

Table 1.--Water use in Mississippi (by principal use and source, in million gallons per day).

Table with columns for County, Public Supply (Municipal Use, Rural Systems), Rural Self-Supplied, Industrial Self-Supplied, Fuel-Electric Power, Irrigation, Fish Farming, Wildlife Impoundments, and County Total. Rows list 82 Mississippi counties with detailed water usage data.

SELECTED REFERENCES

- Anderson, I. E., and Boswell, E. H., 1953, Rice irrigation potential of Bogue Phalia, Mississippi: U.S. Geol. Survey open-file report, 39 p.
- Callahan, J. A., 1973, Public and industrial water supplies in northern Mississippi: Mississippi Board Water Comm. Bull. 73-1, 68 p.
- 1975, Public and industrial water supplies in southern Mississippi--1974: Mississippi Board Water Comm. Bull. 75-2, 59 p.
- Hy, Stan W., and Vaughn, Donald S., 1974, A directory of Mississippi municipalities: Bureau of Government Research, University, Miss.
- Mississippi Department of Agriculture and Commerce, 1975, Mississippi agricultural statistics--1954-1973: Mississippi Dept. of Agriculture and Commerce, supp. 9, 138 p.
- U.S. Bureau of Census, 1971, 1970 Census of population and housing: U.S. Dept. of Commerce, Bureau of the Census, PHC (2)-26, Mississippi, 26 p.

To convert English units to International units:  
Multiply By To obtain  
million gallons per day (Mgal/d) 0.044 cubic meters per second (m<sup>3</sup>/s)  
gallons (gal) 3.785 liters (l)  
feet per acre (ft/acre) .1233 meters per hectare (m/ha)

WATER USE IN MISSISSIPPI, 1975

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1976

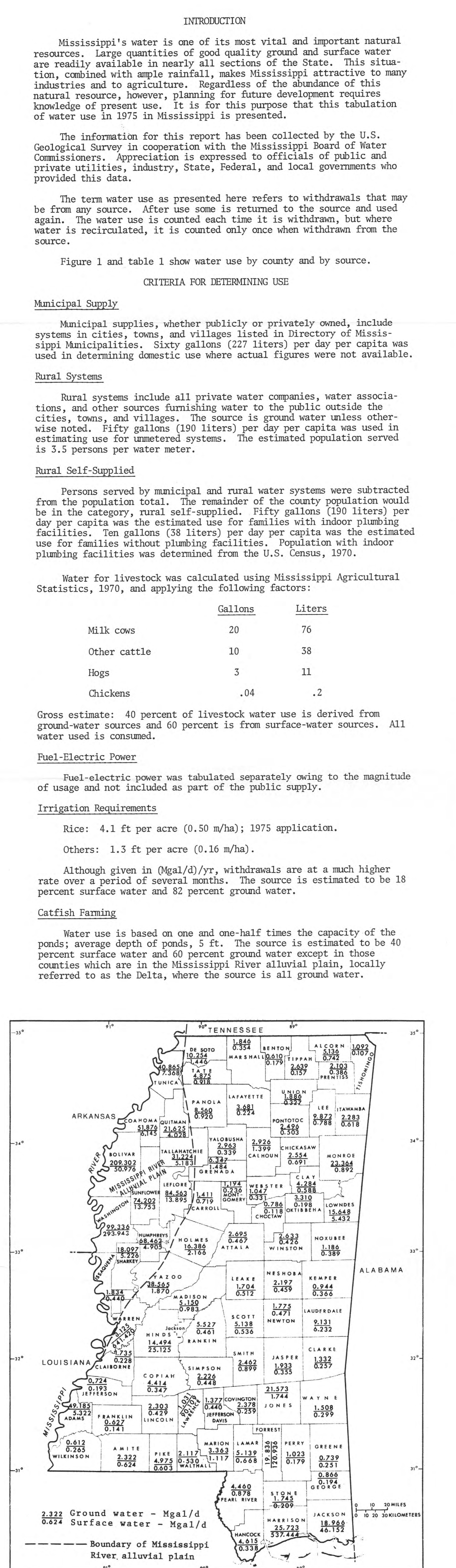


Figure 1.--Water use in Mississippi, 1975.

INTRODUCTION  
Mississippi's water is one of its most vital and important natural resources. Large quantities of good quality ground and surface water are readily available in nearly all sections of the State. This situation, combined with ample rainfall, makes Mississippi attractive to many industries and to agriculture. Regardless of the abundance of this natural resource, however, planning for future development requires knowledge of present use. It is for this purpose that this tabulation of water use in 1975 in Mississippi is presented.  
The information for this report has been collected by the U.S. Geological Survey in cooperation with the Mississippi Board of Water Commissioners. Appreciation is expressed to officials of public and private utilities, industry, State, Federal, and local governments who provided this data.  
The term water use as presented here refers to withdrawals that may be from any source. After use some is returned to the source and used again. The water use is counted each time it is withdrawn, but where water is recirculated, it is counted only once when withdrawn from the source.  
Figure 1 and table 1 show water use by county and by source.

CRITERIA FOR DETERMINING USE  
Municipal Supply  
Municipal supplies, whether publicly or privately owned, include systems in cities, towns, and villages listed in Directory of Mississippi Municipalities. Sixty gallons (227 liters) per day per capita was used in determining domestic use where actual figures were not available.  
Rural Systems  
Rural systems include all private water companies, water associations, and other sources furnishing water to the public outside the cities, towns, and villages. The source is ground water unless otherwise noted. Fifty gallons (190 liters) per day per capita was used in estimating use for unmetered systems. The estimated population served is 3.5 persons per water meter.  
Rural Self-Supplied  
Persons served by municipal and rural water systems were subtracted from the population total. The remainder of the county population would be in the category rural self-supplied. Fifty gallons (190 liters) per day per capita was the estimated use for families with indoor plumbing facilities. Ten gallons (38 liters) per day per capita was the estimated use for families without plumbing facilities. Population with indoor plumbing facilities was determined from the U.S. Census, 1970.

Table with columns: Category, Gallons, Liters. Rows: Milk cows (20, 76), Other cattle (10, 38), Hogs (3, 11), Chickens (.04, .2).

Gross estimate: 40 percent of livestock water use is derived from ground-water sources and 60 percent is from surface-water sources. All water used is consumed.

Fuel-Electric Power  
Fuel-electric power was tabulated separately owing to the magnitude of usage and not included as part of the public supply.

Irrigation Requirements  
Rice: 4.1 ft per acre (0.50 m/ha); 1975 application.  
Others: 1.3 ft per acre (0.16 m/ha).

Although given in (Mgal/d)/yr, withdrawals are at a much higher rate over a period of several months. The source is estimated to be 18 percent surface water and 82 percent ground water.

Catfish Farming  
Water use is based on one and one-half times the capacity of the ponds; average depth of ponds, 5 ft. The source is estimated to be 40 percent surface water and 60 percent ground water except in those counties which are in the Mississippi river alluvial plain, locally referred to as the Delta, where the source is all ground water.