	67	4,338	4,078	0	0	0	4,438
142	OCHILTREE	101,000	128,608	0	0	101,000	128,608	0	0	0	4,342
143	TIERRA BLANCA	285,530	297,892	0	0	285,530	297,892	0	0	0	15,240
145	ROBERTS	8,436	5,204	0	0	8,436	5,204	0	0	0	2,852
146	HUTCHINSON	44,895	60,142	0	0	44,895	60,142	0	0	0	1,408
147	PALO DURO	58,255	53,503	350	350	55,625	50,423	2,280	2,730	60	3,860
148	HANSFORD	148,306	252,284	0	0	148,306	252,284	0	0	0	7,880
149	COCHRAN	105,512	73,917	0	0	105,512	73,917	0	0	0	104,635
150	YOAKUM	100,427	61,515	0	0	100,427	61,515	0	0	0	99,797
151	TERRY	146,799	66,118	0	0	146,449	65,243	350	875	91	146,494
152	HARTLEY	200,000	219,512	0	0	200,000	219,512	0	0	0	97,910
153	OLDHAM COUNTY	6,136	5,661	0	0	6,136	5,661	0	0	0	848
155	STAKED PLAINS	11,460	7,097	0	0	11,460	7,097	0	0	0	640
156	MCCLELLAN CREEK	114,000	105,923	0	0	114,000	105,923	0	0	0	5,575
157	DUCK CREEK	10,070	6,718	1,123	468	8,457	5,960	490	290	60	5,200
158	GARZA	6,105	5,125	0	0	6,105	5,125	0	0	0	340
159	SHERMAN COUNTY	140,200	225,833	0	0	140,200	225,833	0	0	0	43,830
160	CANADIAN RIVER	8,705	13,253	0	0	6,185	8,857	2,520	4,396	70	2,480
161	FOARD COUNTY	4,220	4,080	0	0	4,220	4,080	0	0	0	4,220
162	LOWER PEASE RIVER	6,671	6,592	120	170	6,551	6,422	0	0	0	1,505
163	COTTLE	1,712	1,913	20	5	1,632	1,758	60	150	10	1,373



TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES		SPRINKLER SYSTEMS	
	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	ACRES	ACRES
164 UPPER PEASE	9,460	4,309	360	200	9,100	4,109	0	0	0	9,080
165 UPPER CLEAR FORK	1,333	1,977	30	50	1,128	1,813	175	114	90	1,150
166 GAINES COUNTY	261,920	282,872	0	0	261,920	282,872	0	0	0	261,920
167 STONEWALL	272	179	0	0	272	179	0	0	0	272
168 KING	600	436	0	0	600	436	0	0	0	600
ZONE 1 TOTAL	4,590,578	5,165,484	2,899	2,201	4,535,720	5,119,574	51,959	43,709	58	1,693,503
201 CONCHO	30,569	40,470	4,821	10,322	25,748	30,148	0	0	0	2,679
205 EL PASO-HUDSPETH	84,777	316,493	220	393	19,466	102,737	65,091	213,363	97	4,480
206 MIDDLE CLEAR FORK	1,340	754	345	173	995	581	0	0	0	900
207 MITCHELL	2,798	2,739	0	0	2,798	2,739	0	0	0	2,783
208 NORTH CONCHO RIVER	30,404	40,297	0	0	30,404	40,297	0	0	0	1,052
209 TOYAH-LIMPIA	16,966	58,697	25	38	10,605	32,196	6,336	26,463	50	5,607
210 HIGHLAND	7,827	25,178	4,998	20,596	2,829	4,582	0	0	0	2,350
213 UPPER PECOS	10,867	32,247	0	0	10,867	32,247	0	0	0	2,407
214 SAN SABA-BRADY	10,060	9,644	5,857	5,434	4,203	4,210	0	0	0	5,228
215 MENARD COUNTY	3,398	2,588	3,202	2,425	196	163	0	0	0	270
216 KENDALL	114	320	15	38	99	282	0	0	0	65
217 KERR COUNTY	826	2,255	597	1,017	94	158	135	1,080	80	762
218 PEDERNALES	233	419	27	62	206	357	0	0	0	117
219 COKE COUNTY	310	512	0	0	310	512	0	0	0	75
220 GILLESPIE COUNTY	1,201	2,040	175	153	1,026	1,887	0	0	0	700
221 NUECES-FRIO-SABINAL	51,370	151,773	1,750	2,005	48,420	146,560	1,200	3,208	10	15,348

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT		ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
NO.	NAME	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
222	EDWARDS PLATEAU	617	937	91	143	526	794	0	0	0	278
223	MASON COUNTY	5,889	13,640	125	264	5,764	13,376	0	0	0	5,841
224	DEVIL'S RIVER	1,022	2,348	620	1,612	402	736	0	0	0	90
225	UPPER LLANOS	1,914	1,328	1,523	1,051	391	277	0	0	0	1,292
226	MEDINA VALLEY	46,868	126,194	13,840	37,762	30,804	81,390	2,224	7,042	50	10,648
227	BIG BEND	233	427	0	0	233	427	0	0	0	135
228	MAVERICK	39,353	84,339	39,353	84,339	0	0	0	0	0	53
229	BANDERA	213	169	152	108	61	61	0	0	0	150
230	HIGH POINT	10,869	22,265	0	0	10,869	22,265	0	0	0	4,119
231	TRANS-PECOS	31,230	89,819	0	0	31,230	89,819	0	0	0	3,794
232	RUNNELS	3,049	3,887	1,942	2,578	749	871	358	438	60	1,225
233	LLANO COUNTY	711	1,049	50	42	661	1,007	0	0	0	665
234	MIDDLE CONCHO	38,757	51,616	1,359	2,281	37,398	49,335	0	0	0	2,288
235	CROCKETT	450	338	0	0	450	338	0	0	0	450
236	WEST NUECES-LAS MORAS	4,706	10,335	671	1,212	4,035	9,123	0	0	0	1,555
237	R GRANDE-PECOS RIVER	28	41	0	0	28	41	0	0	0	0
238	UPPER NUECES-FRIO	243	348	243	348	0	0	0	0	0	201
240	CHAPARAL	894	1,407	0	0	894	1,407	0	0	0	640
241	SANDHILLS	2,482	5,617	0	0	1,872	3,538	610	2,079	90	1,834
242	MUSTANG	16,979	19,093	0	0	16,979	19,093	0	0	0	16,399
243	HOWARD	506	614	51	112	455	502	0	0	0	506
244	MIDLAND	19,794	23,852	0	0	15,727	18,997	4,067	4,855	74	13,172

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT NO.	DISTRICT NAME	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS ACRES
		ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	
245	NOLAN COUNTY	2,210	2,262	140	140	1,730	1,629	340	493	73	1,911
246	ANDREWS	4,871	3,605	0	0	4,871	3,605	0	0	0	4,754
247	ELDORADO-DIVIDE	1,017	1,438	0	0	1,017	1,438	0	0	0	304
248	TOM GREEN	5,590	10,881	3,190	8,060	2,400	2,821	0	0	0	2,080
ZONE 2 TOTAL		493,555	1,164,275	85,382	182,708	327,812	722,546	80,361	259,021	89	119,207
301	WILSON COUNTY	12,051	8,395	1,707	1,146	10,164	7,116	180	133	28	11,863
304	HAYS-CALDWELL-TRAVIS	1,985	2,207	1,512	1,603	335	328	138	276	80	1,840
306	COMAL-HAYS-GUADALUPE	6,707	8,489	2,930	3,882	3,777	4,607	0	0	0	5,665
307	ATASCOSA COUNTY	31,988	35,039	0	0	31,988	35,039	0	0	0	31,988
311	NUECES-J WELLS-KLEBERG	9,505	5,521	1,360	582	8,065	4,886	80	53	60	4,165
313	BURLESON-LEE	11,917	7,863	106	88	10,864	7,227	947	548	50	181
316	MATAGORDA COUNTY	46,886	158,140	30,128	115,953	12,571	27,751	4,187	14,436	80	8,875
317	COASTAL PLAINS	25,201	86,108	6,987	29,622	18,214	56,486	0	0	0	1,775
318	WATERS DAVIS	49,611	145,493	41,083	130,180	7,474	12,151	1,054	3,162	60	5,088
319	SOUTHMOST	268,707	376,457	268,207	375,707	0	0	500	750	75	500
320	DIMMIT COUNTY	10,051	18,160	250	123	6,578	12,252	3,223	5,785	10	1,038
321	AGUA POQUITA	2,755	2,517	0	0	2,755	2,517	0	0	0	2,755
322	DOS RIOS	6,510	10,894	700	1,275	4,970	8,362	840	1,257	30	6,510
323	LIVE OAK	1,230	1,533	260	433	970	1,100	0	0	0	1,230
324	SAN PATRICIO	6,428	3,556	40	13	6,388	3,543	0	0	0	54
325	FRIO	60,285	90,007	340	453	58,970	88,051	975	1,503	18	53,165
326	WINTER GARDEN	58,894	95,856	2,185	1,151	49,209	81,997	7,500	12,708	30	6,780

TABLE 3--IRRIGATION SUMMARY FOR SOIL &amp; WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT		ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
NO.	NAME	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
328	LOMA BLANCA	450	135	0	0	450	135	0	0	0	450
329	COPANO BAY	150	51	0	0	150	51	0	0	0	0
330	ALAMO	20,104	38,815	9,565	15,266	10,499	23,449	40	100	60	5,478
331	MONTE MUCHO	450	450	0	0	450	450	0	0	0	450
332	STARR COUNTY	25,751	30,777	25,251	30,277	500	500	0	0	0	400
333	COLORADO	36,501	134,012	24,795	95,049	10,552	35,116	1,154	3,847	20	25
334	LAVACA	6,304	22,320	0	0	6,304	22,320	0	0	0	270
335	ZAPATA	3,286	3,300	3,286	3,300	0	0	0	0	0	684
336	JACKSON	30,685	96,670	0	0	28,265	89,006	2,420	7,664	23	250
337	WEBB	5,400	5,400	5,400	5,400	0	0	0	0	0	783
338	GONZALES COUNTY	2,395	1,636	860	498	1,405	1,008	130	130	38	2,265
339	DE WITT COUNTY	445	148	60	20	385	128	0	0	0	250
340	BASTROP COUNTY	1,598	1,130	890	663	28	37	680	430	33	1,078
341	FAYETTE	1,309	458	993	331	221	111	95	16	60	1,136
342	WHARTON COUNTY	83,700	268,952	22,770	91,832	53,030	147,495	7,900	29,625	62	4,360
343	KARNES-GOLIAD	2,101	2,102	1,069	411	1,032	1,691	0	0	0	1,534
344	BEE	3,830	1,339	25	38	3,805	1,301	0	0	0	40
345	CALHOUN	9,161	28,143	8,048	24,897	1,113	3,246	0	0	0	0
346	VICTORIA	6,293	20,334	160	133	6,133	20,201	0	0	0	160
347	AUSTIN COUNTY	3,015	8,754	0	0	3,015	8,754	0	0	0	0
348	WASHINGTON	122	122	0	0	122	122	0	0	0	0
349	WILLACY	37,235	54,235	37,235	54,235	0	0	0	0	0	0

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT	ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE- PERCENT	ACRES
350 HILDAGO	399,563	552,313	339,063	466,063	500	250	60,000	86,000	90	8,000
ZONE 3 TOTAL	1,290,559	2,327,831	837,265	1,450,624	361,251	708,784	92,043	168,423	70	171,085
401 NACOGDOCHES	53	24	9	5	44	19	0	0	0	44
404 DAVY CROCKETT-TRINITY	182	80	177	78	5	2	0	0	0	0
408 BOWIE COUNTY	3,492	9,018	2,095	5,865	857	1,533	540	1,620	25	351
412 HARRISON COUNTY	48	21	8	1	40	20	0	0	0	48
415 LAMAR	1,760	4,667	1,760	4,667	0	0	0	0	0	1,760
417 UPSHUR-GREGG	0	0	0	0	0	0	0	0	0	0
419 SULPHUR-CYPRESS	542	658	27	50	60	145	455	463	45	482
421 ANDERSON-HOUSTON	616	445	492	380	30	18	94	47	50	381
422 TRINITY-NECHES	173	124	0	0	160	95	13	29	30	165
423 RED RIVER COUNTY	375	613	375	613	0	0	0	0	0	205
424 FREESTONE-LEON	0	0	0	0	0	0	0	0	0	0
425 MONTGOMERY-WALKER	13	13	0	0	13	13	0	0	0	0
426 NECHES-SABINE	784	1,959	784	1,959	0	0	0	0	0	710
427 CHEROKEE COUNTY	274	659	185	434	24	8	65	217	50	246
428 BEDIAS CREEK	521	300	421	225	100	75	0	0	0	160
429 PINEY WOODS	0	0	0	0	0	0	0	0	0	0
431 BRAZOS-ROBERTSON	28,731	28,035	2,878	2,824	19,353	18,912	6,500	6,299	25	0
432 COASTAL	27,830	97,405	27,830	97,405	0	0	0	0	0	222
433 MARION-CASS	0	0	0	0	0	0	0	0	0	0
434 TRINITY BAY	35,393	123,592	35,308	123,379	85	213	0	0	0	80

TABLE 3--IRRIGATION SUMMARY FOR SOIL & WATER CONSERVATION DISTRICTS - 1984 CONTINUED

DISTRICT		ALL IRRIGATION (ON-FARM USE)		SURFACE-WATER SUPPLIED (ON-FARM USE)		GROUND-WATER SUPPLIED		IRRIGATION USING COMBINED SUPPLIES			SPRINKLER SYSTEMS
NO.	NAME	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE- FEET	SURFACE SOURCE - PERCENT	ACRES
435	LOWER TRINITY	25,286	75,715	15,527	51,756	6,812	16,591	2,947	7,368	54	220
436	POLK-SAN JACINTO	76	228	0	0	76	228	0	0	0	40
437	LOWER NECHES	430	1,141	0	0	430	1,141	0	0	0	15
438	UPPER NECHES	225	563	0	0	225	563	0	0	0	225
439	LONG LEAF	39	22	35	18	4	4	0	0	0	35
440	NAVASOTA	10,398	28,739	367	184	10,031	28,555	0	0	0	620
441	JASPER-NEWTON	1,265	1,347	35	105	0	0	1,230	1,242	25	165
442	HARRIS	16,375	33,483	585	1,755	15,790	31,728	0	0	0	2,000
443	DELTA	1,300	3,900	1,300	3,900	0	0	0	0	0	0
444	WOOD	412	680	120	113	110	275	182	292	35	402
445	HOPKINS-RAINS	157	105	157	105	0	0	0	0	0	136
446	LOWER SABINE-NECHES	1,321	4,403	1,321	4,403	0	0	0	0	0	0
447	RUSK	47	87	27	54	20	33	0	0	0	27
448	PANOLA	32	64	32	64	0	0	0	0	0	32
449	SHELBY	40	13	30	8	10	5	0	0	0	0
ZONE 4 TOTAL		158,190	418,103	91,885	300,350	54,279	100,176	12,026	17,577	38	8,771
501	LIMESTONE-FALLS	5,705	5,907	1,080	1,207	4,625	4,700	0	0	0	400
504	ELLIS-PRAIRIE	0	0	0	0	0	0	0	0	0	0
505	KAUFMAN-VAN ZANDT	897	943	886	932	11	11	0	0	0	892
506	HAMILTON-CORYELL	1,576	2,640	780	1,205	600	782	196	653	50	1,201
508	LITTLE RIV-S GABRIEL	291	252	270	250	21	2	0	0	0	195
509	CENTRAL TEXAS	1,812	1,753	1,750	1,691	62	62	0	0	0	1,318