

U. S. WATER RESOURCES COUNCIL



2120 L Street, N.W. Washington, D.C. 20037

MONOMA STATE UNIVERSITY-RUBEN SALAZAR LIBRARY

Consultant Report

***State Water Use and Socioeconomic
Data Related to the Second
National Water Assessment***

Govt. Doc
HD
1694
.A5
U55
1979

Prepared by the

OAK RIDGE NATIONAL LABORATORY

Oak Ridge, Tennessee

October 1980

The final report of the Second National Water Assessment consists of four volumes as listed below. These are available from the Superintendent of Documents, U.S. Government Printing Office, Washington, DC 20402.

THE NATION'S WATER RESOURCES--1975-2000

The Second National Water Assessment
by the
U.S. Water Resources Council

<u>Volume</u>	<u>GPO Stock Number</u>	<u>Price</u>	<u>Title</u>
1	052-045-00051-7	\$ 5.00	Summary
2	052-045-00082-7	11.00	Water Quantity, Quality & Related Land Considerations
3	052-045-00052-5	4.00	Analytical Data Summary
3	052-045-00053-3	4.75	Appx. I, Social, Economic & Environmental Data
3	052-045-00054-1	5.00	Appx. II, Annual Water Supply & Use Analysis
3	052-045-00055-0	7.00	Appx. III, Monthly Water Supply & Use Analysis
3	052-045-00056-8	7.00	Appx. IV, Dry Conditions Water Supply & Use Analysis
3	052-045-00057-6	6.00	Appx. V, Streamflow Conditions
4	052-045-00059-2	4.25	Region 1, New England
4	052-045-00060-6	4.00	Region 2, Mid-Atlantic
4	052-045-00061-4	3.75	Region 3, South Atlantic-Gulf
4	052-045-00062-2	3.75	Region 4, Great Lakes
4	052-045-00063-1	2.75	Region 5, Ohio
4	052-045-00064-9	2.50	Region 6, Tennessee
4	052-045-00065-7	4.75	Region 7, Upper Mississippi
4	052-045-00066-5	4.25	Region 8, Lower Mississippi
4	052-045-00067-3	4.00	Region 9, Souris-Red-Rainy
4	052-045-00068-1	2.75	Region 10, Missouri
4	052-045-00069-0	2.75	Region 11, Arkansas-White-Red
4	052-045-00070-3	3.75	Region 12, Texas-Gulf
4	052-045-00071-1	3.75	Region 13, Rio Grande
4	052-045-00072-0	2.50	Region 14, Upper Colorado
4	052-045-00073-8	2.75	Region 15, Lower Colorado
4	052-045-00074-6	3.75	Region 16, Great Basin
4	052-045-00075-4	2.75	Region 17, Pacific Northwest
4	052-045-00076-2	3.75	Region 18, California
4	052-045-00077-1	3.75	Region 19, Alaska
4	052-045-00078-9	3.50	Region 20, Hawaii
4	052-045-00080-1	3.50	Region 21, Caribbean

CONTENTS

	<u>Page</u>
ACKNOWLEDGMENTS	ix
HIGHLIGHTS	1-1
1. INTRODUCTION	1-3
1.1 Purpose	1-3
1.2 General Methodology	1-3
1.3 Data Not Converted to State Boundaries	1-6
2. SOCIOECONOMIC GROWTH PROJECTIONS	2-1
2.1 Population, Employment, Income, and Earnings	2-1
2.2 State Surface Areas	2-2
2.3 Cropland, Cropland Harvested, and Irrigated Farmland	2-3
2.4 Steam-Electric Generating Plants	2-3
3. WATER USE PROJECTIONS	3-1
3.1 Conversion Methods, Data Sources, and Discrepancies	3-1
3.2 Agricultural Water Demands	3-5
3.2.1 Irrigation water withdrawals and consumption	3-5
3.2.2 Livestock water use	3-8
3.3 Steam-Electric Withdrawals and Consumption	3-12
3.4 Manufacturing Water Use	3-12
3.5 Domestic Central and Noncentral Water Use	3-14
3.5.1 Central and noncentral population estimates	3-15
3.5.2 Noncentral system water use	3-16
3.5.3 Central system water use	3-18
3.6 Commercial Water Use	3-18
3.7 Minerals Water Requirements	3-22
3.8 National and State Summaries of Water Use	3-23
REFERENCES	R-1
Appendix A — SOCIOECONOMIC DATA	A-1
Appendix B — WATER USE BY SECTOR	B-1
Appendix C — NATIONAL AND STATE WATER USE SUMMARIES	C-1
Appendix D — GLOSSARY	D-1

LIST OF FIGURES

<u>Figure</u>		<u>Page</u>
1.1	Water Resources Council's assessment subareas ASA's	1-4
2.1	Percentage of harvested acres irrigated in 1975, 1985, and 2000	2-4
3.1	Total annual water use by major sector	3-2
3.2	Total withdrawals in 1975, 1985, and 2000	3-3
3.3	Total water consumption in 1975, 1985, and 2000	3-4
3.4	State livestock water use in 1975, 1985, and 2000	3-10
3.5	Total water use by major industry	3-13
3.6	Changes in the percentage of population on noncentral water systems	3-17

LIST OF TABLES

<u>Table</u>	<u>Page</u>
2.1 Differences in Number of Steam-Electric Generating Plants	2-5
3.1 Withdrawals — Comparison of National Totals by Sector	3-6
3.2 Consumption — Comparison of National Totals by Sector	3-7
A.1 Population	A-2 I-1*
A.2 Employment and Income	A-4 I-1*
A.3 Earnings by Major Sector — Total and Manufacturing . . .	A-6 I-2*
A.4 Earnings by Major Sector — Agriculture and Mining	A-8 I-2*
A.5 State Surface Area	A-10 I-3*
A.6 Cropland and Irrigated Farmland	A-12 I-4*
A.7 Steam-Electric Generating Plants	A-14 I-9*
B.1 Total State Water Use	B-2
B.2 Agricultural Water Use	B-4 II-4*
B.3 Irrigation Water Use	B-6 II-4*
B.4 Livestock Water Use	B-8 II-4*
B.5 Steam-Electric Generating Water Use	B-10 II-4*
B.6 Manufacturing Water Use — All Manufacturing	B-12 II-4*
B.7 Manufacturing Water Use — Primary Metals	B-14 II-4*
B.8 Manufacturing Water Use — Chemicals	B-16 II-4*
B.9 Manufacturing Water Use — Paper	B-18 II-4*
B.10 Manufacturing Water Use — Food, etc.	B-20 II-4*
B.11 Manufacturing Water Use — Petroleum	B-22 II-4*

<u>Table</u>	<u>Page</u>
B.12 Manufacturing Water Use — Transportation	B-24 II-4*
B.13 Manufacturing Water Use — Textile Mills	B-26 II-4*
B.14 Manufacturing Water Use — All Other	B-28 II-4*
B.15 Domestic Water Use — Total Domestic Central and Non-Central	B-30 II-4*
B.16 Domestic Central Water Use	B-32 II-4*
B.17 Domestic Non-Central Water Use	B-34 II-4*
B.18 Commercial Water Use	B-36 II-4*
B.19 Minerals Water Use — All Minerals	B-38 II-4*
B.20 Minerals Water Use — Non-Metals	B-40 II-4*
B.21 Minerals Water Use — Fuels	B-42 II-4*
B.22 Minerals Water Use — Metals	B-44 II-4*
C.1 National Summary of Annual Water Requirements for Offstream Uses	C-2 II-4*
C.2 State Summaries of Annual Water Requirements for Offstream Uses	C-3

* Corresponding table number in *The Nation's Water Resources, 1975-2000*, Vol. 3, Appendixes I and II.

State Water-Use and Socioeconomic Data Related to
the Second National Water Assessment

A. D. Shepherd
M. E. Hodgson*
J. Stewart†
K. A. Hake*

Energy Division
Oak Ridge National Laboratory

HIGHLIGHTS

The Second National Water Assessment by the U.S. Water Resources Council (WRC)¹ contains considerable information relating to water withdrawal and consumption, based on data developed by the WRC and its member agencies for 106 hydrologically oriented Assessment Subregions (ASRs). The objective of this project was to convert the ASR data to state boundaries to make them more suitable for use in state and federal policy analysis. This report presents the converted Second Assessment projections of water-use and related socioeconomic data by state, rather than by ASR, and documents the data sources, conversion techniques, and assumptions.

*Geography Department, University of Tennessee.

†Lockheed Missiles and Space Company.

1. INTRODUCTION

1.1 Purpose

Under the Water Resources Planning Act of 1965 (Public Law 89-80), the United States Water Resources Council (WRC) is responsible, for preparing periodic assessments of the nation's water and related land resources to determine the adequacy of these resources for meeting present and future demands. In the Second National Water Assessment by the WRC,¹ a considerable amount of information relating to present and future water withdrawals and consumption was developed for 106 hydrologically oriented Assessment Subregions (ASRs). These 106 ASRs (99 in the conterminous U.S.) or their county approximations, termed Assessment Subareas (ASAs), were used exclusively in the Second National Water Assessment as the basic data-collection and analysis units for identification and definition of water resources problems. (Figure 1.1 shows the geographical relationship between the 99 ASA approximations and the 48 contiguous state boundaries.) ASRs and ASAs, however, do not correspond to state, regional, or federal planning units, nor do they represent hydrologically discrete drainage areas in sufficient detail for state, regional, or local-level policy decision making.²

The objective of this project was to convert the Second National Water Assessment data to state boundaries and produce a supplementary assessment report of state-level information that is consistent with the Second Assessment's national totals. This report presents the converted Second Assessment projections of water-use and related socioeconomic data by state rather than by ASR and documents the data sources, conversion techniques, and assumptions. For ease of reference, the lengthy tabular output containing the converted state data is in the appendixes to this text.

1.2 General Methodology

The Nation's Water Resources 1975-2000,¹ Volume 3: Analytical Data, contains the basic and derived information developed for the



1-4



Figure 1.1. Water Resources Council's Assessment Subareas (ASA's). (See legend on facing page).

Assessment Subareas

New England Region (1)

0101 Northern Maine
 0102 Saco-Merrimack
 0103 Massachusetts-Rhode Island Coastal
 0104 Housatonic-Thames
 0105 Connecticut River
 0106 Richelieu

Mid Atlantic Region (2)

0201 Upper Hudson
 0202 Lower Hudson-Long Island-
 North New Jersey
 0203 Delaware
 0204 Susquehanna
 0205 Upper and Lower Chesapeake
 0206 Potomac

South Atlantic-Gulf Region (3)

0301 Roanoke-Cape Fear
 0302 Pee Dee-Edisto
 0303 Savannah-St Marys
 0304 St Johns-Suwannee
 0305 Southern Florida
 0306 Apalachicola
 0307 Alabama-Choctawhatchee
 0308 Mobile-Tombigbee
 0309 Pascagoula-Pearl

Great Lakes Region (4)

0401 Lake Superior
 0402 NW Lake Michigan
 0403 SW Lake Michigan
 0404 Eastern Lake Michigan
 0405 Lake Huron
 0406 St Clair-Western Lake Erie
 0407 Eastern Lake Erie
 0408 Lake Ontario

Ohio Region (5)

0501 Ohio Headwaters
 0502 Upper Ohio-Big Sandy
 0503 Muskingum-Scioto-Miami
 0504 Kanawha
 0505 Kentucky-Licking-Green-Ohio
 0506 Wabash
 0507 Cumberland

Tennessee Region (6)

0601 Upper Tennessee
 0602 Lower Tennessee

Upper Mississippi Region (7)

0701 Mississippi Headwaters
 0702 Black-Root-Chippewa-Wisconsin
 0703 Rock-Mississippi-Des Moines
 0704 Salt-Sny-Illinois
 0705 Lower Upper Mississippi

Lower Mississippi Region (8)

0801 Hatchie-Mississippi-St Francis
 0802 Yazoo-Mississippi-Ouachita
 0803 Mississippi Delta

Souris-Red-Rainy Region (9)

0901 Souris-Red-Rainy

Missouri Region (10)

1001 Missouri-Milk-Saskatchewan
 1002 Missouri-Marias
 1003 Missouri-Musselshell
 1004 Yellowstone
 1005 Western Dakotas
 1006 Eastern Dakotas
 1007 North and South Platte
 1008 Niobrara-Platte-Loup
 1009 Middle Missouri
 1010 Kansas
 1011 Lower Missouri

Arkansas-White-Red Region (11)

1101 Upper White
 1102 Upper Arkansas
 1103 Arkansas-Cimarron
 1104 Lower Arkansas
 1105 Canadian
 1106 Red-Washita
 1107 Red-Sulphur

Texas-Gulf Region (12)

1201 Sabine-Neches
 1202 Trinity-Galveston Bay
 1203 Brazos
 1204 Colorado (Texas)
 1205 Nueces-Texas Coastal

Rio Grande Region (13)

1301 Rio Grande Headwaters
 1302 Middle Rio Grande
 1303 Rio Grande-Pecos
 1304 Upper Pecos
 1305 Lower Rio Grande

Upper Colorado Region (14)

1401 Green-White-Yampa
 1402 Colorado-Gunnison
 1403 Colorado-San Juan

Lower Colorado Region (15)

1501 Little Colorado
 1502 Lower Colorado Main Stem
 1503 Gila

Great Basin Region (16)

1601 Bear-Great Salt Lake
 1602 Sevier Lake
 1603 Humboldt-Tonopah Desert
 1604 Central Lahontan

Pacific Northwest Region (17)

1701 Clark Fork-Kootenai
 1702 Upper / Middle Columbia
 1703 Upper / Central Snake
 1704 Lower Snake
 1705 Coast-Lower Columbia
 1706 Puget Sound
 1707 Oregon Closed Basin

California Region (18)

1801 Klamath-North Coastal
 1802 Sacramento-Lahontan
 1803 San Joaquin-Tulare
 1804 San Francisco Bay
 1805 Central California Coast
 1806 Southern California
 1807 Lahontan-South

Alaska Region (19)

1901 Alaska

Hawaii Region (20)

2001 Hawaii County
 2002 Maui County
 2003 Honolulu County
 2004 Kauai County

Caribbean Region (21)

2101 Puerto Rico
 2102 Virgin Islands

Second National Water Assessment. These were originally prepared by the WRC member agencies, under the direction of the WRC. Volume 3 includes the national and regional totals for social, economic, environmental, water-supply, and water-use information. The original ASR-level data that were converted to state boundaries in this project are found in Appendixes I and II to Volume 3. The List of Tables provided at the front of this report includes a cross reference to the ASR data tables in the Appendixes to Volume 3.

State socioeconomic data and projections for some functional water-use categories were available directly from the WRC member agencies responsible for producing the original Second Assessment data. In other cases disaggregated data were provided to ORNL that required varying amounts of computer processing and verification. When no data were available for a particular water-use category, techniques which duplicated or improved upon the methods and/or information used by WRC to produce the original ASR-level projections were developed by ORNL to construct state shares of the Second Assessment national totals. The technical documentation included in this report for all information converted is reflective of (1) what data were available from the original WRC agency source, (2) whether that agency or ORNL performed the data conversions, (3) how much processing of the data was required, and (4) the problems or discrepancies that were encountered.

1.3 Data Not Converted to State Boundaries

The data converted to state boundaries in this project were determined by the WRC and include all the Second Assessment water-use and related socioeconomic projections. Various other data contained in the Second Assessment were not chosen for conversion for reasons of technical infeasibility and/or cost. The water-supply data, in particular, were omitted, primarily because of the obvious definitional problems presented by state boundary waters. Although the nation's water resources are under the jurisdiction of the states, quantitative apportionment of streamflow between riparian state borders or the division of waters in state-bordering lakes and reservoirs was clearly beyond the scope of

this report. The calculation of streamflows that cross, rather than form, state boundaries was reported by ORNL to WRC as being technically feasible but also as entailing analysis and/or interpolation of stream-gaging station records at, or near, each state border crossing. Such water-supply statistics for ASR-state portions would be of limited use without correspondingly detailed estimates of water use, however.

At the inception of this project, part of ORNL's motivation was the hope of obtaining more spatially detailed water-use projections. During the project, ORNL discovered that further disaggregation of the ASR-level projections into smaller hydrologic component regions would not be feasible for several major water-use sectors. However, the exercise of the project did provide ORNL with valuable insight into and experience with the methods and techniques employed in producing the Second National Water Assessment.

2. SOCIOECONOMIC GROWTH PROJECTIONS

The key components affecting the WRC's Second National Water Assessment projections for the withdrawal and consumption of water are regional variations in population, income, and the dominant type of employment. Major changes in population growth, migration, or composition (age, family size, occupation, etc.) affect the amount, distribution, and mix of projected water requirements, whereas the earnings, incomes, and lifestyles of the population affect the priorities placed on its use.

2.1 Population, Employment, Income, and Earnings

The economic and demographic projections for the years 1985 and 2000 in the Second National Water Assessment's National Future¹ data are based primarily on the 1972 *OBERS Series E* projections.³ The *OBERS* projections were developed as a nationally consistent set of data on population and economic growth. The projections were prepared by the Bureau of Economic Analysis (BEA) of the U.S. Department of Commerce and the Economics, Statistics, and Cooperatives Service (ESCS) of the U.S. Department of Agriculture (USDA).

The National Future population projection, used as the starting point in the Second Assessment, was the Census Bureau's "SERIES E" projection, which assumes a birthrate that would, in time, yield zero population growth, exclusive of immigration. (This was the approximate birthrate for the period 1970 to 1975.)

The WRC publication entitled *1972 OBERS Projection Series E Population, Volume 4: States*⁴ contains the state-level projections of population, employment, income, and earnings for 1985 and 2000 that correspond to the ASR-level projections used in the Second Assessment. State data for the Second Assessment's 1975 baseline year, however, are not contained in the *OBERS Series E* projections. For the purposes of this report, state shares of the 1975 national totals in the Second Assessment were derived on the basis of actual 1975 data. The following references were used as the basis for calculating these state shares:

Population, 1975	U.S. Bureau of the Census, <i>Current Population Reports</i> , Series P-25, NUS. 460, 642. ⁵
Employment, 1975	U.S. Department of Labor, <i>Manpower Reports</i> , pp. 281-82, Table D-3, "Civilian Labor Force by State: Annual Averages 1975-1977," and Table D-4, "Total Unemployment and Unemployment Rates by State: Annual Averages 1933-1977." ⁶
Per capita personal income, 1975	<i>Survey of Current Business</i> , August 1978, p. 15, "Personal Income by States and Regions, 1972-1977," Table 2, "Per Capita Personal Income." ⁷
Earnings, 1975	<i>Survey of Current Business</i> , August 1977, Tables G-G3, pp. 18-41. ⁷ "Personal Income by Major Source, 1973-1976." ⁸

The resultant state tables (Appendix A) include the following: Table A.1, Population; Table A.2, Employment and income; Table A.3, Earnings by major sectors (total and manufacturing); and Table A.4, Earnings by major sectors (agriculture and mining).

2.2 State Surface Area

Estimates of state surface areas presented in Table A.5 correspond to the surface area estimates contained in the Second National Water Assessment, Table I-3, found in Vol. 3, Appendix I.¹ The state estimates were taken from the *National Inventory of Soil and Water Conservation Needs*⁹ and the *National Atlas of the United States of America*.¹⁰ The exact conversion factor used to calculate square kilometers from square miles was 2.589998.

2.3 Cropland, Cropland Harvested, and Irrigated Farmland

State estimates for cropland, cropland harvested, and irrigated farmland, presented in Table A.6, correspond to the ASR-level estimates found in the Second National Water Assessment, Table I-4, Appendix I, Vol. 3.¹ State estimates were derived from the same models and from ASR-to-state distribution weights used in the Second Assessment¹ by the Natural Resource Economics Division of the ESCS. Figure 2.1 illustrates the differences in the percentages of harvested acres irrigated in 1975 and those projected for 1985 and 2000.

2.4 Steam-Electric Generating Plants

The number of steam-electric generating plants is presented by state in Table A.7. These data were calculated from computer files developed by the Federal Energy Regulatory Commission (FERC) for the Second National Water Assessment.

The plant data provided to ORNL by FERC did not totally agree with the FERC data published by WRC in the Second Assessment summary report (Vol. 3, p. 36). The differences in the number of facilities by type between the national totals published in the Second Assessment and the state totals obtained from processing the FERC data files are summarized in Table 2.1. These discrepancies were attributed to adjustments made by FERC to the computer file counts before they were published in the Second Assessment.

The steam-electric generating plant data contained in this report are FERC data, processed by ORNL for the purpose of this project. However, this in no way constitutes any verification of the FERC data by ORNL.

PERCENTAGE OF HARVESTED ACRES IRRIGATED

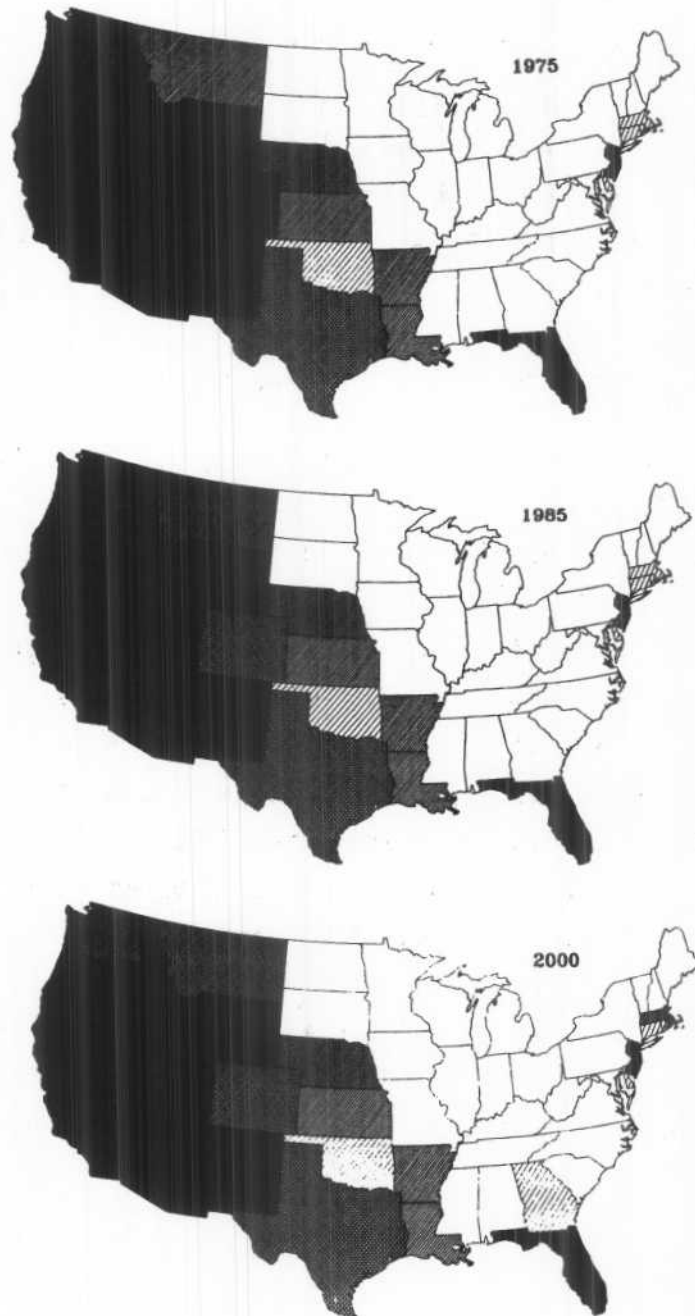


Figure 2.1. Percentage of harvested acres irrigated in 1975, 1985, and 2000.

Table 2.1. Differences in number of steam-electric generating facilities
 [All plants have a generating capacity of >25 MW(e)]

	ASR totals ^a			State boundary totals			Difference ^b		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
Number of fossil plants	780	812	739	766	798	718	14	14	21
Number of nuclear plants	41	125	273	41	125	270	0	0	3

^a*The Nation's Water Resources; 1975-2000*, The Second National Water Assessment by the U.S. Water Resources Council, Vol. 3: Analytical Data Summary, December 1978, p. 36.

^b(ASR totals) - (State totals).

3. WATER USE PROJECTIONS

Offstream use includes both the quantity of water withdrawn from surface or groundwater sources and the portion consumed or not returned to the source after use. Withdrawals may include saline water; however, the major concern of the Second Assessment was with freshwater withdrawals and consumption. Saline withdrawals are reported only as totals in the national and state summary tables. Instream water uses for navigation, aquatic life, etc. were not included in the scope of this project.

The conversion of the Second Assessment's National Future data from the hydrologically oriented boundaries of the 106 ASRs to state boundaries was accomplished for six functional water-use sectors: (1) (1) agriculture, subdivided into irrigation and livestock; (2) steam-electric withdrawal and consumption; (3) manufacturing, subdivided into primary metals, chemicals, paper, food processing, petroleum, transportation, textiles, and all others; (4) domestic, subdivided into centrally and noncentrally supplied; (5) commercial; and (6) minerals, subdivided into nonmetals, fuels, and metals. Figure 3.1 compares the national totals of water withdrawals and consumption for these six major sectors, and Figs. 3.2 and 3.3 illustrate state totals of water withdrawals and consumption for the assessment years 1975, 1985, and 2000. The converted state totals by functional water-use categories are in Table B.1.

3.1 Conversion Methods, Data Sources, and Discrepancies

This chapter documents the conversion methods used and introduces the tables of state data for each functional water-use category. For some water-use sectors, the conversion of data to state boundaries was provided directly by the WRC member agency that produced the original ASR data for the Second Assessment. In those cases, the reader is referred in the text to the appropriate federal agency for the techniques employed in producing these data. However, the original sources for all data and any apparent discrepancies discovered during ORNL's compilation of these data are noted.

ANNUAL WATER USE BY MAJOR SECTOR

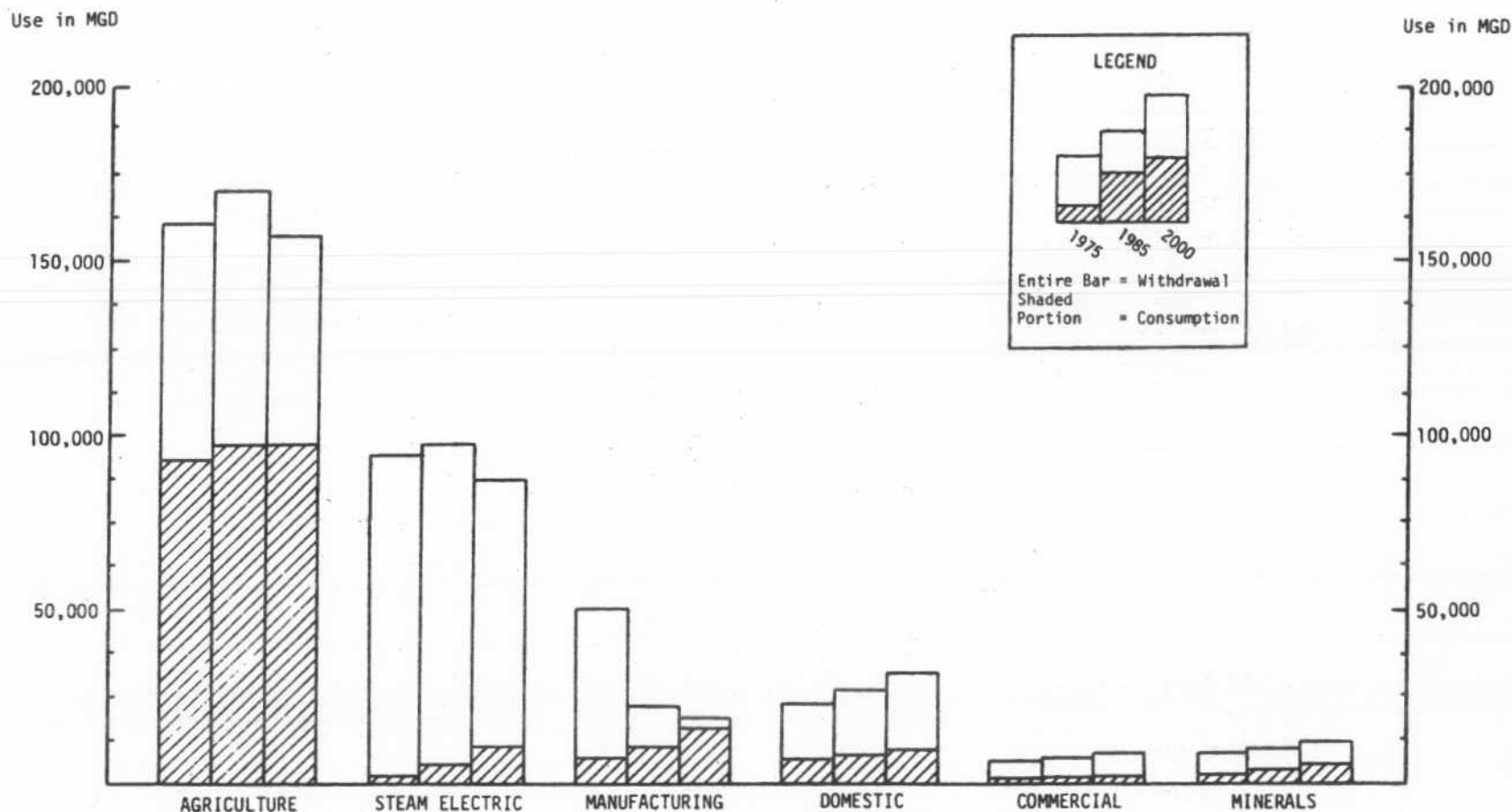
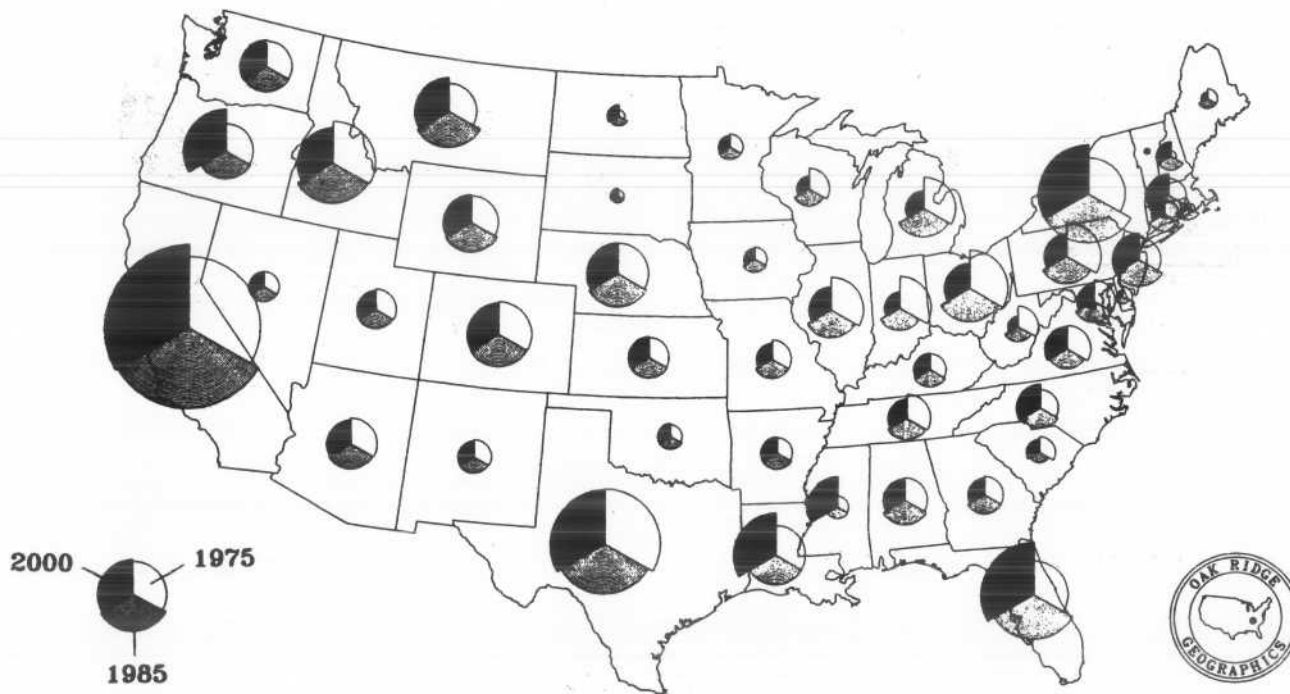


Figure 3.1. Total water use by major sector.

TOTAL WATER WITHDRAWALS

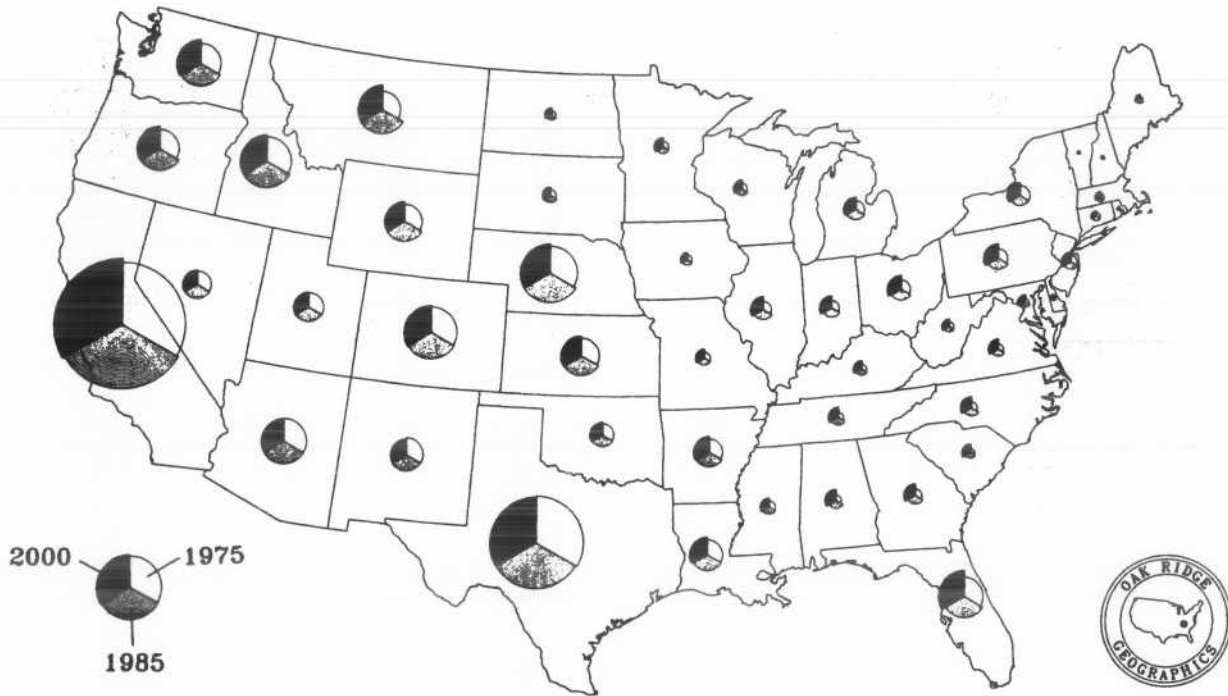
1975 - 1985 - 2000



3-3

Figure 3.2. Total withdrawals in 1975, 1985, and 2000.

TOTAL WATER CONSUMPTION 1975 - 1985 - 2000



The general procedure used to convert data not available directly from the WRC member agencies was to first reconstruct the methodologies, assumptions, and data from which the original ASR-level figures were developed. The resulting information was then evaluated and supplemented with any more recent data available, and methods were developed to derive state shares of the national totals appearing in the Second Assessment. A detailed discussion of the data used and the methods developed by ORNL is provided.

A summary comparison of the differences in the national totals of water withdrawals and consumption as they are given in the aggregated ASR data and in the converted state totals is presented in Tables 3.1 and 3.2. Discrepancies appear primarily in those data obtained directly from the WRC member agencies. Rationales for these differences are addressed in the individual sector discussions. Some small differences exist in the ORNL-produced data because of rounding errors.

3.2 Agricultural Water Demands

Water use in agricultural production, including freshwater withdrawals and consumption, places a greater demand on total water resources than does any other economic sector. In addition, agriculture has a significant effect on the quantity and quality of water available for other uses. Total agricultural water withdrawals and consumption are given by state in Table B.2.

3.2.1 Irrigation water withdrawals and consumption

Irrigation represents the primary use of all water withdrawals. Table B.3 presents state estimates of average annual water withdrawals and consumption for irrigation. These estimates were derived from linear programming models, developed by the Soil Conservation Service¹¹ and Iowa State University, and ASR-to-state distribution weights. The data were converted by the Resources Systems branch of the Natural Resource Economics Division of the ESCS, USDA.

Table 3.1. Withdrawals: comparison of national water withdrawal totals by major water-use sector between assessment subregion (ASR) and converted state boundary data

(All totals given in millions of gallons per day)

Functional use	ASR totals ^a			Converted state totals			Differences ^b		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
Irrigation	158743	166252	153846	158229	165764	153527	514	488	319
Livestock	1912	2233	2551	1912	2233	2551	0	0	0
Steam electric	88916	94858	79492	88735	94245	79692	181	613	-200
Manufacturing	51222	23687	19669	50624	23797	19494	598	-110	175
Domestic: Central	21164	23983	27918	21162	23981	27929	2	2	-11
Noncentral	2092	2320	2400	2092	2319	2401	0	1	-1
Commercial	5530	6048	6732	5529	6041	6731	1	7	1
Minerals	7055	8832	11328	7024	8795	11282	31	37	46
<u>Totals</u>									
Fresh	336634	328213	303936	335306	327175	303606	1328	1038	330
Saline	59737	91236	118815	55657	88816	116489	4080	2420	2326

^aThe Nation's Water Resources; 1975-2000, Vol. 1 Summary, December 1978.

^b(ASR Totals) - (State Totals).

Table 3.2. Consumption: comparison of national water consumption totals by major water-use sector between assessment subregion (ASR) and converted state boundary data
(All totals given in millions of gallons per day)

Functional use	ASR totals ^a			Converted state totals			Differences ^b		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
Irrigation	86391	92820	92506	86117	92533	92313	274	287	193
Livestock	1912	2233	2551	1912	2233	2551	0	0	0
Steam electric	1419	4062	10541	1413	4080	10537	6	14	4
Manufacturing	6059	8903	14699	5667	8274	14575	392	629	124
Domestic: Central	4976	5665	6638	4975	5665	6637	1	0	1
Noncentral	1292	1408	1436	1292	1409	1436	0	1	0
Commercial	1109	1216	1369	1109	1216	1362	0	0	7
Minerals	2196	2777	3609	2192	2772	3603	4	5	6
Total fresh	105354	119084	133349	104677	118150	133015	677	934	334

^aThe Nation's Water Resources; 1975-2000, Vol. 1. Summary, December 1978.

^b(ASR Totals) - (State Totals).

3.2.2 Livestock water use

Projections of livestock water use by state for the assessment years 1985 and 2000 were published in the 1972 *OBERS Series E* projections.²⁰ However, no comparable state livestock water-use data were available for the 1975 assessment baseline year. The method developed by ORNL to estimate state shares of the Second Assessment's 1975 national total for livestock water use is described in this section.

Procedure for determining state shares of livestock water use. The methods used by ORNL closely followed the coefficient multiplier approach employed by the USDA, which relies on known or projected livestock populations and estimated water use by livestock type for a particular climatic region. Livestock populations for 1975 were obtained from published USDA sources.¹²⁻¹⁹

State production totals for each of six livestock categories were multiplied by water consumption coefficients. These products were then summed for each state. Livestock water-use figures from each state were then summed, yielding a national total. Percentages of total U.S. water use were calculated for states from *OBERS* production data and multiplied by the Second Assessment national totals for livestock water use in 1975, 1985, and 2000 respectively. The end result is an amount for each state (given in millions of gallons per day) that reflects the *OBERS* production livestock levels for 1975, 1985, and 2000.

The following formula depicts this approach:

$$SS_i = \sum_{i=1}^{50} \left[\frac{\sum_{j=1}^6 (LP_j \times CF_j)}{\sum_{i=1}^{50} ST_i \sum_{j=1}^6 (LP_j \times CF_j)} \right] \times WRCT \quad (1)$$

where

SS_i = State share of Second Assessment national total for livestock water use for the i th state.

LP_j = Type of livestock production for the j th livestock type.

CF_j = Unique water use conversion factor for the j th type of livestock production.

ST_i = Total of all livestock water use for the i th state.

WRCT = Second Assessment national total for livestock water use.

The distribution of livestock water use by state is presented in Fig. 3.4. The converted state values for 1975 and the projected livestock water use for 1985 and 2000¹² appear in Table B.4.

The livestock categories used in the 1972 *OBERS Series E* projections served as the basis for the six livestock types used in the state-share calculations and are listed below.

1. Beef and veal: Cattle and calves in the USDA statistics. Live weight produced was used. The data include adjustments for changes in inventory and for inshipments.¹²
2. Pork: Hogs in the USDA statistics. Live weight produced was used. The data include adjustments for changes in inventory and for inshipments.¹³
3. Lamb and mutton: Sheep and lambs in the USDA statistics. Live weight produced was used. The data include adjustments for changes in inventory and for inshipments.¹⁴
4. Poultry (includes the three USDA categories):
 - a. Chickens. Chickens produced by commercial hatcheries for egg production, including male breeding stock. Live weight produced was used. Production data are for the December 1, 1974, through November 30, 1975, marketing year.¹⁵
 - b. Broilers. Crossbreed chickens raised for meat, from among which pullets and cockerels are sold as broilers. Live weight produced was used. Production data are for the December 1, 1974, through November 30, 1975, marketing year. Data also exclude states producing less than 500,000 birds.¹⁶
 - c. Turkeys. Live weight produced was used.¹⁷

CALCULATED LIVESTOCK WATER USE 1975 - 1985 - 2000

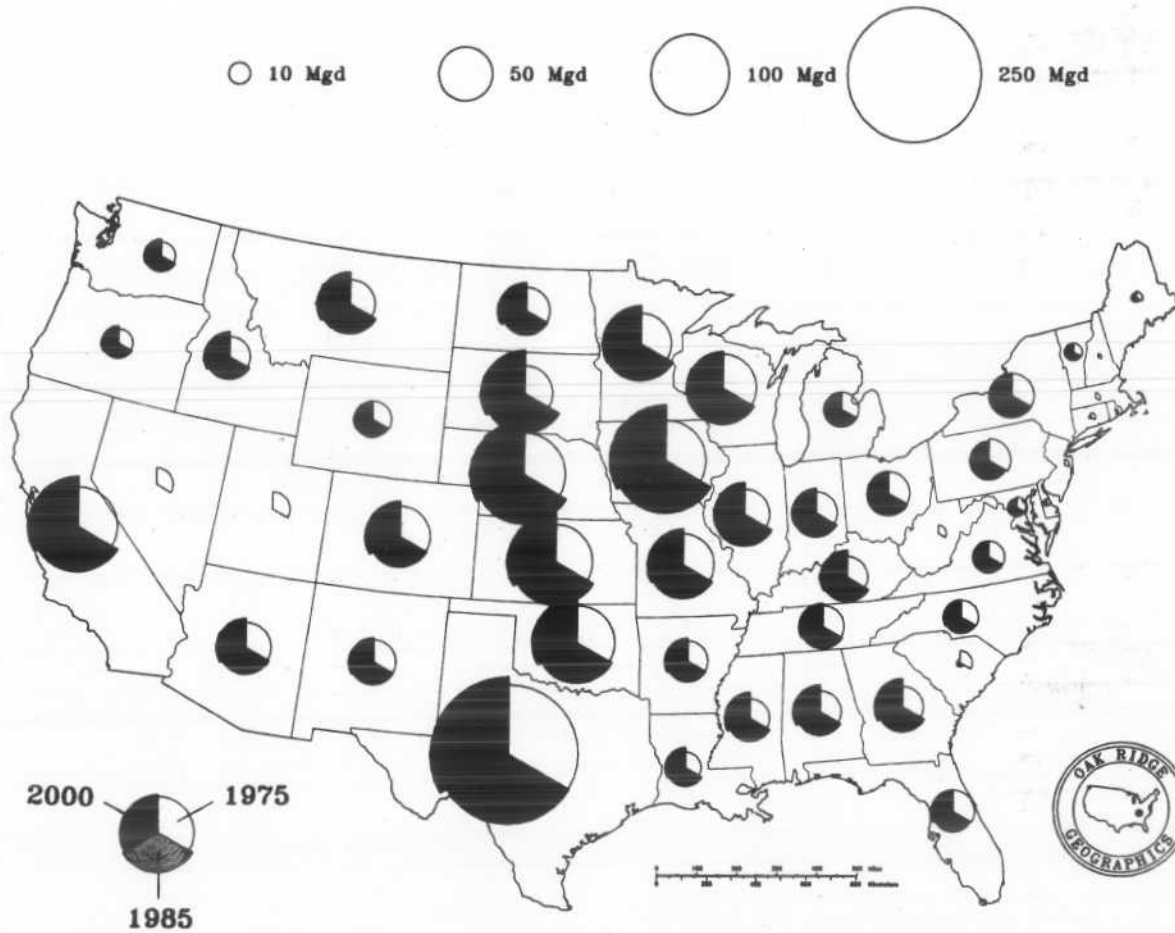


Figure 3.4. Livestock water use in 1975, 1985, and 2000.

5. Eggs: Quantity of chicken eggs produced was used. The production data are for the December 1, 1974, through November 30, 1975, marketing year.¹⁸
6. Milk: Pounds of milk produced was used. Data excluded milk consumed by calves.¹⁹

Data base. A review of available data sources included *Agricultural Statistics*¹² and the USDA's *Statistical Bulletin* series. These publications combine the data of the USDA Crop Reporting Board and ESCS and they are updated annually. The quinquennial agricultural census reports provide less current data. The units of measurement are compatible with those used in *1972 OBERS Projections*²⁰ and *Livestock Water Use*.²¹

The *OBERS* data provides state-specific information; however, some averaging error was introduced in combining totals. For example, production data for beef and veal, pork, and lamb and mutton for six states (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont) were combined in a single total for New England. To avoid disclosure of proprietary information, a strict average was computed for the six states to obtain individual state production figures. The same procedure was used for the turkey production, where the line entry "other states" includes data for Arizona, Delaware, Florida, Idaho, Kentucky, Montana, New Mexico, and Wyoming.

Missing values in 1985 and 2000 appear because the *1972 OBERS Series E* projections did not list livestock populations for those states that produced less than 1% of the national total.

Conversion factors. Water-use conversion factors were taken directly from the USDA's *Livestock Water Use*.²¹ These factors, derived by the USDA as estimated daily water requirements for livestock production, vary among states and among livestock types because of climatic and animal-specific variables. Water use for cattle in Michigan, for example, would not be as intense as that for cattle in New Mexico because of lower rates of evaporation in stock ponds. For comparison of livestock types, conversion factors are based on water volume per unit of livestock product.

Projected production figures for 1985 and 2000 combined the three livestock types – chickens, broilers, and turkeys – into a single, poultry category. To compensate for this, a weighted average conversion factor for poultry, was devised from the actual 1975 proportional production of chickens, broilers, and turkeys. It was thereby assumed that the proportional production of chickens, broilers, and turkeys for 1985 and 2000 will be the same as for 1975.

3.3 Steam-Electric Withdrawals and Consumption

The principal demand for water in energy production is for condenser cooling in steam-electric generating facilities. Estimates of cooling water requirements for the steam-electric sector included in the Second National Water Assessment were made by FERC.

A listing of FERC projections of water withdrawals and consumption by steam-electric plants, summed by state, appears in Table B.5. The FERC data are reported to represent base conditions as defined in the Second Assessment. These data were processed by ORNL from the same FERC files from which the number of steam-electric generating plants in each state (Sect. 2.4 and Table A.7) was obtained. The differences between the national totals contained in the Second Assessment (Vol. 3, p. 42) and the state totals computed from the FERC files regarding the quantities of water withdrawn and consumed (Tables 3.1 and 3.2) and the differences in the number of plants (Table 2.1) do not seem to be correlated, however.

3.4 Manufacturing Water Use

Manufacturing water-use data for the Second National Water Assessment and the corresponding state data were produced by the Office of Business Research and Analysis (OBRA), Bureau of Domestic Business Development of the Bureau of Domestic Commerce, using the OBRA industrial water-use forecasting model. A breakdown of the national water-use totals for major industry groups is shown in Fig. 3.5. Table B.6 presents the state totals of all manufacturing water use, and Tables B.7 through B.14 contain the corresponding state totals, given by major industry group.

ANNUAL WATER USE BY MAJOR INDUSTRY

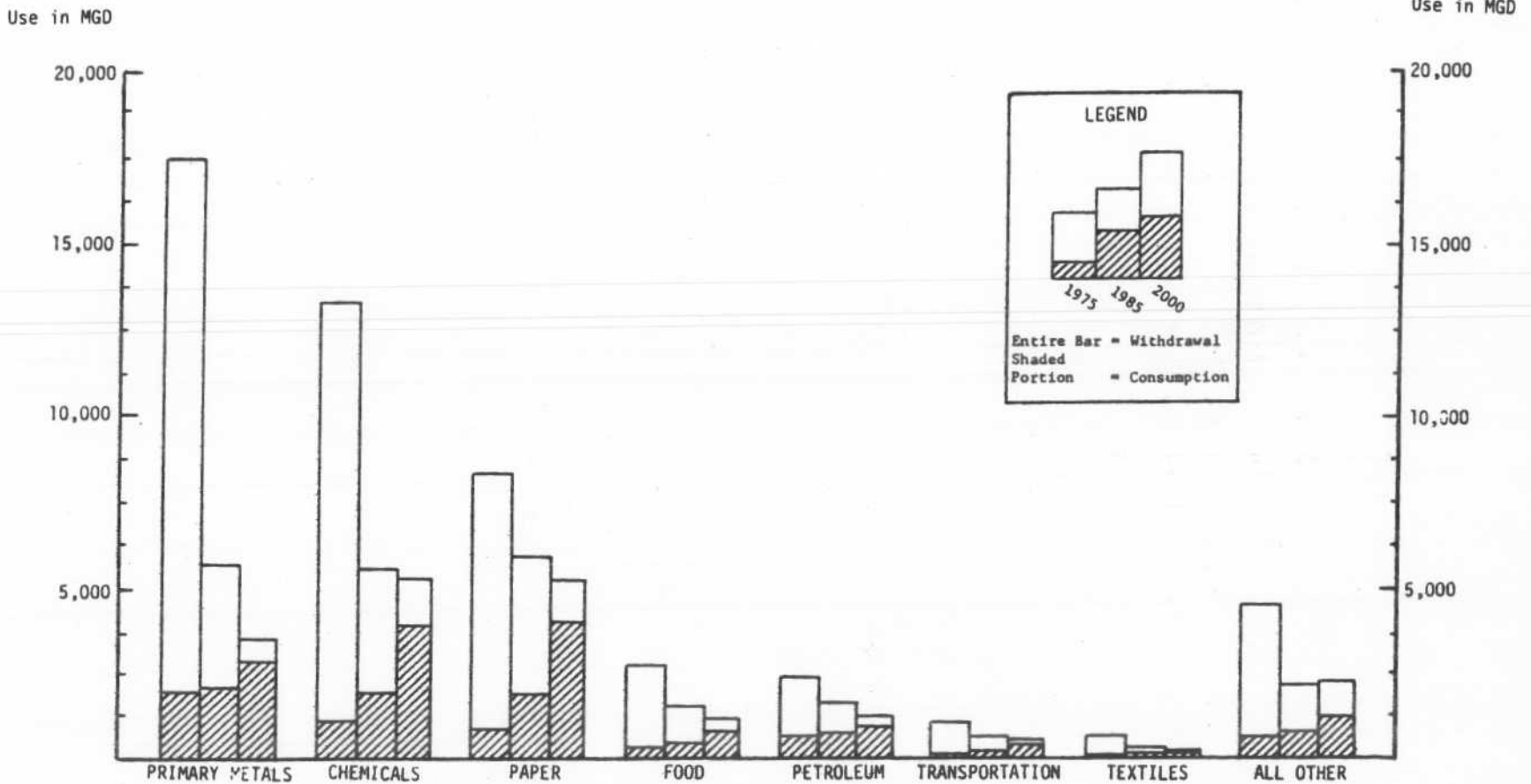


Figure 3.5. Total water use by major industry.

The water-use parameters projected by the OBRA model are intake, discharge, consumption, and gross use (intake plus recycled water). The OBRA forecasts produced for the Second Assessment assumed zero discharge of pollutants by the year 2000 and were based on the 1972 *OBERS Series E* projections²⁰ of economic growth.

The primary data base for the OBRA model was a file of information on 9300 large manufacturing plants, gathered in a 1971 survey of all manufacturing establishments using over 10 Mg/year (1.38×10^6 m³/year) of water. The 9300 plants in the OBRA file account for about 98% of the water used by some 312,000 manufacturing establishments in 1970. In addition, the OBRA data base contains files of technical coefficients and related data (e.g., recirculation and consumption rates and economic factors) calculated for each industry type.

It is important to note that the manufacturing water-use data in the Second Assessment and the state data contained in this report represent the average water use per calendar day. Comparable data giving estimated water requirements per operating day (based on the approximate number of operating days per year for each industry) are available from the Department of Commerce in the OBRA forecasts.

Note also that there is a discrepancy between the definition of brackish water withdrawals in the OBRA state data and the definition of saline water withdrawals as appears in the the Second National Water Assessment (Vol. 1, p. 34). Apparently, noncoastal brackish water was combined with coastal saline water withdrawals in the OBRA state data but was not included in the saline withdrawals category in the Second Assessment. Brackish water withdrawn from estuaries and bays and used for once-through cooling currently accounts for about 20% of all water used by manufacturers. The Second Assessment data either assumed that plants using such brackish cooling water would switch to closed systems using freshwater or it combined brackish water with freshwater use.

3.5 Domestic Central and Noncentral Water Use

Projected domestic water use by state was derived by estimating state shares of the Second Assessment national totals. The procedures

developed were similar to those used by the WRC to estimate domestic water use from central systems (CS),²² and by the USDA to estimate domestic water use from noncentral systems (NCS).²³

As in both the WRC and USDA methodologies, domestic water use was assumed to be directly related to population. Also, domestic water use was considered to be influenced by two other factors: (1) the ratio of population obtaining water from a CS (i.e., utility-supplied water) to the population withdrawing water from an NCS (i.e., private sources such as wells, springs, and creeks) and (2) the ratio of the population having pressurized water systems to those without pressurized systems.²⁴ Incorporating these factors, the Second Assessment national projections of domestic water use were disaggregated to states using the procedure outlined below:

- (a) estimate the population using the CS's and NCS's for each state;
- (b) estimate state CS and NCS water withdrawal and consumption for 1975, 1985, and 2000;
- (c) aggregate the above state CS and NCS estimates to national totals;
- (d) compute state portions of the above derived national water-use figures;
- (e) distribute the Second Assessment national totals of CS and NCS water use according to the derived state portions.

Tables B.15, B.16, and B.17 present the converted state water-use data for total domestic, domestic CS's, and domestic NCS's respectively.

3.5.1 Central and noncentral population estimates

The method used for estimating domestic CS and NCS populations in each state for 1975, 1985, and 2000 was adapted from USDA methodology, represented by the following definitions:

$$\text{NCS units} = (\text{individual wells} + \text{other}) / \text{total year-round housing units}, \quad (2)$$

$$\text{NCS population} = \text{NCS units} \times \text{rate decline} \times \text{OBERS population}, \quad (3)$$

$$\text{CS population} = \text{OBERS population} - \text{NCS population}. \quad (4)$$

The proportion of NCS housing units to total housing units in each state was calculated from the 1970 Census of Housing.²⁵ In accordance with USDA methodology, the proportion of NCS housing units in a state was expected to decline at an annual rate of either 1%, if the actual 1960 to 1970 rate of decline was less than 2%, or 2-1/4%, if it was greater than 2%. The NCS population for each year was then derived by multiplying QBERS state populations by the percentage of NCS housing units in 1970, adjusted by the annual rate of decline. Figure 3.6 shows the change in the percentage of the population using NCS (i.e., self-supplied water systems) in 1975, 1985, and 2000.

The CS population was the residual of the state population minus the NCS population. These estimates assume that the number of people per housing unit was the same for NCS and CS populations.

3.5.2 Noncentral system water use

The procedure for estimating water use by the NCS population was patterned after USDA methodology.²² Water use by units within the NCS population varies according to whether or not the water is under pressure. The housing units with water under pressure were assumed to be those having flush toilets. The state percentages of housing units with pressurized water were compiled by the USDA from the 1950, 1960, and 1970 housing censuses. The percentage of units without pressurized water was expected to decline at the rate of 6% per year.

The NCS population without pressurized water was equal to the state population times the percentage of housing units without pressurized water, adjusted by the 6% decline factor. The NCS population with pressurized water was the residual of the total NCS population minus the NCS population without pressurized water.

The water-use estimates for the NCS population in each state were calculated by multiplying the pressure and nonpressure populations for each state by the per capita use rates for withdrawal and consumption and summing the two for each year. The per capita estimates obtained from the USDA are given below.²²

ORNL-DWG 79-12670

PERCENTAGE OF POPULATION
ON SELF SUPPLIED WATER SYSTEMS

□ < 5% ▨ 6 - 10% ▩ 11 - 20% ■ 21 - 40% ■ > 41%

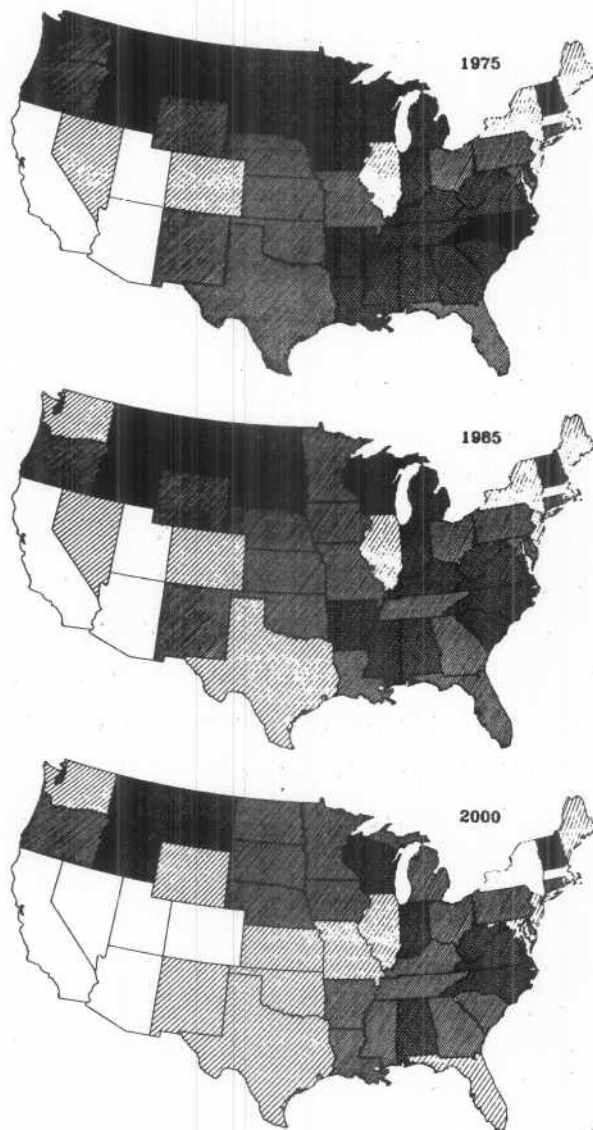


Figure 3.6. Changes in the percentage of population on noncentral water systems.

		Per capita water use (gallons per capita per day)		
		1975	1985	2000
With pressurized water	Withdrawal	66	75	84
	Consumption	40	45	50
Without pressurized water	Withdrawal	10	10	10
	Consumption	10	10	10

3.5.3 Central system water use

Withdrawal and consumption figures for the CS population were derived by computing a per capita use rate for each state in 1970 and multiplying by the CS population. An assumption that the per capita use rates would remain constant through the year 2000 was adopted from WRC methodology.²³ Per capita use rates were computed using the 1975 state totals reported by the United States Geological Survey (USGS) in *Estimated Use of Water in the United States in 1975*.²⁶

Domestic withdrawal from CS's represents the total water withdrawn from public systems minus water delivered to industry and commerce. A ratio of total consumption to total withdrawal was incorporated to estimate the percentage of domestic withdrawal consumed. Per capita use rates were then calculated by dividing withdrawal and consumption by the 1975 USGS estimate of the population served by water utilities.

3.6 Commercial Water Use

State portions of commercial water use were derived from the percentage of total U.S. utility water distributed to the commercial sector (PUWC). A method similar to that used by the WRC to estimate the percentage of utility water used by the commercial sector in ASRs²⁷ was used to calculate PUWCs for each state. The method assumes an areal difference between the percentage of water used by the commercial sector in each region. The commercial water-use data converted to states are presented in Table B.18.

Information for estimating the PUWCs was obtained from a 1976 survey by the American Water Works Association (AWWA) of 767 utilities

in 47 states and the District of Columbia.²⁸ The information that the AWWA survey collected included the total amount of revenue-producing water distributed by each utility to the various water-using sectors. In employing these data, those utilities reported as wholesale water distributors were excluded from the PUWC estimates because the amount of water sold wholesale could not be classified by specific water-use sectors.

Each utility was listed by state according to where it distributed water. The PUWC for each state was then computed using one of two methods. If usable data existed for more than one utility in each state, then the following equation was used:

$$PUWC_i = \frac{\sum_{j=1}^N CMW_{ij}}{\sum_{j=1}^N TW_{ij}}, \quad (5)$$

where

$PUWC_i$ = the percentage of utility water consumed in the i th state,

CMW_j = water obtained by the commercial sector in the j th utility,

TW_j = total water distributed by the j th utility.

This method weights each utility by the amount of water distributed, thus giving more weight to the larger water-distributing utilities. For those states for which no usable data or only one observation existed, the PUWC was estimated by the following equation:*

$$PUWC_i = 0.193 + 1.485(PGOV_i) - 1.064(PTRADE_i), \quad (6)$$

* The WRC did not use this method to estimate the percentage of utility water used by the commercial sector for their regions for which there were no data.

where

$PUWC_i$ = the percentage of utility water consumed in the i th state,

$PGOV_i$ = the percentage of the i th-state population employed by government,

$PTRADE_i$ = the percentage of the i th-state population employed in trade.

This equation was derived from a stepwise regression that indicated a correlation between the percentage of water used by the commercial sector and the percentage of the state population employed in government and trade. Data input to this regression analysis were the PUWCs estimated using equation (6) and the state employment figures from the 1976 Statistical Abstract.²⁹

The PUWCs were then used as state shares to compute commercial water use from the total water distributed by all utilities in each state. State totals of utility-distributed water were obtained from USGS data in *Estimated Use of Water in the United States in 1975*.²⁶ The percentage of water distributed by utilities to the commercial sector and the percentage consumed by the commercial sector were assumed to be the same. Estimated 1975 withdrawal and consumption for each state were calculated by:

$$CW_i = TW_i \times PUWC_i \quad (7)$$

$$CC_i = TC_i \times PUWC_i \quad (8)$$

where

CW_i = commercial water withdrawal in the i th state in 1975.

TW_i = total commercial water withdrawal in the i th state.

$PUWC_i$ = percentage of utility water distributed to the commercial sector in the i th state.

CC_i = commercial water consumption in the i th state in 1975.

TC_i = total commercial water consumption in the i th state.

Increases in commercial water demand were assumed to be proportional to the population of the state. An increase in population would increase the demand for commercial goods and services; thus, the water used by the commercial sector would increase accordingly. To estimate the commercial water use in 1985 and 2000, the following two equations were employed:

$$CW_{ij} = CW_i \left(\frac{POP_{ij}}{POP_i} \right) \quad (9)$$

$$CC_{ij} = CC_i \left(\frac{POP_{ij}}{POP_i} \right) \quad (10)$$

where

CW_{ij} = commercial water withdrawal in the i th state for the j th year,

POP_i = population of the i th state in 1975,

POP_{ij} = population of the i th state in the j th year,

CC_{ij} = commercial water consumption in the i th state for the j th year.

These state water-use estimates were then aggregated to national water-use totals for 1975, 1985, and 2000.

The WRC derived the amount of utility-distributed water for each ASR from the same data used by the USGS.²² However, the WRC indicated that no direct comparison can be made with the USGS data.³⁰ Therefore, assuming that the utility-distributed water figures would not match, the commercial water-use figures estimated in Eqs. (9) and (10) were adjusted to reflect changes in the absolute numbers, but not in the spatial pattern.

This adjustment was accomplished by first computing each state's portion of the national water-use totals estimated above. The Second Assessment national totals for commercial water use were then disaggregated to states based on their previously calculated portions. This method is depicted in the following equations:

$$ACW_{ij} = SACW_j \left(\frac{CW_{ij}}{ENCW_j} \right) \quad (11)$$

where

ACW_{ij} = adjusted commercial water withdrawal in the i th state for the j th year,

$SACW_j$ = Second Assessment commercial water withdrawal in the j th year,

CW_{ij} = commercial water withdrawal in the i th state for the j th year,

$ENCW_j$ = estimated national commercial water withdrawal in the j th year

and

$$ACC_{ij} = SACC_j \left(\frac{CC_{ij}}{ENCC_j} \right) \quad (12)$$

where

ACC_{ij} = adjusted commercial consumption in the i th state for the j th year,

$SACW_j$ = Second Assessment commercial water consumption in the j th year,

CC_{ij} = commercial water consumption in the i th state for the j th year,

$ENCC_j$ = estimated national commercial water consumption in the j th year.

3.7 Mineral Water Requirements

The conversion of the mineral water requirements data in the Second National Water Assessment to a state boundary basis was completed by the Bureau of Mines, U.S. Department of the Interior. The total annual withdrawals and consumption are given by state for mineral water use in

Table B.19, and individually for nonmetals, fuels, and metals in Tables B.20, B.21, and B.22 respectively.

3.8 National and State Summaries of Water Use

Tables C.1 and C.2 summarize the national and state totals of annual water requirements for offstream uses by functional use category. These data represent the average-year base conditions used in the Second National Water Assessment, converted from ASR to state boundaries. The data sources and conversion methods employed for each sector are discussed in the preceding sections.

REFERENCES

1. U.S. Water Resources Council, *The Nation's Water Resources 1975-2000*, The Second National Water Assessment by the U.S. Water Resources Council, Vol. 1, Summary, and Vol. 3, Analytical Data, Government Printing Office, Washington, D.C., December 1978.
2. Ref. 1, Vol. 1, p. 8.
3. U.S. Department of Commerce, *1972 OBERS Projection Series E Population, Volume 1: Concepts, Methodology, and Summary Data*, U.S. Water Resources Council, Washington, D.C., April 1974.
4. U.S. Department of Commerce, *1972 OBERS Projections Series E Population, Volume 4: States*, U.S. Water Resources Council, Washington, D.C., April 1974.
5. U.S. Bureau of the Census, *Current Population Reports*, Series P-25, NUS. 460, 642, Washington, D.C.
6. U.S. Department of Labor, *Manpower Reports*, Washington, D.C.
7. U.S. Department of Labor, *Survey of Current Business*, Washington, D.C., August 1978.
8. U.S. Department of Labor, *Survey of Current Business*, Washington, D.C., August 1977, pp. 18-41.
9. U.S. Department of Agriculture, *National Inventory of Soil and Water Conservation Needs, 1967*, Stat. Bull. No. 461, Washington, D.C., pp. 4-5.
10. U.S. Department of the Interior, *The National Atlas of the United States of America*, Washington, D.C., 1970, p. 336.
11. U.S. Department of Agriculture, Soil Conservation Service, Special Projects Division; User's Guide to the SCS Automated Irrigation Water-Use Requirements Model, Utilized in the 1975 National Water Assessment Program, May 1975.
12. U.S. Department of Agriculture, *Agricultural Statistics 1976*, U.S. Government Printing Office, Washington, D.C. (preliminary), pp. 304-305.

13. Ref. 12, p. 316.
14. Ref. 12, p. 327.
15. U.S. Department of Agriculture, *Poultry Production, Disposition, and Income: Final Estimates, 1970-75*, Stat. Bull. No. 602, April 1978, p. 17.
16. Ref. 15, p. 26.
17. U.S. Department of Agriculture, *Turkeys: Final Estimates for 1970-75*, Stat. Bull. No. 497, August 1978, p. 10.
18. U.S. Department of Agriculture, *Chickens and Eggs: Final Estimates for 1970-75*, Stat. Bull. No. 590, January 1978, p. 20.
19. U.S. Department of Agriculture, *Agricultural Statistics 1977*, U.S. Government Printing Office, Washington, D.C., 1978, p. 369.
20. U.S. Water Resources Council, *1972 OBERS Projections: Regional Economic Activity in the U.S.*, Series E Population Supplement: Agricultural Projection, vols. 1, 3, and 4, U.S. Government Printing Office, Washington, D.C., pp. 52-134.
21. U.S. Department of Agriculture Special Projects Division of the Soil Conservation Service, *Livestock Water Use*, July 1975, p. 14.
22. U.S. Department of Agriculture, *Domestic Water Use from Non-Central Systems*, 1975.
23. Water Resources Council, *Domestic Water Use from Central Systems*, Appendix C-3, Nationwide Analysis Report, 1975.
24. Ref. 22, pp. 1-4.
25. U.S. Department of Commerce, *Detailed Housing Characteristics: United States Summary*, Washington, D.C., 1972, pp. 243-247.
26. R. Murray and E. B. Reeves, *Estimated Use of Water in the United States in 1975*, pp. 20-21.
27. T. H. Ifft, *Methodology and Assumptions for Commercial Water Requirements* (unpublished report), p. 1.

28. American Water Works Association, *AWWA Operating Data for Water Utilities: 1976*, American Water Works Association, Denver, Col.
29. U.S. Bureau of the Census, *Statistical Abstract of the United States: 1976* (97th ed.), Washington, D.C., 1976, p. 367.
30. Ref. 27, p. 1.

Appendix A
SOCIOECONOMIC DATA

STATE SUMMARIES OF WATER USE
AND RELATED DATA

POPULATION

STATE	TOTAL POPULATION THOUSANDS			POPULATION CHANGE PER CENT		POPULATION DENSITY PER SQ MI LAND AREA*		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
ALABAMA	3672	3915	4284	7%	9%	72	77	84
ALASKA	371	361	438	-3%	21%	1	1	1
ARIZONA	2247	2452	3066	9%	25%	20	22	27
ARKANSAS	2143	2177	2380	2%	9%	41	42	46
CALIFORNIA	21534	23658	27049	10%	14%	138	151	173
COLORADO	2581	2734	3134	6%	15%	25	26	30
CONNECTICUT	3149	3529	4030	12%	14%	647	725	828
DELAWARE	588	666	779	13%	17%	297	336	393
DISTRICT OF COLUMBIA	723	750	750	4%	<1%	11852	12295	12295
FLORIDA	8408	9899	12714	18%	28%	155	183	235
GEORGIA	5009	5514	6458	10%	17%	86	95	111
HAWAII	882	911	1058	3%	16%	137	142	165
IDAHO	826	723	755	-12%	4%	10	9	9
ILLINOIS	11374	12564	13877	10%	10%	204	225	248
INDIANA	5397	6067	6837	12%	13%	149	168	189
IOWA	2906	2953	3054	2%	3%	52	53	54
KANSAS	2316	2254	2322	-3%	3%	28	27	28
KENTUCKY	3441	3791	4234	10%	12%	86	95	106
LOUISIANA	3866	3839	4021	-1%	5%	86	85	89
MAINE	1075	982	1003	-9%	2%	35	32	32
MARYLAND	4187	4857	5947	16%	22%	423	491	601
MASSACHUSETTS	5906	6564	7457	11%	14%	754	838	952
MICHIGAN	9255	10184	11342	10%	11%	163	179	200
MINNESOTA	3983	4331	4901	9%	13%	50	55	62
MISSISSIPPI	2378	2388	2496	<1%	5%	50	50	53
MISSOURI	4842	5252	5717	8%	9%	70	76	83

STATE SUMMARIES OF WATER USE
AND RELATED DATA

POPULATION

STATE	TOTAL POPULATION THOUSANDS			POPULATION CHANGE PER CENT		POPULATION DENSITY PER SQ MI LAND AREA*		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
	ALABAMA	2410	2410	2410	0%	0%	10	10
ALASKA	100	100	100	0%	0%	1	1	1
ARIZONA	1500	1500	1500	0%	0%	15	15	15
ARKANSAS	2000	2000	2000	0%	0%	10	10	10
CALIFORNIA	15000	15000	15000	0%	0%	100	100	100
COLORADO	2000	2000	2000	0%	0%	10	10	10
CONNECTICUT	2000	2000	2000	0%	0%	100	100	100
DELAWARE	500	500	500	0%	0%	100	100	100
FLORIDA	10000	10000	10000	0%	0%	100	100	100
GEORGIA	3000	3000	3000	0%	0%	10	10	10
IDAHO	1000	1000	1000	0%	0%	10	10	10
ILLINOIS	10000	10000	10000	0%	0%	100	100	100
INDIANA	5000	5000	5000	0%	0%	10	10	10
IOWA	2000	2000	2000	0%	0%	10	10	10
KANSAS	2000	2000	2000	0%	0%	10	10	10
KENTUCKY	3000	3000	3000	0%	0%	10	10	10
Louisiana	2000	2000	2000	0%	0%	10	10	10
MAINE	1000	1000	1000	0%	0%	100	100	100
MARYLAND	2000	2000	2000	0%	0%	100	100	100
MASSACHUSETTS	2000	2000	2000	0%	0%	100	100	100
MICHIGAN	5000	5000	5000	0%	0%	10	10	10
MINNESOTA	2000	2000	2000	0%	0%	10	10	10
MISSISSIPPI	2000	2000	2000	0%	0%	10	10	10
MISSOURI	3000	3000	3000	0%	0%	10	10	10
MONTANA	1000	1000	1000	0%	0%	10	10	10
NEBRASKA	1500	1500	1500	0%	0%	10	10	10
NEVADA	1000	1000	1000	0%	0%	10	10	10
NEW HAMPSHIRE	1000	1000	1000	0%	0%	100	100	100
NEW JERSEY	5000	5000	5000	0%	0%	100	100	100
NEW MEXICO	1000	1000	1000	0%	0%	10	10	10
NEW YORK	15000	15000	15000	0%	0%	100	100	100
NORTH CAROLINA	3000	3000	3000	0%	0%	10	10	10
NORTH DAKOTA	1000	1000	1000	0%	0%	10	10	10
OHIO	5000	5000	5000	0%	0%	10	10	10
OKLAHOMA	2000	2000	2000	0%	0%	10	10	10
OREGON	1000	1000	1000	0%	0%	10	10	10
PENNSYLVANIA	5000	5000	5000	0%	0%	100	100	100
RHODE ISLAND	1000	1000	1000	0%	0%	100	100	100
SOUTH CAROLINA	2000	2000	2000	0%	0%	10	10	10
SOUTH DAKOTA	1000	1000	1000	0%	0%	10	10	10
TENNESSEE	3000	3000	3000	0%	0%	10	10	10
TEXAS	10000	10000	10000	0%	0%	100	100	100
UTAH	1000	1000	1000	0%	0%	10	10	10
VERMONT	1000	1000	1000	0%	0%	100	100	100
VIRGINIA	3000	3000	3000	0%	0%	10	10	10
WASHINGTON	2000	2000	2000	0%	0%	10	10	10
WEST VIRGINIA	1000	1000	1000	0%	0%	100	100	100
WISCONSIN	2000	2000	2000	0%	0%	10	10	10
WYOMING	1000	1000	1000	0%	0%	10	10	10
NATIONAL	216405	234469	263797	8%	13%	61	66	75

* TO CONVERT TO POPULATION DENSITY PER SQ. KM. DIVIDE BY 2.6

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EMPLOYMENT AND INCOME

STATE	TOTAL EMPLOYMENT THOUSANDS			EMPLOYMENT CHANGE PER CENT		PER CAPITA INCOME DOLLARS (1975\$) *		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
ALABAMA	1392	1551	1784	11%	15%	4900	6285	9811
ALASKA	143	164	205	15%	25%	10186	9658	14257
ARIZONA	863	966	1223	12%	27%	5699	7358	10884
ARKANSAS	806	839	972	4%	16%	4768	6132	9811
CALIFORNIA	8850	10206	12062	15%	18%	6951	9045	13490
COLORADO	1122	1208	1425	8%	18%	6329	8125	12111
CONNECTICUT	1384	1636	1922	18%	17%	7187	9505	14104
DELAWARE	240	292	354	22%	21%	6921	9351	13950
DISTRICT OF COLUMBIA	327	526	765	61%	45%	7677	12417	18703
FLORIDA	3213	3828	4866	19%	27%	5953	7665	11651
GEORGIA	2052	2460	2953	20%	20%	5317	7205	11038
HAWAII	375	431	519	15%	20%	7091	9198	13490
IDAHO	339	305	331	-10%	9%	5475	7052	10884
ILLINOIS	4881	5679	6488	16%	14%	7120	9351	13950
INDIANA	2291	2685	3135	17%	17%	5930	7972	12111
IOWA	1318	1285	1378	-3%	7%	6231	7972	12111
KANSAS	1055	988	1059	-6%	7%	6299	7972	12111
KENTUCKY	1362	1508	1790	11%	19%	5167	6745	10731
LOUISIANA	1404	1428	1590	2%	11%	5078	6592	10271
MAINE	429	418	446	-3%	7%	5039	7205	11191
MARYLAND	1804	2111	2555	17%	21%	6769	8738	13030
MASSACHUSETTS	2538	2997	3504	18%	17%	6424	9045	13490
MICHIGAN	3575	4314	5011	21%	16%	6333	8738	13184
MINNESOTA	1769	1925	2252	9%	17%	6109	8278	12571
MISSISSIPPI	881	908	1007	3%	11%	4279	5825	9198
MISSOURI	2021	2266	2578	12%	14%	5789	7972	12111

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EMPLOYMENT AND INCOME

STATE	TOTAL EMPLOYMENT THOUSANDS			EMPLOYMENT CHANGE PER CENT		PER CAPITA INCOME DOLLARS (1975\$)*		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
MONTANA	324	270	280	-17%	4%	5696	7358	11191
NEBRASKA	706	674	735	-5%	9%	6218	8125	12264
NEVADA	273	313	404	15%	29%	7004	8891	12877
NEW HAMPSHIRE	356	399	465	12%	17%	5727	7818	11957
NEW JERSEY	3052	3860	4578	26%	19%	7182	9198	13644
NEW MEXICO	419	413	468	-1%	13%	5120	6745	10424
NEW YORK	7246	8944	10400	23%	16%	6891	9964	14564
NORTH CAROLINA	2398	2736	3208	14%	17%	5222	6745	10578
NORTH DAKOTA	268	223	225	-17%	1%	6225	6898	10731
OHIO	4487	5250	6034	17%	15%	6108	8432	12571
OKLAHOMA	1122	1191	1366	6%	15%	5582	7052	11038
OREGON	972	1017	1166	5%	15%	6099	7818	11804
PENNSYLVANIA	4880	5597	6289	15%	12%	6175	8278	12571
RHODE ISLAND	410	506	576	23%	14%	6035	8278	12571
SOUTH CAROLINA	1128	1300	1498	15%	15%	4932	6439	9964
SOUTH DAKOTA	310	269	273	-13%	1%	5295	6898	10731
TENNESSEE	1732	2030	2453	17%	21%	5079	6592	10271
TEXAS	5216	5486	6472	5%	18%	5903	7512	11498
UTAH	485	510	606	5%	19%	5180	7052	10731
VERMONT	199	218	258	10%	18%	5206	7665	12111
VIRGINIA	2208	2478	2968	12%	20%	6102	7665	11804
WASHINGTON	1456	1576	1783	8%	13%	6658	8432	12724
WEST VIRGINIA	637	650	697	2%	7%	5246	6439	10271
WISCONSIN	2064	2130	2365	3%	11%	5937	7972	12111
WYOMING	166	141	147	-15%	4%	6473	7818	11804
NATIONAL	88948	101105	117888	14%	17%	6195	8248	12447

* 1975 = 1.533 TIMES 1967\$. BASIC DATA MAINTAINED IN 1967\$.

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EARNINGS BY MAJOR SECTORS

STATE	TOTAL EARNINGS BILLIONS (1975\$)*			CHANGE IN TOTAL EARNINGS PERCENT		MANUFACTURING EARNINGS BILLIONS (1975\$)*		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
ALABAMA	14126	19438	32966	38%	70%	3980	5433	8686
ALASKA	4163	3163	5453	-24%	72%	186	207	330
ARIZONA	9600	14417	26139	50%	81%	1509	2320	4038
ARKANSAS	7611	10257	17546	35%	71%	1928	2942	5115
CALIFORNIA	116874	167002	279058	43%	67%	26006	35182	53818
COLORADO	13116	17569	29817	34%	70%	2116	2787	4311
CONNECTICUT	16725	25848	43118	55%	67%	6309	8252	11936
DELAWARE	3345	5060	8610	51%	70%	1312	1965	3123
DISTRICT OF COLUMBIA	9516	15470	28908	63%	87%	305	546	969
FLORIDA	34569	52614	97069	52%	84%	4511	6965	11963
GEORGIA	21560	32546	57540	51%	77%	5012	7941	13021
HAWAII	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IDAHO	3607	4110	6500	14%	58%	644	705	1084
ILLINOIS	65014	93544	151169	44%	62%	20038	27907	41990
INDIANA	25862	39489	66155	53%	68%	10538	15435	24021
IOWA	13749	17847	27717	30%	55%	3525	4399	6714
KANSAS	10599	12985	20210	23%	56%	2336	2558	3907
KENTUCKY	13825	20029	34807	45%	74%	3573	5587	9645
LOUISIANA	15687	19669	31781	25%	62%	2788	3649	5779
MAINE	4058	5287	8309	30%	57%	1098	1475	2166
MARYLAND	20212	29625	51416	47%	74%	3565	4977	7359
MASSACHUSETTS	28753	45614	76295	59%	67%	8284	10754	15197
MICHIGAN	46703	71924	117933	54%	64%	19248	28175	41995
MINNESOTA	19535	28605	48025	46%	68%	4827	6898	10942
MISSISSIPPI	7882	10825	17841	37%	65%	2177	3108	5181
MISSOURI	22627	34028	55361	50%	63%	5928	9184	14406

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EARNINGS BY MAJOR SECTORS

STATE	TOTAL EARNINGS BILLIONS (1975\$)*			CHANGE IN TOTAL EARNINGS PERCENT		MANUFACTURING EARNINGS BILLIONS (1975\$)*		
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000
MONTANA	3333	3729	5595	12%	50%	336	414	599
NEBRASKA	7698	9528	15051	24%	58%	1157	1639	2713
NEVADA	3468	5230	9481	51%	81%	177	224	394
NEW HAMPSHIRE	3295	5015	8579	52%	71%	1045	1472	2223
NEW JERSEY	38046	59773	100970	57%	69%	12092	17549	26675
NEW MEXICO	4642	5810	9519	25%	64%	320	390	645
NEW YORK	100189	156743	255758	56%	63%	22957	33082	47361
NORTH CAROLINA	23333	34435	59433	48%	73%	7511	11639	19416
NORTH DAKOTA	3216	3044	4456	-5%	46%	213	180	281
OHIO	53908	82962	135261	54%	63%	21157	30177	45238
OKLAHOMA	11434	15299	25740	34%	68%	2009	2782	4687
OREGON	11000	14811	24433	35%	65%	2818	3613	5566
PENNSYLVANIA	58999	84343	135397	43%	61%	20512	27132	39657
RHODE ISLAND	4152	6773	11208	63%	65%	1361	1785	2583
SOUTH CAROLINA	11163	15593	26652	40%	71%	3707	5202	8432
SOUTH DAKOTA	2761	3410	5095	24%	49%	248	295	453
TENNESSEE	17539	26206	46399	49%	77%	5473	8415	14150
TEXAS	58244	76801	131388	32%	71%	11931	15990	26387
UTAH	5102	6955	12006	36%	73%	901	1041	1646
VERMONT	1895	3013	5177	59%	72%	530	763	1245
VIRGINIA	23213	32796	57253	41%	75%	4614	6712	11168
WASHINGTON	18514	23878	38612	29%	62%	4243	4912	7241
WEST VIRGINIA	7436	9322	14308	25%	53%	1864	2467	3650
WISCONSIN	21681	30287	48429	40%	60%	7939	9883	14518
WYOMING	1969	2010	3023	2%	50%	122	137	210
NATIONAL	1045548	1514731	2528966	45%	67%	276979	387246	594834

*1975 = 1.533 TIMES 1967\$. BASIC DATA MAINTAINED IN 1967\$.

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EARNINGS BY MAJOR SECTORS

STATE	AGRICULTURE EARNINGS MILLIONS (1975\$)*			MINING EARNINGS MILLIONS (1975\$)*			OTHER EARNINGS MILLIONS (1975\$)*		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
ALABAMA	525	534	625	161	133	165	9460	13338	23490
ALASKA	4	3	3	81	85	138	3891	2868	4982
ARIZONA	309	421	500	294	483	659	7488	11193	20942
ARKANSAS	880	794	922	48	61	72	4754	6460	11437
CALIFORNIA	4213	3378	3966	448	520	576	86206	127922	220698
COLORADO	582	572	705	255	275	353	10164	13935	24448
CONNECTICUT	90	164	180	13	18	25	10314	17414	30977
DELAWARE	108	80	93	4	1	1	1922	3014	5393
DISTRICT OF COLUMBIA	N/A	2	3	1	1	2	N/A	14921	27934
FLORIDA	1089	1333	1596	95	150	203	28874	44166	83307
GEORGIA	801	936	1140	55	117	164	15692	23552	43215
HAWAII	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
IDAHO	445	448	532	37	45	50	2481	2912	4834
ILLINOIS	2823	1542	1768	356	415	508	41798	63680	106903
INDIANA	1344	935	1083	100	124	154	13882	22995	40897
IOWA	2122	1942	2310	35	51	67	8067	11455	18626
KANSAS	883	1075	1246	121	99	94	7260	9253	14963
KENTUCKY	681	830	962	691	576	786	8881	13036	23414
LOUISIANA	407	635	766	682	814	939	11811	14571	24297
MAINE	100	151	172	2	3	4	2857	3658	5967
MARYLAND	238	267	308	18	42	65	16391	24339	43684
MASSACHUSETTS	78	169	191	9	22	29	20382	34669	60878
MICHIGAN	693	603	582	170	190	228	26593	42956	75128
MINNESOTA	1480	1205	1433	178	237	278	13050	20265	35372
MISSISSIPPI	456	901	1039	65	86	98	5183	6730	11523
MISSOURI	826	1015	1171	99	153	195	15773	23676	39589

STATE SUMMARIES OF WATER USE
AND RELATED DATA

EARNINGS BY MAJOR SECTORS

STATE	AGRICULTURE EARNINGS MILLIONS (1975\$)*			MINING EARNINGS MILLIONS (1975\$)*			OTHER EARNINGS MILLIONS (1975\$)*		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
MONTANA	475	398	454	81	89	104	2440	2828	4438
NEBRASKA	1300	1051	1242	18	20	23	5222	6818	11073
NEVADA	46	68	83	44	68	89	3200	4870	8915
NEW HAMPSHIRE	24	37	43	4	6	8	2223	3500	6305
NEW JERSEY	122	219	243	32	56	72	25801	41949	73980
NEW MEXICO	242	275	322	219	253	296	3861	4892	8256
NEW YORK	486	841	968	124	165	207	76622	122655	207222
NORTH CAROLINA	1396	1184	1369	32	58	77	14394	21554	38571
NORTH DAKOTA	915	555	664	25	23	27	2063	2286	3484
OHIO	1086	812	934	342	410	534	31323	51563	88555
OKLAHOMA	441	624	715	505	499	529	8479	11394	19809
OREGON	456	325	365	18	27	36	7709	10846	18466
PENNSYLVANIA	567	667	766	674	690	816	37245	55854	94158
RHODE ISLAND	7	23	27	1	3	4	2782	4962	8594
SOUTH CAROLINA	356	335	388	14	25	35	7086	10031	17797
SOUTH DAKOTA	588	704	837	25	37	44	1901	2374	3761
TENNESSEE	315	460	510	103	108	143	11648	17223	31596
TEXAS	1326	2227	2540	1698	1596	1753	43290	56988	100708
UTAH	87	130	153	152	209	260	3962	5575	9947
VERMONT	78	95	113	6	15	19	1280	2140	3800
VIRGINIA	355	403	449	264	298	415	17980	25383	45221
WASHINGTON	1038	623	709	25	36	45	13207	18307	30617
WEST VIRGINIA	26	43	47	824	935	1194	4721	5877	9417
WISCONSIN	1044	1027	1187	29	42	52	12670	19335	32672
WYOMING	69	139	158	218	194	242	1560	1540	2413
NATIONAL	34020	33200	38582	9501	10563	12877	725048	1083722	1882673

*1975 = 1.533 TIMES 1967\$. BASIC DATA MAINTAINED IN 1967\$.

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STATE SURFACE AREA

STATE	LAND AREA			WATER AREA			TOTAL	
	SQ. MI.	SQ. KM.	%TOTAL	SQ. MI.	SQ. KM.	%TOTAL	SQ. MI.	SQ. KM.
ALABAMA	50851	131704	99%	758	1963	1%	51609	133667
ALASKA	566432	1467058	97%	19980	51748	3%	586412	1518806
ARIZONA	113563	294128	100%	346	896	<1%	113909	295024
ARKANSAS	52175	135133	98%	929	2406	2%	53104	137539
CALIFORNIA	156537	405431	99%	2156	5584	1%	158693	411015
COLORADO	103794	268826	100%	453	1173	<1%	104247	270000
CONNECTICUT	4870	12613	97%	139	360	3%	5009	12973
DELAWARE	1982	5133	96%	75	194	4%	2057	5328
DISTRICT OF COLUMBIA	61	158	91%	6	16	9%	67	174
FLORIDA	54136	140212	92%	4424	11458	8%	58560	151670
GEORGIA	58197	150730	99%	679	1759	1%	58876	152489
HAWAII	6425	16641	100%	25	65	<1%	6450	16705
IDAHO	82667	214107	99%	880	2279	1%	83557	216412
ILLINOIS	55877	144721	99%	523	1355	1%	56400	146076
INDIANA	36189	93729	100%	102	264	<1%	36291	93994
IOWA	56043	145151	100%	247	640	<1%	56290	145791
KANSAS	82056	212525	100%	208	539	<1%	82264	213064
KENTUCKY	39851	103214	99%	544	1409	1%	40395	104623
LOUISIANA	45155	116951	93%	3368	8723	7%	48523	125674
MAINE	30933	80116	93%	2282	5910	7%	33215	86027
MARYLAND	9891	25618	94%	686	1777	6%	10577	27394
MASSACHUSETTS	7833	20287	95%	424	1098	5%	8257	21386
MICHIGAN	56818	147159	98%	1398	3621	2%	58216	150779
MINNESOTA	79289	205358	94%	4779	12378	6%	84068	217736
MISSISSIPPI	47358	122657	99%	358	927	1%	47716	123584
MISSOURI	69046	178829	99%	640	1658	1%	69686	180487

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STATE SURFACE AREA

STATE	LAND AREA			WATER AREA			TOTAL	
	SQ. MI.	SQ. KM.	%TOTAL	SQ. MI.	SQ. KM.	%TOTAL	SQ. MI.	SQ. KM.
MONTANA	145603	377111	99%	1535	3976	1%	147138	381087
NEBRASKA	76522	198192	99%	705	1826	1%	77227	200018
NEVADA	109889	284612	99%	651	1686	1%	110540	286298
NEW HAMPSHIRE	9033	23395	97%	271	702	3%	9304	24097
NEW JERSEY	7532	19508	96%	304	787	4%	7836	20295
NEW MEXICO	121445	314542	100%	221	572	<1%	121666	315115
NEW YORK	47869	123981	97%	1707	4421	3%	49576	128402
NORTH CAROLINA	48880	126599	93%	3706	9599	7%	52586	136198
NORTH DAKOTA	69280	179435	98%	1385	3587	2%	70665	183022
OHIO	41018	106237	100%	204	528	<1%	41222	106765
OKLAHOMA	68984	178668	99%	935	2422	1%	69919	181090
OREGON	96209	249181	99%	772	1999	1%	96981	251181
PENNSYLVANIA	45025	116615	99%	308	798	1%	45333	117412
RHODE ISLAND	1049	2717	86%	165	427	14%	1214	3144
SOUTH CAROLINA	30280	78425	98%	775	2007	2%	31055	80432
SOUTH DAKOTA	75956	196726	99%	1091	2826	1%	77047	199552
TENNESSEE	41336	107060	98%	878	2274	2%	42244	109412
TEXAS	262970	681092	98%	4369	11316	2%	267339	692407
UTAH	82381	213367	97%	2535	6566	3%	84916	219932
VERMONT	9274	24020	97%	335	868	3%	9609	24887
VIRGINIA	39841	103188	98%	976	2528	2%	40817	105716
WASHINGTON	66663	172657	98%	1529	3960	2%	68192	176617
WEST VIRGINIA	24084	62378	100%	97	251	<1%	24181	62629
WISCONSIN	54464	141062	97%	1690	4377	3%	56154	145439
WYOMING	97281	251958	99%	633	1639	1%	97914	253597
NATIONAL	3540897	9170915	98%	74186	192142	2%	3615123	9363161

STATE SUMMARIES OF WATER USE
AND RELATED DATA

CROPLAND AND IRRIGATED FARMLAND

STATE	TOTAL CROPLAND 1,000 ACRES			CHANGES IN CROPLAND PERCENT		CROPLAND HARVESTED 1,000 ACRES			IRRIGATED FARMLAND 1,000 ACRES		
	1975	1985	2000	1975-1985	1975-2000	1975	1985	2000	1975	1985	2000
ALABAMA	4573	4811	5417	5%	18%	2931	3273	4912	14	19	25
ALASKA	21	35	37	67%	76%	17	25	25	4	4	4
ARIZONA	1355	1316	1267	-3%	-6%	1165	1137	1194	1207	1112	1057
ARKANSAS	8401	8692	9026	3%	7%	7088	8010	7953	1108	1454	1703
CALIFORNIA	10636	10385	10107	-2%	-5%	8775	8993	8683	8495	9132	9854
COLORADO	11304	11321	11300	<1%	<1%	6032	7817	8363	3313	3156	3375
CONNECTICUT	236	216	187	-8%	-21%	171	181	174	12	13	14
DELAWARE	527	513	496	-3%	-6%	482	588	582	26	36	48
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	3115	3179	3209	2%	3%	2251	2315	2645	1755	2160	2466
GEORGIA	6146	6230	6109	1%	-1%	4377	4509	5049	133	193	288
HAWAII	321	320	320	<1%	<1%	321	320	320	142	147	150
IDAHO	6036	6022	5969	<1%	-1%	4489	4560	5148	2989	3351	3400
ILLINOIS	23429	23406	23323	<1%	<1%	21401	24230	23889	52	73	105
INDIANA	13302	13386	13249	1%	<1%	11432	13161	13192	29	39	54
IOWA	26315	26341	26430	<1%	<1%	21592	24360	24677	32	40	47
KANSAS	26840	28836	28914	7%	8%	19434	23485	25974	2044	2618	2823
KENTUCKY	6620	6740	6785	2%	2%	4059	4805	5388	22	31	42
LOUISIANA	5019	5692	5634	13%	12%	4438	4490	3869	648	756	808
MAINE	1137	1127	1119	-1%	-2%	483	657	642	6	9	14
MARYLAND	1628	1660	1613	2%	-1%	1500	1788	1743	34	50	69
MASSACHUSETTS	269	247	210	-8%	-22%	205	220	192	19	20	21
MICHIGAN	9176	9336	9334	2%	2%	5973	7163	8463	78	113	157
MINNESOTA	21824	22190	22533	2%	3%	17961	21195	21352	82	156	313
MISSISSIPPI	6843	7501	8348	10%	22%	5281	6791	5915	164	212	242
MISSOURI	16721	16824	17063	1%	2%	11861	11439	14087	162	212	251

STATE SUMMARIES OF WATER USE
AND RELATED DATA

CROPLAND AND IRRIGATED FARMLAND

STATE	TOTAL CROPLAND 1,000 ACRES			CHANGES IN CROPLAND PERCENT		CROPLAND HARVESTED 1,000 ACRES			IRRIGATED FARMLAND 1,000 ACRES		
	1975	1985	2000	1975-1985	1975-2000	1975	1985	2000	1975	1985	2000
MONTANA	14710	14698	14685	<1%	<1%	8162	9170	9159	2010	2967	2904
NEBRASKA	20277	20217	20214	<1%	<1%	16411	15685	16138	4315	4858	5118
NEVADA	598	831	824	39%	38%	528	803	803	828	737	773
NEW HAMPSHIRE	213	203	188	-5%	-12%	132	148	152	2	3	4
NEW JERSEY	746	669	603	-10%	-19%	581	657	576	105	141	184
NEW MEXICO	2140	2127	2112	-1%	-1%	1112	1350	1197	956	877	816
NEW YORK	5911	5838	6058	-1%	2%	4115	4604	5619	78	103	131
NORTH CAROLINA	6103	6132	6431	<1%	5%	4492	4628	5744	91	134	182
NORTH DAKOTA	27964	27914	27853	<1%	<1%	18064	22145	23057	94	126	230
OHIO	12243	12269	12192	<1%	<1%	9709	12262	12282	21	29	38
OKLAHOMA	13704	13702	13775	<1%	1%	8569	10371	10928	566	580	589
OREGON	5323	5290	5250	-1%	-1%	3026	3631	3749	1742	1987	2096
PENNSYLVANIA	5313	5255	5141	-1%	-3%	4315	5298	5198	21	28	36
RHODE ISLAND	30	27	21	-10%	-30%	23	26	21	2	2	2
SOUTH CAROLINA	3511	3516	4041	<1%	15%	2475	2744	3678	19	25	32
SOUTH DAKOTA	18392	18209	18027	-1%	-2%	14210	14791	15626	218	274	380
TENNESSEE	6607	6597	6667	<1%	1%	3979	4420	4813	17	21	26
TEXAS	33479	33352	33078	<1%	-1%	19443	25847	24238	7414	6886	6170
UTAH	1956	1980	1964	1%	<1%	1119	1392	1345	1056	979	1062
VERMONT	772	759	743	-2%	-4%	561	674	617	1	1	1
VIRGINIA	3910	3963	3888	1%	-1%	2546	2787	2859	46	69	94
WASHINGTON	7935	7902	7826	<1%	-1%	4679	4330	4473	1421	1809	2013
WEST VIRGINIA	1121	1142	1121	2%	<1%	606	713	704	2	3	4
WISCONSIN	11873	11945	11922	1%	<1%	9078	10070	10682	122	191	269
WYOMING	3046	3101	3089	2%	1%	1956	2396	2391	1731	1818	1874
NATIONAL	419671	423964	425712	1%	1%	303610	346454	360480	45448	49754	52358

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STEAM-ELECTRIC GENERATING PLANTS

STATE	NUCLEAR GENERATING PLANTS NUMBER			FOSSIL GENERATING PLANTS NUMBER			GENERATION W/ ONCE-THRU COOLING* PER CENT OF TOTAL PLANTS		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
ALABAMA	1	5	8	12	14	17	100%	68%	52%
ALASKA	0	0	0	4	8	12	75%	38%	25%
ARIZONA	0	1	2	13	13	9	0%	0%	0%
ARKANSAS	1	1	1	9	10	9	40%	36%	40%
CALIFORNIA	3	7	10	35	33	25	63%	65%	63%
COLORADO	0	1	3	13	16	14	38%	24%	12%
CONNECTICUT	2	2	4	9	7	5	100%	100%	33%
DELAWARE	0	1	1	4	4	4	75%	60%	40%
DISTRICT OF COLUMBIA	0	0	0	2	1	1	100%	100%	100%
FLORIDA	1	7	11	38	43	45	85%	74%	62%
GEORGIA	1	2	4	11	15	20	83%	65%	46%
HAWAII	0	0	0	5	5	8	100%	100%	100%
IDAHO	0	0	1	0	1	1	0%	0%	0%
ILLINOIS	3	9	22	31	35	35	79%	50%	12%
INDIANA	0	4	12	27	32	29	85%	53%	17%
IOWA	1	2	6	21	19	21	67%	67%	30%
KANSAS	0	1	3	20	22	17	20%	17%	10%
KENTUCKY	0	0	5	19	22	27	74%	50%	28%
LOUISIANA	0	2	5	26	27	20	42%	45%	44%
MAINE	1	1	1	3	3	2	100%	100%	33%
MARYLAND	1	2	7	10	10	9	100%	83%	25%
MASSACHUSETTS	2	2	2	17	13	14	95%	93%	50%
MICHIGAN	3	8	9	29	28	26	84%	61%	29%
MINNESOTA	2	2	5	20	21	13	73%	65%	22%
MISSISSIPPI	0	1	3	10	11	10	50%	33%	38%
MISSOURI	0	1	7	23	25	20	57%	50%	26%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STEAM-ELECTRIC GENERATING PLANTS

STATE	NUCLEAR GENERATING PLANTS NUMBER			FOSSIL GENERATING PLANTS NUMBER			GENERATION W/ ONCE-THRU COOLING* PER CENT OF TOTAL PLANTS		
	1975	1985	2000	1975	1985	2000	1975	1985	2000
MONTANA	0	0	0	4	5	4	75%	60%	25%
NEBRASKA	2	2	6	10	9	7	83%	91%	54%
NEVADA	0	2	3	6	10	9	0%	0%	0%
NEW HAMPSHIRE	0	1	2	3	3	2	100%	100%	75%
NEW JERSEY	1	5	8	14	13	11	93%	83%	47%
NEW MEXICO	0	0	2	13	12	10	15%	8%	0%
NEW YORK	4	8	16	29	29	17	100%	95%	64%
NORTH CAROLINA	1	6	10	13	13	14	64%	47%	38%
NORTH DAKOTA	0	0	0	5	8	15	60%	50%	27%
OHIO	0	4	12	40	33	27	85%	76%	28%
OKLAHOMA	0	1	3	16	19	15	19%	10%	5%
OREGON	1	2	3	1	2	3	50%	25%	33%
PENNSYLVANIA	2	7	12	36	30	20	79%	62%	16%
RHODE ISLAND	0	1	2	2	1	1	100%	100%	0%
SOUTH CAROLINA	2	5	9	11	11	11	54%	38%	25%
SOUTH DAKOTA	0	0	0	4	2	3	0%	0%	0%
TENNESSEE	0	5	8	8	8	10	100%	62%	44%
TEXAS	0	4	15	83	93	75	14%	12%	12%
UTAH	0	0	1	5	7	6	40%	0%	0%
VERMONT	1	1	2	1	1	0	50%	50%	0%
VIRGINIA	1	2	6	10	9	4	91%	73%	40%
WASHINGTON	1	3	6	3	2	2	75%	20%	12%
WEST VIRGINIA	0	0	2	12	13	12	67%	54%	7%
WISCONSIN	3	4	10	21	20	19	92%	67%	24%
WYOMING	0	0	0	5	7	8	20%	14%	12%
NATIONAL	41	125	270	766	798	718	65%	52%	30%

* ONE OR MORE GENERATING UNITS WITH ONCE-THROUGH COOLING

Appendix B
WATER USE BY SECTOR

STATE SUMMARIES OF WATER USE
AND RELATED DATA

TOTAL STATE WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	6433	7750	6120	20%	-21%	341	690	1264	102%	83%
ALASKA	342	460	776	35%	69%	67	212	459	216%	117%
ARIZONA	8509	8046	7382	-5%	-8%	4314	4347	4253	1%	-2%
ARKANSAS	3376	3895	3747	15%	-4%	1704	2020	2293	19%	14%
CALIFORNIA	39082	39949	40786	2%	2%	26101	27340	29158	5%	7%
COLORADO	12625	12437	11877	-1%	-5%	5410	5749	5991	6%	4%
CONNECTICUT	1634	1176	656	-28%	-44%	177	218	307	23%	41%
DELAWARE	775	706	514	-9%	-27%	68	88	127	29%	44%
DISTRICT OF COLUMBIA	261	242	400	-7%	65%	22	23	23	5%	<1%
FLORIDA	7304	8363	10313	14%	23%	3102	3747	4750	21%	27%
GEORGIA	4336	4685	3787	8%	-19%	449	786	1378	75%	75%
HAWAII	1903	1627	1340	-15%	-18%	572	608	661	6%	9%
IDAHO	19865	18773	14842	-5%	-21%	5034	5772	5742	15%	-1%
ILLINOIS	12538	9641	6706	-23%	-30%	739	1067	1709	44%	60%
INDIANA	11779	6628	3463	-44%	-48%	625	538	1494	50%	59%
IOWA	2212	2563	1855	16%	-28%	265	380	559	43%	47%
KANSAS	5234	5682	5705	9%	<1%	2839	3416	3539	20%	4%
KENTUCKY	3575	4290	3802	20%	-11%	296	423	776	43%	83%
LOUISIANA	9561	9460	10091	-1%	7%	2158	2328	2799	8%	20%
MAINE	852	578	487	-32%	-16%	102	162	298	59%	84%
MARYLAND	1627	1581	1382	-3%	-13%	164	242	455	48%	88%
MASSACHUSETTS	1503	1316	1140	-12%	-13%	127	164	270	29%	65%
MICHIGAN	11885	10252	4469	-14%	-56%	811	1095	1521	35%	39%
MINNESOTA	2602	2424	2080	-7%	-14%	358	519	857	45%	65%
MISSISSIPPI	1431	1672	11110	17%	564%	452	569	810	26%	42%
MISSOURI	4978	4934	3559	-1%	-28%	422	538	873	27%	62%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

TOTAL STATE WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	9649	15446	13817	60%	-11%	2952	4900	4903	66%	<1%
NEBRASKA	11471	13029	11671	14%	-10%	6115	7082	7031	16%	-1%
NEVADA	3286	3257	3250	-1%	<1%	1814	1920	2030	6%	6%
NEW HAMPSHIRE	374	291	317	-22%	9%	26	32	73	23%	128%
NEW JERSEY	2679	2430	2053	-9%	-16%	435	562	739	29%	31%
NEW MEXICO	4200	3856	3652	-8%	-5%	2646	2419	2321	-9%	-4%
NEW YORK	8603	11284	14061	31%	25%	987	954	1432	-3%	50%
NORTH CAROLINA	4442	5444	7183	23%	32%	370	668	1165	81%	74%
NORTH DAKOTA	648	1574	2094	143%	33%	228	314	562	38%	79%
OHIO	16860	13070	8064	-22%	-38%	886	1224	1888	38%	54%
OKLAHOMA	2048	2545	2483	24%	-2%	1246	1349	1529	8%	13%
OREGON	9141	9946	9266	9%	-7%	3226	4157	4248	29%	2%
PENNSYLVANIA	13698	9445	6678	-31%	-29%	920	1284	1985	40%	55%
RHODE ISLAND	154	108	113	-30%	5%	14	17	25	21%	47%
SOUTH CAROLINA	3522	1690	2565	-52%	52%	201	366	770	82%	110%
SOUTH DAKOTA	641	820	1009	28%	23%	380	567	756	49%	33%
TENNESSEE	7301	6293	4912	-14%	-22%	295	593	1094	101%	84%
TEXAS	22979	22280	21368	-3%	-4%	15896	15024	15137	-5%	1%
UTAH	5445	5054	4872	-7%	-4%	2049	2044	2177	<1%	7%
VERMONT	203	144	200	-29%	39%	29	33	80	14%	142%
VIRGINIA	3387	3173	2850	-6%	-10%	311	493	877	59%	78%
WASHINGTON	7992	8359	8744	5%	5%	3538	4341	4785	23%	10%
WEST VIRGINIA	5525	3333	1651	-40%	-50%	246	335	653	36%	95%
WISCONSIN	5794	4263	2471	-26%	-42%	347	499	866	44%	74%
WYOMING	9040	10908	9875	21%	-9%	2804	3530	3521	26%	<1%
NATIONAL	335306	327175	303606	-2%	-7%	104677	118150	133015	13%	13%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

AGRICULTURAL WATER USE

ALL AGRICULTURAL

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	44	56	70	27%	25%	41	52	66	27%	27%
ALASKA	4	4	4	<1%	<1%	3	3	3	<1%	<1%
ARIZONA	7747	7097	6181	-8%	-13%	3933	3877	3649	-1%	-6%
ARKANSAS	2292	2529	2639	10%	4%	1566	1805	1950	15%	8%
CALIFORNIA	33837	33936	33893	<1%	<1%	24013	24798	25978	3%	5%
COLORADO	11679	11492	10629	-2%	-8%	5203	5466	5488	5%	<1%
CONNECTICUT	13	11	13	-15%	18%	10	8	9	-20%	12%
DELAWARE	22	31	40	41%	29%	17	23	30	35%	30%
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	3193	3612	3996	13%	11%	2557	2890	3204	13%	11%
GEORGIA	194	272	347	40%	28%	155	218	282	41%	29%
HAWAII	1449	1226	951	-15%	-22%	476	481	473	1%	-2%
IDAHO	19364	18376	14411	-5%	-22%	4922	5626	5528	14%	-2%
ILLINOIS	97	142	169	46%	19%	87	128	154	47%	20%
INDIANA	61	82	98	34%	20%	56	75	90	34%	20%
IOWA	154	216	243	40%	12%	140	206	235	47%	14%
KANSAS	4059	4738	4551	17%	-4%	2636	3136	3114	19%	-1%
KENTUCKY	53	76	95	43%	25%	48	69	86	44%	25%
LOUISIANA	1963	1662	1444	-15%	-13%	1296	1161	1080	-10%	-7%
MAINE	7	8	10	14%	25%	6	6	7	<1%	17%
MARYLAND	39	52	68	33%	31%	31	40	52	29%	30%
MASSACHUSETTS	20	19	20	-5%	5%	16	14	15	-12%	7%
MICHIGAN	99	133	169	34%	27%	83	114	146	37%	28%
MINNESOTA	147	254	432	73%	70%	131	223	369	70%	65%
MISSISSIPPI	383	429	443	12%	3%	284	329	352	16%	7%
MISSOURI	263	293	312	11%	6%	203	235	257	16%	9%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

AGRICULTURAL WATER USE

ALL AGRICULTURAL

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	9129	15018	13399	65%	-11%	2823	4751	4717	68%	-1%
NEBRASKA	9618	10762	10076	12%	-6%	5989	6968	6831	16%	-2%
NEVADA	3023	2895	2835	-4%	-2%	1715	1750	1854	2%	6%
NEW HAMPSHIRE	3	3	4	<1%	33%	3	2	3	-33%	50%
NEW JERSEY	121	161	209	33%	30%	90	118	154	31%	31%
NEW MEXICO	3673	3269	2974	-11%	-9%	2432	2176	2036	-11%	-6%
NEW YORK	105	126	152	20%	21%	87	103	122	18%	18%
NORTH CAROLINA	111	147	189	32%	29%	89	116	154	30%	33%
NORTH DAKOTA	242	322	513	33%	59%	169	242	409	43%	69%
OHIO	50	58	63	16%	9%	46	53	58	15%	9%
OKLAHOMA	1176	1197	1178	2%	-2%	972	983	972	1%	-1%
OREGON	8211	9178	8377	12%	-9%	3097	3949	3855	28%	-2%
PENNSYLVANIA	56	57	65	2%	14%	50	48	56	-4%	17%
RHODE ISLAND	1	1	2	<1%	100%	1	1	1	<1%	<1%
SOUTH CAROLINA	36	31	37	-14%	19%	30	24	29	-20%	21%
SOUTH DAKOTA	508	691	863	36%	25%	346	531	712	53%	34%
TENNESSEE	48	54	61	12%	13%	45	50	56	11%	12%
TEXAS	17525	15593	13189	-11%	-15%	14228	12723	10883	-11%	-14%
UTAH	4830	4349	4021	-10%	-8%	1810	1722	1754	-5%	2%
VERMONT	8	8	8	<1%	<1%	7	8	8	14%	<1%
VIRGINIA	64	85	108	33%	27%	53	69	87	30%	26%
WASHINGTON	5723	6717	6894	17%	3%	3165	3792	3867	20%	2%
WEST VIRGINIA	7	2	2	-71%	<1%	7	1	2	-86%	100%
WISCONSIN	170	232	281	36%	21%	151	203	246	34%	21%
WYOMING	8517	10293	9352	21%	-9%	2710	3400	3381	25%	-1%
NATIONAL	160141	167997	156078	5%	-7%	88028	94766	94864	8%	<1%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

IRRIGATION WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	11	15	19	36%	27%	8	11	15	38%	36%
ALASKA	4	4	4	<1%	<1%	3	3	3	<1%	<1%
ARIZONA	7702	7046	6122	-9%	-13%	3888	3827	3590	-2%	-6%
ARKANSAS	2262	2497	2601	10%	4%	1535	1773	1912	16%	8%
CALIFORNIA	33741	33809	33746	<1%	<1%	23917	24670	25831	3%	5%
COLORADO	11618	11429	10549	-2%	-8%	5143	5402	5408	5%	<1%
CONNECTICUT	10	11	12	10%	9%	7	8	9	14%	12%
DELAWARE	20	29	39	45%	34%	15	21	29	40%	38%
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	3159	3581	3961	13%	11%	2523	2859	3169	13%	11%
GEORGIA	162	227	291	40%	28%	123	173	226	41%	31%
HAWAII	1447	1226	951	-15%	-22%	474	481	473	1%	-2%
IDAHO	19333	18338	14365	-5%	-22%	4891	5588	5483	14%	-2%
ILLINOIS	53	75	102	42%	36%	42	61	87	45%	43%
INDIANA	28	42	56	50%	33%	23	34	48	48%	41%
IOWA	52	54	60	4%	11%	38	43	51	13%	19%
KANSAS	3972	4619	4409	16%	-5%	2548	3016	2972	18%	-1%
KENTUCKY	22	32	44	45%	38%	17	25	35	47%	40%
LOUISIANA	1944	1635	1413	-16%	-14%	1277	1133	1049	-11%	-7%
MAINE	3	6	7	100%	17%	2	4	5	100%	25%
MARYLAND	29	44	61	52%	39%	22	33	45	50%	36%
MASSACHUSETTS	18	19	20	6%	5%	14	14	15	<1%	7%
MICHIGAN	76	109	145	43%	33%	60	90	122	50%	36%
MINNESOTA	84	164	338	95%	106%	68	133	275	96%	107%
MISSISSIPPI	354	391	394	10%	1%	256	291	304	14%	4%
MISSOURI	198	218	229	10%	5%	138	160	174	16%	9%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

IRRIGATION WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	9086	14958	13328	65%	-11%	2780	4691	4646	69%	-1%
NEBRASKA	9511	10616	9907	12%	-7%	5882	6823	6662	16%	-2%
NEVADA	3002	2895	2835	-4%	-2%	1694	1750	1854	3%	6%
NEW HAMPSHIRE	2	3	4	50%	33%	1	2	3	100%	50%
NEW JERSEY	119	161	209	35%	30%	87	118	154	36%	31%
NEW MEXICO	3636	3232	2931	-11%	-9%	2396	2139	1993	-11%	-7%
NEW YORK	69	90	115	30%	28%	51	66	85	29%	29%
NORTH CAROLINA	88	125	164	42%	31%	66	95	129	44%	36%
NORTH DAKOTA	203	279	457	37%	64%	129	198	354	53%	79%
OHIO	17	22	29	29%	32%	13	17	24	31%	41%
OKLAHOMA	1085	1093	1052	1%	-4%	881	879	846	<1%	-4%
OREGON	8194	9159	8355	12%	-9%	3081	3930	3833	28%	-2%
PENNSYLVANIA	21	29	37	38%	28%	16	20	27	25%	35%
RHODE ISLAND	1	1	2	<1%	100%	1	1	1	<1%	<1%
SOUTH CAROLINA	23	30	35	30%	17%	17	22	28	29%	27%
SOUTH DAKOTA	454	588	744	30%	27%	292	429	593	47%	38%
TENNESSEE	15	18	20	20%	11%	12	13	16	8%	23%
TEXAS	17257	15320	12864	-11%	-16%	13960	12451	10558	-11%	-15%
UTAH	4807	4349	4021	-10%	-8%	1787	1722	1754	-4%	2%
VERMONT	1	1	1	<1%	<1%	<1	1	1	<1%	<1%
VIRGINIA	44	65	87	48%	34%	33	49	67	48%	37%
WASHINGTON	5707	6697	6871	17%	3%	3149	3772	3844	20%	2%
WEST VIRGINIA	1	2	2	100%	<1%	1	1	2	<1%	100%
WISCONSIN	93	142	193	53%	36%	74	113	158	53%	40%
WYOMING	8490	10268	9325	21%	-9%	2683	3376	3355	26%	-1%
NATIONAL	158229	165764	153527	5%	-7%	86117	92533	92313	7%	<1%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

LIVESTOCK WATER USE

TOTAL WITHDRAWAL AND CONSUMPTION

STATES	MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000
ALABAMA	33	41	51	24%	24%
ALASKA	<1	0	0	N/A	N/A
ARIZONA	45	50	59	11%	18%
ARKANSAS	31	32	39	3%	22%
CALIFORNIA	96	127	147	32%	16%
COLORADO	60	64	80	7%	25%
CONNECTICUT	2	<1	0	N/A	N/A
DELAWARE	2	1	1	-50%	<1%
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A
FLORIDA	34	31	35	-9%	13%
GEORGIA	32	45	56	41%	24%
HAWAII	2	0	0	N/A	N/A
IDAHO	31	38	45	23%	18%
ILLINOIS	44	67	67	52%	<1%
INDIANA	33	41	42	24%	2%
IOWA	102	163	184	60%	13%
KANSAS	88	119	142	35%	19%
KENTUCKY	31	44	51	42%	16%
LOUISIANA	19	27	31	42%	15%
MAINE	4	2	2	-50%	<1%
MARYLAND	9	8	8	-11%	<1%
MASSACHUSETTS	3	0	0	N/A	N/A
MICHIGAN	23	24	24	4%	<1%
MINNESOTA	63	90	94	43%	4%
MISSISSIPPI	29	38	48	31%	26%
MISSOURI	65	75	83	15%	11%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

LIVESTOCK WATER USE

STATES	TOTAL WITHDRAWAL AND CONSUMPTION				
	MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000
MONTANA	44	61	71	39%	16%
NEBRASKA	108	145	168	34%	16%
NEVADA	21	0	0	N/A	N/A
NEW HAMPSHIRE	1	0	0	N/A	N/A
NEW JERSEY	2	0	0	N/A	N/A
NEW MEXICO	36	37	43	3%	16%
NEW YORK	36	37	37	3%	<1%
NORTH CAROLINA	23	21	25	-9%	19%
NORTH DAKOTA	40	43	56	8%	30%
OHIO	33	36	34	9%	-6%
OKLAHOMA	92	104	126	13%	21%
OREGON	16	19	22	19%	16%
PENNSYLVANIA	34	28	28	-18%	<1%
RHODE ISLAND	<1	0	0	N/A	N/A
SOUTH CAROLINA	13	2	1	-85%	-50%
SOUTH DAKOTA	54	102	119	89%	17%
TENNESSEE	33	36	41	9%	14%
TEXAS	268	272	325	1%	19%
UTAH	23	0	0	N/A	N/A
VERMONT	7	7	7	<1%	<1%
VIRGINIA	20	20	21	<1%	5%
WASHINGTON	16	20	23	25%	15%
WEST VIRGINIA	6	0	0	N/A	N/A
WISCONSIN	77	89	88	16%	-1%
WYOMING	27	25	27	-7%	8%
NATIONAL	1912	2233	2551	17%	14%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STEAM-ELECTRIC GENERATING WATER USE

FRESHWATER

STATES	TOTAL WITHDRAWALS					TOTAL CONSUMPTION				
	BILLION GALLONS PER DAY			CHANGE PER CENT		BILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	4472	6275	4646	40%	-26%	33	222	506	573%	128%
ALASKA	26	17	10	-35%	-41%	0	2	5	N/A	150%
ARIZONA	38	93	113	145%	22%	36	83	91	131%	10%
ARKANSAS	427	774	446	81%	-42%	14	45	55	221%	22%
CALIFORNIA	42	158	367	276%	132%	25	101	242	304%	140%
COLORADO	149	153	353	3%	131%	23	70	219	204%	213%
CONNECTICUT	700	588	62	-16%	-89%	8	7	41	-12%	486%
DELAWARE	486	473	280	-3%	-41%	3	3	2	<1%	-33%
DISTRICT OF COLUMBIA	58	26	185	-55%	612%	2	2	1	<1%	-50%
FLORIDA	1979	2139	3090	8%	44%	17	56	170	229%	204%
GEORGIA	2475	2874	1757	16%	-39%	41	181	396	341%	119%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	0	9	29	N/A	222%	0	6	19	N/A	217%
ILLINOIS	8041	6048	2969	-25%	-51%	94	269	747	186%	178%
INDIANA	6510	4426	1505	-32%	-66%	55	174	476	216%	174%
IOWA	1241	1736	991	40%	-43%	16	39	142	144%	264%
KANSAS	493	329	491	-33%	49%	26	74	178	185%	141%
KENTUCKY	2606	3470	2912	33%	-16%	54	104	349	93%	236%
LOUISIANA	2868	5076	5982	77%	18%	39	83	159	113%	92%
MAINE	9	19	8	111%	-58%	0	0	5	N/A	N/A
MARYLAND	436	368	122	-16%	-67%	2	8	81	300%	912%
MASSACHUSETTS	339	287	70	-15%	-76%	3	2	46	-33%	2200%
MICHIGAN	6899	7379	1662	7%	-77%	69	192	405	178%	111%
MINNESOTA	1462	1287	672	-12%	-48%	35	61	193	74%	216%
MISSISSIPPI	265	632	10029	138%	1487%	8	22	111	175%	405%
MISSOURI	3701	3718	2217	<1%	-40%	36	80	322	122%	302%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

STEAM-ELECTRIC GENERATING WATER USE

FRESHWATER

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	92	141	127	53%	-10%	3	34	51	1033%	50%
NEBRASKA	1426	1918	1224	35%	-36%	10	29	96	190%	231%
NEVADA	32	109	90	241%	-17%	28	85	66	204%	-22%
NEW HAMPSHIRE	190	138	158	-27%	14%	2	1	24	-50%	2300%
NEW JERSEY	575	535	2	-7%	-100%	3	4	1	33%	-75%
NEW MEXICO	64	62	34	-3%	-45%	26	33	24	27%	-27%
NEW YORK	3758	7405	9945	97%	34%	25	58	309	132%	433%
NORTH CAROLINA	2892	4019	5544	39%	38%	39	205	439	426%	114%
NORTH DAKOTA	302	1152	1476	281%	28%	6	20	97	233%	385%
OHIO	10803	9651	4823	-11%	-50%	100	257	654	157%	154%
OKLAHOMA	230	688	547	199%	-20%	40	92	224	130%	143%
OREGON	22	88	207	300%	135%	0	28	97	N/A	246%
PENNSYLVANIA	5902	5594	3230	-5%	-42%	136	280	614	106%	119%
RHODE ISLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH CAROLINA	2558	756	1530	-70%	102%	35	137	353	291%	158%
SOUTH DAKOTA	5	5	8	<1%	60%	3	3	5	<1%	67%
TENNESSEE	4865	4968	3522	2%	-29%	33	210	466	536%	122%
TEXAS	758	1050	2317	39%	121%	120	302	1029	152%	241%
UTAH	40	63	104	58%	65%	8	51	78	538%	53%
VERMONT	25	37	77	48%	108%	8	8	51	<1%	538%
VIRGINIA	1434	1648	1160	15%	-30%	14	47	149	236%	217%
WASHINGTON	238	106	344	-55%	225%	13	70	228	438%	226%
WEST VIRGINIA	2396	2367	802	-1%	-66%	74	88	236	19%	168%
WISCONSIN	4123	3041	1232	-26%	-59%	29	72	241	148%	235%
WYOMING	283	350	221	24%	-37%	19	48	44	153%	-8%
NATIONAL	88735	94245	79692	6%	-15%	1413	4048	10537	186%	160%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

ALL MANUFACTURING

STATES	TOTAL WITHDRAWALS					TOTAL CONSUMPTION				
	MILLION GALLONS PER DAY			CHANGE PER CENT		MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	1427	849	736	-41%	-13%	186	318	575	71%	81%
ALASKA	133	90	83	-32%	-8%	26	39	66	50%	69%
ARIZONA	57	60	79	5%	32%	37	24	55	-35%	129%
ARKANSAS	351	245	243	-30%	-1%	46	84	186	83%	121%
CALIFORNIA	779	857	838	10%	-2%	235	344	577	46%	68%
COLORADO	209	128	110	-38%	-14%	33	40	78	21%	95%
CONNECTICUT	612	215	158	-65%	-27%	51	76	108	49%	42%
DELAWARE	193	116	90	-40%	-22%	28	38	65	36%	71%
DISTRICT OF COLUMBIA	1	2	3	100%	50%	1	1	2	<1%	100%
FLORIDA	708	872	937	23%	7%	123	303	728	146%	140%
GEORGIA	905	639	579	-29%	-9%	72	173	440	140%	154%
HAWAII	250	186	141	-26%	-24%	34	60	111	76%	85%
IDAHO	283	177	163	-37%	-8%	52	81	128	56%	58%
ILLINOIS	2162	878	656	-59%	-25%	280	352	447	26%	27%
INDIANA	4512	1301	876	-71%	-33%	328	463	663	41%	43%
IOWA	426	179	137	-58%	-23%	34	55	95	62%	73%
KANSAS	233	130	118	-44%	-9%	43	63	88	47%	40%
KENTUCKY	546	294	265	-46%	-10%	88	123	195	40%	59%
LOUISIANA	3531	1290	1036	-63%	-20%	254	427	818	68%	92%
MAINE	699	418	327	-40%	-22%	68	129	257	90%	99%
MARYLAND	575	462	313	-20%	-32%	72	125	238	74%	90%
MASSACHUSETTS	513	292	224	-43%	-23%	64	97	153	52%	58%
MICHIGAN	3616	1259	893	-65%	-29%	444	537	668	21%	24%
MINNESOTA	407	209	175	-49%	-16%	60	82	119	37%	45%
MISSISSIPPI	497	291	280	-41%	-4%	55	100	216	82%	116%
MISSOURI	353	166	154	-53%	-7%	37	54	99	46%	83%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

ALL MANUFACTURING

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	215	66	47	-69%	-29%	39	25	37	-36%	48%
NEBRASKA	153	61	54	-60%	-11%	56	23	37	-59%	61%
NEVADA	27	9	8	-67%	-11%	6	5	6	-17%	20%
NEW HAMPSHIRE	94	50	41	-47%	-18%	8	14	28	75%	100%
NEW JERSEY	928	497	405	-46%	-19%	116	172	273	48%	59%
NEW MEXICO	13	27	54	108%	100%	16	22	42	38%	91%
NEW YORK	2108	769	573	-64%	-25%	383	234	370	-39%	58%
NORTH CAROLINA	734	432	413	-41%	-4%	52	118	294	127%	149%
NORTH DAKOTA	11	7	7	-36%	<1%	3	3	5	<1%	67%
OHIO	4456	1549	1078	-65%	-30%	457	581	790	27%	36%
OKLAHOMA	158	105	116	-34%	10%	43	57	85	33%	49%
OREGON	574	312	258	-46%	-17%	51	95	197	86%	107%
PENNSYLVANIA	6120	1935	1268	-68%	-34%	460	636	946	38%	49%
RHODE ISLAND	86	29	24	-66%	-17%	7	9	15	29%	67%
SOUTH CAROLINA	457	369	359	-19%	-3%	45	103	271	129%	163%
SOUTH DAKOTA	20	11	10	-45%	-9%	2	3	6	50%	100%
TENNESSEE	1886	661	585	-65%	-11%	131	229	445	75%	94%
TEXAS	2072	2739	2470	32%	-10%	514	884	1932	72%	119%
UTAH	75	84	90	12%	7%	21	36	71	71%	97%
VERMONT	92	10	8	-89%	-20%	1	2	5	100%	150%
VIRGINIA	1218	643	600	-47%	-7%	124	232	461	87%	99%
WASHINGTON	1355	808	689	-40%	-15%	232	342	538	47%	57%
WEST VIRGINIA	2747	538	351	-80%	-35%	66	133	274	102%	106%
WISCONSIN	1027	461	363	-55%	-21%	75	120	265	60%	121%
WYOMING	21	20	9	-5%	-55%	8	8	7	<1%	-12%
NATIONAL	50624	23797	19494	-53%	-18%	5667	8274	14575	46%	76%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PRIMARY METALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	284	200	153	-30%	-24%	49	75	121	53%	61%
ALASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARIZONA	4	8	6	100%	-25%	12	3	5	-75%	67%
ARKANSAS	18	4	3	-78%	-25%	2	2	2	<1%	<1%
CALIFORNIA	35	38	31	9%	-18%	14	18	23	29%	28%
COLORADO	74	44	31	-41%	-30%	7	13	24	86%	85%
CONNECTICUT	96	27	15	-72%	-44%	5	7	11	40%	57%
DELAWARE	1	6	4	500%	-33%	3	3	3	<1%	<1%
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	1	1	2	<1%	100%	0	1	1	N/A	<1%
GEORGIA	5	6	7	20%	17%	1	2	5	100%	150%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	24	8	5	-67%	-38%	1	2	4	100%	100%
ILLINOIS	1148	391	225	-66%	-42%	146	165	178	13%	8%
INDIANA	3628	977	591	-73%	-40%	179	276	470	54%	70%
IOWA	26	10	6	-62%	-40%	3	4	5	33%	25%
KANSAS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KENTUCKY	84	64	55	-24%	-14%	39	42	44	8%	5%
LOUISIANA	517	96	58	-81%	-40%	27	34	46	26%	35%
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	179	291	175	63%	-40%	42	74	139	76%	88%
MASSACHUSETTS	24	6	4	-75%	-33%	2	2	3	<1%	50%
MICHIGAN	1742	524	319	-70%	-39%	295	297	253	1%	-15%
MINNESOTA	53	21	13	-60%	-38%	7	8	10	14%	25%
MISSISSIPPI	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSOURI	61	18	11	-70%	-39%	5	7	8	40%	14%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PRIMARY METALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	116	27	16	-77%	-41%	5	8	13	60%	62%
NEBRASKA	1	1	2	<1%	100%	0	1	2	N/A	100%
NEVADA	22	6	4	-73%	-33%	3	3	3	<1%	<1%
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	36	30	18	-17%	-40%	14	15	14	7%	-7%
NEW MEXICO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW YORK	576	239	142	-59%	-41%	307	96	113	-69%	18%
NORTH CAROLINA	2	2	1	<1%	-50%	0	1	1	N/A	<1%
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	2856	910	526	-68%	-42%	335	379	417	13%	10%
OKLAHOMA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OREGON	31	8	5	-74%	-38%	4	4	4	<1%	<1%
PENNSYLVANIA	4073	1186	660	-71%	-44%	283	379	523	34%	38%
RHODE ISLAND	18	5	3	-72%	-40%	1	2	2	100%	<1%
SOUTH CAROLINA	5	2	2	-60%	<1%	0	1	1	N/A	<1%
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	50	20	14	-60%	-30%	2	4	11	100%	175%
TEXAS	661	281	182	-57%	-35%	87	108	144	24%	33%
UTAH	53	58	63	9%	9%	9	23	50	156%	117%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	5	3	3	-40%	<1%	1	1	2	<1%	100%
WASHINGTON	143	51	31	-64%	-39%	13	17	24	31%	41%
WEST VIRGINIA	863	200	106	-77%	-47%	26	47	84	81%	79%
WISCONSIN	41	17	11	-59%	-35%	3	5	8	67%	60%
WYOMING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	17556	5786	3503	-67%	-39%	1932	2129	2771	10%	30%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

CHEMICALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	450	149	143	-67%	-4%	65	95	113	46%	19%
ALASKA	3	4	5	33%	25%	2	3	4	50%	33%
ARIZONA	2	5	11	150%	120%	2	4	9	100%	125%
ARKANSAS	40	16	14	-60%	-12%	13	16	11	23%	-31%
CALIFORNIA	49	79	83	61%	5%	20	35	61	75%	74%
COLORADO	17	11	10	-35%	-9%	12	4	8	-67%	100%
CONNECTICUT	34	36	29	6%	-19%	13	19	22	46%	16%
DELAWARE	158	57	48	-64%	-16%	9	17	35	89%	106%
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	219	351	406	60%	16%	71	146	323	106%	121%
GEORGIA	187	95	90	-49%	-5%	19	35	71	84%	103%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	54	43	43	-20%	<1%	21	30	34	43%	13%
ILLINOIS	235	108	98	-54%	-9%	41	60	72	46%	20%
INDIANA	346	88	77	-75%	-12%	66	85	58	29%	-32%
IOWA	51	27	24	-47%	-11%	5	10	19	100%	90%
KANSAS	152	82	69	-46%	-16%	24	38	55	58%	45%
KENTUCKY	276	121	104	-56%	-14%	27	47	82	74%	74%
LOUISIANA	2092	653	560	-69%	-14%	121	225	445	86%	98%
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	170	40	31	-76%	-22%	5	10	24	100%	140%
MASSACHUSETTS	49	26	22	-47%	-15%	8	12	16	50%	33%
MICHIGAN	897	185	145	-79%	-22%	21	47	112	124%	138%
MINNESOTA	2	3	4	50%	33%	1	2	3	100%	50%
MISSISSIPPI	137	59	48	-57%	-19%	12	21	38	75%	81%
MISSOURI	120	60	55	-50%	-8%	9	18	42	100%	133%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

CHEMICALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEBRASKA	104	30	24	-71%	-20%	47	10	19	-79%	90%
NEVADA	4	2	2	-50%	<1%	2	1	1	-50%	<1%
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	332	205	170	-38%	-17%	43	74	126	72%	70%
NEW MEXICO	1	1	1	<1%	<1%	1	0	1	N/A	N/A
NEW YORK	529	117	90	-78%	-23%	22	39	65	77%	67%
NORTH CAROLINA	105	56	60	-47%	7%	12	22	45	83%	105%
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	585	223	190	-62%	-15%	30	65	147	117%	126%
OKLAHOMA	3	5	7	67%	40%	2	3	5	50%	67%
OREGON	50	8	6	-84%	-25%	2	3	5	50%	67%
PENNSYLVANIA	958	240	189	-75%	-21%	47	82	146	74%	78%
RHODE ISLAND	26	5	5	-81%	<1%	1	1	4	<1%	300%
SOUTH CAROLINA	90	63	67	-30%	6%	7	18	51	157%	183%
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	1407	358	298	-75%	-17%	78	135	234	73%	73%
TEXAS	607	1517	1407	150%	-7%	169	406	1118	140%	175%
UTAH	1	4	4	300%	<1%	2	2	3	<1%	50%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	733	250	209	-66%	-16%	70	111	164	59%	48%
WASHINGTON	157	27	19	-83%	-30%	4	7	14	75%	100%
WEST VIRGINIA	1852	316	223	-83%	-29%	34	77	176	126%	129%
WISCONSIN	482	17	15	-79%	-12%	21	6	11	-71%	83%
WYOHING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	13366	5742	5105	-57%	-11%	1181	2041	3992	73%	96%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PAPER

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	ALABAMA	575	443	388	-23%	-12%	56	127	310	127%
ALASKA	124	83	75	-33%	-10%	24	36	60	50%	67%
ARIZONA	14	19	26	36%	37%	3	7	20	133%	186%
ARKANSAS	196	162	161	-17%	-1%	8	38	128	375%	237%
CALIFORNIA	155	211	239	36%	13%	30	74	189	147%	155%
COLORADO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
CONNECTICUT	20	18	16	-10%	-11%	1	5	13	400%	160%
DELAWARE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	364	416	400	14%	-4%	26	102	319	292%	213%
GEORGIA	527	450	400	-15%	-11%	21	99	318	371%	221%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	74	31	25	-58%	-19%	6	10	20	67%	100%
ILLINOIS	68	40	33	-41%	-18%	5	11	25	120%	127%
INDIANA	18	16	15	-11%	-6%	3	5	11	67%	120%
IOWA	5	2	2	-60%	<1%	1	1	1	<1%	<1%
KANSAS	7	7	8	<1%	14%	1	3	6	200%	100%
KENTUCKY	42	33	33	-21%	<1%	3	9	26	200%	189%
LOUISIANA	314	225	205	-28%	-9%	35	72	163	106%	126%
MAINE	652	395	309	-39%	-22%	58	118	246	103%	108%
MARYLAND	114	59	48	-48%	-19%	11	19	38	73%	100%
MASSACHUSETTS	155	61	42	-61%	-31%	7	15	32	114%	113%
MICHIGAN	324	176	132	-46%	-25%	38	62	105	63%	69%
MINNESOTA	220	107	85	-51%	-21%	28	42	66	50%	57%
MISSISSIPPI	170	165	172	-3%	4%	24	55	137	129%	149%
MISSOURI	3	4	6	33%	50%	0	1	4	N/A	300%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PAPER

STATES	TOTAL WITHDRAWALS			CHANGE PER CENT		TOTAL CONSUMPTION			CHANGE PER CENT	
	MILLION GALLONS PER DAY					MILLION GALLONS PER DAY				
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	26	11	9	-58%	-18%	20	4	7	-80%	75%
NEBRASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEVADA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW HAMPSHIRE	63	36	27	-43%	-25%	5	10	21	100%	110%
NEW JERSEY	98	75	68	-23%	-9%	7	20	52	186%	160%
NEW MEXICO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW YORK	337	179	133	-47%	-26%	10	38	104	280%	174%
NORTH CAROLINA	370	219	200	-41%	-9%	13	49	159	277%	224%
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	153	97	81	-37%	-16%	16	30	62	88%	107%
OKLAHOMA	97	41	33	-58%	-20%	18	23	27	28%	17%
OREGON	335	196	156	-41%	-20%	19	50	124	163%	148%
PENNSYLVANIA	276	173	145	-37%	-16%	22	49	114	123%	133%
RHODE ISLAND	2	1	1	-50%	<1%	0	0	1	N/A	N/A
SOUTH CAROLINA	228	217	212	-5%	-2%	16	53	169	231%	219%
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	283	204	196	-28%	-4%	36	69	156	92%	126%
TEXAS	246	217	218	-12%	<1%	38	77	173	103%	125%
UTAH	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VERMONT	14	5	3	-64%	-80%	0	1	3	N/A	200%
VIRGINIA	252	254	270	1%	6%	17	68	215	300%	216%
WASHINGTON	901	637	555	-29%	-13%	189	282	442	49%	57%
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	574	294	229	-49%	-22%	18	63	181	250%	187%
WYOMING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	8396	5979	5356	-29%	-10%	833	1797	4247	116%	136%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

FOOD ETC.

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	9	5	4	-44%	-20%	0	1	2	N/A	100%
ALASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARIZONA	18	9	8	-50%	-11%	14	4	5	-71%	25%
ARKANSAS	30	13	10	-57%	-23%	2	3	6	50%	100%
CALIFORNIA	188	149	120	-21%	-19%	45	57	80	27%	40%
COLORADO	61	41	38	-33%	-7%	4	10	27	150%	170%
CONNECTICUT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DELAWARE	12	5	4	-58%	-20%	2	2	2	<1%	<1%
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	89	66	60	-26%	-9%	10	20	44	100%	120%
GEORGIA	38	19	16	-50%	-16%	3	4	9	33%	125%
HAWAII	245	179	134	-27%	-25%	31	56	106	81%	89%
IDAHO	58	33	25	-43%	-24%	3	8	19	167%	138%
ILLINOIS	261	115	83	-56%	-28%	30	38	53	27%	39%
INDIANA	51	25	20	-51%	-20%	15	15	12	<1%	-20%
IOWA	239	110	77	-54%	-30%	20	32	56	60%	75%
KANSAS	18	8	6	-56%	-25%	2	3	3	50%	<1%
KENTUCKY	32	21	17	-34%	-19%	6	8	11	33%	38%
LOUISIANA	177	94	63	-47%	-33%	14	25	48	79%	92%
MAINE	30	12	8	-60%	-33%	7	7	5	<1%	-29%
MARYLAND	46	32	23	-30%	-28%	4	8	15	100%	88%
MASSACHUSETTS	19	18	14	-5%	-22%	2	4	8	100%	100%
MICHIGAN	55	27	22	-51%	-19%	7	9	13	29%	44%
MINNESOTA	83	42	31	-49%	-26%	14	17	20	21%	18%
MISSISSIPPI	14	6	5	-57%	-17%	1	2	3	100%	50%
MISSOURI	65	35	26	-46%	-26%	6	9	16	50%	78%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

FOOD ETC.

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	17	12	9	-29%	-25%	6	6	7	<1%	17%
NEBRASKA	35	21	17	-40%	-19%	7	9	11	29%	22%
NEVADA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	65	44	35	-32%	-20%	14	17	21	21%	24%
NEW MEXICO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW YORK	72	56	44	-22%	-21%	14	18	24	29%	33%
NORTH CAROLINA	19	9	8	-53%	-11%	2	3	4	50%	33%
NORTH DAKOTA	8	4	3	-50%	-25%	2	2	2	<1%	<1%
OHIO	56	35	30	-38%	-14%	8	11	16	38%	45%
OKLAHOMA	7	6	7	-14%	17%	0	1	4	N/A	300%
OREGON	22	12	10	-45%	-17%	2	3	6	50%	100%
PENNSYLVANIA	135	65	47	-52%	-28%	22	25	29	14%	16%
RHODE ISLAND	11	3	2	-73%	-33%	1	1	1	<1%	<1%
SOUTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH DAKOTA	20	11	9	-45%	-18%	2	3	6	50%	100%
TENNESSEE	45	21	16	-53%	-24%	4	6	10	50%	67%
TEXAS	80	64	58	-20%	-9%	16	23	40	44%	74%
UTAH	10	9	8	-10%	-11%	4	4	6	<1%	50%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	10	8	8	-20%	<1%	1	2	4	100%	100%
WASHINGTON	47	30	23	-36%	-23%	7	10	16	43%	60%
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	142	54	37	-62%	-31%	11	15	24	36%	60%
WYOMING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	2639	1528	1185	-42%	-22%	365	501	794	37%	58%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PETROLEUM

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ALASKA	1	1	1	<1%	<1%	0	0	1	N/A	N/A
ARIZONA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARKANSAS	21	11	9	-48%	-18%	11	10	7	-9%	-30%
CALIFORNIA	123	150	102	22%	-32%	62	65	81	5%	25%
COLORADO	7	4	4	-43%	<1%	3	3	3	<1%	<1%
CONNECTICUT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DELAWARE	9	41	27	356%	-34%	12	14	21	17%	50%
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
GEORGIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
HAWAII	5	6	6	20%	<1%	3	3	4	<1%	33%
IDAHO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ILLINOIS	70	57	55	-19%	-4%	27	31	44	15%	42%
INDIANA	251	54	35	-78%	-35%	29	28	28	-3%	<1%
IOWA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KANSAS	21	20	22	-5%	10%	13	14	18	8%	29%
KENTUCKY	48	20	16	-58%	-20%	7	8	13	14%	62%
LOUISIANA	420	205	136	-51%	-34%	54	67	109	24%	63%
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MASSACHUSETTS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MICHIGAN	35	24	16	-31%	-33%	6	8	13	33%	62%
MINNESOTA	10	8	9	-20%	12%	5	5	7	<1%	40%
MISSISSIPPI	16	24	21	50%	-12%	10	11	17	10%	55%
MISSOURI	17	1	1	-94%	<1%	4	0	1	N/A	N/A

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

PETROLEUM

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	MONTANA	48	10	6	-79%	-40%	5	4	5	-20%
NEBRASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEVADA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	212	71	43	-67%	-39%	27	28	34	4%	21%
NEW MEXICO	1	1	1	<1%	<1%	1	0	0	N/A	N/A
NEW YORK	55	7	4	-87%	-43%	2	2	3	<1%	50%
NORTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NORTH DAKOTA	3	3	3	<1%	<1%	1	1	3	<1%	200%
OHIO	227	42	28	-81%	-33%	15	17	22	13%	29%
OKLAHOMA	32	34	43	6%	26%	18	22	35	22%	59%
OREGON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
PENNSYLVANIA	344	105	69	-69%	-34%	52	51	55	-2%	8%
RHODE ISLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	1	2	3	100%	50%	1	2	3	100%	50%
TEXAS	341	570	509	67%	-11%	187	240	407	28%	70%
UTAH	7	7	7	<1%	<1%	4	4	6	<1%	50%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	3	11	6	267%	-45%	3	4	5	33%	25%
WASHINGTON	11	11	15	<1%	36%	6	7	12	17%	71%
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	21	5	3	-76%	-40%	1	2	3	100%	50%
WYOMING	15	16	5	7%	-69%	7	6	4	-14%	-33%
NATIONAL	2375	1521	1205	-36%	-21%	576	657	964	14%	47%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

TRANSPORTATION

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	ALABAMA	0	0	0	N/A	N/A	0	0	0	N/A
ALASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARIZONA	10	5	4	-50%	-20%	5	2	3	-60%	50%
ARKANSAS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
CALIFORNIA	30	36	35	20%	-3%	6	13	26	117%	100%
COLORADO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
CONNECTICUT	336	78	47	-77%	-40%	25	32	37	28%	16%
DELAWARE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	5	9	33	80%	267%	3	18	26	500%	44%
GEORGIA	17	17	18	<1%	6%	2	5	14	150%	180%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ILLINOIS	14	7	5	-50%	-29%	3	4	4	33%	<1%
INDIANA	52	41	37	-21%	-10%	8	15	28	88%	87%
IOWA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KANSAS	7	4	3	-43%	-25%	1	2	2	100%	<1%
KENTUCKY	0	0	0	N/A	N/A	0	0	0	N/A	N/A
LOUISIANA	3	4	3	33%	-25%	1	1	2	<1%	100%
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	15	11	8	-27%	-27%	2	3	6	50%	100%
MASSACHUSETTS	5	3	2	-40%	-33%	1	1	2	<1%	100%
MICHIGAN	274	227	172	-17%	-24%	71	98	131	38%	34%
MINNESOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSISSIPPI	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSOURI	19	21	24	11%	14%	2	7	18	250%	157%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

TRANSPORTATION

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEBRASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEVADA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	22	8	5	-64%	-38%	2	3	4	50%	33%
NEW MEXICO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW YORK	118	28	17	-76%	-39%	4	7	13	75%	86%
NORTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	72	60	56	-17%	-7%	8	18	43	125%	139%
OKLAHOMA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OREGON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
PENNSYLVANIA	21	15	12	-29%	-20%	2	4	9	100%	125%
RHODE ISLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	11	3	2	-73%	-33%	4	1	2	-75%	100%
TEXAS	89	33	21	-63%	-36%	1	6	16	500%	167%
UTAH	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	7	20	14	186%	-30%	5	7	11	40%	57%
WASHINGTON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	18	16	16	-11%	<1%	5	8	12	60%	50%
WYOMING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	1145	646	534	-44%	-17%	161	255	409	58%	60%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

TEXTILE MILLS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	53	22	17	-58%	-23%	9	10	12	11%	20%
ALASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARIZONA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ARKANSAS	8	9	11	12%	22%	2	3	9	50%	200%
CALIFORNIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
COLORADO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
CONNECTICUT	13	3	2	-77%	-33%	0	1	1	N/A	<1%
DELAWARE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
GEORGIA	103	34	25	-67%	-26%	17	18	16	6%	-11%
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ILLINOIS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
INDIANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IOWA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KANSAS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KENTUCKY	0	0	0	N/A	N/A	0	0	0	N/A	N/A
LOUISIANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MASSACHUSETTS	17	5	3	-71%	-40%	1	1	2	<1%	100%
MICHIGAN	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MINNESOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSISSIPPI	2	2	2	<1%	<1%	1	1	2	<1%	100%
MISSOURI	0	0	0	N/A	N/A	0	0	0	N/A	N/A

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

TEXTILE MILLS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	MONTANA	0	0	0	N/A	N/A	0	0	0	N/A
NEBRASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEVADA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW HAMPSHIRE	9	1	1	-89%	<1%	0	0	0	N/A	N/A
NEW JERSEY	5	3	2	-40%	-33%	0	1	1	N/A	<1%
NEW MEXICO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW YORK	12	4	4	-67%	<1%	0	1	1	N/A	<1%
NORTH CAROLINA	175	86	67	-51%	-22%	11	21	45	91%	114%
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	4	2	1	-50%	-50%	0	0	1	N/A	N/A
OKLAHOMA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OREGON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
PENNSYLVANIA	12	4	3	-67%	-25%	1	1	1	<1%	<1%
RHODE ISLAND	18	6	3	-67%	-50%	2	2	2	<1%	<1%
SOUTH CAROLINA	96	59	47	-39%	-20%	15	21	33	40%	57%
SOUTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	16	12	11	-25%	-8%	2	4	8	100%	100%
TEXAS	1	1	1	<1%	<1%	0	1	1	N/A	<1%
UTAH	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	43	20	15	-53%	-25%	6	8	11	33%	38%
WASHINGTON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WYOMING	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NATIONAL	587	273	215	-53%	-21%	67	94	146	40%	55%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

ALL OTHER

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	56	30	31	-46%	3%	7	10	17	43%	70%
ALASKA	5	2	2	-60%	<1%	0	0	1	N/A	N/A
ARIZONA	9	14	24	56%	71%	1	4	13	300%	225%
ARKANSAS	38	30	35	-21%	17%	8	12	23	50%	92%
CALIFORNIA	199	194	228	-3%	18%	58	82	117	41%	43%
COLORADO	49	28	27	-43%	-4%	7	10	16	43%	60%
CONNECTICUT	113	53	49	-53%	-8%	7	12	24	71%	100%
DELAWARE	13	7	7	-46%	<1%	2	2	4	<1%	100%
DISTRICT OF COLUMBIA	1	2	3	100%	50%	1	1	2	<1%	100%
FLORIDA	30	29	36	-3%	24%	13	16	15	23%	-6%
GEORGIA	28	18	23	-36%	28%	9	10	7	11%	-30%
HAWAII	0	1	1	N/A	<1%	0	1	1	N/A	<1%
IDAHO	73	62	65	-15%	5%	21	31	51	48%	65%
ILLINOIS	366	160	157	-56%	-2%	28	43	71	54%	65%
INDIANA	166	100	101	-40%	1%	28	39	56	39%	44%
IOWA	105	30	28	-71%	-7%	5	8	14	60%	75%
KANSAS	28	9	10	-68%	11%	2	3	4	50%	33%
KENTUCKY	64	35	40	-45%	14%	6	9	19	50%	111%
LOUISIANA	8	13	11	62%	-15%	2	3	5	50%	67%
MAINE	17	11	10	-35%	-9%	3	4	6	33%	50%
MARYLAND	51	29	28	-43%	-3%	8	11	16	38%	45%
MASSACHUSETTS	244	173	137	-29%	-21%	43	62	90	44%	45%
MICHIGAN	289	96	87	-67%	-9%	6	16	41	167%	156%
MINNESOTA	39	28	33	-28%	18%	5	8	13	60%	62%
MISSISSIPPI	158	35	32	-78%	-9%	7	10	19	43%	90%
MISSOURI	68	27	31	-60%	15%	11	12	10	9%	-17%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MANUFACTURING WATER USE

ALL OTHER

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	8	6	7	-25%	17%	3	3	5	<1%	67%
NEBRASKA	13	9	11	-31%	22%	2	3	5	50%	67%
NEVADA	1	1	2	<1%	100%	1	1	2	<1%	100%
NEW HAMPSHIRE	22	13	13	-41%	<1%	3	4	7	33%	75%
NEW JERSEY	158	61	64	-61%	5%	9	14	21	56%	50%
NEW MEXICO	11	25	52	127%	108%	14	22	41	57%	86%
NEW YORK	409	139	139	-66%	<1%	24	33	47	38%	42%
NORTH CAROLINA	63	60	77	-5%	28%	14	22	40	57%	82%
NORTH DAKOTA	0	0	1	N/A	N/A	0	0	0	N/A	N/A
OHIO	503	180	166	-64%	-8%	45	61	82	36%	34%
OKLAHOMA	19	19	26	<1%	37%	5	8	14	60%	75%
OREGON	136	88	81	-35%	-8%	24	35	58	46%	66%
PENNSYLVANIA	301	147	143	-51%	-3%	31	45	69	45%	53%
RHODE ISLAND	11	9	10	-18%	11%	2	3	5	50%	67%
SOUTH CAROLINA	38	28	31	-26%	11%	7	10	17	43%	70%
SOUTH DAKOTA	0	0	1	N/A	N/A	0	0	0	N/A	N/A
TENNESSEE	73	41	45	-44%	10%	4	8	21	100%	162%
TEXAS	47	56	74	19%	32%	16	23	33	44%	43%
UTAH	4	6	8	50%	33%	2	3	6	50%	100%
VERMONT	78	5	5	-94%	<1%	1	1	2	<1%	100%
VIRGINIA	165	77	75	-53%	-3%	21	31	49	48%	58%
WASHINGTON	96	52	46	-46%	-12%	13	19	30	46%	58%
WEST VIRGINIA	32	22	22	-31%	<1%	6	9	14	50%	56%
WISCONSIN	149	58	52	-61%	-10%	16	21	26	31%	24%
WYOMING	6	4	4	-33%	<1%	1	2	3	100%	50%
NATIONAL	4560	2322	2391	-49%	3%	552	800	1252	45%	56%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

DOMESTIC WATER USE

TOTAL DOMESTIC CENTRAL AND NON-CENTRAL

STATES	TOTAL WITHDRAWALS			CHANGE PER CENT		TOTAL CONSUMPTION			CHANGE PER CENT	
	MILLION GALLONS PER DAY					MILLION GALLONS PER DAY				
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	310	357	410	15%	15%	52	62	71	19%	14%
ALASKA	119	127	167	7%	31%	24	26	34	7%	28%
ARIZONA	388	438	551	13%	26%	202	230	292	14%	27%
ARKANSAS	165	181	210	10%	16%	48	52	57	8%	10%
CALIFORNIA	3215	3622	4164	13%	15%	1338	1528	1760	14%	15%
COLORADO	378	415	482	10%	16%	99	110	127	11%	15%
CONNECTICUT	240	280	326	17%	16%	91	107	124	17%	16%
DELAWARE	58	69	83	18%	21%	18	22	26	21%	20%
DISTRICT OF COLUMBIA	108	115	114	7%	-1%	11	12	12	9%	<1%
FLORIDA	1049	1289	1692	23%	31%	302	371	480	23%	29%
GEORGIA	484	569	690	17%	21%	137	160	190	17%	19%
HAWAII	148	156	182	5%	17%	48	52	61	8%	16%
IDAHO	150	138	151	-8%	9%	45	42	45	-7%	7%
ILLINOIS	1670	1915	2148	15%	12%	197	224	243	13%	9%
INDIANA	496	589	687	19%	17%	157	188	216	20%	15%
IOWA	256	276	292	8%	6%	57	59	59	4%	-1%
KANSAS	254	259	273	2%	6%	82	84	87	2%	4%
KENTUCKY	161	194	227	20%	17%	45	52	57	16%	9%
LOUISIANA	420	444	484	6%	9%	227	242	263	7%	9%
MAINE	99	94	98	-6%	5%	22	21	22	-1%	4%
MARYLAND	431	523	653	21%	25%	44	52	59	16%	14%
MASSACHUSETTS	480	546	623	14%	14%	34	39	42	12%	8%
MICHIGAN	733	846	968	15%	14%	137	158	174	16%	10%
MINNESOTA	285	326	379	14%	16%	60	64	67	8%	5%
MISSISSIPPI	187	206	230	10%	12%	78	86	93	10%	9%
MISSOURI	304	346	383	14%	11%	77	86	91	12%	6%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

DOMESTIC WATER USE

TOTAL DOMESTIC CENTRAL AND NON-CENTRAL

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	101	93	95	-8%	2%	52	48	49	-7%	2%
NEBRASKA	184	191	206	4%	8%	44	45	48	3%	5%
NEVADA	120	143	185	19%	30%	43	52	68	20%	31%
NEW HAMPSHIRE	68	77	88	13%	15%	12	14	15	12%	12%
NEW JERSEY	901	1057	1218	17%	15%	200	238	273	19%	15%
NEW MEXICO	161	158	180	-1%	13%	73	73	82	<1%	12%
NEW YORK	1998	2259	2544	13%	13%	391	442	488	13%	11%
NORTH CAROLINA	546	660	807	21%	22%	164	199	238	21%	19%
NORTH DAKOTA	68	65	66	-5%	2%	39	37	38	-4%	2%
OHIO	1162	1347	1521	16%	13%	212	249	278	18%	11%
OKLAHOMA	232	253	283	9%	12%	95	105	116	10%	11%
OREGON	255	278	313	9%	12%	65	71	80	10%	12%
PENNSYLVANIA	1108	1248	1367	13%	10%	177	202	218	14%	8%
RHODE ISLAND	45	52	60	14%	15%	5	6	7	17%	10%
SOUTH CAROLINA	342	388	462	13%	19%	73	81	91	11%	13%
SOUTH DAKOTA	62	63	64	2%	2%	20	20	20	1%	<1%
TENNESSEE	326	401	482	23%	20%	58	70	79	22%	13%
TEXAS	1211	1306	1515	8%	16%	463	503	580	9%	15%
UTAH	327	339	391	4%	15%	153	160	186	5%	16%
VERMONT	43	48	55	12%	14%	8	9	10	11%	8%
VIRGINIA	319	385	481	21%	25%	72	90	111	24%	23%
WASHINGTON	531	563	623	6%	11%	106	111	121	5%	9%
WEST VIRGINIA	148	162	168	10%	4%	17	20	20	16%	2%
WISCONSIN	359	398	439	11%	10%	78	87	94	11%	8%
WYOMING	51	46	48	-8%	3%	14	13	13	-8%	2%
NATIONAL	23253	26300	30330	13%	15%	6267	7074	8073	13%	14%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

DOMESTIC CENTRAL WATER USE

STATES	TOTAL WITHDRAWALS					TOTAL CONSUMPTION				
	MILLION GALLONS PER DAY			CHANGE PER CENT		MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	258	293	335	14%	14%	20	23	26	15%	13%
ALASKA	114	122	162	7%	33%	21	23	30	10%	30%
ARIZONA	383	432	544	13%	26%	198	227	287	15%	26%
ARKANSAS	133	149	179	12%	20%	28	32	38	14%	19%
CALIFORNIA	3158	3564	4110	13%	15%	1303	1493	1727	15%	16%
COLORADO	364	400	469	10%	17%	91	101	119	11%	18%
CONNECTICUT	199	233	274	17%	18%	67	79	93	18%	18%
DELAWARE	51	60	73	18%	22%	13	16	20	23%	25%
DISTRICT OF COLUMBIA	108	115	114	6%	-1%	11	12	12	9%	<1%
FLORIDA	974	1206	1605	24%	33%	255	321	428	26%	33%
GEORGIA	432	511	631	18%	23%	104	125	155	20%	24%
HAWAII	148	156	182	5%	17%	48	52	60	8%	15%
IDAHO	135	125	137	-7%	10%	36	33	36	-8%	9%
ILLINOIS	1598	1840	2080	15%	13%	153	178	202	16%	13%
INDIANA	398	472	558	19%	18%	98	118	139	20%	18%
IOWA	216	237	260	10%	10%	32	36	39	12%	8%
KANSAS	233	240	257	3%	7%	69	72	77	4%	7%
KENTUCKY	118	144	176	22%	22%	17	21	26	24%	24%
LOUISIANA	372	398	444	7%	12%	197	214	238	9%	11%
MAINE	95	89	92	-6%	3%	19	18	19	-5%	6%
MARYLAND	394	482	611	22%	27%	21	27	34	29%	26%
MASSACHUSETTS	461	528	606	15%	15%	23	27	31	17%	15%
MICHIGAN	584	674	782	15%	16%	46	54	63	17%	17%
MINNESOTA	224	264	321	18%	22%	22	27	32	23%	19%
MISSISSIPPI	157	173	198	10%	14%	58	65	74	12%	14%
MISSOURI	258	297	338	15%	14%	48	57	64	19%	12%

STATE SUMMARIES OF WATER USE
AND RELATED DATA MAY 1979

DOMESTIC CENTRAL WATER USE

STATES	TOTAL WITHDRAWALS					TOTAL CONSUMPTION				
	MILLION GALLONS PER DAY			CHANGE PER CENT		MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	89	82	84	-8%	2%	44	41	42	-7%	2%
NEBRASKA	167	175	193	5%	10%	34	36	39	6%	8%
NEVADA	116	139	182	20%	31%	41	50	66	22%	32%
NEW HAMPSHIRE	53	60	70	13%	17%	3	3	4	<1%	33%
NEW JERSEY	853	1000	1156	17%	16%	171	203	236	19%	16%
NEW MEXICO	150	149	170	-1%	14%	66	67	76	2%	13%
NEW YORK	1896	2156	2451	14%	14%	329	380	433	16%	14%
NORTH CAROLINA	413	496	617	20%	24%	82	100	124	22%	24%
NORTH DAKOTA	57	55	59	-4%	7%	32	31	33	-3%	6%
OHIO	1037	1199	1360	16%	13%	136	160	181	18%	13%
OKLAHOMA	207	228	260	10%	14%	80	90	102	12%	13%
OREGON	226	247	279	9%	13%	47	52	60	11%	15%
PENNSYLVANIA	978	1098	1209	12%	10%	98	112	124	14%	11%
RHODE ISLAND	40	46	53	15%	15%	2	2	3	<1%	50%
SOUTH CAROLINA	296	341	416	15%	22%	44	52	64	18%	23%
SOUTH DAKOTA	51	53	56	4%	6%	13	14	15	8%	7%
TENNESSEE	284	350	430	23%	23%	30	38	47	27%	24%
TEXAS	1134	1228	1438	8%	17%	414	455	534	10%	17%
UTAH	324	336	388	4%	15%	151	159	184	5%	16%
VERMONT	32	36	42	12%	17%	2	2	2	<1%	<1%
VIRGINIA	246	290	363	18%	25%	26	32	40	23%	25%
WASHINGTON	504	537	600	7%	12%	89	96	108	8%	12%
WEST VIRGINIA	121	130	134	7%	3%	0	0	0	N/A	N/A
WISCONSIN	275	305	341	11%	12%	27	31	35	15%	13%
WYOMING	47	43	45	-9%	5%	11	11	11	<1%	<1%
NATIONAL	21162	23981	27929	13%	16%	4975	5665	6637	14%	17%

STATE SUMMARIES OF WATER USE
AND RELATED DATA MAY 1979

DOMESTIC NON-CENTRAL WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	ALABAMA	51	64	75	25%	17%	32	40	45	25%
ALASKA	5	5	5	<1%	<1%	3	3	3	<1%	<1%
ARIZONA	5	6	7	20%	17%	4	4	4	<1%	<1%
ARKANSAS	32	32	31	<1%	-3%	20	20	19	<1%	-5%
CALIFORNIA	57	58	54	2%	-7%	35	35	32	<1%	-9%
COLORADO	14	14	13	<1%	-7%	8	9	8	12%	-11%
CONNECTICUT	41	47	52	15%	11%	25	28	31	12%	11%
DELAWARE	8	9	11	12%	22%	5	6	6	20%	<1%
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	76	83	87	9%	5%	46	50	52	9%	4%
GEORGIA	53	58	60	9%	3%	33	36	36	9%	>1%
HAWAII	<1	<1	1	N/A	N/A	<1	<1	<1	N/A	N/A
IDAHO	15	14	14	-7%	<1%	9	8	8	-11%	<1%
ILLINOIS	73	76	69	4%	-9%	45	46	41	2%	-11%
INDIANA	98	116	129	18%	11%	60	70	77	17%	10%
IOWA	40	38	33	-5%	-13%	24	23	19	-4%	-17%
KANSAS	21	19	17	-10%	-11%	13	12	10	-8%	-17%
KENTUCKY	43	50	51	16%	2%	28	31	31	11%	<1%
LOUISIANA	48	46	41	-4%	-11%	30	28	24	-7%	-14%
MAINE	4	5	6	25%	20%	3	3	3	<1%	<1%
MARYLAND	38	41	42	8%	2%	23	25	25	9%	<1%
MASSACHUSETTS	18	19	17	6%	-11%	11	11	10	<1%	-9%
MICHIGAN	148	172	186	16%	8%	90	104	111	16%	7%
MINNESOTA	60	62	58	3%	-6%	37	38	34	3%	-11%
MISSISSIPPI	31	33	31	6%	-6%	20	20	19	<1%	-5%
MISSOURI	45	48	45	7%	-6%	28	30	27	7%	-10%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

DOMESTIC NON-CENTRAL WATER USE

STATES	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION BILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	12	12	11	<1%	-8%	7	7	7	<1%	<1%
NEBRASKA	17	16	14	-6%	-12%	10	10	8	<1%	-20%
NEVADA	3	4	4	33%	<1%	2	2	2	<1%	<1%
NEW HAMPSHIRE	15	17	18	13%	6%	9	10	11	11%	10%
NEW JERSEY	48	57	63	19%	11%	29	34	37	17%	9%
NEW MEXICO	10	10	9	<1%	-10%	7	6	6	-14%	<1%
NEW YORK	102	103	93	1%	-10%	62	62	55	<1%	-11%
NORTH CAROLINA	134	163	190	22%	17%	83	99	114	19%	15%
NORTH DAKOTA	11	10	8	-9%	-20%	7	6	5	-14%	-17%
OHIO	124	148	162	19%	9%	76	89	96	17%	8%
OKLAHOMA	25	25	23	<1%	-8%	15	15	14	<1%	-7%
OREGON	28	31	34	11%	10%	17	19	20	12%	5%
PENNSYLVANIA	130	149	158	15%	6%	79	90	94	14%	4%
RHODE ISLAND	5	6	7	20%	17%	3	4	4	33%	<1%
SOUTH CAROLINA	46	47	46	2%	-2%	29	29	28	<1%	-3%
SOUTH DAKOTA	11	10	8	-9%	-20%	7	6	5	-14%	-17%
TENNESSEE	42	51	53	21%	4%	27	31	32	15%	3%
TEXAS	77	78	77	1%	-1%	48	48	46	<1%	-4%
UTAH	3	3	3	<1%	<1%	2	2	2	<1%	<1%
VERMONT	11	12	13	9%	8%	7	8	8	14%	<1%
VIRGINIA	73	95	110	30%	24%	46	58	71	26%	22%
WASHINGTON	27	26	23	-4%	-12%	17	16	14	-6%	-22%
WEST VIRGINIA	27	32	34	19%	6%	17	20	20	18%	<1%
WISCONSIN	84	93	98	11%	5%	51	56	59	10%	5%
WYOMING	4	3	3	-25%	<1%	2	2	2	<1%	<1%
NATIONAL	2092	2319	2401	11%	4%	1292	1409	1436	9%	2%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

COMMERCIAL WATER USE

STATES	TOTAL WITHDRAWALS			CHANGE PER CENT		TOTAL CONSUMPTION			CHANGE PER CENT	
	MILLION GALLONS PER DAY					MILLION GALLONS PER DAY				
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	70	76	82	9%	8%	5	5	6	<1%	20%
ALASKA	30	30	36	<1%	20%	1	1	1	<1%	<1%
ARIZONA	122	136	167	11%	23%	51	56	70	10%	25%
ARKANSAS	45	46	50	2%	9%	11	11	12	<1%	9%
CALIFORNIA	912	1016	1149	11%	13%	307	344	388	12%	13%
COLORADO	101	108	122	7%	13%	21	23	26	10%	13%
CONNECTICUT	50	57	64	14%	12%	14	16	18	14%	12%
DELAWARE	14	16	18	14%	12%	2	3	3	50%	<1%
DISTRICT OF COLUMBIA	94	99	98	5%	-1%	8	8	8	<1%	<1%
FLORIDA	150	170	228	13%	34%	67	80	102	19%	28%
GEORGIA	120	134	155	12%	16%	21	24	27	14%	12%
HAWAII	55	58	65	5%	12%	14	15	17	7%	13%
IDAHO	26	23	24	-12%	4%	6	6	6	<1%	<1%
ILLINOIS	369	414	452	12%	9%	31	34	38	10%	12%
INDIANA	86	99	110	15%	11%	7	8	9	14%	12%
IOWA	54	56	57	4%	2%	6	7	7	17%	<1%
KANSAS	63	62	63	-2%	2%	15	15	15	<1%	<1%
KENTUCKY	60	66	73	10%	11%	5	6	6	20%	<1%
LOUISIANA	103	104	108	1%	4%	48	49	50	2%	2%
MAINE	26	25	25	-4%	<1%	4	4	4	<1%	<1%
MARYLAND	81	95	115	17%	21%	3	4	4	33%	<1%
MASSACHUSETTS	118	133	149	13%	12%	5	6	6	20%	<1%
MICHIGAN	226	252	277	12%	10%	15	17	19	13%	12%
MINNESOTA	110	121	135	10%	12%	9	10	11	11%	10%
MISSISSIPPI	52	54	55	4%	2%	13	13	14	<1%	8%
MISSOURI	169	185	199	9%	8%	28	30	33	7%	10%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

COMMERCIAL WATER USE

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	35	31	30	-11%	-3%	11	10	10	-9%	<1%
NEBRASKA	60	60	62	<1%	3%	10	10	10	<1%	<1%
NEVADA	26	31	40	19%	29%	7	9	10	29%	11%
NEW HAMPSHIRE	13	14	16	8%	14%	1	1	1	<1%	<1%
NEW JERSEY	88	102	115	16%	13%	14	17	19	21%	12%
NEW MEXICO	70	66	71	-6%	8%	25	24	26	-4%	8%
NEW YORK	452	503	554	11%	10%	72	81	89	12%	10%
NORTH CAROLINA	88	99	112	12%	13%	14	16	20	14%	25%
NORTH DAKOTA	12	11	10	-8%	-9%	6	5	5	-17%	<1%
OHIO	131	148	161	13%	9%	16	18	20	12%	11%
OKLAHOMA	78	83	90	6%	8%	27	29	31	7%	7%
OREGON	43	45	50	5%	11%	7	8	8	14%	<1%
PENNSYLVANIA	187	205	217	10%	6%	16	17	18	6%	6%
RHODE ISLAND	19	22	24	16%	9%	1	1	1	<1%	<1%
SOUTH CAROLINA	80	84	93	5%	11%	10	11	12	10%	9%
SOUTH DAKOTA	15	14	14	-7%	<1%	3	3	3	<1%	<1%
TENNESSEE	69	80	92	16%	15%	6	8	9	33%	12%
TEXAS	258	271	305	5%	13%	92	97	109	5%	12%
UTAH	45	47	52	4%	11%	15	15	17	<1%	13%
VERMONT	14	14	16	<1%	14%	1	2	2	100%	<1%
VIRGINIA	226	258	303	14%	17%	14	16	18	14%	12%
WASHINGTON	94	97	104	3%	7%	13	14	14	8%	<1%
WEST VIRGINIA	33	34	34	3%	<1%	<1	0	<1	-100%	N/A
WISCONSIN	67	73	75	9%	3%	6	6	6	<1%	<1%
WYOMING	17	15	15	-12%	<1%	4	4	3	<1%	-25%
NATIONAL	5529	6041	6731	9%	11%	1109	1216	1362	10%	12%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

ALL MINERALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	ALABAMA	110	137	176	25%	28%	24	31	41	29%
ALASKA	30	192	476	540%	148%	12	141	350	1075%	148%
ARIZONA	157	223	290	42%	30%	55	76	97	38%	28%
ARKANSAS	96	120	159	25%	32%	19	23	32	21%	39%
CALIFORNIA	297	359	375	21%	4%	183	225	213	23%	-5%
COLORADO	111	141	180	27%	28%	31	41	53	32%	29%
CONNECTICUT	20	25	34	25%	36%	3	3	6	<1%	100%
DELAWARE	2	2	2	<1%	<1%	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
FLORIDA	225	281	370	25%	32%	36	47	66	31%	40%
GEORGIA	157	197	259	25%	31%	23	30	43	30%	43%
HAWAII	1	1	1	<1%	<1%	0	0	0	N/A	N/A
IDAHO	42	50	65	19%	30%	9	12	16	33%	33%
ILLINOIS	198	245	312	24%	27%	50	60	80	20%	33%
INDIANA	114	131	187	15%	43%	22	30	40	36%	33%
IOWA	81	100	134	23%	34%	12	15	22	25%	47%
KANSAS	132	163	208	23%	28%	37	45	57	22%	27%
KENTUCKY	149	189	230	27%	22%	56	69	83	23%	20%
LOUISIANA	675	884	1037	31%	17%	294	367	429	25%	17%
MAINE	11	15	19	36%	27%	2	2	3	<1%	50%
MARYLAND	65	81	110	25%	36%	11	13	20	18%	54%
MASSACHUSETTS	32	39	54	22%	38%	4	7	9	75%	29%
MICHIGAN	312	383	500	23%	31%	63	77	109	22%	42%
MINNESOTA	191	228	287	19%	26%	63	79	97	25%	23%
MISSISSIPPI	46	60	74	30%	23%	14	19	24	36%	26%
MISSOURI	189	226	294	20%	30%	41	52	71	27%	37%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

ALL MINERALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
	ALABAMA	77	96	119	25%	24%	24	31	39	29%
NEBRASKA	30	37	49	23%	32%	6	6	10	<1%	67%
NEVADA	58	71	92	22%	30%	15	19	26	27%	37%
NEW HAMPSHIRE	6	8	10	33%	25%	1	1	2	<1%	100%
NEW JERSEY	65	78	103	20%	32%	12	13	19	8%	46%
NEW MEXICO	220	273	339	24%	24%	73	91	111	25%	22%
NEW YORK	181	222	293	23%	32%	29	36	54	24%	50%
NORTH CAROLINA	70	88	119	26%	35%	11	13	20	18%	54%
NORTH DAKOTA	12	18	22	50%	22%	6	7	8	17%	14%
OHIO	259	317	418	22%	32%	54	65	88	20%	35%
OKLAHOMA	173	220	270	27%	23%	68	84	101	24%	20%
OREGON	36	44	61	22%	39%	6	6	11	<1%	83%
PENNSYLVANIA	326	407	530	25%	30%	81	101	134	25%	33%
RHODE ISLAND	2	3	4	50%	33%	0	0	1	N/A	N/A
SOUTH CAROLINA	50	62	84	24%	35%	8	10	14	25%	40%
SOUTH DAKOTA	31	36	50	16%	39%	6	7	10	17%	43%
TENNESSEE	107	129	170	21%	32%	22	27	39	23%	44%
TEXAS	1155	1321	1572	14%	19%	479	515	604	8%	17%
UTAH	128	172	213	34%	24%	42	60	71	43%	18%
VERMONT	21	26	36	24%	38%	3	4	5	33%	25%
VIRGINIA	127	154	198	21%	29%	34	39	51	15%	31%
WASHINGTON	52	68	91	31%	34%	9	12	17	33%	42%
WEST VIRGINIA	194	230	294	19%	28%	82	93	121	13%	30%
WISCONSIN	49	59	81	20%	37%	8	11	14	38%	27%
WYOMING	152	184	231	21%	26%	49	57	72	16%	26%
NATIONAL	7024	8795	11282	25%	28%	2192	2772	3603	26%	30%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

NON-METALS

STATES	TOTAL WITHDRAWALS			CHANGE PER CENT		TOTAL CONSUMPTION			CHANGE PER CENT	
	MILLION GALLONS PER DAY					MILLION GALLONS PER DAY				
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	84	103	138	23%	34%	12	15	23	25%	53%
ALASKA	3	5	7	67%	40%	<1	<1	<1	N/A	N/A
ARIZONA	25	36	48	44%	33%	4	6	8	50%	33%
ARKANSAS	84	104	141	24%	36%	13	16	24	23%	50%
CALIFORNIA	98	118	151	20%	28%	13	14	19	8%	36%
COLORADO	53	65	89	23%	37%	8	10	15	25%	50%
CONNECTICUT	20	25	34	25%	36%	3	3	6	<1%	100%
DELAWARE	2	2	2	<1%	<1%	<1	<1	<1	N/A	N/A
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	217	270	357	24%	32%	32	42	60	31%	43%
GEORGIA	156	196	258	26%	32%	23	30	43	30%	43%
HAWAII	1	1	1	<1%	<1%	<1	<1	<1	N/A	N/A
IDAHO	23	29	40	26%	38%	3	4	7	33%	75%
ILLINOIS	138	170	224	23%	32%	21	25	38	19%	52%
INDIANA	97	108	161	11%	49%	14	19	27	36%	42%
IOWA	80	99	133	24%	34%	12	15	22	25%	47%
KANSAS	82	100	136	22%	36%	12	15	23	25%	53%
KENTUCKY	53	65	89	23%	37%	8	10	15	25%	50%
LOUISIANA	129	160	215	24%	34%	19	24	36	26%	50%
MAINE	11	14	18	27%	29%	2	2	3	<1%	50%
MARYLAND	64	80	109	25%	36%	10	12	19	20%	58%
MASSACHUSETTS	32	39	54	22%	38%	4	7	9	75%	29%
MICHIGAN	240	299	397	25%	33%	36	45	68	25%	51%
MINNESOTA	34	43	58	26%	35%	5	6	10	20%	67%
MISSISSIPPI	23	29	39	26%	34%	3	4	7	33%	75%
MISSOURI	127	153	205	20%	34%	19	23	35	21%	52%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

NON-METALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	29	36	49	24%	36%	4	5	9	25%	80%
NEBRASKA	26	33	44	27%	33%	4	4	8	<1%	100%
NEVADA	29	35	48	21%	37%	4	5	8	25%	60%
NEW HAMPSHIRE	6	8	10	33%	25%	1	1	2	<1%	100%
NEW JERSEY	58	71	95	22%	34%	9	11	16	22%	45%
NEW MEXICO	78	94	127	21%	35%	11	14	21	27%	50%
NEW YORK	169	210	277	24%	32%	25	32	47	28%	47%
NORTH CAROLINA	70	88	119	26%	35%	11	13	20	18%	54%
NORTH DAKOTA	4	5	8	25%	60%	1	1	1	<1%	<1%
OHIO	216	265	359	23%	35%	32	40	60	25%	50%
OKLAHOMA	52	64	87	23%	36%	8	10	14	25%	40%
OREGON	34	42	58	24%	38%	5	5	10	<1%	100%
PENNSYLVANIA	230	291	385	27%	32%	35	44	65	26%	48%
RHODE ISLAND	2	3	4	50%	33%	<1	<1	1	N/A	N/A
SOUTH CAROLINA	50	62	84	24%	35%	8	10	14	25%	40%
SOUTH DAKOTA	23	29	40	26%	38%	3	4	6	33%	50%
TENNESSEE	82	101	137	23%	36%	12	15	23	25%	53%
TEXAS	280	346	465	24%	34%	40	53	78	32%	47%
UTAH	36	46	61	28%	33%	5	7	10	40%	43%
VERMONT	21	26	36	24%	38%	3	4	5	33%	25%
VIRGINIA	85	104	141	22%	36%	13	16	24	23%	50%
WASHINGTON	48	63	85	31%	35%	7	10	14	43%	40%
WEST VIRGINIA	39	49	67	26%	37%	5	8	11	60%	38%
WISCONSIN	45	55	74	22%	35%	7	9	12	29%	33%
WYOMING	67	84	113	25%	35%	10	13	19	30%	46%
NATIONAL	3655	4523	6077	24%	34%	539	681	1015	26%	49%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

FUELS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	26	33	37	27%	12%	12	16	18	33%	12%
ALASKA	12	133	342	1000%	157%	11	120	308	991%	157%
ARIZONA	2	2	2	<1%	<1%	1	1	1	<1%	<1%
ARKANSAS	10	13	15	30%	15%	5	6	7	20%	17%
CALIFORNIA	193	235	217	22%	-8%	169	210	192	24%	-9%
COLORADO	18	24	27	33%	12%	9	11	13	22%	18%
CONNECTICUT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DELAWARE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	6	9	10	50%	11%	3	4	5	33%	25%
GEORGIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
ILLINOIS	59	74	86	25%	16%	29	35	41	21%	17%
INDIANA	17	23	26	35%	13%	8	11	13	38%	18%
IOWA	1	1	1	<1%	<1%	<1	<1	<1	N/A	N/A
KANSAS	50	63	72	26%	14%	25	30	34	20%	13%
KENTUCKY	96	124	141	29%	14%	48	59	68	23%	15%
LOUISIANA	546	724	822	33%	14%	275	343	393	25%	15%
MAINE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MARYLAND	1	1	1	<1%	<1%	1	1	1	<1%	<1%
MASSACHUSETTS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MICHIGAN	6	8	9	33%	12%	3	3	4	<1%	33%
MINNESOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSISSIPPI	23	31	35	35%	13%	11	15	17	36%	13%
MISSOURI	3	3	4	<1%	33%	1	2	2	100%	<1%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

FUELS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	13	18	20	38%	11%	7	9	10	29%	11%
NEBRASKA	4	4	5	<1%	25%	2	2	2	<1%	<1%
NEVADA	<1	<1	<1	N/A	N/A	<1	<1	<1	N/A	N/A
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW MEXICO	71	97	112	37%	15%	37	46	53	24%	15%
NEW YORK	1	1	1	<1%	<1%	<1	<1	1	N/A	N/A
NORTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NORTH DAKOTA	8	13	14	62%	8%	5	6	7	20%	17%
OHIO	43	52	59	21%	13%	22	25	28	14%	12%
OKLAHOMA	120	155	182	29%	17%	60	74	87	23%	18%
OREGON	0	0	0	N/A	N/A	0	0	0	N/A	N/A
PENNSYLVANIA	87	106	133	22%	25%	42	51	64	21%	25%
RHODE ISLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH DAKOTA	<1	<1	<1	N/A	N/A	<1	<1	<1	N/A	N/A
TENNESSEE	9	11	13	22%	18%	5	5	8	<1%	60%
TEXAS	850	935	1062	10%	14%	429	449	507	5%	13%
UTAH	16	19	22	19%	16%	9	10	11	11%	10%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	40	48	55	20%	15%	20	22	26	10%	18%
WASHINGTON	2	2	3	<1%	50%	1	1	2	<1%	100%
WEST VIRGINIA	155	181	227	17%	25%	77	85	110	10%	29%
WISCONSIN	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WYOMING	64	76	89	19%	17%	32	36	42	12%	17%
NATIONAL	2552	3219	3844	26%	19%	1359	1688	2075	24%	23%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

METALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
ALABAMA	<1	1	1	N/A	<1%	0	<1	<1	N/A	N/A
ALASKA	15	54	127	260%	135%	1	21	42	2000%	100%
ARIZONA	130	185	240	42%	30%	50	69	88	38%	28%
ARKANSAS	2	3	3	50%	<1%	1	1	1	<1%	<1%
CALIFORNIA	6	6	7	<1%	17%	1	1	2	<1%	100%
COLORADO	40	52	64	30%	23%	14	20	25	43%	25%
CONNECTICUT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DELAWARE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
DISTRICT OF COLUMBIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
FLORIDA	2	2	3	<1%	50%	1	1	1	<1%	<1%
GEORGIA	1	1	1	<1%	<1%	<1	<1	<1	N/A	N/A
HAWAII	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IDAHO	19	21	25	11%	19%	6	8	9	33%	12%
ILLINOIS	1	1	2	<1%	100%	<1	<1	1	N/A	N/A
INDIANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
IOWA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KANSAS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
KENTUCKY	<1	<1	<1	N/A	N/A	<1	<1	<1	N/A	N/A
LOUISIANA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MAINE	<1	1	1	N/A	<1%	<1	<1	<1	N/A	N/A
MARYLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MASSACHUSETTS	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MICHIGAN	66	76	94	15%	24%	24	29	37	21%	28%
MINNESOTA	157	185	229	18%	24%	58	73	87	26%	19%
MISSISSIPPI	0	0	0	N/A	N/A	0	0	0	N/A	N/A
MISSOURI	59	70	85	19%	21%	21	27	34	29%	26%

STATE SUMMARIES OF WATER USE
AND RELATED DATA

MINERALS WATER USE

METALS

STATES	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			CHANGE PER CENT		TOTAL CONSUMPTION MILLION GALLONS PER DAY			CHANGE PER CENT	
	1975	1985	2000	1975-1985	1985-2000	1975	1985	2000	1975-1985	1985-2000
MONTANA	35	42	50	20%	19%	13	17	20	31%	18%
NEBRASKA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEVADA	29	36	44	24%	22%	11	14	18	27%	29%
NEW HAMPSHIRE	0	0	0	N/A	N/A	0	0	0	N/A	N/A
NEW JERSEY	7	7	8	<1%	14%	3	2	3	-33%	50%
NEW MEXICO	71	82	100	15%	22%	25	31	37	24%	19%
NEW YORK	11	11	15	<1%	36%	4	4	6	<1%	50%
NORTH CAROLINA	<1	<1	<1	N/A	N/A	<1	<1	<1	N/A	N/A
NORTH DAKOTA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OHIO	0	0	0	N/A	N/A	0	0	0	N/A	N/A
OKLAHOMA	1	1	1	<1%	<1%	<1	<1	<1	N/A	N/A
OREGON	2	2	3	<1%	50%	1	1	1	<1%	<1%
PENNSYLVANIA	9	10	12	11%	20%	4	6	5	50%	-17%
RHODE ISLAND	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH CAROLINA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
SOUTH DAKOTA	8	7	10	-12%	43%	3	3	4	<1%	33%
TENNESSEE	16	17	20	6%	18%	5	7	8	40%	14%
TEXAS	25	40	45	60%	12%	10	13	19	30%	46%
UTAH	76	107	130	41%	21%	28	43	50	54%	16%
VERMONT	0	0	0	N/A	N/A	0	0	0	N/A	N/A
VIRGINIA	2	2	2	<1%	<1%	1	1	1	<1%	<1%
WASHINGTON	2	3	3	50%	<1%	1	1	1	<1%	<1%
WEST VIRGINIA	0	0	0	N/A	N/A	0	0	0	N/A	N/A
WISCONSIN	4	4	7	<1%	75%	1	2	2	100%	<1%
WYOMING	21	24	29	14%	21%	7	8	11	14%	38%
NATIONAL	817	1053	1361	29%	29%	294	403	513	37%	27%

Appendix C

NATIONAL AND STATE WATER USE SUMMARIES

50-STATE TOTAL OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	160141	167997	156078	88029	94766	94864
IRRIGATION	158229	165764	153527	86117	92533	92313
LIVESTOCK	1912	2233	2551	1912	2233	2551
STEAM ELECTRIC	88735	94245	79692	1413	4048	10537
MANUFACTURING	50624	23797	19494	5667	8274	14575
PRIMARY METALS	17556	5786	3503	1932	2129	2771
CHEMICALS	13366	5742	5105	1181	2041	3992
PAPER	8396	5979	5356	833	1797	4247
FOOD ETC.	2639	1528	1185	365	501	794
PETROLEUM	2375	1521	1205	576	657	964
TRANSPORTATION	1145	646	534	161	255	409
TEXTILE MILLS	587	273	215	67	94	146
ALL OTHER	4560	2322	2391	528	762	1194
DOMESTIC	23253	26300	30330	6267	7074	8073
DOM. CENTRAL	21162	23981	27929	4975	5665	6637
DOM. NONCENTRAL	2092	2319	2401	1292	1409	1436
COMMERCIAL	5529	6041	6731	1109	1216	1362
MINERALS	7024	8795	11282	2192	2772	3603
NONMETALS	3655	4523	6077	539	681	1015
FUELS	2552	3219	3844	1359	1688	2075
METALS	817	1053	1361	294	403	513
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	335306	327175	303606	104677	118150	133015
TOTAL SALINE	55657	88816	116489	302	834	2514
FRESHWATER (BASE) PLUS SALINE	390963	415991	420095	104979	118984	135529

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	44	56	70	41	52
IRRIGATION	11	15	19	8	11	15
LIVESTOCK	33	41	51	33	41	51
STEAM ELECTRIC	4472	6275	4646	33	222	506
MANUFACTURING	1427	849	736	186	318	575
PRIMARY METALS	284	200	153	49	75	121
CHEMICALS	450	149	143	65	95	113
PAPER	575	443	388	56	127	310
FOOD ETC.	9	5	4	0	1	2
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	53	22	17	9	10	12
ALL OTHER	56	30	31	7	10	17
DOMESTIC	310	357	410	52	62	71
DOM. CENTRAL	258	293	335	20	23	26
DOM. NONCENTRAL	51	64	75	32	40	45
COMMERCIAL	70	76	82	5	5	6
MINERALS	110	137	176	24	31	41
NONMETALS	84	103	138	12	15	23
FUELS	26	33	37	12	16	18
METALS	(5)	1	1	0	(5)	(5)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	6433	7750	6120	341	690	1264
TOTAL SALINE	190	99	44	0	1	0
FRESHWATER (BASE)	6623	7849	6164	341	691	1264

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	4	4	4	3	3	3
IRRIGATION	4	4	4	3	3	3
LIVESTOCK	(5)	0	0	(5)	0	0
STEAM ELECTRIC	26	17	10	0	2	5
MANUFACTURING	133	90	83	26	39	66
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	3	4	5	2	3	4
PAPER	124	83	75	24	36	60
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	1	1	1	0	0	1
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	5	2	2	0	0	1
DOMESTIC	119	127	167	24	26	34
DOM. CENTRAL	114	122	162	21	23	30
DOM. NONCENTRAL	5	5	5	3	3	3
COMMERCIAL	30	30	36	1	1	1
MINERALS	30	192	476	12	141	350
NONMETALS	3	5	7	(5)	(5)	(5)
FUELS	12	133	342	11	120	308
METALS	15	54	127	1	21	42
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	342	460	776	67	212	459
TOTAL SALINE	26	19	396	0	0	2
FRESHWATER (BASE) PLUS SALINE	368	479	1172	67	212	461

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	7747	7097	6181	3933	3877	3649
IRRIGATION	7702	7046	6122	3888	3827	3590
LIVESTOCK	45	50	59	45	50	59
STEAM ELECTRIC	38	93	113	36	83	91
MANUFACTURING	57	60	79	37	24	55
PRIMARY METALS	4	8	6	12	3	5
CHEMICALS	2	5	11	2	4	9
PAPER	14	19	26	3	7	20
FOOD ETC.	18	9	8	14	4	5
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	10	5	4	5	2	3
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	9	14	24	1	4	13
DOMESTIC	388	438	551	202	230	292
DOM. CENTRAL	383	432	544	198	227	287
DOM. NONCENTRAL	5	6	7	4	4	4
COMMERCIAL	122	136	167	51	56	70
MINERALS	157	223	290	55	76	97
NONMETALS	25	36	48	4	6	8
FUELS	2	2	2	1	1	1
METALS	130	185	240	50	69	88
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	8509	8046	7382	4314	4347	4253
TOTAL SALINE	9	0	0	0	0	0
FRESHWATER (BASE)	8518	8046	7382	4314	4347	4253

TABLE C.2 (CONTINUED)

U. S. WATER RESOURCES COUNCIL

ARKANSAS

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	2292	2529	2639	1566	1805	1950
IRRIGATION	2262	2497	2601	1535	1773	1912
LIVESTOCK	31	32	39	31	32	39
STEAM ELECTRIC	427	774	446	14	45	55
MANUFACTURING	351	245	243	46	84	186
PRIMARY METALS	18	4	3	2	2	2
CHEMICALS	40	16	14	13	16	11
PAPER	196	162	161	8	38	128
FOOD ETC.	30	13	10	2	3	6
PETROLEUM	21	11	9	11	10	7
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	8	9	11	2	3	9
ALL OTHER	38	30	35	8	12	23
DOMESTIC	165	181	210	48	52	57
DOM. CENTRAL	133	149	179	28	32	38
DOM. NONCENTRAL	32	32	31	20	20	19
COMMERCIAL	45	46	50	11	11	12
MINERALS	96	120	159	19	23	32
NONMETALS	84	104	141	13	16	24
FUELS	10	13	15	5	6	7
METALS	2	3	3	1	1	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	3376	3895	3747	1704	2020	2293
TOTAL SALINE	7	0	0	0	0	0

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OPFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	33837	33936	33893	24013	24798	25978
IRRIGATION	33741	33809	33746	23917	24670	25831
LIVESTOCK	96	127	147	96	127	147
STEAM ELECTRIC	42	158	367	25	101	242
MANUFACTURING	779	857	838	235	344	577
PRIMARY METALS	35	38	31	14	18	23
CHEMICALS	49	79	83	20	35	61
PAPER	155	211	239	30	74	189
FOOD ETC.	188	149	120	45	57	80
PETROLEUM	123	150	102	62	65	81
TRANSPORTATION	30	36	35	6	13	26
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	199	194	228	58	82	117
DOMESTIC	3215	3622	4164	1338	1528	1760
DOM. CENTRAL	3158	3564	4110	1303	1493	1727
DOM. NONCENTRAL	57	58	54	35	35	32
COMMERCIAL	912	1016	1149	307	344	388
MINERALS	297	359	375	183	225	213
NONMETALS	98	118	151	13	14	19
FUELS	193	235	217	169	210	192
METALS	6	6	7	1	1	2
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	39082	39949	40786	26101	27340	29158
TOTAL SALINE	10645	22090	24658	55	125	155
FRESHWATER (BASE) PLUS SALINE	49727	62039	65444	26156	27465	29313

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	11679	11492	10629	5203	5466	5488
IRRIGATION	11618	11429	10549	5143	5402	5408
LIVESTOCK	60	64	80	60	64	80
STEAM ELECTRIC	149	153	353	23	70	219
MANUFACTURING	208	128	110	33	40	78
PRIMARY METALS	74	44	31	7	13	24
CHEMICALS	17	11	10	12	4	8
PAPER	0	0	0	0	0	0
FOOD ETC.	61	41	38	4	10	27
PETROLEUM	7	4	4	3	3	3
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	49	28	27	7	10	16
DOMESTIC	378	415	482	99	110	127
DOM. CENTRAL	364	400	469	91	101	119
DOM. NONCENTRAL	14	14	13	8	9	8
COMMERCIAL	101	108	122	21	23	26
MINERALS	111	141	180	31	41	53
NONMETALS	53	65	89	8	10	15
FUELS	18	24	27	9	11	13
METALS	40	52	64	14	20	25
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	12625	12437	11877	5410	5749	5991
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	12625	12437	11877	5410	5749	5991

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	13	12	13	10	8
IRRIGATION	10	11	12	7	8	9
LIVESTOCK	2	(5)	0	2	(5)	0
STEAM ELECTRIC	700	588	62	8	7	41
MANUFACTURING	612	215	158	51	76	108
PRIMARY METALS	96	27	15	5	7	11
CHEMICALS	34	36	29	13	19	22
PAPER	20	18	16	1	5	13
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	336	78	47	25	32	37
TEXTILE MILLS	13	3	2	0	1	1
ALL OTHER	113	53	49	7	12	24
DOMESTIC	240	280	326	91	107	124
DOM. CENTRAL	199	233	274	67	79	93
DOM. NONCENTRAL	41	47	52	25	28	31
COMMERCIAL	50	57	64	14	16	18
MINERALS	20	25	34	3	3	6
NONMETALS	20	25	34	3	3	6
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	1634	1176	656	177	218	307
TOTAL SALINE	1493	2985	1814	12	24	59

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	22	31	40	17	23	30
IRRIGATION	20	29	39	15	21	29
LIVESTOCK	2	1	1	2	1	1
STEAM ELECTRIC	486	473	280	3	3	2
MANUFACTURING	193	116	90	28	38	65
PRIMARY METALS	1	6	4	3	3	3
CHEMICALS	158	57	48	9	17	35
PAPER	0	0	0	0	0	0
FOOD ETC.	12	5	4	2	2	2
PETROLEUM	9	41	27	12	14	21
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	13	7	7	2	2	4
DOMESTIC	58	69	83	18	22	26
DOM. CENTRAL	51	60	73	13	16	20
DOM. NONCENTRAL	8	9	11	5	6	6
COMMERCIAL	14	16	18	2	3	3
MINERALS	2	2	2	0	0	0
NONMETALS	2	2	2	(S)	(S)	(S)
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	775	706	514	68	88	127
TOTAL SALINE	880	265	117	3	20	48
FRESHWATER (BASE) PLUS SALINE	1655	971	631	71	108	175

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	N/A	N/A	N/A	N/A	N/A	N/A
IRRIGATION	N/A	N/A	N/A	N/A	N/A	N/A
LIVESTOCK	N/A	N/A	N/A	N/A	N/A	N/A
STEAM ELECTRIC	58	26	185	2	2	1
MANUFACTURING	1	2	3	1	1	2
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	0	0	0	0	0	0
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	1	2	3	1	1	2
DOMESTIC	108	115	114	11	12	12
DOM. CENTRAL	108	115	114	11	12	12
DOM. NONCENTRAL	0	0	0	0	0	0
COMMERCIAL	94	99	98	8	8	8
MINERALS	N/A	N/A	N/A	N/A	N/A	N/A
NONMETALS	N/A	N/A	N/A	N/A	N/A	N/A
FUELS	N/A	N/A	N/A	N/A	N/A	N/A
METALS	N/A	N/A	N/A	N/A	N/A	N/A
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	261	242	400	22	23	23
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	261	242	400	22	23	23

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	3193	3612	3996	2557	2890	3204
IRRIGATION	3159	3581	3961	2523	2859	3169
LIVESTOCK	34	31	35	34	31	35
STEAM ELECTRIC	1979	2139	3090	17	56	170
MANUFACTURING	708	872	937	123	303	728
PRIMARY METALS	1	1	2	0	1	1
CHEMICALS	219	351	406	71	146	323
PAPER	364	416	400	26	102	319
FOOD ETC.	89	66	60	10	20	44
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	5	9	33	3	18	26
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	30	29	36	13	16	15
DOMESTIC	1049	1289	1692	302	371	480
DOM. CENTRAL	974	1206	1605	255	321	428
DOM. NONCENTRAL	76	83	87	46	50	52
COMMERCIAL	150	170	228	67	80	102
MINERALS	225	281	370	36	47	66
NONMETALS	217	270	357	32	42	60
FUELS	6	9	10	3	4	5
METALS	2	2	3	1	1	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	7304	8363	10313	3102	3747	4750
TOTAL SALINE	6550	14023	19588	54	156	706
FRESHWATER (BASE) PLUS SALINE	13854	22386	29901	3156	3903	5456

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	194	272	347	155	218	282
IRRIGATION	162	227	291	123	173	226
LIVESTOCK	32	45	56	32	45	56
STEAM ELECTRIC	2475	2874	1757	41	181	396
MANUFACTURING	905	639	579	72	173	440
PRIMARY METALS	5	6	7	1	2	5
CHEMICALS	187	95	90	19	35	71
PAPER	527	450	400	21	99	318
FOOD ETC.	38	19	16	3	4	9
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	17	17	18	2	5	14
TEXTILE MILLS	103	34	25	17	18	16
ALL OTHER	28	18	23	9	10	7
DOMESTIC	484	569	690	137	160	190
DOM. CENTRAL	432	511	631	104	125	155
DOM. NONCENTRAL	53	58	60	33	36	36
COMMERCIAL	120	134	155	21	24	27
MINERALS	157	197	259	23	30	43
NONMETALS	156	196	258	23	30	43
FUELS	0	0	0	0	0	0
METALS	1	1	1	(S)	(S)	(S)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	4336	4685	3787	449	786	1378
TOTAL SALINE	486	323	144	2	2	1
FRESHWATER (BASE) PLUS SALINE	4822	5008	3931	451	788	1379

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	1449	1226	951	476	481	473
IRRIGATION	1447	1226	951	474	481	473
LIVESTOCK	2	0	0	2	0	0
STEAM ELECTRIC	0	0	0	0	0	0
MANUFACTURING	250	186	141	34	60	111
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	0	0	0	0	0	0
FOOD ETC.	245	179	134	31	56	106
PETROLEUM	5	6	6	3	3	4
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	0	1	1	0	1	1
DOMESTIC	148	156	182	48	52	61
DOM. CENTRAL	148	156	182	48	52	60
DOM. NONCENTRAL	(S)	(S)	0	(S)	(S)	(S)
COMMERCIAL	55	58	65	14	15	17
MINERALS	1	1	1	0	0	0
NONMETALS	1	1	1	(S)	(S)	(S)
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	1903	1627	1340	572	608	661
TOTAL SALINE	1138	1952	3623	3	8	20
FRESHWATER (BASE) PLUS SALINE	3041	3579	4963	575	616	681

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	19364	18376	14411	4922	5626	5528
IRRIGATION	19333	18338	14365	4891	5588	5483
LIVESTOCK	31	38	45	31	38	45
STEAM ELECTRIC	0	9	29	0	6	19
MANUFACTURING	283	177	163	52	81	128
PRIMARY METALS	24	8	5	1	2	4
CHEMICALS	54	43	43	21	30	34
PAPER	74	31	25	6	10	20
FOOD ETC.	58	33	25	3	8	19
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	73	62	65	21	31	51
DOMESTIC	150	138	151	45	42	45
DOM. CENTRAL	135	125	137	36	33	36
DOM. NONCENTRAL	15	14	14	9	8	8
COMMERCIAL	26	23	24	6	6	6
MINERALS	42	50	65	9	12	16
NONMETALS	23	29	40	3	4	7
FUELS	0	0	0	0	0	0
METALS	19	21	25	6	8	9
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	19865	18773	14842	5034	5772	5742
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	19865	18773	14842	5034	5772	5742

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	97	142	169	87	128	154
IRRIGATION	53	75	102	42	61	87
LIVESTOCK	44	67	67	44	67	67
STEAM ELECTRIC	8041	6048	2969	94	269	747
MANUFACTURING	2162	878	656	280	352	447
PRIMARY METALS	1148	391	225	146	165	178
CHEMICALS	235	108	98	41	60	72
PAPER	68	40	33	5	11	25
FOOD ETC.	261	115	83	30	38	53
PETROLEUM	70	57	55	27	31	44
TRANSPORTATION	14	7	5	3	4	4
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	366	160	157	28	43	71
DOMESTIC	1670	1915	2148	197	224	243
DOM. CENTRAL	1598	1840	2080	153	178	202
DOM. NONCENTRAL	73	76	69	45	46	41
COMMERCIAL	369	414	452	31	34	38
MINERALS	198	245	312	50	60	80
NONMETALS	138	170	224	21	25	38
FUELS	59	74	86	29	35	41
METALS	1	1	2	(5)	(5)	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	12538	9641	6706	739	1067	1709
TOTAL SALINE	17	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	12555	9641	6706	739	1067	1709

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	61	82	98	56	75	90
IRRIGATION	28	42	56	23	34	48
LIVESTOCK	33	41	42	33	41	42
STEAM ELECTRIC	6510	4426	1505	55	174	476
MANUFACTURING	4512	1301	876	328	463	663
PRIMARY METALS	3628	977	591	179	276	470
CHEMICALS	346	88	77	66	85	58
PAPER	18	16	15	3	5	11
FOOD ETC.	51	25	20	15	15	12
PETROLEUM	251	54	35	29	28	28
TRANSPORTATION	52	41	37	8	15	28
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	166	100	101	28	39	56
DOMESTIC	496	589	687	157	188	216
DOM. CENTRAL	398	472	558	98	118	139
DOM. NONCENTRAL	98	116	129	60	70	77
COMMERCIAL	86	99	110	7	8	9
MINERALS	114	131	187	22	30	40
NONMETALS	97	108	161	14	19	27
FUELS	17	23	26	8	11	13
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	11779	6628	3463	625	938	1494
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	11783	6628	3463	625	938	1494

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	154	216	243	140	206	235
IRRIGATION	52	54	60	38	43	51
LIVESTOCK	102	163	184	102	163	184
STEAM ELECTRIC	1241	1736	991	16	39	142
MANUFACTURING	426	179	137	34	55	95
PRIMARY METALS	26	10	6	3	4	5
CHEMICALS	51	27	24	5	10	19
PAPER	5	2	2	1	1	1
FOOD ETC.	239	110	77	20	32	56
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	105	30	28	5	8	14
DOMESTIC	256	276	292	57	59	59
DOM. CENTRAL	216	237	260	32	36	39
DOM. NONCENTRAL	40	38	33	24	23	19
COMMERCIAL	54	56	57	6	7	7
MINERALS	81	100	134	12	15	22
NONMETALS	80	99	133	12	15	22
FUELS	1	1	1	(S)	(S)	(S)
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	2212	2563	1855	265	380	559
TOTAL SALINE	11	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	2223	2563	1855	265	380	559

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	4059	4738	4551	2636	3136	3114
IRRIGATION	3972	4619	4409	2548	3016	2972
LIVESTOCK	88	119	142	88	119	142
STEAM ELECTRIC	493	329	491	26	74	178
MANUFACTURING	233	130	118	43	63	88
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	152	82	69	24	38	55
PAPER	7	7	8	1	3	6
FOOD ETC.	18	8	6	2	3	3
PETROLEUM	21	20	22	13	14	18
TRANSPORTATION	7	4	3	1	2	2
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	28	9	10	2	3	4
DOMESTIC	254	259	273	82	84	87
DOM. CENTRAL	233	240	257	69	72	77
DOM. NONCENTRAL	21	19	17	13	12	10
COMMERCIAL	63	62	63	15	15	15
MINERALS	132	163	208	37	45	57
NONMETALS	82	100	136	12	15	23
FUELS	50	63	72	25	30	34
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	5234	5682	5705	2839	3416	3539
TOTAL SALINE	28	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	5262	5682	5705	2839	3416	3539

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	53	76	95	48	69	86
IRRIGATION	22	32	44	17	25	35
LIVESTOCK	31	44	51	31	44	51
STEAM ELECTRIC	2606	3470	2912	54	104	349
HANUFACTURING	546	294	265	88	123	195
PRIMARY METALS	84	64	55	39	42	44
CHEMICALS	276	121	104	27	47	82
PAPER	42	33	33	3	9	26
FOOD ETC.	32	21	17	6	8	11
PETROLEUM	48	20	16	7	8	13
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	64	35	40	6	9	19
DOMESTIC	161	194	227	45	52	57
DOM. CENTRAL	118	144	176	17	21	26
DOM. NONCENTRAL	43	50	51	28	31	31
COMMERCIAL	60	66	73	5	6	6
MINERALS	149	189	230	56	69	83
NONMETALS	53	65	89	8	10	15
FUELS	96	124	141	48	59	68
METALS	(S)	(S)	(S)	(S)	(S)	(S)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	3575	4290	3802	296	423	776
TOTAL SALINE	1	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	3576	4290	3802	296	423	776

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	1963	1662	1444	1296	1161	1080
IRRIGATION	1944	1635	1413	1277	1133	1049
LIVESTOCK	19	27	31	19	27	31
STEAM ELECTRIC	2868	5076	5982	39	83	159
MANUFACTURING	3531	1290	1036	254	427	818
PRIMARY METALS	517	96	58	27	34	46
CHEMICALS	2092	653	560	121	225	445
PAPER	314	225	205	35	72	163
FOOD ETC.	177	94	63	14	25	48
PETROLEUM	420	205	136	54	67	109
TRANSPORTATION	3	4	3	1	1	2
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	8	13	11	2	3	5
DOMESTIC	420	444	484	227	242	263
DOM. CENTRAL	372	398	444	197	214	238
DOM. NONCENTRAL	48	46	41	30	28	24
COMMERCIAL	103	104	108	48	49	50
MINERALS	675	884	1037	294	367	429
NONMETALS	129	160	215	19	24	36
FUELS	546	724	822	275	343	393
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	9561	9460	10091	2158	2328	2799
TOTAL SALINE	1253	1590	10181	2	10	63
FRESHWATER (BASE) PLUS SALINE	10814	11050	20272	2160	2338	2862

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	7	8	10	6	6	7
IRRIGATION	3	6	7	2	4	5
LIVESTOCK	4	2	2	4	2	2
STEAM ELECTRIC	9	19	8	0	0	5
MANUFACTURING	699	418	327	68	129	257
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	652	395	309	58	118	246
FOOD ETC.	30	12	8	7	7	5
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	17	11	10	3	4	6
DONESTIC	99	94	98	22	21	22
DOM. CENTRAL	95	89	92	19	18	19
DOM. NONCENTRAL	4	5	6	3	3	3
COMMERCIAL	26	25	25	4	4	4
MINERALS	11	15	19	2	2	3
NONMETALS	11	14	18	2	2	3
FUELS	0	0	0	0	0	0
METALS	(S)	1	1	(S)	(S)	(S)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	852	578	487	102	162	298
TOTAL SALINE	714	1007	263	6	10	26
FRESHWATER (BASE) PLUS SALINE	1566	1585	750	108	172	324

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	39	52	68	31	40	52
IRRIGATION	29	44	61	22	33	45
LIVESTOCK	9	8	8	9	8	8
STEAM ELECTRIC	436	368	122	2	8	81
MANUFACTURING	575	462	313	72	125	238
PRIMARY METALS	179	291	175	42	74	139
CHEMICALS	170	40	31	5	10	24
PAPER	114	59	48	11	19	38
FOOD ETC.	46	32	23	4	8	15
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	15	11	8	2	3	6
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	51	29	28	8	11	16
DOMESTIC	431	523	653	44	52	59
DOM. CENTRAL	394	482	611	21	27	34
DOM. NONCENTRAL	38	41	42	23	25	25
COMMERCIAL	81	95	115	3	4	4
MINERALS	65	81	110	11	13	20
NONMETALS	64	80	109	10	12	19
FUELS	1	1	1	1	1	1
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	1627	1581	1382	164	242	455
TOTAL SALINE	4244	4228	2565	20	59	208
FRESHWATER (BASE) PLUS SALINE	5871	5809	3947	184	301	663

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	20	19	20	16	14	15
IRRIGATION	18	19	20	14	14	15
LIVESTOCK	3	0	0	3	0	0
STEAM ELECTRIC	339	287	70	3	2	46
MANUFACTURING	513	292	224	64	97	153
PRIMARY METALS	24	6	4	2	2	3
CHEMICALS	49	26	22	8	12	16
PAPER	155	61	42	7	15	32
FOOD ETC.	19	18	14	2	4	8
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	5	3	2	1	1	2
TEXTILE MILLS	17	5	3	1	1	2
ALL OTHER	244	173	137	43	62	90
DOMESTIC	480	546	623	34	39	42
DOM. CENTRAL	461	528	606	23	27	31
DOM. NONCENTRAL	18	19	17	11	11	10
COMMERCIAL	118	133	149	5	6	6
MINERALS	32	39	54	4	7	9
NONMETALS	32	39	54	4	7	9
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	1503	1316	1140	127	164	270
TOTAL SALINE	2729	5524	5223	27	43	106
FRESHWATER (BASE) PLUS SALINE	4232	6840	6363	154	207	376

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	99	133	169	83	114	146
IRRIGATION	76	109	145	60	90	122
LIVESTOCK	23	24	24	23	24	24
STEAM ELECTRIC	6899	7379	1662	69	192	405
MANUFACTURING	3616	1259	893	444	537	668
PRIMARY METALS	1742	524	319	295	297	253
CHEMICALS	897	185	145	21	47	112
PAPER	324	176	132	38	62	105
FOOD ETC.	55	27	22	7	9	13
PETROLEUM	35	24	16	6	8	13
TRANSPORTATION	274	227	172	71	98	131
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	289	96	87	6	16	41
DOMESTIC	733	846	968	137	158	174
DOM. CENTRAL	584	674	782	46	54	63
DOM. NONCENTRAL	148	172	186	90	104	111
COMMERCIAL	226	252	277	15	17	19
MINERALS	312	383	500	63	77	109
NONMETALS	240	299	397	36	45	68
FUELS	6	8	9	3	3	4
METALS	66	76	94	24	29	37
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	11885	10252	4469	811	1095	1521
TOTAL SALINE	336	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	12221	10252	4469	811	1095	1521

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	147	254	432	131	223	369
IRRIGATION	84	164	338	68	133	275
LIVESTOCK	63	90	94	63	90	94
STEAM ELECTRIC	1462	1287	672	35	61	193
MANUFACTURING	407	209	175	60	82	119
PRIMARY METALS	53	21	13	7	8	10
CHEMICALS	2	3	4	1	2	3
PAPER	220	107	85	28	42	66
FOOD ETC.	83	42	31	14	17	20
PETROLEUM	10	8	9	5	5	7
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	39	28	33	5	8	13
DOMESTIC	285	326	379	60	64	67
DOM. CENTRAL	224	264	321	22	27	32
DOM. NONCENTRAL	60	62	58	37	38	34
COMMERCIAL	110	121	135	9	10	11
MINERALS	191	228	287	63	79	97
NONMETALS	34	43	58	5	6	10
FUELS	0	0	0	0	0	0
METALS	157	185	229	58	73	87
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	2602	2424	2080	358	519	857
TOTAL SALINE	1	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	2603	2424	2080	358	519	857

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	383	429	443	284	329	352
IRRIGATION	354	391	394	256	291	304
LIVESTOCK	29	38	48	29	38	48
STEAM ELECTRIC	265	632	10029	8	22	111
MANUFACTURING	497	291	280	55	100	216
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	137	59	48	12	21	38
PAPER	170	165	172	24	55	137
FOOD ETC.	14	6	5	1	2	3
PETROLEUM	16	24	21	10	11	17
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	2	2	2	1	1	2
ALL OTHER	158	35	32	7	10	19
DOMESTIC	187	206	230	78	86	93
DOM. CENTRAL	157	173	198	58	65	74
DOM. NONCENTRAL	31	33	31	20	20	19
COMMERCIAL	52	54	55	13	13	14
MINERALS	46	60	74	14	19	24
NONMETALS	23	29	39	3	4	7
FUELS	23	31	35	11	15	17
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	1431	1672	11110	452	569	810
TOTAL SALINE	428	405	211	3	24	30
FRESHWATER (BASE) PLUS SALINE	1859	2077	11321	455	593	840

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	263	293	312	203	235	257
IRRIGATION	198	218	229	138	160	174
LIVESTOCK	65	75	83	65	75	83
STEAM ELECTRIC	3701	3718	2217	36	80	322
MANUFACTURING	353	166	154	37	54	99
PRIMARY METALS	61	18	11	5	7	8
CHEMICALS	120	60	55	9	18	42
PAPER	3	4	6	0	1	4
FOOD ETC.	65	35	26	6	9	16
PETROLEUM	17	1	1	4	0	1
TRANSPORTATION	19	21	24	2	7	18
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	68	27	31	11	12	10
DOMESTIC	304	346	383	77	86	91
DOM. CENTRAL	258	297	338	48	57	64
DOM. NONCENTRAL	45	48	45	28	30	27
COMMERCIAL	169	185	199	28	30	33
MINERALS	189	226	294	41	52	71
NONMETALS	127	153	205	19	23	35
FUELS	3	3	4	1	2	2
METALS	59	70	85	21	27	34
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	4978	4934	3559	422	538	873
TOTAL SALINE	1	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	4979	4934	3559	422	538	873

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	9129	15018	13399	2823	4751
IRRIGATION	9086	14958	13328	2780	4691	4646
LIVESTOCK	44	61	71	44	61	71
STEAM ELECTRIC	92	141	127	3	34	51
MANUFACTURING	215	66	47	39	25	37
PRIMARY METALS	116	27	16	5	8	13
CHEMICALS	0	0	0	0	0	0
PAPER	26	11	9	20	4	7
FOOD ETC.	17	12	9	6	6	7
PETROLEUM	48	10	6	5	4	5
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	8	6	7	3	3	5
DOMESTIC	101	93	95	52	48	49
DOM. CENTRAL	89	82	84	44	41	42
DOM. NONCENTRAL	12	12	11	7	7	7
COMMERCIAL	35	31	30	11	10	10
MINERALS	77	96	119	24	31	39
NONMETALS	29	36	49	4	5	9
FUELS	13	18	20	7	9	10
METALS	35	42	50	13	17	20
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	9649	15446	13817	2952	4900	4903
TOTAL SALINE	1	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	9650	15446	13817	2952	4900	4903

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	9618	10762	10076	5989	6968	6831
IRRIGATION	9511	10616	9907	5882	6823	6662
LIVESTOCK	108	145	168	108	145	168
STEAM ELECTRIC	1426	1918	1224	10	29	96
MANUFACTURING	153	61	54	56	23	37
PRIMARY METALS	1	1	2	0	1	2
CHEMICALS	104	30	24	47	10	19
PAPER	0	0	0	0	0	0
FOOD ETC.	35	21	17	7	9	11
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	13	9	11	2	3	5
DOMESTIC	184	191	206	44	45	48
DOM. CENTRAL	167	175	193	34	36	39
DOM. NONCENTRAL	17	16	14	10	10	8
COMMERCIAL	60	60	62	10	10	10
MINERALS	30	37	49	6	6	10
NONMETALS	26	33	44	4	4	8
FUELS	4	4	5	2	2	2
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	11471	13029	11671	6115	7082	7031
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	11471	13029	11671	6115	7082	7031

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	3023	2895	2835	1715	1750	1854
IRRIGATION	3002	2895	2835	1694	1750	1854
LIVESTOCK	21	0	0	21	0	0
STEAM ELECTRIC	32	109	90	28	85	66
MANUFACTURING	27	9	8	6	5	6
PRIMARY METALS	22	6	4	3	3	3
CHEMICALS	4	2	2	2	1	1
PAPER	0	0	0	0	0	0
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	1	1	2	1	1	2
DOMESTIC	120	143	185	43	52	68
DOM. CENTRAL	116	139	182	41	50	66
DOM. NONCENTRAL	3	4	4	2	2	2
COMMERCIAL	26	31	40	7	9	10
MINERALS	58	71	92	15	19	26
NONMETALS	29	35	48	4	5	8
FUELS	(5)	(5)	(5)	(5)	(5)	(5)
METALS	29	36	44	11	14	18
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	3286	3257	3250	1814	1920	2030
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	3286	3257	3250	1814	1920	2030

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	3	3	4	3	2
IRRIGATION	2	3	4	1	2	3
LIVESTOCK	1	0	0	1	0	0
STEAM ELECTRIC	190	138	158	2	1	24
MANUFACTURING	94	50	41	8	14	28
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	63	36	27	5	10	21
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	9	1	1	0	0	0
ALL OTHER	22	13	13	3	4	7
DOMESTIC	68	77	88	12	14	15
DOM. CENTRAL	53	60	70	3	3	4
DOM. NONCENTRAL	15	17	18	9	10	11
COMMERCIAL	13	14	16	1	1	1
MINERALS	6	8	10	1	1	2
NONMETALS	6	8	10	1	1	2
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	374	291	317	26	32	73
TOTAL SALINE	140	2589	2732	2	16	16
FRESHWATER (BASE) MILLION GALLONS PER DAY	514	2880	3049	28	48	89

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	121	161	209	90	118	154
IRRIGATION	119	161	209	87	118	154
LIVESTOCK	2	0	0	2	0	0
STEAM ELECTRIC	575	535	2	3	4	1
MANUFACTURING	928	497	405	116	172	273
PRIMARY METALS	36	30	18	14	15	14
CHEMICALS	332	205	170	43	74	126
PAPER	98	75	68	7	20	52
FOOD ETC.	65	44	35	14	17	21
PETROLEUM	212	71	43	27	28	34
TRANSPORTATION	22	8	5	2	3	4
TEXTILE MILLS	5	3	2	0	1	1
ALL OTHER	158	61	64	9	14	21
DOMESTIC	901	1057	1218	200	238	273
DOM. CENTRAL	853	1000	1156	171	203	236
DOM. NONCENTRAL	48	57	63	29	34	37
COMMERCIAL	88	102	115	14	17	19
MINERALS	65	78	103	12	13	19
NONMETALS	58	71	95	9	11	16
FUELS	0	0	0	0	0	0
METALS	7	7	8	3	2	3
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	2679	2430	2053	435	562	739
TOTAL SALINE	3587	6695	6979	16	77	252
FRESHWATER (BASE) PLUS SALINE	6266	9125	9032	451	639	991

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	3673	3269	2974	2432	2176	2036
IRRIGATION	3636	3232	2931	2396	2139	1993
LIVESTOCK	36	37	43	36	37	43
STEAM ELECTRIC	64	62	34	26	33	24
MANUFACTURING	13	27	54	16	22	42
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	1	1	1	1	0	1
PAPER	0	0	0	0	0	0
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	1	1	1	1	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	11	25	52	14	22	41
DOMESTIC	161	158	180	73	73	82
DOM. CENTRAL	150	149	170	66	67	76
DOM. NONCENTRAL	10	10	9	7	6	6
COMMERCIAL	70	66	71	25	24	26
MINERALS	220	273	339	73	91	111
NONMETALS	78	94	127	11	14	21
FUELS	71	97	112	37	46	53
METALS	71	82	100	25	31	37
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	4200	3856	3652	2646	2419	2321
TOTAL SALINE	5	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	4205	3856	3652	2646	2419	2321

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	105	126	152	87	103	122
IRRIGATION	69	90	115	51	66	85
LIVESTOCK	36	37	37	36	37	37
STEAM ELECTRIC	3758	7405	9945	25	58	309
MANUFACTURING	2108	769	573	383	234	370
PRIMARY METALS	576	239	142	307	96	113
CHEMICALS	529	117	90	22	39	65
PAPER	337	179	133	10	38	104
FOOD ETC.	72	56	44	14	18	24
PETROLEUM	55	7	4	2	2	3
TRANSPORTATION	118	28	17	4	7	13
TEXTILE MILLS	12	4	4	0	1	1
ALL OTHER	409	139	139	24	33	47
DOMESTIC	1998	2259	2544	391	442	488
DOM. CENTRAL	1896	2156	2451	329	380	433
DOM. NONCENTRAL	102	103	93	62	62	55
COMMERCIAL	452	503	554	72	81	89
MINERALS	181	222	293	29	36	54
NONMETALS	169	210	277	25	32	47
FUELS	1	1	1	(S)	(S)	1
METALS	11	11	15	4	4	6
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	8603	11284	14061	987	954	1432
TOTAL SALINE	7107	15338	12794	42	99	143
FRESHWATER (BASE) PLUS SALINE	15710	26622	26855	1029	1053	1575

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	111	147	189	89	116
IRRIGATION	88	125	164	66	95	129
LIVESTOCK	23	21	25	23	21	25
STEAM ELECTRIC	2892	4019	5544	39	205	439
MANUFACTURING	734	432	413	52	118	294
PRIMARY METALS	2	2	1	0	1	1
CHEMICALS	105	56	60	12	22	45
PAPER	370	219	200	13	49	159
FOOD ETC.	19	9	8	2	3	4
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	175	86	67	11	21	45
ALL OTHER	63	60	77	14	22	40
DOMESTIC	546	660	807	164	199	238
DOM. CENTRAL	413	496	617	82	100	124
DOM. NONCENTRAL	134	163	190	83	99	114
COMMERCIAL	88	99	112	14	16	20
MINERALS	70	88	119	11	13	20
NONMETALS	70	88	119	11	13	20
FUELS	0	0	0	0	0	0
METALS	(S)	(S)	(S)	(S)	(S)	(S)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	4442	5444	7183	370	668	1165
TOTAL SALINE	7	76	172	3	50	114
FRESHWATER (BASE) PLUS SALINE	4449	5520	7355	373	718	1279

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	242	322	513	169	242	409
IRRIGATION	203	279	457	129	198	354
LIVESTOCK	40	43	56	40	43	56
STEAM ELECTRIC	302	1152	1476	6	20	97
MANUFACTURING	11	7	7	3	3	5
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	0	0	0	0	0	0
FOOD ETC.	8	4	3	2	2	2
PETROLEUM	3	3	3	1	1	3
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	0	0	1	0	0	0
DOMESTIC	68	65	66	39	37	38
DOM. CENTRAL	57	55	59	32	31	33
DOM. NONCENTRAL	11	10	8	7	6	5
COMMERCIAL	12	11	10	6	5	5
MINERALS	12	18	22	6	7	8
NONMETALS	4	5	8	1	1	1
FUELS	8	13	14	5	6	7
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	648	1574	2094	228	314	562
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	648	1574	2094	228	314	562

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	50	58	63	46	53	58
IRRIGATION	17	22	29	13	17	24
LIVESTOCK	33	36	34	33	36	34
STEAM ELECTRIC	10803	9651	4823	100	257	654
MANUFACTURING	4456	1549	1078	457	581	790
PRIMARY METALS	2856	910	526	335	379	417
CHEMICALS	585	223	190	30	65	147
PAPER	153	97	81	16	30	62
FOOD ETC.	56	35	30	8	11	16
PETROLEUM	227	42	28	15	17	22
TRANSPORTATION	72	60	56	8	18	43
TEXTILE MILLS	4	2	1	0	0	1
ALL OTHER	503	180	166	45	61	82
DOMESTIC	1162	1347	1521	212	249	278
DOM. CENTRAL	1037	1199	1360	136	160	181
DOM. NONCENTRAL	124	148	162	76	89	96
COMMERCIAL	131	148	161	16	18	20
MINERALS	259	317	418	54	65	88
NONMETALS	216	265	359	32	40	60
FUELS	43	52	59	22	25	28
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	16860	13070	8064	886	1224	1888
TOTAL SALINE	7	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	16867	13070	8064	886	1224	1888

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	1176	1197	1178	972	983	972
IRRIGATION	1085	1093	1052	881	879	846
LIVESTOCK	92	104	126	92	104	126
STEAM ELECTRIC	230	688	547	40	92	224
MANUFACTURING	158	105	116	43	57	85
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	3	5	7	2	3	5
PAPER	97	41	33	18	23	27
FOOD ETC.	7	6	7	0	1	4
PETROLEUM	32	34	43	18	22	35
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	19	19	26	5	8	14
DOMESTIC	232	253	283	95	105	116
DOM. CENTRAL	207	228	260	80	90	102
DOM. NONCENTRAL	25	25	23	15	15	14
COMMERCIAL	78	83	90	27	29	31
MINERALS	173	220	270	68	84	101
NONMETALS	52	64	87	8	10	14
FUELS	120	155	182	60	74	87
METALS	1	1	1	(S)	(S)	(S)
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	2048	2545	2483	1246	1349	1529
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	2048	2545	2483	1246	1349	1529

U. S. WATER RESOURCES COUNCIL

OREGON

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000

AGRICULTURE	8211	9178	8377	3097	3949	3855
IRRIGATION	8194	9159	8355	3081	3930	3833
LIVESTOCK	16	19	22	16	19	22
STEAM ELECTRIC	22	88	207	0	28	97
MANUFACTURING	574	312	258	51	95	197
PRIMARY METALS	31	8	5	4	4	4
CHEMICALS	50	8	6	2	3	5
PAPER	335	196	156	19	50	124
FOOD ETC.	22	12	10	2	3	6
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	136	88	81	24	35	58
DOMESTIC	255	278	313	65	71	80
DOM. CENTRAL	226	247	279	47	52	60
DOM. NONCENTRAL	28	31	34	17	19	20
COMMERCIAL	43	45	50	7	8	8
MINERALS	36	44	61	6	6	11
NONMETALS	34	42	58	5	5	10
FUELS	0	0	0	0	0	0
METALS	2	2	3	1	1	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	9141	9946	9266	3226	4157	4248
TOTAL SALINE	9	0	10592	0	0	65
FRESHWATER (BASE) PLUS SALINE	9150	9946	19858	3226	4157	4313

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	56	57	65	50	48
IRRIGATION	21	29	37	16	20	27
LIVESTOCK	34	28	28	34	28	28
STEAM ELECTRIC	5902	5594	3230	136	280	614
MANUFACTURING	6120	1935	1268	460	636	946
PRIMARY METALS	4073	1186	660	283	379	523
CHEMICALS	958	240	189	47	82	146
PAPER	276	173	145	22	49	114
FOOD ETC.	135	65	47	22	25	29
PETROLEUM	344	105	69	52	51	55
TRANSPORTATION	21	15	12	2	4	9
TEXTILE MILLS	12	4	3	1	1	1
ALL OTHER	301	147	143	31	45	69
DOMESTIC	1108	1248	1367	177	202	218
DOM. CENTRAL	978	1098	1209	98	112	124
DOM. NONCENTRAL	130	149	158	79	90	94
COMMERCIAL	187	205	217	16	17	18
MINERALS	326	407	530	81	101	134
NONMETALS	230	291	385	35	44	65
FUELS	87	106	133	42	51	64
METALS	9	10	12	4	6	5
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	13698	9445	6678	920	1284	1985
TOTAL SALINE	30	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	13728	9445	6678	920	1284	1985

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	2	1	2	1	1	1
IRRIGATION	1	1	2	1	1	1
LIVESTOCK	(5)	0	0	(5)	0	0
STEAM ELECTRIC	0	0	0	0	0	0
MANUFACTURING	86	29	24	7	9	15
PRIMARY METALS	18	5	3	1	2	2
CHEMICALS	26	5	5	1	1	4
PAPER	2	1	1	0	0	1
FOOD ETC.	11	3	2	1	1	1
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	18	6	3	2	2	2
ALL OTHER	11	9	10	2	3	5
DOMESTIC	45	52	60	5	6	7
DOM. CENTRAL	40	46	53	2	2	3
DOM. NONCENTRAL	5	6	7	3	4	4
COMMERCIAL	19	22	24	1	1	1
MINERALS	2	3	4	0	0	1
NONMETALS	2	3	4	(5)	(5)	1
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	154	108	113	14	17	25
TOTAL SALINE	140	2493	129	0	15	86
FRESHWATER (BASE) PLUS SALINE	294	2601	242	14	32	111

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	36	31	37	30	24	29
IRRIGATION	23	30	35	17	22	28
LIVESTOCK	13	2	1	13	2	1
STEAM ELECTRIC	2558	756	1530	35	137	353
MANUFACTURING	457	369	359	45	103	271
PRIMARY METALS	5	2	2	0	1	1
CHEMICALS	90	63	67	7	18	51
PAPER	228	217	212	16	53	169
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	96	59	47	15	21	33
ALL OTHER	38	28	31	7	10	17
DOMESTIC	342	388	462	73	81	91
DOM. CENTRAL	296	341	416	44	52	64
DOM. NONCENTRAL	46	47	46	29	29	28
COMMERCIAL	80	84	93	10	11	12
MINERALS	50	62	84	8	10	14
NONMETALS	50	62	84	8	10	14
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	3522	1690	2565	201	366	770
TOTAL SALINE	97	50	80	0	0	53
FRESHWATER (BASE) PLUS SALINE	3619	1740	2645	201	366	823

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	508	691	863	346	531	712
IRRIGATION	454	588	744	292	429	593
LIVESTOCK	54	102	119	54	102	119
STEAM ELECTRIC	5	5	8	3	3	5
MANUFACTURING	20	11	10	2	3	6
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	0	0	0	0	0	0
FOOD ETC.	20	11	9	2	3	6
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	0	0	1	0	0	0
DOMESTIC	62	63	64	20	20	20
DOM. CENTRAL	51	53	56	13	14	15
DOM. NONCENTRAL	11	10	8	7	6	5
COMMERCIAL	15	14	14	3	3	3
MINERALS	31	36	50	6	7	10
NONMETALS	23	29	40	3	4	6
FUELS	(S)	(S)	(S)	(S)	(S)	(S)
METALS	8	7	10	3	3	4
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	641	820	1009	380	567	756
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	641	820	1009	380	567	756

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	48	54	61	45	50	56
IRRIGATION	15	18	20	12	13	16
LIVESTOCK	33	36	41	33	36	41
STEAM ELECTRIC	4865	4968	3522	33	210	466
MANUFACTURING	1886	661	585	131	229	445
PRIMARY METALS	50	20	14	2	4	11
CHEMICALS	1407	358	298	78	135	234
PAPER	283	204	196	36	69	156
FOOD ETC.	45	21	16	4	6	10
PETROLEUM	1	2	3	1	2	3
TRANSPORTATION	11	3	2	4	1	2
TEXTILE MILLS	16	12	11	2	4	8
ALL OTHER	73	41	45	4	8	21
DOMESTIC	326	401	482	58	70	79
DOM. CENTRAL	284	350	430	30	38	47
DOM. NONCENTRAL	42	51	53	27	31	32
COMMERCIAL	69	80	92	6	8	9
MINERALS	107	129	170	22	27	39
NONMETALS	82	101	137	12	15	23
FUELS	9	11	13	5	5	8
METALS	16	17	20	5	7	8
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	7301	6293	4912	295	593	1094
TOTAL SALINE	4	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	7305	6293	4912	295	593	1094

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS BILLION GALLONS PER DAY			TOTAL CONSUMPTION BILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
	AGRICULTURE	17525	15593	13189	14228	12723
IRRIGATION	17257	15320	12864	13960	12451	10558
LIVESTOCK	268	272	325	268	272	325
STEAM ELECTRIC	758	1050	2317	120	302	1029
MANUFACTURING	2072	2739	2470	514	884	1932
PRIMARY METALS	661	281	182	87	108	144
CHEMICALS	607	1517	1407	169	406	1118
PAPER	246	217	218	38	77	173
FOOD ETC.	80	64	58	16	23	40
PETROLEUM	341	570	509	187	240	407
TRANSPORTATION	89	33	21	1	6	16
TEXTILE MILLS	1	1	1	0	1	1
ALL OTHER	47	56	74	16	23	33
DOMESTIC	1211	1306	1515	463	503	580
DOM. CENTRAL	1134	1228	1438	414	455	534
DOM. NONCENTRAL	77	78	77	48	48	46
COMMERCIAL	258	271	305	92	97	109
MINERALS	1155	1321	1572	479	515	604
NONMETALS	280	346	465	40	53	78
FUELS	850	935	1062	429	449	507
METALS	25	40	45	10	13	19
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	22979	22280	21368	15896	15024	15137
TOTAL SALINE	9438	4950	10371	37	45	199
FRESHWATER (BASE) PLUS SALINE	32417	27230	31739	15933	15069	15336

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	4830	4349	4021	1810	1722	1754
IRRIGATION	4807	4349	4021	1787	1722	1754
LIVESTOCK	23	0	0	23	0	0
STEAM ELECTRIC	40	63	104	8	51	78
MANUFACTURING	75	84	90	21	36	71
PRIMARY METALS	53	58	63	9	23	50
CHEMICALS	1	4	4	2	2	3
PAPER	0	0	0	0	0	0
FOOD ETC.	10	9	8	4	4	6
PETROLEUM	7	7	7	4	4	6
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	4	6	8	2	3	6
DOMESTIC	327	339	391	153	160	186
DOM. CENTRAL	324	336	388	151	159	184
DOM. NONCENTRAL	3	3	3	2	2	2
COMMERCIAL	45	47	52	15	15	17
MINERALS	128	172	213	42	60	71
NONMETALS	36	46	61	5	7	10
FUELS	16	19	22	9	10	11
METALS	76	107	130	28	43	50
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	5445	5054	4872	2049	2044	2177
TOTAL SALINE	14	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	5459	5054	4872	2049	2044	2177

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	8	8	8	8	8	8
IRRIGATION	1	1	1	(S)	1	1
LIVESTOCK	7	7	7	7	7	7
STEAM ELECTRIC	25	37	77	8	8	51
MANUFACTURING	92	10	8	1	2	5
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	14	5	3	0	1	3
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	78	5	5	1	1	2
DOMESTIC	43	48	55	8	9	10
DOM. CENTRAL	32	36	42	2	2	2
DOM. NONCENTRAL	11	12	13	7	8	8
COMMERCIAL	14	14	16	1	2	2
MINERALS	21	26	36	3	4	5
NONMETALS	21	26	36	3	4	5
FUELS	0	0	0	0	0	0
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	203	144	200	29	33	80
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	203	144	200	29	33	80

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	64	85	108	53	69	87
IRRIGATION	44	65	87	33	49	67
LIVESTOCK	20	20	21	20	20	21
STEAM ELECTRIC	1434	1648	1160	14	47	149
MANUFACTURING	1218	643	600	124	232	461
PRIMARY METALS	5	3	3	1	1	2
CHEMICALS	733	250	209	70	111	164
PAPER	252	254	270	17	68	215
FOOD ETC.	10	8	8	1	2	4
PETROLEUM	3	11	6	3	4	5
TRANSPORTATION	7	20	14	5	7	11
TEXTILE MILLS	43	20	15	6	8	11
ALL OTHER	165	77	75	21	31	49
DOMESTIC	319	385	481	72	90	111
DOM. CENTRAL	246	290	363	26	32	40
DOM. NONCENTRAL	73	95	118	46	58	71
COMMERCIAL	226	258	303	14	16	18
MINERALS	127	154	198	34	39	51
NONMETALS	85	104	141	13	16	24
FUELS	40	48	55	20	22	26
METALS	2	2	2	1	1	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	3387	3173	2850	311	493	877
TOTAL SALINE	3782	2108	3753	15	50	162
FRESHWATER (BASE) PLUS SALINE	7169	5281	6603	326	543	1039

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	5723	6717	6894	3165	3792	3867
IRRIGATION	5707	6697	6871	3149	3772	3844
LIVESTOCK	16	20	23	16	20	23
STEAM ELECTRIC	238	106	344	13	70	228
MANUFACTURING	1355	808	689	232	342	538
PRIMARY METALS	143	51	31	13	17	24
CHEMICALS	157	27	19	4	7	14
PAPER	901	637	555	189	282	442
FOOD ETC.	47	30	23	7	10	16
PETROLEUM	11	11	15	6	7	12
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	96	52	46	13	19	30
DOMESTIC	531	563	623	106	111	121
DOM. CENTRAL	504	537	600	89	96	108
DOM. NONCENTRAL	27	26	23	17	16	14
COMMERCIAL	94	97	104	13	14	14
MINERALS	52	68	91	9	12	17
NONMETALS	48	63	85	7	10	14
FUELS	2	2	3	1	1	2
METALS	2	3	3	1	1	1
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	7992	8359	8744	3538	4341	4785
TOTAL SALINE	98	7	60	0	0	0
FRESHWATER (BASE) PLUS SALINE	8090	8366	8804	3538	4341	4785

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	7	2	2	7	1	2
IRRIGATION	1	2	2	1	1	2
LIVESTOCK	6	0	0	6	0	0
STEAM ELECTRIC	2396	2367	802	74	88	236
MANUFACTURING	2747	538	351	66	133	274
PRIMARY METALS	863	200	106	26	47	84
CHEMICALS	1852	316	223	34	77	176
PAPER	0	0	0	0	0	0
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	0	0	0	0	0	0
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	32	22	22	6	9	14
DOMESTIC	148	162	168	17	20	20
DOM. CENTRAL	121	130	134	0	0	0
DOM. NONCENTRAL	27	32	34	17	20	20
COMMERCIAL	33	34	34	(S)	0	(S)
MINERALS	194	230	294	82	93	121
NONMETALS	39	49	67	5	8	11
FUELS	155	181	227	77	85	110
METALS	0	0	0	0	0	0
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	5525	3333	1651	246	335	653
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	5525	3333	1651	246	335	653

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	170	232	281	151	203	246
IRRIGATION	93	142	193	74	113	158
LIVESTOCK	77	89	88	77	89	88
STEAM ELECTRIC	4123	3041	1232	29	72	241
MANUFACTURING	1027	461	363	75	120	265
PRIMARY METALS	41	17	11	3	5	8
CHEMICALS	82	17	15	21	6	11
PAPER	574	294	229	18	63	181
FOOD ETC.	142	54	37	11	15	24
PETROLEUM	21	5	3	1	2	3
TRANSPORTATION	18	16	16	5	8	12
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	149	58	52	16	21	26
DOMESTIC	359	398	439	78	87	94
DOM. CENTRAL	275	305	341	27	31	35
DOM. NONCENTRAL	84	93	98	51	56	59
COMMERCIAL	67	73	75	6	6	6
MINERALS	49	59	81	8	11	14
NONMETALS	45	55	74	7	9	12
FUELS	0	0	0	0	0	0
METALS	4	4	7	1	2	2
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	5794	4263	2471	347	499	866
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	5794	4263	2471	347	499	866

STATE SUMMARIES OF WATER USE
AND RELATED DATA

ANNUAL WATER REQUIREMENTS FOR OFFSTREAM USES

CATEGORY	TOTAL WITHDRAWALS MILLION GALLONS PER DAY			TOTAL CONSUMPTION MILLION GALLONS PER DAY		
	1975	1985	2000	1975	1985	2000
AGRICULTURE	8517	10293	9352	2710	3400	3381
IRRIGATION	8490	10268	9325	2683	3376	3355
LIVESTOCK	27	25	27	27	25	27
STEAM ELECTRIC	283	350	221	19	48	44
MANUFACTURING	21	20	9	8	8	7
PRIMARY METALS	0	0	0	0	0	0
CHEMICALS	0	0	0	0	0	0
PAPER	0	0	0	0	0	0
FOOD ETC.	0	0	0	0	0	0
PETROLEUM	15	16	5	7	6	4
TRANSPORTATION	0	0	0	0	0	0
TEXTILE MILLS	0	0	0	0	0	0
ALL OTHER	6	4	4	1	2	3
DOMESTIC	51	46	48	14	13	13
DOM. CENTRAL	47	43	45	11	11	11
DOM. NONCENTRAL	4	3	3	2	2	2
COMMERCIAL	17	15	15	4	4	3
MINERALS	152	184	231	49	57	72
NONMETALS	67	84	113	10	13	19
FUELS	64	76	89	32	36	42
METALS	21	24	29	7	8	11
ALL OTHER	N/A	N/A	N/A	N/A	N/A	N/A
TOTAL (BASE) FRESHWATER	9040	10908	9875	2804	3530	3521
TOTAL SALINE	0	0	0	0	0	0
FRESHWATER (BASE) PLUS SALINE	9040	10908	9875	2804	3530	3521

Appendix D

GLOSSARY

GLOSSARY AND CONVERSION TABLE

Definitions of terms as used in the Second National Water Assessment

1975⁴—most monetary figures are shown in 1975 dollars; source information was often supplied in 1967 dollars and a factor of 1.533 applied to obtain 1975⁴.

"1975"—base year for assessment information; represents assumed average conditions, not actual data, so is shown with quotation marks.

1985—10-year date from base year "1975" for which water supply, water use, and other assessment information is projected.

2000—25-year date from base year "1975" for which water supply, water use, and other assessment information is projected.

annual—average daily value for the year.

aquifer—underground formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

assessed streamflow—see *streamflow-related terms*.

assessment geographic divisions

- 1. region**—one of the 21 hydrologic regions as designated by the U.S. Water Resources Council; 18 are within the conterminous United States, plus Alaska, Hawaii, and the Caribbean.
- 2. assessment subregion (ASR)**—one of the 106 hydrologic subdivisions of a region; once called aggregated subregion; shortened to subregion for this report.
- 3. assessment subarea (ASA)**—one of the 106 county approximations of the assessment subregions; once called aggregated subarea; shortened to subarea for this report.

base conditions—typical or average conditions of fresh-water use; used to compare "1975" base year conditions with projections for 1985 and 2000.

best available technology (BAT)—best available technology economically achievable for industrial discharges; 1983 goal of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500).

best practicable technology (BPT)—best practicable control technology currently available for industrial discharges; 1977 goal of the Federal Water Pollution Control Act Amendments of 1972 (Public Law 92-500).

bgd—billion gallons per day.

biochemical oxygen demand (BOD)—a measure of oxygen required for the oxidation of organic matter in water.

consumption—portion of surface or ground water withdrawn for off-stream uses that is lost by evapotranspiration or by incorporation into a manufactured product.

conterminous U.S.—(also called *contiguous U.S.*) the 48 States with common boundaries; water resources regions 1-18.

critical month—month in which fish and wildlife instream flow needs are least likely to be met under present or future base conditions.

cropland—land used for agriculture but not in permanent pasture, native hayland, rangeland, or woodland.

current streamflow—see *streamflow-related terms*.

dry conditions—present and future water conditions for a moderate drought that occurs on the average one year in five.

earnings—sum of income accruing from wage and salary, proprietor's income, and other labor income.

evaporation—see *net evaporation*.

evapotranspiration—water loss through evaporation (from soil and surface water bodies) and transpiration (from plants).

exceedance—see "*streamflow exceedance*" given under *streamflow-related terms*.

exports—artificial transfers of fresh water from one region or subregion to another, e.g., by pipes or canals.

frequency analysis—method used to determine "*streamflow exceedance*" given under *streamflow-related terms*.

functional water use—category of offstream use, e.g., domestic, commercial, manufacturing, agriculture, steam electric generation, minerals industry.

future streamflow—
future modified flow (FMF)— } now called
assessed streamflow.

gpd—gallons per capita per day.

ground-water overdraft—portion of ground-water withdrawals that exceed recharge; sometimes called ground-water mining.

imports—artificial transfers of fresh water to one region or subregion from another, e.g., by pipes or canals.

instream flow approximations—estimates of monthly flow sufficient to support aquatic life and outdoor recreation; estimated at the outflow point.

Instream use—uses of water in the stream channel, e.g. fish and other aquatic life, recreation, navigation, hydroelectric production.

mgd—million gallons per day.

modified central case (MCC)—now called *National Future*.

monthly—a set of average daily values for each month of the year.

NASQAN—National Stream Quality Accounting Network; a data-collection program established by the U.S. Geological Survey to obtain long-term consistent regional and nationwide overviews of the quality of streams.

natural flow depletion—see *streamflow-related terms*.

natural modified flow (NMF)—now called *total streamflow*.

natural outflow—see *streamflow-related terms*.

National Future (NF)—estimates of present and future conditions by the participating Federal agencies; National Future estimates form a nationally consistent information base, which is not necessarily a nationally accepted future; see also *State-Regional Future*.

net evaporation—the difference between rainfall and evaporation; limited to evaporation from manmade reservoirs that have more than 5,000 acre-feet capacity and from farm and stock ponds; zero is used when rainfall exceeds evaporation.

net exports— } the difference between the water artificially transferred to and from a region or subregion
net imports— } is calculated as a net import or export.

OBERS—a collection of current socioeconomic information and demographic and economic projections; the 1972 OBERS Series E projections are the primary base for information used in the second assessment; OBERS is a Water Resources Council publication combining information from the Department of Commerce (Bureau of Economic Analysis) and the Department of Agriculture (Economics, Statistics, and Cooperative Service).

offstream use—water withdrawn from a source for functional uses such as irrigation, municipal water supply, steam electric generation, etc.

outflow point—see *streamflow-related terms*.

overdraft—see *groundwater overdraft*.

present modified flow (PMF)—now called *current streamflow*.

public lands—includes only Bureau of Land Management (BLM) lands, national forests, and national parks.

region—see *assessment geographic divisions*.

salinity—a condition in which the water contains more than 1,000 milligrams of dissolved solids per liter, regardless of the nature of the mineral in solution.

State-Regional Future (SRF)—estimates of present and future conditions provided by participating River Basin Commissions, State agencies, and other regional sponsors; see also *National Future*.

STORET (storage and retrieval)—a computerized water quality data system managed by the Environmental Protection Agency.

streamflow-related terms

1. outflow point

- a. **above outflow point**—describes depletion (consumption and evaporation) and water transfer (export and import) information. Information described as "above the outflow point" is the value for the given region or subregion, plus the sum of values for all upstream regions or subregions.
- b. **at outflow point**—the sum of outflows from all of the major streams and rivers draining the area, measured at the downstream boundary of the region or subregion.

2. streamflow

- a. **streamflow**—statistically derived estimate of surface fresh-water discharge rates at the outflow point of the subregions, with adjustments made where actual stream gage locations are not near the outflow point.
- b. **current streamflow**—average flow for "1975" derived from historical data; data includes effects of consumption, water transfers, evaporation, and ground-water overdraft.
- c. **assessed streamflow**—a computed flow that includes effects of consumption, water transfers, and evaporation from man-made reservoirs, but not ground-water overdraft.

3. streamflow as supply

- a. **current streamflow supply**—the "1975" streamflow if consumption were eliminated, but ground-water overdraft flows were continued.
- b. **assessed total streamflow**—streamflow that would be available if consumption were eliminated, if "1975" water transfer and reservoir practices were continued, but if ground-

water overdrafting were discontinued.

- c. **natural outflow** (natural available streamflow)—estimate of streamflow without artificial manmade constraints.
4. **streamflow depletion**
 - a. **current streamflow depletion**—estimated loss to "1975" current streamflow supply from consumption.
 - b. **assessed streamflow depletion**—estimated loss to assessed total streamflow from consumption, increases in net exports, and increases in net evaporation.
 - c. **natural flow depletion**—estimated loss to natural outflows (natural available streamflow) from all offstream demands (consumption, evaporation, and net exports).
 5. **streamflow exceedance**—a statistical estimate of flow probability based on a 100-year period; a 5-percent exceedance flow will be exceeded only in five of the 100 years, which represents a very high streamflow condition.
 6. **surplus streamflow**—portion of streamflow at region or subregion outflow point after all offstream and instream uses have been met; value does not include covenants and agreement for maintaining flows at downstream points.

subarea—see "assessment subarea" given under *assessment geographic divisions*.

subregion—see "assessment subregion" given under *assessment geographic divisions*.

surplus streamflow—see *streamflow-related terms*.

suspended solids—small particles of solid materials that contribute to turbidity and resist separation by conventional means.

total streamflow—see "assessed total streamflow" given under *streamflow-related terms*.

total suspended solids (TSS)—a measure of suspended solids used to evaluate water quality.

water adequacy—capability of a river system to meet both offstream and instream uses without overdraft of ground-water sources.

water transfers—see *imports, exports*.

withdrawal—water taken from a surface- or ground-water source for offstream use.

CONVERSION TABLE FOR WATER-MEASUREMENT TERMS

QUANTITY

1 acre-foot = 325,851 gallons
 = 43,560 cubic feet

1 million gallons = 3.07 acre-feet

1 cubic foot = 7.48 gallons

FLOW

1 million gallons per day (mgd) = 694.4 gallons per minute
 = 1.55 cubic feet per second
 = 1,120 acre-feet per year

1 billion gallons per day (bgd) = 1.12 million acre-feet per year
 1 cubic foot per second = 1.98 acre-feet per day

METRIC UNITS CONVERSION

1 million gallons per day (Mgd) = 3785 cubic meters per day (m³/d)