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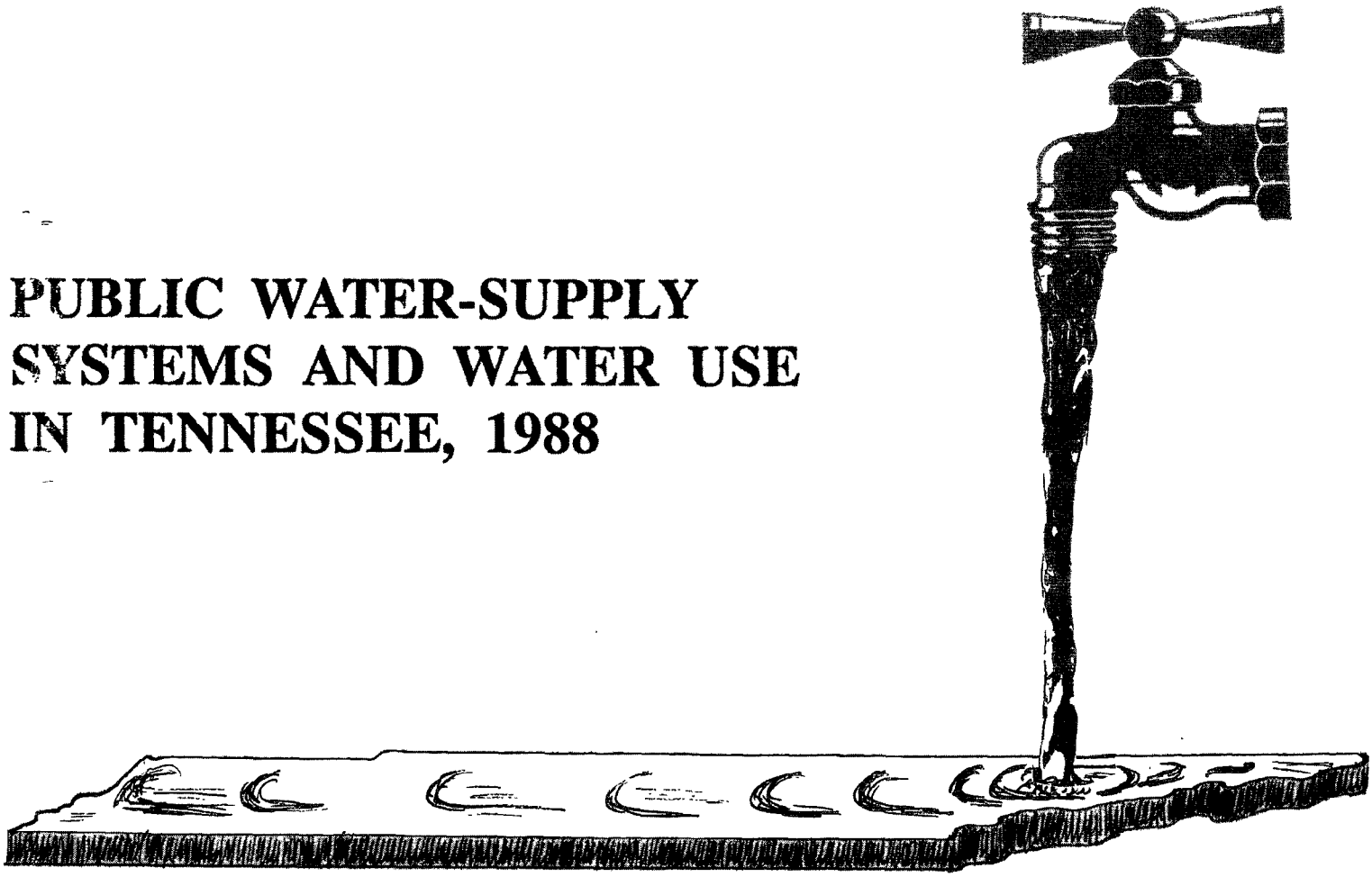

PUBLIC WATER-SUPPLY SYSTEMS AND WATER USE IN TENNESSEE, 1988

Prepared by the
U.S. GEOLOGICAL SURVEY

in cooperation with the
TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION,
DIVISION OF WATER SUPPLY

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By SUSAN S. HUTSON and A. JANINE MORRIS[1]

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Memphis, Tennessee

1992

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METRIC CONVERSION FACTORS

Multiply	By	To obtain
inch (in.)	25.4	millimeter
foot (ft)	0.3048	meter
mile (mi)	1.609	kilometer
gallon (gal)	0.003785	cubic meter
gallon per day (gal/d)	0.003785	cubic meter per day
million gallons per day (Mgal/d)	0.003785	million cubic meters per day
inch per year (in/yr)	25.4	millimeter per year

PUBLIC WATER-SUPPLY SYSTEMS AND WATER USE IN TENNESSEE, 1988

By Susan S. Hutson *and* A. Janine Morris[1]

ABSTRACT

This report summarizes the results of a study conducted by the U.S. Geological Survey, in cooperation with the Tennessee Department of Environment and Conservation (TDEC), Division of Water Supply in 1988. Data gathered during an inventory by the TDEC were collated to determine water use, supply sources, population served, and design and storage capacities of the systems. The inventory was limited to systems that were active on June 30, 1988. Results of a survey of the systems conducted by the Tennessee Department of Health and Environment[2] during 1988 were a primary source of data for this report. Data from computer and manual files maintained by the Tennessee Department of Health and Environment and the U.S. Geological Survey also were used.

The Division of Water Supply, TDEC, surveyed 541 public water-supply systems. These systems served 81 percent of the population of the State, or 3.95 million people. The gross per capita use statewide for public-supplied water was 179 gallons per day. Total water withdrawals for public supply increased about 39 percent from 510 million gallons per day (Mgal/d) in 1980, to 708 Mgal/d in 1988. During the same period, the population increased about 7 percent. Surface-water withdrawals accounted for 63 percent (446 Mgal/d) of the total water withdrawn in the State. All of these withdrawals occurred in the Tennessee (56 percent or 249 Mgal/d) and the Ohio (44 percent or 197 Mgal/d) hydrologic regions. Ground water supplied 262 Mgal/d or 37 percent of the total water withdrawn by public-supply systems statewide. Of that amount, 79 percent, or 208 Mgal/d, was used in western Tennessee.

INTRODUCTION

Water use and related information about active public water-supply systems in Tennessee is changing constantly. These changes may include transfers of system ownership, consolidation and interconnectiveness among systems, and development of alternative sources of supply. The need for current, accurate, water-use data for public water-supply systems has been highlighted by recent droughts, wellhead-protection initiatives, increasing water requirements for both instream and offstream uses, and concern about future water shortages.

From 1980, when the last comprehensive inventory of public water-supply systems in Tennessee was completed (Alexander and others, 1984), to 1988, the number of public water-supply systems increased about 17 percent (from 463 to 541 systems). Public-supply water withdrawals increased at an even greater rate during this same period. These withdrawals totaled 708 million gallons of water per day (Mgal/d) in 1988, an increase of 39 percent since 1980 (510 Mgal/d) (Solley and others, 1983). In comparison, the population in the State increased only about 7 percent from 4.59 million in 1980 (Solley and others, 1983) to 4.89 million people in 1988 (University of Tennessee, 1989). Further, the population served by public water supplies increased about 6 percent (from 3.72 million to 3.95 million people). This rapid increase in withdrawals by public water-supply systems compared to the rate of growth of the population served by public-water supplies indicates that the increase in public water-supply withdrawals may be related to changing water-use demands and changing water-use patterns in the commercial and industrial sector.

The U.S. Geological Survey (USGS), as information from part of its ongoing cooperative water-resources programs in Tennessee, compiled an inventory of public water-supply systems during 1988. The inventory was conducted by the Tennessee Department of Environment and Conservation (TDEC), Division of Water Supply (TDWS), as part of the Water-Use Program.

Purpose and Scope

This report presents information on Tennessee public-supply systems. Data from the following sources were

[1]A. Janine Morris, Environmental Specialist, Tennessee Department of Health and Environment, Division of Water Supply.

[2]Tennessee Department of Environment and Conservation as of 1991.

collated to determine water use, supply sources, population served, and design and storage capacities of the systems:

(1) a survey of water withdrawals by source of supply and of water purchases by public water-supply systems conducted by the TDWS,
(2) computer and manual files maintained by the TDWS containing public water-supply system and source of supply information, and
(3) computer and manual files of the USGS containing river basin and aquifer information.

The inventory was limited to water systems that were active on June 30, 1988, and served at least 15 connections used by permanent residents, or those that regularly served at least 25 permanent residents. The systems included investor-owned water companies; small, private water companies; municipal water departments; regional water authorities; apartments; condominiums; residential developments; convalescent homes; mobile home parks; and homeowner associations.

Acknowledgments

The authors express appreciation to the managers of the public water-supply systems for providing the data on which this report is based; to David Draughon, Director of the Division of Water Supply, who initiated the data-collection program and coordinated transmittal of the survey forms from the public water-supply systems to Tennessee Department of Environment and Conservation (TDEC) Basin Offices in Jackson, Nashville, Knoxville, and Chattanooga; and to the TDEC Basin Office managers who provided ancillary system information and source of supply information.

Description of Study Area

Local physiographic and geologic variations govern water availability statewide. Tennessee is divided into eight physiographic divisions (Miller, 1974) (fig. 1). The diverse topography of these divisions ranges from rolling hills and broad floodplains in the Coastal Plain province in western Tennessee to steep mountains and deep, narrow valleys in the Valley and Ridge province in eastern Tennessee. The geologic setting of Tennessee includes unconsolidated sediments of the Coastal Plain province in western Tennessee, limestone and dolomite of the Highland Rim and Central Basin in central Tennessee, and limestone and granite of the folded Appalachian Mountains in eastern Tennessee.

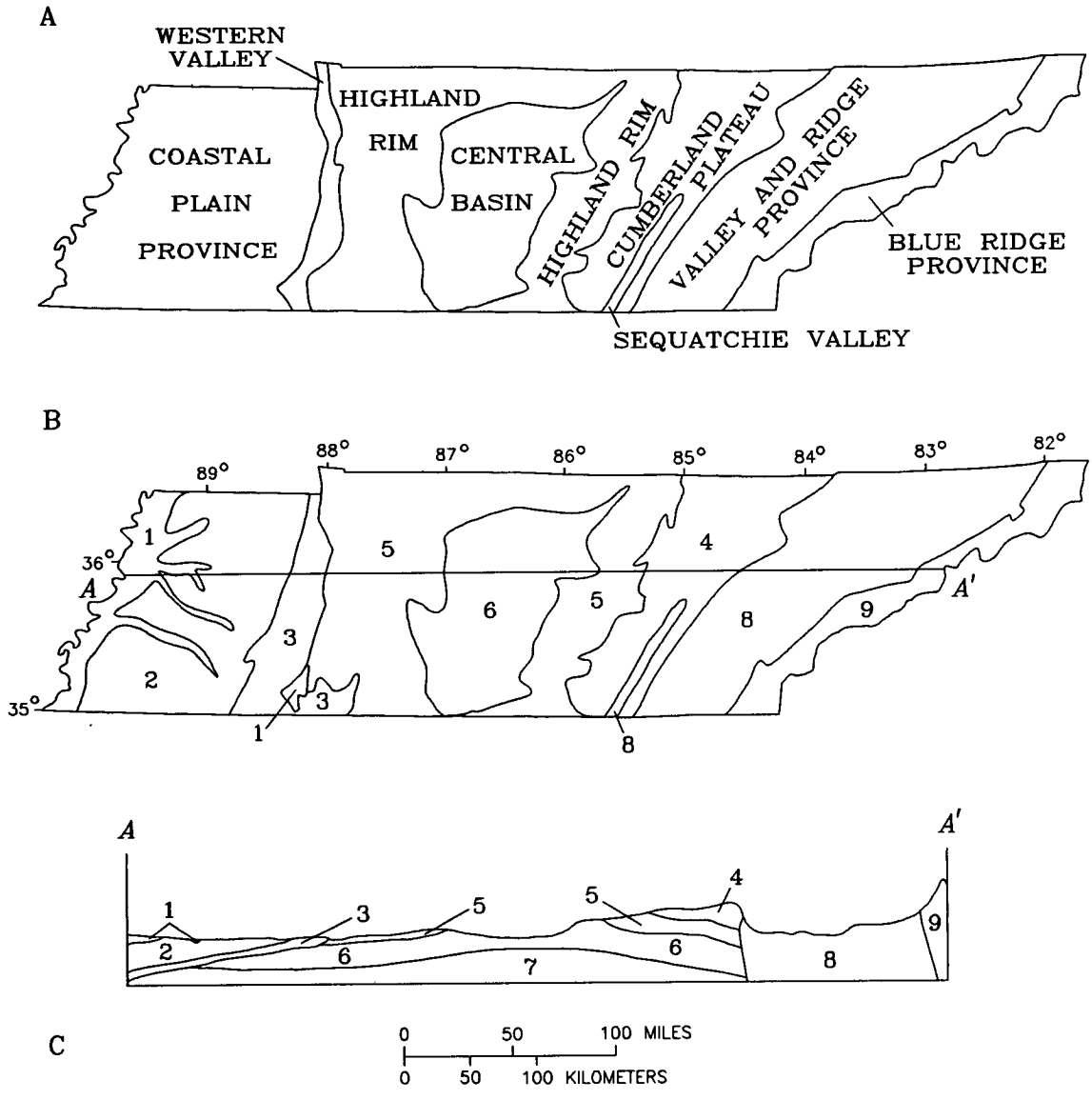
In the Coastal Plain province in western Tennessee, ground water is the principal source of supply, whereas, a combination of surface and ground water is used in the rest of the State. Tennessee receives an average of about 50 inches of precipitation per year (U.S. Department of Commerce, 1968). This plentiful rainfall recharges the aquifers and replenishes streamflow, thereby, providing water for many uses in the State, including public supply.

WATER AVAILABILITY

Patterns of surface- and ground-water withdrawals and water transfers by public water-supply systems vary by river basin and aquifer, reflecting differences in water availability statewide. In the Ohio and Tennessee hydrologic regions (fig. 2), an extensive network of reservoirs storing about 8.12 million-acre feet (2,646 billion gallons) of water provides a reliable and abundant source of surface water for public water-supply systems in central and eastern Tennessee (U.S. Army Corps of Engineers, 1981). In these two regions, however, the many small unregulated tributaries are not reliable sources of public-supplied drinking water. These smaller streams are characterized by no flow or low flow during the dry periods of late summer and early fall (table 1).

In contrast to the Ohio and Tennessee hydrologic regions, few water-storage sites are available in the Lower-Mississippi hydrologic region in western Tennessee. Although ground water sustains flow in the main channel during the dry months, the unregulated, sediment-laden streams of this region are not utilized for any major water use, including public supply. Additionally, tributaries in the region will be dry during those months, further limiting the availability of surface water as a supply source.

Ground water for public supply is withdrawn from eight of the nine principal aquifers in Tennessee (figs. 1 and 3). These aquifers are the alluvial, Tertiary sand, Cretaceous sand, Mississippian carbonate, Ordovician carbonate, Pennsylvanian sandstone, Cambrian-Ordovician carbonate, and crystalline rock aquifers (table 2). Yields to wells of 1,000 gallons per minute (gal/min) are common in the Tertiary sand aquifer in western Tennessee (U.S. Geological Survey, 1985). This aquifer is the most productive aquifer in Tennessee and supplied 61 percent of the ground water pumped in the State in 1985 for all purposes (Hutson, 1988). The dolomite and limestone aquifers in the Ohio region yield limited quantities of water to wells, and are not a principal source of water for public supply. Yields to wells vary widely in the Cambrian-Ordovician carbonate and crystalline rock aquifers of eastern Tennessee. The largest yields generally are from wells completed in the alluvium emplaced by tributary and slope wash in the valleys.



EXPLANATION

PRINCIPAL AQUIFERS

1 – Alluvial (Quaternary)
2 – Tertiary sand
3 – Cretaceous sand
4 – Pennsylvanian sandstone
5 – Mississippian carbonate rock
6 – Ordovician carbonate rock
7 – Knox (Cambrian–Ordovician)
8 – Cambrian–Ordovician carbonate rock
9 – Crystalline rock (Precambrian and Cambrian)
A–*A*′ Trace of geologic section

Figure 1.--(A) Major physiographic divisions (modified from Fennemann, 1946 and Miller, 1974), (B) principal aquifers (modified from U.S. Geological Survey, 1985), and (C) generalized geologic section in Tennessee (U.S. Geological Survey, 1985).

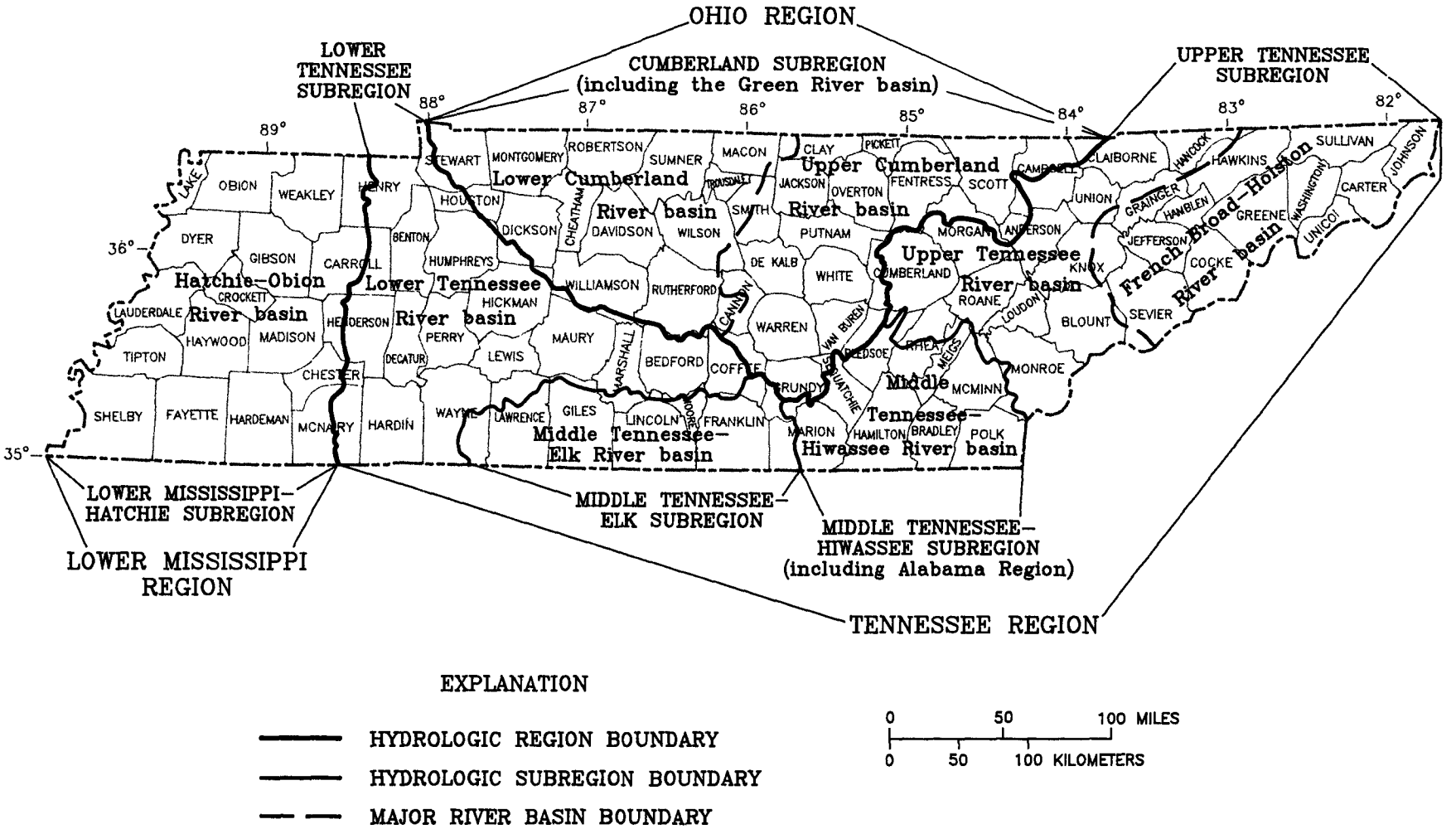


Figure 2.--Major hydrologic regions and subregions, major river basins, and counties in Tennessee.

Table 1.--*Surface-water characteristics of hydrologic subregions and major river basins in Tennessee*

Hydrologic subregion	Major river basin and associated river	Physiographic divisions (Miller, 1974)	Response to drought	Remarks
Lower Mississippi-Hatchie	Hatchie-Obion Obion Hatchie Loosahatchie Wolf Nonconnah Forked Deer	Coastal Plain	Sustained flow from ground water in main stem during dry months. Small streams will be dry.	Few available storage sites. High sediment load and poor water quality limits use; pumps must use filters.
Cumberland (including the Green River basin in Tennessee)	Upper Cumberland Obey Caney Lower Cumberland Harpeth Stones	Central Basin Highland Rim Cumberland Plateau.	Many small unregulated streams are characterized by no flow or low flow during dry periods. The Cumberland River is regulated.	In the Central Basin, streamflow is highly responsive to rainfall and flows are poorly sustained. Streamflows are fairly well sustained in the Highland Rim. The Sequatchie River streamflows in the Cumberland Plateau are poorly sustained.
Lower Tennessee	Lower Tennessee Duck Buffalo Beech Big Sandy	Highland Rim Central Basin Cumberland Plateau. Western Valley	In late summer and early fall, unregulated streams go dry or sustain low flows.	In the Central Basin, streamflow is highly responsive to rainfall and flows are poorly sustained. Streamflows are fairly well sustained in the Highland Rim. The Sequatchie River streamflows in the Cumberland Plateau are poorly sustained. Streamflow is adequately sustained for supply in the Western Valley.
Middle Tennessee-Elk	Middle Tennessee-Elk Elk Shoal	Highland Rim Cumberland Plateau. Central Basin	Commonly in late summer, unregulated streams go dry, particularly along the basin rim.	In the Central Basin, streamflow is highly responsive to rainfall and flows are poorly sustained. Streamflows are fairly well sustained in the Highland Rim. In the Cumberland Plateau, streamflows are poorly sustained.
Upper Tennessee	French Broad-Holston French Broad Holston Upper Tennessee Clinch Little Tennessee Little Tellico	Blue Ridge Valley and Ridge. Cumberland Plateau.	Commonly in late summer, unregulated streams go dry, particularly along the basin rim. Many small unregulated streams may sustain low flow with ground-water inflow.	In the Blue Ridge, steep terrain and low permeability result in high runoff rates. Many springs are in the area. Surface-water impoundments enhance water supplies in the Valley and Ridge. In the Cumberland Plateau, streamflows are poorly sustained.
Middle Tennessee-Hiwassee	Middle Tennessee-Hiwassee Hiwassee Sequatchie	Blue Ridge Valley and Ridge. Cumberland Plateau.	Commonly in late summer, unregulated streams go dry, particularly along the basin rim. Even streams having watersheds exceeding 100 square miles may cease to flow.	In the Blue Ridge, steep terrain and low permeability result in high runoff rates. Many springs are in the area. Surface-water impoundments enhance water supplies in the Valley and Ridge. In the Cumberland Plateau, streamflows are poorly sustained.

Table 2.--*Aquifer and well characteristics in Tennessee (modified from U.S. Geological Survey, 1985)*

[ft, foot; gal/min, gallon per minute]

Aquifer name and description	Well characteristics				Remarks
	Depth (ft)		Yield (gal/min)		
	Common range	May exceed	Common range	May exceed	
Alluvial: Sand, gravel, and clay. Unconfined.	10 - 75	100	20 - 50	1,500	High iron concentrations in some areas.
Tertiary sand: Multi-aquifer unit of sand, clay, silt, and some gravel and lignite. Confined; unconfined in the outcrop area.	100 - 1,300	1,500	200 - 1,000	2,000	Includes Memphis Sand of Claiborne Group and Fort Pillow Sand of Wilcox Group. Problems with high iron concentrations in some places.
Cretaceous sand: Multi-aquifer unit of interbedded sand, clay, marl, and gravel. Confined; unconfined in the outcrop area.	100 - 1,500	2,500	50 - 500	1,000	Includes McNairy and Coffee Sands, and Tuscaloosa Formation. Water withdrawn primarily in the outcrop area.
Pennsylvanian sandstone: Multi-aquifer unit, primarily sandstone and conglomerate, interbedded shale and some coal. Unconfined near land surface; confined at depth.	100 - 200	250	5 - 50	200	Permeability is from fractures, faults, and bedding-plane openings. Principal water-bearing units are Rockcastle Sandstone and Sewanee Conglomerate. High iron concentrations are a problem.
Mississippian carbonate: Multi-aquifer unit of limestone, dolomite, and some shale. Unconfined or partly confined near land surface; may be confined at depth.	50 - 200	250	5 - 50	400	Water occurs in solution and bedding-plane openings. Principal water-bearing units are Ste. Genevieve (Monteagle), St. Louis and Warsaw Limestones and Fort Payne Formation. Water generally hard; high iron, sulfide, or sulfate concentrations are a problem in some areas.
Ordovician carbonate: Multi-aquifer unit of limestone, dolomite, and shale. Partly confined to unconfined near land surface; confined at depth.	50 - 150	200	5 - 20	300	Principal water-bearing units are Bigby, Carters, Ridley, and Murfreesboro Limestones. Water generally hard; some high sulfide or sulfate concentrations in places.
Knox: Primarily dolomite, some limestone; confined. Does not have the structural complexity of the Cambrian-Ordovician carbonate aquifer.	700 - 1,200	1,400	1 - 10	20	Deep aquifer; occurs under most of central and western Tennessee. Away from Central Basin, water generally has high concentrations of dissolved solids.
Cambrian-Ordovician carbonate: Extremely faulted multi-aquifer unit of limestone, dolomite, sandstone, and shale; structurally complex. Unconfined; confined at depth.	100 - 300	400	5 - 200	2,000	Principal water-bearing units are carbonate rocks in Chickamauga Limestone, Knox Group, and Honaker Dolomite. Water is generally hard. Brine below 3,000 feet.
Crystalline rock: Multi-aquifer unit of dolomite, granite gneiss, phyllite, and metasedimentary rocks overlain by thick regolith; alluvium and colluvium in some valleys. Generally unconfined.	50 - 150	200	5 - 50	1,000	High yields occur primarily in dolomite or deep colluvium and alluvium. Shady Dolomite is a principal aquifer. Low pH and high iron concentrations may be problems in some areas.

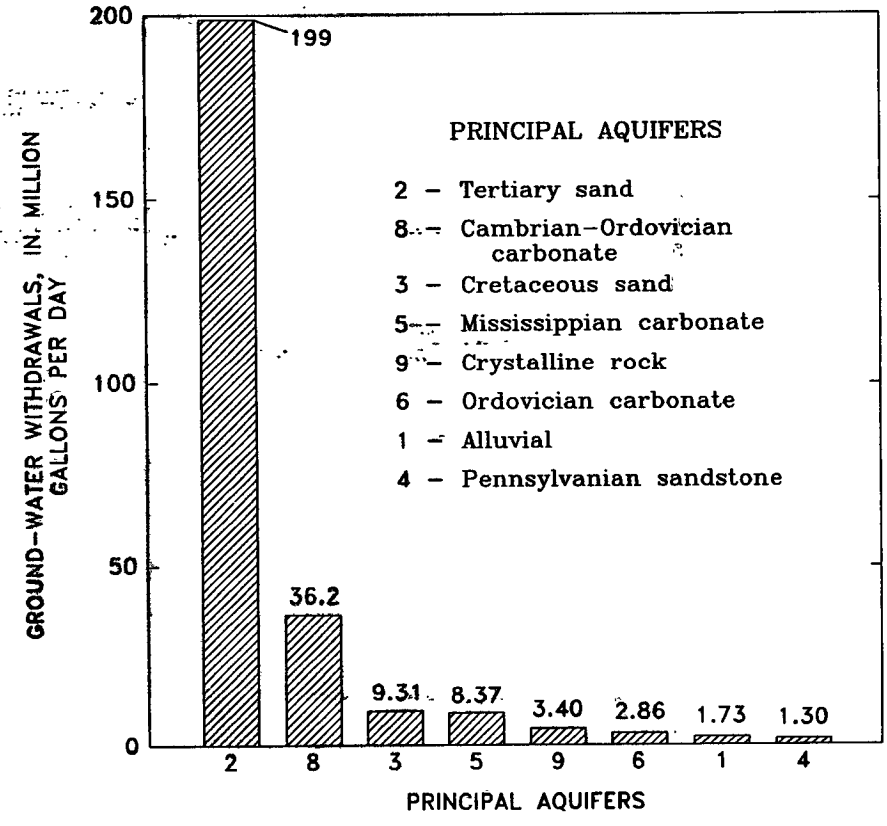


Figure 3.--Ground-water withdrawals by public-supply systems during 1988 by aquifer.

PUBLIC WATER-SUPPLY SYSTEMS

The DWS surveyed 541 public water-supply systems (see Supplements A, B, and C at the back of this report). Data for the 541 systems are presented by hydrologic region (Ohio, Tennessee, and Lower Mississippi) (fig. 1). Within each of the hydrologic regions, the individual systems are presented by county in numerical order by the State "Public Water Supply Identification" (PWSID) code. The data consist of: system name, source of supply, average daily water withdrawal or purchase, average daily wholesale transaction, average daily gross water use, population served, gross per capita water use (total public supply withdrawals divided by population source), and the design and the storage capacities of the system. Individual systems area listed alphabetically in the "*Index*" with the respective page number of the corresponding supplement.

The 541 systems are grouped by source of supply in figure 4. In 1988, more systems in Tennessee relied on ground water than on surface water as a source of supply. Of the 541 systems, 270 systems reported ground water as at least one source of supply; 218 systems reported ground water as the sole source of supply. The other 52 ground-water systems withdrew ground water in conjunction with surface water or purchased water from systems which reported ground water as one of their sources of supply.

Surface water was reported as the source of supply for 141 of the systems and was the sole source of supply for 99 of the systems. The other 42 systems withdrew surface water in conjunction with ground water, or purchased water from systems which reported surface water as at least one source of supply.

Purchased water served as at least one source of supply for 199 systems; 161 of these systems depended solely on purchased water. The other 38 systems used purchased water in conjunction with surface- or ground-water withdrawals to provide water to their customers.

Public water-supply systems in Tennessee served 81 percent of the population, or 3.95 million people, during 1988. The 541 water systems range in size from small ones serving as few as 38 residential customers to large ones serving hundreds of thousands of residential customers. One-half of the 541 systems served fewer than 2,236 people; 75 percent of the systems served 5,894 people or less. The eight systems (less than 2 percent of the systems) serving more than 50,000 people provided water to 40 percent of the public-supply customers.

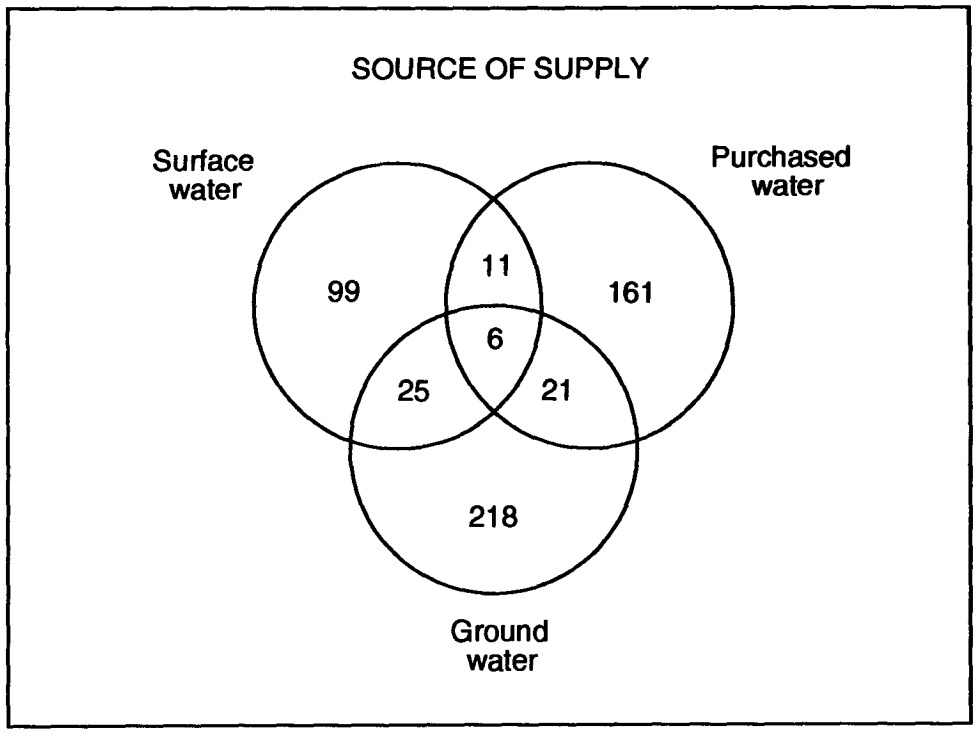


Figure 4.--The 541 public-supply systems in Tennessee by source of supply.

The gross per capita water use statewide for public-supplied water was 179 gal/d. One-half of the systems had per capita use exceeding 111 gal/d per person. The largest gross per capita use in the State was 3,809 gal/d per person. This system serves few residential customers, but serves some large industrial water users. The smaller gross per capita use values, such as 40 gal/d, represent systems serving residential users only.

PUBLIC-SUPPLY WATER USE

Total water withdrawals for public supply increased about 39 percent, from 510 Mgal/d in 1980 to 708 Mgal/d in 1988. Surface-water withdrawals increased 44 percent, from 310 Mgal/d in 1980 to 446 Mgal/d in 1988, and ground-water withdrawals increased 31 percent, from 200 Mgal/d in 1980 to 262 Mgal/d in 1988. Withdrawals for 1988 are summarized by source of supply and hydrologic region in table 3. In comparison, the population of the State increased only about 6 percent, from 4.59 to 4.89 million people during 1980-88. Further, the population served by public-water systems increased about 6 percent (from 3.72 to 3.95 million people). This rapid increase of withdrawals by public water-supply systems compared to the slower rate of growth of the population served by public-water supplies indicates that the growth in the public-water supply sector may be related to changing water-use demands and changing water-use patterns in the commercial and industrial sector.

Although data were collected for all of the systems, water usage could be verified for only 500 systems. The other 41 systems are small surface- and ground-water distribution systems, which serve a total of about 4,000 people. An analysis of the 500 systems and their associated gross water use indicates that the 8 percent of the systems

Table 3.--*Public water-supply systems withdrawing 1 million gallons per day or more of ground water by hydrologic region*

[Mgal/k, million gallons per day]

Public water-supply system	Withdrawal rate (Mgal/d)
Lower Mississippi Region	
Memphis Light, Gas and Water Division	141
Jackson Utility Division	10.2
Germantown Water Department	4.91
Dyersburg Water Department	4.35
Union City Water Department	2.85
Collierville Water Department	2.37
Paris Board of Public Utilities	2.17
Selmer Water System	2.10
Memphis Naval Air Station	1.91
Ripley Water System	1.87
Humboldt Water Department	1.84
Bartlett-Ellendale Water	1.77
Brownsville Water Department	1.71
Martin Water Department	1.51
Covington Water Department	1.40
Bolivar Water Plant	1.37
Bartlett Water System	1.36
Milan Water Department	1.34
Millington Water Department	1.10
Tennessee Region	
Hixson Utility District	5.61
Elizabethton Water Department	5.26
Eastside Utility District	3.77
Johnson City Water Department	3.18
Athens Utilities Board	1.76
Savannah Public Utilities Department	1.73
Jefferson City Water and Sewer Commission	1.51
Erwin Utilities	1.28
Cleveland Utilities	1.25
Sweetwater Utility Board	1.10
Mountain City Water Department	1.10
Lawrenceburg Water System	1.07

(40 systems), delivering at least 3.0 Mgal/d accounted for 72 percent (511 Mgal/d) of the public-supplied water. Less than 18 percent of the systems (96 systems) delivered at least 1.0 Mgal/d, but these systems accounted for about 86 percent (607 Mgal/d) of the public-supply water. One-half of the water systems delivered less than 0.248 Mgal/d; 25 percent delivered less than 0.102 Mgal/d; and, 75 percent delivered less than 0.720 Mgal/d.

Surface-water withdrawals accounted for 63 percent (446 Mgal/d) of the water withdrawn by public water-supply systems in Tennessee during 1988. All of these withdrawals occurred in the Ohio (44 percent or 197 Mgal/d) and the Tennessee (56 percent or 249 Mgal/d) hydrologic regions. The Lower-Mississippi region of western Tennessee depends exclusively on ground water for its drinking water. The county with the largest surface-water withdrawals was Davidson (90.8 Mgal/d). Withdrawals in Davidson County accounted for 20 percent of the public-supply withdrawals from surface-water, statewide.

Surface-water withdrawals ranged from 0.015 to 90.1 Mgal/d. One-half of the surface-water withdrawals for public-supply equaled or exceeded 0.990 Mgal/d. Most surface-water systems are larger than the ground-water systems: 70 percent of the 139 surface-water systems inventoried withdrew at least 0.540 Mgal/d, but only 25 percent of the 228 ground-water systems inventoried withdrew as much water.

Ground-water withdrawals accounted for 37 percent of the 708 Mgal/d (262 Mgal/d) withdrawn by public water-supply systems in Tennessee during 1988. One-half of the ground-water withdrawals for public supply equaled or exceeded 0.193 Mgal/d. The Tertiary and Cretaceous sand aquifers of western Tennessee were the sources for 79 percent of the ground-water public-supply withdrawals (208 Mgal/d) (fig. 3). The Tertiary sand aquifer alone accounted for 76 percent (199 Mgal/d) of the total ground-water withdrawals. These two aquifer systems are the source of supply for 18 of the 30 public-supply systems statewide that withdraw at least 1.0 Mgal/d of ground water (table 3). The county with the largest ground-water withdrawals was Shelby County (154 Mgal/d). Withdrawals in this county were from the Tertiary sand aquifer and accounted for 59 percent of the public-supply ground-water withdrawals statewide.

SUMMARY

An inventory of public water-supply systems in Tennessee in 1988 indicated that 541 public water-supply systems supplied water to 3.95 million people, or 81 percent of the population. Public-supply water withdrawals totaled 708 Mgal/d, 63 percent (446 Mgal/d) which was from surface-water sources. All of the surface-water withdrawals took place within the Tennessee (56 percent or 249 Mgal/d) and the Ohio (44 percent or 197 Mgal/d) hydrologic regions. Ground-water withdrawals accounted for 37 percent (262 Mgal/d) of the total water withdrawal. Although ground water was used statewide, it was the sole source of public-supply water in the Lower Mississippi hydrologic region of western Tennessee. Of the 262 Mgal/d of ground water used statewide, 79 percent, or 208 Mgal/d, was used in western Tennessee.

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GLOSSARY

Definitions of significant terms used in this report (modified from Alexander and others, 1984), are listed below:

Design capacity--The amount of water a system is designed to treat daily. Systems which do not treat water either purchase water from another system which has its own treatment plant or, withdraw water from a ground-water source which requires no treatment other than chlorination.

Gross per capita water use--The quantity of water used within the public supply distribution system per person per day. The value is calculated by dividing the "gross-water use" for a system by the "population served."

Gross water use--The quantity of water used within the public-supply distribution system. The value is calculated as the sum of water withdrawn by a public supply system plus water purchased from other public supplies minus water sold to other public supply systems. The water is sold to residential, commercial, and industrial customers or provided free as public-use water, and includes water lost in the distribution system.

Population served--Number of people supplied water by the system. The "population served" value was obtained from computer printouts furnished by the Tennessee Department of Environment and Conservation, Division of Water Supply.

Storage capacity--Capacity for storage of treated or untreated water by the system.

Purchased water--Quantity of water purchased or obtained from another system. The water may be conveyed from one system to another system without charge.

Wholesale water--Quantity of water sold or provided to another system. The water may be conveyed from one system to another system without charge.

SUPPLEMENTAL INFORMATION

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region
(Modified from F.M. Alexander and others, 1984)

[PWSID, Public Water System Identification number; Mgal/d, million gallons per day; gal/d, gallons per day; BPU, Board of Public Utilities; BU, Board of Utilities; FUD, First Utility District; PUB, Public Utility Board; PWD, Power and Water Department; SS, Services System; UB, Utility Board; UC, Utility Commission; UD, Utility District; W & S, Water and Sewer Commission; WC, Water Cooperative; WD, Water Department; WS, water System; *, less than 50 connections, ground-water sole source; **, surface-water system; ***, transfer-water system; ---, not applicable; a, incomplete data for 1988, estimate; b, 1985 estimate; principal aquifer: 1, alluvial; 2, Tertiary sand; 3, Cretaceous sand; 4, Pennsylvanian sandstone; 5, Mississippian carbonate; 6, Ordovician carbonate; 8, Cambrian-Ordovician carbonate; 9, crystalline rock; Co., county]

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
			Tennessee region							
Anderson										
016 Andersonville Utility District	Clinton UB			0.151		0.280	2,342	120	0.06	---
	Norris WC			.129						
120 Clinton Utility Board	Clinch River (66.3)	8	1.33		0.151	1.77	12,428	142	3.20	2.25
	Gill Spring		.138							
	Coker Spring		.078							
	Hallsdale-Powell UD			.111						
	Anderson Co. UB			.261						
383 Lake City Water Department	North Anderson UD			.243		.243	2,295	106	.75	---
513 Norris Water Commission	Clear Creek Spring[1]	8	.315		.129	.186	1,755	106	.250	.432
514 North Anderson County Utility District	Anderson Co. UB	8		.429	.317	.889	8,564	104	1.98	.748
	Shetterly Spring		.235							
	Clinch River (77.8)		.542							
	Clinton UB			.000						
522 Oak Ridge Department of Public Works	Rust Engineering Company			4.89		4.89	28,976	169	3.80	---
768 Anderson County Utility Board	Clinch River, Melton Hill Reservoir (52.4)		.987		.714	.273	2,141	128	1.00	2.00

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Anderson										
772 Rust Engineering Company	Clinch River (41.6)		17.5		4.89	12.6	3,310	3807	7.00	17.2
869 Twilight Zone Mobile Home Park	well		*			*	135	*	---	---
Bedford										
044 Bell Buckle Water System	Wartrace WS			0.136		.136	1,046	130	.100	---
512 Bedford County Utility District #2	Wartrace WS			.044		.044	122	361	.225	---
517 Bedford County Utility District #1	Duck River (202.4)		.633			.633	5,656	112	.550	.748
	Shelbyville WS			.000						
628 Shelbyville Water System	Duck River (227.0)		2.83		.078	2.75	16,566	166	5.00	4.92
629 Flat Creek Cooperative	Shelbyville WS			.078		.081	813	100	.100	---
	Tullahoma BU			.003						
730 Wartrace Water System	spring	6	.525		.180	.345	1,656	208	.225	.500
Benton										
051 Big Sandy Water Department	well	3	.064			.064	806	79	.150	.072

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Benton										
055 Kentucky Lake Heights Water System	2 wells		0.019a			0.019a	172	110a	0.008	0.144
090 Camden Water Department	Tennessee River (100.4)		.906			.906	7,688	118	1.60	1.56
Bledsoe										
551 Pikeville Water System	4 wells	8	.327			.327	2,468	132	1.15	.432
Blount										
007 Alcoa Water System	Little River (9.7)		12.1		1.81	10.3	21,895	470	11.4	24.3
249 Friendsville Utility District	South Blount UD			0.154		.154	1,830	84	.250	---
438 Maryville Utilities Board	Little River (about 17.3) Alcoa WS		2.64	 .000	.523	2.12	25,107	84	4.25	6.05
439 Edge-O-Town Mobile Home Park	well	8	.005			.005	125	40	---	.057
588 Hickory Hill Trailer Court	well		*			*	87	*	---	---
643 South Blount Utility District	Alcoa WS Maryville UB			1.43 .522	.154	1.80	12,955	139	1.40	---
714 Tuckaleechee Utility Distirct	Alcoa WS Knox-Chapman UD Maryville UB			.379 .005 .001		.385	4,647	83	1.31	---
728 Walland Water System	wells		*			*	76	*	.012	.086

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Blount										
805 Bays Mountain Mobile Home Park	spring		*			*	73	*	0.005	0.010
Bradley										
117 Cleveland Utilities	Hiwassee River (about 22.0)	8	3.00		0.982	5.10	43,050	118	11.5	7.28
	Waterville Spring		1.25							
	Hiwassee UC			1.83						
118 Bachman Memorial Home	well	8	.014			.014	65	215	.060	---
564 Prospect McDonald Utility District	Cleveland Utilities			.760		.760	7,175	106	.015	---
782 Casson's Apartments Water System	well		*			*	86	*	---	.072
831 Hiwassee Utility Commission	Hiwassee River (about 22.5)		2.93		2.24	.69	3,310	208	2.00	7.50
Campbell										
322 Caryville-Jacksboro Utility Commission	Cove Lake (impoundment)		.182			.256	5,446	47	1.15	.328
	N Anderson Co. UD			.074						
	La Follette WD			.000						
374 La Follette Water Department	Ollis Creek (impoundment) (0.8)		1.15			1.15	15,929	72	2.06	3.32
Carroll										
081 Bruceton Water System	well	3	.256			.256	1,767	145	.500	.864

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Carroll										
115 Clarksburg Utility District	2 wells	3	0.111			0.111	940	118	0.210	0.138
310 Hollow Rock Water Department	2 wells	3	.070			.070	1,012	69	.050	.259
Carter										
060 Blue Springs Utility District	FUD Carter Co.			0.136		.136	1,156	118	.100	---
094 First Utility District of Carter County	Campbell Spring Elizabethton WD	8	.755	.000	0.136	.619	4,546	136	1.17	.720
221 Elizabethton Water Department	Big Springs Hampton Spring Milligan Spring Valley Forge Spring	8	.701 2.58 .467 1.51		.298	4.96	24,443	203	6.85	6.35
223 North Elizabethton Water Cooperative	Elizabethton WD			.116		.116	929	125	.100	---
282 Hampton Utility District	spring	8	.601		.328	.273	2,655	103	.672	.835
584 Roan Mountain Utility District	spring wells	9	.054 .000			.054	800	68	.100	.093
633 Siam Utility District	Elizabethton WD			.182		.182	2,065	88	.100	---
646 South Elizabethton Utility District	Hampton UD			.328		.328	4,129	79	.450	---
802 Peters Hollow Water System	Peters Branch (1.5)		**			**	143	**	.004	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Claiborne										
022 Arthur-Shawanee Utility District	Davis Creek[2] (impoundment)		0.000			0.571	4,327	132	0.750	1.44
	Powell River (65.0)		.571							
113 Claiborne County Utility District	Ball Creek Spring[2] (impoundment)		.721			.721	7,683	94	1.10	.864
161 Cumberland Gap Water Services	Lincoln Memorial University			0.038		.038	248	153	.340	---
290 Lincoln Memorial University	spring	4	.172		0.038	.134	1,100	122	.068	.400
Cocke										
500 Newport Water System	French Broad River (87.1)		2.88		.029	2.85	14,588	195	3.67	6.00
501 L W Hooper Water System	Newport WS	8		.029		.063	328	192	.015	.053
	spring		.016							
	well		.018							
Coffee										
429 Manchester Water Department	Duck River UC			1.60	.268	1.33	9,742	137	2.40	---
430 Hillsville Utility District	Manchester WD			.268		.268	3,061	88	.400	---
715 Tullahoma Board of Utilities	Duck River UC			2.27	.314	1.96	20,353	96	4.20	2.48
821 Duck River Utility Commission	Duck River, Normandy Reservoir (about 255.0)		3.90		3.87	.000	0	0	.660	7.50

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Coffee										
830 Arnold Village	well #1 well #12	5	0.036 .000			0.036	38	947	0.020	---
879 Shady Grove Mobile Home Park	well		*			*	102	*	---	---
880 Stacey Ann's Mobile Home Park	wells		*			*	125	*	---	---
Cumberland										
147 Crab Orchard Utility District	Crossville WD			0.594		.594	6,600	90	.950	---
150 Crossville Water Department	Obed River, Holiday Hills Lake (at the head of the river) (40.2)		2.55		1.11	1.90	12,133	157	2.59	4.42
	Meadow Creek, Meadow Park Lake (8.0)		.46							
158 Catoosa Utility District	Crossville WD			.230		.230	3,580	64	.300	---
159 Lantana Utility District	Crossville WD			.250		.250	3,231	77	.600	---
Decatur										
186 Decaturville Water System	well	6	.147			.147	1,354	109	.400	.200
541 Parsons Water Department	Beech River (10.0)		.497		.079	.418	3,381	124	.600	1.73

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Decatur										
543 Perryville Utility District	Parsons WD			0.079		0.079	1,211	65	0.050	---
Dickson										
191 Dickson Water Department	impoundment		1.13		0.26	1.12	8,988	125	2.47	1.04
	Turnbull UD			.250						
	wells		.000							
Franklin										
046 Belvidere Rural Utility District	well	5	0.132			.132	861	153	.050	.216
101 Center Grove-Winchester Springs Utility District #1	Tullahoma BU			.311		.311	2,105	148	.500	---
146 Cowan Board of Public Utilities	spring	5	.178			.178	2,238	80	.250	.504
187 Decherd Water Department	2 wells	5	.283			.283	3,272	86	.400	.504
232 Estill Springs Water Department	Estill Spring	5	.375			.375	2,907	129	.575	.540
317 Huntland Water System	well # 1	5	.109			.149	1,148	130	.400	.285
	well # 2		.033							
	well # 3		.007							
623 Sewanee Utility District	Lake Jackson		.000		0.026	.293	3,591	82	.406	.691
	Lake O'Donnell		.319							
754 Winchester Water System	Elk River, Tims Ford Reservoir (154.0)		1.57			1.57	12,697	124	1.55	3.02

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Giles										
018 Ardmore Water System	well (Tennessee) wells (Alabama)	5	0.129 .171			0.300	1,960	153	0.150	0.331
419 Lynnville Water Department	Fairview UD			0.051		.051	644	79	.075	---
469 Minor Hill Utility Corporation	Pulaski WS			.252		.252	2,457	103	.300	---
562 Pulaski Water System	Richland Creek (24.1)		2.11		0.528	1.58	9,233	171	4.12	3.60
563 Fairview Utility District	Pulaski WS			.139	.051	.088	734	120	.100	---
566 Tarpley Shop Utility District	Pulaski WS			.137		.137	1,589	86	.100	---
649 South Giles Utility District	Richland Creek (2.2)		.136			.136	2,239	61	.450	.288
Grainger										
041 Bean Station Utility District	Morristown WD			.362		.362	2,990	121	.500	---
600 Rutledge Water System	Morristown WD			.111		.111	1,241	89	.400	---
846 Lakeshore Heights Subdivision	well #1 well #2		* *			*	125	*	---	.064
Greene										
108 Chuckey Utility District	Greeneville PWD Jonesboro WD Glen Hills UD			.385 .000 .000		.385	4,836	80	.500	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Greene										
149 Cross Anchor Utility District	Greeneville PWD			0.406		0.406	4,046	100	0.100	0.100
266 Glen Hills Utility District	Greeneville PWD			.564		.564	5,886	96	3.92	1.00
273 Greeneville Power and Water Department	Nolichucky River (57.2)		6.35		1.93	4.42	22,367	198	5.70	10.0
274 North Greene Utility District	Cross Anchor UD			.000		.303	3,178	95	.800	.115
	Lick Creek (49.7)		.263							
	Mosheim UD			.040						
478 Moshiem Utility District	Greeneville PWD			.192	0.062	.130	1,570	83	.500	---
530 Old Knoxville Highway Utility District	Greeneville PWD			.381		.403	3,440	117	.350	---
	Mosheim UD			.022						
Grundy										
122 Big Creek Utility District	Ranger Creek (about 500 feet upstream from Highway 56)		.638		.085	.553	5,124	108	1.49	1.21
470 Monteagle Public Utility Board	Laurel Creek Lake		.236		.021	.241	1,931	125	.200	.270
	Sewanee UD			.026						
706 Tracy City Water System	spring #1	4	.360			.360	2,913	124	.625	.720
	spring #2		.000							
	wells		.000							
850 Monteagle Sunday School Assembly	Monteagle PUB			.021		.021	525	40	.300	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hamblen										
014 Alpha-Talbott Utility District	Morristown WD			1.00		1.00	11,325	88	1.10	---
474 Morristown Water Department	Holston River, Cherokee Lake (75.3)	8	6.22		2.38	3.84	29,747	129	7.71	10.2
	Havley Spring Creek		.000							
	Havley Spring		.000							
	wells		.000							
476 Rine's Trailer Court	well		*			*	74	*	---	---
598 Russellville Whitesburg Utility District	Morristown WD			.723	.091	.632	8,263	76	.450	---
650 South Morristown-Witt Utility District	Morristown WD			.181		.181	2,114	86	.301	---
Hamilton										
037 Union Fork-Bakewell Utility District	3 wells	8	.184			.184	1,756	105	.300	.158
107 Tennessee-American Water Company	Tennessee River (465.0)		40.7		.842	39.9	175,142	228	19.43	72.0
168 Mowbray Mountain Utility District	Soddy-Daisy UD			.081		.081	1,008	80	.250	.230
169 Soddy-Daisy-Falling Water Utility District	well #2	8	.927		.081	1.73	8,352	207	1.90	2.07
	Soddy Creek embayment (4.0)		.881							
	Soddy well #1		.000							

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hamilton										
219 Eastside Utility District	Tennessee American Water Company	8		0.000	0.009	3.76	23,984	157	3.90	4.00
	4 wells		3.77							
303 Hixson Utility District	Cave Springs	8	5.61			5.61	46,149	122	5.12	9.22
	rock quarry		.000							
605 Sale Creek Utility District	2 wells	8	.169			.169	997	170	.400	.368
613 Savannah Valley Utility District	well #1	8	.798			.798	5,425	147	1.43	.936
	well #2		.000							
634 Signal Mountain Water System	Tennessee American Water Company			.842		.842	6,583	128	1.55	---
635 Walden Ridge Utility Department	2 wells	8	.526			.526	5,233	101	1.20	.737
776 White Oak Mountain Water Association	Eastside UD			.009		.009	95	95	.018	---
Hancock										
640 Sneedville Utility District	Brier Creek (1.1)	8	.099			.210	1,717	122	.475	.712
	Fall Branch Spring		.111							
Hardin										
546 Hardin County Board of Public Utilities	Tennessee River (at Pickwick Dam, about 207.0)		.329			.329	2,894	114	.650	.519
606 Saltillo Utility District	well	3	.081			.081	885	92	.150	.504

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hardin										
611 Savannah Public Utilities Department	6 wells	1	1.73			1.73	13,041	133	1.35	2.54
Hawkins										
082 Bulls Gap Utility District	Russellville Whitesburg UD			0.091		.091	1,025	89	.250	---
092 Pressman's Home	well		*			*	97	*	.245	.360
109 First Utility District of Hawkins County #1	Alexander Creek (0.7) Hord Creek (1.5)		0.564 .117			.681	5,890	116	.800	2.01
384 Lakemont Utility District	well	8	.006			.006	137	44	.012	.036
472 Mooresburg Utility District	spring	8	.068			.068	598	114	.250	.046
593 Rogersville Water System	Big Creek (1.2)		1.16		0.332	.828	6,432	129	1.25	2.00
594 Persia Utility District	Rogersville WS			.181		.181	2,235	81	.325	---
596 Lakeview Utility District	Rogersville WS			.075		.075	1,264	59	1.60	---
673 Striggersville Utility District	Rogersville WS			.076		.076	499	152	1.60	---
682 Surgoinsville Utility District	Jennings Spring	8	.127			.127	1,513	84	.350	.288

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hawkins										
761 New Canton Utility District	FUD of Hawkins Co #2			0.028		0.028	257	109	---	---
855 First Utility District of Hawkins County #2	Lee Spring Hamilton Spring	8	0.487 .184		0.028	.643	5,720	112	0.450	0.792
Henderson										
402 Lexington Water System	Beech River, Beech Reservoir (35.5)		2.78			2.78	14,712	189	2.57	4.00
609 Sardis Water System	wells	3	.057			.057	819	70	.050	.086
614 Scotts Hill Water System	2 wells	3	.234			.234	2,208	106	.350	.396
Henry										
536 Paris Board of Public Utilities	4 wells	3	2.17		.202	1.97	12,152	162	2.30	6.05
537 South Paris Water Cooperative	Paris BPU			.124		.124	1,300	95	2.30	---
568 Puryear Water System	2 wells	2	.075			.075	864	87	.225	.172
838 Northwest Henry County Utility District	Paris BPU			.078		.078	1,235	63	.150	---
Hickman										
066 Bon Aqua-Lyles Utility District	Mill Creek (9.9) MacFarland Spring		.398 .000			.398	3,900	102	.300	.648
103 Centerville Water System	Big Swan Creek (1.1)		.890			.890	5,370	166	1.45	1.15

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hickman										
533 Turney Center	Duck River (40.0)		0.252			0.252	1,150	219	1.00	0.296
Houston										
698 Tennessee Ridge Water System	2 wells	5	.141			.141	2,635	54	.600	.187
Humphreys										
420 McEwen Water Department	well #1 well #2	5	.203 .000			.203	1,946	104	.400	.432
497 New Johnsonville Water Department	Tennessee River, Kentucky Lake (100.5)		.373			.373	1,681	222	0.800	1.15
733 Waverly Water Plant	2 wells Duck River (8.3)	5	.472 .661			1.13	5,907	191	1.10	1.52
Jefferson										
170 Dandridge Water Department	spring well well #1	8	.057 .208 .000		0.002	.263	2,346	112	.818	.612
171 Bush Brothers #1	Weaver Hall well		*			*	37	*	---	---
328 Jefferson City Water and Sewer Commission	Jarnigan Mine[1] Mossy Creek Spring	8	1.26 .247		.636	.871	6,029	144	2.74	5.00
329 Baneberry Utility District	well #1 well #2	8	.013 .001			.014	253	55	---	.288

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Jefferson										
385 Mountain View Water System	Dandridge WD well	8	 0.007	0.000		0.007	84	83	---	0.040
499 New Market Utility District	Jefferson City Wastewater and Sewer			.281		.281	2,843	99	0.448	---
626 Shady Grove Utility District	Dandridge WD Knoxville UB #2 Jefferson City W & S			.002 .148 .355		.505	5,070	100	.200	---
746 White Pine Water System	South Morristown-Witt UD	8		.000		.185	1,863	99	.200	.216
	well #1 well #2		.097 .088							
789 Wilmore Estates Water System	well	8	.010			.010	110	91	.006	.096
843 Bush Brothers #2	McGaha Road well		*			*	34	*	---	---
Johnson										
085 Carderview Utility District	Unnamed tributary well	8	.015b .002b			.017b	200b	85b	.102	.132
479 Mountain City Water Department	Rambo Spring Silverlake Spring[1] Silver Lake Spring[3]	8	.255 .843 .069			1.17	6,094	192	2.88	---
480 Brownlow Utility District	Vaughts Creek (3.4)		.023			.023	291	79	.052	---
485 Johnson County Utility District	Leco Spring	8	.079			.079	388	204	.200	.777

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Knox										
217 Knoxville Utilities Board #2	French Broad River (3.4)		0.790		0.148	1.32	10,962	120	2.75	3.18
	Holston River (9.3)		.682							
280 Hallsdale-Powell Utility District	Beaver Creek (32.0)	8	.949		.111	4.05	33,000	123	4.17	3.66
	Granny Bright Spring		.283							
	Fowler Springs		.709							
	Bull Run Creek, Melton Hill Reservoir (3.8)		2.22							
366 Knoxville Utilities Board #1	Tennessee River (649.2)		31.4			31.4	151,379	207	23.22	50.0
367 Knox-Chapman Utility District	French Broad River (3.4)		1.92		.005	1.92	17,875	107	2.56	2.59
369 First Utility District of Knox County	Knoxville UB #1	8		0.000	.075	4.34	37,495	116	5.19	7.78
	Tennessee River, (617.5)		4.22							
	Walker Springs		.194							
	West Knox UD			.000						
	Sinking Creek embayment (617.2)		.000							
371 West Knox Utility District	Clinch River, Melton Hill Reservoir (36.5)		1.08			3.67	33,045	111	4.08	7.60
	Clinch River, Melton Hill Reservoir (46.5)		2.59							

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Knox										
515 Northeast Knox Utility District	Holston River (9.6)		1.04			1.04	11,072	94	2.17	2.30
762 Little Creek Sanitarium	Little Creek Spring	8	.048			.049	205	239	.050	.048
	FUD Knox County			0.001						
Lawrence										
239 Fall River Road Utility District	Lawrenceburg WS			.096		.096	1,083	89	.075	---
320 Iron City Utility District	Holly Creek[2]		.074			.074	540	137	.150	.086
	City Spring		.000							
389 Northeast Lawrence Utility District	Lawrenceburg WS			.063		.063	821	77	.100	---
391 New Prospect Utility Dictrict	Lawrenceburg WS			.107		.107	1,080	99	.100	---
392 Lawrenceburg Water System	Shoal Creek (55.9)	5	2.25		0.339	2.98	13,968	213	3.65	8.00
	City Spring		1.07							
399 Leoma Utility District	spring	5	.103			.103	1,305	79	.100	.144
408 Loretto Water Department	Stillhouse Spring	5	.186			.186	2,160	86	.473	.368
604 St. Joseph Water System	spring	5	.084			.084	1,050	80	.300	.156
676 Summertown Water System	2 wells	5	.096			.096	1,200	80	.150	.180
677 Ethridge Utility District	Lawrenceburg WS			.073		.073	1,224	60	.150	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Lawrence										
740 Westpoint Utility District	Factory Creek (4.2)		0.017			0.017	342	50	0.050	0.072
Lewis										
304 Hohenwald Water System	Downey Spring	5	.103			.898	5,668	158	.800	1.51
	well #1		.303							
	well #2		.492							
678 The Farm Water System	Laundry well	5	.034			.034	350	97	.005	---
Lincoln										
242 Fayetteville Water System	Elk River (93.9)	5	2.59		.201	3.01	10,596	284	3.10	5.21
	Teal Hollow Spring		.624							
243 Norris Realty Company	Fayetteville WS			0.010		.010	102	98	3.12	---
346 Kelso Water Department	Fayetteville WS			.011		.011	78	141	3.12	---
489 Mulberry Utility District	Fayetteville WS			.032		.032	472	68	.055	---
764 Lincoln County Board of Public Utilities #1	wells (Elora)	5	.276			.845	9,801	86	1.10	.432
	wells (Taft)		.468	.101						
	Fayetteville WS									
Loudon										
396 Lenoir City Utility Board	Tennessee River (601.3)		.993		0.218	.775	7,532	103	1.88	3.01
397 Dixie Lee Utility District	Allen Fine Spring	8	.539		.132	.699	6,325	111	1.05	.864
	Lenoir City UB			.218						
	FUD Knox County			.074						

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Loudon										
409 Loudon Utilities Board	Roberson Spring Tennessee River (593.0)	8	0.175 4.97			5.15	6,078	847	5.65	8.20
410 Piney Utility District	spring	8	.230			.230	1,967	117	.325	.172
434 Martel Utility District	Dixie Lee UD			0.132		.132	1,600	83	.025	---
832 Freda Bell Mobile Home Park	well		*			*	44	*	---	---
871 Tellico Village Property Owner's Association	Tellico Area SS			.069		.069	146	473	1.80	---
McMinn										
024 Athens Utilities Board	Ingleside Spring Oostanaula Creek (35.2)	8	1.76 1.66			3.42	13,828	247	4.00	4.15
025 Hillside Trailer Park	well		*			*	56	*	---	---
026 Malone Trailer Park	well #1 well #2		* *			*	62	*	---	---
028 Johnson Trailer Park	well		*			*	42	*	---	---
106 Calhoun-Charleston Utility District	Hiwassee Utility Commission			.098		.098	1,483	66	.200	---
224 Englewood Water Department	Middle Creek (near State Highway 39 and L&N Railroad crossing)		.259			.259	2,638	98	.695	.576

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
McMinn										
233 Etowah Utility District	Hiwasse River (42.6)		1.85		0.111	1.74	8,391	207	3.10	2.75
510 Niota Water System	Hiwassee Utility Commission			0.240		.240	1,630	147	.335	---
576 Riceville Utility District	Hiwassee Utility Commission			.072		.072	787	91	.060	.060
771 Tall Oaks Apartments	well		*			*	115	*	---	---
866 Eastwood Apartments	well		*			*	32	*	---	---
McNairy										
002 Adamsville Water System	well	3	.609			.609	5,195	117	.625	.720
454 Michie Water Department	wells	3	.241			.241	1,867	129	.200	.205
Marion										
278 Griffith Creek Utility District	Big Creek UD			.085		.085	993	86	.080	---
325 Jasper Water Department	Blue Spring Sequatchie River (6.0)	8	.735 .062			.797	6,153	130	1.42	1.60
535 Orme Water System	creek springs	8	.000 .005			.005	103	49	---	---
616 Sequatchie Water Works	Blowing Cave Spring	8	.086			.086	527	163	.011	.136
651 South Pittsburg Water System	Tennessee River (about 417.0)		.995			.995	4,881	204	1.54	2.10

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Marion										
749 Whitwell Water Department	Sequatchie River (22.0)		0.454		0.113	0.341	3,355	102	1.01	1.20
750 West Valley Water System Incorpaorated	Whitwell WD			0.113		.113	1,612	70	.100	---
Marshall										
104 Chapel Hill Water System	Marshall Co BPU #1	6		.004		.115	949	121	.100	---
	Town Well		.111							
105 Marshall County Board of Public Utilities #1	Lewisburg WS			.188	.004	.184	1,651	111	.417	---
139 Cornersville Water Department	Lewisburg WS			.108		.108	930	116	.200	---
400 Lewisburg Water System	Duck River (181.0)		2.50		.337	2.16	11,591	186	5.40	4.51
	City Lake		.000							
544 Petersburg Water System	Fayetteville WS			.047		.047	772	61	.250	---
857 Marshall County Board of Public Utilities #2	Lewisburg WS			.014		.014	171	82	---	---
858 Marshall County Board of Public Utilities #3	Lewisburg WS			.027		.027	302	89	---	---
Maury										
128 Columbia Water Department	Duck River (133.7)		8.01		.816	7.19	36,875	195	12.50	15.24
488 Mount Pleasant Water System #1	springs	6	.931			.931	5,504	169	1.15	1.15

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Maury										
667 Spring Hill Water Department	Columbia WD			0.564	0.354	0.210	1,475	142	1.00	---
770 Maury County Water System	Columbia WD			.121		.121	4,377	28	.100	---
867 Mount Pleasant Water System #2	Columbia WD			.131		.131	543	241	---	---
Meigs										
183 Decatur Water Department	Eaves Spring Big Spring	8	0.331 .084			.415	1,729	240	.600	0.576
Monroe										
425 Madisonville Water Department	Tellico Area SS			.636		.636	5,690	112	1.65	---
426 Hiwassee College	Hiwassee Spring	8	.119			.119	500	238	.138	.120
687 Sweetwater Utility Board	Sweetwater Creek (21.6) Cannon Spring	8	1.19 1.10			2.29	7,688	298	2.60	2.21
693 Tellico Plains Water Department	wells	8	.355			.355	2,207	161	.400	.576
726 Tellico Area Services System	Little Tennessee River, Tellico Reservoir (about 19.2)		.962		.705	.257	1,570	164	1.30	3.46

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Moore										
416 Lynchburg Water Department	East Fork Mulberry Creek (14.4)		0.169			0.169	1,132	149	0.200	0.288
	Tennessee River, Tims Ford Reservoir (414.0)		.000							
Morgan										
520 Brushy Mountain Prison	impoundment (surface runoff and runoff from a mine)		.147			.147	500	294	.700	1.03
729 Plateau Utility District	Crooked Fork Creek (6.3)	4	.000			.404	3,912	103	.400	.414
	wells		.404							
755 Wolfe Branch Utility District	Harriman UB			0.134		.134	2,022	66	.206	---
Perry										
404 Linden Water Department	Buffalo River (43.0)		.244			.244	1,734	141	.500	.972
406 Lobelville Water Department	Buffalo River (29.6)		.141			.141	1,000	141	.300	.288
Polk										
048 Benton Water System	springs	8	.130			.207	2,003	103	.250	---
	Ocoee WS			.070						
	Hiwassee Water Coop			.007						
049 Hiwassee Water Cooperative	Etowah UD			.111	0.007	.104	800	130	---	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Polk										
136 Copperhill Water Department	springs	8	0.114			0.114	773	147	0.460	0.093
138 Cherokee Hills Utility District	4 springs	8	.047			.047	325	145	.055	.086
525 Ocoee Water System	Cleveland Utilities	8		0.222	0.070	.708	5,460	130	.600	1.15
	Wildwood Spring		.556							
844 Copper Basin Utility District	Campbell Cove Lake		.146			.146	1,484	98	1.10	.576
Rhea										
174 Dayton Water Department	Tennessee River (503.9)		1.47		.153	1.32	8,180	161	1.75	2.05
176 Hill Lake Water System	well #1		*			*	66	*	---	---
	well #2		*							
178 Laurelbrook Sanitarium School	well #2	4	.021			.021	165	127	.055	.090
	well #1		.000							
180 Mount Vista Mobile Home Park	well		*			*	74	*	---	---
235 Evensville Utility District	Dayton WD			.153		.153	1,539	99	---	---
269 Graysville Water Department	wells	4	.217			.217	1,491	146	.180	.518
656 Spring City Water System	Piney River, Watts Bar Reservoir (568.4)	8	.195			.411	2,708	152	.750	.656
	spring		.216							

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Rhea										
657 Newport Resort Water System	well	8	0.009			0.009	86	105	0.015	0.043
663 Yost Trailer Park	well #1 well #3		.002 .000			.002	45	44	---	---
863 Grandview Utility District	Crossville WD			0.036		.036	992	36	.270	---
872 Watts Bar Utility District	wells		*			*	527	*	---	---
Roane										
287 Harriman Utility Board	Emory River (12.9)		1.59		0.180	1.41	9,320	151	1.80	3.11
360 Kingston Water System	spring Tennessee River, Watts Bar Reservoir (about 5.7)	8	.163 .571			.734	6,598	111	.136	2.00
361 Lewands Water System	well		*			*	78	*	---	---
457 Midtown Utility District	Rockwood WS			.276		.276	3,167	87	.400	---
523 Oliver Springs Water	Anderson Co. UB Bacon Spring	8	 .506	.024		.530	5,089	104	1.00	.864
531 Cumberland Utility District	Dickey Spring Little Emory River (3.0) Mill Spring	8	.172 .715 .000			.887	7,050	126	2.15	1.27

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Roane										
590 Rockwood Water System	Tennessee River, Watts Bar Reservoir (553.0)		1.47		0.276	1.19	8,470	140	3.00	6.00
686 Swan Pond Utility District	Harriman UB			0.046		.046	549	84	---	---
Sequatchie										
205 Dunlap Water System	Sequatchie River (about 44.6)		.464			.464	3,830	121	1.50	.864
208 Old Union Water System	spring		*			*	28	*	.004	---
Sevier										
256 Gatlinburg Water Department	West Prong Little Pigeon River (at the Great Smoky Mountains National Park boundary)	9	1.48		.047	1.75	7,331	239	5.85	2.89
	Pigeon Forge WS well #1		.049	.267						
261 Webb Creek Utility District	7 wells	9	.039			.039	628	62	.980	.086
270 Great Smoky Mountains National Park	well	9	.012			.012	150	80	.200	.504
548 Pigeon Forge Water System	Walden Creek (8.9)		1.34		.267	1.07	4,852	221	1.65	2.60

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Sevier										
617 Sevierville Water System	East Prong Little Pigeon River (7.3)		1.20			1.20	8,344	144	1.40	2.02
618 East Sevier County Utility District	2 wells	9	.009			.009	120	75	.238	.086
620 Mountain View Trailer Park	well		*			*	27	*	---	---
841 Norton Creek Water System	spring well		* *			*	83	*	---	---
849 Chalet Village North	Gatlinburg WD well	9	 .040	0.047		.087	602	145	.110	---
868 Cate's Mobile Home Park	well		*			*	52	*	---	---
873 Condo Villas of Gatlinburg	Gatlinburg WD			***		***	527	***	.500	.792
Sullivan										
056 Bloomingdale Utility District	Reedy Creek (11.2) Kingsport WD		1.09	 .000		1.09	10,910	100	1.30	1.38
057 Blountville Utility District	Bristol WS			.390		.390	7,568	52	.400	---
058 Tri-Cities/Sullivan Utility District	Bristol-Bluff City Utility District			.059		.059	1,792	33	.250	---
059 11-W Utility District	Bristol WS			.106		.106	1,106	96	.250	---
061 Bluff City Water System	Underwood Spring	8	.231		0.003	.228	1,760	130	.300	---

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Sullivan										
062 Chinquapin Grove Utility District	Wildcat Springs Johnson City WD Bluff City WS	8	0.070	 0.021 .003		0.094	1,580	59	0.100	0.208
073 Bristol Water System	South Fork Holston River (48.2)		5.21		0.999	4.21	26,475	159	6.10	10.10
074 Holston Utility District	Bristol WS			.151		.151	1,690	89	---	---
078 Jacobs Creek Job Corps System	Little Jacob Creek (2.5)		.022			.022	220	100	.050	.057
079 Bristol-Bluff City Utility District	South Fork Holston River (35.6)		.908		.125	.783	3,707	211	1.40	1.38
319 Intermont Utility District	Bristol WS			.032		.032	385	83	---	---
349 Kingsport Water Department	South Fork Holston River (6.4)		15.6		.295	15.3	71,172	215	13.9	---
351 Long Island Utility District	Kingsport WD			.219		.219	300	730	---	---
644 South Bristol-Weaver Pike Utility District	Bristol WS Bristol-Bluff City WD			.320 .125		.445	3,781	118	---	---
854 Foxfire Homeowners-Association	2 wells		*			*	75	*	.035	---
Unicoi										
229 Temple Hill Utility District	Erwin Utilities			.136		.136	1,124	121	.150	.288

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Unicoi										
231 Erwin Utilities	A. McPhearson Spring	8	0.422		0.375	0.904	11,154	81	1.99	2.33
	Birchfield Spring		.431							
	O'Brien Spring		.426							
719 Unicoi Water Utility District	Erwin Utilities			0.239		.239	2,535	94	.200	---
Union										
415 Luttrell-Blaine-Corryton Utility District	Big Spring	8	.344			.344	3,034	113	.221	---
	Booker Spring		.000							
	Phipps Spring		.000							
442 Maynardville Water Department	Davis Spring	8	.085			.268	2,427	110	.020	.238
	Lay Spring		.183							
443 Ailor Trailor Park	3 wells		*			*	71	*	---	---
799 Beard Valley Mobile Home Park	2 wells		*			*	50	*	---	---
860 Welch Mobile Home Park	well		*			*	29	*	---	---
Washington										
237 Fall Branch Utility District	Kingsport WD	8		.076		.172	2,118	81	---	---
	spring		.096							
331 Johnson City Water Department	spring	9	3.18		.021	13.4	65,368	205	11.8	16.0
	Watauga River (17.5)		10.2							
338 Jonesboro Water Department	Dry Creek	8	0.22			1.96	13,414	114	3.51	4.70
	Nolichucky River (about 86.0)		.000							
	Sinking Creeks[1]		1.74							

Supplement A.--Public water-supply systems and associated water use in the Tennessee hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Wayne										
119 Clifton Water Department	Tennessee River (158.2)		.107			.107	1,440	74	.500	.324
127 Collinwood Water Department	4 springs	5	.198			.198	1,803	110	.300	.288
736 Waynesboro Water System	Green River (13.6)		.383			.383	3,105	123	.600	.865

[1]Ground water
[2]River mile unknown
[3]Surface water

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region
(Modified from F.M. Alexander and others, 1984)

[PWSID, Public Water System Identification number; Mgal/d, million gallons per day; gal/d, gallons per day; UD, Utility District; WD, Water Department; WS, Water System; *, less than 50 connections, ground-water sole source; ---, not applicable; a, data for January to June, 1988; Principal aquifer: 4, Pennsylvanian sandstone; 5, Mississippian carbonate; 6, Ordovician carbonate; Co., county]

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
				Ohio region						
Bledsoe										
553 Taft Youth Center	Bee Creek (7.3)		0.384		0.175	0.209	1,000	209	1.46	0.602
Campbell										
330 Jellico Water Department	Proctors Hollow Creek[1] (impoundment)		.370			.370	3,600	103	.750	.751
Cannon										
756 Woodbury Water System	spring	6	.284			.284	3,756	76	.700	.829
Cheatham										
023 Ashland City Water Department	Big Marrowbone, Cheatham Reservoir (1.1)		.647			.647	3,454	187	1.00	.622
218 East Montgomery Utility District	Clarksville WD			0.381		.658	6,892	95	.800	---
	Springfield WS			.277						
558 Pleasant View Utility District	Springfield WS			.025		.460	6,123	75	.800	.518
	Sycamore Creek (10.8)		.435							
582 River Road Utility District	Brush Creek (1.1)		.073			.114	1,178	97	.100	.144
	Harpeth Valley UD			.041						
645 Second South Cheatham Utility	Harpeth River (36.1)		.392			.392	4,156	94	.800	.461

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region
(Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Claiborne										
826 Clear Fork Utility District	well #1	4	0.081			0.081	998	81	0.200	0.200
	well #2		.000							
Clay										
099 Celina Water System	Obey River (0.25)		.628		0.034	.594	3,022	197	1.21	1.00
100 Free Hill Utility District	Celina WS			0.034		.034	248	137	.075	---
573 Northwest Clay County Utility District	Red Boiling Spring WS			.149		.149	1,395	107	.400	---
Cumberland										
557 Pleasant Hill Utility District	Bon de Croft UD			.152		.152	2,307	66	.100	---
Davidson										
297 Cumberland Utility District	Cumberland River, Cheatham Reservoir (207.6)		3.80			3.80	22,320	170	4.95	4.97
286 Harpeth Valley Utility District	Cumberland River, Cheatham Reservoir (172.6)		7.84		4.10	3.74	17,309	216	9.20	4.50
424 Madison Suburban Utility District	Cumberland River, Cheatham Reservoir (200.5)		9.41			9.41	38,096	247	8.90	13.3
494 Nashville Water Department	Cumberland River, Cheatham Reservoir (195.0)		53.2		1.49	88.6	305,784	290	82.4	131
	Cumberland River, Cheatham Reservoir (200.0)		36.9							

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Davidson										
527 Old Hickory Utility District	Cumberland River, Old Hickory Reservoir (218.9)		0.677		0.282	0.395	4,045	98	0.500	1.44
528 Lakewood Water Department	Old Hickory UD			0.166		.166	2,176	76	.500	---
529 Rayon City Water Company	Old Hickory UD			.116		.116	1,688	69	.500	---
DeKalb										
008 Alexandria Water System	Smith UD #1			.118		.118	1,575	75	.450	---
188 DeKalb Utility District #1	Smithville WS			.273		.273	3,729	73	.100	---
403 Dowelltown-Liberty Utility District	well #1 well #2	6	.079 .076			.155	1,020	152	.100	.130
637 Smithville Water System	Caney Fork River, Center Hill Reservoir (60.7)		.973		.431	.542	4,554	119	2.10	4.15
833 Dekalb Utility District #2	Smithville WS			.114		.114	1,273	90	.837	---
834 Dekalb Utility District #3	Smithville WS			.044		.044	506	87	.837	---
835 Dekalb Utility District #4	Baxter WD			.022		.022	286	77	.300	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Dickson										
285 Harpeth Utility District	Baker Spring Turnbull UD Sylvia-Tennessee-Pond UD	5	0.156	 0.052 .000		0.208	2,263	92	0.100	0.288
691 Sylvia-Tennessee City-Pond Utility District	Dickson WD			.186		.186	2,212	84	.100	---
716 Turnbull Utility District	Turnbull Creek (11.1)		1.26		0.645	.615	5,098	121	2.60	3.00
724 Vanleer Water System	spring	5	.113			.113	1,268	89	.350	.288
739 West Piney Utility District	Dickson WD			.074		.074	783	95	.850	---
744 White Bluff Utility District	Turnbull UD			.343		.343	3,468	99	.150	---
Fentress										
010 Allardt Water System	Fentress UD			.140		.140	1,535	91	.150	---
244 Fentress Utility District	Jamestown WD			.467	.140	.327	5,044	65	.300	---
324 Jamestown Water Department	North White Oak Creek (18.1)		.860		.467	.393	3,352	117	.350	1.08
Houston										
230 Erin Water Treatment Plant #1	Cumberland River, Lake Barkley (108.3)		.486		.035	.451	2,040	221	1.20	.748
839 Erin Water Treatment Plant #2	spring	5	.232			.232	991	234	.200	.309

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Jackson										
251 Gainesboro Water System	Cumberland River, (Cordell Hull Reservoir) (359.1)		0.314		0.010	0.304	1,390	219	0.580	0.360
252 Jackson County Utility District #1	Old Gainesboro Road UD			0.053		.053	806	66	.175	---
817 Jackson County Utility District #2	Livingston WD			.033		.033	653	51	1.60	---
845 Jackson County Utility District #3	Gainesboro WS			.010		.010	125	80	.579	---
859 Jackson County Utility District #4	Red Boiling Springs WS			.026		.026	367	71	.300	---
878 Jackson County Utility District #5	Red Boiling Springs WS			.006		.006	181	33	.300	---
Macon										
373 Lafayette Water System	Adams Spring Spring Creek Spring	5	.000 .643			.643	7,228	89	.400	1.20
572 Red Boiling Springs Water System	spring A spring B	5	.415 .163		.181	.397	2,210	180	.300	.576
Montgomery										
116 Clarksville Water Department	Cumberland River, Lake Barkley (132.8)		11.2		1.80	9.40	62,037	152	9.75	16.0
166 Cumberland Heights Utility District	Clarksville WD			.174		.174	2,698	64	.300	---
167 Cunningham Utility District	Clarksville WD			.671		.671	5,588	120	.800	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region
(Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Montgomery										
603 Kirkwood Utility District #1	Clarksville WD			0.064a		0.064a	738	87	---	---
758 Woodlawn Utility District	Clarksville WD			.511	0.216	.295	3,254	91	0.200	---
820 Fort Campbell Water System	Little West Fork, Red River, Boiling Springs[2] (12.9)		4.98			4.98	43,000	116	2.75	11.40
	Red River (5.3)		.000							
Morgan										
681 Sunbright Utility District	Cumberland UD wells	4	.114 .037			.151	2,070	73	.700	.216
Overton										
013 North Overton Utility District	Livingston WD			.131		.131	1,853	71	.350	---
405 Livingston Water Department	Carr Creek (impoundment) (4.7)		1.24		.358	.882	6,636	133	1.85	3.00
578 West Overton Utility District	Algood WS Livingston WD			.051 .194		.245	2,545	96	.100	---
853 East Fork Utility District	Monterey WD			.022		.022	470	47	.200	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Pickett										
088 Byrdstown Water Department	Obey River, Dale Hollow Reservoir (45.3)		0.282			0.282	3,418	83	0.450	0.432
Putnam										
009 Algood Water System	Cookeville WD			0.371	0.051	.320	3,530	91	.275	---
038 Bangham Utility District	Cookeville WD			.304		.304	3,246	94	---	---
040 Baxter Water Department	Cookeville WD			.494	.033	.461	3,300	140	.300	---
133 Cookeville Water Department	Caney Fork River, Center Hill Reservoir (45.1)		7.60		2.13	5.47	20,448	268	---	15.0
134 Cookeville Boat Dock Road Utility District	Cookeville WD			.323		.323	3,161	102	---	---
135 Old Gainesboro Road Utility District	Cookeville WD			.311	.053	.258	2,749	94	.100	---
192 Double Springs Utility	Cookeville WD			.200		.200	2,630	76	---	---
202 Dry Valley Utility District	Cookeville WD			.126		.126	1,365	92	---	---
471 Monterey Water Department	Garrison Branch (2.2)		.545		.038	.507	3,397	149	1.70	1.01
862 Standing Stone Utility District	Monterey WD			.016		.016	334	48	---	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Robertson										
001 Adams-Cedar Hill Water System	Red River (34.1)	5	0.226			0.226	2,430	93	0.660	0.345
271 Greenbrier Water and Sewer Department	Springfield WS	5		0.251		.251	3,000	84	.100	---
534 Orlinda Water System	well spring	5	.041 .000			.041	469	87	.050	.144
666 Springfield Water System	Red River (about 1,000 yards south of the Kentucky stateline)	5	3.36		0.553	2.81	17,700	159	4.50	4.60
Rutherford										
216 Eagleville Water Department	2 wells	6	.061			.061	626	97	.200	.163
386 La Vergne Water System	Nashville WD Smyrna WS			.468 .472		.940	6,622	142	1.75	---
491 Murfreesboro Water Department	East Fork Stones River (12.3)	6	6.59			6.81	35,131	194	9.00	9.40
	spring		.215							
639 Smyrna Water System	Stones River, J. Percy Priest Reservoir (35.5)		3.73		.477	3.25	10,430	313	3.22	8.00
791 Consolidated Utility District of Rutherford County #1	East Fork Stones River (0.7)		3.75			3.75	28,345	132	5.00	4.70
792 Consolidated Utility District of Rutherford County #2	Smyrna WS			.005		.005	119	42	---	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Scott										
318 Huntsville Utility District	impoundment		0.763			0.763	6,675	114	1.06	---
532 Oneida Water and Sewer Commission	North Fork Pine Creek, Howard Baker Lake (1.8)	4	.470			.478	6,243	77	1.40	1.51
	well		.008							
	well		.000							
Smith										
095 Carthage Water System	Cumberland River, Old Hickory Reservoir (308.7)		.453		0.158	.295	2,484	119	.600	1.50
096 Cordell Hull Utility District	Carthage WS			0.077		.077	962	80	.200	---
636 Smith Utility District #1	Caney Fork River (7.3)		.940		.118	.822	3,640	226	2.50	3.00
718 Twenty Five Utility District	Carthage WS			.081		.081	856	95	.100	---
847 Smith Utility District #2	Baxter WD			.011		.011	156	71	---	---
Stewart										
083 Loon Bay Property Owners Association	well #1		*			*	38	*	.001	---
	well #2		*							
162 Cumberland City Water System	Erin WTP #1			.035		.035	368	95	.300	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region
(Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Stewart										
193 Dover Water Department	Cumberland River, Lake Barkley (88.8)		0.207			0.207	1,592	130	0.425	0.254
195 North Stewart Utility District	Woodlawn UD			0.216		.216	2,307	94	.350	---
807 Long Creek Water System	well		*			*	66	*	---	---
Sumner										
097 Castalian Springs-Bethpage Utility District	Gallatin WD			.363		.363	3,991	91	.300	---
253 Gallatin Water Department	Cumberland River, Old Hickory Reservoir (239.1)		4.42		0.389	4.03	21,416	188	7.50	8.06
294 Hendersonville Utility District	Drakes Creek, Old Hickory Lake (4.8)		3.98			3.98	30,086	132	3.75	4.79
559 Portland Water System	City Lake		.424			1.12	7,786	144	.750	1.68
	Drakes Creek (0.35)		.692							
	Sportsman Lake		.000							
	White House UD			.007						
	Franklin Water Works, Simpson County, Kentucky			.000						
738 Westmoreland Water System	City Lake		.170			.196	2,497	78	.600	.230
	Gallatin WD			.026						
745 White House Utility District	Cumberland River, Old Hickory Reservoir (217.1)		5.92		.007	5.91	34,555	171	4.60	7.80

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Trousdale										
291 Hartsville Water Department	Cumberland River, Old Hickory Reservoir (278.6)		0.527			0.527	5,187	102	1.33	1.10
Van Buren										
552 Fall Creek Falls Utility District	Taft Youth Center			0.175		.175	1,975	89	.800	---
655 Spencer Water System	impoundment		.239			.239	3,603	66	.425	1.01
Warren										
423 McMinnville Water Department	Barren Fork River (6.3)		2.49			2.49	13,837	180	4.00	.003
742 West Warren-Viola Utility District	Barren Fork River (18.1)		.331			.331	3,562	93	.625	1.50
818 Warren County Utility District	Collins River (21.6)		1.44			1.44	11,686	123	2.45	2.00
	McMinnville WD			.000						
White										
190 Dewhite Utility District	Sparta WS			.333	0.027	.306	3,492	88	.300	---
526 OConnor Utility District	Sparta WS			.387		.387	4,101	94	.400	---
569 Quebeck Walling Utility District #1	Sparta WS			.154		.154	2,274	68	.100	---
652 Sparta Water System	Calfkiller River (16.1)		2.04		.874	1.17	8,115	144	3.50	3.29
653 Bon de Croft Utility District	Billys Branch (8.2)		.261		.162	.099	1,807	55	.200	.322

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
White										
836 Prices Switch Water Company	Bon de Croft UD			0.010		0.010	170	59	---	---
852 Quebeck Walling Utility District #2	Dewhite UD			.027		.027	328	82	0.100	---
Williamson										
069 Brentwood Water Department	Nashville WD Harpeth Valley UD			.704 1.16		1.86	13,000	143	---	9.10
125 College Grove Utility District	well	6	0.053			.053	639	83	.200	.100
236 Fairview Water System	Harpeth Valley UD Horn Tavern Spring Middle School well	5	 .078 .081	.234		.393	4,333	91	.550	.187
246 Franklin Water Department	Harpeth Valley UD springs Harpeth River (89.9)	5	 .181 1.74	1.72	0.333	3.31	20,759	159	8.45	2.40
247 Milcrofton Utility District	Harpeth Valley UD			.388		.388	3,127	124	1.10	---
428 Mallory Valley Utility District	Franklin WD Harpeth Valley UD			.333 .167		.500	3,250	154	.788	---
511 Nolensville Utility District	Nashville WD wells	6	 .182	.313		.495	4,894	101	.650	.504
699 Hillsboro and Thompson Station Utility District	Harpeth Valley UD Spring Hill WD			.430 .354		.784	7,740	101	.800	---

Supplement B.--Public water-supply systems and associated water use in the Ohio hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Wilson										
264 Gladeville Utility District	Lebanon WS West Wilson UD			0.505 .255	0.086	0.674	6,941	97	0.400	---
393 Lebanon Water System	Cumberland River, Old Hickory Reservoir (263.0)		4.61		1.21	3.40	18,449	184	9.00	6.19
394 Laguardo Utility District	Lebanon WS West Wilson UD			.304 .000		.304	3,528	86	.500	---
732 Watertown Water System	well #1 well #2	6	.157 .000			.157	1,676	94	.400	.144
743 West Wilson Utility District	Cumberland River, Old Hickory Reservoir (225.4)		2.70		.255	2.45	22,485	109	8.00	4.61
790 Wilson County Water and Wastewater	Lebanon WS Gladeville UD	6		.401 .086		.487	3,700	132	.500	---

[1]River mile unknown
[2]Surface water

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region
(Modified from F.M. Alexander and others, 1984)

[PWSID, Public Water System Identification number; Mgal/d, million gallons per day; gal/d, gallons per day; LGW, Memphis Light, Gas and Water Division; UD, Utility District; WD, Water Department; WP, Water Plant; WS, Water System; *, less than 50 connections, ground-water sole source; ---, not applicable; a, governing board, billing through Memphis Light, Gas and Water Division (LGW), "water use" and "population served" combined with LGW totals; Principal aquifer: 2, Tertiary sand; 3, Cretaceous sand]

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
			Lower Mississippi region							
Carroll										
035 Atwood Water System	well	2	0.155			0.155	1,215	128	0.050	0.230
098 Cedar Grove Utility District	2 wells	2	.147			.147	1,223	120	.100	.172
316 Huntingdon Water Department	2 deep wells	2	.590			.590	4,920	120	.900	2.07
421 McKenzie Water Department	wells	2	.720			.720	5,556	130	.600	1.36
422 McLemoresville Water Department	2 wells	2	.032			.032	405	79	.100	.518
710 Trezevant Water System	2 wells	2	.101			.101	1,161	87	.150	.432
Chester										
293 Henderson Water Department	5 wells	3	.861		0.131	.730	5,239	139	.800	2.18
Crockett										
005 Alamo Water Department	4 wells	2	.313			.313	3,267	96	.300	.720
006 County Wide Utility District	2 Gadsden wells	2	.074			.962	8,021	120	.775	1.07
	Gum Flat well		.297							
	Salem well		.197							
	Bonicord well		.063							
	Old Field well		.173							
	Egg Hill well		.158							
	Highway 20 well		.000							

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Crockett										
045 Bells Public Utility District	well	2	0.194			0.194	1,706	114	0.100	0.648
148 Crockett Mills Utility District	2 wells	2	.053			.053	748	71	.100	.086
248 Friendship Water Company	3 wells	2	.105			.105	619	170	.160	.216
441 Maury City Water Department	2 wells	2	.105			.105	1,081	97	.275	.173
Dyer										
211 Dyersburg Water Department	4 wells	2	4.35		0.084	4.27	17,128	249	4.50	5.40
212 Dyersburg Suburban Consolidated Utility District	3 wells	2	.382			.382	3,560	107	.300	1.15
213 East Dyersburg Utility District	Dyersburg WD			0.084		.084	1,140	74	.055	---
496 Newbern Water Department	3 wells	2	.828			.828	6,586	126	1.01	.504
518 Northwest Dyersburg Utility District	wells	2	.238			.238	2,548	93	.150	.432
711 Trimble Water System	2 wells	2	.124			.124	1,140	109	.100	.380
Fayette										
021 Pine Lake Cooperative, Incorporated	2 wells	2	.050			.050	352	142	.003	---

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Fayette										
254 Gallaway Water Department	3 wells	2	0.194			0.194	945	205	0.200	0.144
382 La Grange Water Department	well #3	2	.040			.040	235	170	.009	.187
477 Moscow Water Department	well	2	.082			.082	1,079	76	.175	.360
521 Oakland Water Department	2 wells	2	.121			.121	1,776	68	.200	.216
597 Rossville Water System	2 wells	2	.094			.094	449	209	.200	.216
641 Somerville Water System	5 wells	2	.618		0.059	.559	3,899	143	.900	.720
753 Williston Water System	Somerville WS			0.059		.059	637	93	---	---
Gibson										
067 Bradford Water System	well	2	.165			.165	1,413	117	.300	1.08
209 Dyer Water Department	3 wells	2	.348			.348	3,154	110	1.38	.933
263 Gibson Water Department	2 wells	2	.032			.032	465	69	.050	.432
314 Humboldt Water Department	4 wells	2	1.84			1.84	11,452	161	1.05	2.88
445 Medina Water Department	2 wells	2	.070			.070	1,063	66	.200	.288
458 Milan Water Department	3 wells	2	1.34			1.34	10,109	133	.750	2.94
599 Rutherford Water System	2 wells	2	.143			.143	1,560	92	.150	.604
707 Trenton Water System	3 wells	2	.674			.674	5,453	124	1.75	1.58
709 Gibson County Municipal Water District #1	Grier's Chapel well	2	.148			.148	1,267	117	.100	.216

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Gibson										
741 Gibson County Municipal Water District #7	Yorkville well	2	0.102			0.102	945	108	0.125	0.216
788 Gibson County Municipal Water District #2	Concord well	2	.096			.096	1,187	81	.150	.216
798 Milan Arsenal #1	wells	2	.455			.455	1,400	325	.800	1.58
812 Gibson County Municipal Water District #3	Eaton Central well	2	.166			.166	1,114	149	.075	.216
813 Gibson County Municipal Water District #4	Fruitland well	2	.150			.150	1,270	118	.075	.216
815 Gibson County Municipal Water District #5	Goat City well	2	.044			.044	363	121	.150	.216
816 Gibson County Municipal Water District #6	Idlewild well	2	.026			.026	218	119	.150	.216
Hardeman										
063 Bolivar Water Plant	well	3	1.37		0.367	1.00	7,320	137	1.55	4.15
064 Western State Hospital	wells	3	.169			.169	1,700	99	.390	.720
267 Grand Junction Water Department	2 wells	2	.192		.039	.153	930	165	.225	.430
312 Hornsby Water Department	Bolivar WP			0.085		.085	999	85	.150	---
446 Woodrun Lakes	well	2	.012			.012	83	145	.120	.288
451 Grand Valley Lakes Water System	well		.022			.022	330	67	.038	.259

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Hardeman										
452 Rogers Springs Home Owners Association	well		0.017			0.017	93	183	0.063	0.144
455 Middleton Water Department	2 wells	3	.223			.223	963	232	.250	.432
610 Saulsbury Utility District	Grand Junction WD			0.039		.039	543	72	---	---
664 Spring Creek Utility District	Bolivar WP			.282		.282	1,419	199	.805	---
704 Toone Water System	3 wells	3	.185			.185	462	400	.580	.604
748 Whiteville Water Department	3 wells	2	.114			.114	1,230	93	.050	.720
797 Riveria Utility Cherokee Landing	well		.035			.035	133	263	.075	.144
874 Hickory Valley Water System	North well South well		* *			*	270	*	---	---
Haywood										
080 Brownsville Water Department	well	2	1.71			1.71	13,631	125	1.60	3.68
672 Stanton Water System	well	2	.063			.063	772	82	.300	.144
Henry										
296 Henry Water System	2 wells	2	.087			.087	481	181	.100	.252
539 Lakeland Water System	well	3	.028			.028	195	144	.003	.201

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Henry										
540 Henry County Water Company	3 wells	3	0.247			0.247	1,885	131	0.600	0.720
Lake										
561 Proctor City Utility District	Tiptonville WS			0.024		.024	327	73	.600	---
575 Reelfoot Utility District	2 wells	2	.167		0.070	.097	668	145	.100	.288
579 Ridgely Water System	2 wells	2	.230			.230	2,414	95	.175	6.00
700 Tiptonville Water System	3 wells	2	.695		.024	.671	2,396	280	.650	1.40
Lauderdale										
245 Fort Pillow State Farm	3 wells	2	.504			.504	1,000	504	.400	1.08
255 Gates Water Department	2 wells	2	.059			.059	821	72	.100	.432
279 Halls Water System	3 wells	2	.787			.787	5,197	151	.725	.792
295 Henning Water Department	well	2	.120			.120	916	131	.130	.259
580 Ripley Water System	4 wells	2	1.87			1.87	8,035	233	1.70	2.96
581 Lauderdale County Water System	4 wells	2	.573			.573	8,117	71	.502	.676
McNairy										
050 Bethel Springs Water System	well	3	.084			.084	1,040	81	.100	.216
570 Eastview Utility District	Selmer WS			.130		.130	1,092	119	---	2.59

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
McNairy										
571 Ramer Water Department	deep well	3	0.059			0.059	546	108	0.100	0.324
615 Selmer Water System	wells	3	2.10		0.130	1.97	13,494	146	2.20	2.59
Madison										
043 Beech Bluff Utilities, Incorporated	Jackson WS			0.231		.231	3,186	73	.100	---
298 Whispering Pines Trailer Court	2 wells		*			*	130	*	---	---
299 Jackson Utility Division	North well field South well field	2	8.58 1.58		.231	9.93	60,966	163	13.06	---
301 Youth Town of Tenneessee	well		*			*	30	*	.001	.046
453 Mercer Utility District	well	2	.018			.018	234	77	.100	.086
556 Pinson Utility District	Henderson WD			.131		.131	1,190	110	.080	---
665 Spring Creek Utility District	3 wells	2	.281			.281	1,707	165	9.95	8.48
Obion										
220 Elbridge Utility District	2 wells	2	.220			.220	2,776	79	.350	.576
311 Hornbeak Utility District	3 wells	2	.101			.101	1,303	78	.110	.142
347 Kenton Water Department	2 wells	2	.149			.149	1,738	86	.400	.648
524 Obion Water Department	2 wells	2	.248			.248	1,930	128	.250	.252
607 Samburg Utility District	Reelfoot UD			.070		.070	776	90	.100	---

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Obion										
648 South Fulton Water System	wells	2	0.478			0.478	4,590	104	0.600	1.44
712 Troy Water System	2 wells	2	.214			.214	1,823	117	.160	.633
720 Union City Water Department	wells	2	2.85		0.054	2.80	16,103	174	1.98	4.56
757 Reelfoot Water Association	Union City WD			0.054		.054	656	82	---	---
Shelby										
019 Arlington Water System	well	2	.437			.437	1,294	338	.450	.720
039 Bartlett-Ellendale Water System	well	2	1.77			1.77	10,617	167	1.10	6.00
126 Collierville Water Department	deep wells	2	2.37		.122	2.25	11,392	198	2.45	5.50
262 Germantown Water Department	9 wells	2	4.91			4.91	27,106	181	2.00	4.55
450 Memphis Light, Gas, and Water Division	Mallory well field Sheahan well field Allen well field McCord well field Lichterman well field Davis well field LNG well field Palmer well field Morton well field	2	21.0 21.4 24.7 20.7 25.3 13.0 .525 .051 14.2		.004	141	648,490	217	4.50	262
463 Millington Water Department	wells	2	1.10			1.10	6,433	171	.500	2.59

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	Withdrawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Population served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Shelby										
468 Naval Air Station Memphis	north and south well fields	2	1.91			1.91	18,000	106	0.500	4.20
765 Bartlett Water System	well	2	1.36			1.36	13,214	103	.350	2.16
773 Shelby County Board of Public Utilities	Memphis LGW			a		a	a	a	1.40	---
842 Piperton Water System	Collierville WD			0.122		0.122	923	132	---	---
Tipton										
029 Orman's Trailer Park	well		*			*	213	*	.0025	---
033 Atoka Water System	Munford WD			.055		.055	715	77	---	---
070 Brighton Water System	well	2	.107			.107	1,119	96	.125	.243
144 Covington Water Department	deep wells	2	1.40		0.052	1.35	8,634	156	1.50	3.24
201 Poplar Grove Utility District	wells Memphis LGW Covington UD Munford WD	2	.212	 .004 .052 .000		.268	7,034	38	.400	---
440 Mason Water Department	2 wells	2	.126			.126	1,143	110	.255	.375
467 Twin Circle Trailer Park	well		*			*	100	*	.003	---
490 Munford Water Department	2 wells Poplar Grove UD	2	.384 .000		.055	.329	3,638	90	.635	.725
703 First Utility District of Tipton County	4 wells	2	.540			.540	5,995	90	.250	.864

Supplement C.--Public water-supply systems and associated water use in the Lower Mississippi hydrologic region (Modified from F.M. Alexander and others, 1984)--Continued

County, PWSID, and system	Source of supply (intake river mile)	Principal aquifer	With-drawal (Mgal/d)	Water purchased (Mgal/d)	Water sold (Mgal/d)	Gross water use (Mgal/d)	Popula-tion served	Gross per capita use (gal/d)	Storage capacity (million gallons)	Design capacity (million gallons)
Weakley										
196 Dresden Water Department	3 wells	2	0.501			0.501	2,977	168	1.00	1.15
265 Gleason Water Department	2 wells	2	.439			.439	1,446	304	.200	.720
276 Greenfield Water Department	wells	2	.294			.294	2,538	116	.135	1.08
435 Martin Water Department	wells	2	1.51			1.51	8,486	178	.975	3.60
627 Sharon Water System	wells	2	.226			.226	1,391	162	.155	.720
840 Dukedom Water Works	well		*			*	57	*	---	.030

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