In order to plan for future water needs, regional water planners must estimate future population growth. Accordingly, population projections for each county in the Southwest New Mexico planning region were developed. Additionally, water demand by sector for each county was analyzed as a tool for understanding water use in each county.

The population projections were based on information from interviews with selected community representatives, from historical population trends, and from Bureau of Business & Economic Research (BBER) population projections. Based on this information, both high growth rate and low growth rate scenarios for future population development were determined. The resulting population projections, by county, are presented below.

**Catron County**

In Catron County, irrigated agriculture has historically used and continues to use the largest amount of water in Catron County, accounting for 81 percent of water consumption (Figure 1). Accordingly, changes in irrigated agriculture will likely drive water consumption more than changes in population.

**Grant County**

Mining has historically used and continues to use the largest amount of water in Grant County, consuming 62 percent, followed by irrigated agriculture which consumes approximately 23 percent. Combined mining and irrigated agriculture account for approximately 85 percent of the water consumed in Grant County (Figure 3).

The population of Catron County is projected to remain flat (low growth scenario) or grow at a slow rate (high growth scenario), driven by new subdivisions in the south end of the county (Figure 2). No substantial increase in activity that would significantly increase water consumption is expected in most sectors. The exception is the proposed Fence Lake Coal Mine Project, which is planned for an area 14 miles north of Quemado, partially in Catron County. Additionally, the trend toward converting ranch land to subdivisions may have a minor impact on future water use.

**Figure 1. Catron County Water Use in 2000**

**Figure 2. Catron County Projected Population**

**Figure 3. Grant County Water Use in 2000**

Water use in mining operations fluctuates with the minerals market, and due to a drop in world copper market prices in recent years, Phelps Dodge Mining Company has significantly curtailed their mining operations near Silver City. If and when copper prices rise again, however, it is expected that mining operations (and water usage) will return to previous levels. The amount of land in irrigated agriculture declined approximately 13% from 1970 to 1984 and has since held steady at 6,950 acres.

An area of potential growth in Grant County is residential development. The population projections for the county (Figure 4) indicate a growth trend in
this segment and consequently a rise in water usage for this purpose, primarily in Silver City and the mining district.

Irrigated agriculture has historically used and continues to use the largest amount of water in Hidalgo County, consuming 82 percent (Figure 5).

Population projections for Hidalgo County are shown on Figure 6. However, because the majority of water use in the county is for irrigated agriculture, trends in this sector will have more impact on water use than population growth.

Irrigated agriculture and its associated water use is expected to remain steady. A 20,000-head cattle feedlot is expected to begin operating in 2004 or 2005, with the possibility of another 20,000-head feedlot in the next five years. These large feedlots, as well as additional power plants recently built in Hidalgo County, may require increased water.

Luna County

Irrigated agriculture has historically used and continues to use the largest amount of water in Luna County, consuming 95 percent (Figure 7).

Luna County has the most land in irrigated agriculture in the Southwest New Mexico region. The amount of irrigated acreage has increased almost 2,500 acres since 1970, but appears to be holding steady at about 74,000 acres.

Population projections for Luna County are shown on Figure 8. However, because the majority of water use in the county is for irrigated agriculture, trends in this sector will have more impact on water use than population growth.

Other sectors in which growth may affect water use are power generation and industrial uses. Substantial growth is expected in the power generation sector over the next 10 to 20 years. In addition, with one of the largest industrial parks in the region located in Deming, industrial activity and its associated water use may increase in Luna County, dependent on transportation access, land availability, and apparent water availability for future growth.