## THE NATURE AND GEOGRAPHIC DISTRIBUTION OF PUBLIC WATER DISTRICTS IN ILLINOIS

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## **ABSTRACT**

Public water districts were created in Illinois in 1945 when the Public Water District Act was passed. According to this legislation, any area in Illinois with 500,000 or fewer individuals may create a public water district with the consent of a majority of the voters. In contrast to public water supply systems, public water districts supply water to a dispersed rural population in Illinois. In 1991, there were 98 public water districts in Illinois with a large concentration in the southern part of the state. The nature and geographic distribution of these entities were the focus of this thesis.

Each of the 98 public water district directors were mailed a survey to ascertain the characteristics of public water districts in Illinois. The mailed questionnaire yielded 63 responses which provided the data for investigating the reasons for the concentration of public water districts in southern Illinois. This southern concentration likely occurs because of the inadequate ground water supplies and the availability of government funds for establishing public water districts.

In 1992, a typical public water district in Illinois was 23 years old, encompassed an area of 45 square miles, had 71 miles of pipeline, charged \$7.96 per 1,000 gallons of water consumed, had 1,607 customers on-line, and employed 4 individuals.

There were several additional characteristics of public water districts in Illinois. An engineering firm is the best source for learning the process involved in creating a public water district. The main reason for creating a public water district is an inadequate supply of water. Poor water quality occurring in private wells is the major reason public water districts increased by 61 from 1975 to The Farmers Home Administration and revenue bonds are the primary funding sources for public water districts. Most of the districts use the declining block rate pricing method. The condition of the equipment and the operation of public districts are both rated good to very good. primary advantages of these entities are easy access to good quality water and providing water to rural residents. Lastly, frequent problems with public water districts are financing capital improvements, increasing Federal regulations, water leaks, keeping water prices within reason, and lack of training for new employees.