Ground water is the source of drinking water for 91 percent of the 4,620 million people in Tennessee. In 1986, public supply withdrawals of ground water from wells and springs in the nine principal aquifers in Tennessee (Fig. 1) averaged about 242 million gallons per day and amounted to 37 percent of the total public supply withdrawals used in the state (Fig. 2). This amount represents an increase of about 31 percent in the use of ground water for public supply during the period 1968 to 1986, when public supply withdrawals averaged about 188 million gallons per day.

Most of the ground water used for public supply in 1986 was withdrawn by public water-supply systems in West Tennessee. Ground water withdrawals in West Tennessee averaged 240 million gallons per day and accounted for 77 percent of the ground water used for public supply in the state.

The principal public-supply systems that use ground water in Tennessee are shown in figure 3 and listed alphabetically by county in table 1. The data in table 1 also include all-year-withdrawals of ground water from the system used for other purposes as well as ground water. The county with the largest ground-water withdrawal for public supply in 1986 was Smith County (Archer), where withdrawals totaled 33 million gallons per day, or 39 percent of the total ground water withdrawn for public supply in the state. This amount represents an increase of 41 percent in the use of ground water for public supply during the period 1968 to 1986, when public supply withdrawals averaged about 188 million gallons per day.

Figure 1.—Geographic distribution of principal aquifers in Tennessee. (From N.W. Bradley and E.F. Holleyday, 1980.)

Figure 2.—Estimated ground-water withdrawals by aquifer for public-supply use for Tennessee during 1986.

COUNTY NAMES AND FIPS CODES

For additional information, visit the U.S. Geological Survey's website.