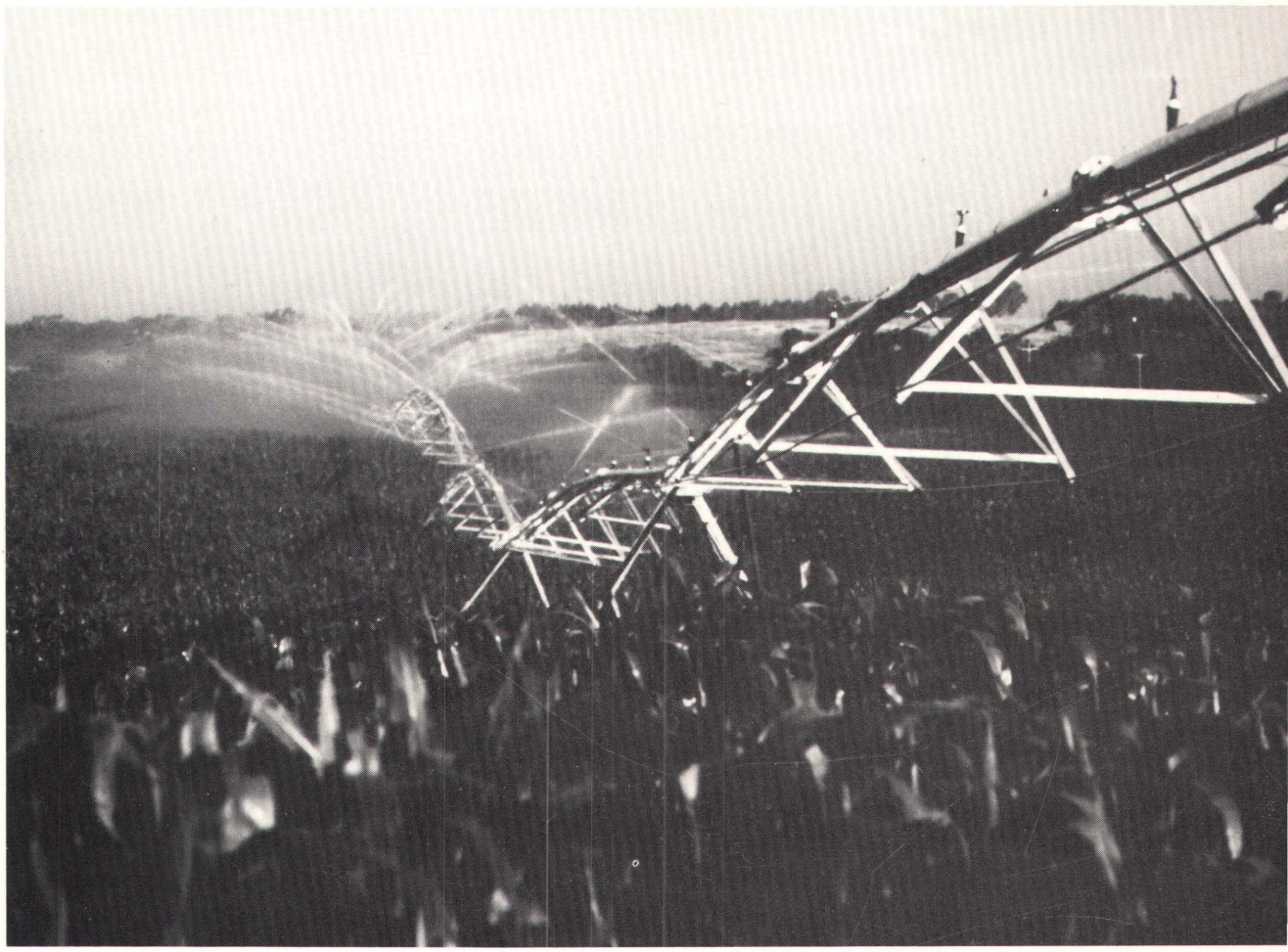
# Estimated Use of Water in Nebraska, 1985

By Eugene K. Steele, Jr.
U.S. Geological Survey



Nebraska Water Survey Paper No. 64

Published in cooperation with
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Institute of Agriculture and Natural Resources
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June 1988

Cooperative projects with
**UNITED STATES GEOLOGICAL SURVEY**
Dallas L. Peck, Director

Water Resources Division, Nebraska District
William Kastner, District Chief

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# Tables

(In back of report)

## CONVERSION FACTORS

| Multiply | By | To obtain |
|---|---|---|
| | *Area* | |
| acres | 43,450 | square feet |
| | 4,047 | square meters |
| | 0.001562 | square miles |
| | *Flow* | |
| billion gallons per day | 1,000 | million gallons per day |
| | 1,121 | thousand acre-feet per day |
| | 0.001547 | thousand cubic feet per second |
| | 0.6944 | thousand gallons per minute |
| | 0.003785 | million cubic meters per day |
| thousand acre-feet per year | 0.0008921 | billion gallons per day |
| | 0.8921 | million gallons per day |
| | 0.001380 | thousand cubic feet per second |
| | 0.6195 | thousand gallons per minute |
| | 0.003377 | million cubic meters per day |

(From U.S. Geological Survey Circular 1001, Estimated use of water in the United States in 1980, W. B. Solley, E. B. Chase, and W. B. Mann)

## FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS

| Multiply | By | To obtain |
|---|---|---|
| | *Rate* | |
| gallons per day (GPD) | 0.0037 | cubic meters per day |
| million gallons per day (Mgal/d) | 3,700 | cubic meters per day |
| | *Volume* | |
| acre-foot (acre-ft) | 1,233 | cubic meters |
| inch per acre (in./acre) | 2.540 | meter per acre |

# ESTIMATED USE OF WATER IN NEBRASKA, 1985

By Eugene K. Steele, Jr.

## ABSTRACT

The estimated volume of 19,187,200 acre-feet of water used in Nebraska during 1985 is an average of 17,116.15 million gallons per day. Surface water supplied 12,925,040 acre-feet or 67.4 percent of the total volume used. The remaining 6,262,160 acre-feet or 32.6 percent was pumped from the groundwater reservoir.

Power production was the greatest use of water of any category, with 10,415,200 acre-feet or 54.3 percent of the total use during 1985.

Excluding power production, estimated total water use in Nebraska in 1985 was 7,825.16 million gallons per day, or 8,772,000 acre-feet. Excluding power production, groundwater accounted for 71 percent—or 5,561.51 million gallons per day (6,234,450 acre-feet)—of this total water use in the state in 1985, and surface water accounted for 28.9 percent, or 2,363.65 million gallons per day (2,537,550 acre-feet).

Estimated irrigation water use of 8,144,170 acre-feet during 1985 was 42.4 percent of the total water use in the state; excluding power production, it was 92.8 percent of total water use.

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Lincoln, NE 68508

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Lakewood, CO 80225

or

Conservation and Survey Division
113 Nebraska Hall
University of Nebraska–Lincoln
Lincoln, NE 68588-0517

## INTRODUCTION

Water-use data are collected cooperatively by the Conservation and Survey Division of the University of Nebraska–Lincoln, the Nebraska Department of Water Resources, the Little Blue Natural Resources District, and the Big Blue River Association of Ground Water Conservation Districts; these data are used to estimate the total water use in Nebraska. Aggregated water-use data are stored in the U.S. Geological Survey computer files in Reston, Virginia as part of a National Water Use Data System (NWUDS).

Estimates of water use in Nebraska during 1985 were needed for 12 water-use categories to include in the U.S. Geological Survey Water Resources Division's forthcoming report, "Estimated use of water in the United States in 1985." Estimates of water use in Nebraska during 1985 for 11 of these water-use categories and methods used to obtain these estimates are listed in this report under proper category headings. The twelfth category, water use for geothermal power generation, does not apply to Nebraska.

Water-use estimates for 1985 are given for Nebraska counties, hydrologic units, and subregions or drainage basins. County locations and identification numbers are shown in figure 1; hydrologic units and their identifying numbers are shown in figure 2; and subregions or drainage basins are shown in figure 3.

Data referenced to tables in this report are given in tables 1-28 at the end of the report.

### *Purpose and Scope*

The purpose of this report is to present estimates of water use in Nebraska in 1985 as assembled and aggregated for the U.S. Geological Survey's National Water Use Data System for preparation of the 5-year water-use report "Estimated use of water in the United States in 1985" and to document the methods of estimation. Estimates are provided by county, hydrologic unit, and subregion for the various categories to facilitate their use by water planners and managers.

## DEFINITION OF TERMS

The following definitions are provided for the convenience of users of this report:

*Acre-foot* (acre-ft) is the volume of water required to cover 1 acre of land to a depth of 1 foot and is equal to 43,560 cubic feet or about 326,000 gallons.

*County number* (county no.) is an identification number adopted from Federal Information Processing Standards Publication 6-2 (U.S. Water Resources Council, 1976) and used by the U.S. Geological Survey for the storage and retrieval of county data. This identification number must be used when storing or retrieving county data from the National Water Use Data System.

*Fossil-fuel power* is electrical power generated using fossil fuel (coal, oil, or natural gas).

*Groundwater* generally is all subsurface water, as distinct from surface water, specifically, that part of the subsurface water in the saturated zone (a zone in which all voids are filled with water under pressure greater than or equal to atmospheric).

*Groundwater Conservation District*—a political entity within a county with authority to levy taxes for the development, conservation, regulation, and management of the groundwater resources within the boundaries of the district.

*Hydroelectric-power water use*—the use of water to drive turbines and generate electric power.

*Hydrologic unit*—a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the U.S. Geological Survey on the state Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number, the first four of which denote the region and subregion containing the unit.

*Instream water use*—water used within the stream channel for purposes such as hydroelectric power generation, navigation, water-quality improvement, fish propagation, and recreation.

*Million gallons per day* (Mgal/d)—a standard term used to denote an average daily use rate.

*National Water Use Data System* (NWUDS)—a national system established by the U.S. Geological Survey for the storage and retrieval of aggregated estimates of water used by the states.

*Natural Resources District* (NRD)—a political entity established by the Nebraska State Legislature with the authority to levy taxes for the development, conservation, regulation, and management of natural resources within the boundaries of the district.

*Offstream water use*—Water withdrawn or diverted from a ground- or surface-water source for public supply, industry, irrigation, livestock, and self-supplied domestic use.

*Per capita use*—the average amount of water used per person per day, in gallons per day (GPD) per capita.

*Subregion*— geographic area representing a drainage basin or distinct hydrologic feature as delineated by the U.S. Geological Survey on the state Hydrologic Unit Maps, comprising one or more hydrologic units and identified by a four-digit number, the first two of which identify the region containing the subregion.

*Surface water*—an open body of water such as a river, creek, lake, reservoir, or pond.

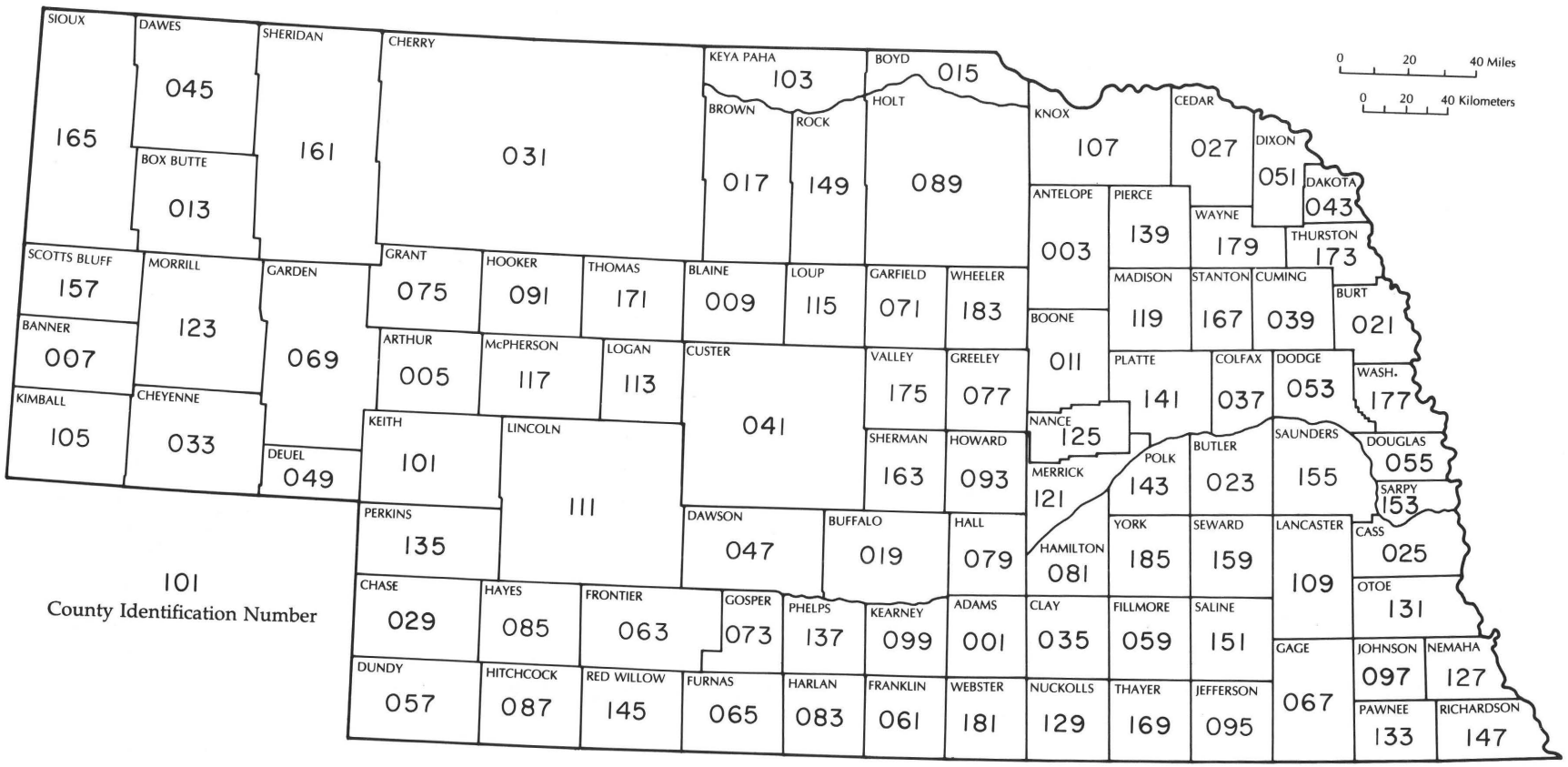



Figure 1. Locations and identification numbers of Nebraska counties

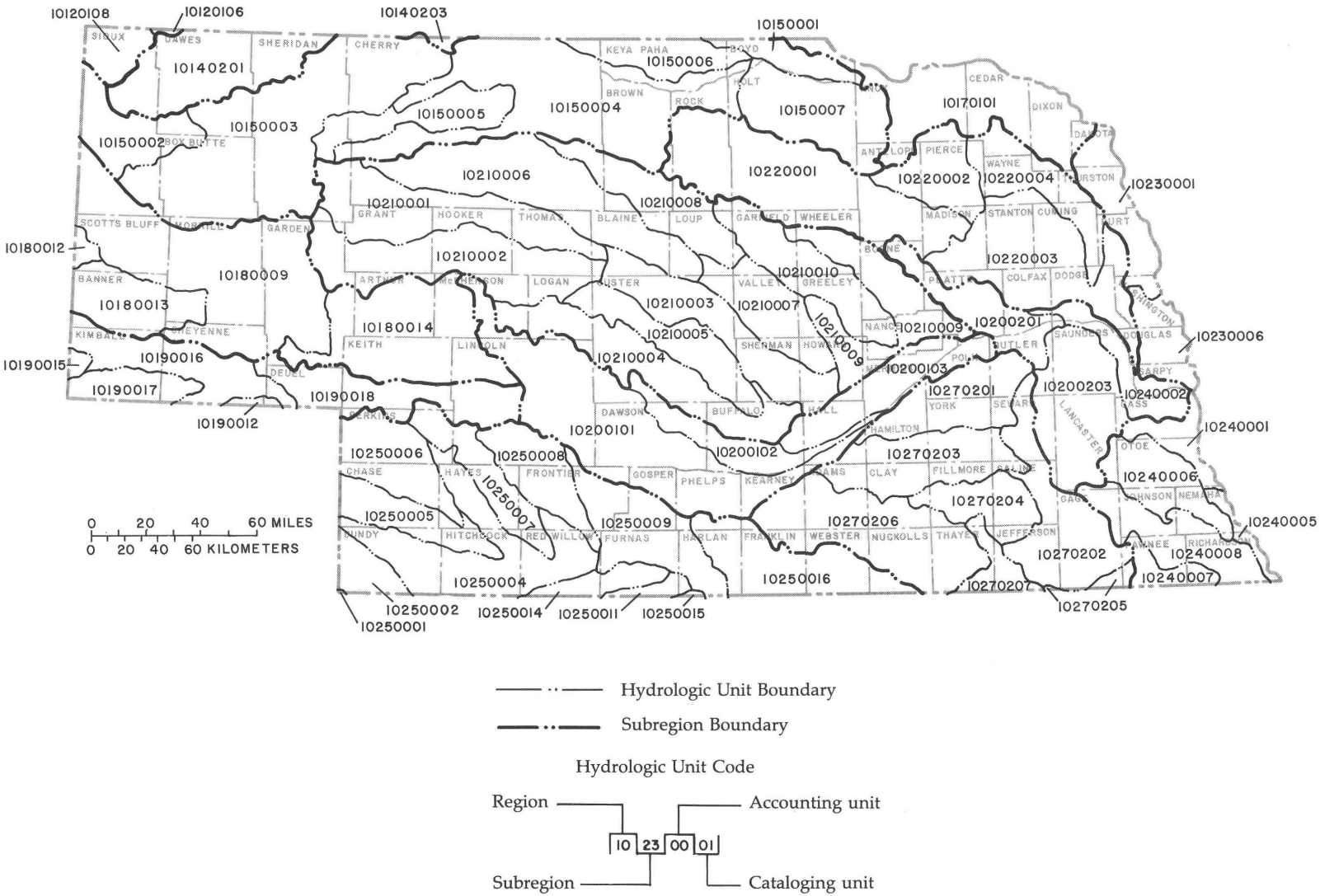



Figure 2. Hydrologic units and subregions of Nebraska

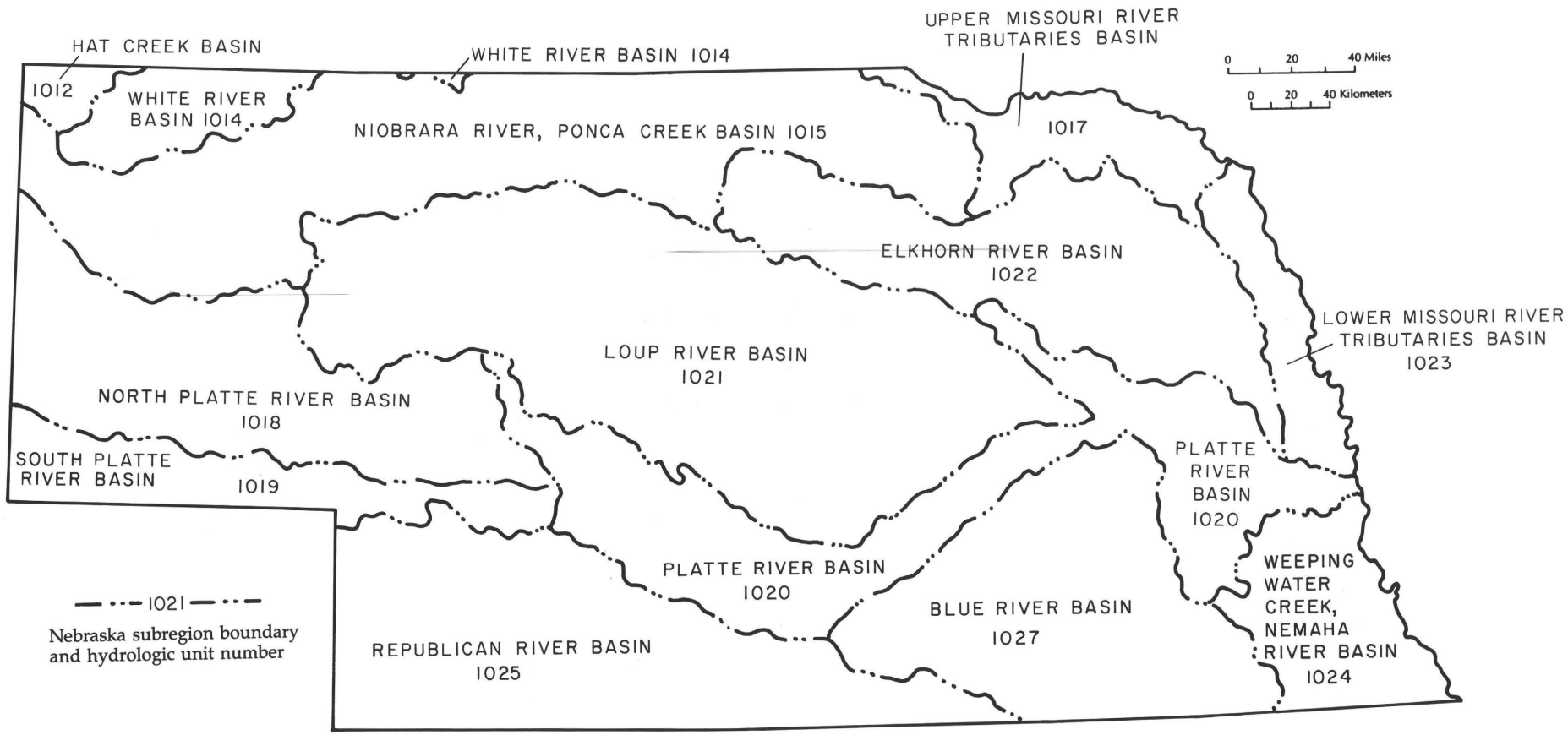



Figure 3. Subregions and drainage basins of Nebraska

## EFFECTS OF HYDROLOGY AND GEOLOGY ON WATER USE

Volume or rates used for various water-use categories are dependent to some extent on the available supply of water, the ease by which it can be obtained, and the cost of pumping and transporting it. Other conditions that affect the rate of water used are precipitation and temperature. For example, water used for irrigation and for lawns and gardens would be less during a year of greater-than-normal precipitation and lower-than-normal temperatures.

The average annual precipitation for Nebraska for 1951-1980 is shown in figure 4. The 1985 departure from normal precipitation for the National Oceanic and Atmospheric Administration (NOAA) climatic divisions in Nebraska is shown in figure 5. The timeliness of precipitation will affect water use more than the annual amount; and the departures given in figure 5 show above-normal precipitation for May through September 1985 for five of the NOAA divisions in Nebraska. Average mean temperatures were lower than normal throughout the state for this period, and supplemental water needed for crop production was about 22 percent less than the estimate for 1980 (Solley and others, 1983).

Abundant groundwater is available at moderate pumping depths in most areas of the state, and 35.8 percent of the offstream water-use requirement for 1985 was withdrawn from groundwater supplies. The transmissivity of the principal groundwater reservoir in Nebraska is shown in figure 6.

## ESTIMATED WATER USE IN NEBRASKA, 1985

The estimated volume of water used in Nebraska during 1985 is 19,187,200 acre-ft, which is an average use rate of 17,116.15 Mgal/d (million gallons per day) and a per capita use rate of 10,662 GPD (gallons per day) for the estimated population of 1,605,300 (U.S. Bureau of Census estimate, July 1, 1985).

Total water use by category for Nebraska during 1985 is shown in figure 7. Total water use by category for Nebraska's subregions during 1985 is shown in figures 8-14.

The estimated use of 11,529.92 Mgal/d from surface-water supplies accounted for 67.4 percent of the total water use in Nebraska during 1985, and water use for power generation—9,266.27 Mgal/d—was 80.4 percent of the total surface-water use. Surface-water use by category for Nebraska during 1985 is shown in figure 15.

Estimated groundwater use of 5,586.23 Mgal/d accounted for the remaining 32.6 percent of water used in Nebraska during 1985, and the estimated groundwater use for irrigation—5,178.08 Mgal/d—was 92.8 percent of the total groundwater used in 1985. Groundwater use by category for Nebraska during 1985 is shown in figure 16. Excluding power production, estimated total water use in Nebraska in 1985 was 7,825.16 Mgal/d, or 8,772,000 acre-ft.

Excluding power production, groundwater accounted for 71 percent—or 5,561.51 Mgal/d (6,234,450 acre-ft)—of this total water use in the state in 1985, and surface water accounted for 28.9 percent, or 2,363.65 Mgal/d (2,537,550 acre-ft).

### *Deliveries from Public Water Supply*

Water use for this category includes water withdrawn by public and private suppliers and delivered to users that do not supply their own water. These suppliers provide water for a variety of uses, such as domestic, commercial, and industrial.

The amount of water withdrawn for public-supply use of 247.88 Mgal/d was 1.4 percent of the total water used in Nebraska during 1985. Domestic water use of 148.58 Mgal/d was 59.9 percent of public supply. The remaining 40.1 percent or 99.30 Mgal/d was used for commercial and industrial purposes. Groundwater withdrawals of 208.42 Mgal/d accounted for 84.1 percent of total public supply.

The range of withdrawal for public water supply in Nebraska counties during 1985 is shown in figure 17. The range for subregions is shown in figure 18.

Public water-supply withdrawals and deliveries for domestic, commercial, and industrial uses in Nebraska counties during 1985 are given in table 1, and in hydrologic units and subregions during 1985 are given in table 2.

### *Domestic Water Use*

Domestic water use includes water used for household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing stools, and watering lawns and gardens. This use can be served by purchases from a public or private water supplier or by self-supplied withdrawals.

Domestic water use in Nebraska during 1985 was estimated to be 172.98 Mgal/d for an average of 108 GPD per capita. Deliveries from public supply of 148.58 Mgal/d accounted for 85.9 percent of domestic water use. Groundwater withdrawals of 132.18 Mgal/d comprised 89 percent of domestic deliveries from public supply; the remaining 16.4 Mgal/d, or 11 percent, were from surface-water diversions.

The range in amounts of domestic water used in Nebraska counties is shown in figure 19, and the range in domestic water use for Nebraska subregions is shown in figure 20. Estimates of total domestic water use in Nebraska counties and for hydrologic units and subregions during 1985 are given in tables 3 and 4.

The estimated domestic water use in Nebraska counties during 1985 ranged from 0.05 Mgal/d in Arthur County to 27.52 Mgal/d in Douglas County. Estimated domestic water use in Nebraska hydrologic units ranged from less than 0.002 Mgal/d in the Republican River basin (Unit 10250003) to 35.55 Mgal/d in the Lower Missouri River Tributaries basin (Unit 10230006).

Total amounts for domestic water use given above are aggregates of estimates made for public-supplied and self-supplied population as explained in the following subsections.

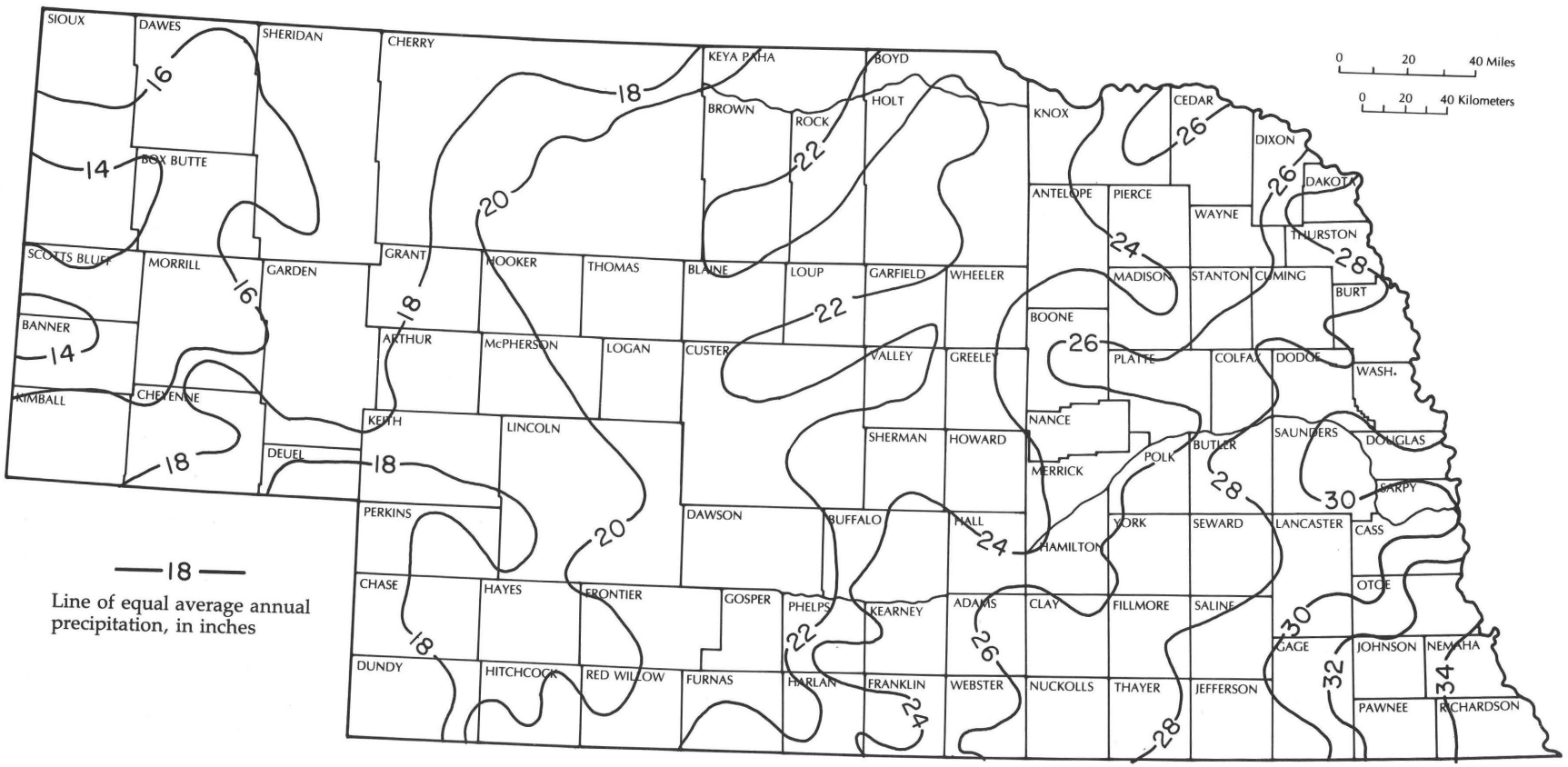



Figure 4. Average annual precipitation for Nebraska, 1951-80

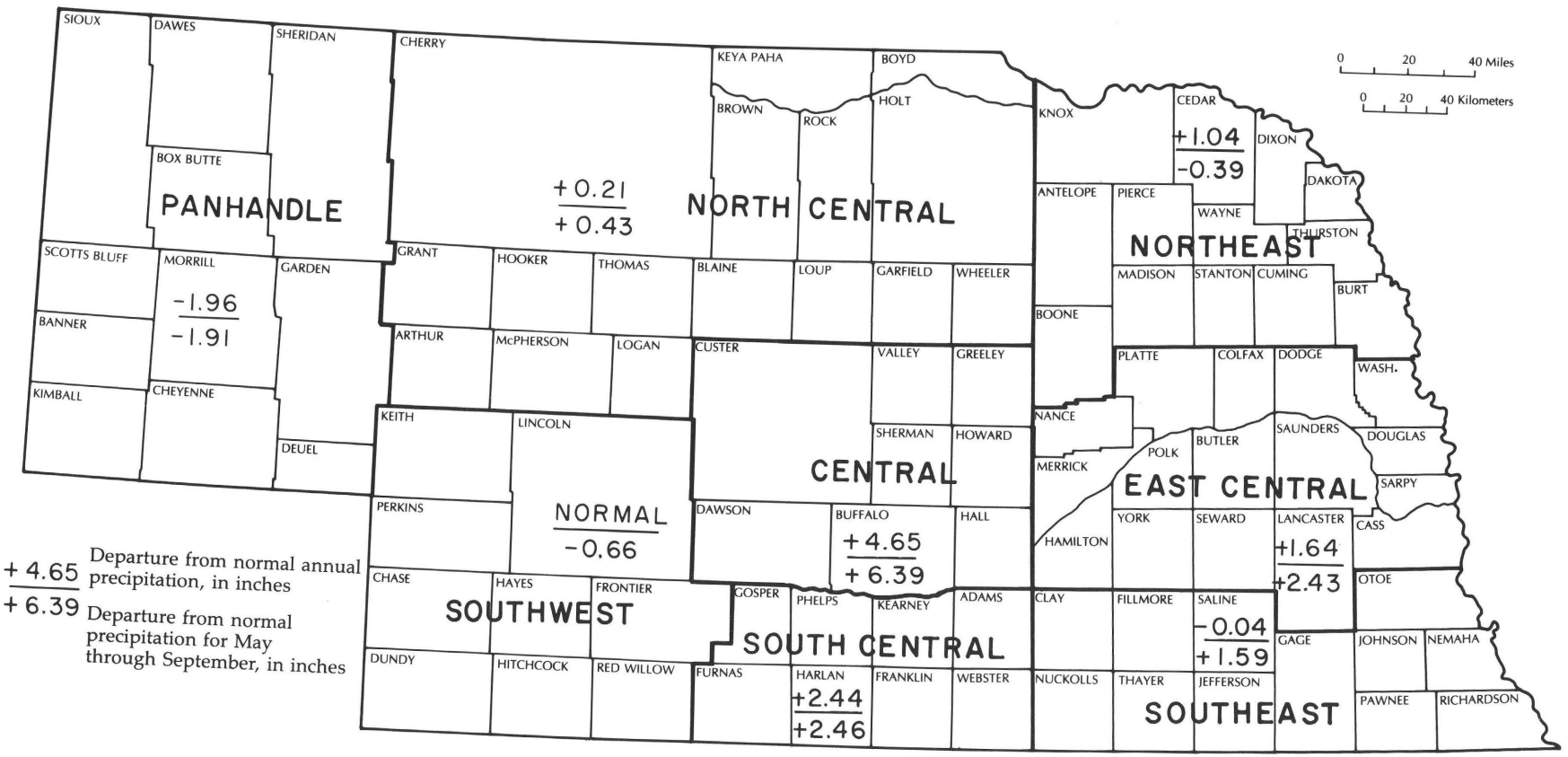
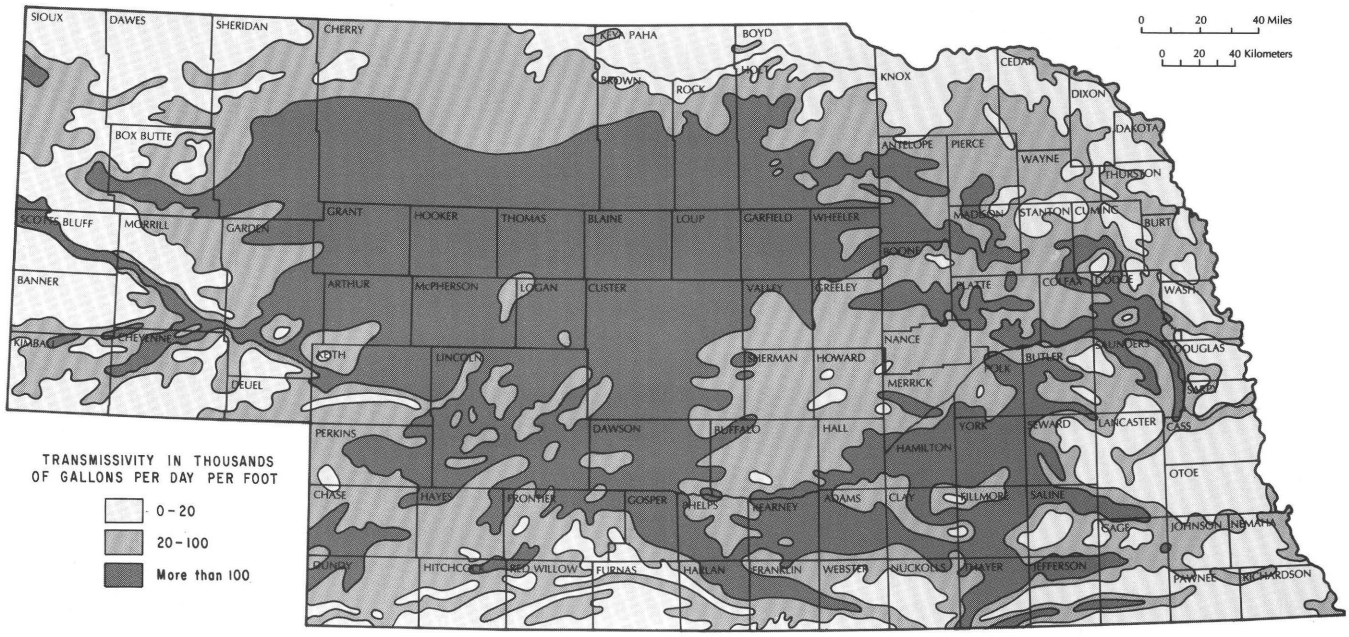



Figure 5. 1985 departure from normal precipitation for National Oceanic and Atmospheric Administration (NOAA) divisions in Nebraska




From: The Groundwater Atlas of Nebraska, (Resource Atlas No. 4) 1986, Conservation and Survey Division, Institute of Agriculture and Natural Resources, University of Nebraska–Lincoln

Transmissivity is a measure of the volume of groundwater that will flow through a given width of an aquifer under a specified slope of the water table. In practical terms, it provides a measure of the ability of an aquifer to supply water to wells. Transmissivity is dependent on a combination of the saturated thickness and the permeability of the aquifer. Thick aquifers of highly permeable materials have the highest transmissivity. The conversion of transmissivity values to potential well yields requires the consideration of more factors than transmissivity alone, such as the type of well construction and development, the amount of drawdown and whether the groundwater is confined or unconfined. Usually, where transmissivity values exceed 20,000 gallons per day per foot, wells can be developed with yields adequate for some types of irrigation. Where transmissivity values exceed 100,000 gallons per day per foot, high-capacity wells of more than 1,000 gallons per minute can be developed for irrigation for other purposes.

Coarse-grained sediment is generally more permeable than fine-grained sediment. The areas showing the highest transmissivity have coarse-grained deposits of sand, sandstone and/or sandy gravel. Low transmissivity areas are characterized either by fine-grained deposits or by thin deposits of coarse-grained sediments. In such areas, the depth to bedrock generally is shallow or the overlying till is thick, as in the eastern part of the state.

The greatest thickness of saturated, coarse-grained deposits in the state underlies the Sand Hills region. Transmissivity values are high in this region, as they are in the North Platte River and South Plate River valleys, the Platte River valley and in much of the Big Blue River basin. Local areas of high transmissivity also occur where thick layers of sand and gravel fill bedrock paleovalleys. An example of the location of a paleovalley is the band of high transmissivity across southern Thayer, Jefferson, and Gage counties.

Figure 6. Transmissivity of the principal groundwater reservoir in Nebraska

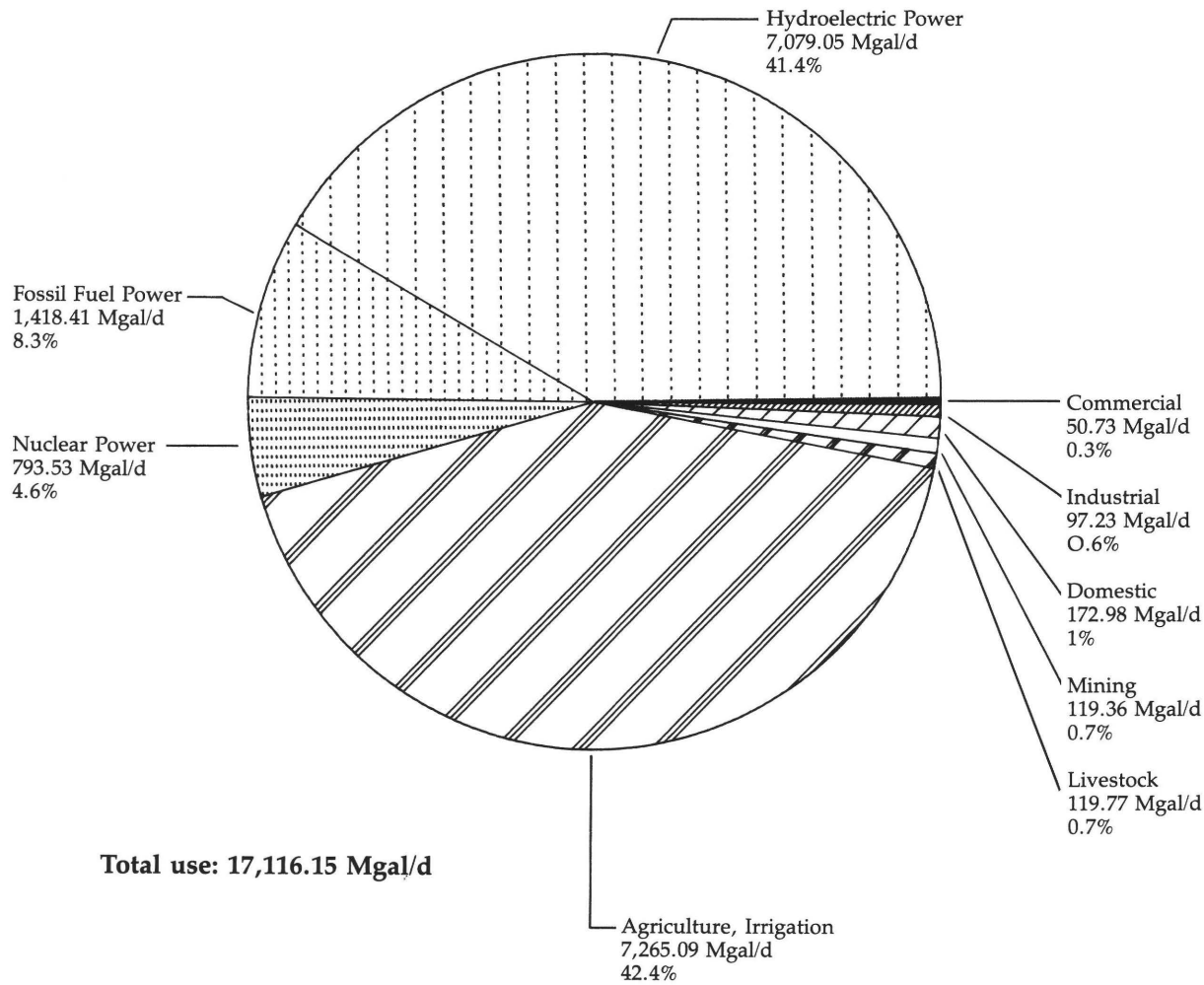
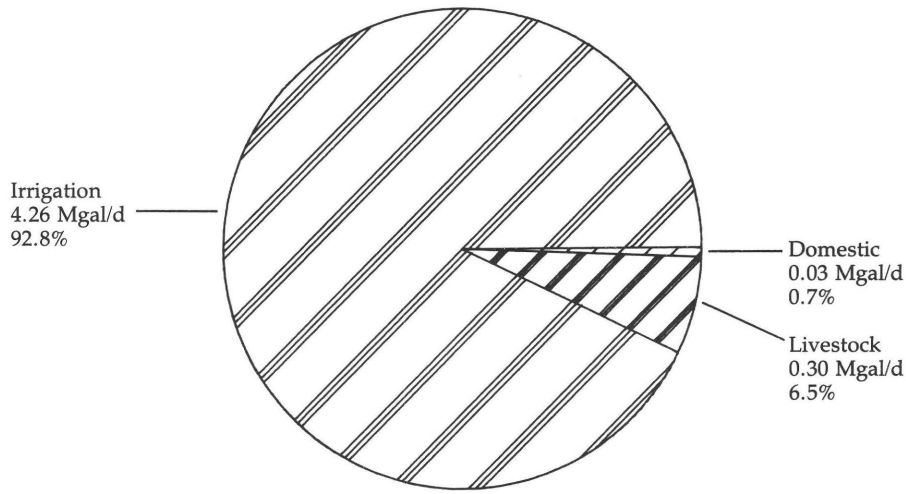


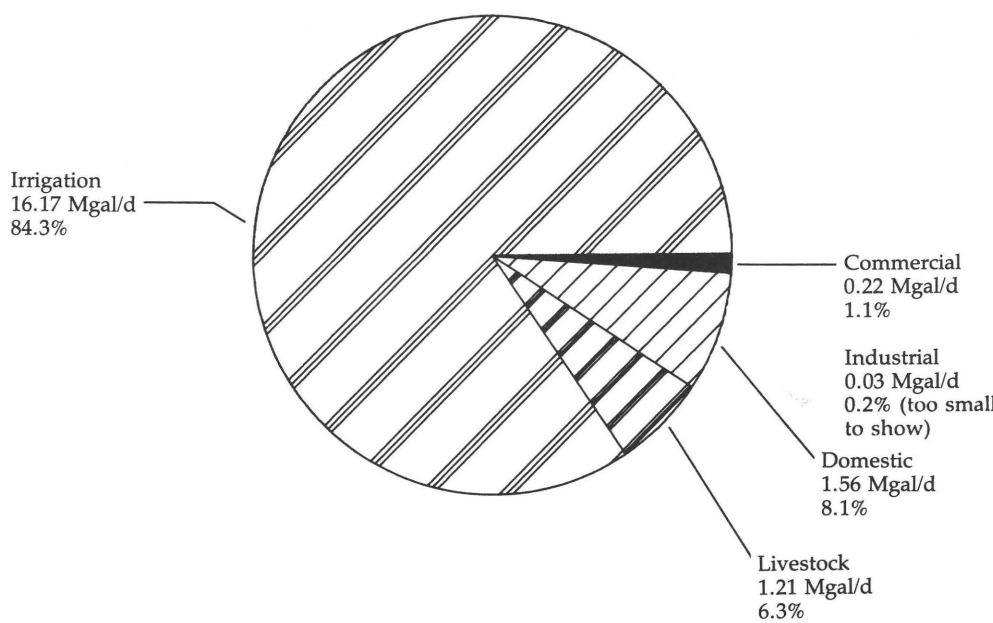

Figure 7. Estimated total water use in Nebraska, 1985

## HAT CREEK BASIN
## HYDROLOGIC UNIT SUBREGION 1012




**Total water use: 4.59 Mgal/d**

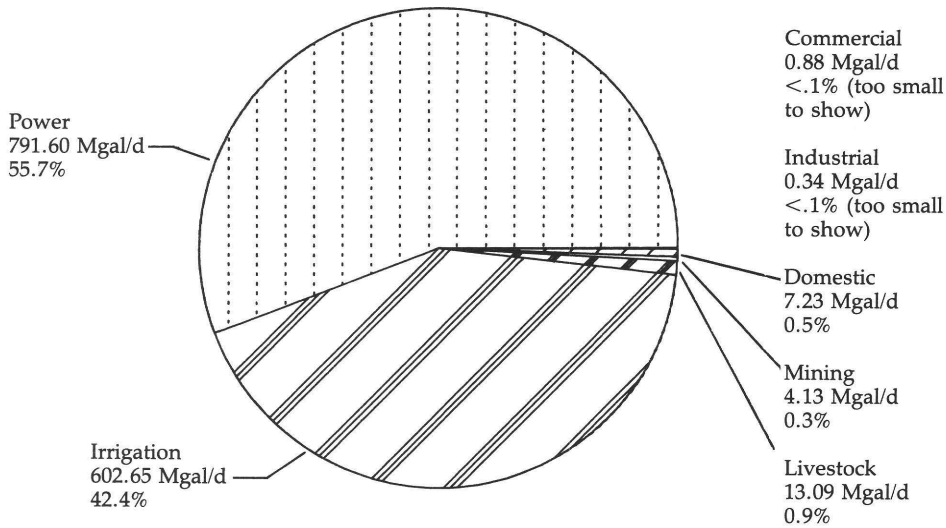
## WHITE RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1014




**Total water use: 19.19 Mgal/d**

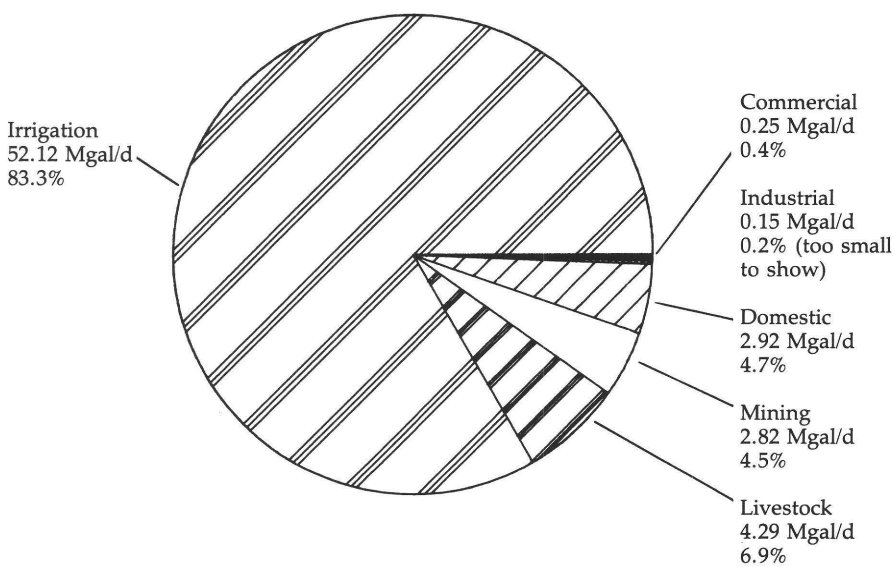
Figure 8. Estimated water use in Nebraska subregions 1012 and 1014 during 1985

## NIOBRARA RIVER, PONCA CREEK BASIN HYDROLOGIC UNIT SUBREGION 1015




**Total water use: 1,419.92 Mgal/d**

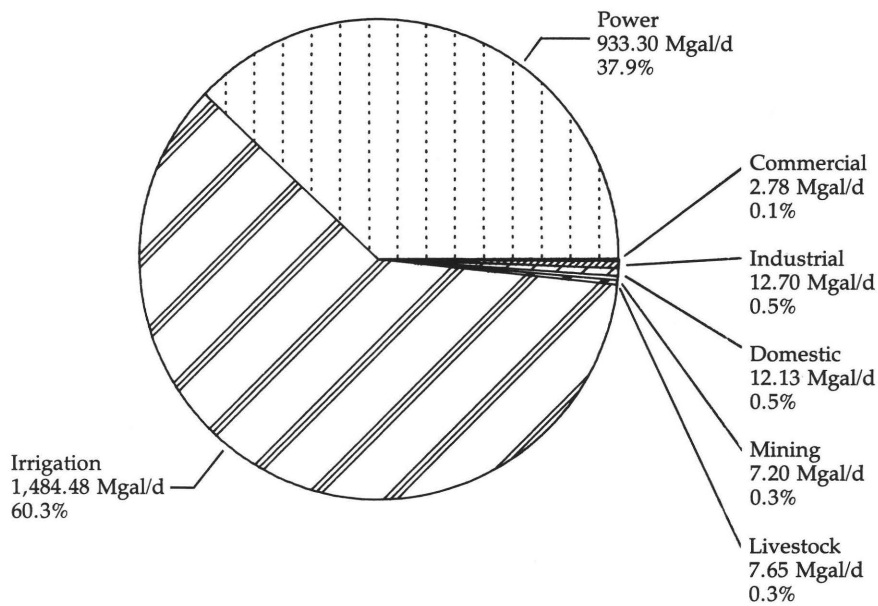
## UPPER MISSOURI TRIBUTARIES BASIN HYDROLOGIC UNIT SUBREGION 1017




**Total water use: 62.55 Mgal/d**

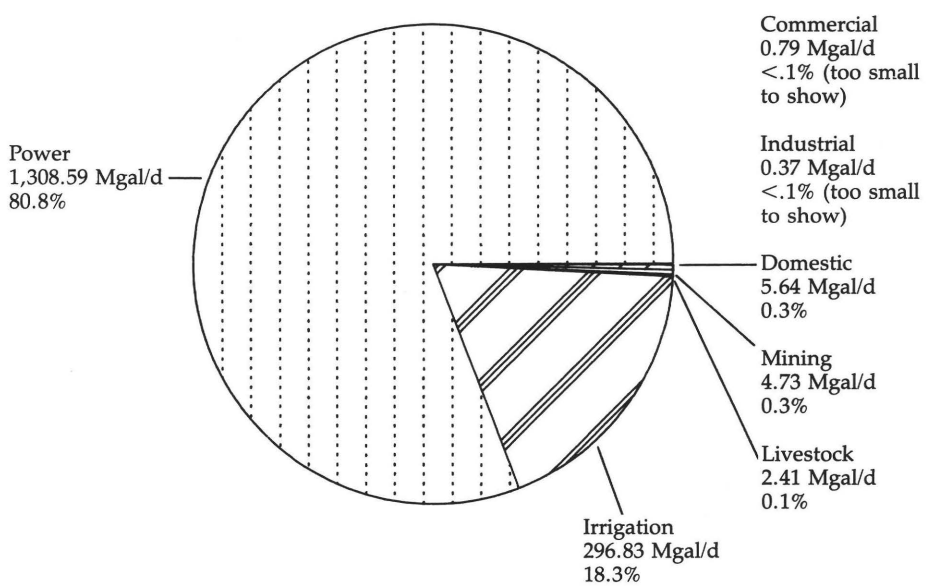
Figure 9. Estimated water use in Nebraska subregions 1015 and 1017 during 1985

## NORTH PLATTE RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1018




**Total water use: 2,460.24 Mgal/d**

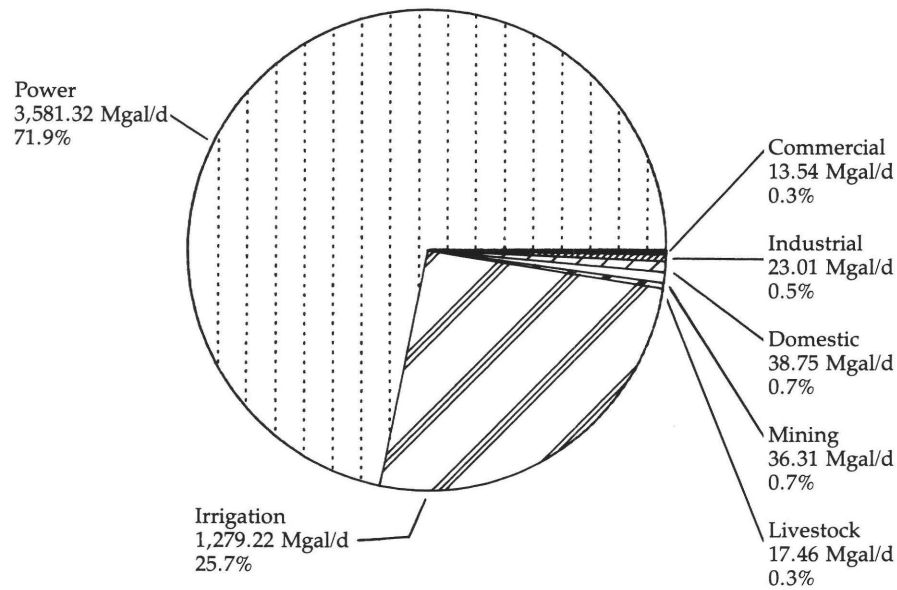
## SOUTH PLATTE RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1019




**Total water use: 1,619.36 Mgal/d**

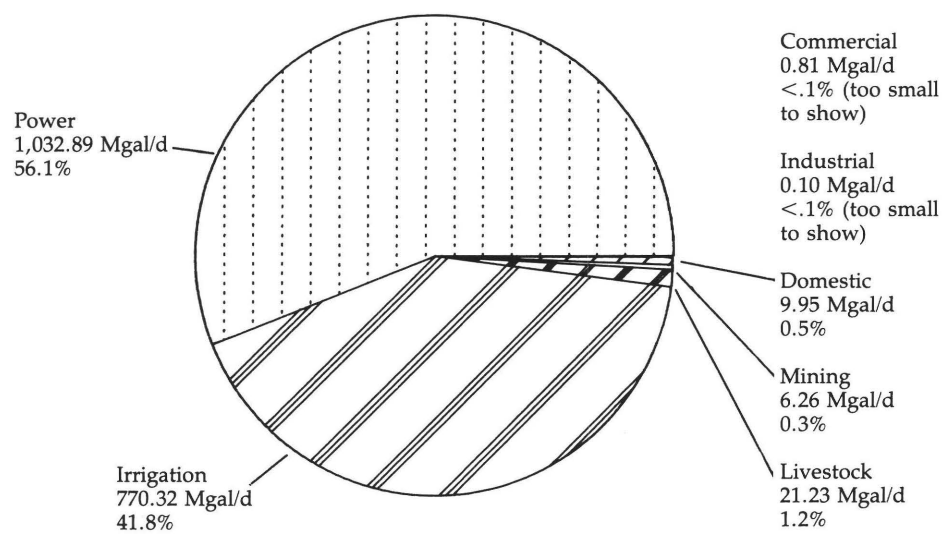
Figure 10. Estimated water use in Nebraska subregions 1018 and 1019 during 1985

## PLATTE RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1020




**Total water use: 4,986.61 Mgal/d**

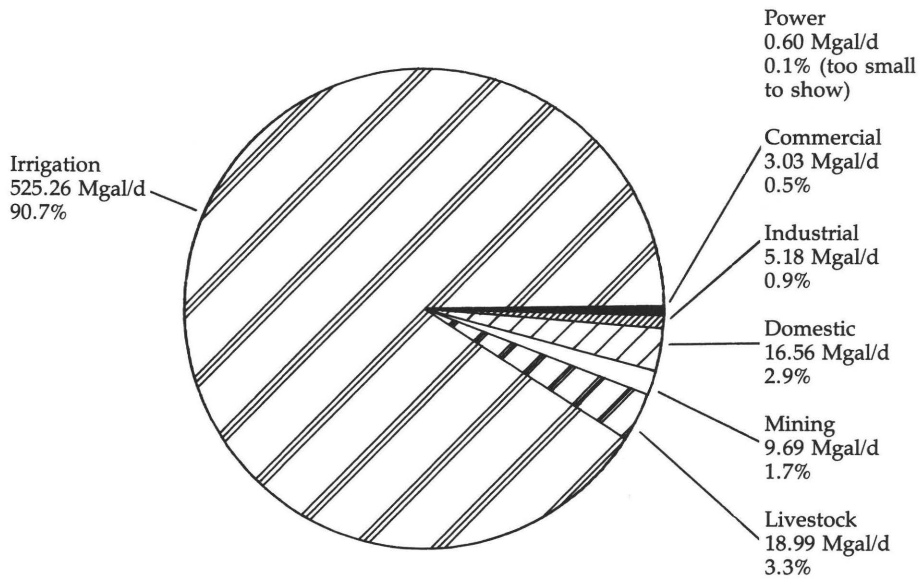
## LOUP RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1021




**Total water use: 1,841.56 Mgal/d**

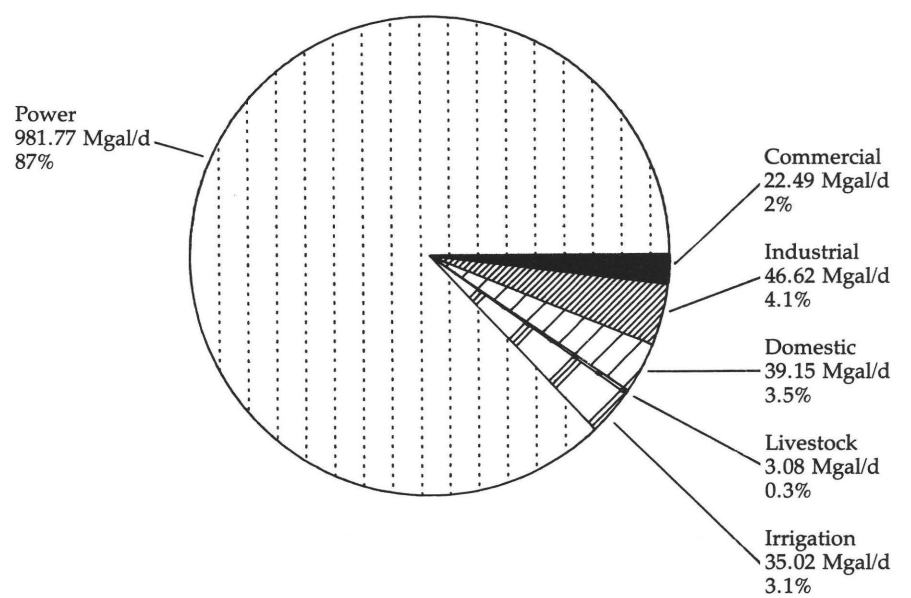
Figure 11. Estimated water use in Nebraska subregions 1020 and 1021 during 1985

## ELKHORN RIVER BASIN
## HYDROLOGIC UNIT SUBREGION 1022




**Total water use: 579.31 Mgal/d**

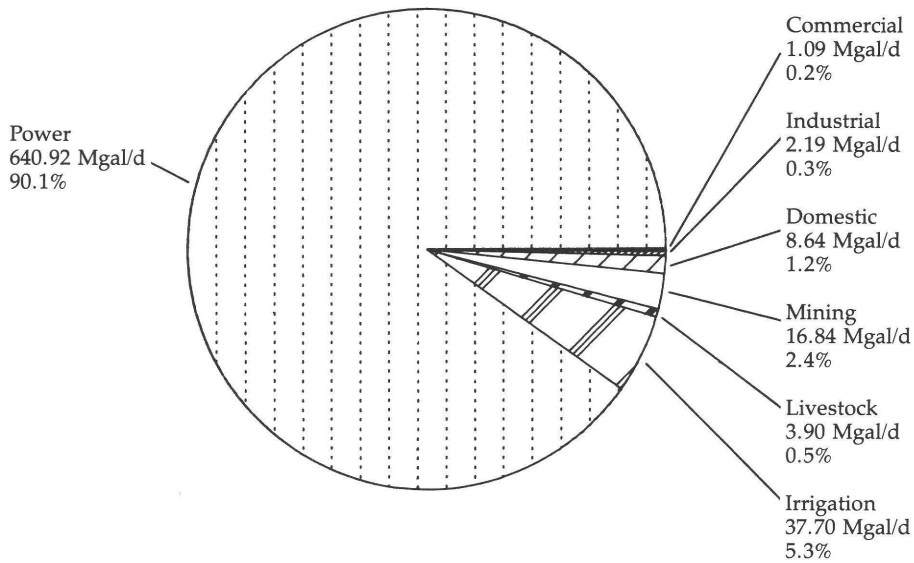
## LOWER MISSOURI TRIBUTARIES BASIN
## HYDROLOGIC UNIT SUBREGION 1023




**Total water use: 1,128.13 Mgal/d**

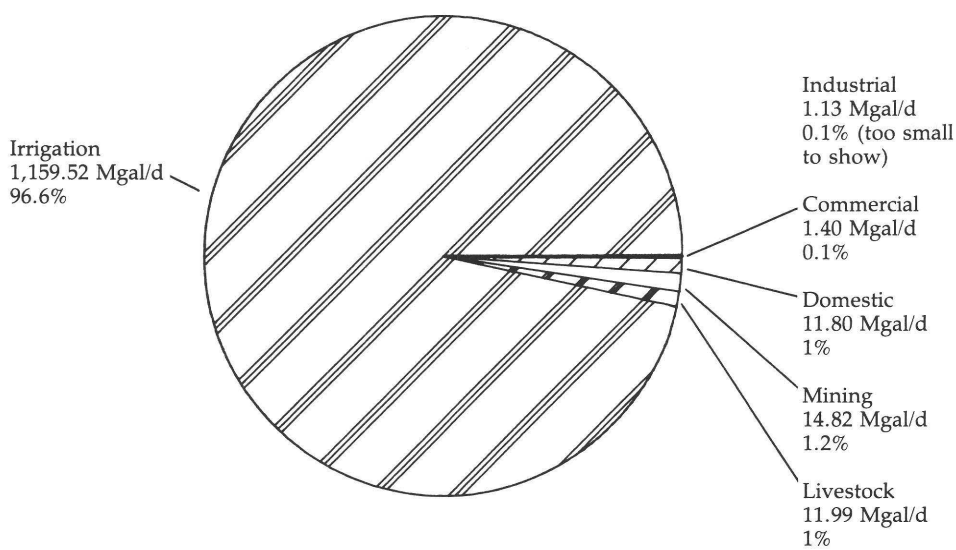
Figure 12. Estimated water use in Nebraska subregions 1022 and 1023 during 1985

## WEEPING WATER CREEK, NEMAHA RIVER BASIN HYDROLOGIC UNIT SUBREGION 1024




**Total water use: 711.28 Mgal/d**

## REPUBLICAN RIVER BASIN HYDROLOGIC UNIT SUBREGION 1025




**Total water use: 1,200.66 Mgal/d**

Figure 13. Estimated water use in Nebraska subregions 1024 and 1025 during 1985

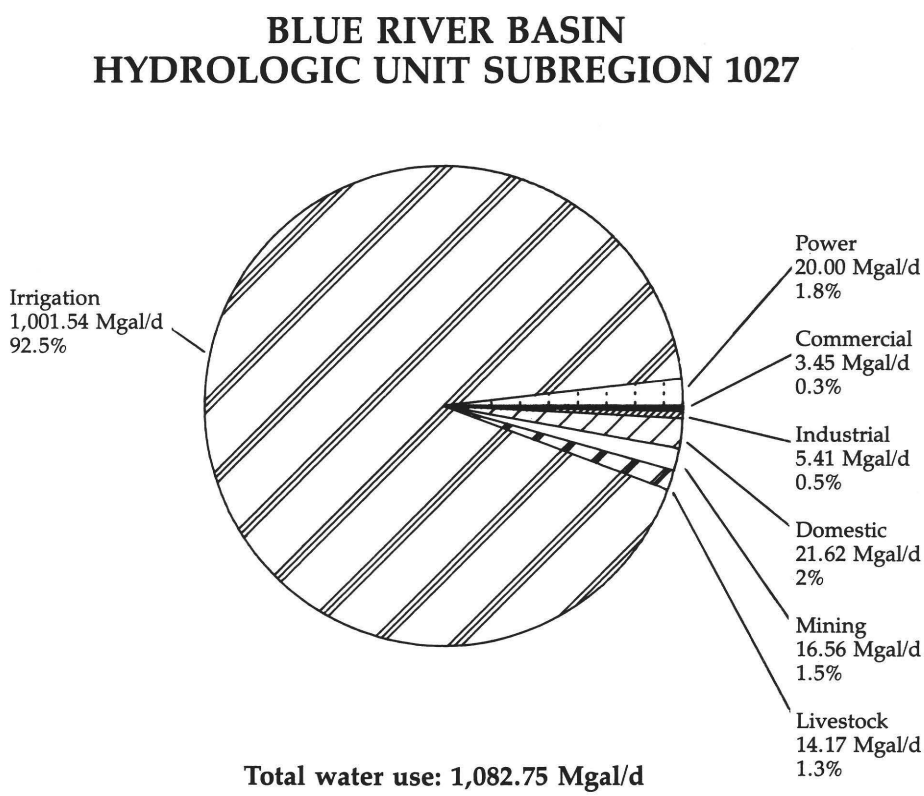
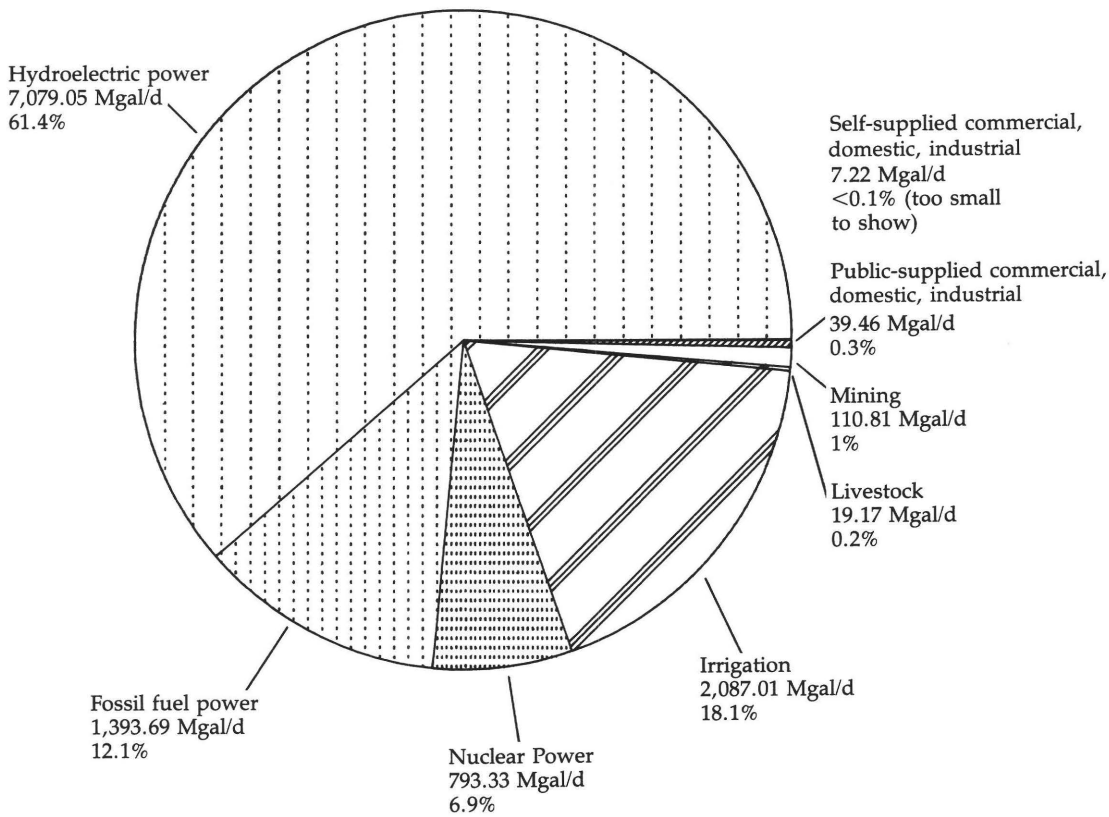
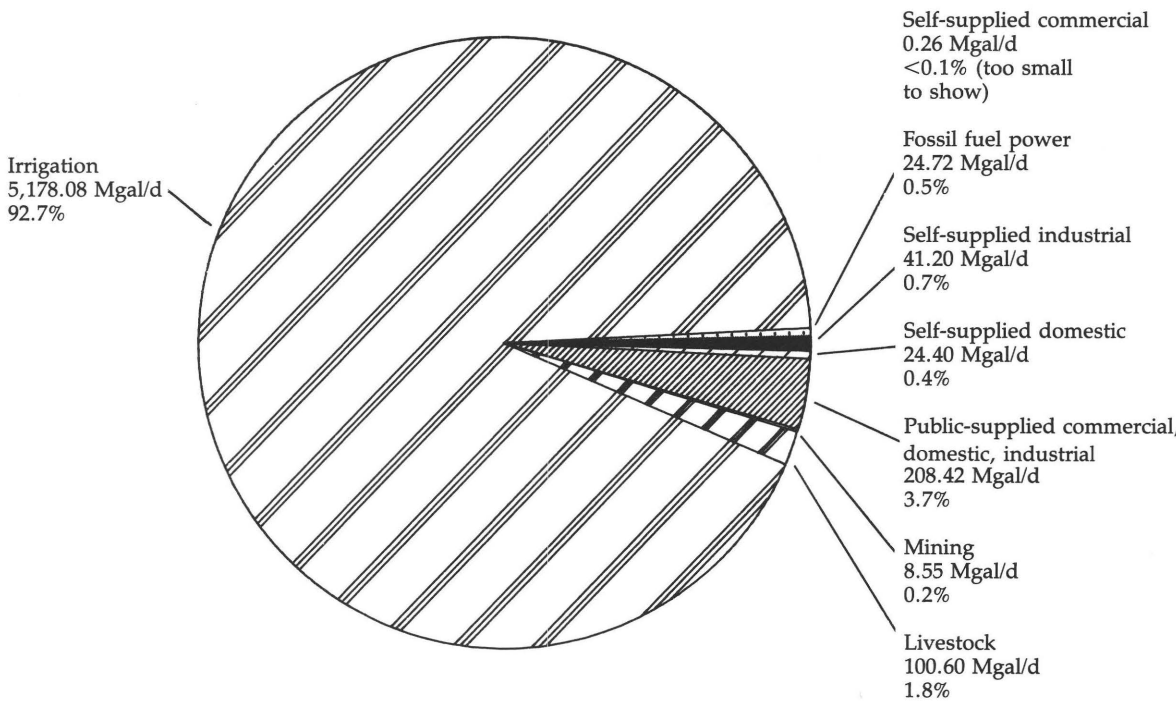



Figure 14. Estimated water use in Nebraska subregion 1027 during 1985




**Total surface water use: 11,529.92 Mgal/d**

Figure 15. Estimated surface-water use in Nebraska, 1985




**Total groundwater use: 5,586.23 Mgal/d**

Figure 16. Estimated groundwater use in Nebraska, 1985

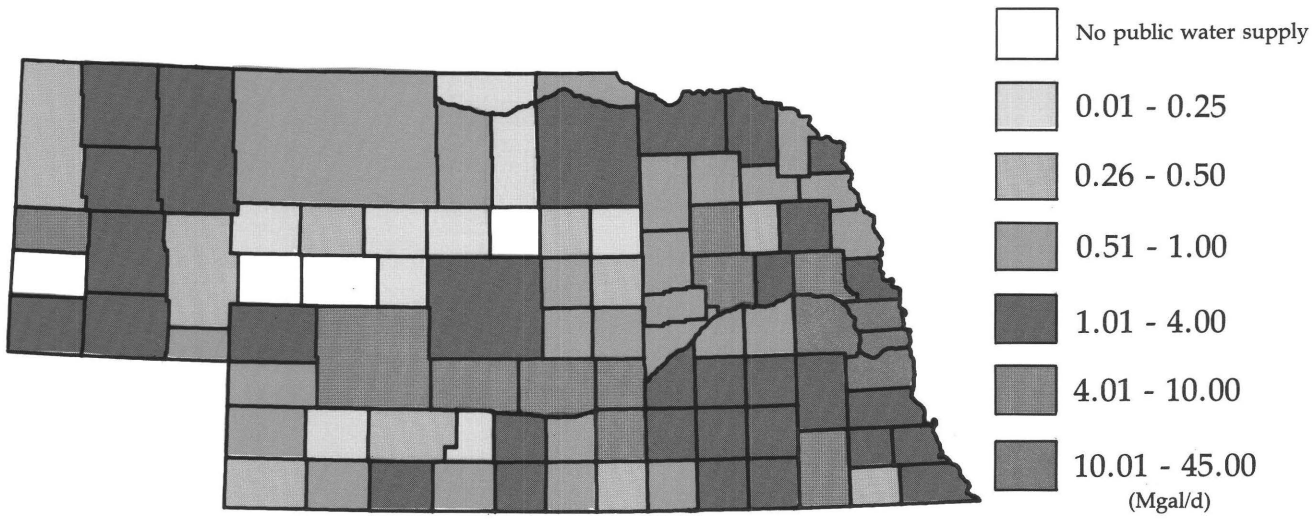



Figure 17. Public water-supply withdrawals in Nebraska counties, 1985

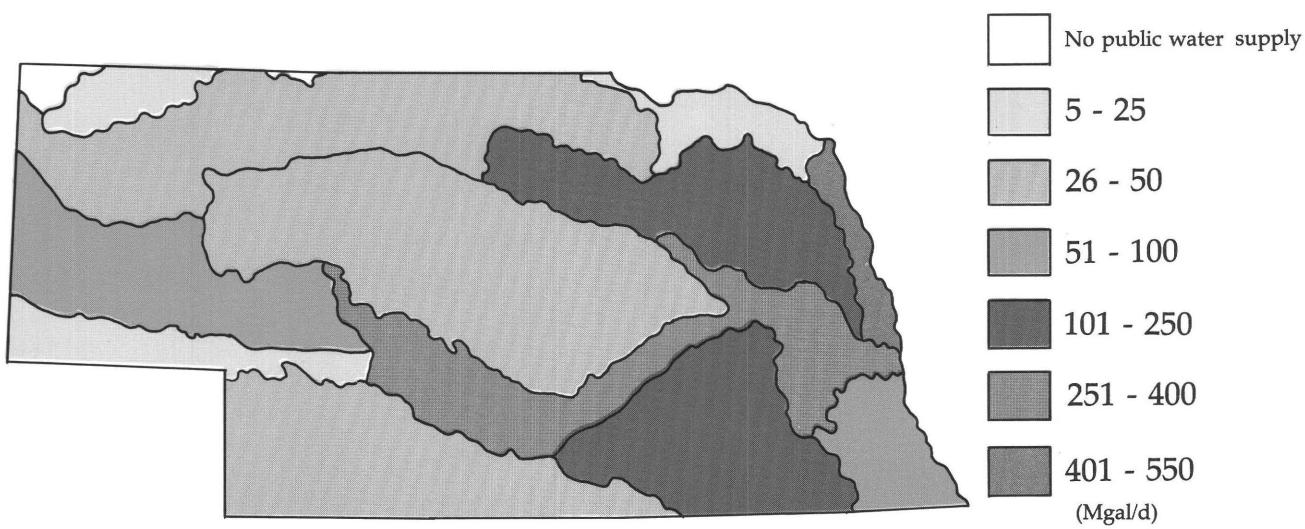



Figure 18. Public water-supply withdrawals in Nebraska subregions, 1985

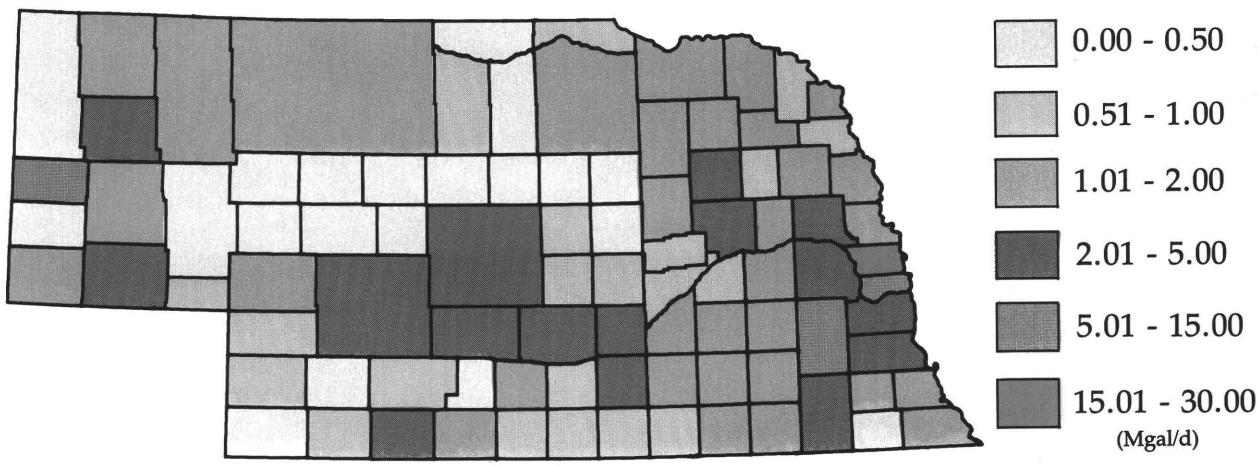



Figure 19. Total domestic water use in Nebraska counties, 1985

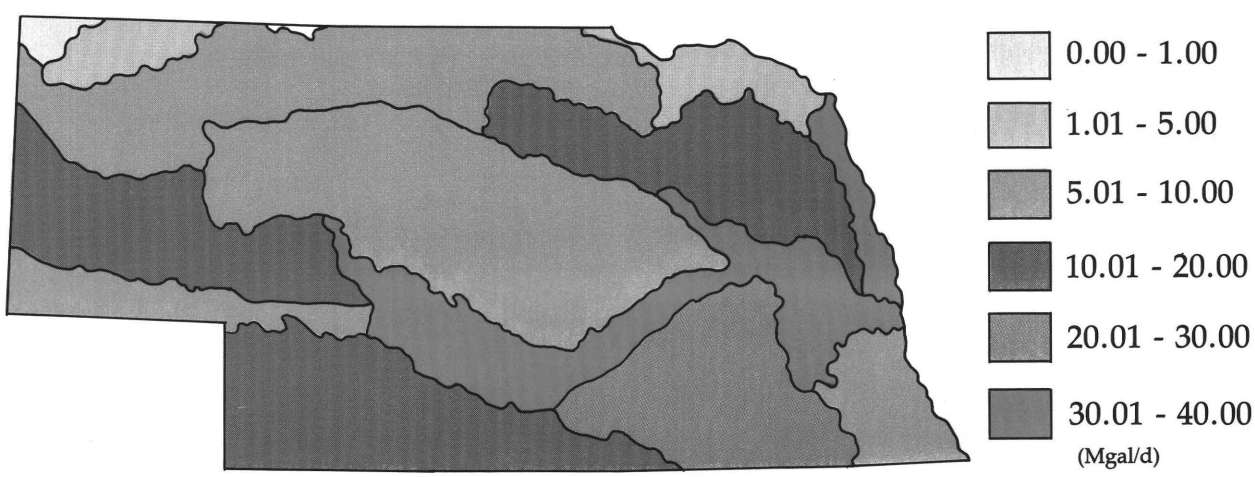



Figure 20. Total domestic water use in Nebraska subregions, 1985

### *Public-Supplied Domestic Water Use*

Public-supplied water use in Nebraska during 1985 was estimated from withdrawal amounts for municipal and rural water districts furnished by the University of Nebraska-Lincoln Conservation and Survey Division. These amounts were total withdrawals by the public-supply system for all purposes. Actual delivery amounts for the categories served were not available, and estimates of percentages of domestic water use were made from information obtained from water commissioners, city services personnel, or plant operators. Population numbers are from estimated county populations on July 1, 1985, supplied by the U.S. Bureau of Census to the National Water Use Data System.

Public-supplied domestic water use ranged from none in Arthur, Banner, Loup, and McPherson counties, which have no public-supply systems, to 26.54 Mgal/d in Douglas County. The range in use for subregions was from none in Hat Creek basin (no public-supply systems in basin), subregion 1012, to 37.62 Mgal/d in the Lower Missouri River Tributaries basin, subregion 1023. Estimates of public-supplied domestic water use for Nebraska counties and for hydrologic units and subregions during 1985 are given in tables 5 and 6, respectively.

The average daily public-supplied domestic water use in Nebraska during 1985 was 112 GPD per capita. The average daily public-supplied domestic water use for Nebraska counties is shown in figure 21. The trend for increased per capita domestic water use from east to west across the state, as annual precipitation amounts decrease, is apparent in figure 21. The population served by public- supply systems in Nebraska counties during 1985 is shown in figure 22. The population served by public-supply systems in Nebraska subregions is shown in figure 23.

### *Self-Supplied Domestic Water Use*

Self-supplied domestic water use in Nebraska is estimated, because no data base of actual measurements exists for this category. The estimated self-supplied domestic water use in Nebraska during 1985 was determined by assigning estimates of gallons per day per capita to each county, based on values used by Steele (1985, p. 11), with adjustments for 1985 precipitation. These estimated values are shown in figure 24.

Populations using self-supplied domestic water for Nebraska counties were determined by subtracting populations served by municipal and rural water districts from the U.S. Bureau of Census July 1, 1985, estimates of county population. This computation for Boyd County indicated the total county population was served by public-supply systems. There are some self-supplied rural systems in the county, but since the total population is accounted for in the public-supplied water-use category, no adjustment was made to the county population estimate furnished by the Bureau of Census.

Estimates of self-supplied domestic water use in Nebraska counties and in hydrologic units and subregions during 1985 are listed in tables 7 and 8, respectively. Self-supplied domestic water use for Nebraska counties ranged from none (as explained above for Boyd County) to 1.02 Mgal/d in Scotts Bluff County. Self-supplied domestic use for Nebraska subregions ranged from 0.03 Mgal/d in the Hat Creek basin, subregion 1012, to 5.19 Mgal/d in the Platte River basin, subregion 1020. All self-supplied domestic water use in Nebraska is from groundwater withdrawals.

## *Commercial Water Use*

The commercial water-use category includes water withdrawn or delivered for use by facilities such as restaurants, lodging places, office buildings, retail stores, military facilities, etc. Water use for this category was estimated to be 50.73 Mgal/d during 1985 in Nebraska. Deliveries from public supplies of 50.47 Mgal/d accounted for 99.5 percent of this use.

The estimates of public-supplied commercial water use were made from information obtained from municipalities on percentages of total withdrawals for this category. Self-supplied commercial water use was estimated and updated from an inventory of facilities by Lawton and others, 1983.

The range of commercial water use in Nebraska counties and subregions is shown in figures 25 and 26, respectively. Estimates of commercial water use during 1985 in Nebraska counties and subregions are listed in tables 9 and 10, respectively.

## *Industrial Water Use*

Industrial water use includes withdrawals and deliveries by industrial facilities in the manufacturing process. Industrial water use in Nebraska during 1985 was estimated to be 97.23 Mgal/d; public-supplied delivery of 48.83 Mgal/d accounted for 50.2 percent, and self-supplied withdrawals of 48.40 Mgal/d accounted for 49.8 percent.

The estimate of public-supplied industrial water use was made from information supplied by municipalities on the percentage of total withdrawals for this category because metered delivery amounts were not available. Self-supplied industrial water use was estimated from an inventory of facilities by Lawton and others (1983).

The range of industrial water use in Nebraska counties and subregions during 1985 is shown in figures 27 and 28, respectively. Estimates of industrial water use in Nebraska counties and in hydrologic units and subregions are listed in tables 9 and 10, respectively.

## *Mining Water Use*

Water use for mining in Nebraska includes secondary oil recovery, quarrying limestone, washing gravel or rock, and other preparations customarily done at a mine or quarry site.

Estimated use for mining operations in Nebraska during 1985 is 119.36 Mgal/d. Of that amount, 110.81

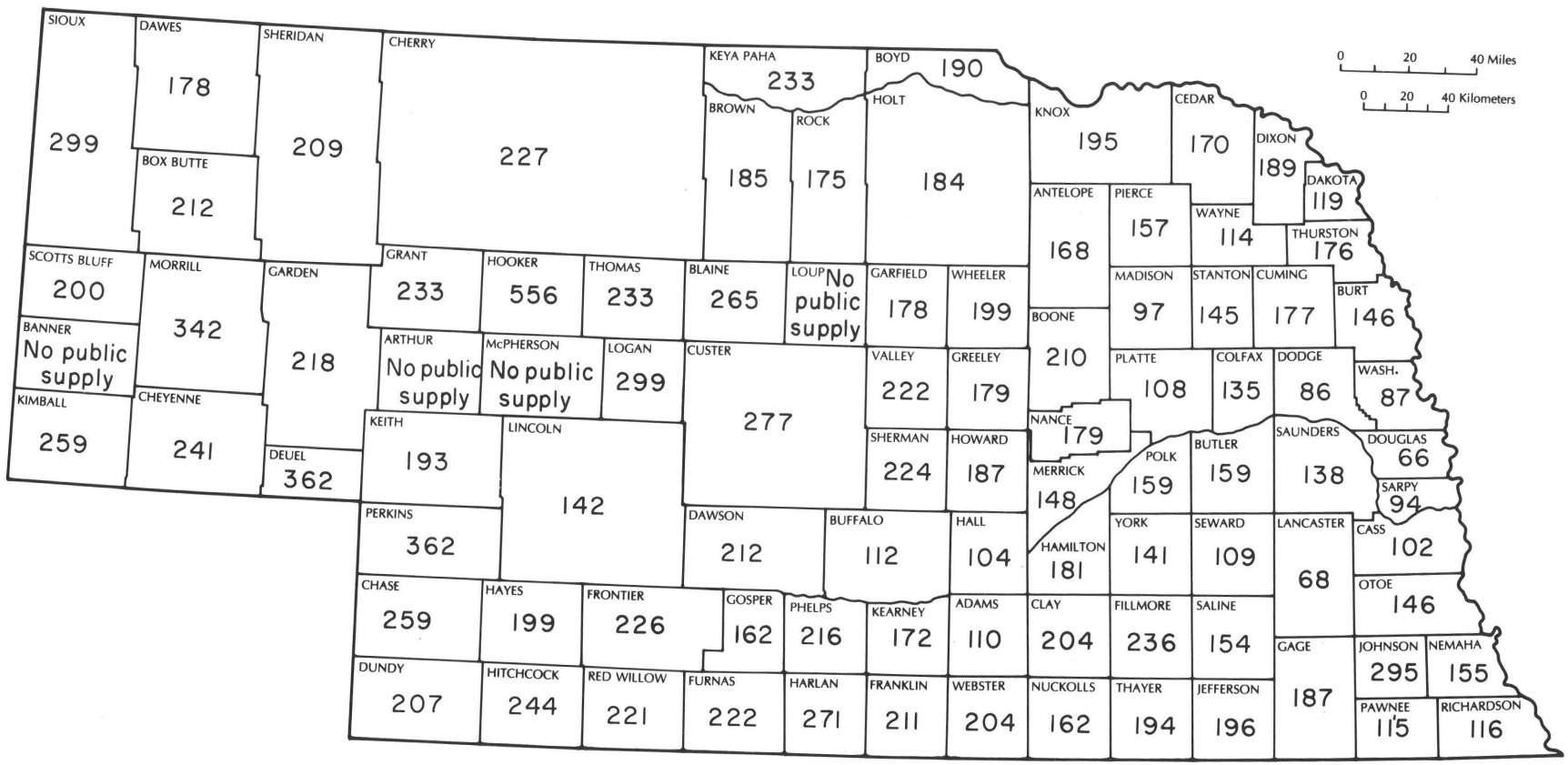



Figure 21. Public-supplied domestic water use, in gallons per day per capita, in Nebraska counties, 1985

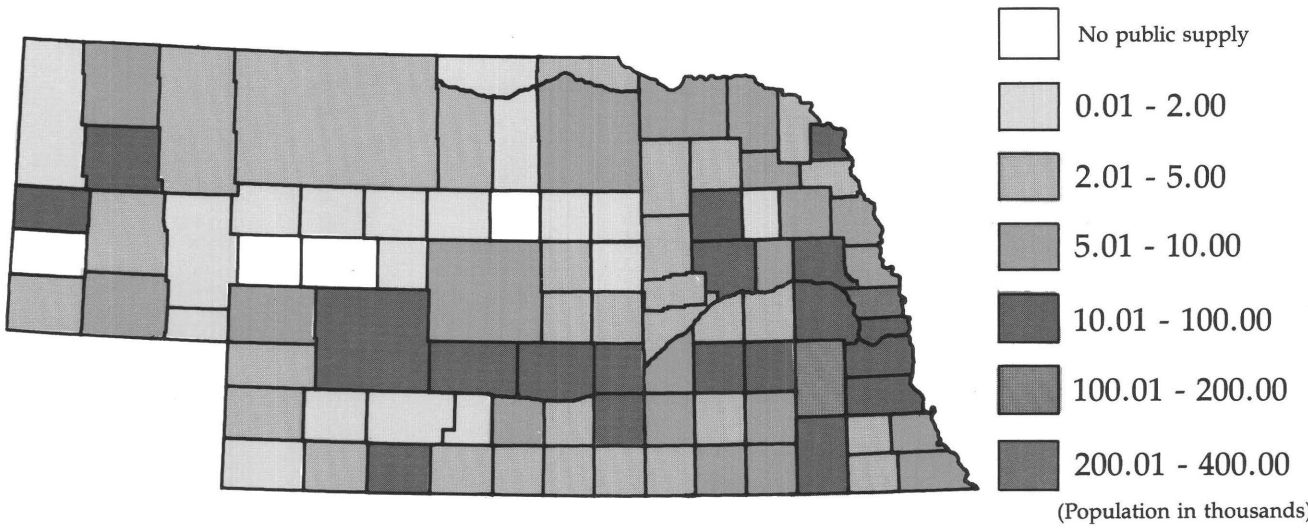



Figure 22. Population served by public-supply water systems in Nebraska counties, 1985

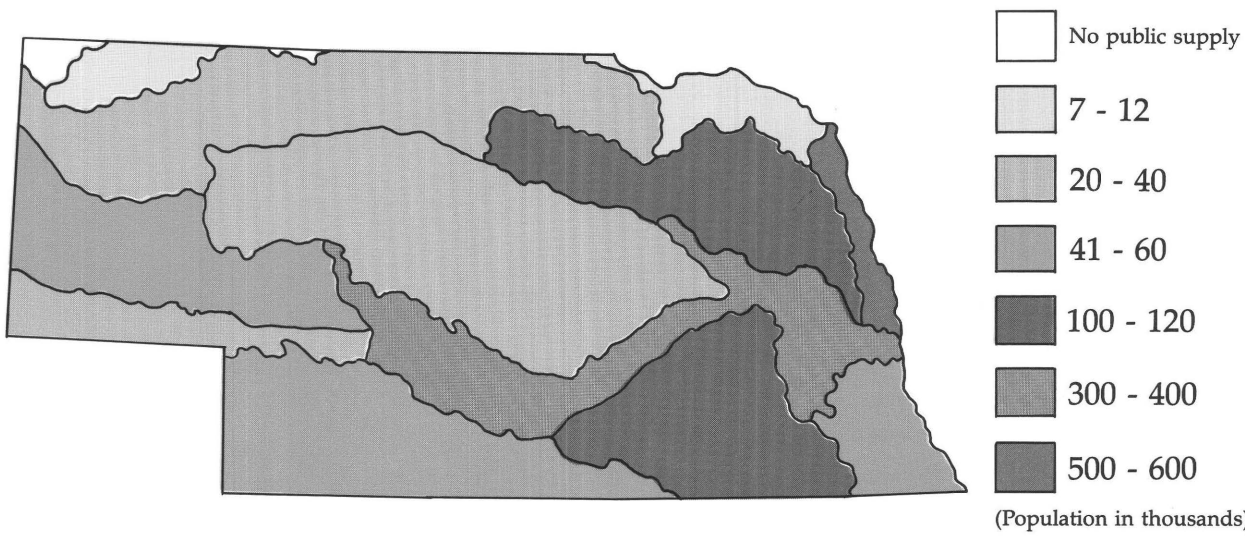



Figure 23. Population served by public-supply water systems in Nebraska subregions, 1985

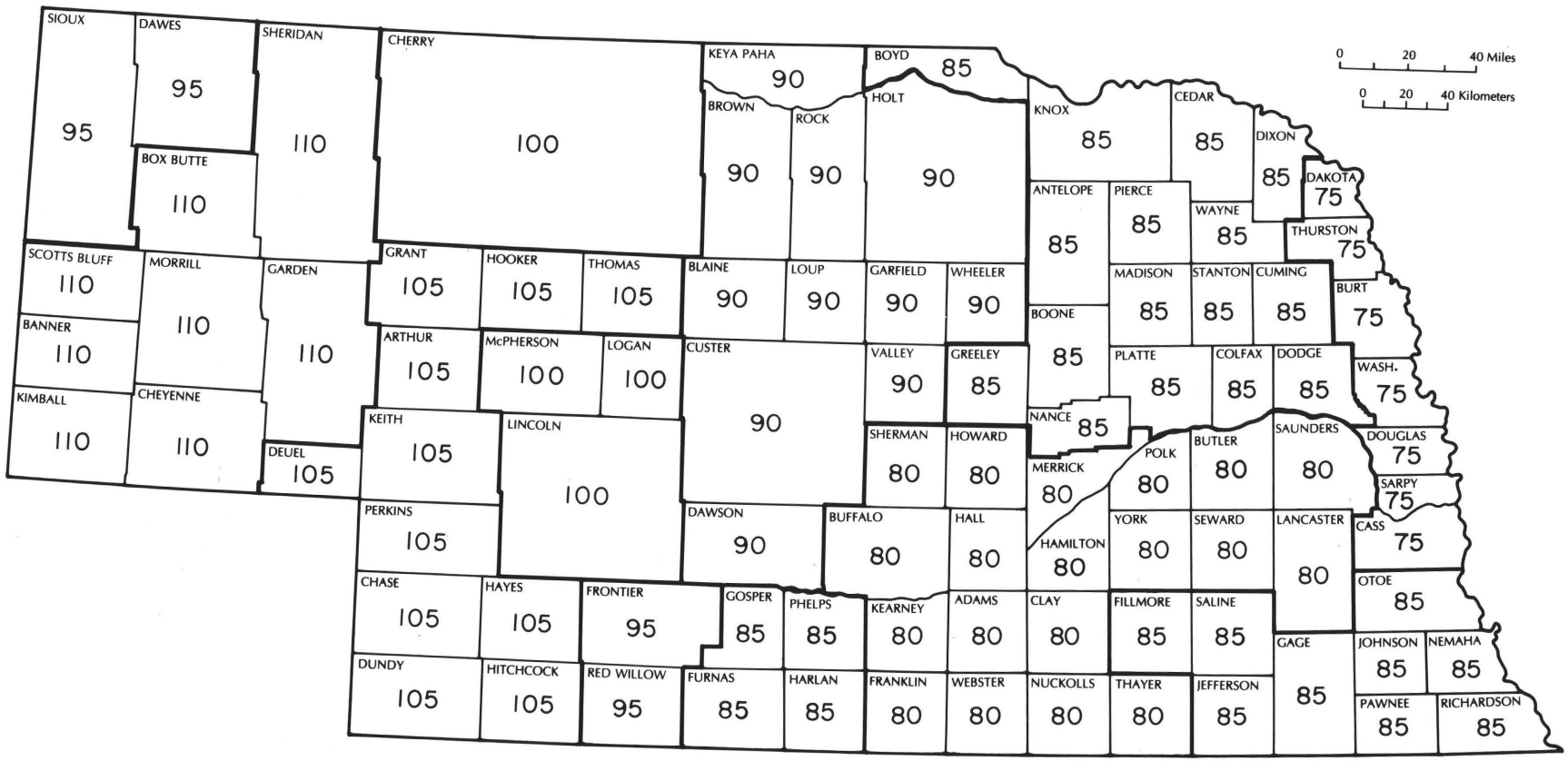



Figure 24. Estimated self-supplied domestic water use, in gallons per day per capita, in Nebraska counties, 1985

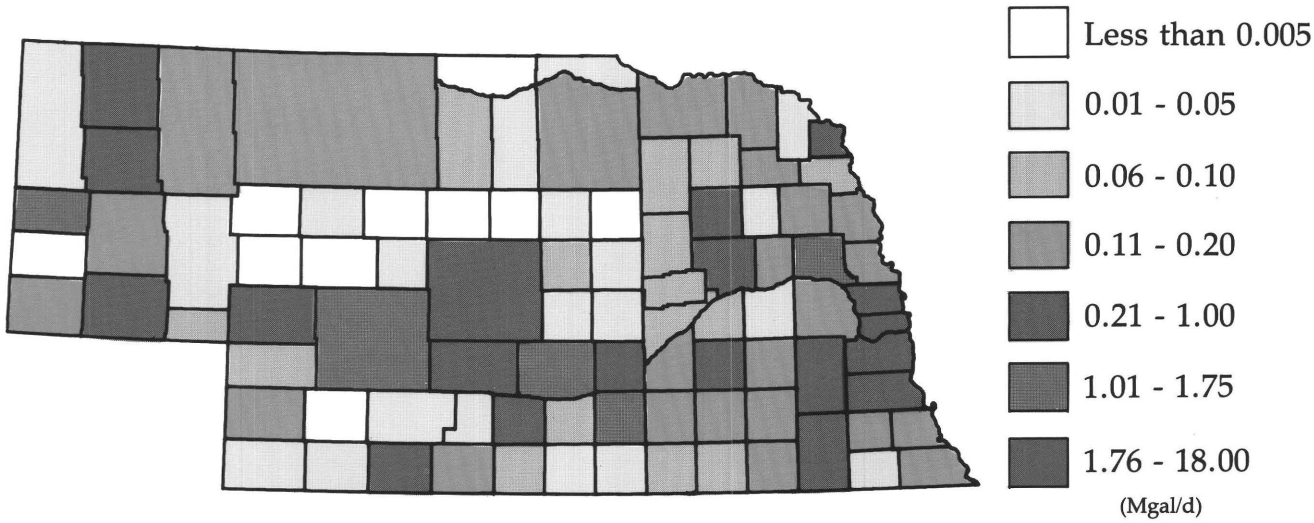



Figure 25. Commercial water use in Nebraska counties, 1985

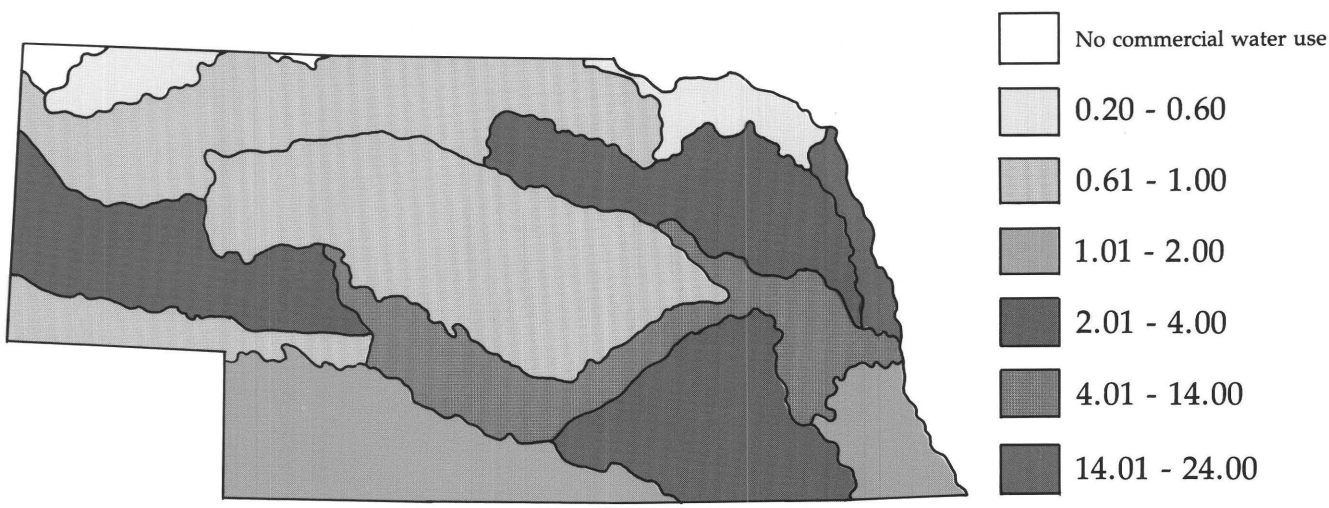



Figure 26. Commercial water use in Nebraska subregions, 1985

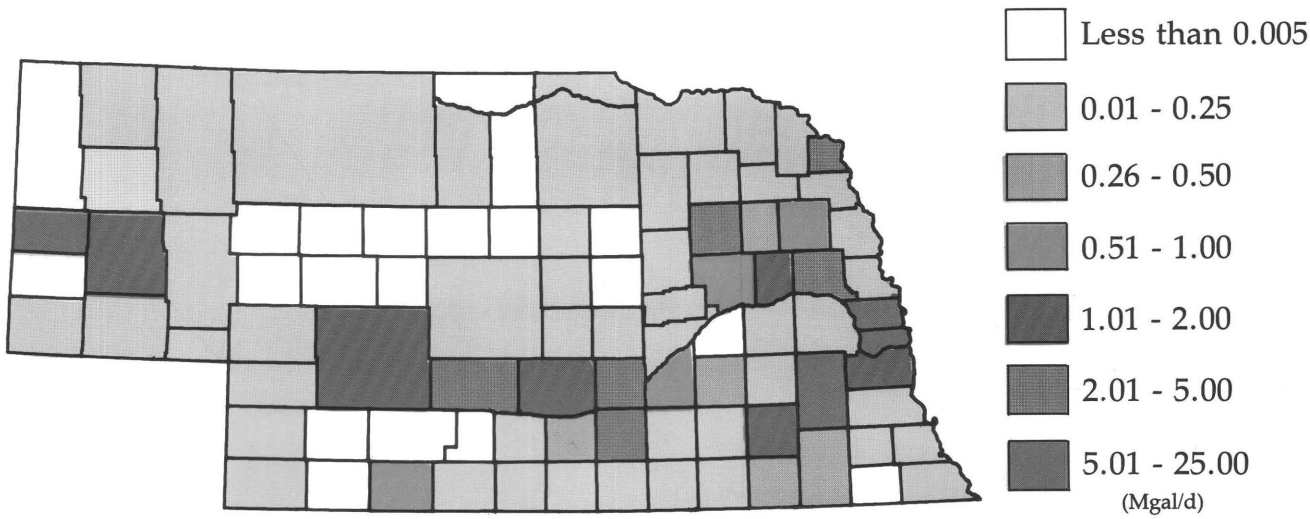



Figure 27. Industrial water use in Nebraska counties, 1985

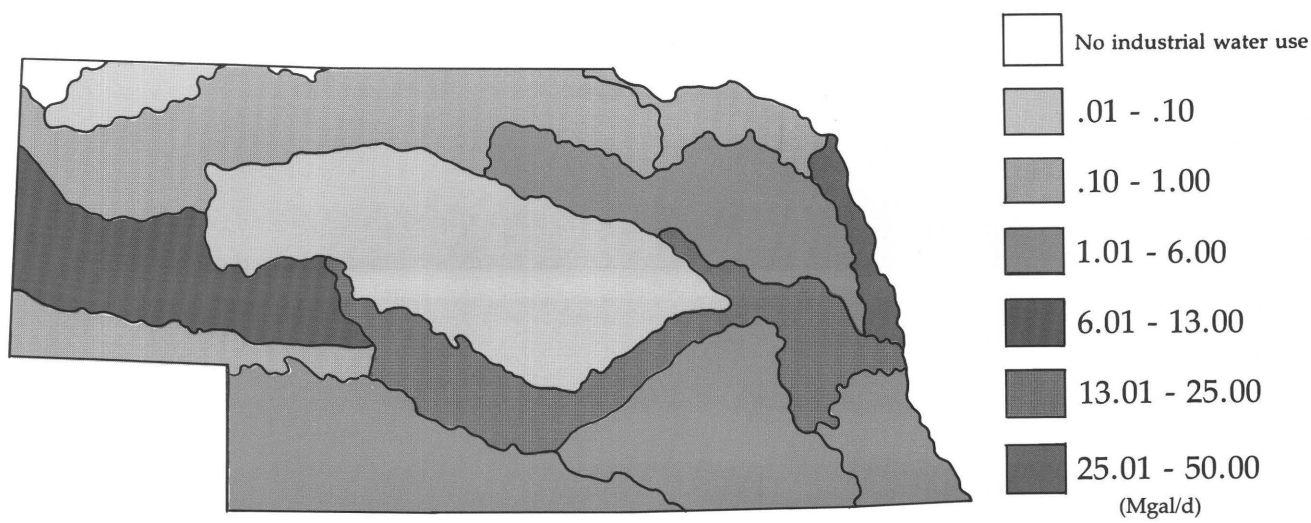



Figure 28. Industrial water use in Nebraska subregions, 1985

Mgal/d or 92.8 percent was supplied by surface water for quarrying and gravel-washing operations, and 8.55 Mgal/d or 7.2 percent was supplied by groundwater for secondary oil recovery.

The estimates above on mining water use were made from information obtained from the Nebraska Oil and Gas Conservation Commission; from Burchett and Eversoll (1974); from an inventory of operations from the U.S. Department of Labor, Metal/Nonmetal Mine Safety and Health, for 1986; and from telephone contact with owners as to the extent of their operations during 1985.

The range in water use for mining operations in Nebraska counties during 1985 is shown in figure 29, and the range in use by subregions is shown in figure 30. Estimated values for mining water use in Nebraska counties and in hydrologic units and subregions are shown in tables 9 and 10, respectively.

## *Irrigation Water Use*

Water used for irrigation in Nebraska during 1985 was estimated at 7,265.09 Mgal/d, or 8,144,170 acre-ft, which was 42.4 percent of the total water use. Excluding power-generation use, irrigation accounted for 92.8 percent of the total offstream water use; that total was nearly 13 times greater than the combined offstream water use for all other categories, excluding power production, and was 42 times greater than the next largest offstream use, domestic use.

Surface-water diversions and withdrawals of 2,087.01 Mgal/d supplied 28.7 percent of irrigation water use in Nebraska during 1985. The remaining 71.3 percent, or 5,178.08 Mgal/d, was pumped from the groundwater reservoir.

Acreage irrigated during 1985 was estimated to be 7,480,140, with an average application of 13 inches of water per acre for the irrigation season. Irrigated acreage in Nebraska counties during 1985 ranged from 1,590 in Grant County to 281,890 in Holt County. Hydrologic Unit 10120106 in the Hat Creek basin had no irrigated acres, and Hydrologic Unit 10200101 in the Platte River basin had the most acres irrigated: 657,260. Water used for irrigation in Nebraska counties during 1985 ranged from 1.54 Mgal/d (annual volume of 1,730 acre-ft) in Grant County to 784.29 Mgal/d (annual volume of 879,190 acre-ft) in Scotts Bluff County. Water used for irrigation in Nebraska hydrologic units ranged from none (no irrigated acreage) in Unit 10120106 in the Hat Creek basin to 1,269.61 Mgal/d (annual volume of 1,423,240 acre-ft) in Unit 10180009 in the North Platte River basin. The range in irrigation water use for Nebraska counties and subregions is shown in figures 31 and 32, respectively. Estimates of total water used for irrigation in Nebraska counties and in hydrologic units and subregions during 1985 are listed in tables 11 and 12, respectively.

The annual volume of water use, in acre-feet (listed in tables 11 and 12) was computed for both groundwater and surface water by multiplying acres irrigated by amounts applied in acre-feet per acre (shown in figure 33) for gravity and center-pivot applications. (In the Hat Creek basin, where there is no groundwater use, a rate of 1 acre-ft per acre was used for surface water.) This volume of water was then converted to a use rate in million gallons per day and an average seasonal application, in inches per acre, which was rounded to the nearest 0.5 inch.

Corn was the principal irrigated grain crop grown in Nebraska during 1985, with an estimated acreage of 5,200,000 (Nebraska Crop and Livestock Reporting Service, 1986; adjusted). This is 69.5 percent of the total irrigated acres in the state and is more than eight times greater than the second largest irrigated crop acreage of 640,000 for soybeans. The major crops irrigated in Nebraska during 1985 are shown in figure 34.

Irrigation water use and acres irrigated that are given above are aggregates of estimates made for the four subcategories of irrigation uses and application methods explained in the following subcategories. Separate estimates were necessary because application amounts were different for different methods of application and transportation of water. Acres irrigated in these subcategories are shown in figure 35, and water use and source of supply for the subcategories are shown in figure 36.

### *Groundwater Withdrawal for Irrigation by Gravity Distribution Systems*

To estimate the amount of groundwater withdrawn for irrigation by gravity distribution systems during 1985, it was necessary to estimate the acres irrigated by these systems and estimate the amount of water applied, in inches per acre or acre-feet per acre.

The Nebraska Natural Resources Commission Data Bank, which contains information on registered irrigation wells in Nebraska, was used to determine the number of registered wells in each county and hydrologic unit during 1985. The total number of irrigation wells listed was 75,016, which is somewhat greater than the 70,985 irrigation wells stated by Ellis and Pederson (1986) and taken from information provided by the Nebraska Department of Water Resources. The discrepancy between the irrigation-well counts by the two state agencies appears to be a difference in interpretation and cataloging of the data. The distribution of irrigation wells in Nebraska counties in 1985 is shown in figure 37.

The number of gravity irrigation systems in a Nebraska county or hydrologic unit was determined by subtracting the number of center-pivot distribution systems listed in the master file maintained by the Remote Sensing Center, (now part of the Center for Advanced Land Management Information Technologies), University of Nebraska-Lincoln Conservation and Survey Division, from the number of registered irrigation wells taken from the Nebraska Natural Resources Commission Data Bank. The number of gravity irrigation systems was then adjusted from estimates received from county agents and Soil Conservation Service field technicians on the number of active gravity systems in their counties. This negates any discrepancy in total well count by state agencies for the purpose of this report, as only the estimates of active systems were used to determine acres irrigated and water used. The number of registered irrigation wells,

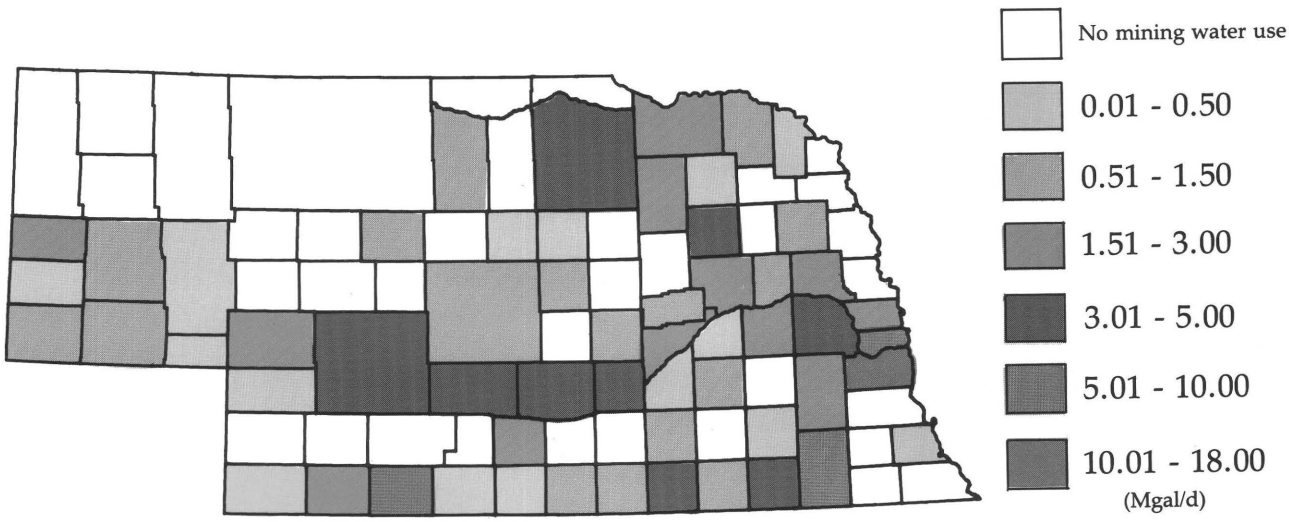



Figure 29. Mining water use in Nebraska counties, 1985

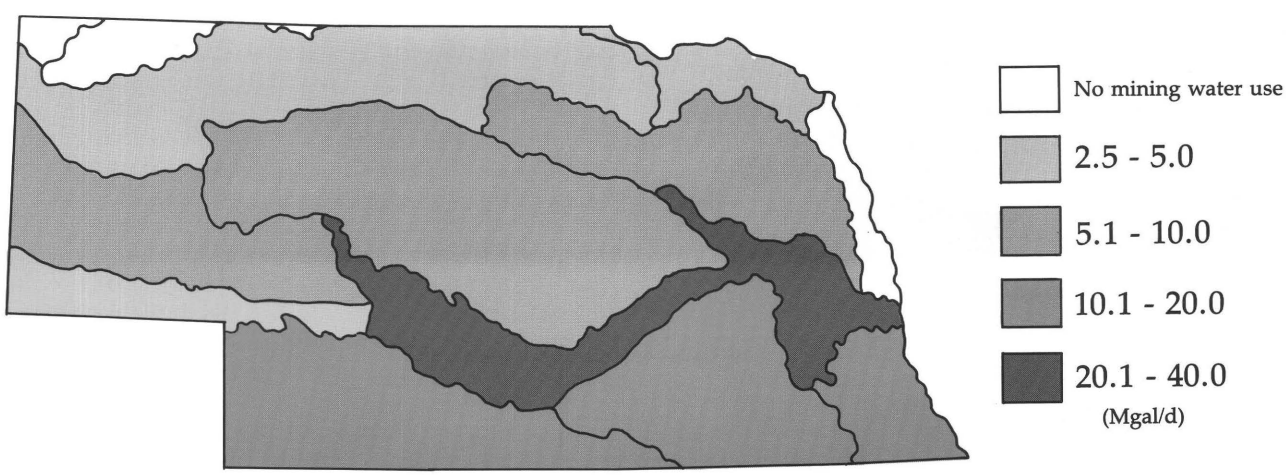



Figure 30. Mining water use in Nebraska subregions, 1985

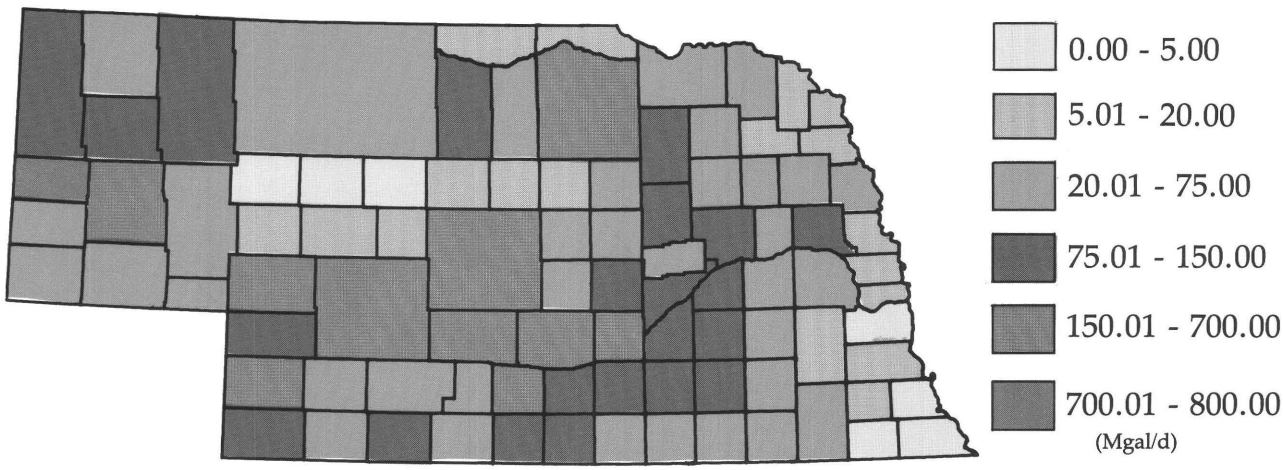



Figure 31. Water used for irrigation in Nebraska counties, 1985

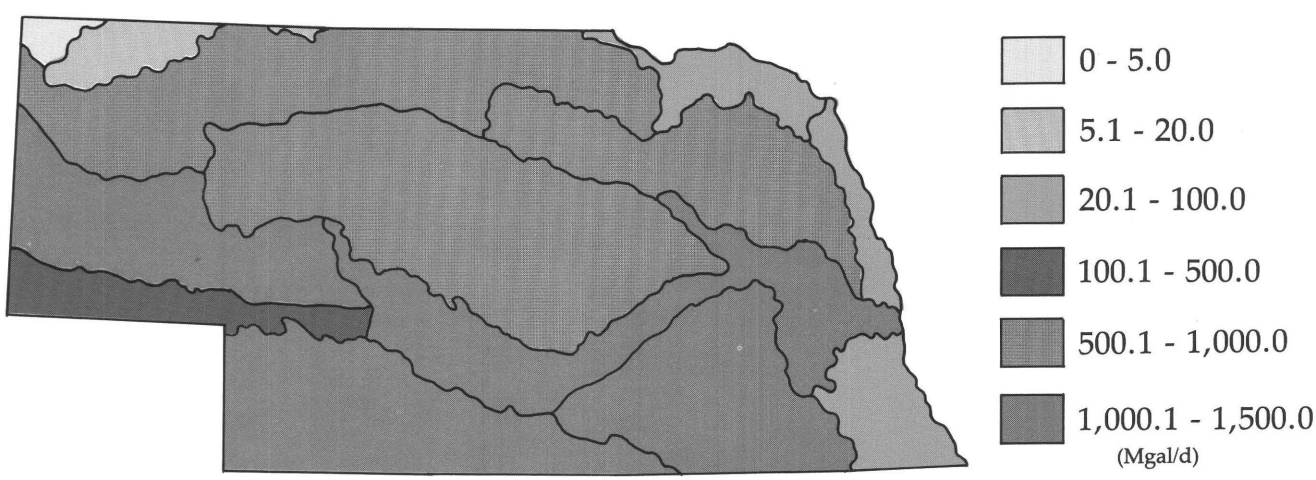



Figure 32. Water used for irrigation in Nebraska subregions, 1985

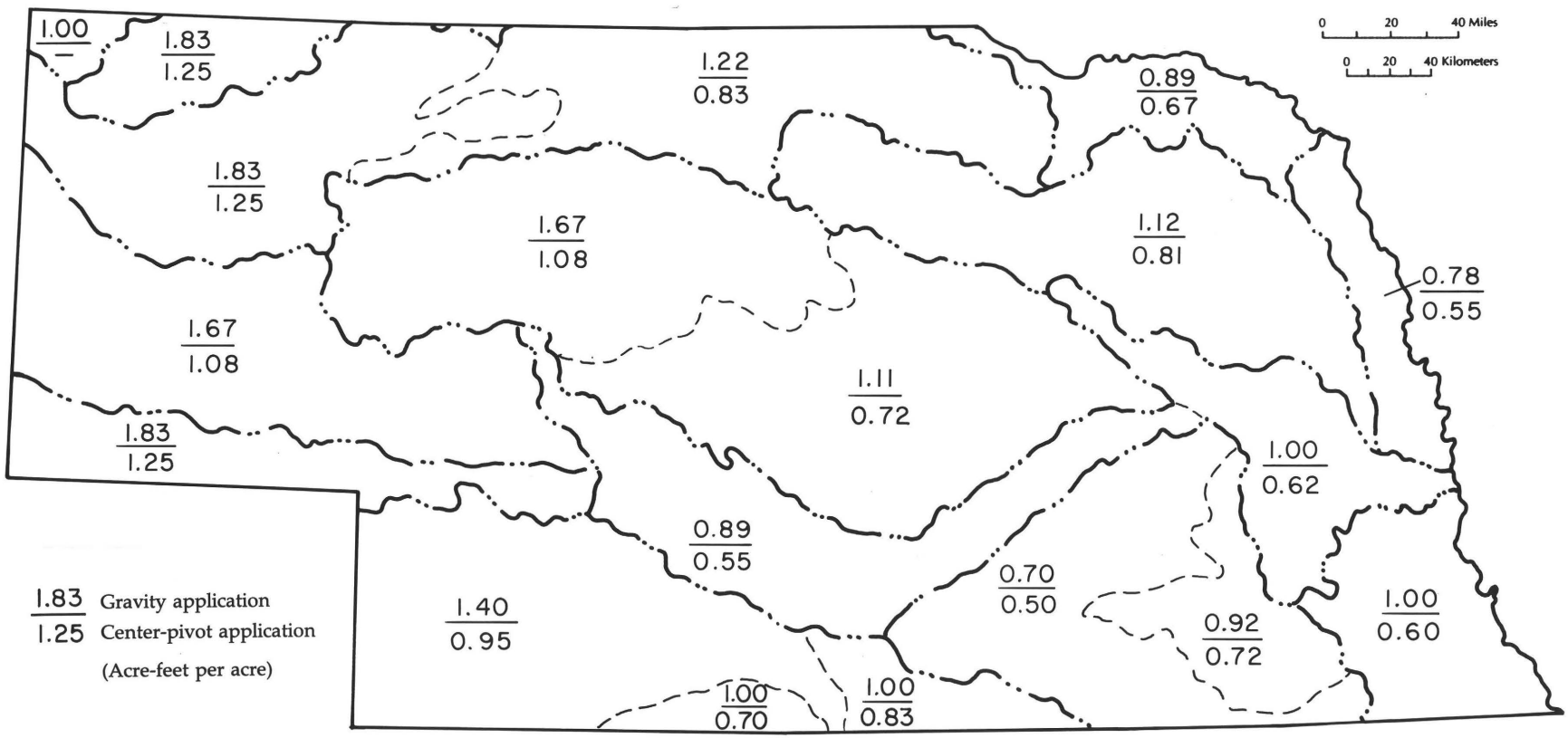
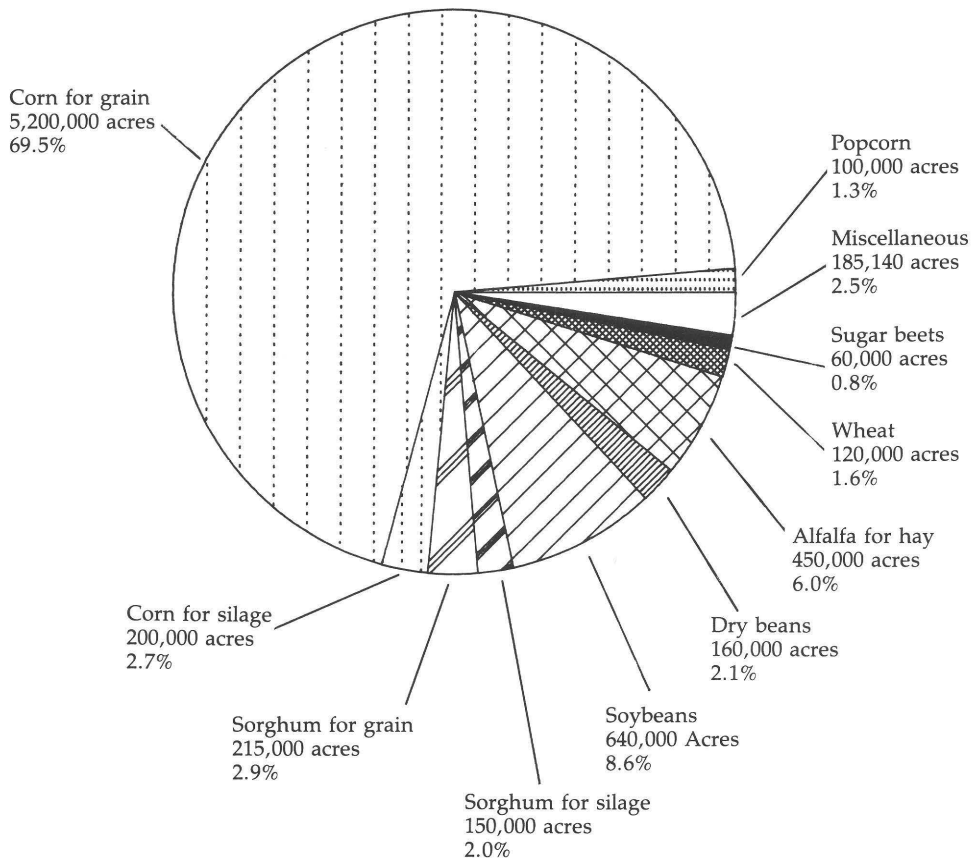
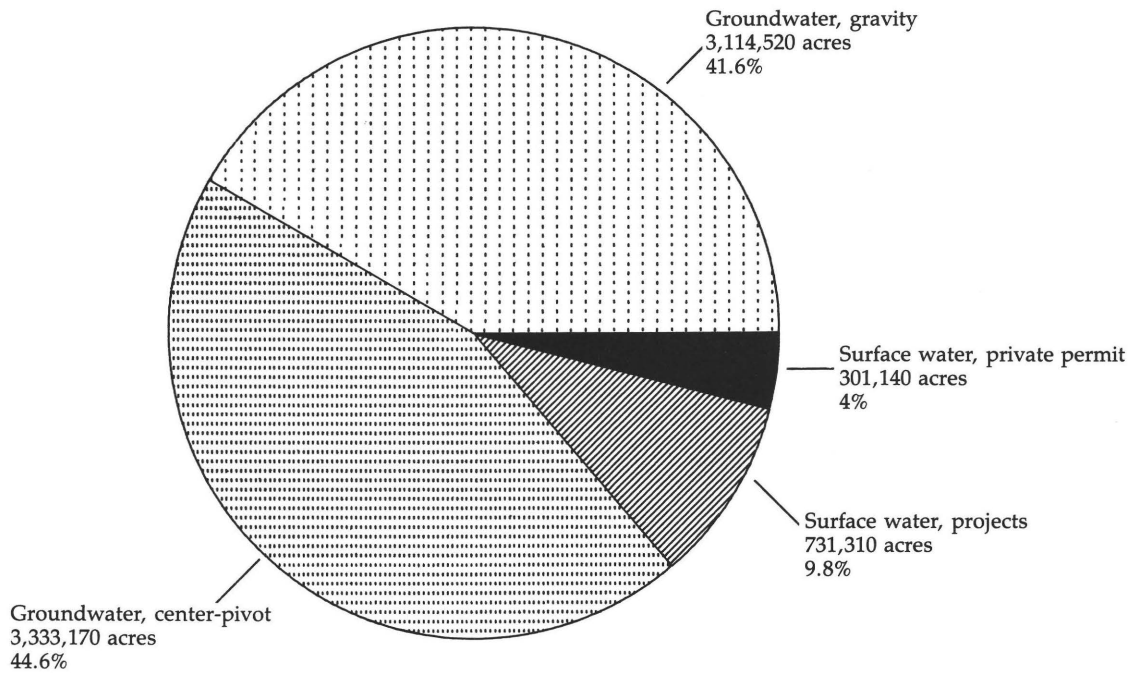



Figure 33. Groundwater used for irrigation for 1985 irrigation season in Nebraska



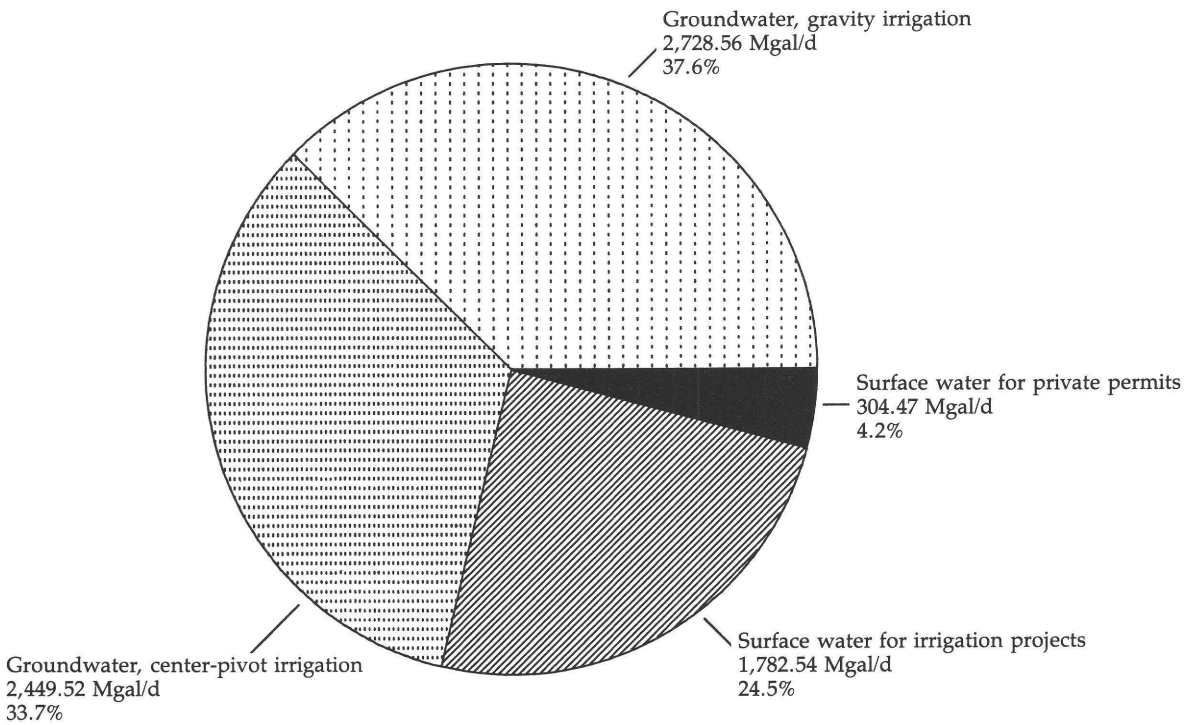

**Acres irrigated: 7,480,140**

Figure 34. Major crops irrigated in Nebraska, 1985
(Adjusted from "1985 Nebraska Agicultural Statistics")




**Total acres irrigated: 7,480,140**

Figure 35. Estimated acres irrigated, by source and delivery system, in Nebraska, 1985




**Total use: 7,265.09 Mgal/d**

Figure 36. Estimated water use for irrigation, by source and delivery system, in Nebraska, 1985

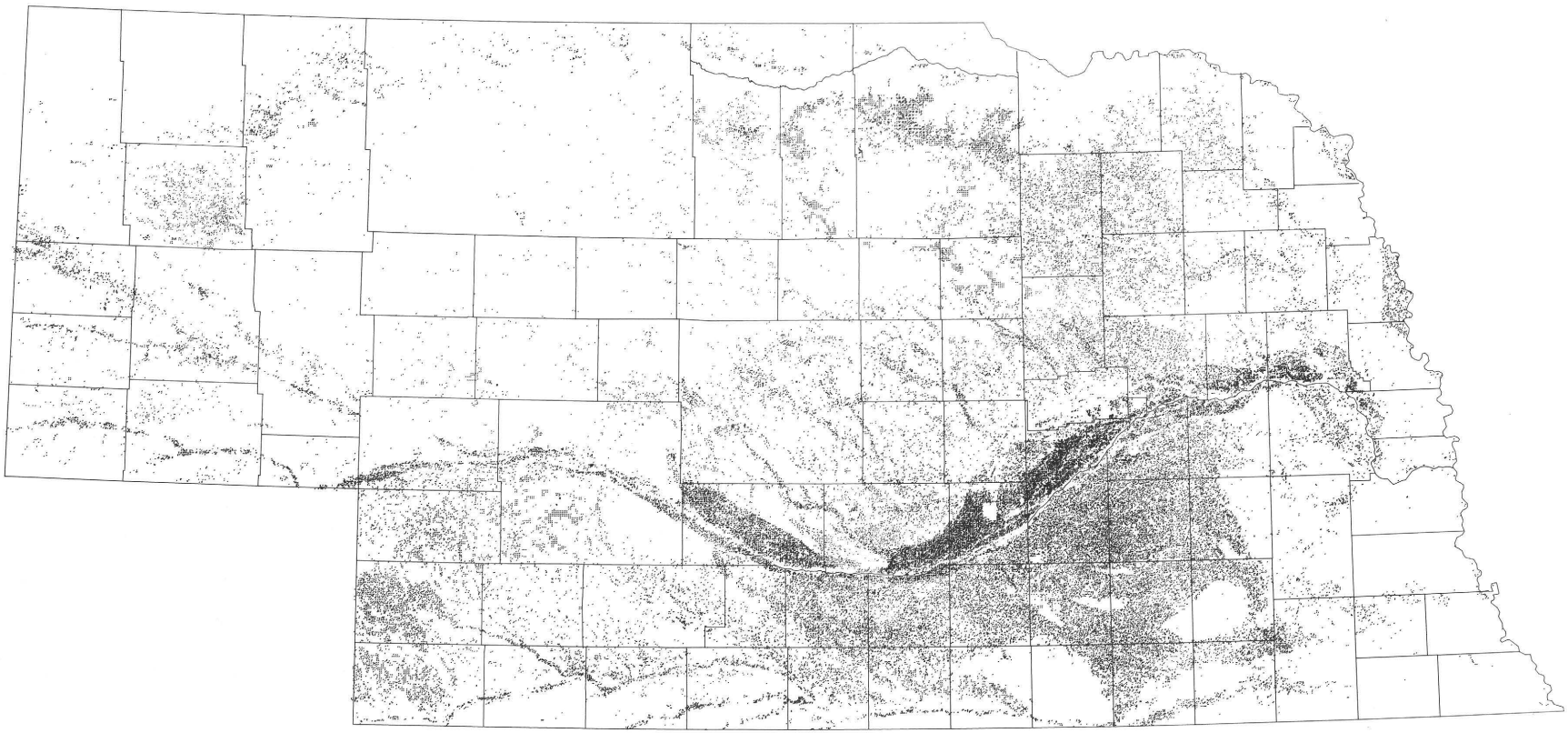


Figure 37. Location of registered irrigation wells in Nebraska, January 1, 1986

method of distribution, and estimated number of active systems in Nebraska counties and in hydrologic units and subregions for 1985 are listed in tables 13 and 14, respectively.

The estimate of active gravity irrigation systems was then multiplied by the acres irrigated per well—a value estimated from data on selected wells monitored by the Little Blue Natural Resources District (NRD), the Blue River Association of Ground Water Conservation Districts, and from pumping depths and acreages listed on well registrations. The estimated acres irrigated with groundwater by gravity distribution systems was multiplied by an estimated value of water applied during the 1985 irrigation season. This amount was determined from monitored wells, as mentioned above, from a complete inventory of irrigation wells in the Upper Republican NRD groundwater control area, from precipitation records, and from a comparison of application amounts monitored in Blaine and Kimball counties in 1980, when climatic conditions in the northwestern part of the state were comparable to those in 1985.

Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska counties during 1985 is given in table 15. Values for hydrologic units and subregions are given in table 16.

### *Groundwater Withdrawal for Irrigation by Center-Pivot Distribution Systems*

Groundwater used for irrigation by center-pivot distribution systems was estimated as a subcategory by itself, as application rates for acres irrigated by these distribution systems average about one-third less than for gravity systems.

The number of active center-pivot systems for most counties in Nebraska during 1985 was obtained from the Remote Sensing Center (now part of CALMIT), University of Nebraska–Lincoln Conservation and Survey Division, from their annual satellite-imagery inventory of active center-pivot systems. Extended periods of cloud cover prevented an inventory of active center pivots in Buffalo and Dawson counties during 1985, so the 1984 inventory was used for these counties. A field inventory of active center-pivot systems in the groundwater control area of the Upper Republican NRD in Perkins, Chase, and Dundy counties in 1985 was used for these counties. A field survey by technicians of the Soil Conservation Service provided the number of active center-pivot systems for Cedar County. Satellite-imagery data was used for the remaining 87 counties. Distribution of center-pivot systems in Nebraska is shown in figure 38.

Measurements from satellite imagery of areas encompassed by center-pivot irrigation systems indicate an average of 133 acres irrigated per system, and this average was used to estimate acres irrigated by center pivots in Nebraska counties, except Perkins, Chase, and Dundy, where an inventory of actual acres irrigated by center pivots was used.

The acres irrigated by center-pivot systems were multiplied by a seasonal application rate estimated for subregions and/or hydrologic units, as explained in the preceding subsection for gravity distribution. These seasonal application amounts in acre-feet per acre are shown in figure 33.

Amounts of groundwater used for center-pivot irrigation in Nebraska during 1985 ranged from 0.30 Mgal/d (340 acre-ft per year) in Nemaha County to 187.73 Mgal/d (210,450 acre-ft per year) in Holt County. Amounts of groundwater used for center-pivot irrigation in Nebraska hydrologic units ranged from none in Units 10120106 and 10120108, in far northwestern Dawes County and northern Sioux County, and 10270205 in southeastern Jefferson, southern Gage and western Pawnee counties (no center pivots exist in these areas) to 198.99 Mgal/d (223,070 acre-ft per year) in Unit 10220001, which includes parts of Brown, Garfield, Wheeler, Boone and Madison counties and most of southern Holt and Antelope counties, and central Rock County.

Amounts of groundwater withdrawn for irrigation by center-pivot systems in Nebraska counties during 1985 are listed in table 17; amounts withdrawn for use in hydrologic units and subregions are listed in table 18.

### *Surface-Water Use for Irrigation during 1985*

There were 5,379 registered permits to divert or withdraw water from Nebraska streams for irrigation during 1985 (Nebraska Department of Water Resources). The distribution of permits, by county, are shown in figure 39, and the distribution by subregions is shown in figure 40.

Surface water diverted to canals to serve irrigation projects was estimated to be 1,782.54 Mgal/d (1,998,230 acre-ft) or 85.4 percent of the total surface water used for irrigation in 1985. An estimated 731,310 acres irrigated from canals accounted for 70.8 percent of the total acreage irrigated with surface water. Estimated acres irrigated and amounts of water diverted for irrigation projects during 1985 were obtained from the Annual Operating Plans of the U.S. Bureau of Reclamation, Missouri River Region, Niobrara, Lower Platte, and Kansas River Basins, 1985; from preliminary estimates of canal diversions for the Nebraska Department of Water Resources Hydrographic Report, 1985; and from information received from the Central Nebraska Public Power and Irrigation District.

Estimated surface-water use for irrigation projects during 1985 in Nebraska counties and in hydrologic units and subregions is listed in tables 19 and 20, respectively.

The remaining 301,140 acres irrigated from surface water during 1985 were served by approximately 5,150 private permits. The acreage irrigated from these permits was estimated from mail surveys conducted in 1983-85 by the Nebraska Department of Water Resources. A 29.5 percent return of questionnaires for the 1985 irrigation season provided the sample for the 1985 estimation. Application rates in acre-feet per acre were estimated to be the same as for acres irrigated from groundwater with gravity distribution systems (fig. 33).

Surface-water use for irrigation during 1985 by pri-

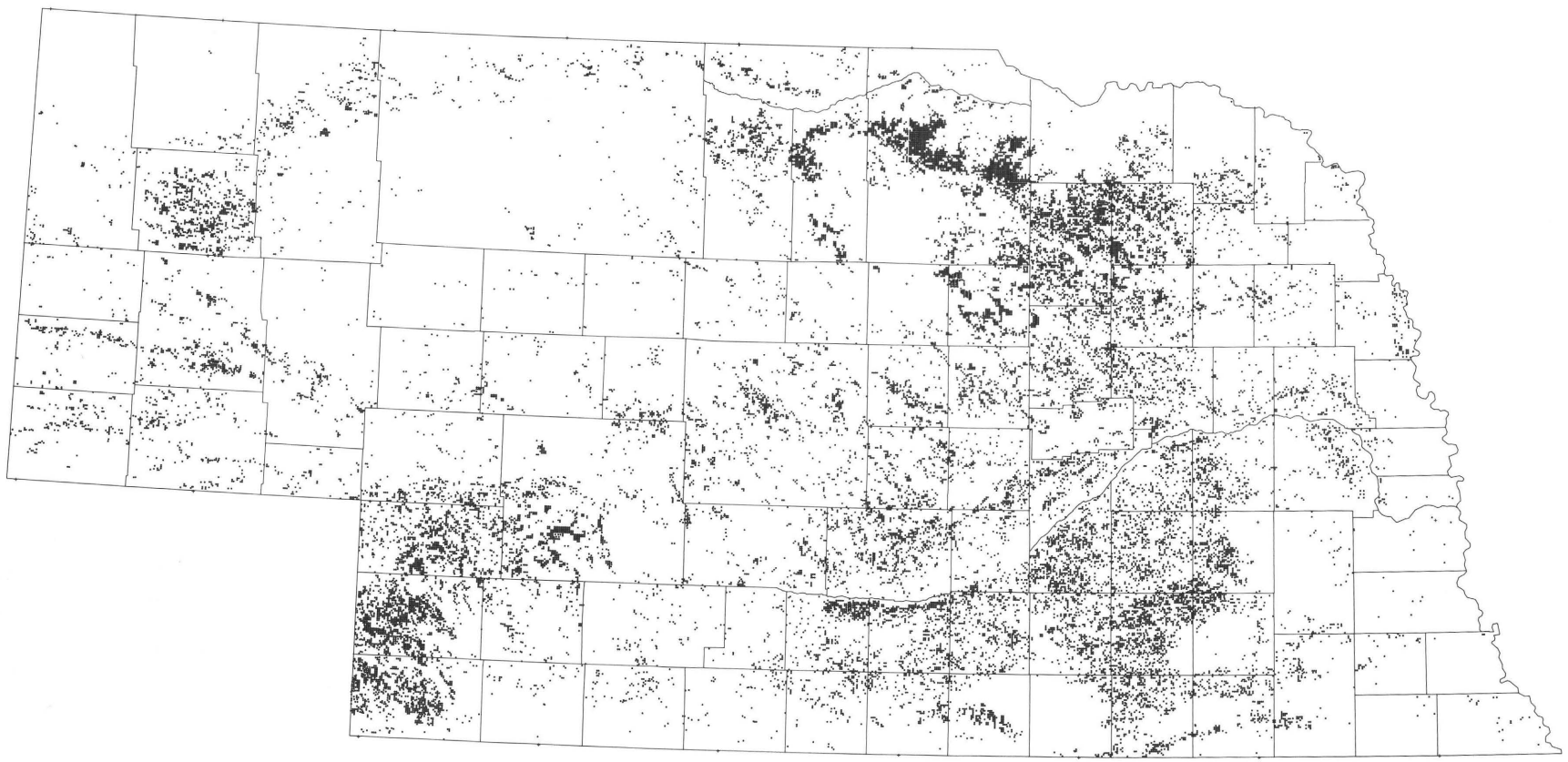


Figure 38. Location of center-pivot irrigation systems in Nebraska, December 31, 1985

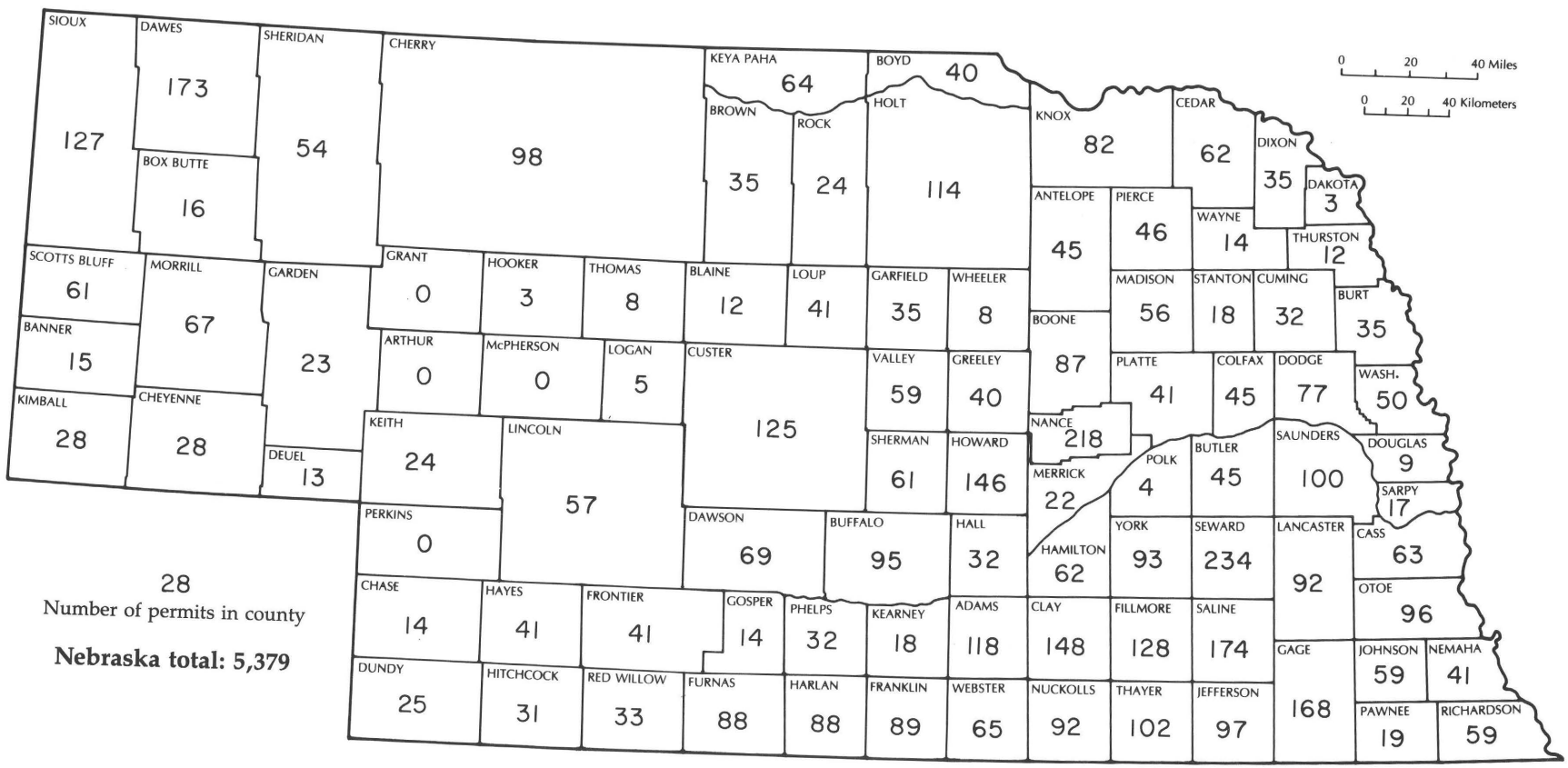



Figure 39. Registered surface-water diversion or withdrawal permits in Nebraska counties, 1985

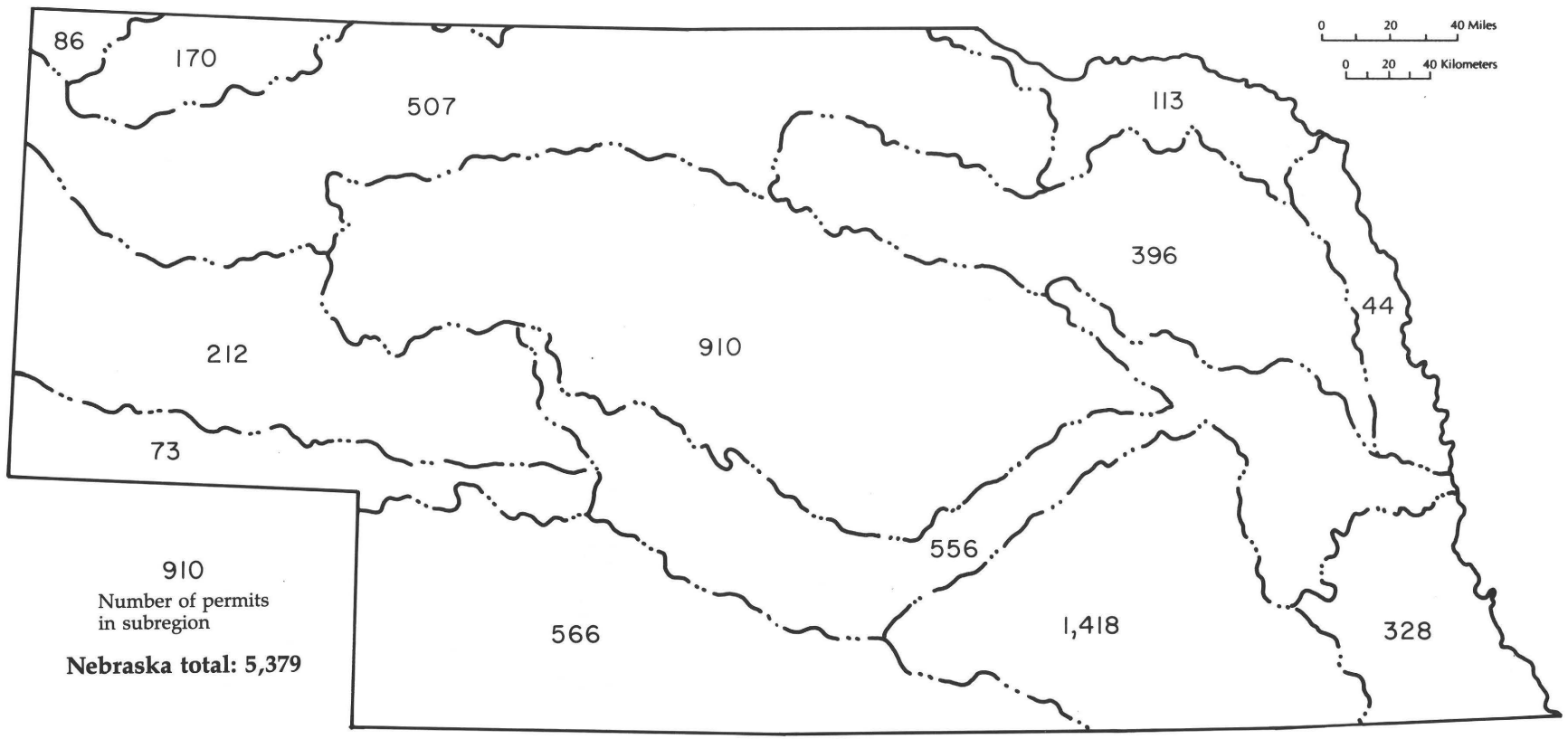



Figure 40. Registered surface-water diversion or withdrawal permits in Nebraska subregions, 1985

vate permit holders was estimated to be 304.17 Mgal/d, or 351,310 acre-ft, for an average application of 14 in. of water per acre for the season.

Estimates of total surface water used for irrigation in Nebraska counties during 1985 are listed in table 21; estimates for total surface water used for irrigation in hydrologic units and subregions are listed in table 22.

Acres registered for diversion permits shown in column 4 of table 21 are not necessarily acres irrigated in the county where the diversion permit is registered; water is carried by canals across county lines to project areas. The acres irrigated and surface-water use, columns 5-8, are for the counties indicated.

## *Livestock Water Use*

This category of water use is classified as "agriculture, nonirrigation" in the National Water Use Data System and includes such uses as commercial fish farming, livestock watering, dairy operations, and other on-farm uses, excluding rural-domestic and irrigation water use. The "agriculture, nonirrigation" category is equivalent to "livestock water use" listed under the rural-use category in previous national water-use circulars. The term "livestock water use" is preferred for this report, as it adequately describes this category for Nebraska.

Livestock water use of 119.777 Mgal/d during 1985 is only 1.5 percent of the total offstream water use in Nebraska (excluding power production); but this use has a major impact on the farm economy of the state. Nebraska ranked fourth in the 50 states in cash receipts from farm marketing in 1984 (1985 data not available), and livestock sales accounted for more than 60 percent of these receipts (Nebraska Department of Economic Development, 1987).

To estimate livestock water use in Nebraska during 1985, it was necessary to determine the number of animals in each class. These numbers were determined from Nebraska 1984 preliminary county estimates (Nebraska Crop and Livestock Reporting Service) and estimates of declining livestock inventory. Water use was estimated by multiplying the estimated livestock numbers by the gallons per day per head utilized by each class of animal. Water-use rates for the various livestock classes are given in the following table:

**Water-use rates for various livestock classes**
(Adjusted from Anderson, 1966, and Sykes, 1955; gal/d: gallons per day)

| Livestock class | Daily use rate (gal/d/head) | Annual use rate (gal/d/head) |
|---|---|---|
| Beef cows and other cattle[1] | 15 | 15 |
| Calves raised[2] | 6 | 4 |
| Milk cows[3] | 30 | 30 |
| Hogs[4] | 4 | 4 |
| Pigs raised[5] | 2 | 1 |
| Sheep | 2 | 2 |
| Lambs raised[6] | 1 | 0.6 |
| Turkeys | 0.12 | .12 |

[1]Class includes breeding stock, herd-replacement stock, cattle in feedlots, and all other cattle, excluding milk cows.
[2]Based on no water use at birth to 12 gal/d/head at 8 months of age, for an average use of 6 gal/d/head for two-thirds of a year. For computational purposes, this is equal to an annual use rate of 4 gal/d/head.
[3]Most dairy herds in Nebraska are maintained for the marketing of Grade A or Grade B whole milk. Certain sanitary procedures are required for certification to sell to these markets, and the 30 gal/d/head includes an estimated 5 gal/d/head for sanitation.
[4]Includes water for cooling during summer months and for sanitation of feeding floors and lots.
[5]Based on no water use at birth to 4 gal/d/head at market age of 6 months, for an average of 2 gal/d/head for one-half year. For computational purposes, this is equal to an annual use rate of 1 gal/d/head.
[6]Based on no water use at birth to 2 gal/d/head at market age of 7 months, for an average use rate of 1 gal/d/head. For computational purposes, this is equal to an annual use rate of 0.6 gal/d/head.

Water use for livestock classes in Nebraska during 1985 is shown in figure 41. The beef industry (beef cows and other cattle and calves raised) accounted for 80.1 percent of the total water used for livestock in Nebraska during 1985. The range in livestock water use in Nebraska counties is shown in figure 42, and the range in livestock water use in subregions is shown in figure 43. Livestock water use in million gallons per day and acre-feet per year for Nebraska counties and for hydrologic units and subregions is listed in tables 23 and 24, respectively.

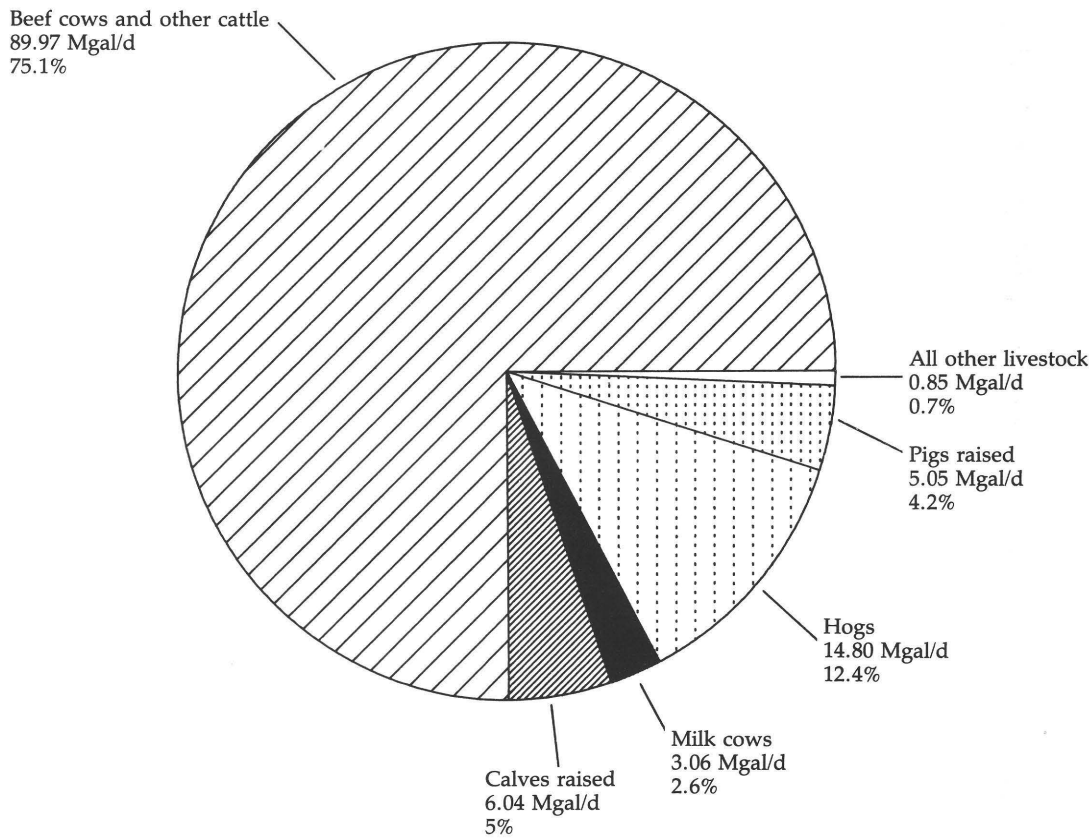
Bentall and Shaffer (1979) estimated that 20 percent of the water used by livestock in Nebraska is supplied from surface water. This is considered a reasonable estimate for beef cows and other cattle and for calves raised; it was used by Steele (1986) to estimate the 19.17 Mgal/d of surface water used by livestock during 1985. Milk cows, hogs, pigs, sheep, and lambs generally are kept in more confined lots and pastures, and surface water used by these classes is minimal. In this report, all water used by these livestock classes is considered to be provided by groundwater supplies.

## *Power-Generation Water Use*

The 1985 water use for power generation in Nebraska of 9,290.99 Mgal/d was 54.3 percent of the total water used for all purposes; 99.7 percent of power-generation use was from surface water.

Power-generation use was divided into three categories to satisfy the usage request for the national water-use report. Hydroelectric power generation is classified as an instream water use and is all surface-water supplied. The 7,079.05 Mgal/d of hydroelectric power use was 76.2 percent of the total water used for power generation in 1985. This 7,079.05 Mgal/d does not include water used for power generation from Lewis and Clark Lake.

Fossil fuel power-generation water use of 1,418.41 Mgal/d was 15.3 percent of total power-generation




**Total use: 119.77 Mgal/d**

Figure 41. Water use by major livestock classes in Nebraska, 1985

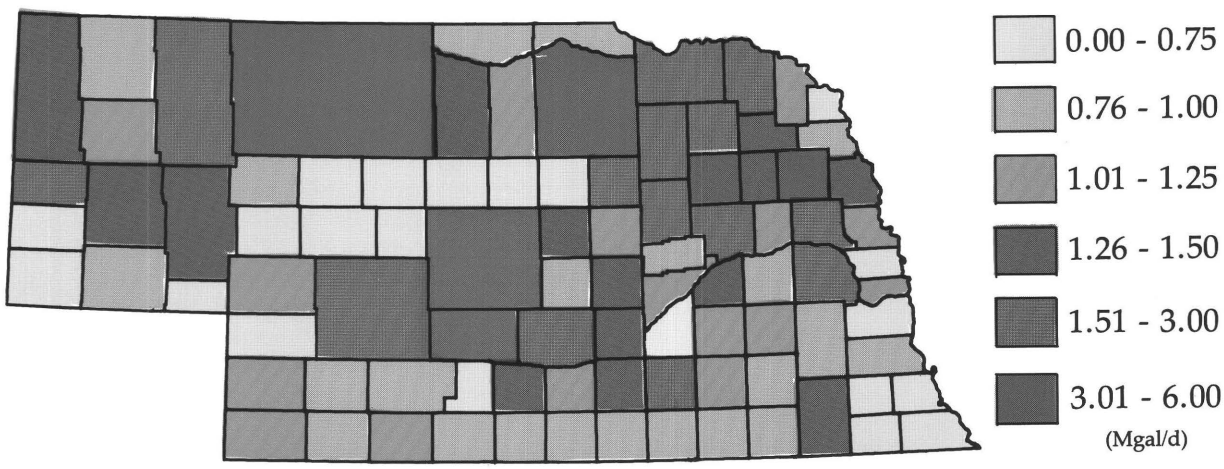



Figure 42. Livestock water use in Nebraska counties, 1985

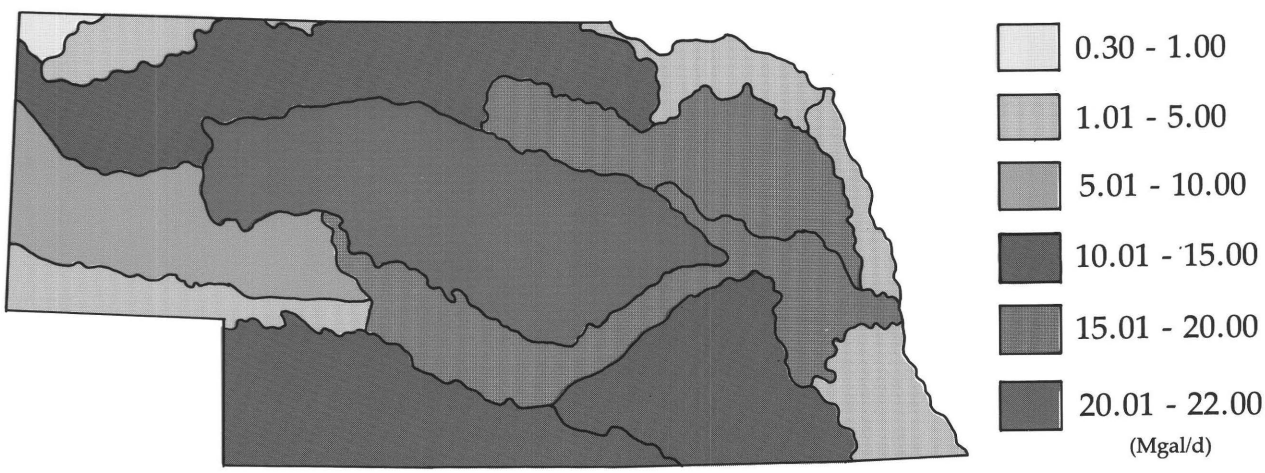



Figure 43. Livestock water use in Nebraska subregions, 1985

use, with 1,393.69 Mgal/d from surface-water supply and 24.72 Mgal/d from groundwater supply.

Nuclear power-generation use of 793.53 Mgal/d was 8.5 percent of total power-generation use during 1985 and was all supplied from surface water. Total water use for power generation in Nebraska during 1985 is shown in figure 44 by category and supply—surface water or groundwater. The ranges of use by the various categories for counties and subregions in Nebraska during 1985 are shown in figures 45-50.

Power-generation water use in Nebraska counties and in hydrologic units and subregions during 1985 is listed in tables 25 and 26, respectively.

### *Sewage Treatment*

Water use by this category includes water returned to the hydrologic system by municipal sewage-treatment facilities. The data presented for 1985 was aggregated from the files of the Nebraska Department of Environmental Control and from computer files of the U.S. Environmental Protection Agency from a complete inventory of the 477 municipal facilities in Nebraska. The range of waste-water treatment releases in Nebraska counties and subregions is shown in figures 51 and 52, respectively. Sewage effluent releases in Nebraska counties and in hydrologic units and subregions during 1985 are listed in tables 27 and 28, respectively.

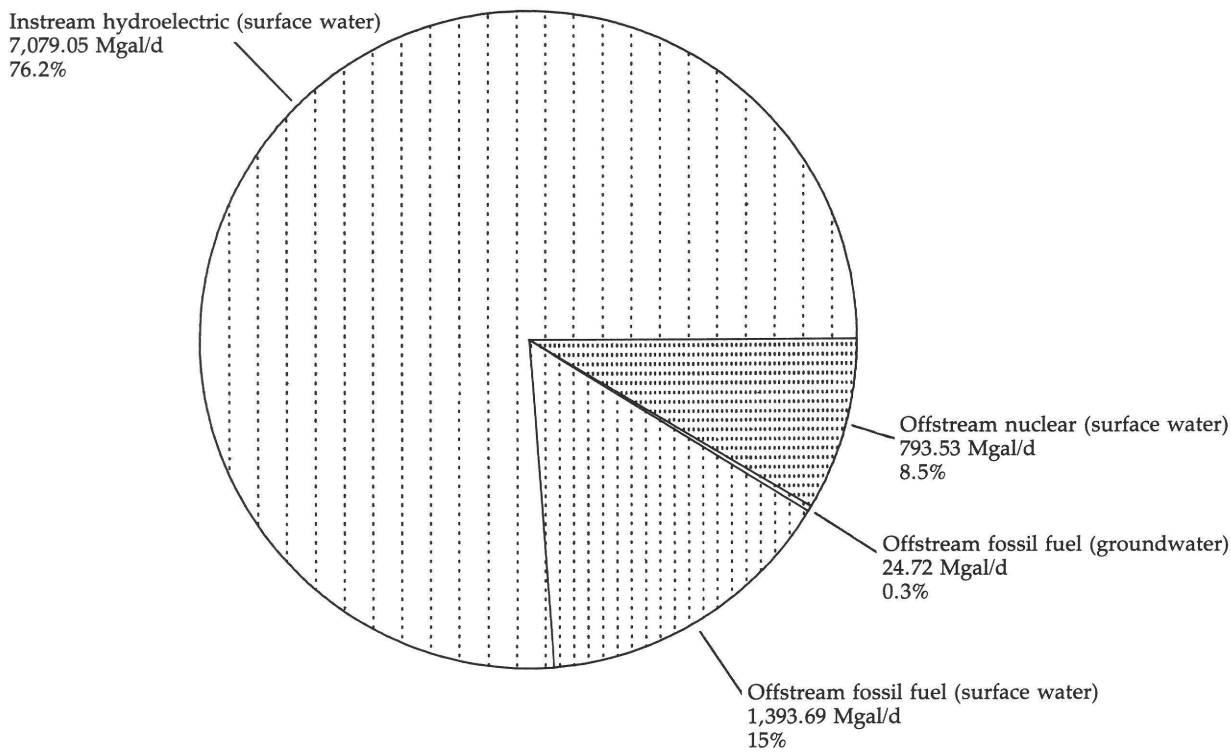
## SUMMARY

Total water use in Nebraska during 1985 was estimated to be 19,187,200 acre-ft, for an average use rate of 17,116.15 Mgal/d. About 67 percent of this use, or 12,922,040 acre-ft, was estimated to be from surface water (rivers, streams, lakes, reservoirs, and stock ponds). The remaining 6,262,160 acre-ft was obtained by pumping from groundwater supplies.

Water used for power generation of 9,290.99 Mgal/d was the greatest of all water-use categories. The second greatest category was irrigation, with an estimated use of 7,265.09 Mgal/d during 1985 or an annual volume of 8,144,170 acre-ft. Irrigation water use accounted for 92.8 percent of the total offstream water use during 1985; however, this percentage may vary from year to year, as the volume used is dependent on climatic and economic conditions.

Although livestock water use of 119.77 Mgal/d was only 1.5 percent of the total offstream use, this use has a major impact on the farm economy of Nebraska, as livestock sales during 1984 accounted for more than 60 percent of farm market receipts (1985 data not available).

During 1985, the Platte River basin hydrologic unit, subregion 1020, had the greatest total water use: 4,986.61 Mgal/d; Hat Creek basin hydrologic unit, subregion 1012, had the smallest total water use: 4.59 Mgal/d.




**Total use: 9,290.99 Mgal/d**

Figure 44. Water use for power generation in Nebraska, 1985

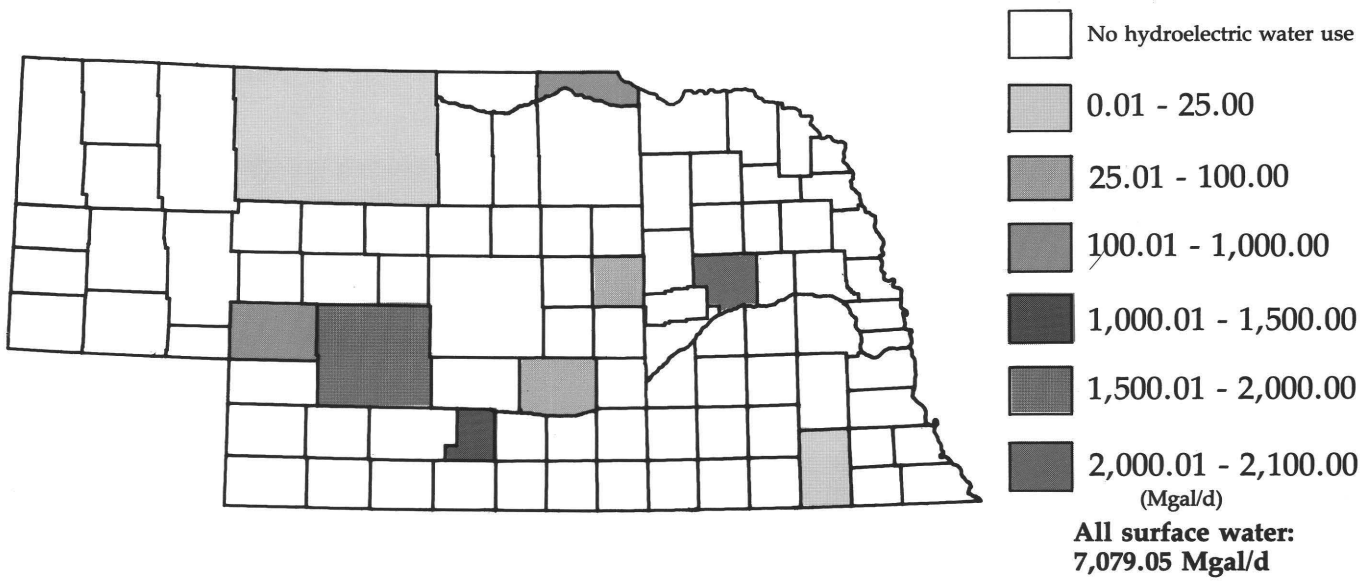



Figure 45. Hydroelectric water use in Nebraska counties, 1985

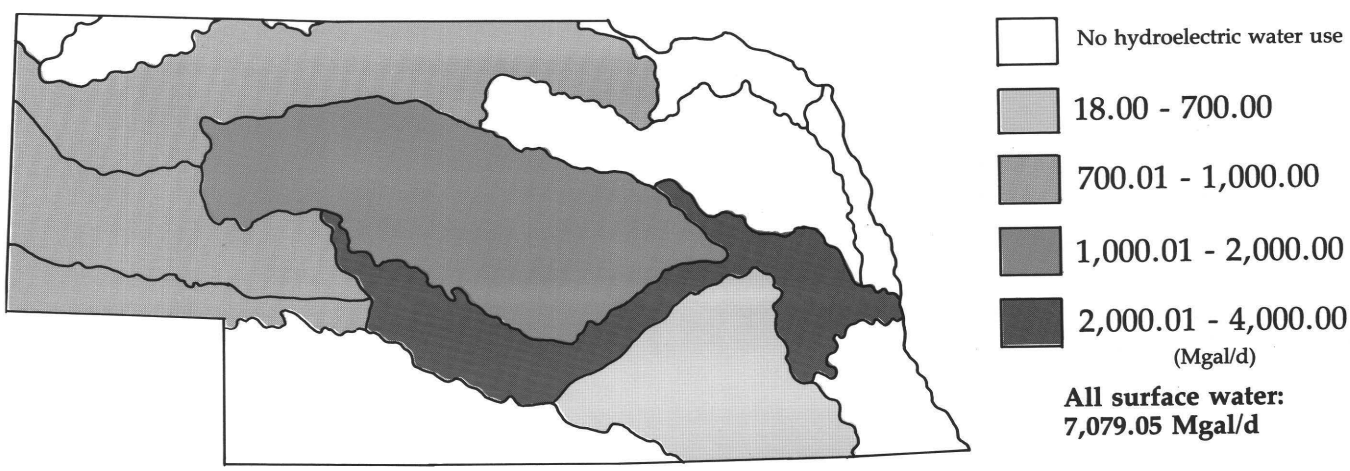



Figure 46. Hydroelectric water use in Nebraska subregions, 1985

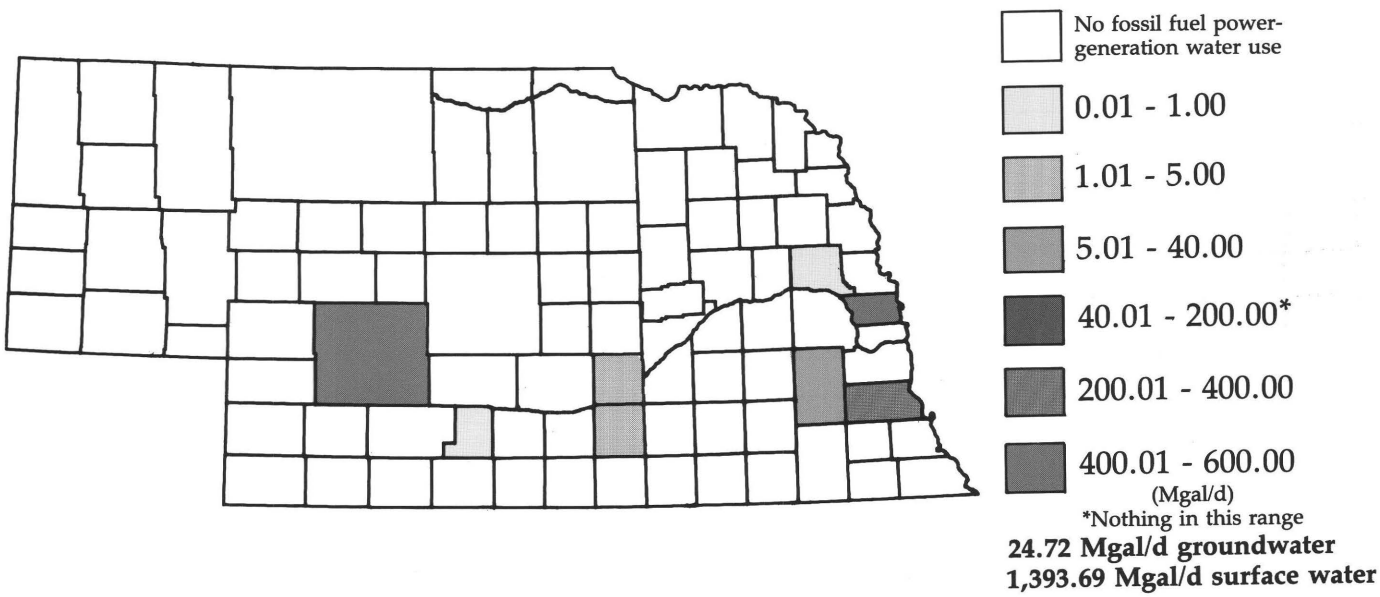



Figure 47. Fossil fuel power-generation water use in Nebraska counties, 1985


Figure 48. Fossil fuel power-generation water use in Nebraska subregions, 1985

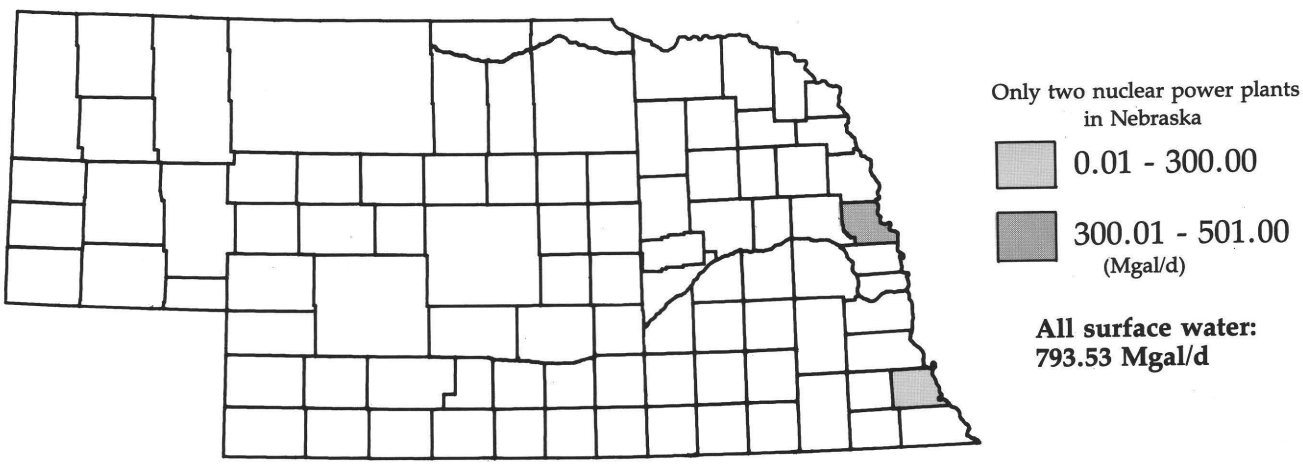



Figure 49. Nuclear power-generation water use in Nebraska counties, 1985

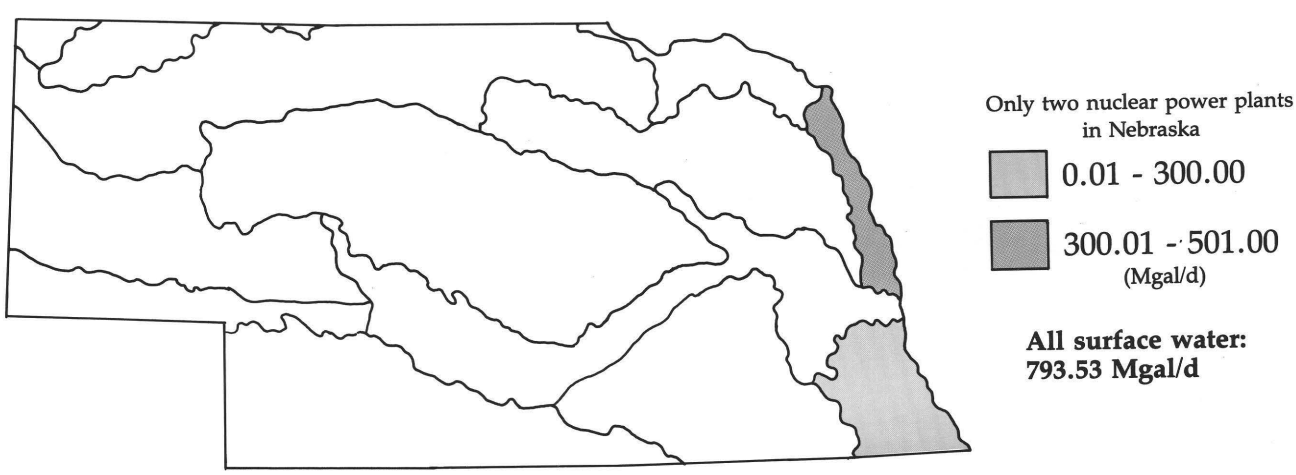



Figure 50. Nuclear power-generation water use in Nebraska subregions, 1985

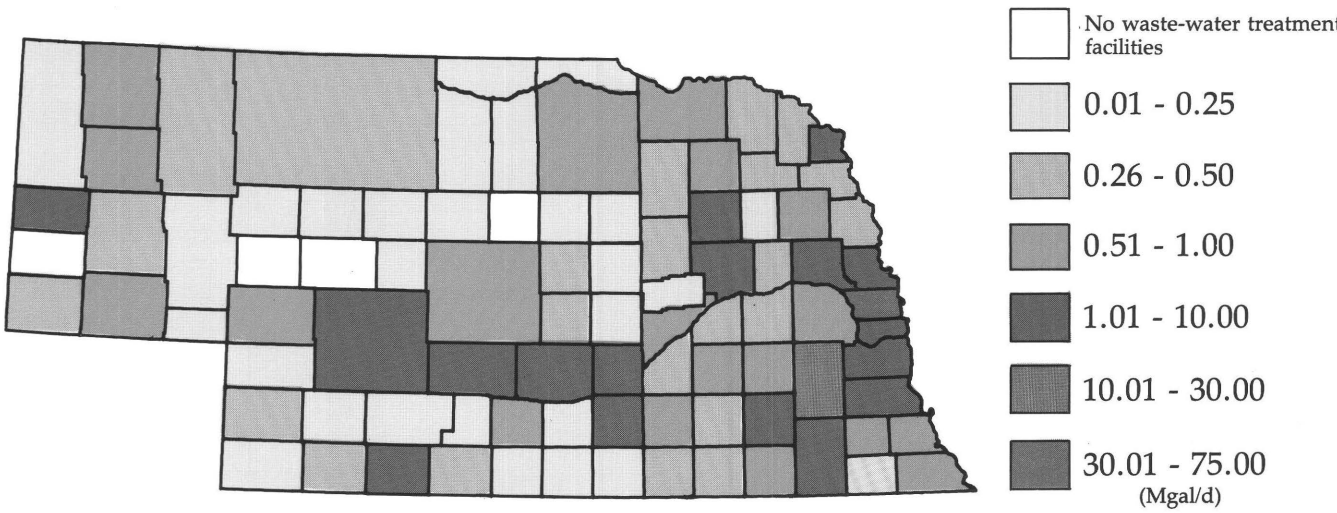



Figure 51. Waste-water treatment releases in Nebraska counties, 1985

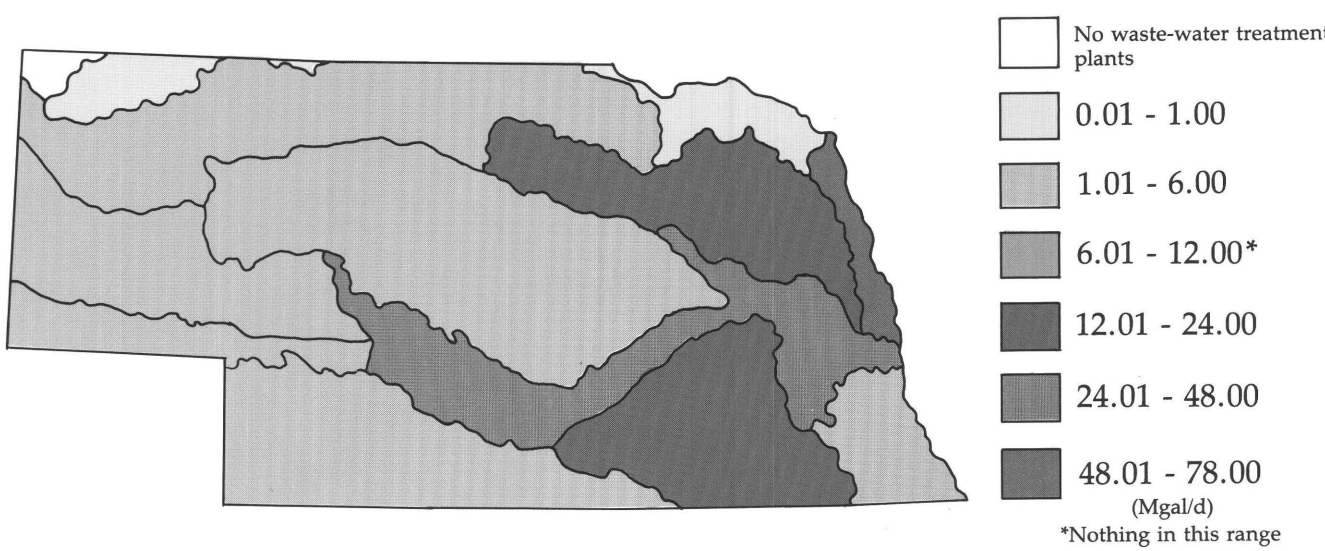



Figure 52. Waste-water treatment releases in Nebraska subregions, 1985

## SELECTED REFERENCES


Anderson, K. E., 1966, Water well handbook (4th edition): Missouri Water Well Drillers Association, Rolla, Missouri, 281 p.

Bentall, Ray, and Shaffer, F. B. 1979, Availability and and use of water in Nebraska, 1975: University of Nebraska-Lincoln Conservation and Survey Division, Nebraska Water Survey Paper 48, 121 p.

Blue River Association of Ground Water Conservation Districts, 1986: Unpublished data on monitored irrigation wells in 1985.

Burchett, R. R., and Eversoll, D. A., 1974, Inventory of mining operations in Nebraska: University of Nebraska-Lincoln Conservation and Survey Division, Resource Report No. 7, 272 p.

Central Nebraska Public Power and Irrigation District, 1986, Unpublished data on acres irrigated from CNPPID canals in 1985.

Ellis, M. J., and Pederson, D. T., 1986, Groundwater levels in Nebraska, 1985: University of Nebraska–Lincoln Conservation and Survey Division, Nebraska Water Survey Paper 61, 65 p.

Lawton, D. R., Veys, C. L., and Goodenkauf, Owen, 1983, An inventory of public, industrial, and power-generating water use in Nebraska, 1979 and 1980: University of Nebraska–Lincoln Conservation and Survey Division, Nebraska Water Survey Paper 54, 58 p.

Little Blue River Natural Resources District: Unpublished 1985 irrigation-monitoring data.

National Oceanic and Atmospheric Administration, 1985, Climatological data, May through September and Annual Summary.

Nebraska Crop and Livestock Reporting Service, 1985, Nebraska 1984 preliminary county estimates and state agricultural data: 54 p.

_____, 1986, 1985 Nebraska Agricultural Statistics: 90p.

Nebraska Department of Economic Development, 1987, Nebraska statistical handbook, 1986-1987: Lincoln, Nebraska, 301 p.

Nebraska Department of Environmental Control, Unpublished data on municipal sewage treatment releases for Nebraska, 1985.

Nebraska Department of Water Resources, 1986, Hydrographic report, 1985: 116 p.

_____, unpublished data on acres irrigated by surface-water permit holders in 1985.

Nebraska Natural Resources Commission, unpublished data on registered irrigation wells in Nebraska, 1985.

Nebraska Oil and Gas Conservation Commission, unpublished data on oil and gas mining water use, 1985.

Solley, W. B., Chase, E. B., and Mann, W. B., IV, 1983, Estimated use of water in the United States in 1980: U.S. Geological Survey Circular 1001, 56 p.

Steele, Eugene K., Jr., 1985, Estimate of self-supplied domestic water use in Nebraska during 1980, U.S. Geological Survey Water-Resources Investigations Report 85-4257, 29 p.

_____, 1986, Estimate of livestock water use in Nebraska during 1980: U.S. Geological Survey Water-Resources Investigations Report 86-4031, 38 p.

Sykes, J. F., 1955, Animals and fowl and water: U.S. Department of Agriculture Yearbook - Water, 1955, p. 14-18.

U.S. Bureau of Census, unpublished estimates of county populations, 1985.

U.S. Bureau of Reclamation, 1986, Annual Operating Plans, Niobrara, Lower Platte, and Kansas River Basins, calendar years 1985-1986: U.S. Bureau of Reclamation, Missouri Basin Region, 22 p.

U.S. Department of Labor, Metal/Nonmetal Mine Safety and Health, Unpublished computer listing of all facilities in Nebraska, process date 7-22-86.

University of Nebraska, 1986, The groundwater atlas of Nebraska: University of Nebraska-Lincoln Conservation and Survey Division, Resource Atlas No. 4, 32 p.

_____, 1986, Center-pivot irrigation systems in Nebraska, 1985: University of Nebraska-Lincoln Conservation and Survey Division, Nebraska Water-Use Program, map (1:1,000,000).

# Appendix

Table 1.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska counties, 1985
[Mgal/d, million gallons per day; SW, surface water]

| County number | County name | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|---|
| | | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| 001 | Adams | 5.89 | 3.08 | 1.35 | 1.31 |
| 003 | Antelope | .92 | .79 | .07 | .01 |
| 005 | Arthur | 0 | 0 | 0 | 0 |
| 007 | Banner | 0 | 0 | 0 | 0 |
| 009 | Blaine | .04 | .04 | 0 | 0 |
| 011 | Boone | .90 | .80 | .09 | .01 |
| 013 | Box Butte | 3.18 | 2.42 | .47 | .29 |
| 015 | Boyd | .66 | .59 | .06 | .01 |
| 017 | Brown | .59 | .51 | .07 | .01 |
| 019 | Buffalo | 5.95 | 3.43 | 1.32 | 1.20 |
| 021 | Burt | .91 | .79 | .11 | .01 |
| 023 | Butler | .77 | .70 | .06 | .01 |
| 025 | Cass | 22.82 | 1.96 | .28 | .11 |
| 027 | Cedar | 1.39 | 1.19 | .17 | .02 |
| 029 | Chase | .82 | .70 | .11 | .01 |
| 031 | Cherry | .96 | .84 | .11 | .01 |
| 033 | Cheyenne | 2.39 | 1.93 | .28 | .18 |
| 035 | Clay | 1.26 | 1.10 | .14 | .02 |
| 037 | Colfax | 1.03 | .89 | .13 | .01 |
| 039 | Cuming | 1.65 | 1.42 | .21 | .02 |
| 041 | Custer | 2.49 | 2.19 | .27 | .03 |
| 043 | Dakota | 2.14 | 1.72 | .29 | .16 |
| 045 | Dawes | .76 | .66 | .09 | .01 |
| | | .50SW | .73SW | .12SW | .02SW |
| 047 | Dawson | 4.29 | 3.49 | .58 | .22 |
| 049 | Deuel | .67 | .58 | .08 | .01 |
| 051 | Dixon | .86 | .72 | .06 | .01 |
| 053 | Dodge | 4.10 | 2.81 | 1.09 | .99 |
| 055 | Douglas | 2.89 | 11.38 | 7.22 | 8.70 |
| | | 37.91SW | 15.16SW | 10.24SW | 12.51SW |
| 057 | Dundy | .36 | .31 | .04 | .01 |
| 059 | Fillmore | 1.32 | 1.18 | .13 | .01 |
| 061 | Franklin | .63 | .57 | .05 | .01 |
| 063 | Frontier | .48 | .43 | .05 | 0 |
| 065 | Furnas | .77 | 1.02 | .12 | .02 |
| 067 | Gage | 4.42 | 3.44 | .60 | .38 |
| 069 | Garden | .29 | .24 | .04 | .01 |

Table 1.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska counties, 1985--Continued

| County number | County name | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|---|
| | | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| 071 | Garfield | 0.30 | 0.25 | 0.04 | 0.01 |
| 073 | Gosper | .15 | .13 | .02 | 0 |
| 075 | Grant | .07 | .07 | 0 | 0 |
| 077 | Greeley | .36 | .34 | .02 | 0 |
| 079 | Hall | 8.05 | 4.30 | 1.92 | 1.83 |
| 081 | Hamilton | 1.09 | .98 | .10 | .01 |
| 083 | Harlan | 1.09 | .76 | .09 | .01 |
| 085 | Hayes | .05 | .05 | 0 | 0 |
| 087 | Hitchcock | .67 | .61 | .06 | 0 |
| 089 | Holt | 1.66 | 1.45 | .19 | .02 |
| 091 | Hooker | .43 | .39 | .04 | 0 |
| 093 | Howard | .64 | .58 | .05 | .01 |
| 095 | Jefferson | 1.55 | 1.35 | .14 | .02 |
| 097 | Johnson | 1.33 | 1.12 | .15 | .02 |
| 099 | Kearney | .77 | .67 | .09 | .01 |
| 101 | Keith | 1.68 | 1.29 | .24 | .15 |
| 103 | Keya Paha | .07 | .07 | 0 | 0 |
| 105 | Kimball | 1.10 | .96 | .12 | .02 |
| 107 | Knox | 1.34 | 1.19 | .13 | .02 |
| 109 | Lancaster | 2.00 | 13.11 | 8.33 | 10.09 |
| 111 | Lincoln | 6.56 | 3.53 | 1.54 | 1.49 |
| 113 | Logan | .13 | .12 | .01 | 0 |
| 115 | Loup | 0 | 0 | 0 | 0 |
| 117 | McPherson | 0 | 0 | 0 | 0 |
| 119 | Madison | 4.30 | 2.57 | .94 | .84 |
| 121 | Merrick | .73 | .65 | .07 | .01 |
| 123 | Morrill | 1.34 | 1.13 | .18 | .03 |
| 125 | Nance | .58 | .50 | .07 | .01 |
| 127 | Nemaha | 1.28 | 1.13 | .13 | .01 |
| 129 | Nuckolls | .86 | .76 | .09 | .01 |
| 131 | Otoe | 2.73 | 2.15 | .35 | .18 |
| 133 | Pawnee | .43 | .39 | .04 | 0 |
| 135 | Perkins | .86 | .76 | .09 | .01 |
| 137 | Phelps | 2.10 | 1.62 | .30 | .18 |
| 139 | Pierce | .76 | .66 | .09 | .02 |

Table 1.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska counties, 1985--Continued

| County number | County name | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|---|
| | | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| 141 | Platte | 4.07 | 2.39 | 0.86 | 0.82 |
| 143 | Polk | .62 | .54 | .08 | 0 |
| 145 | Red Willow | 3.08 | 2.25 | .42 | .26 |
| 147 | Richardson | 1.27 | 1.06 | .14 | .07 |
| 149 | Rock | .24 | .21 | .03 | 0 |
| 151 | Saline | 1.63 | 1.43 | .18 | .02 |
| 153 | Sarpy | 23.13 | 8.69 | 4.59 | 5.29 |
| 155 | Saunders | 31.28 | 1.49 | .18 | .02 |
| 157 | Scotts Bluff | 7.35 | 5.72 | 1.05 | .58 |
| 159 | Seward | 1.48 | 1.24 | .17 | .07 |
| 161 | Sheridan | 1.10 | .94 | .14 | .02 |
| 163 | Sherman | .53 | .47 | .05 | .01 |
| 165 | Sioux | .13 | .12 | .01 | 0 |
| | | .37SW | 0 SW | 0 SW | 0 SW |
| 167 | Stanton | .32 | .29 | .03 | 0 |
| 169 | Thayer | 1.11 | 1.03 | .09 | .01 |
| 171 | Thomas | .07 | .07 | 0 | 0 |
| 173 | Thurston | .83 | .74 | .09 | .01 |
| 175 | Valley | .91 | .80 | .10 | .01 |
| 177 | Washington | .38 | .35 | .03 | 0 |
| | | .68SW | .51SW | .10SW | .07SW |
| 179 | Wayne | .88 | .73 | .11 | .07 |
| 181 | Webster | .43 | .51 | .06 | .01 |
| 183 | Wheeler | .06 | .06 | 0 | 0 |
| 185 | York | 1.86 | 1.49 | .23 | .14 |
| NEBRASKA TOTAL | | 208.42 | 132.18 | 40.01 | 36.23 |
| | | 39.46SW | 16.40SW | 10.46SW | 12.60SW |

1/ Public water supply all from ground water unless noted otherwise.

Table 2.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska hydrologic units and subregions, 1985
[Mgal/d, million gallons per day; SW, surface water]

| Hydrologic unit number | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|
| | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 |
| | WHITE RIVER BASIN | | | |
| 10140201 | 0.76<br>.87SW | 0.66<br>.73SW | 0.09<br>.12SW | 0.01<br>.02SW |
| 10140203 | 0 | 0 | 0 | 0 |
| Subregion 1014 total | 1.63 | 1.39 | 0.21 | 0.03 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 0.61 | 0.54 | 0.06 | 0.01 |
| 10150002 | .13 | .12 | .01 | 0 |
| 10150003 | 4.39 | 3.46 | .62 | .31 |
| 10150004 | 1.44 | 1.25 | .17 | .02 |
| 10150005 | 0 | 0 | 0 | 0 |
| 10150006 | .13 | .13 | 0 | 0 |
| 10150007 | .24 | .22 | .02 | 0 |
| Subregion 1015 total | 6.94 | 5.72 | 0.88 | 0.34 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 2.40 | 2.12 | 0.25 | 0.05 |
| Subregion 1017 total | 2.40 | 2.12 | 0.25 | 0.05 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 8.98 | 7.08 | 1.26 | 0.62 |
| 10180012 | .12 | .11 | .01 | 0 |
| 10180013 | 0 | 0 | 0 | 0 |
| 10180014 | 5.91 | 2.95 | 1.48 | 1.48 |
| Subregion 1018 total | 15.01 | 10.14 | 2.75 | 2.10 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 0 | 0 | 0 | 0 |
| 10190015 | .04 | .04 | 0 | 0 |
| 10190016 | 3.89 | 3.21 | .47 | .21 |
| 10190017 | 0 | 0 | 0 | 0 |
| 10190018 | 2.23 | 1.77 | .30 | .16 |
| Subregion 1019 total | 6.16 | 5.02 | 0.77 | 0.37 |

Table 2.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|
| | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| | PLATTE RIVER BASIN | | | |
| 10200101 | 10.07 | 6.80 | 1.87 | 1.40 |
| 10200102 | 8.42 | 4.63 | 1.95 | 1.84 |
| 10200103 | 1.05 | .93 | .11 | .01 |
| 10200201 | 4.50 | 2.75 | .92 | .83 |
| 10200202 | 22.69 | 1.03 | .14 | .02 |
| 10200203 | 33.02 | 14.42 | 8.49 | 10.11 |
| Subregion 1020 total | 79.75 | 30.56 | 13.48 | 14.21 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 0.57 | 0.53 | 0.04 | 0 |
| 10210002 | .04 | .04 | 0 | 0 |
| 10210003 | 1.67 | 1.50 | .15 | .02 |
| 10210004 | .45 | .41 | .04 | 0 |
| 10210005 | 2.13 | 1.84 | .25 | .04 |
| 10210006 | 0 | 0 | 0 | 0 |
| 10210007 | 1.15 | 1.00 | .13 | .02 |
| 10210008 | 0 | 0 | 0 | 0 |
| 10210009 | 1.68 | 1.49 | .17 | .02 |
| 10210010 | .34 | .32 | .02 | 0 |
| Subregion 1021 total | 8.03 | 7.13 | 0.80 | 0.10 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 3.11 | 2.76 | 0.32 | 0.03 |
| 10220002 | 4.28 | 2.50 | .93 | .85 |
| 10220003 | 7.18 | 5.50 | 1.45 | 1.02 |
| 10220004 | 2.65 | 2.26 | .31 | .08 |
| Subregion 1022 total | 17.22 | 13.02 | 3.01 | 1.98 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 3.14 | 10.57 | 4.88 | 5.44 |
| | .68SW | .51SW | .10SW | .07SW |
| 10230006 | 24.37 | 11.38 | 7.22 | 8.70 |
| | 37.91SW | 15.16SW | 10.24SW | 12.51SW |
| Subregion 1023 total | 66.10 | 37.62 | 22.44 | 26.72 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 3.81 | 3.07 | 0.51 | 0.29 |
| 10240005 | .37 | .34 | .03 | 0 |
| 10240006 | 2.17 | 1.93 | .22 | .01 |
| 10240007 | .43 | .39 | .04 | 0 |
| 10240008 | 2.65 | 2.25 | .29 | .09 |
| Subregion 1024 total | 9.43 | 7.98 | 1.09 | 0.39 |

Table 2.--Withdrawals for public water supply and deliveries to water-use categories in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Withdrawals for public supply[1]/ (Mgal/d) | Deliveries | | |
|---|---|---|---|---|
| | | Domestic (Mgal/d) | Commercial (Mgal/d) | Industrial (Mgal/d) |
| | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 0.05 | 0.05 | 0 | 0 |
| 10250002 | .31 | .26 | .04 | .01 |
| 10250003 | 0 | 0 | 0 | 0 |
| 10250004 | 3.82 | 3.03 | .52 | .27 |
| 10250005 | .91 | .79 | .11 | .01 |
| 10250006 | .86 | .76 | .09 | .01 |
| 10250007 | .07 | .07 | 0 | 0 |
| 10250008 | .38 | .34 | .04 | 0 |
| 10250009 | 1.47 | 1.31 | .15 | .02 |
| 10250011 | .03 | .03 | 0 | 0 |
| 10250014 | .26 | .24 | .02 | 0 |
| 10250015 | 0 | 0 | 0 | 0 |
| 10250016 | 3.31 | 2.68 | .42 | .21 |
| Subregion 1025 total | 11.47 | 9.56 | 1.39 | 0.53 |
| | BLUE RIVER BASIN | | | |
| 10270201 | 2.85 | 2.44 | 0.33 | 0.08 |
| 10270202 | 6.31 | 5.09 | .81 | .41 |
| 10270203 | 3.60 | 3.02 | .42 | .16 |
| 10270204 | .96 | .86 | .09 | .01 |
| 10270205 | .03 | .03 | 0 | 0 |
| 10270206 | 8.48 | 5.61 | 1.61 | 1.33 |
| 10270207 | 1.51 | 1.27 | .14 | .02 |
| Subregion 1027 total | 23.74 | 18.32 | 3.40 | 2.01 |
| NEBRASKA TOTAL | 208.42<br>39.46SW | 132.18<br>16.40SW | 40.01<br>10.46SW | 36.23<br>12.60SW |

1/ Public water supply all from ground water unless noted otherwise.

Table 3.--Estimate of total domestic water use in Nebraska counties, 1985
[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot]

| County number | County name | Population served | Total domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| 001 | Adams | 31,100 | 3.33 | 107 | 3,730 |
| 003 | Antelope | 8,600 | 1.12 | 130 | 1,260 |
| 005 | Arthur | 500 | .05 | 100 | 60 |
| 007 | Banner | 1,000 | .11 | 110 | 120 |
| 009 | Blaine | 700 | .09 | 129 | 100 |
| 011 | Boone | 7,200 | 1.09 | 151 | 1,220 |
| 013 | Box Butte | 14,400 | 2.75 | 191 | 3,080 |
| 015 | Boyd | 3,100 | .59 | 190 | 660 |
| 017 | Brown | 4,200 | .64 | 152 | 710 |
| 019 | Buffalo | 37,600 | 3.98 | 106 | 4,460 |
| 021 | Burt | 8,600 | 1.03 | 120 | 1,160 |
| 023 | Butler | 9,200 | 1.08 | 120 | 1,210 |
| 025 | Cass | 21,600 | 2.13 | 99 | 2,390 |
| 027 | Cedar | 11,000 | 1.53 | 139 | 1,710 |
| 029 | Chase | 4,800 | .92 | 192 | 1,030 |
| 031 | Cherry | 7,000 | 1.17 | 167 | 1,310 |
| 033 | Cheyenne | 10,100 | 2.16 | 214 | 2,420 |
| 035 | Clay | 7,800 | 1.29 | 165 | 1,440 |
| 037 | Colfax | 9,600 | 1.15 | 120 | 1,290 |
| 039 | Cuming | 11,300 | 1.70 | 150 | 1,900 |
| 041 | Custer | 13,600 | 2.70 | 199 | 3,030 |
| 043 | Dakota | 17,300 | 1.94 | 112 | 2,180 |
| 045 | Dawes | 9,400 | 1.54 | 164 | 1,730 |
| 047 | Dawson | 22,500 | 4.03 | 179 | 4,510 |
| 049 | Deuel | 2,400 | .66 | 275 | 740 |
| 051 | Dixon | 6,800 | .98 | 144 | 1,100 |
| 053 | Dodge | 35,400 | 3.04 | 86 | 3,410 |
| 055 | Douglas | 412,900 | 27.52 | 67 | 30,850 |
| 057 | Dundy | 2,900 | .46 | 159 | 520 |
| 059 | Fillmore | 7,600 | 1.40 | 184 | 1,570 |
| 061 | Franklin | 4,200 | .69 | 164 | 770 |
| 063 | Frontier | 3,600 | .59 | 164 | 660 |
| 065 | Furnas | 6,300 | 1.16 | 184 | 1,300 |
| 067 | Gage | 23,700 | 3.89 | 164 | 4,360 |
| 069 | Garden | 2,800 | .43 | 154 | 480 |

Table 3.--Estimate of total domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Population served | Total domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| 071 | Garfield | 2,300 | 0.33 | 143 | 370 |
| 073 | Gosper | 2,200 | .25 | 114 | 280 |
| 075 | Grant | 900 | .13 | 144 | 150 |
| 077 | Greeley | 3,300 | .46 | 139 | 510 |
| 079 | Hall | 49,600 | 4.97 | 100 | 5,570 |
| 081 | Hamilton | 9,300 | 1.29 | 139 | 1,450 |
| 083 | Harlan | 4,200 | .88 | 210 | 980 |
| 085 | Hayes | 1,300 | .16 | 123 | 180 |
| 087 | Hitchcock | 4,000 | .77 | 192 | 860 |
| 089 | Holt | 13,900 | 1.99 | 143 | 2,240 |
| 091 | Hooker | 1,000 | .42 | 420 | 470 |
| 093 | Howard | 6,700 | .87 | 130 | 980 |
| 095 | Jefferson | 9,500 | 1.55 | 163 | 1,730 |
| 097 | Johnson | 5,000 | 1.22 | 244 | 1,370 |
| 099 | Kearney | 6,700 | .89 | 133 | 1,000 |
| 101 | Keith | 9,100 | 1.54 | 169 | 1,730 |
| 103 | Keya Paha | 1,200 | .15 | 125 | 170 |
| 105 | Kimball | 4,800 | 1.08 | 225 | 1,210 |
| 107 | Knox | 11,000 | 1.61 | 146 | 1,800 |
| 109 | Lancaster | 205,400 | 14.07 | 69 | 15,780 |
| 111 | Lincoln | 33,500 | 4.40 | 131 | 4,940 |
| 113 | Logan | 1,000 | .18 | 180 | 200 |
| 115 | Loup | 900 | .08 | 90 | 90 |
| 117 | McPherson | 600 | .06 | 100 | 70 |
| 119 | Madison | 32,200 | 3.06 | 95 | 3,430 |
| 121 | Merrick | 8,600 | .99 | 115 | 1,110 |
| 123 | Morrill | 5,900 | 1.42 | 241 | 1,600 |
| 125 | Nance | 4,600 | .65 | 141 | 730 |
| 127 | Nemaha | 8,500 | 1.23 | 145 | 1,380 |
| 129 | Nuckolls | 6,700 | .92 | 137 | 1,030 |
| 131 | Otoe | 15,000 | 2.18 | 145 | 2,440 |
| 133 | Pawnee | 3,700 | .42 | 114 | 470 |
| 135 | Perkins | 3,800 | .94 | 247 | 1,050 |
| 137 | Phelps | 10,100 | 1.84 | 182 | 2,070 |
| 139 | Pierce | 8,400 | 1.02 | 121 | 1,140 |

Table 3.--Estimate of total domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Population served | Total domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| 141 | Platte | 29,800 | 3.04 | 102 | 3,410 |
| 143 | Polk | 6,100 | .76 | 125 | 860 |
| 145 | Red Willow | 12,900 | 2.51 | 195 | 2,810 |
| 147 | Richardson | 10,700 | 1.20 | 112 | 1,350 |
| 149 | Rock | 2,300 | .31 | 135 | 350 |
| 151 | Saline | 12,900 | 1.74 | 135 | 1,950 |
| 153 | Sarpy | 95,300 | 8.93 | 94 | 10,010 |
| 155 | Saunders | 18,700 | 2.12 | 113 | 2,380 |
| 157 | Scotts Bluff | 37,900 | 6.74 | 178 | 7,550 |
| 159 | Seward | 15,700 | 1.58 | 101 | 1,770 |
| 161 | Sheridan | 7,600 | 1.28 | 168 | 1,430 |
| 163 | Sherman | 4,000 | .62 | 155 | 700 |
| 165 | Sioux | 1,700 | .24 | 141 | 260 |
| 167 | Stanton | 6,500 | .67 | 103 | 750 |
| 169 | Thayer | 7,300 | 1.21 | 166 | 1,350 |
| 171 | Thomas | 1,000 | .14 | 140 | 160 |
| 173 | Thurston | 7,100 | .96 | 135 | 1,080 |
| 175 | Valley | 5,800 | 1.00 | 172 | 1,120 |
| 177 | Washington | 15,700 | 1.29 | 82 | 1,440 |
| 179 | Wayne | 9,800 | 1.02 | 104 | 1,150 |
| 181 | Webster | 4,600 | .68 | 148 | 760 |
| 183 | Wheeler | 1,100 | .13 | 118 | 150 |
| 185 | York | 15,100 | 1.85 | 123 | 2,070 |
| NEBRASKA TOTAL | | 1,605,300 | 172.98 | 108 | 193,910 |

1/ Average use, in Mgal/d divided by population served.
2/ Rounded to nearest 10 acre-ft.

Table 4 .--Estimate of total domestic water use in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot; <, less than value shown]

| Hydrologic unit number | Population served | Total domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | HAT CREEK BASIN | | | |
| 10120106 | 30 | <0.005 | 95 | 0 |
| 10120108 | 280 | .03 | 95 | 30 |
| Subregion 1012 total | 310 | .03 | 95 | 30 |
| | WHITE RIVER BASIN | | | |
| 10140201 | 9,560 | 1.56 | 163 | 1,750 |
| 10140203 | 20 | <.005 | 105 | 0 |
| Subregion 1014 total | 9,580 | 1.56 | 163 | 1,750 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 3,080 | 0.55 | 179 | 620 |
| 10150002 | 1,180 | .20 | 169 | 220 |
| 10150003 | 21,900 | 4.10 | 187 | 4,600 |
| 10150004 | 9,110 | 1.52 | 167 | 1,700 |
| 10150005 | 580 | .06 | 103 | 70 |
| 10150006 | 1,250 | .18 | 144 | 210 |
| 10150007 | 5,750 | .62 | 108 | 700 |
| Subregion 1015 total | 42,850 | 7.23 | 169 | 8,120 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 20,600 | 2.92 | 142 | 3,270 |
| Subregion 1017 total | 20,600 | 2.92 | 142 | 3,270 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 44,460 | 8.35 | 188 | 9,360 |
| 10180012 | 1,910 | .125 | 131 | 280 |
| 10180013 | 2,090 | .22 | 105 | 250 |
| 10180014 | 26,020 | 3.31 | 127 | 3,710 |
| Subregion 1018 total | 74,480 | 12.13 | 163 | 13,600 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 180 | 0.02 | 112 | 20 |
| 10190015 | 310 | .05 | 161 | 60 |
| 10190016 | 13,780 | 3.40 | 245 | 3,810 |
| 10190017 | 800 | .09 | 113 | 100 |
| 10190018 | 11,920 | 2.08 | 174 | 2,330 |
| Subregion 1019 total | 26,990 | 5.64 | 209 | 6,320 |

Table 4.--Estimate of total domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Population served | Total domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | PLATTE RIVER BASIN | | | |
| 10200101 | 61,470 | 8.17 | 133 | 9,160 |
| 10200102 | 48,380 | 5.08 | 105 | 5,690 |
| 10200103 | 16,460 | 1.78 | 108 | 2,000 |
| 10200201 | 34,610 | 3.42 | 99 | 3,830 |
| 10200202 | 12,350 | 1.37 | 111 | 1,540 |
| 10200203 | 220,600 | 15.93 | 72 | 17,860 |
| Subregion 1020 total | 393,870 | 35.75 | 91 | 40,080 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 2,690 | 0.66 | 245 | 750 |
| 10210002 | 1,720 | .20 | 116 | 220 |
| 10210003 | 11,040 | 1.90 | 172 | 2,130 |
| 10210004 | 7,470 | .86 | 115 | 960 |
| 10210005 | 9,240 | 2.06 | 223 | 2,310 |
| 10210006 | 1,550 | .16 | 103 | 180 |
| 10210007 | 8,620 | 1.30 | 151 | 1,460 |
| 10210008 | 1,370 | .13 | 95 | 150 |
| 10210009 | 14,910 | 2.09 | 140 | 2,340 |
| 10210010 | 4,640 | .59 | 127 | 660 |
| Subregion 1021 total | 63,250 | 9.95 | 157 | 11,160 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 24,920 | 3.59 | 144 | 4,020 |
| 10220002 | 32,390 | 3.01 | 93 | 3,370 |
| 10220003 | 67,730 | 7.13 | 105 | 8,000 |
| 10220004 | 23,030 | 2.83 | 123 | 3,170 |
| Subregion 1022 total | 148,070 | 16.56 | 112 | 18,560 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 32,650 | 3.60 | 110 | 4,030 |
| 10230006 | 501,410 | 35.55 | 71 | 39,850 |
| Subregion 1023 total | 534,060 | 39.15 | 73 | 43,880 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 23,690 | 3.16 | 133 | 3,540 |
| 10240005 | 2,770 | .38 | 137 | 420 |
| 10240006 | 19,290 | 2.10 | 109 | 2,350 |
| 10240007 | 3,920 | .45 | 115 | 510 |
| 10240008 | 17,380 | 2.55 | 147 | 2,860 |
| Subregion 1024 total | 67,050 | 8.64 | 129 | 9,680 |

Table 4.--Estimate of total domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Population served | Total domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 220 | 0.05 | 227 | 60 |
| 10250002 | 2,070 | .34 | 164 | 380 |
| 10250003 | 10 | <.002 | 105 | 0 |
| 10250004 | 18,040 | 3.49 | 193 | 3,920 |
| 10250005 | 4,660 | .95 | 204 | 1,070 |
| 10250006 | 4,360 | 1.00 | 229 | 1,120 |
| 10250007 | 2,110 | .26 | 123 | 290 |
| 10250008 | 3,780 | .57 | 151 | 640 |
| 10250009 | 8,620 | 1.61 | 187 | 1,810 |
| 10250011 | 730 | .07 | 96 | 70 |
| 10250014 | 2,460 | .36 | 146 | 400 |
| 10250015 | 120 | .01 | 83 | 10 |
| 10250016 | 18,250 | 3.09 | 169 | 3,460 |
| Subregion 1025 total | 65,430 | 11.80 | 180 | 13,230 |
| | BLUE RIVER BASIN | | | |
| 10270201 | 25,550 | 3.05 | 119 | 3,420 |
| 10270202 | 38,460 | 5.74 | 149 | 6,440 |
| 10270203 | 25,810 | 3.77 | 146 | 4,230 |
| 10270204 | 8,140 | 1.20 | 147 | 1,340 |
| 10270205 | 710 | .07 | 99 | 70 |
| 10270206 | 51,680 | 6.37 | 123 | 7,140 |
| 10270207 | 8,410 | 1.42 | 169 | 1,590 |
| Subregion 1027 total | 158,760 | 21.62 | 136 | 24,230 |
| NEBRASKA TOTAL | 1,605,300 | 172.98 | 108 | 193,910 |

1/ Average use, in Mgal/d, divided by population served.
2/ Rounded to nearest 10 acre-ft.

Table 5 .--Estimate of public-supplied domestic water use in Nebraska counties, 1985

[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot]

| County number | County name | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita[1] | Annual volume[2] (acre-ft) |
| 001 | Adams | 28,000 | 3.08 | 110 | 3,450 |
| 003 | Antelope | 4,700 | .79 | 168 | 890 |
| 005 | Arthur | 0 | (No public supply in county) | | |
| 007 | Banner | 0 | (do.) | | |
| 009 | Blaine | 150 | .04 | 265 | 40 |
| 011 | Boone | 3,800 | .80 | 210 | 900 |
| 013 | Box Butte | 11,400 | 2.42 | 212 | 2,710 |
| 015 | Boyd | 3,100 | .59 | 190 | 660 |
| 017 | Brown | 2,750 | .51 | 185 | 570 |
| 019 | Buffalo | 30,700 | 3.43 | 112 | 3,840 |
| 021 | Burt | 5,400 | .79 | 146 | 890 |
| 023 | Butler | 4,400 | .70 | 159 | 780 |
| 025 | Cass | 19,300 | 1.96 | 102 | 2,200 |
| 027 | Cedar | 7,000 | 1.19 | 170 | 1,330 |
| 029 | Chase | 2,700 | .70 | 259 | 780 |
| 031 | Cherry | 3,700 | .84 | 227 | 940 |
| 033 | Cheyenne | 8,000 | 1.93 | 241 | 2,160 |
| 035 | Clay | 5,400 | 1.10 | 204 | 1,230 |
| 037 | Colfax | 6,600 | .89 | 135 | 1,000 |
| 039 | Cuming | 8,000 | 1.42 | 177 | 1,590 |
| 041 | Custer | 7,900 | 2.19 | 277 | 2,460 |
| 043 | Dakota | 14,400 | 1.72 | 119 | 1,930 |
| 045 | Dawes | 7,800 | 1.39 | 178 | 1,560 |
| 047 | Dawson | 16,500 | 3.49 | 212 | 3,910 |
| 049 | Deuel | 1,600 | .58 | 362 | 650 |
| 051 | Dixon | 3,800 | .72 | 189 | 810 |
| 053 | Dodge | 32,700 | 2.81 | 86 | 3,150 |
| 055 | Douglas | 400,000 | 26.54 | 66 | 29,750 |
| 057 | Dundy | 1,500 | .31 | 207 | 350 |
| 059 | Fillmore | 5,000 | 1.18 | 236 | 1,320 |
| 061 | Franklin | 2,700 | .57 | 211 | 640 |
| 063 | Frontier | 1,900 | .43 | 226 | 480 |
| 065 | Furnas | 4,600 | 1.02 | 222 | 1,140 |
| 067 | Gage | 18,400 | 3.44 | 187 | 3,860 |
| 069 | Garden | 1,100 | .24 | 218 | 270 |

Table 5.--Estimate of public-supplied domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita | Annual volume (acre-ft) |
| 071 | Garfield | 1,400 | 0.25 | 178 | 280 |
| 073 | Gosper | 800 | .13 | 162 | 150 |
| 075 | Grant | 300 | .07 | 233 | 80 |
| 077 | Greeley | 1,900 | .34 | 179 | 380 |
| 079 | Hall | 41,200 | 4.30 | 104 | 4,820 |
| 081 | Hamilton | 5,400 | .98 | 181 | 1,100 |
| 083 | Harlan | 2,800 | .76 | 271 | 850 |
| 085 | Hayes | 250 | .05 | 199 | 60 |
| 087 | Hitchcock | 2,500 | .61 | 244 | 680 |
| 089 | Holt | 7,900 | 1.45 | 184 | 1,630 |
| 091 | Hooker | 700 | .39 | 556 | 440 |
| 093 | Howard | 3,100 | .58 | 187 | 650 |
| 095 | Jefferson | 6,900 | 1.35 | 196 | 1,510 |
| 097 | Johnson | 3,800 | 1.12 | 295 | 1,260 |
| 099 | Kearney | 3,900 | .67 | 172 | 750 |
| 101 | Keith | 6,700 | 1.29 | 193 | 1,450 |
| 103 | Keya Paha | 300 | .07 | 233 | 80 |
| 105 | Kimball | 3,700 | .96 | 259 | 1,080 |
| 107 | Knox | 6,100 | 1.19 | 195 | 1,330 |
| 109 | Lancaster | 193,400 | 13.11 | 68 | 14,700 |
| 111 | Lincoln | 24,800 | 3.53 | 142 | 3,960 |
| 113 | Logan | 400 | .12 | 299 | 130 |
| 115 | Loup | 0 | (No public supply in county) | | |
| 117 | McPherson | 0 | | (do.) | |
| 119 | Madison | 26,400 | 2.57 | 97 | 2,880 |
| 121 | Merrick | 4,400 | .65 | 148 | 730 |
| 123 | Morrill | 3,300 | 1.13 | 342 | 1,270 |
| 125 | Nance | 2,800 | .50 | 179 | 560 |
| 127 | Nemaha | 7,300 | 1.13 | 155 | 1,270 |
| 129 | Nuckolls | 4,700 | .76 | 162 | 850 |
| 131 | Otoe | 14,700 | 2.15 | 146 | 2,410 |
| 133 | Pawnee | 3,400 | .39 | 115 | 440 |
| 135 | Perkins | 2,100 | .76 | 362 | 850 |
| 137 | Phelps | 7,500 | 1.62 | 216 | 1,820 |
| 139 | Pierce | 4,200 | .66 | 157 | 740 |

Table 5.--Estimate of public-supplied domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| 141 | Platte | 22,200 | 2.39 | 108 | 2,680 |
| 143 | Polk | 3,400 | .54 | 159 | 610 |
| 145 | Red Willow | 10,200 | 2.25 | 221 | 2,520 |
| 147 | Richardson | 9,100 | 1.06 | 116 | 1,190 |
| 149 | Rock | 1,200 | .21 | 175 | 240 |
| 151 | Saline | 9,300 | 1.43 | 154 | 1,600 |
| 153 | Sarpy | 92,100 | 8.69 | 94 | 9,740 |
| 155 | Saunders | 10,800 | 1.49 | 138 | 1,670 |
| 157 | Scotts Bluff | 28,600 | 5.72 | 200 | 6,410 |
| 159 | Seward | 11,400 | 1.24 | 109 | 1,390 |
| 161 | Sheridan | 4,500 | .94 | 209 | 1,050 |
| 163 | Sherman | 2,100 | .47 | 224 | 530 |
| 165 | Sioux | 400 | .12 | 299 | 130 |
| 167 | Stanton | 2,000 | .29 | 145 | 320 |
| 169 | Thayer | 5,300 | 1.03 | 194 | 1,150 |
| 171 | Thomas | 300 | .07 | 233 | 80 |
| 173 | Thurston | 4,200 | .74 | 176 | 830 |
| 175 | Valley | 3,600 | .80 | 222 | 900 |
| 177 | Washington | 9,900 | .86 | 87 | 960 |
| 179 | Wayne | 6,400 | .73 | 114 | 820 |
| 181 | Webster | 2,500 | .51 | 204 | 570 |
| 183 | Wheeler | 300 | .06 | 199 | 70 |
| 185 | York | 10,600 | 1.49 | 141 | 1,670 |
| NEBRASKA TOTAL | | 1,324,450 | 148.58 | 112 | 166,560 |

1/ Average use in Mgal/d divided by population served.
2/ Rounded to nearest 10 acre-ft.

Table 6.--Estimate of public-supplied domestic water use in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1] | Annual volume[2] (acre-ft) |
| | HAT CREEK BASIN | | | |
| 10120106 | 0 | | | |
| 10120108 | 0 | | | |
| Subregion 1012 total | 0 | | | |
| | WHITE RIVER BASIN | | | |
| 10140201 | 7,800 | 1.39 | 178 | 1,560 |
| 10140203 | 0 | | | |
| Subregion 1014 total | 7,800 | 1.39 | 178 | 1,560 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 2,900 | 0.54 | 186 | 610 |
| 10150002 | 400 | .12 | 299 | 130 |
| 10150003 | 16,000 | 3.46 | 216 | 3,880 |
| 10150004 | 6,300 | 1.25 | 198 | 1,400 |
| 10150005 | 0 | | | |
| 10150006 | 600 | .13 | 216 | 150 |
| 10150007 | 1,200 | .22 | 183 | 250 |
| Subregion 1015 total | 27,400 | 5.72 | 209 | 6,420 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 11,300 | 2.12 | 188 | 2,370 |
| Subregion 1017 total | 11,300 | 2.12 | 188 | 2,370 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 33,000 | 7.08 | 215 | 7,940 |
| 10180012 | 600 | .11 | 183 | 120 |
| 10180013 | 0 | | | |
| 10180014 | 22,500 | 2.95 | 131 | 3,310 |
| Subregion 1018 total | 56,100 | 10.14 | 181 | 11,370 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 0 | | | |
| 10190015 | 200 | 0.04 | 199 | 50 |
| 10190016 | 12,100 | 3.21 | 265 | 3,600 |
| 10190017 | 0 | | | |
| 10190018 | 8,800 | 1.77 | 201 | 1,980 |
| Subregion 1019 total | 21,100 | 5.02 | 238 | 5,630 |

Table 6.--Estimate of public-supplied domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | PLATTE RIVER BASIN | | | |
| 10200101 | 46,200 | 6.80 | 147 | 7,620 |
| 10200102 | 42,900 | 4.63 | 108 | 5,190 |
| 10200103 | 5,800 | .93 | 160 | 1,040 |
| 10200201 | 26,700 | 2.75 | 103 | 3,080 |
| 10200202 | 7,800 | 1.03 | 132 | 1,160 |
| 10200203 | 201,700 | 14.42 | 71 | 16,170 |
| Subregion 1020 total | 331,100 | 30.56 | 92 | 34,260 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 1,300 | 0.53 | 407 | 600 |
| 10210002 | 150 | .04 | 265 | 40 |
| 10210003 | 6,300 | 1.50 | 238 | 1,680 |
| 10210004 | 2,200 | .41 | 186 | 460 |
| 10210005 | 6,700 | 1.84 | 275 | 2,060 |
| 10210006 | 0 | | | |
| 10210007 | 5,200 | 1.00 | 192 | 1,120 |
| 10210008 | 0 | | | |
| 10210009 | 7,700 | 1.49 | 193 | 1,670 |
| 10210010 | 1,500 | .32 | 213 | 360 |
| Subregion 1021 total | 31,050 | 7.13 | 230 | 7,990 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 15,200 | 2.76 | 182 | 3,090 |
| 10220002 | 26,600 | 2.50 | 94 | 2,800 |
| 10220003 | 47,900 | 5.50 | 115 | 6,170 |
| 10220004 | 16,100 | 2.26 | 140 | 2,530 |
| Subregion 1022 total | 105,800 | 13.02 | 123 | 14,590 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 25,700 | 3.08 | 120 | 3,450 |
| 10230006 | 488,000 | 34.54 | 71 | 38,720 |
| Subregion 1023 total | 513,700 | 37.62 | 75 | 42,170 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 22,500 | 3.07 | 136 | 3,440 |
| 10240005 | 2,300 | .34 | 148 | 380 |
| 10240006 | 17,200 | 1.93 | 112 | 2,160 |
| 10240007 | 3,400 | .39 | 115 | 440 |
| 10240008 | 13,900 | 2.25 | 162 | 2,520 |
| Subregion 1024 total | 59,300 | 7.98 | 135 | 8,940 |

Table 6.--Estimate of public-supplied domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Population served | Public-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 200 | 0.05 | 249 | 60 |
| 10250002 | 1,300 | .26 | 200 | 290 |
| 10250003 | 0 | | | |
| 10250004 | 13,500 | 3.03 | 224 | 3,400 |
| 10250005 | 3,100 | .79 | 255 | 890 |
| 10250006 | 2,100 | .76 | 362 | 850 |
| 10250007 | 300 | .07 | 233 | 80 |
| 10250008 | 1,400 | .34 | 243 | 380 |
| 10250009 | 5,100 | 1.31 | 257 | 1,470 |
| 10250011 | 200 | .03 | 149 | 30 |
| 10250014 | 1,200 | .24 | 200 | 270 |
| 10250015 | 0 | | | |
| 10250016 | 13,200 | 2.68 | 203 | 3,000 |
| Subregion 1025 total | 41,600 | 9.56 | 230 | 10,720 |
| | BLUE RIVER BASIN | | | |
| 10270201 | 17,800 | 2.44 | 137 | 2,740 |
| 10270202 | 30,800 | 5.09 | 165 | 5,710 |
| 10270203 | 16,600 | 3.02 | 182 | 3,390 |
| 10270204 | 4,200 | .86 | 205 | 960 |
| 10270205 | 200 | .03 | 149 | 30 |
| 10270206 | 42,100 | 5.61 | 133 | 6,290 |
| 10270207 | 6,500 | 1.27 | 195 | 1,420 |
| Subregion 1027 total | 118,200 | 18.32 | 155 | 20,540 |
| NEBRASKA TOTAL | 1,324,450 | 148.58 | 112 | 166,560 |

1/ Average use, in Mgal/d, divided by population served.
2/ Rounded to nearest 10 acre-ft.

Table 7.--Estimate of self-supplied domestic water use in Nebraska counties, 1985

[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot]

| County number | County name | Self-supplied population | Self-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d)[1] | GPD per capita | Annual volume[2] (acre-ft) |
| 001 | Adams | 3,100 | 0.25 | 80 | 280 |
| 003 | Antelope | 3,900 | .33 | 85 | 370 |
| 005 | Arthur | 500 | .05 | 105 | 60 |
| 007 | Banner | 1,000 | .11 | 110 | 120 |
| 009 | Blaine | 550 | .05 | 90 | 60 |
| 011 | Boone | 3,400 | .29 | 85 | 320 |
| 013 | Box Butte | 3,000 | .33 | 110 | 370 |
| 015 | Boyd | 0 | 0 | 0 | 0 |
| 017 | Brown | 1,450 | .13 | 90 | 140 |
| 019 | Buffalo | 6,900 | .55 | 80 | 620 |
| 021 | Burt | 3,200 | .24 | 75 | 270 |
| 023 | Butler | 4,800 | .38 | 80 | 430 |
| 025 | Cass | 2,300 | .17 | 75 | 190 |
| 027 | Cedar | 4,000 | .34 | 85 | 380 |
| 029 | Chase | 2,100 | .22 | 105 | 250 |
| 031 | Cherry | 3,300 | .33 | 100 | 370 |
| 033 | Cheyenne | 2,100 | .23 | 110 | 260 |
| 035 | Clay | 2,400 | .19 | 80 | 210 |
| 037 | Colfax | 3,000 | .26 | 85 | 290 |
| 039 | Cuming | 3,300 | .28 | 85 | 310 |
| 041 | Custer | 5,700 | .51 | 90 | 570 |
| 043 | Dakota | 2,900 | .22 | 75 | 250 |
| 045 | Dawes | 1,600 | .15 | 95 | 170 |
| 047 | Dawson | 6,000 | .54 | 90 | 600 |
| 049 | Deuel | 800 | .08 | 105 | 90 |
| 051 | Dixon | 3,000 | .26 | 85 | 290 |
| 053 | Dodge | 2,700 | .23 | 85 | 260 |
| 055 | Douglas | 12,900 | .98 | 75 | 1,100 |
| 057 | Dundy | 1,400 | .15 | 105 | 170 |
| 059 | Fillmore | 2,600 | .22 | 85 | 250 |
| 061 | Franklin | 1,500 | .12 | 80 | 130 |
| 063 | Frontier | 1,700 | .16 | 95 | 180 |
| 065 | Furnas | 1,700 | .14 | 85 | 160 |
| 067 | Gage | 5,300 | .45 | 85 | 500 |
| 069 | Garden | 1,700 | .19 | 110 | 210 |

Table 7.--Estimate of self-supplied domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Self-supplied population | Self-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d)[1] | GPD per capita | Annual volume[2] (acre-ft) |
| 071 | Garfield | 900 | 0.08 | 90 | 90 |
| 073 | Gosper | 1,400 | .12 | 85 | 130 |
| 075 | Grant | 600 | .06 | 105 | 70 |
| 077 | Greeley | 1,400 | .12 | 85 | 130 |
| 079 | Hall | 8,400 | .67 | 80 | 750 |
| 081 | Hamilton | 3,900 | .31 | 80 | 350 |
| 083 | Harlan | 1,400 | .12 | 85 | 130 |
| 085 | Hayes | 1,050 | .11 | 105 | 120 |
| 087 | Hitchcock | 1,500 | .16 | 105 | 180 |
| 089 | Holt | 6,000 | .54 | 90 | 610 |
| 091 | Hooker | 300 | .03 | 105 | 30 |
| 093 | Howard | 3,600 | .29 | 80 | 330 |
| 095 | Jefferson | 2,600 | .20 | 85 | 220 |
| 097 | Johnson | 1,200 | .10 | 85 | 110 |
| 099 | Kearney | 2,800 | .22 | 80 | 250 |
| 101 | Keith | 2,400 | .25 | 105 | 280 |
| 103 | Keya Paha | 900 | .08 | 90 | 90 |
| 105 | Kimball | 1,100 | .12 | 110 | 130 |
| 107 | Knox | 4,900 | .42 | 85 | 470 |
| 109 | Lancaster | 12,000 | .96 | 80 | 1,080 |
| 111 | Lincoln | 8,700 | .87 | 100 | 980 |
| 113 | Logan | 600 | .06 | 100 | 70 |
| 115 | Loup | 900 | .08 | 90 | 90 |
| 117 | McPherson | 600 | .06 | 100 | 70 |
| 119 | Madison | 5,800 | .49 | 85 | 550 |
| 121 | Merrick | 4,200 | .34 | 80 | 380 |
| 123 | Morrill | 2,600 | .29 | 110 | 330 |
| 125 | Nance | 1,800 | .15 | 85 | 170 |
| 127 | Nemaha | 1,200 | .10 | 85 | 110 |
| 129 | Nuckolls | 2,000 | .16 | 80 | 180 |
| 131 | Otoe | 300 | .03 | 85 | 30 |
| 133 | Pawnee | 300 | .03 | 85 | 30 |
| 135 | Perkins | 1,700 | .18 | 105 | 200 |
| 137 | Phelps | 2,600 | .22 | 85 | 250 |
| 139 | Pierce | 4,200 | .36 | 85 | 400 |

Table 7.--Estimate of public-supplied domestic water use in Nebraska counties, 1985--Continued

| County number | County name | Self-supplied population | Public-supplied domestic water use | | |
|---|---|---|---|---|---|
| | | | Average use (Mgal/d)[1] | GPD per capita | Annual volume[2] (acre-ft) |
| 141 | Platte | 7,600 | 0.65 | 85 | 730 |
| 143 | Polk | 2,700 | .22 | 80 | 250 |
| 145 | Red Willow | 2,700 | .26 | 95 | 290 |
| 147 | Richardson | 1,600 | .14 | 85 | 160 |
| 149 | Rock | 1,100 | .10 | 90 | 110 |
| 151 | Saline | 3,600 | .31 | 85 | 350 |
| 153 | Sarpy | 3,200 | .24 | 75 | 270 |
| 155 | Saunders | 7,900 | .63 | 80 | 710 |
| 157 | Scotts Bluff | 9,300 | 1.02 | 110 | 1,140 |
| 159 | Seward | 4,300 | .34 | 80 | 380 |
| 161 | Sheridan | 3,100 | .34 | 110 | 380 |
| 163 | Sherman | 1,900 | .15 | 80 | 170 |
| 165 | Sioux | 1,300 | .12 | 95 | 130 |
| 167 | Stanton | 4,500 | .38 | 85 | 430 |
| 169 | Thayer | 2,000 | .18 | 80 | 200 |
| 171 | Thomas | 700 | .07 | 105 | 80 |
| 173 | Thurston | 2,900 | .22 | 75 | 250 |
| 175 | Valley | 2,200 | .20 | 90 | 220 |
| 177 | Washington | 5,800 | .43 | 75 | 480 |
| 179 | Wayne | 3,400 | .29 | 85 | 330 |
| 181 | Webster | 2,100 | .17 | 80 | 190 |
| 183 | Wheeler | 800 | .07 | 90 | 80 |
| 185 | York | 4,500 | .36 | 80 | 400 |
| NEBRASKA TOTAL | | 280,850 | 24.40 | 87 | 27,350 |

1/ Self-supplied population times GPD per capita divided by $10^6$.
2/ Rounded to nearest 10 acre-ft.

Table 8.--Estimate of self-supplied domestic water use in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; GPD, gallons per day; acre-ft, acre-foot; <, less than value shown]

| Hydrologic unit number | Self-supplied population | Self-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | HAT CREEK BASIN | | | |
| 10120106 | 30 | <0.005 | 108 | 0 |
| 10120108 | 280 | .03 | 108 | 30 |
| Subregion 1012 total | 310 | .03 | 108 | 30 |
| | WHITE RIVER BASIN | | | |
| 10140201 | 1,760 | 0.17 | 97 | 0 |
| 10140203 | 20 | <.005 | 97 | 190 |
| Subregion 1014 total | 1,780 | 0.17 | 97 | 190 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 180 | 0.01 | 85 | 10 |
| 10150002 | 780 | .08 | 103 | 90 |
| 10150003 | 5,900 | .64 | 108 | 720 |
| 10150004 | 2,810 | .27 | 96 | 300 |
| 10150005 | 580 | .06 | 104 | 70 |
| 10150006 | 650 | .05 | 77 | 60 |
| 10150007 | 4,550 | .40 | 88 | 450 |
| Subregion 1015 total | 15,450 | 1.51 | 98 | 1,700 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 9,300 | 0.80 | 86 | 900 |
| Subregion 1017 total | 9,300 | 0.80 | 86 | 900 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 11,460 | 1.27 | 111 | 1,420 |
| 10180012 | 1,310 | .14 | 107 | 160 |
| 10180013 | 2,090 | .22 | 105 | 250 |
| 10180014 | 3,520 | .36 | 102 | 400 |
| Subregion 1018 total | 18,380 | 1.99 | 108 | 2,230 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 180 | 0.02 | 112 | 20 |
| 10190015 | 110 | .01 | 92 | 10 |
| 10190016 | 1,680 | .19 | 113 | 210 |
| 10190017 | 800 | .09 | 113 | 100 |
| 10190018 | 3,120 | .31 | 99 | 350 |
| Subregion 1019 total | 5,890 | 0.62 | 105 | 690 |

Table 8.--Estimate of self-supplied domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Self-supplied population | Self-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | PLATTE RIVER BASIN | | | |
| 10200101 | 15,270 | 1.37 | 90 | 1,540 |
| 10200102 | 5,480 | .45 | 82 | 500 |
| 10200103 | 10,660 | .85 | 80 | 950 |
| 10200201 | 7,910 | .67 | 85 | 750 |
| 10200202 | 4,550 | .34 | 75 | 380 |
| 10200203 | 18,900 | 1.51 | 80 | 1,700 |
| Subregion 1020 total | 62,770 | 5.19 | 83 | 5,820 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 1,390 | 0.13 | 94 | 150 |
| 10210002 | 1,570 | .16 | 102 | 180 |
| 10210003 | 4,740 | .40 | 84 | 450 |
| 10210004 | 5,270 | .45 | 85 | 500 |
| 10210005 | 2,540 | .22 | 87 | 250 |
| 10210006 | 1,550 | .16 | 103 | 180 |
| 10210007 | 3,420 | .30 | 88 | 340 |
| 10210008 | 1,370 | .13 | 95 | 150 |
| 10210009 | 7,210 | .60 | 83 | 670 |
| 10210010 | 3,140 | .27 | 86 | 300 |
| Subregion 1021 total | 32,200 | 2.82 | 88 | 3,170 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 9,720 | 0.83 | 85 | 930 |
| 10220002 | 5,790 | .51 | 88 | 570 |
| 10220003 | 19,830 | 1.63 | 82 | 1,830 |
| 10220004 | 6,930 | .57 | 82 | 640 |
| Subregion 1022 total | 42,270 | 3.54 | 84 | 3,970 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 6,950 | 0.52 | 75 | 580 |
| 10230006 | 13,410 | 1.01 | 75 | 1,130 |
| Subregion 1023 total | 20,360 | 1.53 | 75 | 1,710 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 1,190 | 0.09 | 76 | 100 |
| 10240005 | 470 | .04 | 85 | 40 |
| 10240006 | 2,090 | .17 | 81 | 190 |
| 10240007 | 520 | .06 | 116 | 70 |
| 10240008 | 3,480 | .30 | 86 | 340 |
| Subregion 1024 total | 7,750 | 0.66 | 85 | 740 |

Table 8.--Estimate of self-supplied domestic water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Self-supplied population | Self-supplied domestic water use | | |
|---|---|---|---|---|
| | | Average use (Mgal/d) | GPD per capita[1]/ | Annual volume[2]/ (acre-ft) |
| | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 20 | <0.003 | 105 | 0 |
| 10250002 | 770 | .08 | 104 | 90 |
| 10250003 | 10 | <.002 | 105 | 0 |
| 10250004 | 4,540 | .46 | 101 | 520 |
| 10250005 | 1,560 | .16 | 103 | 180 |
| 10250006 | 2,260 | .24 | 106 | 270 |
| 10250007 | 1,810 | .19 | 105 | 210 |
| 10250008 | 2,380 | .23 | 97 | 260 |
| 10250009 | 3,520 | .30 | 85 | 340 |
| 10250011 | 530 | .04 | 76 | 40 |
| 10250014 | 1,260 | .12 | 95 | 130 |
| 10250015 | 120 | .01 | 85 | 10 |
| 10250016 | 5,050 | .41 | 81 | 460 |
| Subregion 1025 total | 23,830 | 2.24 | 94 | 2,510 |
| | BLUE RIVER BASIN | | | |
| 10270201 | 7,750 | 0.61 | 79 | 680 |
| 10270202 | 7,660 | .65 | 85 | 730 |
| 10270203 | 9,210 | .75 | 81 | 840 |
| 10270204 | 3,940 | .34 | 86 | 380 |
| 10270205 | 510 | .04 | 79 | 40 |
| 10270206 | 9,580 | .76 | 79 | 850 |
| 10270207 | 1,910 | .15 | 78 | 170 |
| Subregion 1027 total | 40,560 | 3.30 | 81 | 3,690 |
| NEBRASKA TOTAL | 280,850 | 24.40 | 87 | 27,350 |

1/ Average use, in Mgal/d, divided by self-supplied population.
2/ Rounded to nearest 10 acre-ft.

Table 9.--Estimates of water use for commercial, industrial, and mining in Nebraska counties, 1985

[Mgal/d, million gallons per day; zero values listed for commercial and industrial use denote any use below 0.005 Mgal/d.]

| County number | County name | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|---|
| | | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| 001 | Adams | 0.01 | 1.35 | 0.80 | 1.31 | 0 |
| 003 | Antelope | 0 | .07 | 0 | .01 | 1.55 |
| 005 | Arthur | 0 | 0 | 0 | 0 | 0 |
| 007 | Banner | 0 | 0 | 0 | 0 | .47 |
| 009 | Blaine | 0 | 0 | 0 | 0 | 0 |
| 011 | Boone | 0 | .09 | 0 | .01 | 0 |
| 013 | Box Butte | 0 | .47 | 0 | .29 | 0 |
| 015 | Boyd | 0 | .06 | 0 | .01 | 0 |
| 017 | Brown | 0 | .07 | 0 | .01 | .82 |
| 019 | Buffalo | .01 | 1.32 | .80 | 1.20 | 4.82 |
| 021 | Burt | 0 | .11 | 0 | .01 | 0 |
| 023 | Butler | 0 | .06 | 0 | .01 | 1.76 |
| 025 | Cass | 0 | .28 | 1.80 | .11 | 17.28 |
| 027 | Cedar | 0 | .17 | .10 | .02 | .88 |
| 029 | Chase | 0 | .11 | 0 | .01 | 0 |
| 031 | Cherry | 0 | .11 | 0 | .01 | 0 |
| 033 | Cheyenne | 0 | .28 | 0 | .18 | .92 |
| 035 | Clay | 0 | .14 | 0 | .02 | .88 |
| 037 | Colfax | 0 | .13 | 1.50 | .01 | 1.32 |
| 039 | Cuming | 0 | .21 | .90 | .02 | 1.32 |
| 041 | Custer | 0 | .27 | 0 | .03 | 1.32 |
| 043 | Dakota | .02 | .29 | 3.10 | .16 | 0 |
| 045 | Dawes | .01 | .21 | 0 | .03 | 0 |
| 047 | Dawson | .01 | .58 | 2.00 | .22 | 3.08 |
| 049 | Deuel | 0 | .08 | 0 | .01 | .44 |
| 051 | Dixon | 0 | .06 | 0 | .01 | .44 |
| 053 | Dodge | .01 | 1.09 | 2.40 | .99 | 1.76 |
| 055 | Douglas | .03 | 17.46 | 1.10 | 21.21 | 1.76 |
| 057 | Dundy | 0 | .04 | 0 | .01 | .47 |
| 059 | Fillmore | 0 | .13 | 0 | .01 | 0 |
| 061 | Franklin | 0 | .05 | 0 | .01 | .88 |
| 063 | Frontier | 0 | .05 | 0 | 0 | 0 |
| 065 | Furnas | 0 | .12 | 0 | .02 | .36 |
| 067 | Gage | .02 | .60 | 0 | .38 | 5.46 |
| 069 | Garden | 0 | .04 | 0 | .01 | .44 |

Table 9.--Estimate of water use for commercial, industrial, and mining in Nebraska counties, 1985--Continued

| County number | County name | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|---|
| | | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| 071 | Garfield | 0 | 0.04 | 0 | 0.01 | 0.44 |
| 073 | Gosper | 0 | .02 | 0 | 0 | 0 |
| 075 | Grant | 0 | 0 | 0 | 0 | 0 |
| 077 | Greeley | 0 | .02 | 0 | 0 | 0 |
| 079 | Hall | .02 | 1.92 | .80 | 1.83 | 4.20 |
| 081 | Hamilton | .01 | .10 | .80 | .01 | .44 |
| 083 | Harlan | 0 | .09 | 0 | .01 | .50 |
| 085 | Hayes | 0 | 0 | 0 | 0 | 0 |
| 087 | Hitchcock | 0 | .06 | 0 | 0 | 1.77 |
| 089 | Holt | 0 | .19 | 0 | .02 | 3.96 |
| 091 | Hooker | 0 | .04 | 0 | 0 | 0 |
| 093 | Howard | 0 | .05 | 0 | .01 | 1.13 |
| 095 | Jefferson | 0 | .14 | .30 | .02 | 3.09 |
| 097 | Johnson | 0 | .15 | 0 | .02 | 0 |
| 099 | Kearney | 0 | .09 | .30 | .01 | 0 |
| 101 | Keith | .01 | .24 | 0 | .15 | 1.76 |
| 103 | Keya Paha | 0 | 0 | 0 | 0 | 0 |
| 105 | Kimball | 0 | .12 | 0 | .02 | .98 |
| 107 | Knox | 0 | .13 | 0 | .02 | 2.82 |
| 109 | Lancaster | .02 | 8.33 | 0 | 10.09 | 1.86 |
| 111 | Lincoln | .01 | 1.54 | .20 | 1.49 | 3.96 |
| 113 | Logan | 0 | .01 | 0 | 0 | 0 |
| 115 | Loup | 0 | 0 | 0 | 0 | .44 |
| 117 | McPherson | 0 | 0 | 0 | 0 | 0 |
| 119 | Madison | .01 | .94 | 1.90 | .84 | 3.09 |
| 121 | Merrick | 0 | .07 | 0 | .01 | 2.20 |
| 123 | Morrill | .01 | .18 | 1.90 | .03 | .55 |
| 125 | Nance | 0 | .07 | 0 | .01 | .88 |
| 127 | Nemaha | 0 | .13 | 0 | .01 | .44 |
| 129 | Nuckolls | 0 | .09 | .20 | .01 | 3.61 |
| 131 | Otoe | 0 | .35 | 0 | .18 | 0 |
| 133 | Pawnee | 0 | .04 | 0 | 0 | 0 |
| 135 | Perkins | 0 | .09 | 0 | .01 | .44 |
| 137 | Phelps | 0 | .30 | 0 | .18 | 1.76 |
| 139 | Pierce | 0 | .09 | 0 | .02 | .44 |

Table 9.--Estimate of water use for commercial, industrial, and mining in Nebraska counties, 1985--Continued

| County number | County name | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|---|
| | | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| 141 | Platte | 0.01 | 0.86 | 0.10 | 0.82 | 2.37 |
| 143 | Polk | 0 | .08 | 0 | 0 | .44 |
| 145 | Red Willow | .01 | .42 | .40 | .26 | 8.65 |
| 147 | Richardson | 0 | .14 | 0 | .07 | 0 |
| 149 | Rock | 0 | .03 | 0 | 0 | 0 |
| 151 | Saline | 0 | .18 | 1.00 | .02 | .44 |
| 153 | Sarpy | 0 | 4.59 | 16.80 | 5.29 | 6.78 |
| 155 | Saunders | 0 | .18 | .10 | .02 | 3.52 |
| 157 | Scotts Bluff | .02 | 1.05 | 8.50 | .58 | 2.40 |
| 159 | Seward | 0 | .17 | 0 | .07 | 0 |
| 161 | Sheridan | 0 | .14 | 0 | .02 | 0 |
| 163 | Sherman | 0 | .05 | 0 | .01 | 0 |
| 166 | Sioux | 0 | .01 | 0 | 0 | 0 |
| 167 | Stanton | 0 | .03 | .40 | 0 | 0 |
| 169 | Thayer | 0 | .09 | 0 | .01 | 1.32 |
| 171 | Thomas | 0 | 0 | 0 | 0 | .73 |
| 173 | Thurston | 0 | .09 | 0 | .01 | 0 |
| 175 | Valley | 0 | .10 | 0 | .01 | .88 |
| 177 | Washington | 0 | .13 | 0 | .07 | 0 |
| 179 | Wayne | 0 | .11 | 0 | .07 | 0 |
| 181 | Webster | 0 | .06 | 0 | .01 | 1.32 |
| 183 | Wheeler | 0 | 0 | 0 | 0 | 0 |
| 185 | York | .01 | .23 | .20 | .14 | 1.32 |
| NEBRASKA TOTAL | | 0.26 | 50.47 | 48.40 | 48.83 | 119.36 |

Table 10.--Estimates of water use for commercial, industrial, and mining in Nebraska hydrologic units and subregions, 1985
[Mgal/d, million gallons per day; zero values listed for commercial and industrial use denote any use below 0.005 Mgal/d.]

| Hydrologic Unit number | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|
| | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| | HAT CREEK BASIN | | | | |
| 10120106 | 0 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 | 0 |
| | WHITE RIVER BASIN | | | | |
| 10140201 | 0.01 | 0.21 | 0 | 0.03 | 0 |
| 10140203 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1014 total | 0.01 | 0.21 | 0 | 0.03 | 0 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | | |
| 10150001 | 0 | 0.06 | 0 | 0.01 | 0 |
| 10150002 | 0 | .01 | 0 | 0 | 0 |
| 10150003 | 0 | .62 | 0 | .31 | 0 |
| 10150004 | 0 | .17 | 0 | .02 | .82 |
| 10150005 | 0 | 0 | 0 | 0 | 0 |
| 10150006 | 0 | 0 | 0 | 0 | 0 |
| 10150007 | 0 | .02 | 0 | 0 | 3.31 |
| Subregion 1015 total | 0 | 0.88 | 0 | 0.34 | 4.13 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | | |
| 10170101 | 0 | 0.25 | 0.10 | 0.05 | 2.82 |
| Subregion 1017 total | 0 | 0.25 | 0.10 | 0.05 | 2.82 |
| | NORTH PLATTE RIVER BASIN | | | | |
| 10180009 | 0.03 | 1.26 | 10.40 | 0.62 | 3.62 |
| 10180012 | 0 | .01 | 0 | 0 | 0 |
| 10180013 | 0 | 0 | 0 | 0 | .50 |
| 10180014 | 0 | 1.48 | .20 | 1.48 | 3.08 |
| Subregion 1018 total | 0.03 | 2.75 | 10.60 | 2.10 | 7.20 |
| | SOUTH PLATTE RIVER BASIN | | | | |
| 10190012 | 0 | 0 | 0 | 0 | 0 |
| 10190015 | 0 | 0 | 0 | 0 | 0 |
| 10190016 | 0 | .47 | 0 | .21 | 1.27 |
| 10190017 | 0 | 0 | 0 | 0 | .38 |
| 10190018 | .02 | .30 | 0 | .16 | 3.08 |
| Subregion 1019 total | 0.02 | 0.77 | 0 | 0.37 | 4.73 |

Table 10.--Estimates of water use for commercial, industrial, and mining in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic Unit number | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|
| | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| **PLATTE RIVER BASIN** | | | | | |
| 10200101 | 0.04 | 1.87 | 2.80 | 1.40 | 9.22 |
| 10200102 | 0 | 1.95 | .80 | 1.84 | 4.64 |
| 10200103 | 0 | .11 | 0 | .01 | 3.25 |
| 10200201 | 0 | .92 | 1.60 | .83 | 3.96 |
| 10200202 | 0 | .14 | 1.10 | .02 | 12.94 |
| 10200203 | .02 | 8.49 | 2.50 | 10.11 | 2.30 |
| Subregion 1020 total | 0.06 | 13.48 | 8.80 | 14.21 | 36.31 |
| **LOUP RIVER BASIN** | | | | | |
| 10210001 | 0 | 0.04 | 0 | 0 | 0.73 |
| 10210002 | 0 | 0 | 0 | 0 | 0 |
| 10210003 | 0 | .15 | 0 | .02 | .26 |
| 10210004 | 0 | .04 | 0 | 0 | 1.32 |
| 10210005 | 0 | .25 | 0 | .04 | 0 |
| 10210006 | 0 | 0 | 0 | 0 | .44 |
| 10210007 | 0 | .13 | 0 | .02 | 2.19 |
| 10210008 | 0 | 0 | 0 | 0 | 0 |
| 10210009 | .01 | .17 | 0 | .02 | 1.32 |
| 10210010 | 0 | .02 | 0 | 0 | 0 |
| Subregion 1021 total | 0.01 | 0.80 | 0 | 0.10 | 6.26 |
| **ELKHORN RIVER BASIN** | | | | | |
| 10220001 | 0 | 0.32 | 0 | 0.03 | 6.61 |
| 10220002 | .01 | .93 | 1.90 | .85 | .44 |
| 10220003 | .01 | 1.45 | 1.30 | 1.02 | 2.64 |
| 10220004 | 0 | .31 | 0 | .08 | 0 |
| Subregion 1022 total | 0.02 | 3.01 | 3.20 | 1.98 | 9.69 |
| **LOWER MISSOURI RIVER TRIBUTARIES** | | | | | |
| 10230001 | 0.02 | 0.50 | 3.10 | 0.24 | 0 |
| 10230006 | .03 | 21.94 | 16.80 | 26.48 | 0 |
| Subregion 1023 total | 0.05 | 22.44 | 19.90 | 26.72 | 0 |
| **WEEPING WATER CREEK - NEMAHA RIVER BASIN** | | | | | |
| 10240001 | 0 | 0.51 | 1.80 | 0.29 | 16.40 |
| 10240005 | 0 | .03 | 0 | 0 | 0 |
| 10240006 | 0 | .22 | 0 | .01 | .44 |
| 10240007 | 0 | .04 | 0 | 0 | 0 |
| 10240008 | 0 | .29 | 0 | .09 | 0 |
| Subregion 1024 total | 0 | 1.09 | 1.80 | 0.39 | 16.84 |

Table 10.--Estimates of water use for commercial, industrial, and mining in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic Unit number | Commercial | | Industrial | | Mining |
|---|---|---|---|---|---|
| | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | Self-supplied (Mgal/d) | Public supplied (Mgal/d) | All self-supplied (Mgal/d) |
| | | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 0 | 0 | 0 | 0 | 0 |
| 10250002 | 0 | .04 | 0 | .01 | .44 |
| 10250003 | 0 | 0 | 0 | 0 | 0 |
| 10250004 | .01 | .52 | .40 | .27 | 9.61 |
| 10250005 | 0 | .11 | 0 | .01 | .01 |
| 10250006 | 0 | .09 | 0 | .01 | .44 |
| 10250007 | 0 | 0 | 0 | 0 | .35 |
| 10250008 | 0 | .04 | 0 | 0 | 0 |
| 10250009 | 0 | .15 | 0 | .02 | .82 |
| 10250011 | 0 | 0 | 0 | 0 | 0 |
| 10250014 | 0 | .02 | 0 | 0 | .47 |
| 10250015 | 0 | 0 | 0 | 0 | .04 |
| 10250016 | 0 | .42 | .20 | .21 | 2.64 |
| Subregion 1025 total | 0.01 | 1.39 | 0.60 | 0.53 | 14.82 |
| | | BLUE RIVER BASIN | | | |
| 10270201 | 0 | 0.33 | 0.80 | 0.08 | 0.88 |
| 10270202 | .02 | .81 | 1.00 | .41 | 5.90 |
| 10270203 | .02 | .42 | .20 | .16 | 2.20 |
| 10270204 | 0 | .09 | 0 | .01 | 0 |
| 10270205 | 0 | 0 | 0 | 0 | 0 |
| 10270206 | .01 | 1.61 | 1.10 | 1.33 | 4.49 |
| 10270207 | 0 | .14 | .30 | .02 | 3.09 |
| Subregion 1027 total | 0.05 | 3.40 | 3.40 | 2.01 | 16.56 |
| NEBRASKA TOTAL | 0.26 | 50.47 | 48.40 | 48.83 | 119.36 |

Table 11.--Estimate of total water used for irrigation in Nebraska counties, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| County number | County name | Estimated acres irrigated | Average seasonal application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
|---|---|---|---|---|---|
| 001 | Adams | 164,960 | 7.5 | 93.45 | 104,760 |
| 003 | Antelope | 179,760 | 9.5 | 128.55 | 144,110 |
| 005 | Arthur | 8,780 | 13.0 | 8.46 | 9,480 |
| 007 | Banner | 27,360 | 14.5 | 29.93 | 33,550 |
| 009 | Blaine | 10,880 | 13.5 | 10.83 | 12,140 |
| 011 | Boone | 117,100 | 10.5 | 90.48 | 101,430 |
| 013 | Box Butte | 119,290 | 16.5 | 146.66 | 164,410 |
| 015 | Boyd | 7,330 | 14.0 | 7.50 | 8,400 |
| 017 | Brown | 87,970 | 16.0 | 106.12 | 118,960 |
| 019 | Buffalo | 245,020 | 10.0 | 182.21 | 204,250 |
| 021 | Burt | 42,710 | 9.5 | 29.38 | 32,940 |
| 023 | Butler | 94,400 | 8.0 | 61.68 | 69,140 |
| 025 | Cass | 5,830 | 11.0 | 4.88 | 5,460 |
| 027 | Cedar | 50,580 | 10.0 | 36.95 | 41,420 |
| 029 | Chase | 180,780 | 15.5 | 207.40 | 232,490 |
| 031 | Cherry | 46,220 | 13.0 | 44.40 | 49,750 |
| 033 | Cheyenne | 43,040 | 16.5 | 53.14 | 59,570 |
| 035 | Clay | 176,950 | 8.0 | 102.18 | 114,540 |
| 037 | Colfax | 63,580 | 11.5 | 54.31 | 60,880 |
| 039 | Cuming | 28,960 | 12.0 | 25.30 | 28,360 |
| 041 | Custer | 186,060 | 11.5 | 159.39 | 178,680 |
| 043 | Dakota | 8,240 | 8.5 | 5.16 | 5,780 |
| 045 | Dawes | 24,600 | 15.0 | 27.58 | 30,930 |
| 047 | Dawson | 258,470 | 12.5 | 237.39 | 266,110 |
| 049 | Deuel | 26,110 | 19.5 | 38.00 | 42,600 |
| 051 | Dixon | 12,560 | 10.5 | 9.73 | 10,910 |
| 053 | Dodge | 90,220 | 12.0 | 78.98 | 88,540 |
| 055 | Douglas | 21,620 | 11.0 | 17.59 | 19,720 |
| 057 | Dundy | 119,010 | 16.0 | 142.02 | 159,200 |
| 059 | Fillmore | 186,080 | 8.5 | 117.01 | 131,170 |
| 061 | Franklin | 85,570 | 13.0 | 82.13 | 92,060 |
| 063 | Frontier | 57,940 | 15.0 | 65.70 | 73,650 |
| 065 | Furnas | 67,760 | 15.0 | 74.40 | 83,400 |
| 067 | Gage | 51,820 | 10.5 | 39.84 | 44,660 |
| 069 | Garden | 41,800 | 18.0 | 55.90 | 62,670 |

Table 11.--Estimate of total water used for irrigation in Nebraska counties, 1985--Continued

| County number | County name | Estimated acres irrigated | Average seasonal application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
|---|---|---|---|---|---|
| 071 | Garfield | 18,230 | 9.5 | 16.04 | 17,980 |
| 073 | Gosper | 45,260 | 13.5 | 45.95 | 51,510 |
| 075 | Grant | 1,590 | 13.0 | 1.54 | 1,730 |
| 077 | Greeley | 63,510 | 10.5 | 49.99 | 56,030 |
| 079 | Hall | 217,430 | 10.0 | 160.77 | 180,240 |
| 081 | Hamilton | 241,610 | 7.5 | 137.58 | 154,230 |
| 083 | Harlan | 76,970 | 14.0 | 81.01 | 90,820 |
| 085 | Hayes | 34,350 | 15.0 | 37.75 | 42,320 |
| 087 | Hitchcock | 42,910 | 17.5 | 55.29 | 61,990 |
| 089 | Holt | 281,890 | 10.5 | 215.09 | 241,120 |
| 091 | Hooker | 2,810 | 13.5 | 2.78 | 3,120 |
| 093 | Howard | 118,910 | 12.0 | 106.04 | 118,880 |
| 095 | Jefferson | 53,650 | 9.0 | 36.09 | 40,460 |
| 097 | Johnson | 12,440 | 11.5 | 10.44 | 11,700 |
| 099 | Kearney | 176,400 | 10.5 | 138.17 | 154,890 |
| 101 | Keith | 95,420 | 21.5 | 150.80 | 169,050 |
| 103 | Keya Paha | 23,930 | 10.5 | 19.00 | 21,310 |
| 105 | Kimball | 29,570 | 17.0 | 37.58 | 42,120 |
| 107 | Knox | 43,100 | 10.0 | 31.58 | 35,400 |
| 109 | Lancaster | 21,100 | 10.5 | 16.84 | 18,880 |
| 111 | Lincoln | 206,180 | 16.5 | 249.23 | 279,380 |
| 113 | Logan | 16,050 | 9.5 | 11.33 | 12,700 |
| 115 | Loup | 14,580 | 16.5 | 17.90 | 20,060 |
| 117 | McPherson | 11,430 | 12.0 | 10.10 | 11,320 |
| 119 | Madison | 72,490 | 10.5 | 57.48 | 64,430 |
| 121 | Merrick | 189,060 | 10.0 | 142.07 | 159,270 |
| 123 | Morrill | 152,600 | 31.0 | 349.78 | 392,110 |
| 125 | Nance | 68,700 | 11.5 | 59.32 | 66,490 |
| 127 | Nemaha | 4,960 | 12.0 | 4.36 | 4,900 |
| 129 | Nuckolls | 58,870 | 11.0 | 47.76 | 53,540 |
| 131 | Otoe | 8,730 | 12.0 | 7.66 | 8,580 |
| 133 | Pawnee | 2,980 | 11.5 | 2.57 | 2,890 |
| 135 | Perkins | 120,130 | 13.0 | 116.61 | 130,720 |
| 137 | Phelps | 212,830 | 14.5 | 232.34 | 260,440 |
| 139 | Pierce | 99,630 | 10.0 | 74.58 | 83,600 |

Table 11.--Estimate of total water used for irrigation in Nebraska counties, 1985--Continued

| County number | County name | Estimated acres irrigated | Average seasonal application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
|---|---|---|---|---|---|
| 141 | Platte | 123,890 | 10.5 | 96.91 | 108,620 |
| 143 | Polk | 130,380 | 8.5 | 82.39 | 92,360 |
| 145 | Red Willow | 66,130 | 16.5 | 80.63 | 90,380 |
| 147 | Richardson | 5,020 | 11.0 | 4.08 | 4,570 |
| 149 | Rock | 64,440 | 10.5 | 50.34 | 56,430 |
| 151 | Saline | 88,960 | 10.0 | 64.65 | 72,480 |
| 153 | Sarpy | 7,010 | 10.5 | 5.46 | 6,130 |
| 155 | Saunders | 59,170 | 10.0 | 44.32 | 49,670 |
| 157 | Scotts Bluff | 256,110 | 41.0 | 784.29 | 879,190 |
| 159 | Seward | 114,900 | 8.5 | 71.52 | 80,170 |
| 161 | Sheridan | 66,840 | 17.0 | 83.76 | 93,910 |
| 163 | Sherman | 58,640 | 11.0 | 44.33 | 49,700 |
| 166 | Sioux | 54,390 | 33.0 | 133.77 | 149,960 |
| 167 | Stanton | 26,060 | 11.5 | 22.51 | 25,240 |
| 169 | Thayer | 115,950 | 7.5 | 63.30 | 70,960 |
| 171 | Thomas | 3,980 | 14.5 | 4.25 | 4,770 |
| 173 | Thurston | 6,950 | 12.5 | 6.34 | 7,100 |
| 175 | Valley | 81,900 | 12.0 | 73.04 | 81,880 |
| 177 | Washington | 10,930 | 10.5 | 8.52 | 9,550 |
| 179 | Wayne | 17,780 | 10.5 | 14.16 | 15,870 |
| 181 | Webster | 50,360 | 12.5 | 47.62 | 53,380 |
| 183 | Wheeler | 60,960 | 8.5 | 39.22 | 43,960 |
| 185 | York | 229,730 | 7.5 | 131.63 | 147,560 |
| NEBRASKA TOTAL | | 7,480,140 | 13.0 | 7,265.09 | 8,144,170 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 12.--Estimate of total water used for irrigation in Nebraska hydrologic units and subregions, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Estimated acres irrigated | Average seasonal application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
|---|---|---|---|---|
| | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 |
| 10120108 | 4,770 | 12.0 | 4.26 | 4,780 |
| Subregion 1012 total | 4,770 | 12.0 | 4.26 | 4,780 |
| | WHITE RIVER BASIN | | | |
| 10140201 | 15,570 | 13.5 | 15.80 | 17,710 |
| 10140203 | 310 | 16.0 | .37 | 420 |
| Subregion 1014 total | 15,880 | 13.5 | 16.17 | 18,130 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 2,910 | 12.5 | 2.70 | 3,030 |
| 10150002 | 14,850 | 16.0 | 17.89 | 20,050 |
| 10150003 | 201,660 | 16.5 | 249.35 | 279,520 |
| 10150004 | 145,910 | 14.0 | 151.08 | 169,360 |
| 10150005 | 2,000 | 19.0 | 2.85 | 3,190 |
| 10150006 | 23,320 | 11.0 | 19.39 | 21,740 |
| 10150007 | 206,240 | 10.5 | 159.39 | 178,680 |
| Subregion 1015 total | 596,890 | 13.5 | 602.65 | 675,570 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 81,020 | 8.5 | 52.12 | 58,420 |
| Subregion 1017 total | 81,020 | 8.5 | 52.12 | 58,420 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 466,620 | 36.5 | 1,269.61 | 1,423,240 |
| 10180012 | 2,510 | 19.5 | 3.60 | 4,030 |
| 10180013 | 46,400 | 17.5 | 61.21 | 68,620 |
| 10180014 | 87,530 | 23.0 | 150.06 | 168,220 |
| Subregion 1018 total | 603,060 | 33.0 | 1,484.48 | 1,664,110 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 2,160 | 15.5 | 2.50 | 2,800 |
| 10190015 | 2,190 | 16.5 | 2.68 | 3,000 |
| 10190016 | 59,900 | 17.5 | 78.16 | 87,610 |
| 10190017 | 9,370 | 18.5 | 12.96 | 14,530 |
| 10190018 | 135,080 | 20.0 | 200.53 | 224,800 |
| Subregion 1019 total | 208,700 | 19.0 | 296.83 | 332,740 |

Table 12.--Estimate of total water used for irrigation in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Estimated acres irrigated | Average seasonal application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
|---|---|---|---|---|
| | PLATTE RIVER BASIN | | | |
| 10200101 | 657,260 | 12.5 | 614.02 | 688,320 |
| 10200102 | 200,720 | 10.0 | 149.44 | 167,520 |
| 10200103 | 400,100 | 10.0 | 293.61 | 329,140 |
| 10200201 | 154,910 | 10.5 | 121.47 | 136,170 |
| 10200202 | 57,310 | 11.0 | 46.80 | 52,450 |
| 10200203 | 70,850 | 10.0 | 53.88 | 60,390 |
| Subregion 1020 total | 1,541,150 | 11.0 | 1,279.22 | 1,433,990 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 6,090 | 14.5 | 6.49 | 7,280 |
| 10210002 | 9,760 | 13.5 | 9.66 | 10,840 |
| 10210003 | 166,620 | 13.0 | 158.48 | 177,660 |
| 10210004 | 132,380 | 10.0 | 99.46 | 111,490 |
| 10210005 | 91,920 | 10.5 | 71.70 | 80,380 |
| 10210006 | 27,250 | 15.5 | 30.90 | 34,640 |
| 10210007 | 121,530 | 12.0 | 109.37 | 122,600 |
| 10210008 | 21,340 | 13.0 | 20.76 | 23,270 |
| 10210009 | 231,770 | 10.5 | 185.13 | 207,530 |
| 10210010 | 100,740 | 10.5 | 78.37 | 87,850 |
| Subregion 1021 total | 909,400 | 11.5 | 770.32 | 863,540 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 303,230 | 10.0 | 225.03 | 252,260 |
| 10220002 | 141,780 | 10.0 | 106.02 | 118,840 |
| 10220003 | 160,220 | 12.0 | 141.25 | 158,340 |
| 10220004 | 62,850 | 11.5 | 52.96 | 59,370 |
| Subregion 1022 total | 668,080 | 10.5 | 525.26 | 588,810 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 44,360 | 8.5 | 27.69 | 31,040 |
| 10230006 | 11,170 | 9.0 | 7.33 | 8,230 |
| Subregion 1023 total | 55,530 | 8.5 | 35.02 | 39,270 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 5,890 | 12.0 | 5.17 | 5,790 |
| 10240005 | 760 | 11.0 | .63 | 710 |
| 10240006 | 14,590 | 11.5 | 12.46 | 13,960 |
| 10240007 | 1,810 | 11.5 | 1.58 | 1,760 |
| 10240008 | 21,460 | 11.0 | 17.86 | 20,030 |
| Subregion 1024 total | 44,510 | 11.5 | 37.70 | 42,250 |

Table 12.--Estimate of total water used for irrigation in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Estimated acres irrigated | Average seasonal application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
|---|---|---|---|---|
| | | REPUBLICAN RIVER BASIN | | |
| 10250001 | 380 | 10.0 | 0.46 | 520 |
| 10250002 | 87,240 | 16.0 | 104.26 | 116,870 |
| 10250003 | 130 | 16.5 | .16 | 180 |
| 10250004 | 143,700 | 15.5 | 166.37 | 186,510 |
| 10250005 | 152,310 | 16.5 | 184.08 | 206,350 |
| 10250006 | 144,390 | 15.0 | 147.80 | 165,680 |
| 10250007 | 63,710 | 13.0 | 62.22 | 69,760 |
| 10250008 | 60,990 | 13.0 | 59.09 | 66,240 |
| 10250009 | 150,530 | 16.0 | 180.89 | 202,780 |
| 10250011 | 16,160 | 11.5 | 14.09 | 15,790 |
| 10250014 | 23,980 | 11.5 | 20.70 | 23,210 |
| 10250015 | 3,470 | 11.5 | 2.96 | 3,320 |
| 10250016 | 219,940 | 13.0 | 216.44 | 242,620 |
| Subregion 1025 total | 1,066,930 | 15.0 | 1,159.52 | 1,299,830 |
| | | BLUE RIVER BASIN | | |
| 10270201 | 357,260 | 7.5 | 202.08 | 226,540 |
| 10270202 | 136,030 | 10.5 | 103.89 | 116,460 |
| 10270203 | 525,750 | 7.5 | 295.25 | 330,970 |
| 10270204 | 144,100 | 11.5 | 108.86 | 122,030 |
| 10270205 | 500 | 8.5 | .31 | 350 |
| 10270206 | 489,700 | 7.5 | 274.95 | 308,210 |
| 10270207 | 30,880 | 7.0 | 16.20 | 18,170 |
| Subregion 1027 total | 1,684,220 | 8.0 | 1,001.54 | 1,122,730 |
| NEBRASKA TOTAL | 7,480,140 | 13.0 | 7,265.09 | 8,144,170 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 13.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska counties, 1985

| County number | County name | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|---|
| | | | Gravity | Center pivot | Gravity | Center pivot | Total |
| 001 | Adams | 1,909 | 1,454 | 455 | 1,235 | 428 | 1,663 |
| 003 | Antelope | 1,420 | 13 | 1,407 | 12 | 1,327 | 1,339 |
| 005 | Arthur | 82 | 0 | 82 | 0 | 66 | 66 |
| 007 | Banner | 255 | 80 | 175 | 68 | 151 | 219 |
| 009 | Blaine | 105 | 12 | 93 | 11 | 70 | 81 |
| 011 | Boone | 1,149 | 589 | 560 | 501 | 531 | 1,032 |
| 013 | Box Butte | 943 | 199 | 744 | 169 | 715 | 884 |
| 015 | Boyd | 44 | 1 | 43 | 1 | 32 | 33 |
| 017 | Brown | 456 | 20 | 436 | 17 | 394 | 411 |
| 019 | Buffalo | 3,533 | 2,868 | 665 | 2,438 | 631 | 3,069 |
| 021 | Burt | 407 | 310 | 97 | 263 | 94 | 357 |
| 023 | Butler | 1,051 | 744 | 307 | 632 | 285 | 917 |
| 025 | Cass | 36 | 23 | 13 | 20 | 9 | 29 |
| 027 | Cedar | 475 | 179 | 296 | 152 | 251 | 403 |
| 029 | Chase | 1,385 | 321 | 1,064 | 321 | 1,005 | 1,326 |
| 031 | Cherry | 384 | 12 | 372 | 12 | 293 | 305 |
| 033 | Cheyenne | 452 | 153 | 299 | 130 | 231 | 361 |
| 035 | Clay | 2,045 | 1,623 | 422 | 1,379 | 400 | 1,779 |
| 037 | Colfax | 784 | 682 | 102 | 579 | 89 | 668 |
| 039 | Cuming | 306 | 193 | 113 | 164 | 99 | 263 |
| 041 | Custer | 1,668 | 890 | 778 | 756 | 722 | 1,478 |
| 043 | Dakota | 94 | 66 | 28 | 56 | 25 | 81 |
| 045 | Dawes | 75 | 20 | 55 | 17 | 46 | 63 |
| 047 | Dawson | 3,429 | 3,160 | 269 | 2,686 | 236 | 2,922 |
| 049 | Deuel | 310 | 230 | 80 | 195 | 67 | 262 |
| 051 | Dixon | 113 | 55 | 58 | 47 | 48 | 95 |
| 053 | Dodge | 1,235 | 1,069 | 166 | 909 | 165 | 1,074 |
| 055 | Douglas | 248 | 219 | 29 | 186 | 24 | 210 |
| 057 | Dundy | 974 | 192 | 782 | 74 | 744 | 818 |
| 059 | Fillmore | 1,944 | 1,172 | 772 | 996 | 721 | 1,717 |
| 061 | Franklin | 860 | 657 | 203 | 558 | 187 | 745 |
| 063 | Frontier | 647 | 517 | 130 | 440 | 92 | 532 |
| 065 | Furnas | 636 | 553 | 83 | 470 | 61 | 531 |
| 067 | Gage | 497 | 324 | 173 | 276 | 157 | 433 |
| 069 | Garden | 305 | 106 | 199 | 90 | 170 | 260 |

Table 13.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska counties, 1985--Continued

| County number | County name | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|---|
| | | | Gravity | Center pivot | Gravity | Center pivot | Total |
| 071 | Garfield | 196 | 54 | 142 | 46 | 86 | 132 |
| 073 | Gosper | 594 | 513 | 81 | 437 | 58 | 495 |
| 075 | Grant | 24 | 0 | 24 | 0 | 12 | 12 |
| 077 | Greeley | 623 | 312 | 311 | 265 | 294 | 559 |
| 079 | Hall | 3,804 | 3,563 | 241 | 3,027 | 216 | 3,243 |
| 081 | Hamilton | 2,876 | 2,230 | 646 | 1,896 | 612 | 2,508 |
| 083 | Harlan | 862 | 707 | 155 | 601 | 131 | 732 |
| 085 | Hayes | 337 | 112 | 225 | 95 | 168 | 263 |
| 087 | Hitchcock | 482 | 430 | 52 | 365 | 40 | 405 |
| 089 | Holt | 2,317 | 225 | 2,092 | 191 | 1,923 | 2,114 |
| 091 | Hooker | 27 | 1 | 26 | 0 | 20 | 20 |
| 093 | Howard | 827 | 543 | 284 | 461 | 253 | 714 |
| 095 | Jefferson | 537 | 298 | 239 | 253 | 214 | 467 |
| 097 | Johnson | 125 | 87 | 38 | 74 | 32 | 106 |
| 099 | Kearney | 1,775 | 1,339 | 436 | 1,138 | 414 | 1,552 |
| 101 | Keith | 939 | 599 | 340 | 509 | 282 | 791 |
| 103 | Keya Paha | 158 | 0 | 158 | 0 | 152 | 152 |
| 105 | Kimball | 295 | 97 | 198 | 82 | 154 | 236 |
| 107 | Knox | 327 | 47 | 280 | 41 | 254 | 295 |
| 109 | Lancaster | 272 | 213 | 59 | 181 | 57 | 238 |
| 111 | Lincoln | 1,754 | 741 | 1,013 | 630 | 900 | 1,530 |
| 113 | Logan | 155 | 19 | 136 | 17 | 109 | 126 |
| 115 | Loup | 110 | 38 | 72 | 32 | 50 | 82 |
| 117 | McPherson | 97 | 0 | 97 | 0 | 86 | 86 |
| 119 | Madison | 660 | 246 | 414 | 209 | 392 | 601 |
| 121 | Merrick | 4,065 | 3,748 | 317 | 3,226 | 281 | 3,507 |
| 123 | Morrill | 635 | 199 | 436 | 169 | 391 | 560 |
| 125 | Nance | 675 | 513 | 162 | 436 | 128 | 564 |
| 127 | Nemaha | 39 | 33 | 6 | 27 | 3 | 30 |
| 129 | Nuckolls | 576 | 471 | 105 | 401 | 92 | 493 |
| 131 | Otoe | 30 | 16 | 14 | 14 | 7 | 21 |
| 133 | Pawnee | 4 | 0 | 4 | 0 | 4 | 4 |
| 135 | Perkins | 872 | 42 | 830 | 42 | 821 | 863 |
| 137 | Phelps | 1,780 | 1,414 | 366 | 1,202 | 350 | 1,552 |
| 139 | Pierce | 805 | 112 | 693 | 95 | 670 | 765 |

Table 13.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska counties, 1985--Continued

| County number | County name | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|---|
| | | | Gravity | Center pivot | Gravity | Center pivot | Total |
| 141 | Platte | 1,426 | 990 | 436 | 840 | 406 | 1,246 |
| 143 | Polk | 1,609 | 1,351 | 258 | 1,148 | 245 | 1,393 |
| 145 | Red Willow | 740 | 614 | 126 | 521 | 74 | 595 |
| 147 | Richardson | 20 | 0 | 20 | 0 | 20 | 20 |
| 149 | Rock | 607 | 0 | 607 | 0 | 473 | 473 |
| 151 | Saline | 947 | 701 | 246 | 597 | 234 | 831 |
| 153 | Sarpy | 94 | 76 | 18 | 65 | 16 | 81 |
| 155 | Saunders | 659 | 447 | 212 | 380 | 188 | 568 |
| 157 | Scotts Bluff | 472 | 426 | 46 | 362 | 31 | 393 |
| 159 | Seward | 1,166 | 784 | 382 | 651 | 367 | 1,018 |
| 161 | Sheridan | 539 | 183 | 356 | 155 | 307 | 462 |
| 163 | Sherman | 513 | 188 | 325 | 160 | 301 | 461 |
| 166 | Sioux | 215 | 103 | 112 | 88 | 85 | 173 |
| 167 | Stanton | 272 | 167 | 105 | 142 | 96 | 238 |
| 169 | Thayer | 1,259 | 854 | 405 | 726 | 386 | 1,112 |
| 171 | Thomas | 35 | 8 | 27 | 7 | 24 | 31 |
| 173 | Thurston | 70 | 57 | 13 | 49 | 8 | 57 |
| 175 | Valley | 517 | 269 | 248 | 228 | 235 | 463 |
| 177 | Washington | 93 | 84 | 9 | 72 | 8 | 80 |
| 179 | Wayne | 161 | 53 | 108 | 45 | 98 | 143 |
| 181 | Webster | 451 | 264 | 187 | 225 | 166 | 391 |
| 183 | Wheeler | 493 | 0 | 493 | 0 | 457 | 457 |
| 185 | York | 2,748 | 2,231 | 517 | 1,897 | 498 | 2,395 |
| NEBRASKA TOTAL | | 75,016 | 47,518 | 27,498 | 40,380 | 24,945 | 65,325 |

Table 14.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska hydrologic units and subregions, 1985

| Hydrologic unit number | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|
| | | Gravity | Center pivot | Gravity | Center pivot | Total |
| | | HAT CREEK BASIN | | | | |
| 10120106 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 | 0 | 0 |
| | | WHITE RIVER BASIN | | | | |
| 10140201 | 25 | 20 | 5 | 17 | 3 | 20 |
| 10140203 | 2 | 0 | 2 | 0 | 2 | 2 |
| Subregion 1014 total | 27 | 20 | 7 | 17 | 5 | 22 |
| | | NIOBRARA RIVER - PONCA CREEK BASIN | | | | |
| 10150001 | 15 | 2 | 13 | 2 | 10 | 12 |
| 10150002 | 78 | 21 | 57 | 18 | 45 | 63 |
| 10150003 | 1,608 | 386 | 1,222 | 327 | 1,118 | 1,445 |
| 10150004 | 855 | 32 | 823 | 29 | 762 | 791 |
| 10150005 | 17 | 0 | 17 | 0 | 6 | 6 |
| 10150006 | 172 | 1 | 171 | 1 | 153 | 154 |
| 10150007 | 1,609 | 91 | 1,518 | 78 | 1,406 | 1,484 |
| Subregion 1015 total | 4,354 | 533 | 3,821 | 455 | 3,500 | 3,955 |
| | | UPPER MISSOURI RIVER TRIBUTARIES | | | | |
| 10170101 | 666 | 158 | 508 | 134 | 467 | 601 |
| Subregion 1017 total | 666 | 158 | 508 | 134 | 467 | 601 |
| | | NORTH PLATTE RIVER BASIN | | | | |
| 10180009 | 1,377 | 713 | 664 | 606 | 576 | 1,182 |
| 10180012 | 23 | 19 | 4 | 16 | 2 | 18 |
| 10180013 | 394 | 133 | 261 | 113 | 227 | 340 |
| 10180014 | 548 | 290 | 258 | 246 | 220 | 466 |
| Subregion 1018 total | 2,342 | 1,155 | 1,187 | 981 | 1,025 | 2,006 |
| | | SOUTH PLATTE RIVER BASIN | | | | |
| 10190012 | 18 | 2 | 16 | 2 | 15 | 17 |
| 10190015 | 20 | 3 | 17 | 3 | 13 | 16 |
| 10190016 | 635 | 252 | 383 | 214 | 285 | 499 |
| 10190017 | 114 | 68 | 46 | 57 | 34 | 91 |
| 10190018 | 1,434 | 823 | 611 | 699 | 498 | 1,197 |
| Subregion 1019 total | 2,221 | 1,148 | 1,073 | 975 | 845 | 1,820 |

Table 14.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|
| | | Gravity | Center pivot | Gravity | Center pivot | Total |
| | | PLATTE RIVER BASIN | | | | |
| 10200101 | 7,328 | 6,158 | 1,170 | 5,235 | 1,052 | 6,287 |
| 10200102 | 3,485 | 3,215 | 270 | 2,732 | 252 | 2,984 |
| 10200103 | 7,515 | 6,855 | 660 | 5,827 | 596 | 6,423 |
| 10200201 | 1,821 | 1,420 | 401 | 1,206 | 371 | 1,577 |
| 10200202 | 923 | 820 | 103 | 697 | 96 | 793 |
| 10200203 | 803 | 572 | 231 | 486 | 207 | 693 |
| Subregion 1020 total | 21,875 | 19,040 | 2,835 | 16,183 | 2,574 | 18,757 |
| | | LOUP RIVER BASIN | | | | |
| 10210001 | 60 | 12 | 48 | 10 | 37 | 47 |
| 10210002 | 98 | 5 | 93 | 5 | 70 | 75 |
| 10210003 | 965 | 490 | 475 | 416 | 437 | 853 |
| 10210004 | 1,288 | 541 | 747 | 459 | 683 | 1,142 |
| 10210005 | 879 | 422 | 457 | 359 | 422 | 781 |
| 10210006 | 231 | 28 | 203 | 24 | 150 | 174 |
| 10210007 | 910 | 512 | 398 | 435 | 345 | 780 |
| 10210008 | 204 | 0 | 204 | 0 | 157 | 157 |
| 10210009 | 2,184 | 1,159 | 1,025 | 1,024 | 959 | 1,983 |
| 10210010 | 976 | 449 | 527 | 381 | 462 | 843 |
| Subregion 1021 total | 7,795 | 3,618 | 4,177 | 3,113 | 3,722 | 6,835 |
| | | ELKHORN RIVER BASIN | | | | |
| 10220001 | 2,673 | 311 | 2,362 | 265 | 2,084 | 2,349 |
| 10220002 | 1,153 | 143 | 1,010 | 121 | 969 | 1,090 |
| 10220003 | 1,714 | 1,176 | 538 | 1,000 | 502 | 1,502 |
| 10220004 | 589 | 281 | 308 | 239 | 268 | 507 |
| Subregion 1022 total | 6,129 | 1,911 | 4,218 | 1,625 | 3,823 | 5,448 |
| | | LOWER MISSOURI RIVER TRIBUTARIES | | | | |
| 10230001 | 462 | 372 | 90 | 317 | 84 | 401 |
| 10230006 | 51 | 43 | 8 | 37 | 6 | 43 |
| Subregion 1023 total | 513 | 415 | 98 | 354 | 90 | 444 |
| | | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | | |
| 10240001 | 38 | 29 | 9 | 25 | 5 | 30 |
| 10240005 | 7 | 5 | 2 | 4 | 2 | 6 |
| 10240006 | 83 | 46 | 37 | 39 | 28 | 67 |
| 10240007 | 3 | 1 | 2 | 1 | 2 | 3 |
| 10240008 | 169 | 100 | 69 | 85 | 63 | 148 |
| Subregion 1024 total | 300 | 181 | 119 | 154 | 100 | 254 |

Table 14.--Number of registered irrigation wells, method of distribution, and estimated active irrigation systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Registered irrigation wells | Method of distribution | | Estimated active systems, 1985 | | |
|---|---|---|---|---|---|---|
| | | Gravity | Center pivot | Gravity | Center pivot | Total |
| | | REPUBLICAN RIVER BASIN | | | | |
| 10250001 | 8 | 0 | 8 | 0 | 3 | 3 |
| 10250002 | 665 | 109 | 556 | 42 | 545 | 587 |
| 10250003 | 10 | 0 | 10 | 0 | 1 | 1 |
| 10250004 | 1,489 | 880 | 609 | 711 | 520 | 1,231 |
| 10250005 | 1,228 | 457 | 771 | 427 | 712 | 1,139 |
| 10250006 | 1,076 | 119 | 957 | 115 | 929 | 1,044 |
| 10250007 | 509 | 95 | 414 | 81 | 380 | 461 |
| 10250008 | 539 | 199 | 340 | 169 | 320 | 489 |
| 10250009 | 1,589 | 1,357 | 232 | 1,154 | 183 | 1,337 |
| 10250011 | 191 | 179 | 12 | 152 | 9 | 161 |
| 10250014 | 314 | 283 | 31 | 240 | 19 | 259 |
| 10250015 | 42 | 37 | 5 | 31 | 4 | 35 |
| 10250016 | 2,231 | 1,684 | 547 | 1,433 | 497 | 1,930 |
| Subregion 1025 total | 9,891 | 5,399 | 4,492 | 4,555 | 4,122 | 8,677 |
| | | BLUE RIVER BASIN | | | | |
| 10270201 | 4,194 | 3,261 | 933 | 2,757 | 885 | 3,742 |
| 10270202 | 1,343 | 872 | 471 | 741 | 436 | 1,177 |
| 10270203 | 6,011 | 4,540 | 1,471 | 3,859 | 1,393 | 5,252 |
| 10270204 | 1,497 | 931 | 566 | 791 | 529 | 1,320 |
| 10270205 | 1 | 1 | 0 | 1 | 0 | 1 |
| 10270206 | 5,563 | 4,181 | 1,382 | 3,553 | 1,300 | 4,853 |
| 10270207 | 294 | 154 | 140 | 132 | 129 | 261 |
| Subregion 1027 total | 18,903 | 13,940 | 4,963 | 11,834 | 4,672 | 16,606 |
| NEBRASKA TOTAL | 75,016 | 47,518 | 27,498 | 40,380 | 24,945 | 65,325 |

Table 15.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska counties, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| County number | County name | Active gravity systems | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
| 001 | Adams | 1,235 | 104,000 | 8.5 | 65.34 | 73,250 |
| 003 | Antelope | 12 | 1,020 | 13.5 | 1.02 | 1,140 |
| 005 | Arthur | 0 | 0 | 0 | 0 | 0 |
| 007 | Banner | 68 | 5,440 | 19.5 | 7.83 | 8,780 |
| 009 | Blaine | 11 | 1,040 | 18.5 | 1.42 | 1,590 |
| 011 | Boone | 501 | 42,590 | 13.5 | 42.02 | 47,100 |
| 013 | Box Butte | 169 | 22,920 | 22.0 | 37.42 | 41,950 |
| 015 | Boyd | 1 | 90 | 22.5 | .15 | 170 |
| 017 | Brown | 17 | 1,440 | 14.5 | 1.57 | 1,760 |
| 019 | Buffalo | 2,438 | 151,950 | 11.0 | 124.42 | 139,470 |
| 021 | Burt | 263 | 26,300 | 9.5 | 19.02 | 21,320 |
| 023 | Butler | 632 | 53,730 | 10.5 | 41.17 | 46,150 |
| 025 | Cass | 20 | 1,690 | 12.0 | 1.51 | 1,690 |
| 027 | Cedar | 152 | 12,920 | 11.5 | 11.24 | 12,600 |
| 029 | Chase | 321 | 39,000 | 20.0 | 57.75 | 64,740 |
| 031 | Cherry | 12 | 1,020 | 14.5 | 1.11 | 1,240 |
| 033 | Cheyenne | 130 | 11,060 | 22.0 | 18.05 | 20,230 |
| 035 | Clay | 1,379 | 117,220 | 8.5 | 73.69 | 82,610 |
| 037 | Colfax | 579 | 49,210 | 12.5 | 44.89 | 50,320 |
| 039 | Cuming | 164 | 13,940 | 13.5 | 13.93 | 15,620 |
| 041 | Custer | 756 | 61,160 | 13.0 | 59.10 | 66,250 |
| 043 | Dakota | 56 | 4,760 | 9.5 | 3.27 | 3,670 |
| 045 | Dawes | 17 | 1,450 | 22.0 | 2.36 | 2,650 |
| 047 | Dawson | 2,686 | 164,900 | 10.5 | 131.00 | 146,850 |
| 049 | Deuel | 195 | 16,570 | 22.0 | 27.05 | 30,320 |
| 051 | Dixon | 47 | 3,990 | 12.5 | 3.69 | 4,140 |
| 053 | Dodge | 909 | 63,640 | 12.5 | 60.08 | 67,350 |
| 055 | Douglas | 186 | 18,160 | 11.5 | 15.22 | 17,060 |
| 057 | Dundy | 74 | 6,220 | 10.5 | 4.83 | 5,410 |
| 059 | Fillmore | 996 | 84,660 | 9.5 | 59.06 | 66,210 |
| 061 | Franklin | 558 | 47,420 | 11.5 | 41.19 | 46,170 |
| 063 | Frontier | 440 | 44,000 | 16.5 | 53.63 | 60,120 |
| 065 | Furnas | 470 | 39,960 | 14.5 | 43.47 | 48,730 |
| 067 | Gage | 276 | 23,460 | 11.0 | 19.36 | 21,700 |
| 069 | Garden | 90 | 7,650 | 20.0 | 11.40 | 12,780 |

Table 15.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska counties, 1985--Continued

| County number | County name | Active gravity systems | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1]/ | Average use rate (Mgal/d) | Annual volume (acre-ft)[2]/ |
| 071 | Garfield | 46 | 3,910 | 13.5 | 3.87 | 4,340 |
| 073 | Gosper | 437 | 37,140 | 14.5 | 39.69 | 44,490 |
| 075 | Grant | 0 | 0 | 0 | 0 | 0 |
| 077 | Greeley | 265 | 22,520 | 13.5 | 22.30 | 25,000 |
| 079 | Hall | 3,027 | 187,230 | 10.5 | 145.61 | 163,230 |
| 081 | Hamilton | 1,896 | 158,500 | 8.5 | 100.05 | 112,160 |
| 083 | Harlan | 601 | 51,090 | 14.5 | 55.43 | 62,140 |
| 085 | Hayes | 95 | 10,610 | 20.0 | 15.61 | 17,500 |
| 087 | Hitchcock | 365 | 31,030 | 18.0 | 41.44 | 46,460 |
| 089 | Holt | 191 | 16,230 | 14.0 | 16.65 | 18,670 |
| 091 | Hooker | 0 | 0 | 0 | 0 | 0 |
| 093 | Howard | 461 | 36,720 | 13.0 | 35.08 | 39,330 |
| 095 | Jefferson | 253 | 21,520 | 10.5 | 16.40 | 18,390 |
| 097 | Johnson | 74 | 6,340 | 12.0 | 5.65 | 6,330 |
| 099 | Kearney | 1,138 | 96,730 | 10.0 | 72.33 | 81,080 |
| 101 | Keith | 509 | 43,270 | 21.5 | 69.63 | 78,060 |
| 103 | Keya Paha | 0 | 0 | 0 | 0 | 0 |
| 105 | Kimball | 82 | 6,980 | 22.0 | 11.35 | 12,720 |
| 107 | Knox | 41 | 3,480 | 13.0 | 3.42 | 3,830 |
| 109 | Lancaster | 181 | 11,140 | 12.0 | 9.94 | 11,140 |
| 111 | Lincoln | 630 | 44,960 | 16.5 | 54.40 | 60,980 |
| 113 | Logan | 17 | 1,450 | 14.5 | 1.57 | 1,760 |
| 115 | Loup | 32 | 2,720 | 17.0 | 3.46 | 3,880 |
| 117 | McPherson | 0 | 0 | 0 | 0 | 0 |
| 119 | Madison | 209 | 17,770 | 13.5 | 17.63 | 19,760 |
| 121 | Merrick | 3,226 | 150,930 | 11.0 | 122.23 | 137,020 |
| 123 | Morrill | 169 | 14,360 | 20.0 | 21.44 | 24,030 |
| 125 | Nance | 436 | 32,330 | 12.5 | 29.78 | 33,380 |
| 127 | Nemaha | 27 | 2,290 | 12.0 | 2.04 | 2,290 |
| 129 | Nuckolls | 401 | 34,080 | 9.0 | 22.21 | 24,900 |
| 131 | Otoe | 14 | 1,200 | 12.0 | 1.08 | 1,210 |
| 133 | Pawnee | 0 | 0 | 0 | 0 | 0 |
| 135 | Perkins | 42 | 10,940 | 15.0 | 12.39 | 13,890 |
| 137 | Phelps | 1,202 | 98,370 | 11.5 | 85.18 | 95,490 |
| 139 | Pierce | 95 | 8,080 | 13.5 | 8.07 | 9,050 |

Table 15.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska counties, 1985--Continued

| County number | County name | Active gravity systems, 1985 | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| 141 | Platte | 840 | 68,320 | 12.5 | 62.67 | 70,250 |
| 143 | Polk | 1,148 | 97,580 | 9.5 | 67.20 | 75,330 |
| 145 | Red Willow | 521 | 44,290 | 16.0 | 52.58 | 58,940 |
| 147 | Richardson | 0 | 0 | 0 | 0 | 0 |
| 149 | Rock | 0 | 0 | 0 | 0 | 0 |
| 151 | Saline | 597 | 50,750 | 10.5 | 40.14 | 45,000 |
| 153 | Sarpy | 65 | 4,540 | 11.5 | 3.93 | 4,410 |
| 155 | Saunders | 380 | 30,220 | 12.0 | 26.96 | 30,220 |
| 157 | Scotts Bluff | 362 | 30,780 | 20.0 | 45.86 | 51,410 |
| 159 | Seward | 651 | 55,240 | 9.0 | 37.75 | 42,320 |
| 161 | Sheridan | 155 | 13,170 | 22.0 | 21.50 | 24,100 |
| 163 | Sherman | 160 | 13,590 | 13.5 | 13.46 | 15,090 |
| 166 | Sioux | 88 | 7,490 | 20.5 | 11.37 | 12,750 |
| 167 | Stanton | 142 | 12,070 | 13.5 | 12.06 | 13,520 |
| 169 | Thayer | 726 | 61,710 | 8.5 | 38.55 | 43,210 |
| 171 | Thomas | 7 | 600 | 20.0 | .89 | 1,000 |
| 173 | Thurston | 49 | 4,900 | 12.5 | 4.64 | 5,200 |
| 175 | Valley | 228 | 19,380 | 13.5 | 19.19 | 21,510 |
| 177 | Washington | 72 | 7,200 | 10.0 | 5.48 | 6,140 |
| 179 | Wayne | 45 | 3,820 | 13.5 | 3.82 | 4,280 |
| 181 | Webster | 225 | 19,130 | 11.0 | 15.63 | 17,520 |
| 183 | Wheeler | 0 | 0 | 0 | 0 | 0 |
| 185 | York | 1,897 | 161,240 | 8.5 | 100.69 | 112,870 |
| NEBRASKA TOTAL | | 40,380 | 3,114,520 | 12.0 | 2,728.56 | 3,058,720 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 16.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska hydrologic units and subregions, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Active gravity systems, 1985 | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|
| | | | Season application (in/acre)[1]/ | Average use rate (Mgal/d) | Annual volume (acre-ft)[2]/ |
| | | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 | 0 |
| | | WHITE RIVER BASIN | | | |
| 10140201 | 17 | 1,450 | 22.0 | 2.37 | 2,660 |
| 10140203 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1014 total | 17 | 1,450 | 22.0 | 2.37 | 2,660 |
| | | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 2 | 170 | 14.5 | 0.19 | 210 |
| 10150002 | 18 | 1,630 | 22.0 | 2.66 | 2,980 |
| 10150003 | 327 | 36,250 | 22.0 | 59.18 | 66,340 |
| 10150004 | 29 | 2,460 | 14.5 | 2.68 | 3,010 |
| 10150005 | 0 | 0 | 0 | 0 | 0 |
| 10150006 | 1 | 90 | 22.0 | .15 | 170 |
| 10150007 | 78 | 6,630 | 14.5 | 7.22 | 8,090 |
| Subregion 1015 total | 455 | 47,230 | 20.5 | 72.08 | 80,800 |
| | | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 134 | 11,380 | 10.5 | 9.03 | 10,120 |
| Subregion 1017 total | 134 | 11,380 | 10.5 | 9.03 | 10,120 |
| | | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 606 | 51,490 | 20.0 | 76.43 | 85,680 |
| 10180012 | 16 | 1,360 | 20.0 | 2.03 | 2,270 |
| 10180013 | 113 | 9,300 | 20.0 | 13.86 | 15,540 |
| 10180014 | 246 | 20,910 | 20.0 | 31.16 | 34,930 |
| Subregion 1018 total | 981 | 83,060 | 20.0 | 123.48 | 138,420 |
| | | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 2 | 170 | 22.0 | 0.28 | 310 |
| 10190015 | 3 | 260 | 22.0 | .42 | 470 |
| 10190016 | 214 | 18,190 | 22.0 | 29.69 | 33,280 |
| 10190017 | 57 | 4,850 | 22.0 | 7.91 | 8,870 |
| 10190018 | 699 | 59,410 | 22.0 | 96.98 | 108,710 |
| Subregion 1019 total | 975 | 82,880 | 22.0 | 135.28 | 151,640 |

Table 16.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Active gravity systems, 1985 | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|
| | | | Season application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft[2/]) |
| | | PLATTE RIVER BASIN | | | |
| 10200101 | 5,235 | 345,810 | 10.5 | 274.55 | 307,770 |
| 10200102 | 2,732 | 166,920 | 10.5 | 132.52 | 148,560 |
| 10200103 | 5,827 | 318,560 | 10.5 | 252.90 | 283,500 |
| 10200201 | 1,206 | 100,620 | 12.0 | 89.76 | 100,620 |
| 10200202 | 697 | 43,070 | 12.0 | 38.42 | 43,070 |
| 10200203 | 486 | 36,950 | 12.0 | 32.96 | 36,950 |
| Subregion 1020 total | 16,183 | 1,011,930 | 11.0 | 821.11 | 920,470 |
| | | LOUP RIVER BASIN | | | |
| 10210001 | 10 | 860 | 20.0 | 1.28 | 1,430 |
| 10210002 | 5 | 430 | 20.0 | .64 | 720 |
| 10210003 | 416 | 35,450 | 13.5 | 35.10 | 39,350 |
| 10210004 | 459 | 39,260 | 13.5 | 38.87 | 43,570 |
| 10210005 | 359 | 30,510 | 13.5 | 30.22 | 33,880 |
| 10210006 | 24 | 2,040 | 20.0 | 3.04 | 3,410 |
| 10210007 | 435 | 36,970 | 13.5 | 36.61 | 41,040 |
| 10210008 | 0 | 0 | 0 | 0 | 0 |
| 10210009 | 1,024 | 87,030 | 13.5 | 86.17 | 96,600 |
| 10210010 | 381 | 32,380 | 13.5 | 32.07 | 35,950 |
| Subregion 1021 total | 3,113 | 264,930 | 13.5 | 264.00 | 295,950 |
| | | ELKHORN RIVER BASIN | | | |
| 10220001 | 265 | 22,520 | 13.5 | 22.50 | 25,220 |
| 10220002 | 121 | 10,290 | 13.5 | 10.28 | 11,520 |
| 10220003 | 1,000 | 82,530 | 13.5 | 82.46 | 92,440 |
| 10220004 | 239 | 21,410 | 13.5 | 21.41 | 24,000 |
| Subregion 1022 total | 1,625 | 136,750 | 13.5 | 136.65 | 153,180 |
| | | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 317 | 30,980 | 9.0 | 20.73 | 23,240 |
| 10230006 | 37 | 9,980 | 9.0 | 6.69 | 7,500 |
| Subregion 1023 total | 354 | 40,960 | 9.0 | 27.42 | 30,740 |
| | | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 25 | 2,120 | 12.0 | 1.90 | 2,130 |
| 10240005 | 4 | 340 | 12.0 | .30 | 340 |
| 10240006 | 39 | 3,320 | 12.0 | 2.96 | 3,320 |
| 10240007 | 1 | 130 | 12.0 | .12 | 130 |
| 10240008 | 85 | 7,240 | 12.0 | 6.46 | 7,240 |
| Subregion 1024 total | 154 | 13,150 | 12.0 | 11.74 | 13,160 |

Table 16.--Estimated groundwater withdrawal for irrigation by gravity distribution systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Active gravity systems, 1985 | Estimated acres irrigated | Groundwater use by gravity systems | | |
|---|---|---|---|---|---|
| | | | Season application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft[2/]) |
| | | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 0 | 0 | 0 | 0 | 0 |
| 10250002 | 42 | 3,540 | 10.5 | 2.75 | 3,080 |
| 10250003 | 0 | 0 | 0 | 0 | 0 |
| 10250004 | 711 | 60,920 | 16.5 | 75.17 | 84,270 |
| 10250005 | 427 | 48,180 | 20.0 | 71.95 | 80,660 |
| 10250006 | 115 | 19,040 | 17.5 | 24.45 | 27,410 |
| 10250007 | 81 | 7,520 | 17.0 | 9.40 | 10,540 |
| 10250008 | 169 | 16,660 | 17.0 | 20.81 | 23,330 |
| 10250009 | 1,154 | 101,280 | 17.0 | 126.48 | 141,780 |
| 10250011 | 152 | 12,920 | 12.0 | 11.52 | 12,910 |
| 10250014 | 240 | 20,400 | 12.0 | 18.19 | 20,390 |
| 10250015 | 31 | 2,640 | 12.0 | 2.36 | 2,650 |
| 10250016 | 1,433 | 121,800 | 12.0 | 108.64 | 121,780 |
| Subregion 1025 total | 4,555 | 414,900 | 15.5 | 471.72 | 528,800 |
| | | BLUE RIVER BASIN | | | |
| 10270201 | 2,757 | 234,330 | 8.5 | 146.33 | 164,040 |
| 10270202 | 741 | 62,990 | 11.0 | 51.69 | 57,940 |
| 10270203 | 3,859 | 328,020 | 8.5 | 204.83 | 229,610 |
| 10270204 | 791 | 67,240 | 11.0 | 55.19 | 61,870 |
| 10270205 | 1 | 80 | 8.5 | .05 | 60 |
| 10270206 | 3,553 | 302,010 | 8.5 | 188.59 | 211,410 |
| 10270207 | 132 | 11,230 | 8.5 | 7.00 | 7,850 |
| Subregion 1027 total | 11,834 | 1,005,900 | 8.5 | 653.68 | 732,780 |
| NEBRASKA TOTAL | 40,380 | 3,114,520 | 12.0 | 2,728.56 | 3,058,720 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 17.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska counties, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| County number | County name | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| 001 | Adams | 428 | 56,920 | 6.0 | 25.57 | 28,660 |
| 003 | Antelope | 1,327 | 176,480 | 9.5 | 125.36 | 140,530 |
| 005 | Arthur | 66 | 8,780 | 13.0 | 8.46 | 9,480 |
| 007 | Banner | 151 | 20,090 | 13.0 | 19.37 | 21,710 |
| 009 | Blaine | 70 | 9,320 | 12.5 | 8.72 | 9,780 |
| 011 | Boone | 531 | 70,620 | 8.5 | 44.62 | 50,020 |
| 013 | Box Butte | 715 | 92,950 | 15.0 | 103.65 | 116,190 |
| 015 | Boyd | 32 | 4,250 | 13.0 | 4.17 | 4,670 |
| 017 | Brown | 394 | 52,400 | 10.0 | 39.78 | 44,590 |
| 019 | Buffalo | 631 | 83,920 | 8.0 | 48.58 | 54,460 |
| 021 | Burt | 94 | 12,500 | 7.5 | 6.99 | 7,840 |
| 023 | Butler | 285 | 37,900 | 6.5 | 18.23 | 20,440 |
| 025 | Cass | 9 | 1,200 | 8.5 | .74 | 830 |
| 027 | Cedar | 251 | 33,380 | 9.0 | 22.13 | 24,810 |
| 029 | Chase | 1,005 | 140,920 | 14.0 | 148.33 | 166,280 |
| 031 | Cherry | 293 | 38,970 | 12.0 | 35.04 | 39,280 |
| 033 | Cheyenne | 231 | 30,720 | 14.5 | 33.03 | 37,030 |
| 035 | Clay | 400 | 53,200 | 6.0 | 24.40 | 27,350 |
| 037 | Colfax | 89 | 11,840 | 8.0 | 7.13 | 7,990 |
| 039 | Cuming | 99 | 13,170 | 9.5 | 9.52 | 10,670 |
| 041 | Custer | 722 | 95,220 | 8.5 | 59.75 | 66,980 |
| 043 | Dakota | 25 | 3,330 | 7.0 | 1.77 | 1,980 |
| 045 | Dawes | 46 | 6,120 | 15.0 | 6.83 | 7,660 |
| 047 | Dawson | 236 | 31,390 | 6.5 | 15.58 | 17,470 |
| 049 | Deuel | 67 | 8,900 | 15.0 | 9.91 | 11,110 |
| 051 | Dixon | 48 | 6,390 | 9.0 | 4.25 | 4,760 |
| 053 | Dodge | 165 | 21,940 | 9.0 | 14.64 | 16,410 |
| 055 | Douglas | 24 | 3,200 | 9.0 | 2.11 | 2,370 |
| 057 | Dundy | 744 | 110,110 | 16.5 | 134.56 | 150,840 |
| 059 | Fillmore | 721 | 95,890 | 7.5 | 53.95 | 60,480 |
| 061 | Franklin | 187 | 24,880 | 9.0 | 17.05 | 19,110 |
| 063 | Frontier | 92 | 12,230 | 11.0 | 9.94 | 11,140 |
| 065 | Furnas | 61 | 8,120 | 10.5 | 6.29 | 7,050 |
| 067 | Gage | 157 | 20,880 | 9.5 | 14.41 | 16,150 |
| 069 | Garden | 170 | 22,620 | 13.0 | 21.93 | 24,580 |

Table 17.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska counties, 1985--Continued

| County number | County name | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| 071 | Garfield | 86 | 11,430 | 9.0 | 7.80 | 8,740 |
| 073 | Gosper | 58 | 7,720 | 10.0 | 5.83 | 6,540 |
| 075 | Grant | 12 | 1,590 | 13.0 | 1.54 | 1,730 |
| 077 | Greeley | 294 | 39,110 | 8.5 | 25.12 | 28,160 |
| 079 | Hall | 216 | 28,720 | 6.5 | 14.06 | 15,760 |
| 081 | Hamilton | 612 | 81,380 | 6.0 | 36.45 | 40,860 |
| 083 | Harlan | 131 | 17,410 | 10.5 | 13.69 | 15,350 |
| 085 | Hayes | 168 | 22,350 | 12.0 | 20.20 | 22,650 |
| 087 | Hitchcock | 40 | 5,320 | 13.0 | 5.06 | 5,670 |
| 089 | Holt | 1,923 | 255,760 | 10.0 | 187.73 | 210,450 |
| 091 | Hooker | 20 | 2,660 | 13.0 | 2.56 | 2,870 |
| 093 | Howard | 253 | 33,650 | 9.5 | 20.42 | 22,890 |
| 095 | Jefferson | 214 | 28,460 | 8.0 | 17.18 | 19,260 |
| 097 | Johnson | 32 | 4,260 | 10.0 | 3.15 | 3,530 |
| 099 | Kearney | 414 | 55,070 | 6.5 | 27.14 | 30,420 |
| 101 | Keith | 282 | 37,510 | 14.0 | 39.29 | 44,040 |
| 103 | Keya Paha | 152 | 20,220 | 10.0 | 14.97 | 16,780 |
| 105 | Kimball | 154 | 20,490 | 15.0 | 22.80 | 25,560 |
| 107 | Knox | 254 | 33,790 | 9.0 | 22.22 | 24,910 |
| 109 | Lancaster | 57 | 7,580 | 8.5 | 4.78 | 5,360 |
| 111 | Lincoln | 900 | 119,690 | 11.5 | 101.52 | 113,800 |
| 113 | Logan | 109 | 14,500 | 9.0 | 9.66 | 10,830 |
| 115 | Loup | 50 | 6,650 | 12.5 | 6.11 | 6,850 |
| 117 | McPherson | 86 | 11,430 | 12.0 | 10.10 | 11,320 |
| 119 | Madison | 392 | 52,140 | 9.5 | 37.27 | 41,780 |
| 121 | Merrick | 281 | 37,370 | 7.0 | 19.22 | 21,550 |
| 123 | Morrill | 391 | 52,000 | 13.0 | 50.16 | 56,230 |
| 125 | Nance | 128 | 17,020 | 8.5 | 10.59 | 11,870 |
| 127 | Nemaha | 3 | 400 | 10.0 | .30 | 340 |
| 129 | Nuckolls | 92 | 12,240 | 7.0 | 6.24 | 7,000 |
| 131 | Otoe | 7 | 930 | 10.0 | .69 | 770 |
| 133 | Pawnee | 4 | 530 | 10.0 | .39 | 440 |
| 135 | Perkins | 821 | 109,190 | 13.0 | 104.22 | 116,830 |
| 137 | Phelps | 350 | 46,560 | 8.0 | 26.98 | 30,240 |
| 139 | Pierce | 670 | 89,100 | 9.5 | 64.06 | 71,810 |

Table 17.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska counties, 1985--Continued

| County number | County name | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots | | |
|---|---|---|---|---|---|---|
| | | | | Season application (in/acre)[1]/ | Average use rate (Mgal/d) | Annual volume (acre-ft)[2]/ |
| 141 | Platte | 406 | 54,000 | 8.0 | 32.78 | 36,750 |
| 143 | Polk | 245 | 32,580 | 6.0 | 15.05 | 16,870 |
| 145 | Red Willow | 74 | 9,840 | 11.0 | 8.22 | 9,210 |
| 147 | Richardson | 20 | 2,670 | 10.0 | 1.98 | 2,220 |
| 149 | Rock | 473 | 62,910 | 10.5 | 48.66 | 54,550 |
| 151 | Saline | 234 | 31,120 | 8.0 | 18.91 | 21,200 |
| 153 | Sarpy | 16 | 2,130 | 7.5 | 1.23 | 1,380 |
| 155 | Saunders | 188 | 25,000 | 7.5 | 13.83 | 15,500 |
| 157 | Scotts Bluff | 31 | 4,130 | 13.0 | 3.98 | 4,460 |
| 159 | Seward | 367 | 48,810 | 7.0 | 25.97 | 29,110 |
| 161 | Sheridan | 307 | 40,830 | 15.0 | 45.34 | 50,830 |
| 163 | Sherman | 301 | 40,040 | 8.5 | 25.71 | 28,820 |
| 165 | Sioux | 85 | 11,300 | 14.0 | 11.64 | 13,050 |
| 167 | Stanton | 96 | 12,770 | 9.5 | 9.23 | 10,350 |
| 169 | Thayer | 386 | 51,340 | 6.0 | 22.94 | 25,720 |
| 171 | Thomas | 24 | 3,190 | 13.0 | 3.08 | 3,450 |
| 173 | Thurston | 8 | 1,060 | 9.5 | .77 | 860 |
| 175 | Valley | 235 | 31,260 | 8.5 | 20.08 | 22,510 |
| 177 | Washington | 8 | 1,070 | 8.0 | .62 | 700 |
| 179 | Wayne | 98 | 13,040 | 9.5 | 9.42 | 10,560 |
| 181 | Webster | 166 | 22,080 | 9.5 | 15.21 | 17,050 |
| 183 | Wheeler | 457 | 60,780 | 8.5 | 39.04 | 43,760 |
| 185 | York | 498 | 66,240 | 6.0 | 29.54 | 33,110 |
| NEBRASKA TOTAL | | 24,945 | 3,333,170 | 10.0 | 2,449.52 | 2,745,910 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 18.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska hydrologic units and subregions, 1985
[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots: Season application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
|---|---|---|---|---|---|
| | | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 | 0 |
| | | WHITE RIVER BASIN | | | |
| 10140201 | 3 | 400 | 15.0 | 0.44 | 490 |
| 10140203 | 2 | 270 | 15.0 | .30 | 340 |
| Subregion 1014 total | 5 | 670 | 15.0 | 0.74 | 830 |
| | | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 10 | 1,330 | 10.0 | 0.98 | 1,100 |
| 10150002 | 45 | 5,960 | 15.0 | 6.65 | 7,450 |
| 10150003 | 1,118 | 146,570 | 15.0 | 163.45 | 183,230 |
| 10150004 | 762 | 101,330 | 10.0 | 75.04 | 84,120 |
| 10150005 | 6 | 800 | 15.0 | .89 | 1,000 |
| 10150006 | 153 | 20,350 | 10.5 | 16.11 | 18,060 |
| 10150007 | 1,406 | 186,990 | 10.0 | 138.44 | 155,190 |
| Subregion 1015 total | 3,500 | 463,330 | 11.5 | 401.56 | 450,150 |
| | | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 467 | 62,120 | 8.0 | 37.12 | 41,610 |
| Subregion 1017 total | 467 | 62,120 | 8.0 | 37.12 | 41,610 |
| | | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 576 | 76,610 | 13.0 | 73.71 | 82,630 |
| 10180012 | 2 | 270 | 13.0 | .26 | 290 |
| 10180013 | 227 | 30,190 | 13.0 | 29.09 | 32,610 |
| 10180014 | 220 | 29,270 | 13.0 | 28.20 | 31,610 |
| Subregion 1018 total | 1,025 | 136,340 | 13.0 | 131.26 | 147,140 |
| | | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 15 | 1,990 | 15.0 | 2.22 | 2,490 |
| 10190015 | 13 | 1,730 | 15.0 | 1.93 | 2,160 |
| 10190016 | 285 | 37,910 | 15.0 | 42.27 | 47,380 |
| 10190017 | 34 | 4,520 | 15.0 | 5.05 | 5,660 |
| 10190018 | 498 | 66,230 | 15.0 | 73.04 | 81,880 |
| Subregion 1019 total | 845 | 112,380 | 15.0 | 124.51 | 139,570 |

Table 18.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots: Season application (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
|---|---|---|---|---|---|
| | | PLATTE RIVER BASIN | | | |
| 10200101 | 1,052 | 139,920 | 6.5 | 68.65 | 76,960 |
| 10200102 | 252 | 32,710 | 6.5 | 16.05 | 17,990 |
| 10200103 | 596 | 79,260 | 6.5 | 38.89 | 43,600 |
| 10200201 | 371 | 49,330 | 7.5 | 27.29 | 30,590 |
| 10200202 | 96 | 12,770 | 7.5 | 7.06 | 7,910 |
| 10200203 | 207 | 27,530 | 7.5 | 15.23 | 17,070 |
| Subregion 1020 total | 2,574 | 341,520 | 7.0 | 173.17 | 194,120 |
| | | LOUP RIVER BASIN | | | |
| 10210001 | 37 | 4,920 | 13.0 | 4.75 | 5,330 |
| 10210002 | 70 | 9,300 | 13.0 | 8.98 | 10,070 |
| 10210003 | 437 | 58,130 | 8.5 | 37.33 | 41,850 |
| 10210004 | 683 | 90,840 | 8.5 | 58.33 | 65,390 |
| 10210005 | 422 | 56,130 | 8.5 | 36.05 | 40,410 |
| 10210006 | 150 | 19,960 | 13.0 | 19.24 | 21,570 |
| 10210007 | 345 | 45,890 | 8.5 | 29.47 | 33,040 |
| 10210008 | 157 | 20,890 | 13.0 | 20.13 | 22,560 |
| 10210009 | 959 | 127,550 | 8.5 | 81.93 | 91,850 |
| 10210010 | 462 | 61,440 | 8.5 | 39.45 | 44,220 |
| Subregion 1021 total | 3,722 | 495,050 | 9.0 | 335.66 | 376,290 |
| | | ELKHORN RIVER BASIN | | | |
| 10220001 | 2,084 | 277,170 | 9.5 | 198.99 | 223,070 |
| 10220002 | 969 | 128,880 | 9.5 | 93.13 | 104,400 |
| 10220003 | 502 | 66,770 | 9.5 | 48.24 | 54,080 |
| 10220004 | 268 | 35,640 | 9.5 | 25.75 | 28,870 |
| Subregion 1022 total | 3,823 | 508,460 | 9.5 | 366.11 | 410,420 |
| | | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 84 | 11,180 | 6.5 | 5.49 | 6,150 |
| 10230006 | 6 | 810 | 6.5 | .39 | 440 |
| Subregion 1023 total | 90 | 11,990 | 6.5 | 5.88 | 6,590 |
| | | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 5 | 670 | 10.0 | 0.50 | 560 |
| 10240005 | 2 | 270 | 10.0 | .20 | 220 |
| 10240006 | 28 | 3,720 | 10.0 | 2.76 | 3,090 |
| 10240007 | 2 | 270 | 10.0 | .20 | 220 |
| 10240008 | 63 | 8,380 | 10.0 | 6.20 | 6,950 |
| Subregion 1024 total | 100 | 13,310 | 10.0 | 9.86 | 11,040 |

Table 18.--Estimated groundwater withdrawal for irrigation by center-pivot distribution systems in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Active center-pivot systems, 1985 | Estimated acres irrigated | Groundwater used by center pivots | | |
|---|---|---|---|---|---|
| | | | Season application (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
| | | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 3 | 380 | 16.5 | 0.46 | 520 |
| 10250002 | 545 | 81,180 | 16.5 | 99.04 | 111,020 |
| 10250003 | 1 | 130 | 16.5 | .16 | 180 |
| 10250004 | 520 | 72,340 | 14.0 | 75.27 | 84,380 |
| 10250005 | 712 | 99,640 | 14.0 | 104.86 | 117,550 |
| 10250006 | 929 | 125,180 | 13.0 | 123.09 | 137,980 |
| 10250007 | 380 | 50,530 | 12.0 | 44.41 | 49,780 |
| 10250008 | 320 | 42,560 | 11.5 | 36.07 | 40,430 |
| 10250009 | 183 | 24,340 | 11.5 | 20.63 | 23,130 |
| 10250011 | 9 | 1,190 | 8.5 | .74 | 830 |
| 10250014 | 19 | 2,530 | 8.5 | 1.58 | 1,770 |
| 10250015 | 4 | 530 | 8.5 | .33 | 370 |
| 10250016 | 497 | 66,100 | 10.0 | 48.95 | 54,870 |
| Subregion 1025 total | 4,122 | 566,630 | 13.0 | 555.59 | 622,810 |
| | | BLUE RIVER BASIN | | | |
| 10270201 | 885 | 117,700 | 6.0 | 52.49 | 58,840 |
| 10270202 | 436 | 57,980 | 9.0 | 39.84 | 44,660 |
| 10270203 | 1,393 | 185,260 | 6.0 | 82.63 | 92,630 |
| 10270204 | 529 | 70,360 | 9.0 | 48.33 | 54,180 |
| 10270205 | 0 | 0 | 0 | 0 | 0 |
| 10270206 | 1,300 | 172,910 | 6.0 | 77.12 | 86,450 |
| 10270207 | 129 | 17,160 | 6.0 | 7.65 | 8,580 |
| Subregion 1027 total | 4,672 | 621,370 | 6.5 | 308.06 | 345,340 |
| NEBRASKA TOTAL | 24,945 | 3,333,170 | 10.0 | 2,449.52 | 2,745,910 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 19.--Surface water diverted for irrigation projects in Nebraska counties, 1985
[Mgal/d, million gallons per day; in/acre, inches per acre.]

| County number | County name | Acres irrigated | Acre-feet diverted to canals | Average diversion rate (Mgal/d) | Average annual diversion (in/acre)[1] | Acre-feet delivered to farm headgates | Average delivery rate to farm headgates (Mgal/d) | Average seasonal application (in/acre)[1] |
|---|---|---|---|---|---|---|---|---|
| 017 | Brown | 31,430 | 69,180 | 61.71 | 26.5 | 45,590 | 40.67 | 17.5 |
| 019 | Buffalo | 2,400 | 4,080 | 3.64 | 20.5 | 2,040 | 1.82 | 10.0 |
| 041 | Custer | 22,720 | 37,700 | 33.63 | 20.0 | 23,570 | 21.02 | 12.5 |
| 047 | Dawson | 58,470 | 98,490 | 87.86 | 20.0 | 54,170 | 48.32 | 11.0 |
| 061 | Franklin | 9,010 | 22,520 | 20.09 | 30.0 | 13,510 | 12.05 | 18.0 |
| 065 | Furnas | 16,510 | 23,940 | 21.36 | 30.0 | 17,960 | 16.02 | 13.0 |
| 071 | Garfield | 2,300 | 4,210 | 3.76 | 22.0 | 2,530 | 2.26 | 13.0 |
| 083 | Harlan | 5,420 | 9,760 | 8.71 | 21.5 | 6,340 | 5.66 | 14.0 |
| 087 | Hitchcock | 4,810 | 8,420 | 7.51 | 21.0 | 4,380 | 3.91 | 11.0 |
| 093 | Howard | 42,610 | 50,080 | 44.67 | 14.0 | 20,910 | 18.65 | 6.0 |
| 099 | Kearney | 23,940 | 42,850 | 38.22 | 21.5 | 23,570 | 21.03 | 12.0 |
| 101 | Keith | 11,800 | 42,200 | 37.64 | 43.0 | 21,510 | 19.19 | 22.0 |
| 111 | Lincoln | 40,670 | 103,510 | 92.34 | 30.5 | 67,290 | 60.03 | 20.0 |
| 115 | Loup | 2,690 | 5,380 | 4.80 | 24.0 | 3,500 | 3.12 | 15.5 |
| 123 | Morrill | 84,810 | 309,460 | 276.06 | 44.0 | 154,730 | 138.03 | 22.0 |
| 129 | Nuckolls | 6,800 | 17,000 | 15.17 | 30.0 | 10,200 | 9.10 | 18.0 |
| 137 | Phelps | 66,800 | 133,110 | 118.72 | 24.0 | 46,590 | 41.56 | 8.5 |
| 145 | Red Willow | 11,750 | 21,980 | 19.61 | 22.5 | 11,850 | 10.57 | 12.0 |
| 157 | Scotts Bluff | 218,230 | 818,360 | 730.03 | 45.0 | 368,260 | 328.51 | 20.0 |
| 161 | Sheridan | 10,830 | 15,300 | 13.65 | 17.0 | 6,940 | 6.19 | 7.5 |
| 163 | Sherman | 3,490 | 4,100 | 3.66 | 14.0 | 1,710 | 1.53 | 6.0 |
| 165 | Sioux | 25,000 | 112,500 | 100.36 | 54.0 | 45,000 | 40.14 | 21.5 |
| 175 | Valley | 22,380 | 28,000 | 24.98 | 15.0 | 21,000 | 18.73 | 11.5 |
| 181 | Webster | 6,440 | 16,100 | 14.36 | 30.0 | 9,660 | 8.62 | 18.0 |
| NEBRASKA TOTALS | | 731,310 | 1,998,230 | 1,782.54 | 33.0 | 982,810 | 876.73 | 16.0 |

[1]Rounded to nearest 0.5 inch.

Table 20.--Surface water diverted for irrigation projects in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; in/acre, inches per acre.]

| Hydrologic unit number | Acres irrigated | Acre-feet diverted to canals | Average diversion rate (Mgal/d) | Average annual diversion (in/acre)[1] | Acre-feet delivered to farm headgates | Average delivery rate to farm headgates (Mgal/d) | Average seasonal application (in/acre)[1] |
|---|---|---|---|---|---|---|---|
| NIOBRARA RIVER - PONCA CREEK BASIN | | | | | | | |
| 10150003 | 10,830 | 15,300 | 13.65 | 17.0 | 6,940 | 6.19 | 7.5 |
| 10150004 | 31,430 | 69,180 | 61.71 | 26.5 | 45,590 | 40.67 | 17.5 |
| Subregion 1015 total | 42,260 | 84,480 | 75.36 | 24.0 | 52,530 | 46.86 | 15.0 |
| NORTH PLATTE RIVER BASIN | | | | | | | |
| 10180009 | 323,530 | 1,223,860 | 1,091.75 | 45.5 | 559,760 | 499.34 | 21.0 |
| 10180013 | 4,510 | 16,460 | 14.68 | 44.0 | 8,230 | 7.34 | 22.0 |
| 10180014 | 34,240 | 96,490 | 86.08 | 34.0 | 61,900 | 55.22 | 21.5 |
| Subregion 1018 total | 362,280 | 1,336,810 | 1,192.51 | 44.5 | 629,890 | 561.90 | 21.0 |
| SOUTH PLATTE RIVER BASIN | | | | | | | |
| 10190018 | 9,300 | 33,950 | 30.29 | 44.0 | 16,970 | 15.14 | 22.0 |
| Subregion 1019 total | 9,300 | 33,950 | 30.29 | 44.0 | 16,970 | 15.14 | 22.0 |
| PLATTE RIVER BASIN | | | | | | | |
| 10200101 | 160,540 | 293,800 | 262.09 | 22.0 | 136,300 | 121.59 | 10.0 |
| Subregion 1020 total | 160,540 | 293,800 | 262.09 | 22.0 | 136,300 | 121.59 | 10.0 |
| LOUP RIVER BASIN | | | | | | | |
| 10210003 | 65,330 | 87,780 | 78.30 | 16.0 | 44,480 | 39.68 | 8.0 |
| 10210005 | 3,490 | 4,100 | 3.66 | 14.0 | 1,710 | 1.53 | 6.0 |
| 10210006 | 2,690 | 5,380 | 4.80 | 24.0 | 3,500 | 3.12 | 15.6 |
| 10210007 | 24,680 | 32,210 | 28.73 | 15.5 | 23,530 | 20.99 | 11.5 |
| Subregion 1021 total | 96,190 | 129,470 | 115.49 | 16.0 | 73,220 | 65.32 | 9.0 |
| REPUBLICAN RIVER BASIN | | | | | | | |
| 10250004 | 9,080 | 16,960 | 15.13 | 22.5 | 8,170 | 7.29 | 11.0 |
| 10250005 | 2,410 | 4,820 | 4.30 | 24.0 | 2,890 | 2.58 | 14.5 |
| 10250007 | 5,070 | 8,620 | 7.69 | 20.5 | 5,170 | 4.61 | 12.0 |
| 10250009 | 21,930 | 33,700 | 30.06 | 18.5 | 24,300 | 21.67 | 13.5 |
| 10250016 | 22,250 | 55,620 | 49.62 | 30.0 | 33,370 | 29.77 | 18.0 |
| Subregion 1025 total | 60,740 | 119,720 | 106.80 | 23.5 | 73,900 | 65.92 | 14.5 |
| NEBRASKA TOTAL | 731,310 | 1,998,230 | 1,782.54 | 33.0 | 982,810 | 876.73 | 16.0 |

[1] Rounded to nearest 0.5 inch.

Table 21.--Estimated use of surface water for irrigation in Nebraska counties, 1985
[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| County number | County name | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation | | |
|---|---|---|---|---|---|---|---|
| | | | | | Average seasonal withdrawal (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| 001 | Adams | 118 | 6,475 | 4,040 | 8.5 | 2.54 | 2,850 |
| 003 | Antelope | 45 | 2,994 | 2,260 | 13.0 | 2.17 | 2,440 |
| 005 | Arthur | 0 | 0 | 0 | 0 | 0 | 0 |
| 007 | Banner | 15 | 2,483 | 1,830 | 20.0 | 2.73 | 3,060 |
| 009 | Blaine | 12 | 14,992 | 520 | 18.0 | .69 | 770 |
| 011 | Boone | 87 | 6,849 | 3,890 | 13.5 | 3.84 | 4,310 |
| 013 | Box Butte | 16 | 6,457 | 3,420 | 22.0 | 5.59 | 6,270 |
| 015 | Boyd | 40 | 5,395 | 2,990 | 14.5 | 3.18 | 3,560 |
| 017 | Brown | 35 | 3,624 | 34,130 | 25.5 | 64.77 | 72,610 |
| 019 | Buffalo | 95 | 17,098 | 9,150 | 13.5 | 9.21 | 10,320 |
| 021 | Burt | 35 | 5,317 | 3,910 | 11.5 | 3.37 | 3,780 |
| 023 | Butler | 45 | 5,019 | 2,770 | 11.0 | 2.28 | 2,550 |
| 025 | Cass | 63 | 8,714 | 2,940 | 12.0 | 2.63 | 2,940 |
| 027 | Cedar | 62 | 8,546 | 4,280 | 11.0 | 3.58 | 4,010 |
| 029 | Chase | 14 | 1,688 | 860 | 20.5 | 1.32 | 1,470 |
| 031 | Cherry | 98 | 56,680 | 6,230 | 18.0 | 8.25 | 9,230 |
| 033 | Cheyenne | 28 | 2,461 | 1,260 | 22.0 | 2.06 | 2,310 |
| 035 | Clay | 148 | 12,931 | 6,530 | 8.5 | 4.09 | 4,580 |
| 037 | Colfax | 45 | 4,145 | 2,530 | 12.0 | 2.29 | 2,570 |
| 039 | Cuming | 32 | 4,415 | 1,850 | 13.5 | 1.85 | 2,070 |
| 041 | Custer | 125 | 95,451 | 29,680 | 18.5 | 40.54 | 45,450 |
| 043 | Dakota | 3 | 323 | 150 | 10.5 | .12 | 130 |
| 045 | Dawes | 173 | 34,496 | 17,030 | 14.5 | 18.39 | 20,620 |
| 047 | Dawson | 69 | 147,672 | 62,180 | 19.5 | 90.81 | 101,790 |
| 049 | Deuel | 13 | 13,524 | 640 | 22.0 | 1.04 | 1,170 |
| 051 | Dixon | 35 | 4,064 | 2,180 | 11.0 | 1.79 | 2,010 |
| 053 | Dodge | 77 | 8,456 | 4,640 | 12.5 | 4.26 | 4,780 |
| 055 | Douglas | 9 | 848 | 260 | 13.5 | .26 | 290 |
| 057 | Dundy | 25 | 3,697 | 2,680 | 13.0 | 2.63 | 2,950 |
| 059 | Fillmore | 128 | 10,706 | 5,530 | 9.5 | 4.00 | 4,480 |
| 061 | Franklin | 89 | 7,848 | 13,270 | 24.0 | 23.89 | 26,780 |
| 063 | Frontier | 41 | 2,877 | 1,710 | 17.0 | 2.13 | 2,390 |
| 065 | Furnas | 88 | 22,603 | 19,680 | 17.0 | 24.64 | 27,620 |
| 067 | Gage | 168 | 15,088 | 7,480 | 11.0 | 6.07 | 6,810 |
| 069 | Garden | 23 | 9,466 | 11,530 | 26.5 | 22.57 | 25,310 |
| 071 | Garfield | 35 | 13,157 | 2,890 | 20.5 | 4.37 | 4,900 |
| 073 | Gosper | 14 | 896 | 400 | 14.5 | .43 | 480 |
| 075 | Grant | 0 | 0 | 0 | 0 | 0 | 0 |
| 077 | Greeley | 40 | 3,117 | 1,880 | 18.5 | 2.57 | 2,870 |
| 079 | Hall | 32 | 3,213 | 1,480 | 10.0 | 1.10 | 1,250 |

Table 21.--Estimated use of surface water for irrigation in Nebraska counties, 1985--Continued

| County number | County name | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation | | |
|---|---|---|---|---|---|---|---|
| | | | | | Average seasonal withdrawal (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| 081 | Hamilton | 62 | 3,214 | 1,730 | 8.5 | 1.08 | 1,210 |
| 083 | Harlan | 88 | 18,349 | 8,470 | 19.0 | 11.89 | 13,330 |
| 085 | Hayes | 41 | 23,651 | 1,390 | 19.0 | 1.94 | 2,170 |
| 087 | Hitchcock | 31 | 18,748 | 6,560 | 18.0 | 8.79 | 9,860 |
| 089 | Holt | 114 | 23,356 | 9,900 | 14.5 | 10.71 | 12,000 |
| 091 | Hooker | 3 | 307 | 150 | 20.0 | .22 | 250 |
| 093 | Howard | 146 | 8,946 | 48,540 | 14.0 | 50.54 | 56,660 |
| 095 | Jefferson | 97 | 6,343 | 3,670 | 9.0 | 2.51 | 2,810 |
| 097 | Johnson | 59 | 6,104 | 1,840 | 12.0 | 1.64 | 1,840 |
| 099 | Kearney | 18 | 1,144 | 24,600 | 21.0 | 38.70 | 43,390 |
| 101 | Keith | 24 | 16,569 | 14,640 | 38.5 | 41.88 | 46,950 |
| 103 | Keya Paha | 64 | 7,197 | 3,710 | 14.5 | 4.03 | 4,530 |
| 105 | Kimball | 28 | 2,154 | 2,100 | 22.0 | 3.43 | 3,840 |
| 107 | Knox | 82 | 7,710 | 5,830 | 13.5 | 5.94 | 6,660 |
| 109 | Lancaster | 92 | 7,297 | 2,380 | 12.0 | 2.12 | 2,380 |
| 111 | Lincoln | 57 | 123,056 | 41,530 | 30.0 | 93.31 | 104,600 |
| 113 | Logan | 5 | 398 | 100 | 13.0 | .10 | 110 |
| 115 | Loup | 41 | 27,190 | 5,210 | 21.5 | 8.33 | 9,330 |
| 117 | McPherson | 0 | 0 | 0 | 0 | 0 | 0 |
| 119 | Madison | 56 | 4,094 | 2,580 | 13.5 | 2.58 | 2,890 |
| 121 | Merrick | 22 | 1,479 | 760 | 11.0 | .62 | 700 |
| 123 | Morrill | 67 | 77,731 | 86,240 | 43.5 | 278.18 | 311,850 |
| 125 | Nance | 218 | 22,186 | 19,350 | 13.0 | 18.95 | 21,240 |
| 127 | Nemaha | 41 | 5,513 | 2,270 | 12.0 | 2.02 | 2,270 |
| 129 | Nuckolls | 92 | 7,170 | 12,550 | 20.5 | 19.31 | 21,640 |
| 131 | Otoe | 96 | 11,718 | 6,600 | 12.0 | 5.89 | 6,600 |
| 133 | Pawnee | 19 | 2,751 | 2,450 | 12.0 | 2.18 | 2,450 |
| 135 | Perkins | 0 | 0 | 0 | 0 | 0 | 0 |
| 137 | Phelps | 32 | 1,938 | 67,900 | 24.0 | 120.18 | 134,710 |
| 139 | Pierce | 46 | 3,830 | 2,450 | 13.5 | 2.45 | 2,740 |
| 141 | Platte | 41 | 2,992 | 1,570 | 12.5 | 1.46 | 1,620 |
| 143 | Polk | 4 | 328 | 220 | 8.5 | .14 | 160 |
| 145 | Red Willow | 33 | 13,004 | 12,000 | 22.0 | 19.83 | 22,230 |
| 147 | Richardson | 59 | 10,322 | 2,350 | 12.0 | 2.10 | 2,350 |
| 149 | Rock | 24 | 2,920 | 1,530 | 14.5 | 1.68 | 1,880 |
| 151 | Saline | 174 | 10,761 | 7,090 | 10.5 | 5.60 | 6,280 |
| 153 | Sarpy | 17 | 1,451 | 340 | 12.0 | .30 | 340 |
| 155 | Saunders | 100 | 9,501 | 3,950 | 12.0 | 3.53 | 3,950 |
| 157 | Scotts Bluff | 61 | 174,698 | 221,200 | 44.5 | 734.45 | 823,320 |
| 159 | Seward | 234 | 15,915 | 10,850 | 9.5 | 7.80 | 8,740 |
| 161 | Sheridan | 54 | 4,070 | 12,840 | 17.5 | 16.92 | 18,980 |

Table 21.--Estimated use of surface water for irrigation in Nebraska counties, 1985--Continued

| County number | County name | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation | | |
|---|---|---|---|---|---|---|---|
| | | | | | Average seasonal withdrawal (in/acre)[1/] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2/] |
| 163 | Sherman | 61 | 3,642 | 5,010 | 14.0 | 5.16 | 5,790 |
| 165 | Sioux | 127 | 12,953 | 35,600 | 42.0 | 110.76 | 124,160 |
| 167 | Stanton | 18 | 1,497 | 1,220 | 13.5 | 1.22 | 1,370 |
| 169 | Thayer | 102 | 5,199 | 2,900 | 8.5 | 1.81 | 2,030 |
| 171 | Thomas | 8 | 447 | 190 | 20.0 | .28 | 320 |
| 173 | Thurston | 12 | 1,312 | 990 | 12.5 | .93 | 1,040 |
| 175 | Valley | 59 | 13,358 | 31,260 | 14.5 | 33.77 | 37,860 |
| 177 | Washington | 50 | 5,371 | 2,660 | 12.0 | 2.42 | 2,710 |
| 179 | Wayne | 14 | 1,383 | 920 | 13.5 | .92 | 1,030 |
| 181 | Webster | 65 | 11,745 | 9,150 | 24.5 | 16.78 | 18,810 |
| 183 | Wheeler | 8 | 661 | 180 | 13.5 | .18 | 200 |
| 185 | York | 93 | 4,158 | 2,250 | 8.5 | 1.40 | 1,580 |
| NEBRASKA TOTAL | | 5,379 | 1,321,616 | 1,032,450 | 27.0 | 2,087.01 | 2,339,540 |

1/ Rounded to nearest 0.5 in.
2/ Rounded to nearest 10 acre-ft.

Table 22.--Estimated use of surface water for irrigation in Nebraska hydrologic units and subregions, 1985

[In/acre, inch per acre; Mgal/d, million gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation | | |
|---|---|---|---|---|---|---|
| | | | | Average seasonal withdrawal (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| | | | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10120108 | 86 | 6,875 | 4,770 | 12.0 | 4.26 | 4,780 |
| Subregion 1012 total | 86 | 6,875 | 4,770 | 12.0 | 4.26 | 4,780 |
| | | | WHITE RIVER BASIN | | | |
| 10140201 | 169 | 21,043 | 13,720 | 12.5 | 12.99 | 14,560 |
| 10140203 | 1 | 42 | 40 | 21.0 | .07 | 80 |
| Subregion 1014 total | 170 | 21,085 | 13,760 | 13.0 | 13.06 | 14,640 |
| | | | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 18 | 2,353 | 1,410 | 14.5 | 1.53 | 1,720 |
| 10150002 | 44 | 7,580 | 7,260 | 16.0 | 8.58 | 9,620 |
| 10150003 | 84 | 24,353 | 18,840 | 19.0 | 26.72 | 29,950 |
| 10150004 | 139 | 30,757 | 42,120 | 23.5 | 73.36 | 82,230 |
| 10150005 | 14 | 41,458 | 1,200 | 22.0 | 1.96 | 2,190 |
| 10150006 | 60 | 6,731 | 2,880 | 14.0 | 3.13 | 3,510 |
| 10150007 | 148 | 16,819 | 12,620 | 14.5 | 13.73 | 15,400 |
| Subregion 1015 total | 507 | 130,051 | 86,330 | 20.0 | 129.01 | 144,620 |
| | | | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 113 | 12,535 | 7,520 | 10.5 | 5.97 | 6,690 |
| Subregion 1017 total | 113 | 12,535 | 7,520 | 10.5 | 5.97 | 6,690 |
| | | | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 113 | 257,431 | 338,520 | 44.5 | 1,119.47 | 1,254,930 |
| 10180012 | 8 | 725 | 880 | 20.0 | 1.31 | 1,470 |
| 10180013 | 43 | 6,753 | 6,910 | 35.5 | 18.26 | 20,470 |
| 10180014 | 48 | 77,694 | 37,350 | 32.5 | 90.70 | 101,680 |
| Subregion 1018 total | 212 | 342,603 | 383,660 | 43.0 | 1,229.74 | 1,378,550 |
| | | | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10190015 | 3 | 203 | 200 | 22.0 | .33 | 370 |
| 10190016 | 63 | 5,369 | 3,800 | 22.0 | 6.20 | 6,950 |
| 10190017 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10190018 | 7 | 12,783 | 9,440 | 43.5 | 30.51 | 34,210 |
| Subregion 1019 total | 73 | 18,355 | 13,440 | 37.0 | 37.04 | 41,530 |

Table 22.--Estimated use of surface water for irrigation in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation: Average seasonal withdrawal (in/acre)[1] | Surface water used for irrigation: Average use rate (Mgal/d) | Surface water used for irrigation: Annual volume (acre-ft)[2] |
|---|---|---|---|---|---|---|
| | | | PLATTE RIVER BASIN | | | |
| 10200101 | 162 | 223,953 | 171,530 | 21.0 | 270.82 | 303,590 |
| 10200102 | 22 | 1,849 | 1,090 | 10.5 | .87 | 970 |
| 10200103 | 48 | 3,429 | 2,280 | 10.5 | 1.82 | 2,040 |
| 10200201 | 89 | 8,142 | 4,960 | 12.0 | 4.42 | 4,960 |
| 10200202 | 36 | 3,943 | 1,470 | 12.0 | 1.32 | 1,470 |
| 10200203 | 199 | 17,820 | 6,370 | 12.0 | 5.69 | 6,370 |
| Subregion 1020 total | 556 | 259,136 | 187,700 | 20.5 | 284.94 | 319,400 |
| | | | LOUP RIVER BASIN | | | |
| 10210001 | 12 | 927 | 310 | 20.0 | 0.46 | 520 |
| 10210002 | 1 | 33 | 30 | 20.0 | .04 | 50 |
| 10210003 | 151 | 109,565 | 73,040 | 16.0 | 86.05 | 96,460 |
| 10210004 | 86 | 6,330 | 2,280 | 13.5 | 2.26 | 2,530 |
| 10210005 | 75 | 5,048 | 5,280 | 13.5 | 5.43 | 6,090 |
| 10210006 | 42 | 28,914 | 5,250 | 22.0 | 8.62 | 9,660 |
| 10210007 | 178 | 32,282 | 38,670 | 15.0 | 43.29 | 48,520 |
| 10210008 | 12 | 769 | 450 | 19.0 | .63 | 710 |
| 10210009 | 249 | 21,673 | 17,190 | 13.5 | 17.03 | 19,080 |
| 10210010 | 104 | 10,455 | 6,920 | 13.5 | 6.85 | 7,680 |
| Subregion 1021 total | 910 | 215,996 | 149,420 | 15.5 | 170.66 | 191,300 |
| | | | ELKHORN RIVER BASIN | | | |
| 10220001 | 83 | 6,037 | 3,540 | 13.5 | 3.54 | 3,970 |
| 10220002 | 52 | 4,154 | 2,610 | 13.5 | 2.61 | 2,920 |
| 10220003 | 165 | 19,816 | 10,920 | 13.0 | 10.55 | 11,820 |
| 10220004 | 96 | 10,375 | 5,800 | 13.5 | 5.80 | 6,500 |
| Subregion 1022 total | 396 | 40,383 | 22,870 | 13.0 | 22.50 | 25,210 |
| | | | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 30 | 3,303 | 2,200 | 9.0 | 1.47 | 1,650 |
| 10230006 | 14 | 949 | 380 | 9.0 | .25 | 290 |
| Subregion 1023 total | 44 | 4,252 | 2,580 | 9.0 | 1.72 | 1,940 |
| | | | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 63 | 8,400 | 3,100 | 12.0 | 2.77 | 3,100 |
| 10240005 | 3 | 477 | 150 | 12.0 | .13 | 150 |
| 10240006 | 125 | 14,972 | 7,550 | 12.0 | 6.74 | 7,550 |
| 10240007 | 30 | 3,967 | 1,410 | 12.0 | 1.26 | 1,410 |
| 10240008 | 107 | 15,732 | 5,840 | 12.0 | 5.20 | 5,840 |
| Subregion 1024 total | 328 | 43,548 | 18,050 | 12.0 | 16.10 | 18,050 |

Table 22.--Estimated use of surface water for irrigation in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Number of withdrawal permits | Acres registered for permits | Estimated acres irrigated in 1985 | Surface water used for irrigation | | |
|---|---|---|---|---|---|---|
| | | | | Average seasonal withdrawal (in/acre)[1] | Average use rate (Mgal/d) | Annual volume (acre-ft)[2] |
| | | | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10250002 | 15 | 2,812 | 2,520 | 13.0 | 2.47 | 2,770 |
| 10250003 | 0 | 0 | 0 | 0 | 0 | 0 |
| 10250004 | 45 | 25,451 | 10,440 | 20.5 | 15.93 | 17,860 |
| 10250005 | 35 | 24,780 | 4,490 | 22.0 | 7.27 | 8,140 |
| 10250006 | 10 | 572 | 170 | 20.5 | .26 | 290 |
| 10250007 | 32 | 6,445 | 5,660 | 20.0 | 8.41 | 9,440 |
| 10250008 | 53 | 3,261 | 1,770 | 17.0 | 2.21 | 2,480 |
| 10250009 | 85 | 22,178 | 24,910 | 18.0 | 33.78 | 37,870 |
| 10250011 | 41 | 3,718 | 2,050 | 12.0 | 1.83 | 2,050 |
| 10250014 | 23 | 2,207 | 1,050 | 12.0 | .93 | 1,050 |
| 10250015 | 10 | 693 | 300 | 12.0 | .27 | 300 |
| 10250016 | 217 | 36,661 | 32,040 | 24.5 | 58.85 | 65,970 |
| Subregion 1025 total | 566 | 128,778 | 85,400 | 21.0 | 132.21 | 148,220 |
| | | | BLUE RIVER BASIN | | | |
| 10270201 | 140 | 9,643 | 5,230 | 8.5 | 3.26 | 3,660 |
| 10270202 | 302 | 25,942 | 15,060 | 11.0 | 12.36 | 13,860 |
| 10270203 | 338 | 22,963 | 12,470 | 8.5 | 7.79 | 8,730 |
| 10270204 | 171 | 11,641 | 6,500 | 11.0 | 5.34 | 5,980 |
| 10270205 | 16 | 1,595 | 420 | 8.5 | .26 | 290 |
| 10270206 | 378 | 22,382 | 14,780 | 8.5 | 9.24 | 10,350 |
| 10270207 | 73 | 3,853 | 2,490 | 8.5 | 1.55 | 1,740 |
| Subregion 1027 total | 1,418 | 98,019 | 56,950 | 9.5 | 39.80 | 44,610 |
| NEBRASKA TOTAL | 5,379 | 1,321,616 | 1,032,450 | 27.0 | 2,087.01 | 2,339,540 |

Table 23.--Estimate of livestock water use in Nebraska counties, 1985
[Mgal/d, million gallons per day; acre-ft, acre-foot; annual volume rounded to nearest 10 acre-ft]

| County number | County name | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|---|
| | | Ground water | Surface water | Total | Ground water | Surface water | Total |
| 001 | Adams | 1.19 | 0.25 | 1.44 | 1,330 | 280 | 1,610 |
| 003 | Antelope | 1.62 | .27 | 1.89 | 1,820 | 300 | 2,120 |
| 005 | Arthur | .48 | .12 | .60 | 540 | 130 | 670 |
| 007 | Banner | .33 | .08 | .41 | 370 | 90 | 460 |
| 009 | Blaine | .57 | .12 | .69 | 640 | 130 | 770 |
| 011 | Boone | 1.39 | .23 | 1.62 | 1,560 | 260 | 1,820 |
| 013 | Box Butte | .88 | .21 | 1.09 | 990 | 230 | 1,220 |
| 015 | Boyd | .73 | .13 | .86 | 820 | 150 | 970 |
| 017 | Brown | 1.07 | .24 | 1.31 | 1,200 | 270 | 1,470 |
| 019 | Buffalo | 1.61 | .33 | 1.94 | 1,800 | 370 | 2,170 |
| 021 | Burt | 1.09 | .17 | 1.26 | 1,220 | 190 | 1,410 |
| 023 | Butler | .78 | .13 | .91 | 880 | 150 | 1,030 |
| 025 | Cass | .57 | .09 | .66 | 640 | 100 | 740 |
| 027 | Cedar | 1.86 | .24 | 2.10 | 2,080 | 270 | 2,350 |
| 029 | Chase | .85 | .18 | 1.03 | 950 | 200 | 1,150 |
| 031 | Cherry | 4.70 | 1.16 | 5.86 | 5,270 | 1,300 | 6,570 |
| 033 | Cheyenne | .81 | .17 | .98 | 910 | 190 | 1,100 |
| 035 | Clay | 1.87 | .22 | 2.09 | 2,100 | 240 | 2,340 |
| 037 | Colfax | 1.02 | .15 | 1.17 | 1,140 | 170 | 1,310 |
| 039 | Cuming | 3.24 | .53 | 3.77 | 3,630 | 600 | 4,230 |
| 041 | Custer | 3.07 | .68 | 3.75 | 3,440 | 760 | 4,200 |
| 043 | Dakota | .34 | .05 | .39 | 380 | 60 | 440 |
| 045 | Dawes | .74 | .17 | .91 | 830 | 190 | 1,020 |
| 047 | Dawson | 3.09 | .64 | 3.73 | 3,460 | 720 | 4,180 |
| 049 | Deuel | .27 | .06 | .33 | 300 | 70 | 370 |
| 051 | Dixon | 1.04 | .16 | 1.20 | 1,170 | 180 | 1,350 |
| 053 | Dodge | 1.32 | .19 | 1.51 | 1,480 | 210 | 1,690 |
| 055 | Douglas | .44 | .09 | .53 | 490 | 100 | 590 |
| 057 | Dundy | .96 | .21 | 1.17 | 1,080 | 230 | 1,310 |
| 059 | Fillmore | .96 | .14 | 1.10 | 1,080 | 160 | 1,240 |
| 061 | Franklin | .72 | .14 | .86 | 810 | 160 | 970 |
| 063 | Frontier | .81 | .17 | .98 | 910 | 190 | 1,100 |
| 065 | Furnas | .78 | .17 | .95 | 870 | 190 | 1,060 |
| 067 | Gage | 1.34 | .15 | 1.49 | 1,500 | 170 | 1,670 |
| 069 | Garden | 1.20 | .29 | 1.49 | 1,350 | 320 | 1,670 |

Table 23.--Estimate of livestock water use in Nebraska counties, 1985--Continued

| County number | County name | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|---|
| | | Ground water | Surface water | Total | Ground water | Surface water | Total |
| 071 | Garfield | 0.51 | 0.12 | 0.63 | 570 | 130 | 700 |
| 073 | Gosper | .54 | .11 | .65 | 610 | 120 | 730 |
| 075 | Grant | .67 | .16 | .83 | 750 | 180 | 930 |
| 077 | Greeley | .88 | .18 | 1.06 | 990 | 200 | 1,190 |
| 079 | Hall | 1.24 | .24 | 1.48 | 1,390 | 270 | 1,660 |
| 081 | Hamilton | .70 | .11 | .81 | 780 | 120 | 900 |
| 083 | Harlan | .72 | .15 | .87 | 810 | 170 | 980 |
| 085 | Hayes | .72 | .16 | .88 | 810 | 180 | 990 |
| 087 | Hitchcock | .65 | .13 | .78 | 730 | 150 | 880 |
| 089 | Holt | 3.62 | .64 | 4.26 | 4,060 | 720 | 4,780 |
| 091 | Hooker | .25 | .06 | .31 | 280 | 70 | 350 |
| 093 | Howard | 1.11 | .20 | 1.31 | 1,240 | 220 | 1,460 |
| 095 | Jefferson | .83 | .13 | .96 | 930 | 150 | 1,080 |
| 097 | Johnson | .52 | .08 | .60 | 580 | 90 | 670 |
| 099 | Kearney | .87 | .19 | 1.06 | 980 | 210 | 1,190 |
| 101 | Keith | .92 | .22 | 1.14 | 1,030 | 250 | 1,280 |
| 103 | Keya Paha | .75 | .16 | .91 | 840 | 180 | 1,020 |
| 105 | Kimball | .32 | .07 | .39 | 360 | 80 | 440 |
| 107 | Knox | 2.34 | .36 | 2.70 | 2,620 | 410 | 3,030 |
| 109 | Lancaster | .79 | .12 | .91 | 890 | 130 | 1,020 |
| 111 | Lincoln | 2.40 | .55 | 2.95 | 2,690 | 620 | 3,310 |
| 113 | Logan | .51 | .12 | .63 | 570 | 130 | 700 |
| 115 | Loup | .42 | .09 | .51 | 470 | 100 | 570 |
| 117 | McPherson | .54 | .13 | .67 | 600 | 150 | 750 |
| 119 | Madison | 1.15 | .18 | 1.33 | 1,290 | 200 | 1,490 |
| 121 | Merrick | .90 | .17 | 1.07 | 1,010 | 190 | 1,200 |
| 123 | Morrill | 1.02 | .24 | 1.26 | 1,140 | 270 | 1,410 |
| 125 | Nance | .64 | .12 | .76 | 720 | 130 | 850 |
| 127 | Nemaha | .54 | .07 | .61 | 600 | 80 | 680 |
| 129 | Nuckolls | .78 | .12 | .90 | 870 | 130 | 1,000 |
| 131 | Otoe | .74 | .10 | .84 | 830 | 110 | 940 |
| 133 | Pawnee | .54 | .08 | .62 | 600 | 90 | 690 |
| 135 | Perkins | .34 | .07 | .41 | 380 | 80 | 460 |
| 137 | Phelps | 1.18 | .24 | 1.42 | 1,320 | 270 | 1,590 |
| 139 | Pierce | 1.40 | .22 | 1.62 | 1,570 | 250 | 1,820 |

Table 23.--Estimate of livestock water use in Nebraska counties, 1985--Continued

| County number | County name | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|---|
| | | Ground water | Surface water | Total | Ground water | Surface water | Total |
| 141 | Platte | 1.48 | 0.18 | 1.66 | 1,660 | 200 | 1,860 |
| 143 | Polk | 1.24 | .24 | 1.48 | 1,390 | 270 | 1,660 |
| 145 | Red Willow | .89 | .19 | 1.08 | 1,000 | 210 | 1,210 |
| 147 | Richardson | .65 | .10 | .75 | 730 | 110 | 840 |
| 149 | Rock | .92 | .21 | 1.13 | 1,030 | 240 | 1,270 |
| 151 | Saline | .67 | .10 | .77 | 750 | 110 | 860 |
| 153 | Sarpy | .86 | .19 | 1.05 | 960 | 210 | 1,170 |
| 155 | Saunders | 1.48 | .27 | 1.75 | 1,660 | 300 | 1,960 |
| 157 | Scotts Bluff | 1.88 | .43 | 2.31 | 2,110 | 480 | 2,590 |
| 159 | Seward | 1.01 | .16 | 1.17 | 1,130 | 180 | 1,310 |
| 161 | Sheridan | 1.88 | .45 | 2.33 | 2,110 | 510 | 2,620 |
| 163 | Sherman | .84 | .16 | 1.00 | 940 | 180 | 1,120 |
| 166 | Sioux | 1.08 | .26 | 1.34 | 1,210 | 290 | 1,500 |
| 167 | Stanton | 1.21 | .21 | 1.42 | 1,360 | 240 | 1,600 |
| 169 | Thayer | .75 | .13 | .88 | 840 | 150 | 990 |
| 171 | Thomas | .33 | .08 | .41 | 370 | 90 | 460 |
| 173 | Thurston | .69 | .10 | .79 | 770 | 110 | 880 |
| 175 | Valley | 1.15 | .21 | 1.36 | 1,290 | 240 | 1,530 |
| 177 | Washington | .94 | .11 | 1.05 | 1,060 | 120 | 1,180 |
| 179 | Wayne | 1.18 | .19 | 1.37 | 1,320 | 210 | 1,530 |
| 181 | Webster | .76 | .16 | .92 | 850 | 180 | 1,030 |
| 183 | Wheeler | 2.03 | .49 | 2.52 | 2,280 | 550 | 2,830 |
| 185 | York | .89 | .13 | 1.02 | 1,000 | 150 | 1,150 |
| NEBRASKA TOTAL | | 100.60 | 19.17 | 119.77 | 112,770 | 21,490 | 134,260 |

Table 24.--Estimate of livestock water use in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; acre-ft, acre-foot; annual volume rounded to nearest 10 acre-ft]

| Hydrologic unit number | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|
| | Ground water | Surface water | Total | Ground water | Surface water | Total |
| | | | HAT CREEK BASIN | | | |
| 10120106 | 0.01 | 0 | 0.01 | 10 | 0 | 10 |
| 10120108 | .23 | .06 | .29 | 260 | 70 | 330 |
| Subregion 1012 total | 0.24 | 0.06 | 0.30 | 270 | 70 | 340 |
| | | | WHITE RIVER BASIN | | | |
| 10140201 | 0.96 | 0.22 | 1.18 | 1,080 | 250 | 1,330 |
| 10140203 | .02 | .01 | .03 | 20 | 10 | 30 |
| Subregion 1014 total | 0.98 | 0.23 | 1.21 | 1,100 | 260 | 1,360 |
| | | | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 0.53 | 0.09 | 0.62 | 590 | 100 | 690 |
| 10150002 | .49 | .11 | .60 | 550 | 120 | 670 |
| 10150003 | 3.05 | .74 | 3.79 | 3,420 | 830 | 4,250 |
| 10150004 | 2.87 | .65 | 3.52 | 3,220 | 730 | 3,950 |
| 10150005 | .69 | .17 | .86 | 770 | 190 | 960 |
| 10150006 | .67 | .14 | .81 | 750 | 160 | 910 |
| 10150007 | 2.47 | .42 | 2.89 | 2,770 | 470 | 3,240 |
| Subregion 1015 total | 10.77 | 2.32 | 13.09 | 12,070 | 2,600 | 14,670 |
| | | | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 3.75 | 0.54 | 4.29 | 4,200 | 610 | 4,810 |
| Subregion 1017 total | 3.75 | 0.54 | 4.29 | 4,200 | 610 | 4,810 |
| | | | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 3.60 | 0.85 | 4.45 | 4,040 | 950 | 4,990 |
| 10180012 | .27 | .06 | .33 | 300 | 70 | 370 |
| 10180013 | .62 | .14 | .76 | 690 | 160 | 850 |
| 10180014 | 1.71 | .40 | 2.11 | 1,920 | 450 | 2,370 |
| Subregion 1018 total | 6.20 | 1.45 | 7.65 | 6,950 | 1,630 | 8,580 |
| | | | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 0.07 | 0.01 | 0.08 | 80 | 10 | 90 |
| 10190015 | .03 | .01 | .04 | 30 | 10 | 40 |
| 10190016 | .60 | .13 | .73 | 670 | 150 | 820 |
| 10190017 | .26 | .06 | .32 | 290 | 70 | 360 |
| 10190018 | 1.01 | .23 | 1.24 | 1,130 | 260 | 1,390 |
| Subregion 1019 total | 1.97 | 0.44 | 2.41 | 2,200 | 500 | 2,700 |

Table 24.--Estimate of livestock water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|
| | Ground water | Surface water | Total | Ground water | Surface water | Total |
| **PLATTE RIVER BASIN** | | | | | | |
| 10200101 | 5.69 | 1.19 | 6.88 | 6,380 | 1,330 | 7,710 |
| 10200102 | 1.48 | .30 | 1.78 | 1,660 | 340 | 2,000 |
| 10200103 | 2.34 | .43 | 2.77 | 2,620 | 480 | 3,100 |
| 10200201 | 1.79 | .25 | 2.04 | 2,010 | 280 | 2,290 |
| 10200202 | 1.10 | .19 | 1.29 | 1,230 | 210 | 1,440 |
| 10200203 | 2.32 | .38 | 2.70 | 2,610 | 420 | 3,030 |
| Subregion 1020 total | 14.72 | 2.74 | 17.46 | 16,510 | 3,060 | 19,570 |
| **LOUP RIVER BASIN** | | | | | | |
| 10210001 | 1.27 | 0.30 | 1.57 | 1,420 | 340 | 1,760 |
| 10210002 | 1.27 | .31 | 1.58 | 1,420 | 350 | 1,770 |
| 10210003 | 2.11 | .43 | 2.54 | 2,370 | 480 | 2,850 |
| 10210004 | 2.12 | .47 | 2.59 | 2,380 | 530 | 2,910 |
| 10210005 | 1.27 | .27 | 1.54 | 1,420 | 300 | 1,720 |
| 10210006 | 1.70 | .41 | 2.11 | 1,910 | 460 | 2,370 |
| 10210007 | 1.61 | .30 | 1.91 | 1,810 | 330 | 2,140 |
| 10210008 | .94 | .21 | 1.15 | 1,050 | 240 | 1,290 |
| 10210009 | 3.01 | .58 | 3.59 | 3,380 | 640 | 4,020 |
| 10210010 | 2.19 | .46 | 2.65 | 2,450 | 520 | 2,970 |
| Subregion 1021 total | 17.49 | 3.74 | 21.23 | 19,610 | 4,190 | 23,800 |
| **ELKHORN RIVER BASIN** | | | | | | |
| 10220001 | 4.65 | 0.87 | 5.52 | 5,220 | 970 | 6,190 |
| 10220002 | 1.99 | .31 | 2.30 | 2,230 | 350 | 2,580 |
| 10220003 | 6.77 | 1.07 | 7.84 | 7,590 | 1,200 | 8,790 |
| 10220004 | 2.88 | .45 | 3.33 | 3,230 | 500 | 3,730 |
| Subregion 1022 total | 16.29 | 2.70 | 18.99 | 18,270 | 3,020 | 21,290 |
| **LOWER MISSOURI RIVER TRIBUTARIES** | | | | | | |
| 10230001 | 1.53 | 0.23 | 1.76 | 1,720 | 260 | 1,980 |
| 10230006 | 1.11 | .21 | 1.32 | 1,240 | 240 | 1,580 |
| Subregion 1023 total | 2.64 | 0.44 | 3.08 | 2,960 | 500 | 3,460 |
| **WEEPING WATER CREEK - NEMAHA RIVER BASIN** | | | | | | |
| 10240001 | 0.46 | 0.06 | 0.52 | 520 | 70 | 590 |
| 10240005 | .20 | .03 | .23 | 220 | 30 | 250 |
| 10240006 | 1.07 | .16 | 1.23 | 1,200 | 180 | 1,380 |
| 10240007 | .44 | .06 | .50 | 490 | 70 | 560 |
| 10240008 | 1.23 | .19 | 1.42 | 1,380 | 210 | 1,590 |
| Subregion 1024 total | 3.40 | 0.50 | 3.90 | 3,810 | 560 | 4,370 |

Table 24.--Estimate of livestock water use in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Water use in Mgal/d | | | Annual volume used in acre-ft | | |
|---|---|---|---|---|---|---|
| | Ground water | Surface water | Total | Ground water | Surface water | Total |
| | | | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 0.01 | 0 | 0.01 | 10 | 0 | 10 |
| 10250002 | .51 | .12 | .63 | 570 | 130 | 700 |
| 10250003 | .01 | 0 | .01 | 10 | 0 | 10 |
| 10250004 | 1.99 | .40 | 2.39 | 2,230 | 450 | 2,680 |
| 10250005 | .69 | .14 | .83 | 770 | 160 | 930 |
| 10250006 | .72 | .17 | .89 | 810 | 190 | 1,000 |
| 10250007 | .69 | .16 | .85 | 770 | 180 | 950 |
| 10250008 | .82 | .17 | .99 | 920 | 190 | 1,110 |
| 10250009 | 1.58 | .34 | 1.92 | 1,770 | 380 | 2,150 |
| 10250011 | .24 | .06 | .30 | 270 | 70 | 340 |
| 10250014 | .49 | .11 | .60 | 550 | 120 | 670 |
| 10250015 | .06 | .01 | .07 | 70 | 10 | 80 |
| 10250016 | 2.09 | .41 | 2.50 | 2,340 | 460 | 2,800 |
| Subregion 1025 total | 9.90 | 2.09 | 11.99 | 11,090 | 2,340 | 13,430 |
| | | | BLUE RIVER BASIN | | | |
| 10270201 | 1.88 | 0.32 | 2.20 | 2,110 | 360 | 2,470 |
| 10270202 | 1.93 | .26 | 2.19 | 2,160 | 290 | 2,450 |
| 10270203 | 2.55 | .38 | 2.93 | 2,860 | 430 | 3,290 |
| 10270204 | 1.04 | .15 | 1.19 | 1,170 | 170 | 1,340 |
| 10270205 | .20 | .02 | .22 | 220 | 20 | 240 |
| 10270206 | 4.00 | .69 | 4.69 | 4,480 | 770 | 5,250 |
| 10270207 | .65 | .10 | .75 | 730 | 110 | 840 |
| Subregion 1027 total | 12.25 | 1.92 | 14.17 | 13,730 | 2,150 | 15,880 |
| NEBRASKA TOTAL | 100.60 | 19.17 | 119.77 | 112,770 | 21,490 | 134,260 |

Table 25.--Power-generation water use in Nebraska counties, 1985

[GW, ground water; SW, surface water; Mgal/d, million gallons per day]

| County number | County name | Fossil fuel | | Nuclear | Hydro-electric | Total use for power |
|---|---|---|---|---|---|---|
| | | GW (Mgal/d) | SW (Mgal/d) | SW (Mgal/d) | SW (Mgal/d) | (Mgal/d) |
| 001 | Adams | 1.10 | 0 | 0 | 0 | 1.10 |
| 015 | Boyd | 0 | 0 | 0 | 767.20 | 767.20 |
| 019 | Buffalo | 0 | 0 | 0 | 62.80 | 62.80 |
| 031 | Cherry | 0 | 0 | 0 | 24.40 | 24.40 |
| 053 | Dodge | .60 | 0 | 0 | 0 | .60 |
| 055 | Douglas | 0 | 480.93 | 0 | 0 | 480.93 |
| 067 | Gage | 0 | 0 | 0 | 18.90 | 18.90 |
| 073 | Gosper | 0 | .24 | 0 | 1,397.80 | 1,398.04 |
| 077 | Greeley | 0 | 0 | 0 | 49.60 | 49.60 |
| 079 | Hall | 1.20 | 0 | 0 | 0 | 1.20 |
| 101 | Keith | 0 | 0 | 0 | 933.30 | 933.30 |
| 109 | Lancaster | 21.82 | 0 | 0 | 0 | 21.82 |
| 111 | Lincoln | 0 | 564.29 | 0 | 1,768.60 | 2,332.89 |
| 127 | Nemaha | 0 | 0 | 292.69 | 0 | 292.69 |
| 131 | Otoe | 0 | 348.23 | 0 | 0 | 348.23 |
| 141 | Platte | 0 | 0 | 0 | 2,056.45 | 2,056.45 |
| 177 | Washington | 0 | 0 | 500.84 | 0 | 500.84 |
| NEBRASKA TOTALS | | 24.72 | 1,393.69 | 793.53 | 7,079.05 | 9,290.99 |

Table 26.--Power-generation water use in Nebraska hydrologic units and subregions, 1985

[GW, ground water; SW, surface water; Mgal/d, million gallons per day]

| Hydrologic Unit number | Fossil fuel GW (Mgal/d) | Fossil fuel SW (Mgal/d) | Nuclear SW (Mgal/d) | Hydro-electric SW (Mgal/d) | Total use for power (Mgal/d) |
|---|---|---|---|---|---|
| NIOBRARA RIVER - PONCA CREEK BASIN | | | | | |
| 10150004 | 0 | 0 | 0 | 24.40 | 24.40 |
| 10150007 | 0 | 0 | 0 | 767.20 | 767.20 |
| Subregion 1015 total | 0 | 0 | 0 | 791.60 | 791.60 |
| NORTH PLATTE RIVER BASIN | | | | | |
| 10180014 | 0 | 0 | 0 | 933.30 | 933.30 |
| Subregion 1018 total | 0 | 0 | 0 | 933.30 | 933.30 |
| SOUTH PLATTE RIVER BASIN | | | | | |
| 10190018 | 0 | 564.29 | 0 | 744.30 | 1,308.59 |
| Subregion 1019 total | 0 | 564.29 | 0 | 744.30 | 1,308.59 |
| PLATTE RIVER BASIN | | | | | |
| 10200101 | 0 | 0.24 | 0 | 2,484.90 | 2,485.14 |
| 10200102 | 1.20 | 0 | 0 | 0 | 1.20 |
| 10200201 | 0 | 0 | 0 | 1,073.16 | 1,073.16 |
| 10200203 | 21.82 | 0 | 0 | 0 | 21.82 |
| Subregion 1020 total | 23.02 | 0.24 | 0 | 3,558.06 | 3,581.32 |
| LOUP RIVER BASIN | | | | | |
| 10210009 | 0 | 0 | 0 | 983.29 | 983.29 |
| 10210010 | 0 | 0 | 0 | 49.60 | 49.60 |
| Subregion 1021 total | 0 | 0 | 0 | 1,032.89 | 1,032.89 |
| ELKHORN RIVER BASIN | | | | | |
| 10220003 | 0.60 | 0 | 0 | 0 | 0.60 |
| Subregion 1022 total | 0.60 | 0 | 0 | 0 | 0.60 |
| LOWER MISSOURI RIVER TRIBUTARIES | | | | | |
| 10230006 | 0 | 480.93 | 500.84 | 0 | 981.77 |
| Subregion 1023 total | 0 | 480.93 | 500.84 | 0 | 981.77 |
| WEEPING WATER - NEMAHA RIVER BASIN | | | | | |
| 10240001 | 0 | 348.23 | 0 | 0 | 348.23 |
| 10240005 | 0 | 0 | 292.69 | 0 | 292.69 |
| Subregion 1024 total | 0 | 348.23 | 292.69 | 0 | 640.92 |
| BLUE RIVER BASIN | | | | | |
| 10270202 | 0 | 0 | 0 | 18.90 | 18.90 |
| 10270206 | 1.10 | 0 | 0 | 0 | 1.10 |
| Subregion 1027 total | 1.10 | 0 | 0 | 18.90 | 20.00 |
| NEBRASKA TOTAL | 24.72 | 1,393.69 | 793.53 | 7,079.05 | 9,290.99 |

Table 27.--Sewage effluent releases in Nebraska counties, 1985
[Mgal/d, million gallons per day; acre-ft, acre-foot]

| County number | County name | Number of sewage systems | | Municipal releases (Mgal/d) | Municipal releases (acre-ft)[1/] |
|---|---|---|---|---|---|
| | | Municipal | Other | | |
| 001 | Adams | 5 | 3 | 3.65 | 4,090 |
| 003 | Antelope | 7 | 0 | .40 | 450 |
| 005 | Arthur | 0 | 0 | 0 | 0 |
| 007 | Banner | 0 | 0 | 0 | 0 |
| 009 | Blaine | 1 | 0 | .02 | 20 |
| 011 | Boone | 5 | 0 | .29 | 330 |
| 013 | Box Butte | 2 | 1 | .96 | 1,080 |
| 015 | Boyd | 5 | 0 | .14 | 160 |
| 017 | Brown | 2 | 0 | .24 | 270 |
| 019 | Buffalo | 8 | 1 | 3.01 | 3,370 |
| 021 | Burt | 5 | 0 | .49 | 550 |
| 023 | Butler | 8 | 0 | .40 | 450 |
| 025 | Cass | 16 | 0 | 1.43 | 1,600 |
| 027 | Cedar | 9 | 0 | .48 | 540 |
| 029 | Chase | 2 | 0 | .30 | 340 |
| 031 | Cherry | 6 | 0 | .37 | 410 |
| 033 | Cheyenne | 5 | 0 | .71 | 800 |
| 035 | Clay | 9 | 0 | .57 | 640 |
| 037 | Colfax | 5 | 1 | .36 | 400 |
| 039 | Cuming | 4 | 1 | .70 | 780 |
| 041 | Custer | 10 | 1 | .79 | 890 |
| 043 | Dakota | 6 | 1 | 1.16 | 1,300 |
| 045 | Dawes | 3 | 0 | .81 | 910 |
| 047 | Dawson | 5 | 3 | 2.04 | 2,290 |
| 049 | Deuel | 2 | 0 | .14 | 160 |
| 051 | Dixon | 9 | 0 | .40 | 450 |
| 053 | Dodge | 8 | 1 | 4.30 | 4,820 |
| 055 | Douglas | 8 | 3 | 72.02 | 80,730 |
| 057 | Dundy | 2 | 0 | .13 | 150 |
| 059 | Fillmore | 7 | 0 | .46 | 520 |
| 061 | Franklin | 7 | 0 | .24 | 270 |
| 063 | Frontier | 5 | 0 | .24 | 270 |
| 065 | Furnas | 7 | 0 | .48 | 540 |
| 067 | Gage | 11 | 1 | 2.16 | 2,420 |
| 069 | Garden | 2 | 0 | .18 | 200 |

Table 27.--Sewage effluent releases in Nebraska counties, 1985--Continued

| County number | County name | Number of sewage systems | | Municipal releases (Mgal/d) | Municipal releases (acre-ft)[1/] |
|---|---|---|---|---|---|
| | | Municipal | Other | | |
| 071 | Garfield | 1 | 0 | 0.19 | 210 |
| 073 | Gosper | 2 | 0 | .07 | 80 |
| 075 | Grant | 1 | 0 | .03 | 30 |
| 077 | Greeley | 4 | 0 | .16 | 180 |
| 079 | Hall | 5 | 1 | 9.48 | 10,630 |
| 081 | Hamilton | 6 | 0 | .49 | 550 |
| 083 | Harlan | 5 | 0 | .22 | 250 |
| 085 | Hayes | 1 | 0 | .02 | 20 |
| 087 | Hitchcock | 4 | 0 | .26 | 290 |
| 089 | Holt | 6 | 0 | .82 | 920 |
| 091 | Hooker | 1 | 0 | .06 | 70 |
| 093 | Howard | 5 | 0 | .21 | 240 |
| 095 | Jefferson | 9 | 0 | .75 | 840 |
| 097 | Johnson | 5 | 0 | .67 | 750 |
| 099 | Kearney | 3 | 1 | .20 | 220 |
| 101 | Keith | 3 | 0 | .83 | 930 |
| 103 | Keya Paha | 1 | 0 | .03 | 30 |
| 105 | Kimball | 3 | 0 | .36 | 400 |
| 107 | Knox | 11 | 0 | .57 | 640 |
| 109 | Lancaster | 17 | 7 | 24.31 | 27,250 |
| 111 | Lincoln | 7 | 1 | 2.49 | 2,790 |
| 113 | Logan | 1 | 0 | .03 | 30 |
| 115 | Loup | 0 | 0 | 0 | 0 |
| 117 | McPherson | 0 | 0 | 0 | 0 |
| 119 | Madison | 7 | 3 | 3.81 | 4,270 |
| 121 | Merrick | 5 | 0 | .70 | 780 |
| 123 | Morrill | 3 | 0 | .32 | 360 |
| 125 | Nance | 3 | 0 | .19 | 200 |
| 127 | Nemaha | 7 | 0 | .51 | 570 |
| 129 | Nuckolls | 5 | 1 | .45 | 500 |
| 131 | Otoe | 9 | 0 | 1.23 | 1,380 |
| 133 | Pawnee | 6 | 0 | .40 | 450 |
| 135 | Perkins | 4 | 0 | .16 | 180 |
| 137 | Phelps | 5 | 0 | .81 | 910 |
| 139 | Pierce | 4 | 0 | .52 | 580 |

Table 27.--Sewage effluent releases in Nebraska counties, 1985--Continued

| County number | County name | Number of sewage systems | | Municipal releases (Mgal/d) | Municipal releases (acre-ft)[1/] |
|---|---|---|---|---|---|
| | | Municipal | Other | | |
| 141 | Platte | 7 | 2 | 2.44 | 2,740 |
| 143 | Polk | 4 | 0 | .31 | 350 |
| 145 | Red Willow | 5 | 0 | 1.31 | 1,470 |
| 147 | Richardson | 8 | 0 | .75 | 840 |
| 149 | Rock | 2 | 0 | .10 | 110 |
| 151 | Saline | 8 | 1 | 1.07 | 1,200 |
| 153 | Sarpy | 6 | 0 | 2.93 | 3,280 |
| 155 | Saunders | 13 | 0 | .98 | 1,100 |
| 157 | Scotts Bluff | 8 | 1 | 2.98 | 3,340 |
| 159 | Seward | 10 | 0 | .90 | 1,010 |
| 161 | Sheridan | 3 | 0 | .39 | 440 |
| 163 | Sherman | 3 | 0 | .30 | 340 |
| 165 | Sioux | 1 | 0 | .03 | 30 |
| 167 | Stanton | 2 | 0 | .17 | 190 |
| 169 | Thayer | 10 | 0 | .38 | 430 |
| 171 | Thomas | 1 | 0 | .03 | 30 |
| 173 | Thurston | 5 | 0 | .46 | 520 |
| 175 | Valley | 3 | 0 | .32 | 360 |
| 177 | Washington | 5 | 0 | 1.12 | 1,260 |
| 179 | Wayne | 5 | 0 | .37 | 410 |
| 181 | Webster | 4 | 0 | .25 | 280 |
| 183 | Wheeler | 2 | 0 | .02 | 20 |
| 185 | York | 7 | 0 | .93 | 1,040 |
| NEBRASKA TOTAL | | 477 | 35 | 169.96 | 190,520 |

1/ Rounded to nearest 10 acre-ft.

Table 28.--Sewage effluent releases in Nebraska hydrologic units and subregions, 1985

[Mgal/d, million gallons per day; acre-ft, acre-foot]

| Hydrologic unit number | Number of sewage systems | | Municipal releases | |
|---|---|---|---|---|
| | Municipal | Other | Mgal/d | acre-ft[1/] |
| | HAT CREEK BASIN | | | |
| 10120106 | 0 | 0 | 0 | 0 |
| 10120108 | 0 | 0 | 0 | 0 |
| Subregion 1012 total | 0 | 0 | 0 | 0 |
| | WHITE RIVER BASIN | | | |
| 10140201 | 3 | 0 | 0.81 | 910 |
| 10140203 | 0 | 0 | 0 | 0 |
| Subregion 1014 total | 3 | 0 | 0.81 | 910 |
| | NIOBRARA RIVER - PONCA CREEK BASIN | | | |
| 10150001 | 5 | 0 | 0.14 | 160 |
| 10150002 | 1 | 0 | .03 | 30 |
| 10150003 | 6 | 1 | 1.36 | 1,530 |
| 10150004 | 7 | 0 | .60 | 670 |
| 10150005 | 0 | 0 | 0 | 0 |
| 10150006 | 2 | 0 | .04 | 40 |
| 10150007 | 3 | 0 | .12 | 130 |
| Subregion 1015 total | 24 | 1 | 2.29 | 2,560 |
| | UPPER MISSOURI RIVER TRIBUTARIES | | | |
| 10170101 | 20 | 0 | 0.99 | 1,110 |
| Subregion 1017 total | 20 | 0 | 0.99 | 1,110 |
| | NORTH PLATTE RIVER BASIN | | | |
| 10180009 | 14 | 1 | 3.49 | 3,910 |
| 10180012 | 1 | 0 | .04 | 40 |
| 10180013 | 0 | 0 | 0 | 0 |
| 10180014 | 1 | 1 | 2.21 | 2,480 |
| Subregion 1018 total | 16 | 2 | 5.74 | 6,430 |
| | SOUTH PLATTE RIVER BASIN | | | |
| 10190012 | 0 | 0 | 0 | 0 |
| 10190015 | 1 | 0 | .02 | 20 |
| 10190016 | 6 | 0 | 1.10 | 1,230 |
| 10190017 | 0 | 0 | 0 | 0 |
| 10190018 | 6 | 0 | 1.04 | 1,170 |
| Subregion 1019 total | 13 | 0 | 2.16 | 2,420 |

Table 28.--Sewage effluent releases in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Number of sewage systems | | Municipal releases | |
|---|---|---|---|---|
| | Municipal | Other | Mgal/d | acre-ft[1/] |
| | PLATTE RIVER BASIN | | | |
| 10200101 | 16 | 4 | 4.61 | 5,170 |
| 10200102 | 8 | 1 | 10.06 | 11,280 |
| 10200103 | 7 | 0 | .81 | 910 |
| 10200201 | 9 | 3 | 2.60 | 2,910 |
| 10200202 | 8 | 1 | .92 | 1,030 |
| 10200203 | 32 | 7 | 25.27 | 28,330 |
| Subregion 1020 total | 80 | 16 | 44.27 | 49,630 |
| | LOUP RIVER BASIN | | | |
| 10210001 | 3 | 0 | 0.12 | 130 |
| 10210002 | 1 | 0 | .02 | 20 |
| 10210003 | 10 | 1 | .63 | 710 |
| 10210004 | 4 | 0 | .17 | 190 |
| 10210005 | 6 | 0 | .67 | 750 |
| 10210006 | 0 | 0 | 0 | 0 |
| 10210007 | 5 | 0 | .51 | 570 |
| 10210008 | 0 | 0 | 0 | 0 |
| 10210009 | 10 | 0 | .58 | 650 |
| 10210010 | 5 | 0 | .13 | 150 |
| Subregion 1021 total | 44 | 1 | 2.83 | 3,170 |
| | ELKHORN RIVER BASIN | | | |
| 10220001 | 15 | 0 | 1.53 | 1,720 |
| 10220002 | 9 | 3 | 3.87 | 4,340 |
| 10220003 | 20 | 2 | 5.52 | 6,190 |
| 10220004 | 19 | 0 | 1.33 | 1,490 |
| Subregion 1022 total | 63 | 5 | 12.25 | 13,740 |
| | LOWER MISSOURI RIVER TRIBUTARIES | | | |
| 10230001 | 10 | 1 | 2.42 | 2,710 |
| 10230006 | 10 | 2 | 74.36 | 83,360 |
| Subregion 1023 total | 20 | 3 | 76.78 | 86,070 |
| | WEEPING WATER CREEK - NEMAHA RIVER BASIN | | | |
| 10240001 | 12 | 0 | 2.16 | 2,420 |
| 10240005 | 3 | 0 | .12 | 130 |
| 10240006 | 16 | 0 | .89 | 1,000 |
| 10240007 | 5 | 0 | .38 | 430 |
| 10240008 | 13 | 0 | 1.45 | 1,630 |
| Subregion 1024 total | 49 | 0 | 5.00 | 5,610 |

Table 28.--Sewage effluent releases in Nebraska hydrologic units and subregions, 1985--Continued

| Hydrologic unit number | Number of sewage systems | | Municipal releases | |
|---|---|---|---|---|
| | Municipal | Other | Mgal/d | acre-ft[1/] |
| | REPUBLICAN RIVER BASIN | | | |
| 10250001 | 1 | 0 | 0.02 | 20 |
| 10250002 | 0 | 0 | 0 | 0 |
| 10250003 | 1 | 0 | .11 | 120 |
| 10250004 | 7 | 0 | 1.53 | 1,720 |
| 10250005 | 3 | 0 | .34 | 380 |
| 10250006 | 4 | 0 | .16 | 180 |
| 10250007 | 1 | 0 | .03 | 30 |
| 10250008 | 6 | 0 | .37 | 420 |
| 10250009 | 8 | 0 | .51 | 570 |
| 10250011 | 1 | 0 | .02 | 20 |
| 10250014 | 4 | 0 | .11 | 120 |
| 10250015 | 0 | 0 | 0 | 0 |
| 10250016 | 14 | 1 | 1.31 | 1,470 |
| Subregion 1025 total | 50 | 1 | 4.51 | 5,050 |
| | BLUE RIVER BASIN | | | |
| 10270201 | 14 | 0 | 1.10 | 1,230 |
| 10270202 | 23 | 2 | 3.83 | 4,300 |
| 10270203 | 16 | 2 | 1.64 | 1,840 |
| 10270204 | 6 | 0 | .34 | 380 |
| 10270205 | 2 | 0 | .02 | 20 |
| 10270206 | 25 | 2 | 4.66 | 5,220 |
| 10270207 | 9 | 0 | .74 | 830 |
| Subregion 1027 total | 95 | 6 | 12.33 | 13,820 |
| NEBRASKA TOTAL | 477 | 35 | 169.96 | 190,520 |

1/ Rounded to nearest 10 acre-ft.