Technical Series 3

January 1992 Kansas Water Levels and Data Related to Water-level Changes

James E. Mitchell, John Woods, Thomas J. McClain, and Robert W. Buddemeier

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Errata

Figures 9A and 9C, 10A and 10C, 11A and 11C, and 12A and 12C were inadvertently exchanged. The following corrections to the table of contents and figure captions correct this problem.

Changes to the table of contents:

9A—Map of annual change in water level in Region I 7
9B—Map of percent change in predevelopment saturated thickness for Region I 7
9C—Generalized predevelopment to present change in water-level map for Region I 8
10A—Map of annual change in water level in Region II 8
10B—Map of percent change in predevelopment saturated thickness for Region II 9
10C—Generalized predevelopment to present change in water-level map for Region II 9
11A—Map of annual change in water level in Region III 10
11B—Map of percent change in predevelopment saturated thickness for Region III 11
11C—Generalized predevelopment to present change in water-level map for Region III 11
12A—Map of annual change in water level in Region V 12
12B—Map of percent change in predevelopment saturated thickness for Region V 13
12C—Generalized predevelopment to present change in water-level map for Region V 14

Changes to figure captions:

FIGURE 9A—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION I, SOUTHWEST KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

FIGURE 9C—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION I, SOUTHWEST KANSAS. Values of the contours are the observed changes in water level in feet.

FIGURE 10A—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION II, WEST-CENTRAL KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

FIGURE 10C—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION II, WEST-CENTRAL KANSAS. Values of the contours are the observed changes in water level in feet.

FIGURE 11A—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION III, NORTHWEST KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

FIGURE 11C—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION III, NORTHWEST KANSAS. Values of the contours are the observed changes in water level in feet.

FIGURE 12A—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION V, SOUTH-CENTRAL KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

FIGURE 12C—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION V, SOUTH-CENTRAL KANSAS. Values of the contours are the observed changes in water level in feet.

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Introduction

This report summarizes hydrologic data from the cooperative program of ground-water-level measurements in Kansas. This program is carried out jointly by the Kansas Geological Survey, the Division of Water Resources (Kansas Board of Agriculture), and the U.S. Geological Survey and involves water-level measurements on a network of approximately 1,500 monitoring wells. A compilation of water-resources data is published annually on a water-year basis by the U.S. Geological Survey (see, for example, Geiger et al., 1992, for a report of the October 1990–September 1991 water year). This Kansas Geological Survey report serves to present the annual water-level data in a more timely fashion and in the context of both recent and long-term water-level changes to provide information on the water resources of the state. As the opportunity arises, additional water-level measurements are added to the data base, but well measurements by other agencies are not necessarily included in this report. Wells which are not measured for six consecutive years or wells that are taken out of service are eliminated from this report.

Appendix A is a list of publications containing ground-water-level data for Kansas. The data tables of Appendix B contain the primary information on well locations and characteristics, past and present water-level measurements, other information on water resources, trends in the measurements, and the amounts and types of information available for each well. To make this information more understandable, in the text that follows we provide some basic definitions and descriptions of the occurrence of ground water in Kansas, material on the relationship between precipitation and ground water, and maps summarizing the long- and short-term changes in water level in selected areas of the state.

Data-collection Program

Most of the wells in the program are measured annually, some are measured quarterly, and a few are equipped with continuous recorders. For continuous-record wells, specific depth values are picked from the record at intervals (typically monthly) and entered into the data base. Because many of the wells are irrigation wells or are in areas of major irrigation pumpage, the annual measurement program is timed for mid-winter to maximize the recovery of water levels from seasonal pumping. The nominal time of measurement is January, but for logistic reasons some of the wells are measured in December of the preceding year. For some of the quarterly measured wells, the measurements reported are for March. Because of this, the 1992 water-level report presents data collected before the 1992 irrigation season and includes measurements taken over the period December to March.

Ideally, the data should provide a snapshot of regional water levels undisturbed by pumping or other factors. In practice, it is physically impossible to measure all wells at exactly the same time. In addition, recovery of local water levels from pumping depends on the schedule and amount of irrigation during the preceding season. Because irrigation varies from year to year, successive measurements at the same time of year may represent differing degrees of water-table recovery. Other factors can also influence the apparent water levels, for example, the effects of barometric-pressure changes or the method of measurement. Thus an apparent change in water level for a particular well during a one-year period may reflect temporary deviations from the fully equilibrated water-table condition, and because of these uncertainties, any assessment of trends should be based on a comparison of changes that occur over a period of several years or that emerge as a consistent pattern across a number of wells.

Aquifers and Ground-water Occurrence

Rock or sediment formations that have a sufficiently large number of interconnected pores to contain usable amounts of extractable water are called aquifers. In Kansas most of the major aquifers occur in the western and south-central portions of the state. Because these are areas of relatively low rainfall, ground water is extensively used. Fewer ground-water resources are found in eastern Kansas, and surface water is used for most water supplies.

Aquifers can be identified in various ways. In this report the data tables (Appendix B) contain the geologic definition for the aquifer unit, which identifies the type and often the age of the formation. Aquifers are more commonly known by popular or geographic names. For example, the major Kansas aquifer system is known as the High Plains aquifer, which is composed of the Ogallala Formation in western Kansas and the Great Bend Prairie and Equus Beds alluvial (streambed) deposits in south-central Kansas. Throughout Kansas stream and river systems flow over alluvial deposits that may be locally important sources of ground water; however, these deposits are often so closely connected to the surface-water flows that in some cases the ground water should probably be treated as part of the river.

Water enters the aquifer through the process of recharge, the percolation of water through the soil zone from rainfall or water bodies at the Earth's surface. This process may take years or decades in the case of deep aquifers (such as much of the Ogallala), but shallow water tables in permeable sediments may respond promptly to rainfall or streamflow (for example, many alluvial aquifers). If ground water is pumped from an aquifer faster than the natural recharge process, the elevation of the water table will decline. Hydrographs are plots of the water level in a given well as a function of time; they can be used to portray both long-term changes in ground-water resources and short-term fluctuations resulting from recharge or withdrawal. The next section presents several representative well hydrographs and local rainfall records for various aquifers and geographic regions.

This report divides the state into eight ground-water regions (fig. 1). Regional maps depict ground-water-level changes in the major aquifers of the central and western part of the state. Regions I, II, and III cover the Ogallala aquifer and coincide approximately with the areas of Groundwater Management Districts 3, 1, and 4, respectively. Region V covers the Great Bend Prairie and Equus Beds aquifers, which are roughly coincident with Groundwater Management Districts 5 and 2, respectively. Maps are not included for the remaining four regions because they contain fewer wells and no laterally extensive major aquifers.

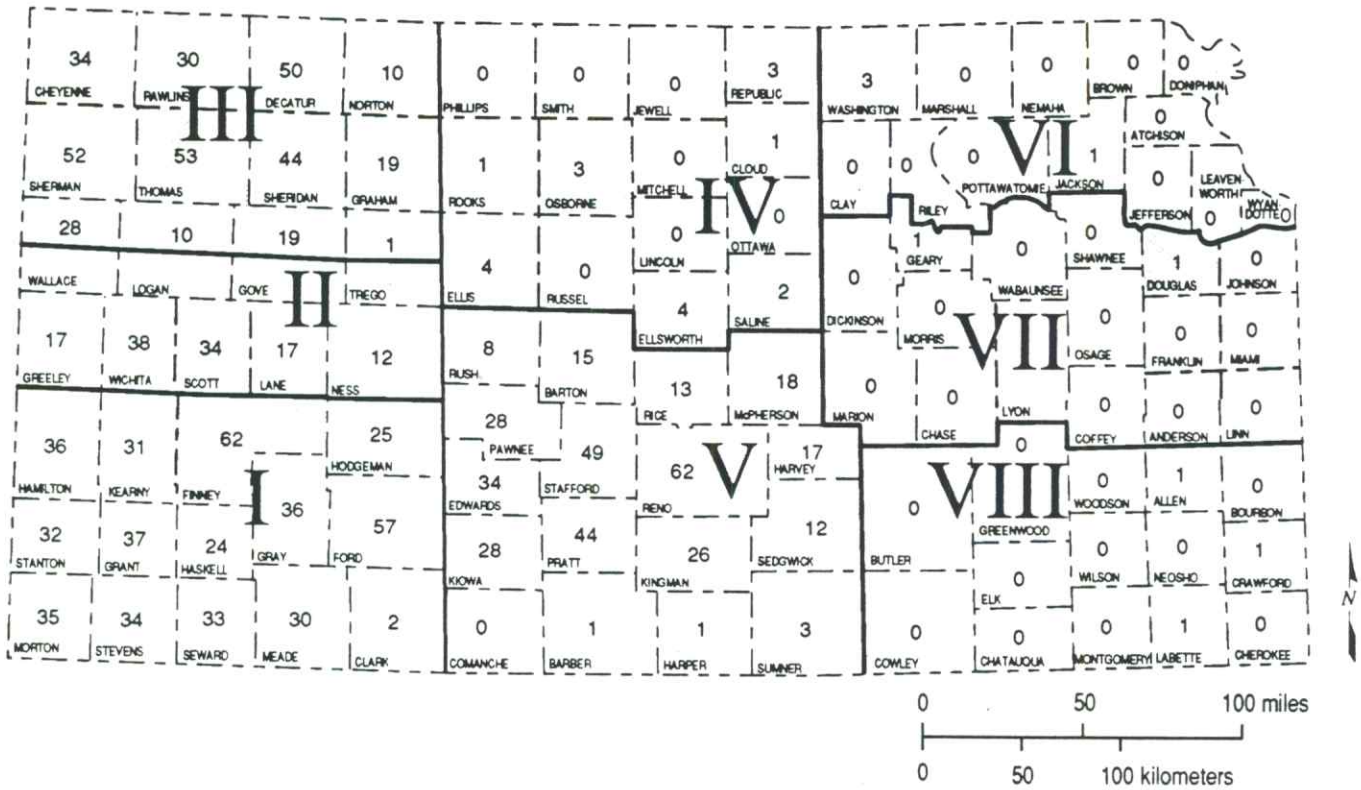


FIGURE 1—NUMBER OF GROUND-WATER-LEVEL OBSERVATION WELLS MEASURED IN 1992 IN EACH COUNTY. Shaded counties are those for which precipitation and well hydrograph plots are presented in the text. The total number of wells tabulated in Appendix B may be greater than the number measured in a single year.

Hydrographs and Precipitation Graphs

The rate of recharge to the ground-water reservoir varies with the amount and pattern of precipitation, surface runoff, streamflow, and evaporation. It also varies with the permeability of the soil and other earth materials through which the water must percolate to reach the zone of saturation. The rate of infiltration varies greatly with the condition of the soil and the timing of precipitation. Drainage patterns within the watershed and local topography also control infiltration rates. In general, steep slopes favor rapid surface runoff, and more gentle slopes retain water longer, favoring infiltration. However, extremely flat terrain often develops tight surface soils that impede infiltration. Land use, agricultural practices, and vegetation also influence the balance between runoff, recharge, and evaporation.

The intensity and duration of precipitation will affect the rate of water infiltration. Moderate rainfall over an extended period of time favors infiltration. Heavy rain in a short time eventually exceeds the soil's ability to absorb and transmit water. At this point, recharge stays constant (it cannot increase) and the excess water becomes runoff to streams.

The hydrographs in figs. 2–8 contain historical information regarding water-table fluctuations and precipitation in Douglas, Finney, Hamilton, Osborne, Scott, Sedgwick, and Thomas counties, respectively. The increase in ground-water usage and associated declines in the water table in some counties are known and demonstrated on several of the graphs. Several factors control the fluctuations of the water table of the aquifer (upper graph); for example, the depth to the water table; the volume, rate, and timing of ground-water pumping in the

area; and the amount of precipitation all vary in different parts of the state. Precipitation (lower graph) may directly affect the water-level change in shallow aquifers. The figures demonstrate trends in the water level and the presence or absence of infiltration effects on various aquifer systems. Deeper aquifers in relatively arid regions, such as the Ogallala, do not show recharge events clearly because of the thickness of the unsaturated zones and the low recharge rate. Water levels in a shallow aquifer, however, may respond rapidly to recharge.

In viewing the graphs it is important to remember that rainfall and water levels are represented by two different types of measurements. The precipitation is expressed as the annual total for the preceding calendar year. The corresponding depth to water measurement is taken at a single point in time, at the beginning of the following year. Although this is the most reasonable way to compare the available data, no direct correspondence exists between the plots. The relationship is only theoretical, because of the importance of the timing of precipitation events to the recharge process. That is, a wet spring may have less influence on next year's water level than a single storm event later in the year closer to the water-level measurement.

Readers will note that some of the graphs display discontinuous lines. This is due to sampling problems encountered by the data-collecting agencies in those years. No attempt is made to connect the data points across time periods in which there are no valid data.

The abbreviations used for the geologic names of the aquifers and a description of the legal-location system of well identification can be found in the introduction to Appendix B.

Douglas County, Pleistocene Terrace Deposits (QU)

The two observation wells in Douglas County are in alluvial aquifers. In Douglas County, alluvial deposits are the primary geologic unit for water usage; they yield water of moderate quality and quantity. The alluvium consists of unconsolidated clay, sand, and gravel located along major stream courses. The thickness of the alluvial deposits varies because the streams downcut into the substrata before depositing their sediment load.

The hydrograph (fig. 2) of the alluvial well 12S20E07CBC01 illustrates rather prompt recharge of precipitation to the water table. This is probably due to the depth of the well, the types of sediment through which the water moves, and the volume of water used in the area.

Finney County, Deposits of Quaternary Age (QU)

Most of the observation wells in Finney County are within the Ogallala Formation (Tertiary) or in undifferentiated Quaternary deposits. Well 24S32W03DAC01 is used for the hydrograph (fig. 3). The depth to bedrock (bottom of the aquifer) at this well is 299 ft (91.14 m), and the formation consists of poorly consolidated sand and gravel of Pleistocene age.

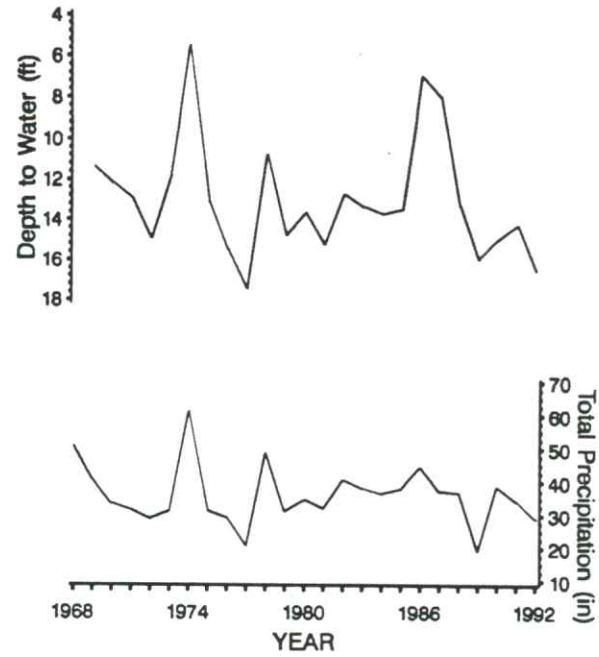


FIGURE 2—COMPARISON OF PRECIPITATION WITH WATER LEVEL IN DOUGLAS COUNTY WELL, 12S20E07CBC01 [Pleistocene formation]. Precipitation records are from the Topeka station.

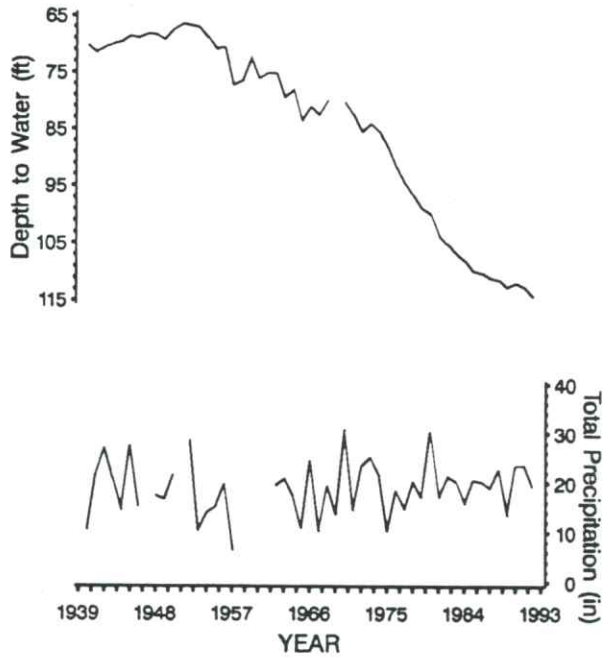


FIGURE 3—WATER LEVELS IN FINNEY COUNTY WELL, 24S32W03DAC01 [Pleistocene/Tertiary formations]. Compared to precipitation at the Garden City Experimental Station.

The depth to water for 1992 is 114 ft (34.75 m). Compared to the 1940 water level [70 ft (21.34 m); Finney County, table 1], the decline of the water level is 44 ft (13.41 m), which represents a greater than 19% decline in saturated thickness. Changes of this magnitude, or greater, in saturated thickness for the period 1940-1992 are typical of both the Pleistocene and the Ogallala aquifers in Finney County.

Figure 3 illustrates the lack of effect of precipitation recharge on the water table in the Pleistocene aquifer and the prominent effect of ground-water pumping on the decline of the water table. As the precipitation graph indicates, there is a regular fluctuation of rainfall over time with an average annual total precipitation of about 16 in/yr (41 cm/yr). No obvious correlation can be seen in fig. 3 between the amount of rainfall and variations of the water-table elevation.

Hamilton County, Alluvial Deposits (QA)

Various aquifers are used in Hamilton County (KU, KJ, TO, QA, QU). The hydrograph (fig. 4) is of well 23S43W21ABA01 in the Quaternary alluvial aquifer of the Arkansas River valley. Alluvial aquifer systems consist of unconsolidated sand and gravel at relatively shallow depths. The depth to bedrock at the well is 29 ft (8.84 m), with a 1940 depth to water of 15 ft (4.57 m) and a 1992 depth to water of 14.5 ft (4.42 m). This local increase in saturated thickness is reasonable for an alluvial aquifer because the water level fluctuates in response to recent rainfall events and recharge by the Arkansas River. However, aquifer systems such as the Ogallala and those in the Cretaceous formations of Hamilton County show steady declines in water level as a result of ground-water withdrawals which exceed natural recharge. Individual wells within the Ogallala Formation (TO) and Cretaceous aquifer units (KU) show declines in excess of 70 ft (21.34 m), as shown in Appendix B.

The hydrograph (fig. 4) for well 23S43W21ABA01 shows some relationship between water level and precipitation. It appears to be neither regular nor strongly correlated. This lack of correspondence between the precipitation and depth to water graphs can probably be attributed to the combination of several factors. These include large-scale and variable local irrigation pumping. In addition, the streamflows in the Arkansas River basin are influenced by precipitation and water use over a much larger area than that represented by the nearest precipitation gauge.

Osborne County, Terrace Deposits of Quaternary Age (QU)

Osborne County contains few observation wells for data collection. Geologic units such as the Dakota Formation (KD) and alluvium (QA) are the major aquifers in this county. The hydrograph of the observation well 06S12W23CDC01 is shown in fig. 5. The well is located in the alluvium of the north fork of the Solomon River.

The hydrograph illustrates the combined effects of recharge, ground-water pumping, releases from upstream reservoirs, and surface-water irrigation, on changes in

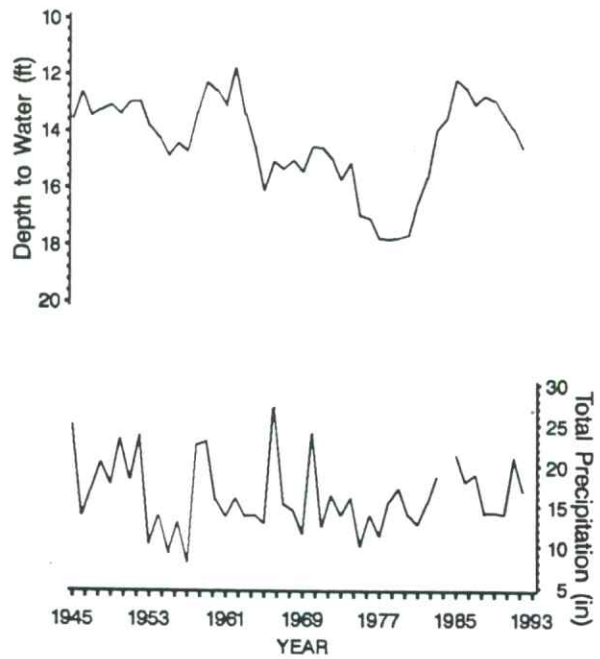


FIGURE 4—Water levels in Hamilton County well, 23S43W21ABA01 [alluvial formation]. Compared to precipitation at the Syracuse station.

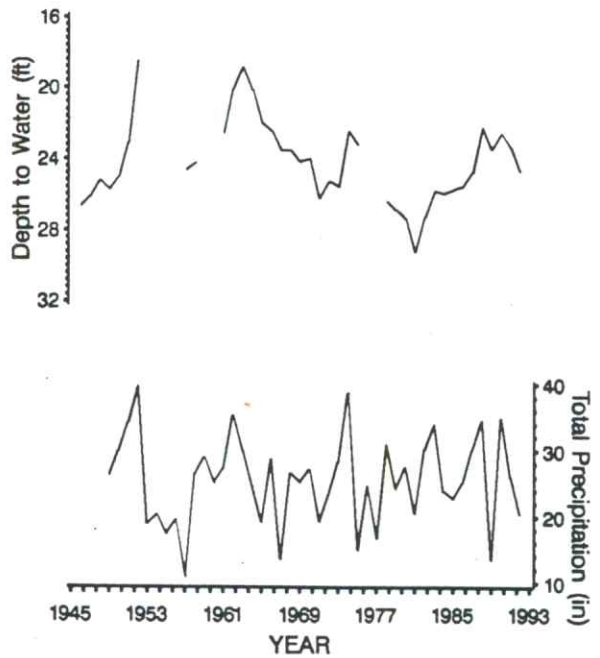


FIGURE 5—Comparison of precipitation (Cawker City station) with water level in Osborne County well, 06S12W23CDC01 [alluvial formation].

water level on a yearly basis. Precipitation patterns drive these factors, directly or indirectly. In turn, they interact in various ways which either cancel their effects (e.g., diverting surface water can be less expensive than pumping, therefore used in its place) or compound their effects (e.g., increased rainfall increases reservoir levels which allows for more instream releases). Because this well is shallow, located in alluvial terrace deposits composed of sands, gravels, and clays, and has a shallow water table [18-28 ft (5.49-8.53 m) on average], the water table responds more rapidly to changes of the channel water level. Comparing figs. 2 and 5 supports these conclusions. The well in fig. 2 is also an alluvial well, but is not subject to fluctuations due to variable local releases and irrigation. Thus the two graphs in fig. 2 show greater correspondence.

Scott County, Ogallala Formation of Tertiary Age (TO)

All the observation wells in Scott County are within the Ogallala Formation (TO). Well 20S33W09BBB01 is used for the hydrograph (fig. 6). This observation well penetrates 128 ft (39.01 m) to the bottom of the Ogallala Formation. The Ogallala is composed of coarse-grained sand and gravel and is overlain by Pleistocene loess deposits of sand, silt, and clay.

The 1992 depth to water is 102.1 ft (31.12 m). Compared to the 1940 level [60 ft (18.29 m); Appendix B, Scott County, table 1], the decline of the water level is 42.1 ft (12.83 m), which represents nearly a 62% decline in saturated thickness. This change in saturated thickness for the period 1940-1992 is typical of the Ogallala aquifer in Scott County.

The hydrograph (fig. 6) illustrates no observable relationship between the low and variable annual rainfall and the water-table variations; this is consistent with other studies that indicate that average annual recharge is of the order of 0.25 in/yr (0.64 cm/yr) and that the time required for water to move from the surface to the water table in some locations may be greater than 30 years. Clearly, the dominant effect is the decline in the water table resulting from ground-water pumping.

Sedgwick County, Quaternary Alluvial Deposit (QA)

The hydrograph (fig. 7) of the observation well 25S01W26DBD01 is representative of ground-water conditions in Sedgwick County. The well is in the alluvium of the Arkansas River.

The depth of this well is 54 ft (16.46 m), and it is in unconsolidated clay, silt, sand, and gravel. The hydrograph (fig. 7) illustrates the effect of recharge on changes in water level on a yearly basis. Because this well is shallow, located in alluvial terrace deposits, and has a shallow water table [15-20 ft (4.57-6.1 m) on average], the depth to water is greatly influenced by recharge from the river.

Comparing fig. 7 with figs. 2 and 5 shows that the behavior of this well is more similar to the Douglas County well in the Kansas River alluvium. Unlike the

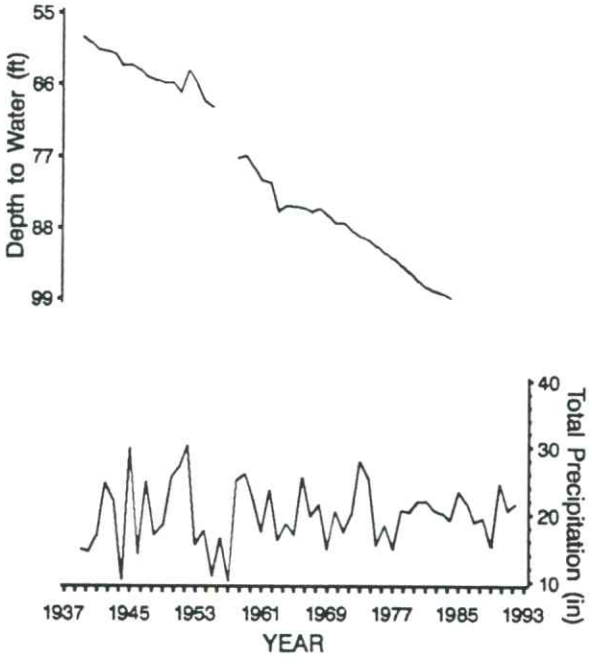


FIGURE 6—WATER LEVELS IN SCOTT COUNTY WELL, 20S33W09BBB01 [Ogallala formation]. Compared to precipitation at the Utica station.

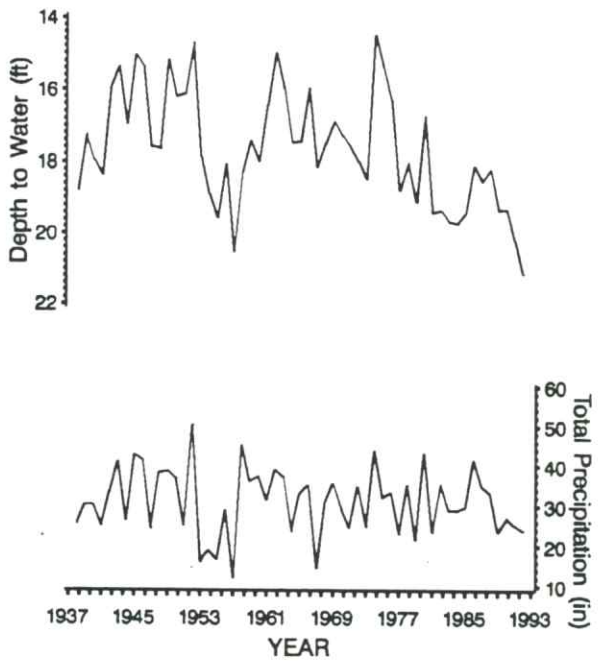


FIGURE 7—COMPARISON OF PRECIPITATION WITH WATER LEVEL IN SEDGWICK COUNTY WELL, 25S01W26DBD01 [Pleistocene alluvial formation]. Precipitation records are from the Sedgwick station.

well in fig. 5, both of these wells are subject to streamflow regimes which are less affected by local regulation.

Thomas County, Ogallala Formation of Tertiary Age

The primary aquifer in Thomas County is the Ogallala Formation. The Ogallala is composed of coarse-grained sand and gravel and is overlain by Pleistocene loess. The depth to bedrock in the Ogallala aquifer at the observation well 08S34W01BAC01 is 270 ft (82.30 m). The depth to water in this well has declined from 113 ft (34.44 m) in 1950 to 131 ft (39.93 m) in 1992. This drop of 18 ft (5.49 m) represents approximately 11.5% of the original saturated thickness.

Like the Scott County example, the hydrograph (fig. 8) illustrates no obvious correspondence between total annual rainfall and the depth to the water table. The Ogallala water table is deep in this part of Kansas. The combination of a deep water table with thick overlying unsaturated sediments and a low annual rainfall produces time lags between rainfall and recharge. The long-term imbalance between ground-water withdrawal and recharge is evident from the yearly decline of water levels over a 40-year period with a relatively stable amount of precipitation.

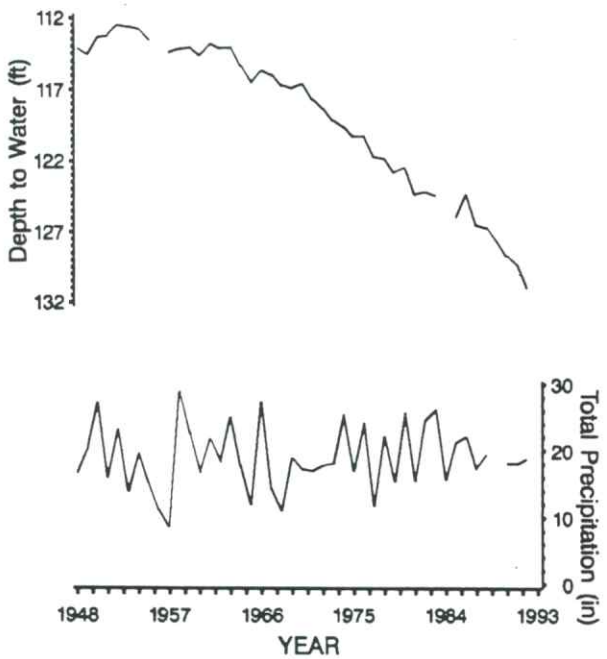


FIGURE 8—Water levels in Thomas County well, 08S34W01BAC01 [Ogallala formation]. Compared with precipitation at the Colby station.

Regional Decline Maps

For the purposes of this report, the state of Kansas has been divided into eight regions (see fig. 1). The following figures (figs. 9-12) are divided into three maps each. Parts A and B refer to "predevelopment," which is usually taken as 1940 or 1950, depending on the availability of early data. Part A depicts the "absolute vertical change" in the water level from the assigned predevelopment period until present. Part B shows the "percentage change" in saturated-aquifer thickness from predevelopment to present. Finally, part C shows the generalized water-level change over the past calendar year. The location of the High Plains aquifer is shown by the shaded areas on each map.

Region I: Southwestern Kansas

The primary aquifers in this part of the state are in Cretaceous, Ogallala, and alluvial units. The regional contour map (fig. 9A) shows that large declines from predevelopment ground-water levels have increased in areal extent in the western part of the region. In the northeastern part of the region, there are some signs of a decrease in the rate of decline of local water levels. The hydrograph from Finney County (fig. 3) illustrates the time history of steady decline of the water table in this area as a result of increased irrigation. Because of the large original saturated thickness of the Ogallala Formation in this area, substantial reserves of ground water still exist. There are only limited areas in which saturated thickness has decreased by as much as 50% (see fig. 9B). However, areas within the –25% and –50% contours have increased relative to last year's value.

The annual change map (fig. 9C) indicates continuing declines over much of the area. Areas of apparent stabilization or slight recovery of the water table in northwestern Grant County, last year, are not present this year. However, they are apparent in Stanton, Morton, Stevens, Seward, Meade, Ford, Haskell, Gray, and Kearney counties. These apparent changes must be treated with caution because uncertainity in annual changes arises from many influence.

Region II: West-central Kansas

The west-central region of Kansas consists of an area one and one-half counties high and six counties wide extending eastward from the Kansas–Colorado border. Within this region the primary aquifer is the Ogallala Formation of Tertiary age. Water-level declines since the predevelopment period (fig. 10A) exceed 50 ft (15.24 m) in the central part of the aquifer. The depth to bedrock in Region II is less than in Regions I and III. As a result, small declines represent a larger fraction (50% or more in many areas; see fig. 10B) of the total water reserves than is the case in portions of the Ogallala in Regions I and III.

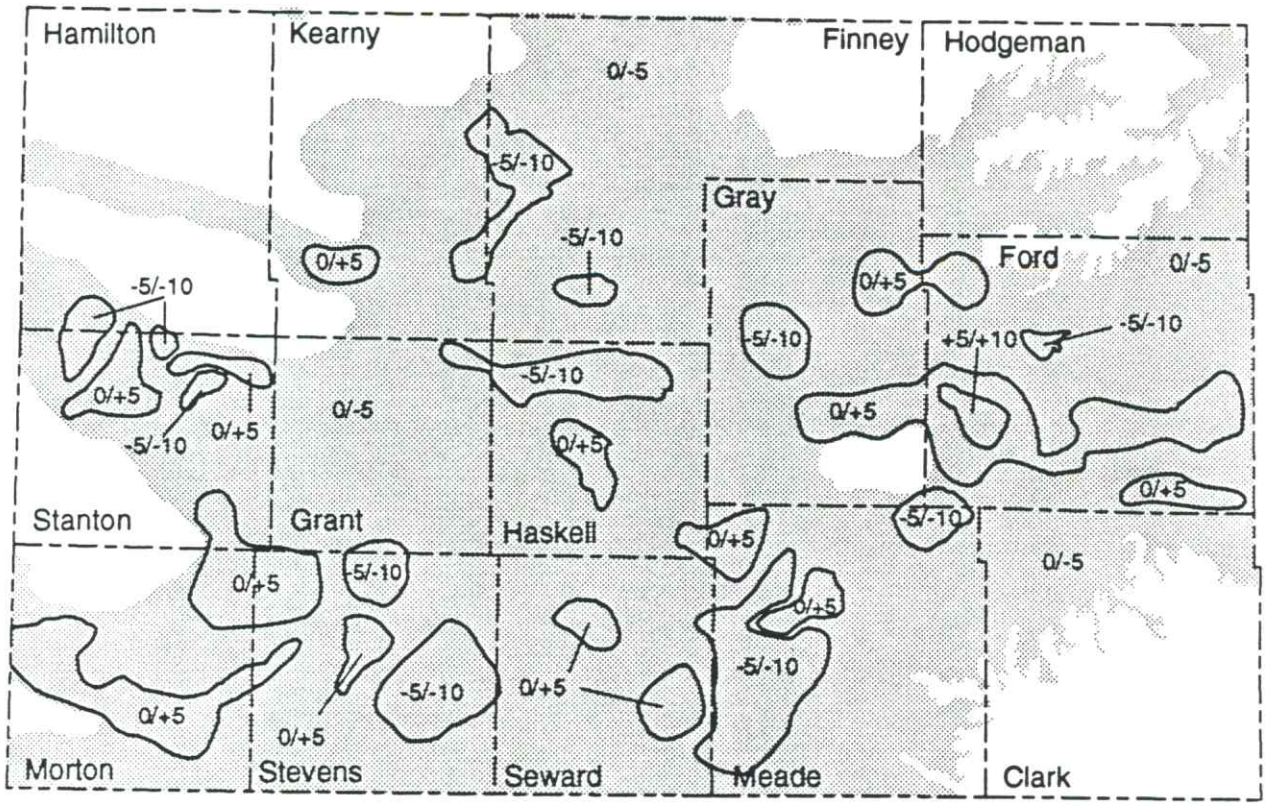


FIGURE 9A—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION I, SOUTHWEST KANSAS. Values of the contours are the observed changes in water level in feet.

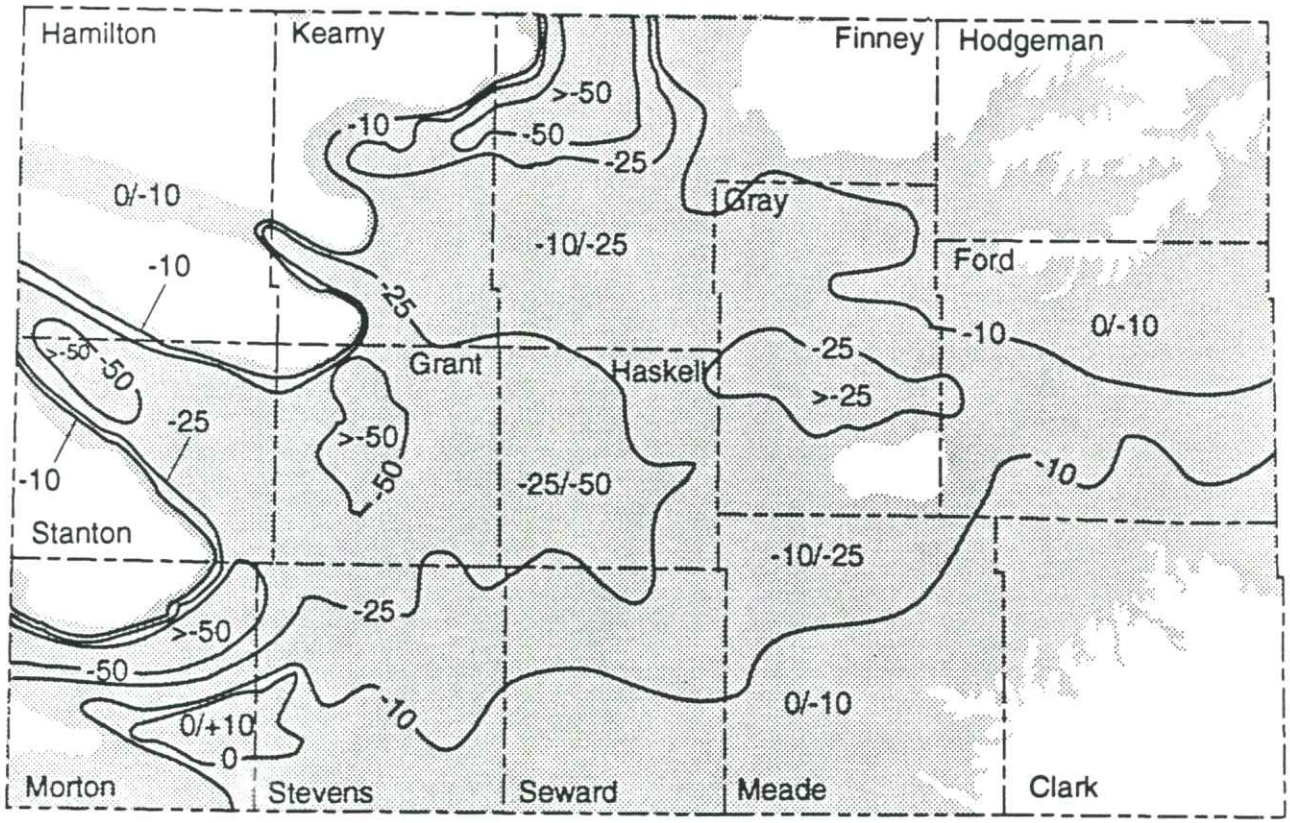


FIGURE 9B—MAP OF PERCENT CHANGE IN PREDEVELOPMENT SATURATED THICKNESS FOR REGION I, SOUTHWEST KANSAS.

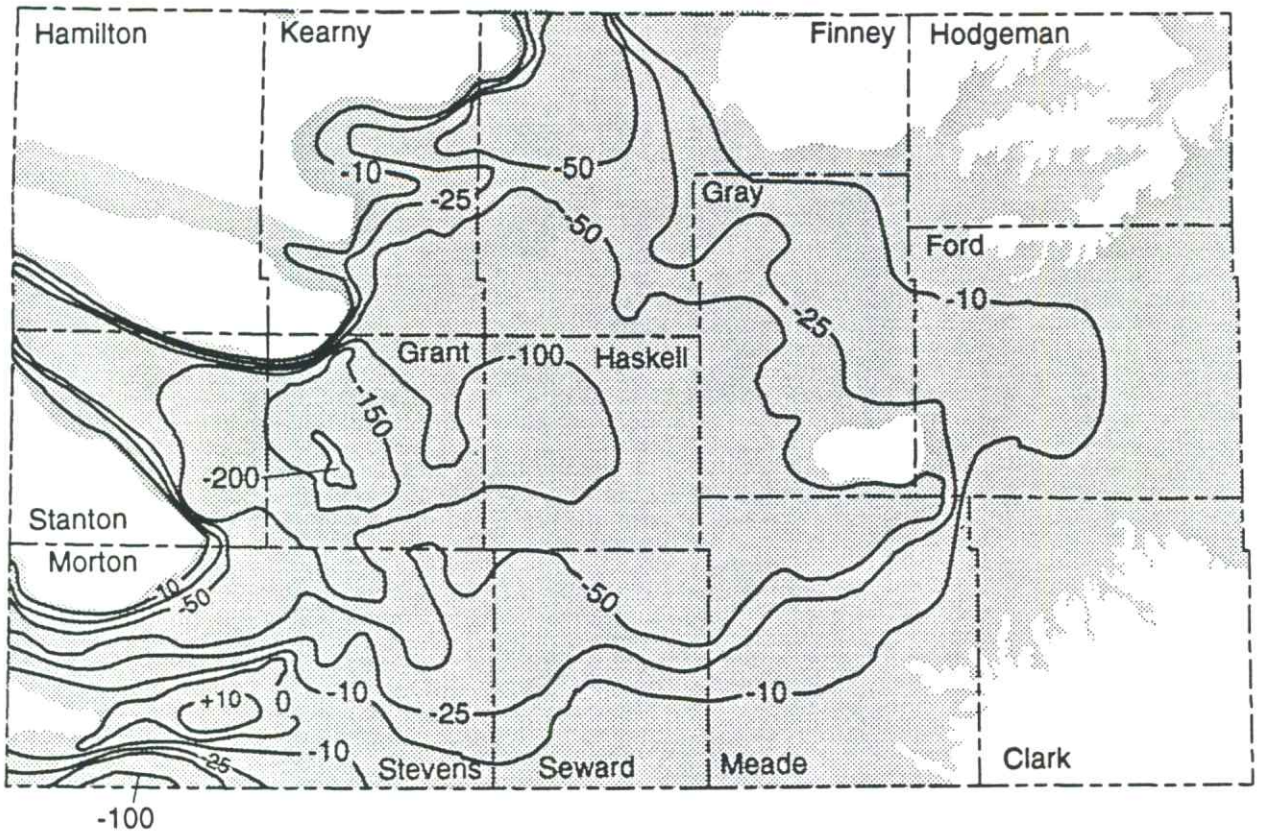


FIGURE 9C—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION I, SOUTHWEST KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

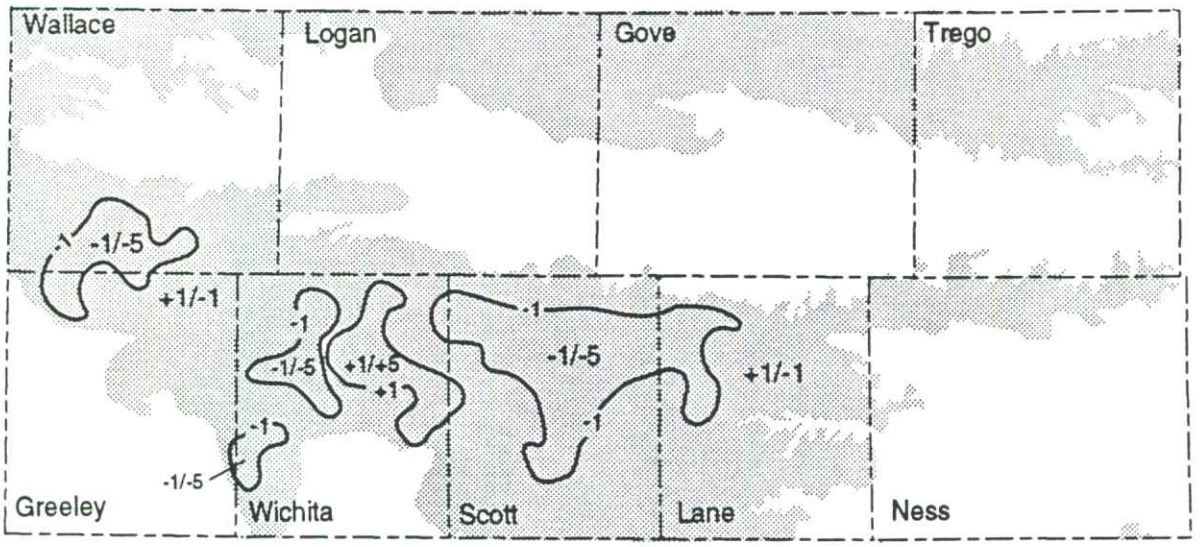


FIGURE 10A—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION II, WEST-CENTRAL KANSAS. Values of the contours are the observed changes in water level in feet.

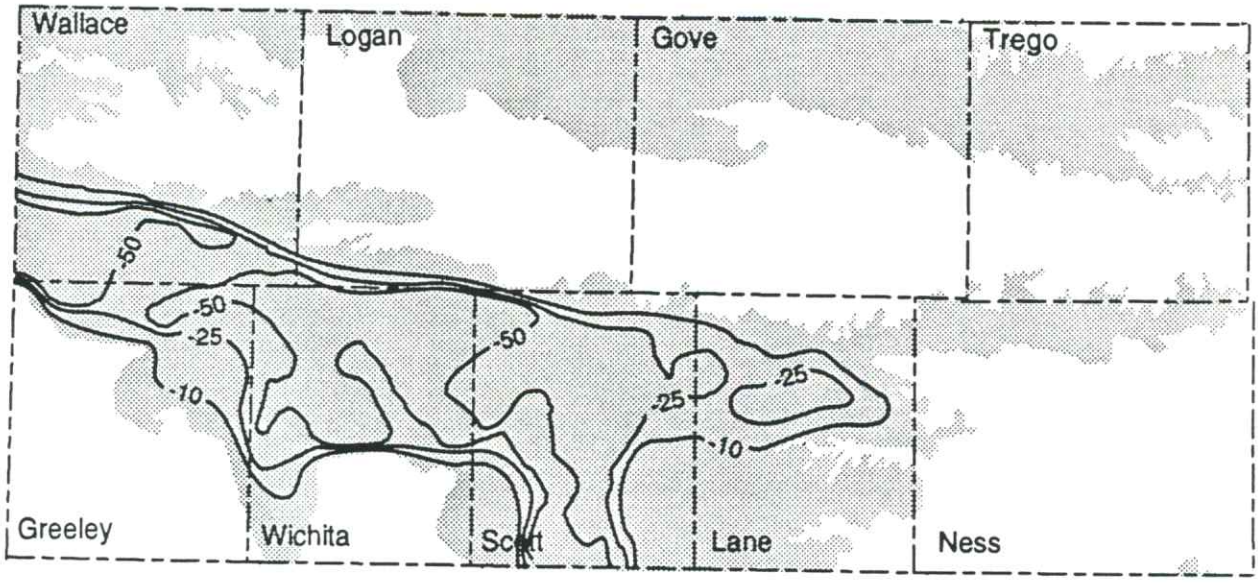


FIGURE 10B—MAP OF PERCENT CHANGE IN PREDEVELOPMENT SATURATED THICKNESS FOR REGION II, WEST-CENTRAL KANSAS.

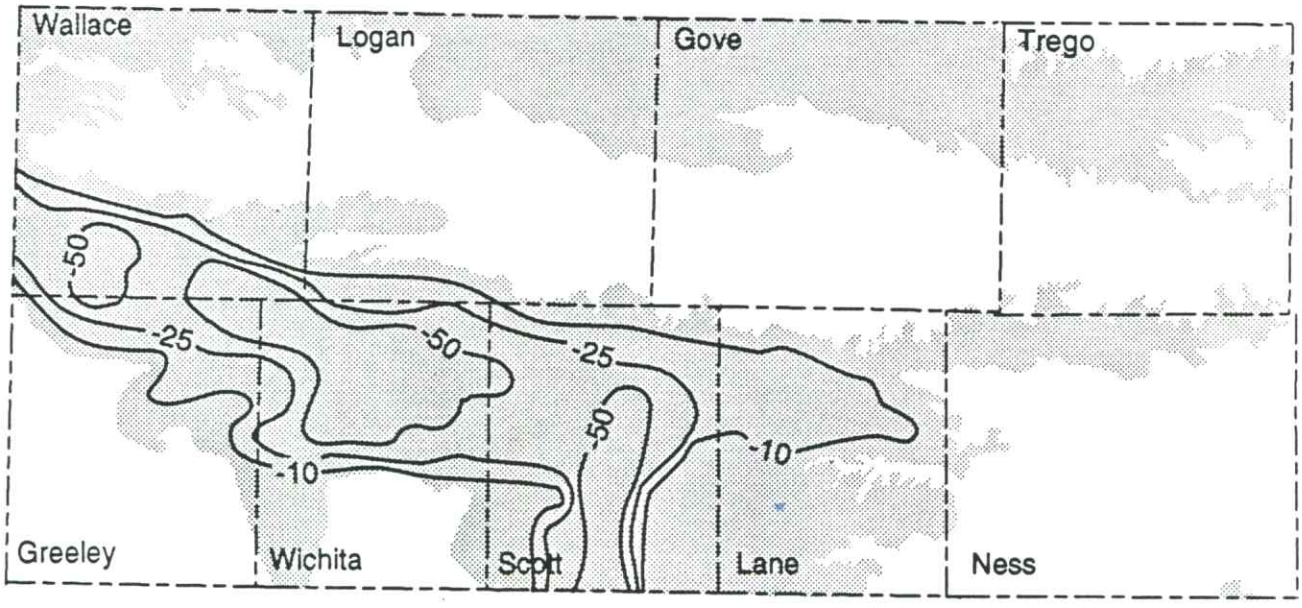


FIGURE 10C—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION II, WEST-CENTRAL KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

The hydrograph for Scott County (fig. 6) illustrates the general decline in the region.

The Ogallala water-level changes for the annual period 1991–92 range up to a decline of 5 ft (1.52 m) in localized areas throughout Scott and Wichita counties. This decline is larger than in 1991, although there is little change over much of the region (fig. 10C).

Region III: Northwest Kansas

In the northwest part of the state the primary aquifer is the Ogallala Formation. The largest water-level (fig. 11A) and saturated-thickness (fig. 11B) declines are centered in Sherman, Sheridan, and Thomas counties where well development is greatest. As in Region I, most of the saturated thickness declines in Region III have not yet reached the 50% level because of the large predevelopment saturated thickness of the aquifer. The hydrograph for Thomas County (fig. 8) illustrates the continued water-table decline, which is typical for much of the region.

The change of the water table for 1991–92 demonstrates apparent stability over a large part of the region (see fig. 11C). Increases of 1–5 ft (0.3–1.52 m) appear in southern Thomas and northern Logan counties. On the Sheridan–Gove county line, declines range from 5 to 10 ft (1.52–3.05 m). Western Sherman, northern Thomas, and central-east Cheyenne counties show annual declines of 1–5 ft (0.3–1.52 m).

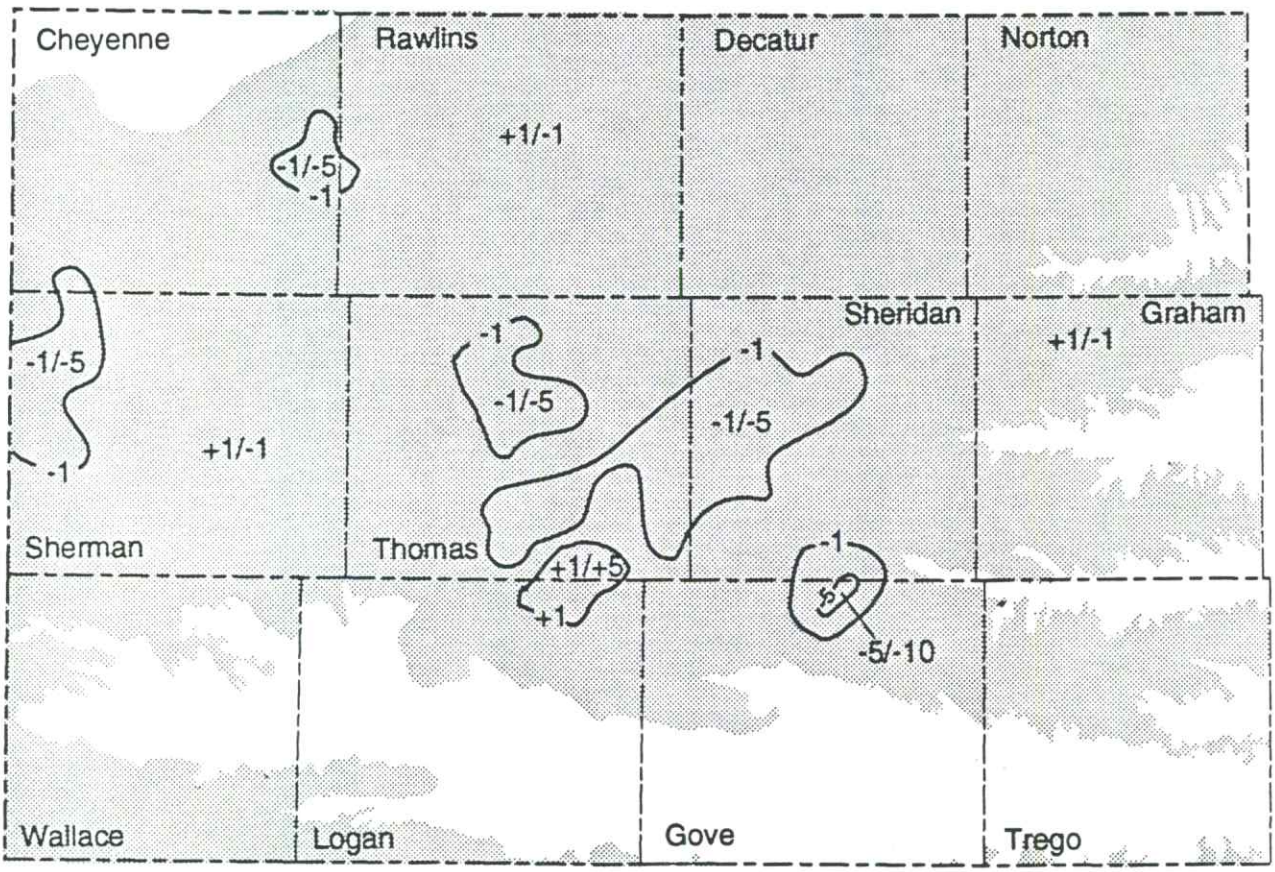


FIGURE 11A—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION III, NORTHWEST KANSAS. Values of the contours are the observed changes in water level in feet.

FIGURE 11C (right)—MAP OF THE ANNUAL CHANGE IN WATER LEVEL IN REGION III, NORTHWEST KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

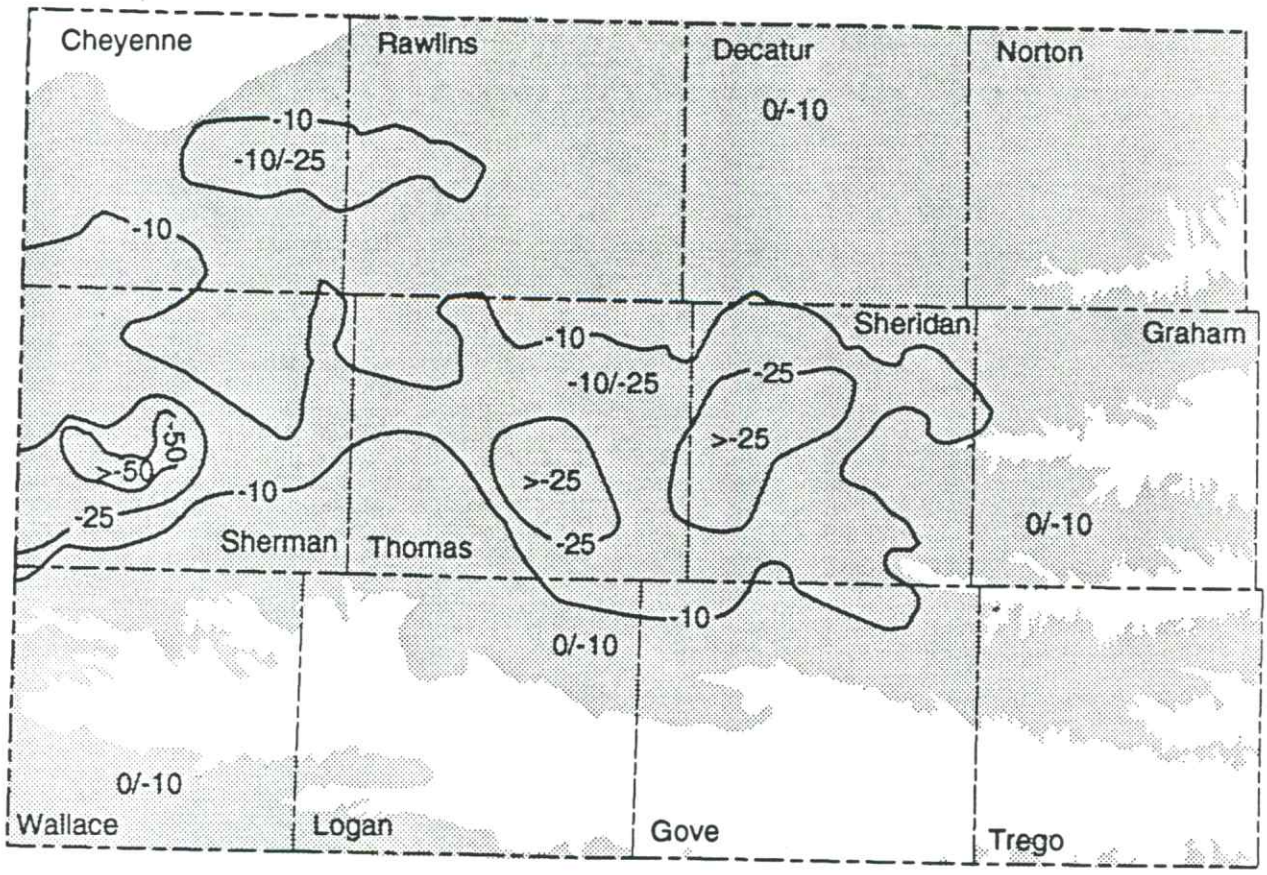
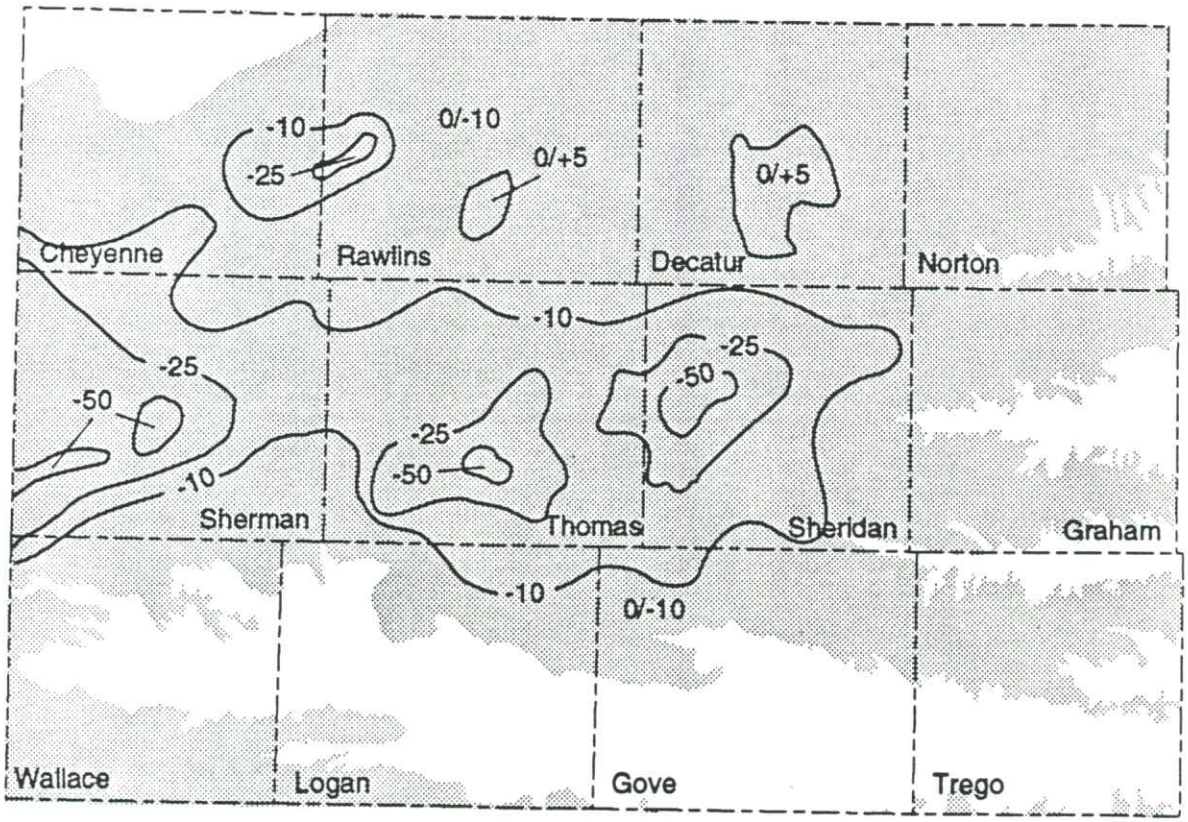


FIGURE 11B—MAP OF PERCENT CHANGE IN PREDEVELOPMENT SATURATED THICKNESS FOR REGION III, NORTHWEST KANSAS.



Region V: South-central Kansas

The south-central region is located east of the eastern-most extension of the Ogallala Formation. In this region the primary aquifer is the Quaternary alluvium, with agriculture being the leading consumer of ground water. There are some significant areas of water-level and saturated-thickness decline (figs. 12A,B) in Edwards, Pawnee, and to a lesser extent in Kingman and Reno counties. Water-table increases in the 0–10 ft range (0–3.05 m) are observed in large areas of Kiowa and Pratt counties.

Annual water-level changes for the period 1991–92 are modest, with much of the area showing general stability and scattered sub-regions indicating declines of a few feet (fig. 12C). In the central and eastern portions of this area, the freshwater aquifer is underlain by formations containing saltwater, which can move up to replace the freshwater if pumping exceeds recharge. This means that local areas may be subject to both water-table declines (reduction of saturated thickness) and "upconing" of salt water. Because of this, reporting of water levels alone is not sufficient for determining the availability of usable water.

Contoured declines for Harvey County are based in part on measurements taken by the City of Wichita, not all of which are included in this report.

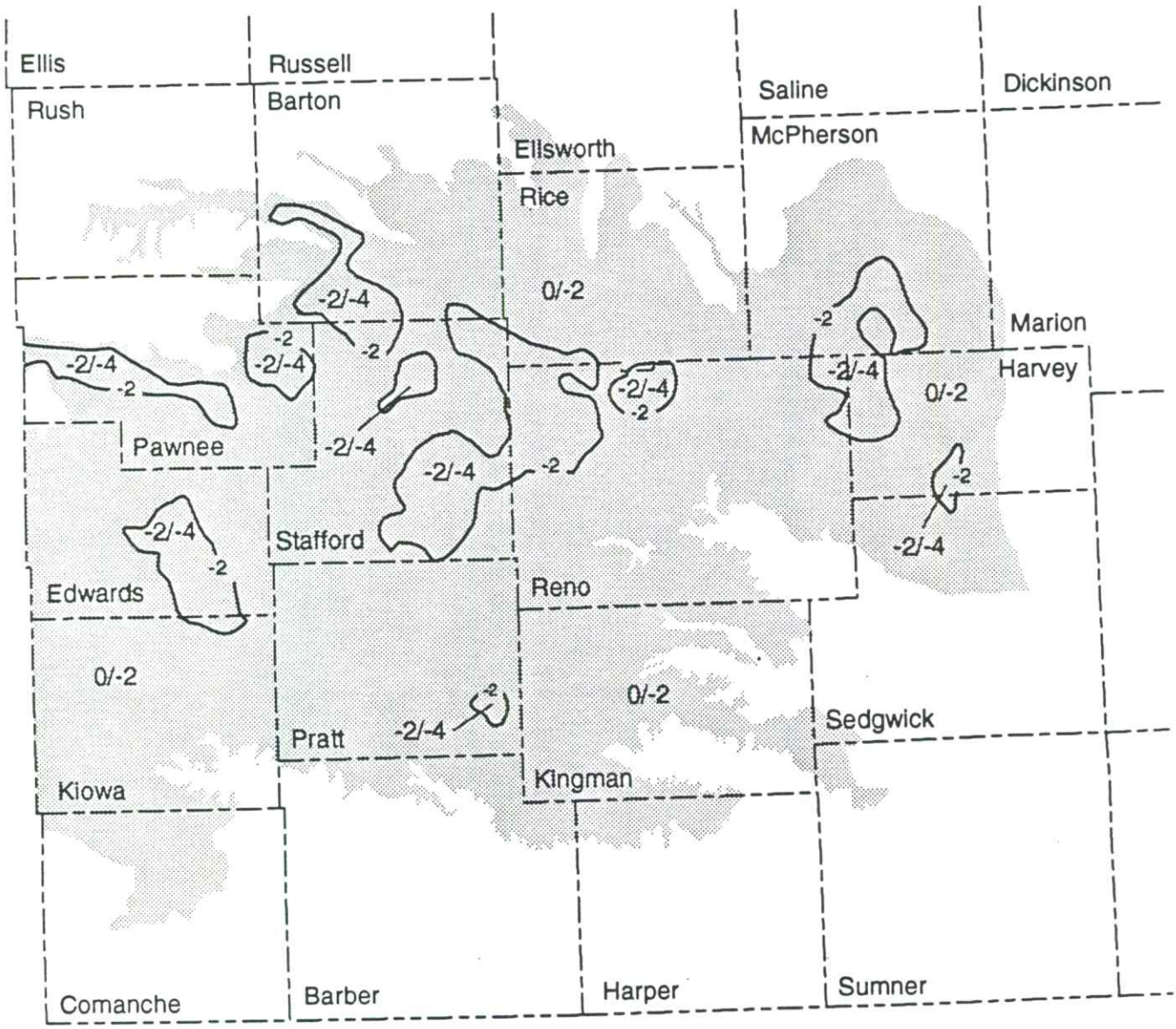


FIGURE 12A—GENERALIZED PREDEVELOPMENT TO PRESENT CHANGE IN WATER-LEVEL MAP FOR REGION V, SOUTH-CENTRAL KANSAS. Values of the contours are the observed changes in water level in feet.

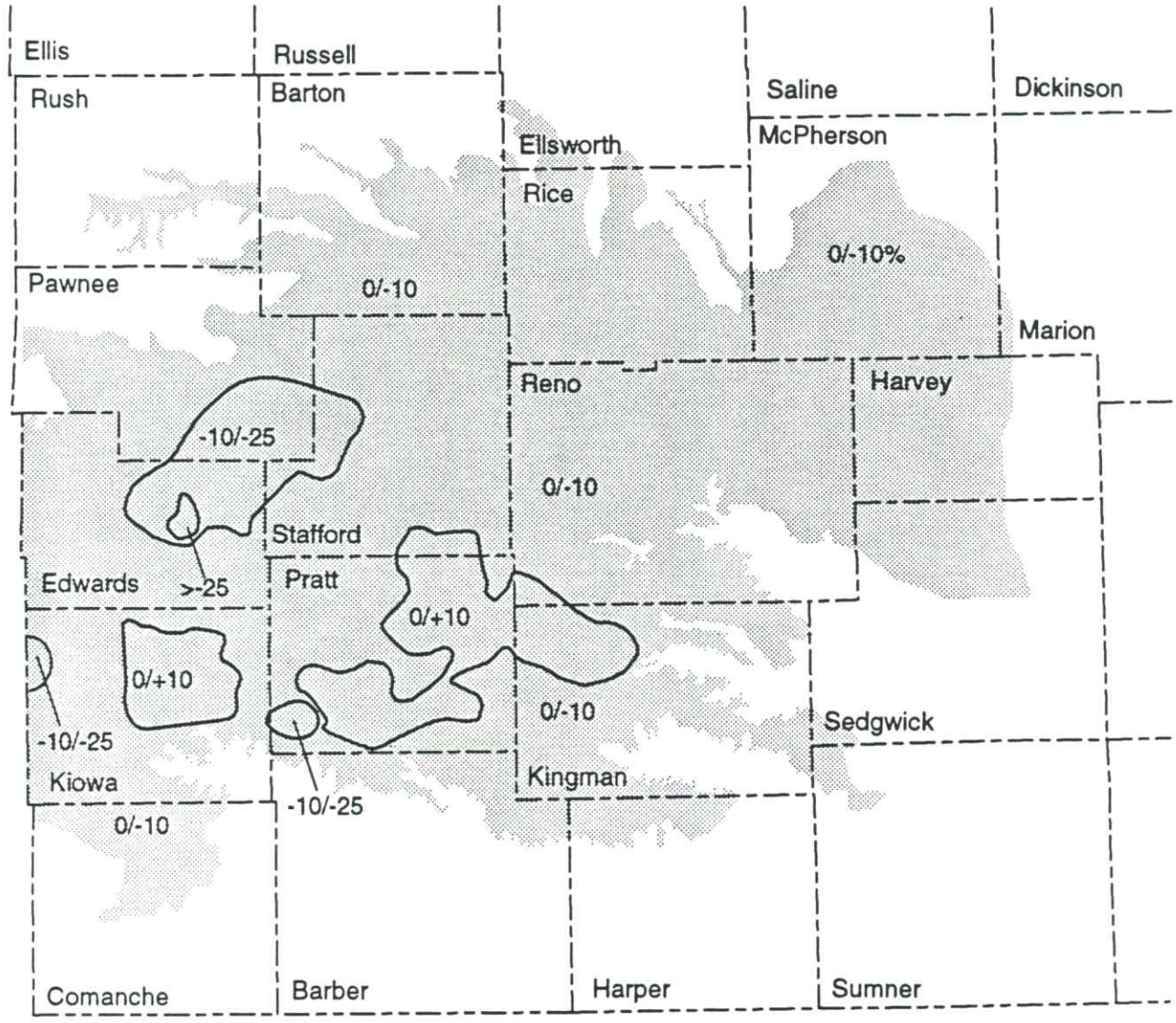


FIGURE 12B—MAP OF PERCENT CHANGE IN PREDEVELOPMENT SATURATED THICKNESS FOR REGION V, SOUTH-CENTRAL KANSAS.

Appendix A: Publications Containing Ground-water-level Data for Kansas

Records of ground-water-level data for Kansas were published in U.S. Geological Survey Water-Supply Papers for 1935-1971. These Water-Supply Papers are listed in table A.1.

A series of annual reports that contain records of water-level measurements made in Kansas during 1956-1965 have been published in Kansas Geological Survey Bulletins, listed in table A.2.

In addition to the publications listed, records of annual water-level measurements in Kansas can be found in the references cited in the following publications:

Broeker, M. E., and McNellis, J. M., 1973, Ground-water levels in observation wells in Kansas, 1966-70: Kansas Geological Survey, Basic Data Series, Ground-water Release 3, 373 p.

Broeker, M. E., McIntyre, H. J., Jr., and McNellis, J. M., 1977, Ground-water levels in observation wells in Kansas, 1971-75: Kansas Geological Survey, Basic Data Series, Ground-water Release 6, 526 p.

Buddemeier, R. W., Shamsnia, S., Woods, J., and McClain, T. J., 1991, January 1990 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Open-file Report 91-12, 129 p.

Buddemeier, R. W., Woods, J., McClain, T. J., and Mitchell, J. E., 1991, January 1991 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Ground Water Series 13, 134 p.

Dague, B. J., 1985, January 1985 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 85-423, 162 p.

_____, 1986, January 1986 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 86-317, 165 p.

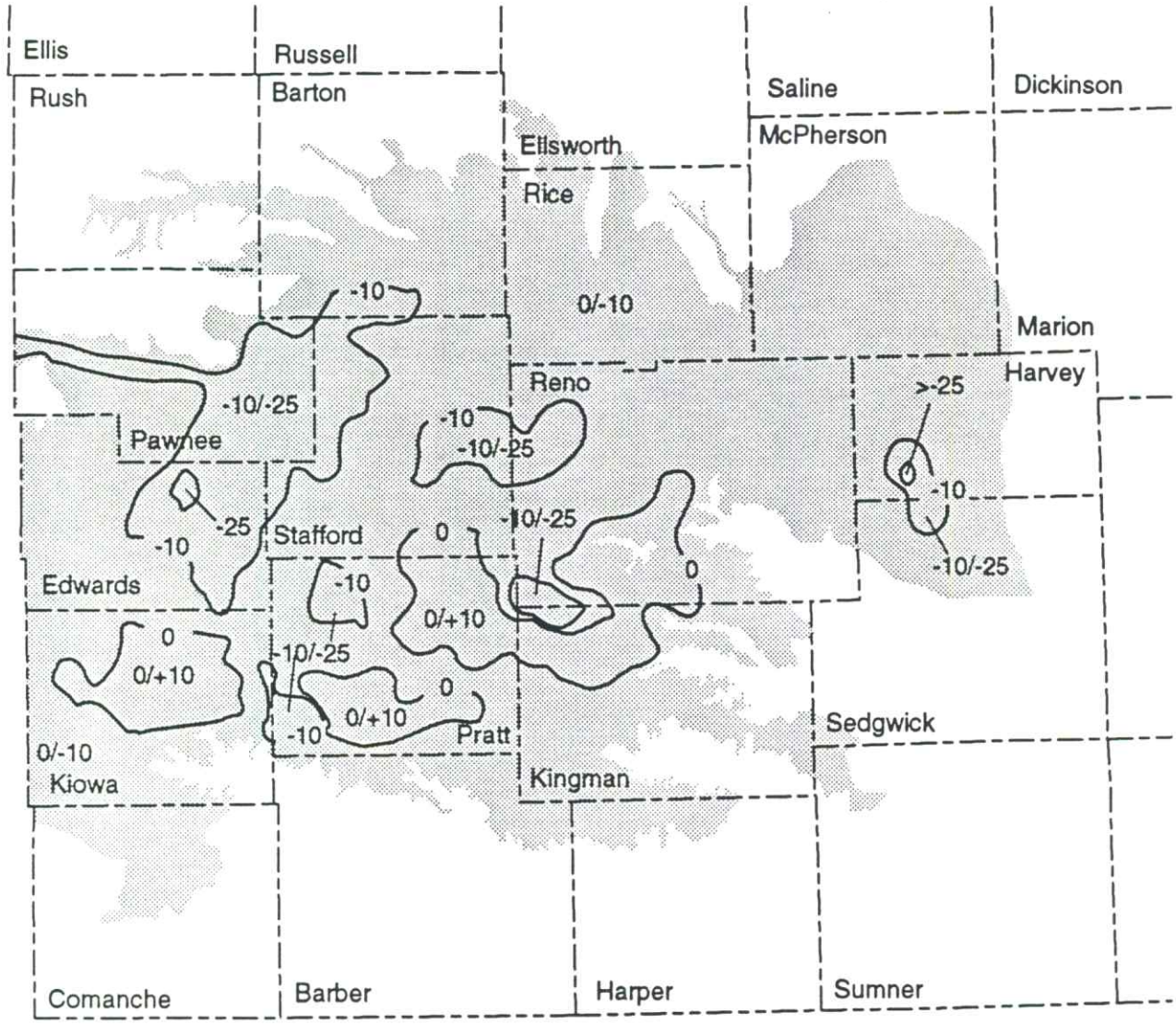


FIGURE 12C—MAP OF THE ANNUAL CHANGE IN WATER-LEVEL IN REGION V, SOUTH-CENTRAL KANSAS, SINCE THE LAST REPORT. Values of the contours are the observed changes in water level in feet.

_____, 1987, January 1987 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 87-241, 161 p.

Dugan, J. T., Shild, D. E., and Kastner, W. M., 1990, Water-level changes in the High Plains aquifer underlying parts of South Dakota, Wyoming, Nebraska, Colorado, Kansas, New Mexico, Oklahoma, and Texas—Predevelopment through nonirrigation season 1988-89: U.S. Geological Survey, Water Resources Investigations Report 90-4153, 29 p.

Dugan, J. T., and Shild, D. E., 1991, Water-level changes in the High Plains aquifer— Predevelopment to 1990: U.S. Geological Survey, Water Resources Investigations Report 91-4165, 55 p.

Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Merry, C. E., 1990, Water resources data, Kansas water year 1989: U.S. Geological Survey, Water-data Report KS-89-1, 457 p.

Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Pabst, B. J., 1991, Water resources data, Kansas water year 1990: U.S. Geological Survey, Water-data Report KS-90-1, 370 p.

Geiger, C. O., Lacock, D. L., Schneider, D. R., Carlson, M. D., and Pabst, B. J., 1992, Water resources data, Kansas water year 1991: U.S. Geological Survey, Water-data Report KS-91-1, 358 p.

Kastner, W. M., Shild, D. E., and Spahr, D. S., 1989, Water-level changes in the High Plains aquifer underlying parts of South Dakota, Wyoming, Nebraska, Colorado Kansas, New Mexico, Oklahoma, and Texas—Predevelopment through nonirrigation season 1987-88: U.S. Geological Survey, Water Resources Investigations Report 89-4073, 61 p.

Pabst, B. J., 1988, January 1988 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 88-342, 158 p.

Pabst, M. E., 1977, January 1977 water levels and data related to water-level changes since 1950, western Kansas: U.S. Geological Survey, Open-file Report 77-264, 209 p.

_____, 1978, January 1978 water levels and data related to water-level changes since 1940 or 1950, western Kansas: U.S. Geological Survey, Open-file Report 78-409, 179 p.

_____, 1979, January 1979 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 79-925, 213 p.

_____, 1980, January 1980 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Hydrologic Data, Open-file Report 80-958, 166 p.

_____, 1981, January 1981 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 81-1001, 168 p.

_____, 1982, January 1982 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 82-649, 167 p.

_____, 1983, January 1983 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 83-762, 164 p.

Pabst, M. E., and Dague, B. J., 1984, January 1984 water levels and data related to water-level changes, western and south-central Kansas: U.S. Geological Survey, Open-file Report 84-613, 162 p.

Pabst, M. E., and Gutentag, E. D., 1977, Water-level changes in west-central Kansas, 1950-1977: Kansas Geological Survey, Journal, October 1977, 18 p.

_____, 1979, Water-level changes in southwestern Kansas, 1940-1978: Kansas Geological Survey, Journal, May 1979, 29 p.

Pabst, M. E., and Jenkins, E. D., 1973, Water-level changes in northwestern Kansas, 1950-1973: Kansas Geological Survey, Journal, October 1973, 14 p.

_____, 1974, Water-level changes in west-central Kansas, 1950-1974: Kansas Geological Survey, Journal, October 1974, 15 p.

_____, 1976a, Water-level changes in northwestern Kansas, 1940-1976: Kansas Geological Survey, Journal, May 1976, 26 p.

_____, 1976b, Water-level changes in northwestern Kansas, 1950-1976: Kansas Geological Survey, Journal, December 1976, 20 p.

Townsend, M. A., Shaukat, N., Healey, J., and McClain, T. J., 1989, January 1989 Kansas water levels and data related to water-level changes: Kansas Geological Survey, Ground Water Series 10, 144 p.

TABLE A.1—U.S. GEOLOGICAL SURVEY WATER-SUPPLY PAPERS.

Year	Water-Supply Paper Number*
1935	777
1936	817
1937	840
1938	845
1939	886
1940	908
1941	938
1942	946
1943	988
1944	1018
1945	1025
1946	1073
1947	1098
1948	1128
1949	1158
1950	1167
1951	1193
1952	1223
1953	1267
1954	1323
1955	1406
1956	1456
1957–1961	1781
1962–1966	1976
1966–1971	2090

*Can be purchased from the U.S. Geological Survey, Books and Open-file Reports, Federal Center, Box 25425, Denver, CO 80225.

TABLE A.2—KANSAS GEOLOGICAL SURVEY BULLETINS WITH WATER-LEVEL MEASUREMENTS.

Year	Bulletin Number*
1956	125
1957	131
1958	141
1959	146
1960	153
1961	159
1962	167
1963	173
1964	177
1965	184

*Can be purchased from the Publications Sales Office, Kansas Geological Survey, University of Kansas, 1930 Constant Avenue, Lawrence, KS 66047.

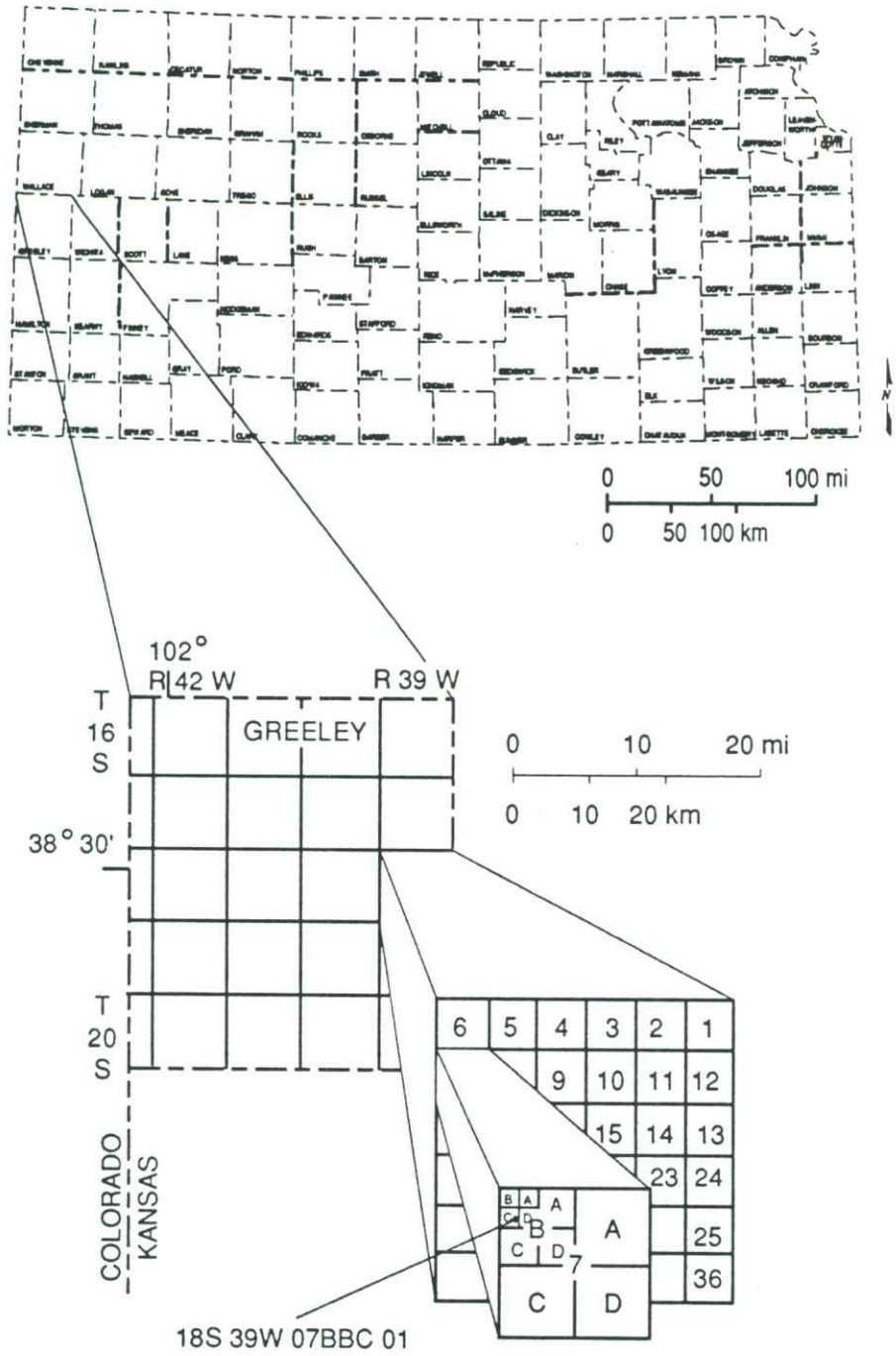


FIGURE 13—DETERMINING WELL LOCATION BY MEANS OF THE LEGAL DESCRIPTION (water right).

Appendix B: Water-level-data Tables

This appendix contains water-level data for wells in the cooperative monitoring network, arranged in alphabetical order by county. For each county, two tables are presented. Table 1 contains descriptive information on each well and depth-to-water measurements for the past seven years. Table 2 displays information about saturated-thickness and water-level changes based on the data in table 1. The nature of the information presented in these tables and how to use them is described below.

Before addressing the content of the tabular information, one apparent data anomaly should be discussed. Two wells in Finney County are marked with a leading plus sign (†). In these wells the water level listed is below the top of bedrock. This situation occurs where predevelopment water levels were above the Niobrara bedrock surface and subsequent water-level declines lowered the water table below the bedrock surface. The upper part of the Niobrara Formation in these areas is weathered and permeable and therefore allows the otherwise impermeable bedrock to act as an aquifer.

Table 1

Column 1 contains the well number, a unique identifier based primarily on the legal location of the water right (well). Wells in this report are numbered according to a modification of the U.S. Bureau of Land Management system of land subdivision (fig. 13). The location is composed of the township, range, and section numbers followed by letters indicating the subdivision of the section in which the well is located. The first letter encloses a 160-acre tract; the second, a 40-acre tract; the third, a 10-acre tract; and the fourth, if present, represents a 2.5-acre tract. The letters A, B, C, and D designate the tract in a counterclockwise manner, starting in the northeast corner. Therefore a location described as SW NW NW sec. 7, T. 18 S., R. 39 W. [SW NW NW sec(tion) 7, T(ownship) 18 S(outh), R(ange) 39 W(est)], is translated to 18S39W07BBC. A final two-digit number is appended to identify the specific well in cases where there are more than one well in the same tract.

Column 2 identifies the principal geologic unit(s) [up to three] in which the well is screened. Letter designations for the geologic units in the tables are:

KJ	undifferentiated Lower Cretaceous/Upper Jurassic rock
KD	Dakota Formation (Cretaceous)
KN	Niobrara Chalk (Cretaceous)
KU	undifferentiated Lower Cretaceous rocks
TO	Ogallala Formation (Tertiary)
QA	Quaternary alluvium
QU	undifferentiated Quaternary deposits

Geologic-unit designations are not given in cases where there is no record of field observations, although in many locations the geologic unit may be inferred from designations for neighboring wells or the general geology of the area. Where more than one unit designation is given for a single well, it indicates that the well was drilled through more than one water-bearing formation or that the geologic units are so similar or in such close proximity that the hydrology at that well may be influenced by more than one unit.

Column 3 gives the land-surface altitude of the well (in feet above mean sea level). By subtracting the depth to water from (below) the land-surface altitude, the altitude (elevation) of the water table can be calculated.

Column 4 presents the depth to bedrock where that is known. The bedrock is assumed to be the impermeable formation at the bottom of the aquifer. The difference between the depth to water and the depth to bedrock is the saturated thickness of the formation (aquifer).

Column 5 gives the depth to water during the base-reference year. Depending on the area of the state, the base-reference year is 1940, 1944, or 1950. These are the earliest predevelopment years (before significant irrigation withdrawals of ground water) for which reliable water-table maps are available. Predevelopment water levels are assigned to the well location on the basis of such maps because most wells were not in existence at that time.

Column 6 gives the depth to water for the reference year of either 1966 or 1974; depending on the locale, these years mark the beginning of modern continuous water-level-monitoring operations for the major Kansas aquifers.

Columns 7–13 give the depths to water measured in each year (when available), for the current year and the past six years. Larger numbers indicate greater depths and therefore declining water reserves.

Column 14 indicates the present frequency of measurement (a = annual, q = quarterly, m = monthly) and the present month of measurement (D = December, J = January, F = February, M = March); the length of record available is indicated by the last two digits of the first year for which data are available. The symbol U indicates that no consistent category could be assigned to that data field on the basis of records. It is important to recognize that December values are reported as part of the water-level record for the subsequent calendar year (i.e., December 1991 water levels are treated as 1992 values). It should be noted that measurement frequency and month of observation may not be consistent throughout the entire record. Monthly records are actually obtained from wells by continuous water-level recorders, from which monthly values are extracted and entered into the data base.

Table 2

Columns 1 and 2 list the well numbers and geologic units as described for table 1.

Column 3 gives the depth to water for the current measurement year (see table 1, column 14, for actual month of measurement). This is the same value entered in column 13 of table 1.

Column 4 gives water-level change from the base-reference (predevelopment) year to the present year.

Column 5 gives water-level change from the reference year (1966 or 1974) to the present year.

Column 6 gives the water-level change over the preceding year.

Columns 7 and 8 present the average annual rates of change between the base reference (predevelopment) year and 1992, and between the reference year (1966 or 1974) and 1992, respectively.

Columns 9 and 10 present the saturated thicknesses of the water-bearing formations in the base-reference (predevelopment) year and in the present year, respectively. These values are blank for wells where depth to bedrock is not known.

Column 11 gives the percentage change in saturated thickness from the base-reference year to present. This is roughly equivalent to the percentage depletion of the original water resource. It is calculated by the formula:

$$\text{Saturated thickness} = \frac{\text{Change in water level}}{\text{Predevelopment water thickness}} \times 100$$

TABLE 1. SELECTED HYDROLOGIC DATA , ALLEN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
24S 18E 28CDD 01		948				9.3	4.0	7.9	14.2	10.5	14.1	14.8	qM64

TABLE 2. DERIVED HYDROLOGIC DATA, ALLEN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
24S 18E 28CDD 01		14.8			-0.7					

Barber County

TABLE 1. SELECTED HYDROLOGIC DATA , BARBER COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
32S 12W 04DBC 01		1480		16	16.4	13.0	13.7	13.5	14.6	14.1	14.8	15.1	aD40

TABLE 2. DERIVED HYDROLOGIC DATA, BARBER COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1940–92	1966–92	1991–92	1940–92	1966–92	1940	1992	1940–92
32S 12W 04DBC 01		15.1	1	1.3	-0.3	0.0	0.1			

Barton County

TABLE 1. SELECTED HYDROLOGIC DATA , BARTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
18S 14W 27CDD 01		1896					45.2	43.1	47.1	46.9	45.7	48.6	aJ72
18S 15W 28CCC 03	QA	1913		9		22.2	23.5	17.7	21.7	22.7	22.7	25.3	aJ60
19S 11W 19BDD 01		1791		13		20.4	20.4	19.8	20.5	20.7	21.0	21.6	aJ85
19S 11W 26BDA 01		1772		7		12.8	13.4	12.5	14.2		14.9	15.5	aJ85
19S 12W 06ADA 01		1800				4.1	4.7	3.4			1.6		aJ85
19S 13W 08BAD 01		1855		11		20.4	19.9	17.2	19.8	20.4	21.2	23.3	aJ77
19S 14W 06BBB 01		1895		13		20.7	20.5	17.4	20.0	21.2			aJ79
19S 14W 23BBD 01		1873					19.5	17.7	20.1	19.2	18.4	20.6	aJ86
19S 14W 29DDB 01		1895		20		29.2	29.2	28.5	30.1	29.6			aJ79
19S 14W 36BBC 01		1868		8		11.2	11.8	10.2	12.1	11.2	10.9	12.9	aJ85
20S 11W 06CCC 01	QA	1788	138	9	5.6	9.8	10.4	9.5	11.0	10.9	11.0	11.5	aJ67
20S 11W 26AAC 01	QU	1752	112	3	1.6	7.8	10.0	9.1	11.4	11.7	11.5	12.5	aJ73
20S 12W 03DAC 01		1799	144	2	1.3	7.0	7.6	6.6		8.0	8.1	8.5	aJ72
20S 12W 06AAC 01	QU	1822	117	7	5.1	9.2	9.8		9.7	9.8	9.8	10.1	aJ73
20S 12W 23CCA 01	QU	1814	159	11	3.7	13.3	14.4	12.7	16.0	16.0	16.2		aJ73
20S 13W 17DDC 01	QU	1876	126	11	7.2	16.3	16.8	14.9	17.4	15.4	16.4		aJ73
20S 13W 24DCB 01	QU	1850	140	12	9.6	20.5	20.7	18.9	20.9	20.9	21.5	23.4	aJ68
20S 14W 22DCB 01		1897	152	6	6.5	14.2	14.3	12.6	15.3	14.1	14.6	17.2	aJ67
20S 15W 24DBD 01		1915		10		14.6	14.5	12.3	14.7	12.9	13.7	16.0	aJ77
20S 15W 33ADD 01		1945		15		19.9	19.9	17.6	19.7	18.1	19.2	20.9	aJ84

TABLE 2. DERIVED HYDROLOGIC DATA, BARTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
18S 14W 27CDD 01		48.6			-2.9					
18S 15W 28CCC 03	QA	25.3	-16		-2.6	-0.3				
19S 11W 19BDD 01		21.6	-9		-0.6	-0.2				
19S 11W 26BDA 01		15.5	-9		-0.6	-0.2				
19S 12W 06ADA 01										
19S 13W 08BAD 01		23.3	-12		-2.1	-0.3				
19S 14W 06BBB 01										
19S 14W 23BBD 01		20.6			-2.2					
19S 14W 29DDB 01										
19S 14W 36BBC 01		12.9	-5		-2.0	-0.1				
20S 11W 06CCC 01	QA	11.5	-3	-5.9	-0.5	-0.1	-0.3	129	127	-2
20S 11W 26AAC 01	QU	12.5	-10	-10.9	-1.0	-0.2	-0.6	109	100	-8
20S 12W 03DAC 01		8.5	-7	-7.2	-0.4	-0.1	-0.4	142	136	-4
20S 12W 06AAC 01	QU	10.1	-3	-5.0	-0.3	-0.1	-0.3	110	107	-3
20S 12W 23CCA 01	QU									
20S 13W 17DDC 01	QU									
20S 13W 24DCB 01	QU	23.4	-11	-13.8	-1.9	-0.2	-0.8	128	117	-9
20S 14W 22DCB 01		17.2	-11	-10.7	-2.6	-0.2	-0.6	146	135	-8
20S 15W 24DBD 01		16.0	-6		-2.3	-0.1				
20S 15W 33ADD 01		20.9	-6		-1.7	-0.1				

Bourbon County

TABLE 1. SELECTED HYDROLOGIC DATA , BOURBON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
25S 24E 36AAC 01		916				196.0	223.0	222.6	229.9	225.7			qM77

TABLE 2. DERIVED HYDROLOGIC DATA, BOURBON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
25S 24E 36AAC 01										

Cheyenne County

TABLE 1. SELECTED HYDROLOGIC DATA , CHEYENNE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
01S 38W 02CDC 01	TO	3034	41	23	22.6	24.1	24.2	24.0	24.1	23.7	24.0	23.9	aJ48
01S 38W 08DCC 01	QA	3057	33	12	12.3	13.4	13.6	13.8	13.7	13.0		13.5	aJ46
01S 38W 30BDC 01	QA	3090	28	7	8.0	9.1	9.6	8.9	9.0	9.2	10.3	10.0	aJ64
01S 39W 25CBC 01	QA	3102	26	7	8.5	9.5	10.2	9.5	9.7	9.6	9.8	9.5	aJ66
02S 37W 33DCC 01		3420				212.7	213.3	213.1	218.0	220.3	212.6	214.3	aJ84
02S 39W 27BBB 01	QA	3235	28	18	17.8	17.9	18.2	18.2	18.1	18.2			aJ46
02S 40W 28DBA 01	TO	3452	140	112	112.5	116.5	115.8	111.2	110.9	111.2	110.7	110.8	aJ65
02S 40W 32BCB 01	TO	3492				130.5	130.4	130.4	132.2	130.3	129.1	131.4	aJ84
02S 41W 27BBD 01	TO	3620	242	200	198.6	200.8	207.4	200.5	201.5	201.2	200.1	202.8	aJ64
02S 41W 33DBC 01	TO	3650	288	235	235.2	236.5	236.3	236.8	236.5	237.1	236.0	236.4	aJ65
03S 37W 19BBC 01	TO	3468	325	215	219.8	229.7	230.2	230.3	230.8	231.0	229.6	231.1	aJ50
03S 37W 21DDD 01	TO	3422	312	194		218.3	218.6	217.8	218.2	218.6	218.8		aJ79
03S 37W 36ADB 01	TO	3381	300	175	182.0	199.9	201.7	201.4	204.5	204.3	201.6	202.6	aJ65
03S 38W 04BCC 01	TO	3479				217.9	217.9	217.6	217.6	218.3	217.2	217.6	aJ66
03S 38W 21BCB 01	TO	3512				240.1	240.1	239.7	243.5	245.7	246.8		aJ66
03S 38W 25BBB 01		3479				227.0	227.2	227.0	232.7	227.0	226.6	228.2	aJ85
03S 39W 04CCC 01	TO	3351				65.6	66.4	66.8	67.9	71.2	64.9	64.6	aJ50
03S 39W 20DAC 01	TO	3450	199	130	140.4	140.2	140.2	139.4	141.0	140.6	140.6	138.8	aJ64
03S 39W 24DDD 01	TO	3505	275	205		221.5	222.0	221.7	222.7	222.7	222.5		aJ78
03S 39W 32BDB 01	TO	3490	223	150	153.6	153.5	153.6	153.3	158.4	153.1	153.6	157.7	aJ60
03S 40W 09BAA 02	QA,TO	3358	22	20	19.9	19.9	19.9	19.8	19.7	19.7	20.0	19.6	aJ51
03S 40W 35AAC 01	TO	3445	144	95	96.1	97.9	96.6	97.8	96.9	97.3	97.6	97.4	aJ64
03S 41W 33ABB 01		3594	184	164		163.5	165.0	162.1	161.8	161.8	160.6		aJ81
03S 42W 04AAA 01	TO	3727	255	230		231.3	230.9	231.0	230.9	230.9	231.3	231.1	aJ78
03S 42W 26CCD 01		3702				205.2	205.0	205.2	212.0	205.8	206.7		aJ85
04S 37W 17AAC 01	TO	3446	325	187	187.9	197.3	197.5	197.6	197.0	200.0	202.7	198.4	aJ66
04S 37W 25DCA 01	TO	3374	284	147	141.5	151.9	151.8		152.4	153.3	152.6	154.7	aJ64
04S 38W 04BAC 01	TO	3509	327	207	207.0	218.6	218.9	218.7	228.3	220.5	221.2	221.6	aJ66
04S 38W 20CCC 01	TO	3485	297	151	149.5	157.0	157.2	157.3	160.4	157.5	157.5	157.5	aJ67
04S 38W 21ADC 01	TO	3491	316	178	188.0	185.4	185.9	187.6	186.1	190.1	194.8		aJ65
04S 40W 22BCB 01	TO	3520	215	123	123.9	124.6	124.3	124.3	124.4	126.4	125.7	124.9	aJ50
04S 41W 16DAA 01	QA	3403	38	13	14.2	15.5	15.6	15.7	15.8	15.9	16.1	15.4	aJ64
04S 41W 23AAA 01		3526				120.9	120.5	120.9	120.6	122.2	122.2		aJ85
04S 41W 25BCB 01	TO	3571	211	141	139.6	142.8	142.8	142.8	142.9	143.3	143.5		aJ46
04S 41W 31ACA 01	TO	3552	142	94	94.0	96.6	96.4	97.1	97.0	97.4	97.5	97.6	aJ46
04S 42W 02BCC 01		3704				213.1	214.6	213.6	213.7	216.0	213.2	216.0	aJ85
04S 42W 16CCD 01		3590				87.4	86.2	88.9	89.2	89.9	90.4		aJ84
05S 37W 15DBB 01	TO	3397	297	137	136.4	150.1	145.7	143.9	151.3	151.1	152.7	152.5	aJ64
05S 38W 13BAD 01	TO	3390	220	74	72.5	78.1	78.7	78.0	78.1	77.9	78.6		aJ64
05S 38W 22ACB 01	TO	3437	270	90	90.6	97.7	97.8	99.9	103.5	95.3	96.0	97.3	aJ64
05S 39W 06DAA 01		3607				212.1	214.5	218.1	213.0	213.5	213.9	214.7	aJ80
05S 39W 11CBC 01	TO	3530	291	140	140.1	150.1	150.5	149.2	149.0	149.3	152.0	151.0	aJ65
05S 39W 18CCC 01	TO	3630	325	185		218.9	218.9	216.9	218.7	221.5			aJ78
05S 39W 25CDA 01	TO	3533	295	127	125.0	132.1	132.6	134.7	135.1	132.6	132.7	133.2	aJ65
05S 40W 14BCD 01	TO	3645	325	187		221.9	220.8	220.7	221.9	222.2	224.1	224.6	aJ75
05S 41W 20DAA 01	TO	3742	309	207	211.6	227.4	225.8	226.1	226.3	226.9	227.0		aJ64
05S 42W 14DCC 01			215					131.3	132.7	134.1	133.4	134.1	aJ87

TABLE 2. DERIVED HYDROLOGIC DATA, CHEYENNE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
01S 38W 02CDC 01	TO	23.9	-1	-1.3	0.1	0.0	-0.1	18	17	-6
01S 38W 08DCC 01	QA	13.5	-2	-1.2		0.0	0.0	21	20	-5
01S 38W 30BDC 01	QA	10.0	-3	-2.0	0.3	-0.1	-0.1	21	18	-14
01S 39W 25CBC 01	QA	9.5	-3	-1.0	0.3	-0.1	0.0	19	17	-11
02S 37W 33DCC 01		214.3			-1.7					
02S 39W 27BBB 01	QA									
02S 40W 28DBA 01	TO	110.8	1	1.7	-0.1	0.0	0.1	28	29	4
02S 40W 32BCB 01	TO	131.4			-2.3					
02S 41W 27BBD 01	TO	202.8	-3	-4.2	-2.7	-0.1	-0.2	42	39	-7
02S 41W 33DBC 01	TO	236.4	-1	-1.2	-0.4	0.0	0.0	53	52	-2
03S 37W 19BBC 01	TO	231.1	-16	-11.3	-1.5	-0.4	-0.4	110	94	-15
03S 37W 21DDD 01	TO									
03S 37W 36ADB 01	TO	202.6	-28	-20.6	-1.0	-0.7	-0.8	125	97	-22
03S 38W 04BCC 01	TO	217.6			-0.4					
03S 38W 21BCB 01	TO									
03S 38W 25BBB 01		228.2			-1.6					
03S 39W 04CCC 01	TO	64.6			0.3					
03S 39W 20DAC 01	TO	138.8	-9	1.6	1.8	-0.2	0.1	69	60	-13
03S 39W 24DDD 01	TO									
03S 39W 32BDB 01	TO	157.7	-8	-4.1	-4.1	-0.2	-0.2	73	65	-11
03S 40W 09BAA 02	QA,TO	19.6	0	0.3	0.4	0.0	0.0	2	2	0
03S 40W 35AAC 01	TO	97.4	-2	-1.3	0.2	0.0	-0.1	49	47	-4
03S 41W 33ABB 01										
03S 42W 04AAA 01	TO	231.1	-1		0.2	0.0		25	24	-4
03S 42W 26CCD 01										
04S 37W 17AAC 01	TO	198.4	-11	-10.5	4.3	-0.3	-0.4	138	127	-8
04S 37W 25DCA 01	TO	154.7	-8	-13.2	-2.1	-0.2	-0.5	137	129	-6
04S 38W 04BAC 01	TO	221.6	-15	-14.6	-0.4	-0.4	-0.6	120	105	-13
04S 38W 20CCC 01	TO	157.5	-7	-8.0	0.0	-0.2	-0.3	146	140	-4
04S 38W 21ADC 01	TO									
04S 40W 22BCB 01	TO	124.9	-2	-1.0	0.8	0.0	0.0	92	90	-2
04S 41W 16DAA 01	QA	15.4	-2	-1.2	0.7	0.0	0.0	25	23	-8
04S 41W 23AAA 01										
04S 41W 25BCB 01	TO									
04S 41W 31ACA 01	TO	97.6	-4	-3.6	-0.1	-0.1	-0.1	48	44	-8
04S 42W 02BCC 01		216.0			-2.8					
04S 42W 16CCD 01										
05S 37W 15DBB 01	TO	152.5	-16	-16.1	0.2	-0.4	-0.6	160	145	-9
05S 38W 13BAD 01	TO									
05S 38W 22ACB 01	TO	97.3	-7	-6.7	-1.3	-0.2	-0.3	180	173	-4
05S 39W 06DAA 01		214.7			-0.8					
05S 39W 11CBC 01	TO	151.0	-11	-10.9	1.0	-0.3	-0.4	151	140	-7
05S 39W 18CCC 01	TO									
05S 39W 25CDA 01	TO	133.2	-6	-8.2	-0.5	-0.1	-0.3	168	162	-4
05S 40W 14BCD 01	TO	224.6	-38		-0.5	-0.9		138	100	-28
05S 41W 20DAA 01	TO									
05S 42W 14DCC 01		134.1			-0.7				81	

Clark County

TABLE 1. SELECTED HYDROLOGIC DATA , CLARK COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1940	1966	1986	1987	1988	1989	1990	1991	1992	Data type
30S 23W 06AAA 01		2556			140.6	142.0	144.6	146.7	143.1	145.1	146.2	142.6	aD39
33S 22W 30CBC 01		1899				15.4	14.1	13.2	14.5	12.8	14.4	18.1	aD61

TABLE 2. DERIVED HYDROLOGIC DATA, CLARK COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
30S 23W 06AAA 01		142.6		-2.0	3.6		-0.1			
33S 22W 30CBC 01		18.1			-3.7					

Cloud County

TABLE 1. SELECTED HYDROLOGIC DATA , CLOUD COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
05S 02W 01BAC 01		1380			43.9	42.5	40.8	40.0	41.7	26.0	43.1	44.1	aM70

TABLE 2. DERIVED HYDROLOGIC DATA, CLOUD COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1944–92	1974–92	1991–92	1944–92	1974–92	1944	1992	1944–92
05S 02W 01BAC 01		44.1		-0.2	-1.0		0.0			

Crawford County

TABLE 1. SELECTED HYDROLOGIC DATA , CRAWFORD COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
29S 23E 24DBA 01		995				305.0	305.3	305.6	306.9	307.8	314.3	318.5	qM77

TABLE 2. DERIVED HYDROLOGIC DATA, CRAWFORD COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
29S 23E 24DBA 01		318.5			-4.2					

Decatur County

TABLE 1. SELECTED HYDROLOGIC DATA , DECATUR COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
01S 26W 18DDB 01	QA	2413	59	28	26.4	27.8	28.1	28.0	27.9	27.8	28.3		aD59
01S 29W 03DDB 01	QA	2539	45	23	23.0	28.6	28.0	28.4	27.6	28.5	28.7	29.3	aD65
01S 29W 19BDD 01	QA	2572	53	10	10.9	17.0	17.4	17.4	17.9	17.5	18.8	19.5	qD59
01S 30W 34DDD 01	QA	2610	60	20	21.5	26.1	27.5	28.3	29.5	29.5	31.0	32.6	aD62
02S 26W 11BBA 01	TO	2509	110	85	87.3	87.8	85.7	87.2	85.4	85.5	85.3	85.5	aD66
02S 28W 13ABA 01		2487		27	26.2	28.2	29.1	28.7	26.8	28.0	29.1	29.8	aD62
02S 30W 23ADD 01		2835						139.8	136.3		135.6		aD87
03S 26W 30CBB 02	TO	2610	142	119	119.4	125.5	125.3	125.1		124.4	124.2	123.9	uD65
03S 27W 32ABA 01	TO	2637	120	74	74.8	72.1	69.9	71.1	70.6	70.2	70.0	70.0	aD67
03S 28W 06DCB 01	QA	2571	55	34	25.6	37.1	30.6	35.4	35.4	35.9	36.5	35.9	aD67
03S 28W 32BCA 01	TO	2749	180	133	133.6	135.3	130.8		130.5	132.5	130.5	130.4	aD62
03S 29W 12BBA 01	QA	2556	55	26	24.9	25.0	25.4	25.3	22.4	25.2	24.9	24.6	qD59
03S 29W 17DCB 01	QA,TO	2587	50	19	20.0	21.8	20.4	19.1	21.6	22.7	23.1	22.8	aD62
03S 29W 31DCC 01	QA	2633	38	20	20.3	24.1	23.4	22.5	23.2	24.2	24.3	25.2	aD62
03S 30W 03CBA 01	TO	2807	177	96	98.6			93.5	96.4	96.7	93.7		aD64
03S 30W 26BBB 01	QA	2629	49	7	10.2	4.8	4.1	3.0	3.9	15.7	5.1	5.7	aD62
04S 26W 08DDD 01	QA	2456	70	26	28.7	29.4	29.7	30.6	29.4	29.2	29.5	30.6	aD59
04S 26W 19DCA 01	QA	2464	37	14	14.0	16.2	16.1	16.6	15.3	15.0	15.6	15.7	aD62
04S 27W 17DAC 01	TO	2648	162	105	103.8	103.6	103.8		105.6	105.8	106.1		aD62
04S 27W 33BBB 01	QA	2528	54	13	16.0	17.9	17.4	17.1	18.0	18.0	18.4	18.1	aD62
04S 28W 15AAA 01	TO	2700	130	92	94.1			91.7	91.8	91.3		91.2	aD53
04S 28W 30DDD 01	TO	2726	110	92	92.7	90.9	90.6	92.5	91.1	90.5	91.6	89.9	aD62
04S 30W 07BBB 01	QA	2697	21	7	7.3		12.0	12.8	13.2	13.1		14.1	aD64
05S 26W 05ADD 01	TO	2607	170	128	128.9	126.9	127.2	126.9	127.1	126.2	126.5	125.8	aD62
05S 26W 26DDA 01	QA	2437	74	26	22.4	23.8	23.1	22.6	24.0	22.0	23.2	25.4	aD62
05S 26W 33DCC 01	QA	2475	60	20	18.2	18.3	18.5	18.3	18.3	19.9	18.4	18.9	aD62
05S 27W 21CCA 01	TO	2675		103	104.2	103.6	103.3	103.4	103.5	104.9	103.2	103.0	aD64
05S 28W 07BBC 01	QA	2644	52	19	19.9	19.1	17.9	16.2	18.0	19.3	19.3	18.9	aD64
05S 28W 10BBB 01	QA	2600	47	12	8.0	9.0	8.7	8.2	9.7	10.2	10.0	9.8	aD64
05S 28W 14ADD 01	TO	2723	160	133	135.0	133.9	135.8	136.1	134.3	133.6	133.6	133.2	aD62
05S 28W 17DAC 01	TO	2734	124	102	102.3	101.9	95.6	104.3	101.7	100.5	101.9	101.7	aD62
05S 29W 22CBB 01	QA	2686	46	11	12.6	12.4	13.1	13.9		13.5	12.8	13.9	aD66
05S 30W 15CCB 01		2878				97.3	99.0	90.5	93.7	93.8	97.6	98.2	aD84
05S 30W 35BCB 01	TO	2891	200	112	111.6	124.7	125.8	122.7	118.8	118.9	119.0	119.3	aD66

TABLE 2. DERIVED HYDROLOGIC DATA, DECATUR COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
01S 26W 18DDB 01	QA									
01S 29W 03DDB 01	QA	29.3	-6	-6.3	-0.6	-0.1	-0.2	22	16	-27
01S 29W 19BDD 01	QA	19.5	-10	-8.6	-0.7	-0.2	-0.3	43	34	-21
01S 30W 34DDD 01	QA	32.6	-13	-11.1	-1.6	-0.3	-0.4	40	27	-33
02S 26W 11BBA 01	TO	85.5	-1	1.8	-0.2	0.0	0.1	25	25	0
02S 28W 13ABA 01		29.8	-3	-3.6	-0.7	-0.1	-0.1			
02S 30W 23ADD 01										
03S 26W 30CBB 02	TO	123.9	-5	-4.5	0.3	-0.1	-0.2	23	18	-22
03S 27W 32ABA 01	TO	70.0	4	4.8	0.0	0.1	0.2	46	50	9
03S 28W 06DCB 01	QA	35.9	-2	-10.3	0.6	0.0	-0.4	21	19	-10
03S 28W 32BCA 01	TO	130.4	3	3.2	0.1	0.1	0.1	47	50	6
03S 29W 12BBA 01	QA	24.6	1	0.3	0.3	0.0	0.0	29	30	3
03S 29W 17DCB 01	QA,TO	22.8	-4	-2.8	0.3	-0.1	-0.1	31	27	-13
03S 29W 31DCC 01	QA	25.2	-5	-4.9	-0.9	-0.1	-0.2	18	13	-28
03S 30W 03CBA 01	TO									
03S 30W 26BBB 01	QA	5.7	1	4.5	-0.6	0.0	0.2	42	43	2
04S 26W 08DDD 01	QA	30.6	-5	-1.9	-1.1	-0.1	-0.1	44	39	-11
04S 26W 19DCA 01	QA	15.7	-2	-1.7	-0.1	0.0	-0.1	23	21	-9
04S 27W 17DAC 01	TO									
04S 27W 33BBB 01	QA	18.1	-5	-2.1	0.3	-0.1	-0.1	41	36	-12
04S 28W 15AAA 01	TO	91.2	1	2.9		0.0	0.1	38	39	3
04S 28W 30DDD 01	TO	89.9	2	2.8	1.7	0.0	0.1	18	20	11
04S 30W 07BBB 01	QA	14.1	-7	-6.8		-0.2	-0.3	14	7	-50
05S 26W 05ADD 01	TO	125.8	2	3.1	0.7	0.0	0.1	42	44	5
05S 26W 26DDA 01	QA	25.4	1	-3.0	-2.2	0.0	-0.1	48	49	2
05S 26W 33DCC 01	QA	18.9	1	-0.7	-0.5	0.0	0.0	40	41	3
05S 27W 21CCA 01	TO	103.0	0	1.2	0.2	0.0	0.0			
05S 28W 07BBC 01	QA	18.9	0	1.0	0.4	0.0	0.0	33	33	0
05S 28W 10BBB 01	QA	9.8	2	-1.8	0.2	0.0	-0.1	35	37	6
05S 28W 14ADD 01	TO	133.2	0	1.8	0.4	0.0	0.1	27	27	0
05S 28W 17DAC 01	TO	101.7	0	0.6	0.2	0.0	0.0	22	22	0
05S 29W 22CBB 01	QA	13.9	-3	-1.3	-1.1	-0.1	-0.1	35	32	-9
05S 30W 15CCB 01		98.2			-0.6					
05S 30W 35BCB 01	TO	119.3	-7	-7.7	-0.3	-0.2	-0.3	88	81	-8

Douglas County

TABLE 1. SELECTED HYDROLOGIC DATA , DOUGLAS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
12S 20E 07CBC 01		826			14.0	10.2	8.4	13.6	15.8	15.0	15.0	16.5	qM66
15S 19E 15AAD 01		1120				39.5	39.4	40.6	42.0	42.9	43.0		aM72

TABLE 2. DERIVED HYDROLOGIC DATA, DOUGLAS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
12S 20E 07CBC 01										
15S 19E 15AAD 01										

Edwards County

TABLE 1. SELECTED HYDROLOGIC DATA , EDWARDS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
24S 16W 12CBC 01	QU	2055	130	5	9.2	24.4	24.0	21.7	24.3	26.7	28.6	30.5	aJ70
24S 17W 20ADC 01	QU	2126	121	3	15.8	28.6	28.6		29.7	30.6	32.0	34.0	aJ73
24S 17W 24DDD 01	QU	2100	170	15	13.3	30.0	29.5	28.6	30.8	32.1	33.4	34.9	qJ73
24S 18W 13DAC 01		2130	115			28.1	28.7	27.9	29.6	30.3	31.3	32.8	aJ86
24S 18W 17ABD 01	QU	2147	92	27	18.8	29.8	29.7	28.4		30.2	31.5	33.1	aJ73
24S 18W 28DAC 01	QU	2158	98	25	16.6	34.1	33.8	34.7	33.1	34.5	35.6	37.2	aJ73
24S 18W 36DDC 01	QU	2149	119	28	24.2	38.3		34.9	38.4	35.7	37.5	40.1	aJ72
24S 19W 34ADD 01	QA	2160		8	7.0	8.9	8.6	9.0	9.6	8.8	8.7	10.3	qJ61
25S 16W 02BBB 01	QU	2069	184	6	6.6	25.3	24.9	20.4	24.4	25.9	27.1	28.3	aJ73
25S 16W 27AAC 01	QU	2063	188	3	6.1	17.7	16.8	16.2	17.7	17.4	19.5	20.5	aJ73
25S 16W 31DCC 01	TO	2089				20.6	19.3	15.2	19.4	19.1	21.7	23.4	qJ81
25S 17W 01DAB 01	QU	2102	162	12	8.8	27.1	26.6	23.5	26.9	28.2	29.4	30.6	aJ45
25S 17W 17AAC 01	QU	2129	74	14	14.4	30.1	29.5	27.7	30.4	31.1	32.5	34.9	aJ73
25S 17W 31BBD 01	QU	2148	178	22	11.1	24.2	24.0	22.7	24.5	25.1		28.0	aJ64
25S 18W 09AAA 01	QU	2161	131	21	15.6	29.6	29.3	26.0	28.9	30.4	31.8	33.8	qJ73
25S 18W 20AAB 01									36.8	37.9	38.7	41.0	aJ88
25S 18W 33CDC 01	QU	2182	172	29	23.2	30.5	30.6	30.2	31.4	32.3	33.3	34.8	aJ72
25S 19W 08BDD 01						6.6	5.7	3.9	6.4	5.8	6.3	8.3	aJ84
25S 19W 26DDB 01	QU	2206	146	31	30.1	38.8	37.9		41.8	37.6	40.9	40.2	aJ73
25S 19W 31CAB 01	QU	2220		17	15.2	19.5	18.3	17.7	18.5	18.7	19.4	21.2	aJ73
25S 20W 03BCD 01		2237				28.0	28.9	27.4	26.9	27.5	29.6	30.7	aJ84
25S 20W 34CCC 01		2219				8.2	8.2	7.0	8.3	7.6	7.6	9.0	aJ45
26S 16W 10CCC 01	QU	2065	220	5	3.8	9.6	9.8	7.6	10.4	9.0	11.8	13.1	aJ73
26S 16W 31CCA 01	QU	2110	285	25	19.6	31.4	32.1	29.3	33.0	32.0	34.0	36.4	aJ73
26S 16W 34ABC 01	QU	2079	289	25	6.8	21.3	22.8	18.6	23.1	22.3	24.0	25.5	aJ66
26S 17W 04AAC 01	QU	2146	216	44		43.4		41.6			29.7	32.8	aJ72
26S 17W 14BAA 01	QU	2109	194	16	20.7	25.6	24.6	20.5	26.9	23.5	26.1	29.4	aJ73
26S 17W 33DDB 01	QU	2127	227	22	12.4	22.7	23.5	20.2	23.6	23.5	25.6	27.9	aJ73
26S 18W 15DCB 01	QU	2174	229	33	22.0	30.5	30.4	28.9	30.6	31.6	33.3	35.0	aJ69
26S 18W 31CCC 01		2215	195	47	33.6	45.5	45.8	44.5	46.8	47.6	49.2	51.6	aJ73
26S 19W 12ABB 02		2210	155	38		50.3	49.9	42.5	44.5	49.0	45.6	47.4	qJ79
26S 19W 16BCB 01	QU	2231	176	35	29.4	37.8	38.3	36.9	38.7	39.1	40.1	41.6	aJ66
26S 19W 34BBD 01	QU	2232	187	36	30.8	38.1	38.2	37.6	38.7	40.6	41.8	43.0	aJ73
26S 20W 20BBC 01		2251		19		11.4	11.4	10.0	12.5	11.3	11.2	13.4	aJ85

TABLE 2. DERIVED HYDROLOGIC DATA, EDWARDS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
24S 16W 12CBC 01	QU	30.5	-26	-21.3	-1.9	-0.6	-0.8	125	100	-20
24S 17W 20ADC 01	QU	34.0	-31	-18.2	-2.0	-0.7	-0.7	118	87	-26
24S 17W 24DDD 01	QU	34.9	-20	-21.6	-1.5	-0.5	-0.8	155	135	-13
24S 18W 13DAC 01		32.8			-1.5				82	
24S 18W 17ABD 01	QU	33.1	-6	-14.3	-1.6	-0.1	-0.6	65	59	-9
24S 18W 28DAC 01	QU	37.2	-12	-20.6	-1.6	-0.3	-0.8	73	61	-16
24S 18W 36DDC 01	QU	40.1	-12	-15.9	-2.6	-0.3	-0.6	91	79	-13
24S 19W 34ADD 01	QA	10.3	-2	-3.3	-1.6	0.0	-0.1			
25S 16W 02BBB 01	QU	28.3	-22	-21.7	-1.2	-0.5	-0.8	178	156	-12
25S 16W 27AAC 01	QU	20.5	-18	-14.4	-1.0	-0.4	-0.6	185	168	-9
25S 16W 31DCC 01	TO	23.4			-1.7					
25S 17W 01DAB 01	QU	30.6	-19	-21.8	-1.2	-0.5	-0.8	150	131	-13
25S 17W 17AAC 01	QU	34.9	-21	-20.5	-2.4	-0.5	-0.8	60	39	-35
25S 17W 31BBD 01	QU	28.0	-6	-16.9		-0.1	-0.7	156	150	-4
25S 18W 09AAA 01	QU	33.8	-13	-18.2	-2.0	-0.3	-0.7	110	97	-12
25S 18W 20AAB 01		41.0			-2.3					
25S 18W 33CDC 01	QU	34.8	-6	-11.6	-1.5	-0.1	-0.4	143	137	-4
25S 19W 08BDD 01		8.3			-2.0					
25S 19W 26DDB 01	QU	40.2	-9	-10.1	0.7	-0.2	-0.4	115	106	-8
25S 19W 31CAB 01	QU	21.2	-4	-6.0	-1.8	-0.1	-0.2			
25S 20W 03BCD 01		30.7			-1.1					
25S 20W 34CCC 01		9.0			-1.4					
26S 16W 10CCC 01	QU	13.1	-8	-9.3	-1.3	-0.2	-0.4	215	207	-4
26S 16W 31CCA 01	QU	36.4	-11	-16.8	-2.4	-0.3	-0.6	260	249	-4
26S 16W 34ABC 01	QU	25.5	-1	-18.7	-1.5	0.0	-0.7	264	264	0
26S 17W 04AAC 01	QU	32.8	11		-3.1	0.3		172	183	6
26S 17W 14BAA 01	QU	29.4	-13	-8.7	-3.3	-0.3	-0.3	178	165	-7
26S 17W 33DDB 01	QU	27.9	-6	-15.5	-2.3	-0.1	-0.6	205	199	-3
26S 18W 15DCB 01	QU	35.0	-2	-13.0	-1.7	0.0	-0.5	196	194	-1
26S 18W 31CCC 01		51.6	-5	-18.0	-2.4	-0.1	-0.7	148	143	-3
26S 19W 12ABB 02		47.4	-9		-1.8	-0.2		117	108	-8
26S 19W 16BCB 01	QU	41.6	-7	-12.2	-1.5	-0.2	-0.5	141	134	-5
26S 19W 34BBD 01	QU	43.0	-7	-12.2	-1.2	-0.2	-0.5	151	144	-5
26S 20W 20BBC 01		13.4	6		-2.2	0.1				

Ellis County

TABLE 1. SELECTED HYDROLOGIC DATA , ELLIS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
13S 18W 29CCC 01		2000				21.6	21.7	19.8	20.9	21.1	21.2	21.7	qM82
14S 18W 12AAD 01		2000				26.3	26.4	24.9	25.7	26.3	26.6	27.3	qM76
15S 18W 25CCD 01		1910				15.3	15.7	15.6	16.2	15.9	15.9	16.9	qM82
15S 19W 25CAB 01		1937				16.1	16.4	16.0	16.1	16.1	16.0	16.3	qM82

TABLE 2. DERIVED HYDROLOGIC DATA, ELLIS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
13S 18W 29CCC 01		21.7			-0.5					
14S 18W 12AAD 01		27.3			-0.7					
15S 18W 25CCD 01		16.9			-1.0					
15S 19W 25CAB 01		16.3			-0.3					

Ellsworth County

TABLE 1. SELECTED HYDROLOGIC DATA , ELLSWORTH COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
17S 09W 20BCD 01		1770				21.9	23.1	20.3	23.0	23.8	24.4	25.8	qM61
17S 09W 21BCC 01		1775			92.2	73.8	76.2	73.3	77.7	77.0	93.7	77.9	qM66
17S 09W 28CBB 02		1761				36.6	36.8	35.0	35.2	36.7	36.5	37.6	qM66
17S 09W 31AAB 01		1762			99.6	61.7	69.4	65.8	68.1	49.0	51.7	51.4	qM66
17S 09W 31ADC 01						60.6	65.5	59.6	63.5	68.8			qM66

TABLE 2. DERIVED HYDROLOGIC DATA, ELLSWORTH COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1940–92	1966–92	1991–92	1940–92	1966–92	1940	1992	1940–92
17S 09W 20BCD 01		25.8			-1.4					
17S 09W 21BCC 01		77.9		14.3	15.8		0.6			
17S 09W 28CBB 02		37.6			-1.1					
17S 09W 31AAB 01		51.4		48.2	0.3		1.9			
17S 09W 31ADC 01										

Finney County

TABLE 1. SELECTED HYDROLOGIC DATA , FINNEY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1940	1966	1986	1987	1988	1989	1990	1991	1992	Data type
21S 30W 05BBB 01	QU,TO	2863	78	35	28.6	36.7	38.3	36.0	36.2	35.6			aJ40
21S 31W 26CCC 01	QU,TO	2900		75		73.9	74.2	74.3	75.2		75.3	75.1	aU85
21S 32W 08ABD 01	QU	2910	150	36	41.3	100.6	103.8	104.5	115.6		116.8	118.8	aU58
21S 32W 20CBD 01	QU,TO	2898	200	31	45.1	98.4		105.2	109.0	110.2	109.9	112.0	aJ64
21S 32W 26DAA 01	QU,TO	2946	171	96	98.8	105.7	107.3	108.6	108.5	109.5	109.1	109.1	aJ61
21S 33W 29BBC 01		2891	106	16		79.7	81.4	81.5	84.7	85.9	88.3	86.2	aJ85
†21S 34W 14DBB 01	KN	2947	97	56	69.0	101.7	104.2	103.4		106.4	110.7	101.0	aJ61
21S 34W 16AAD 02	QU,TO	2981	120	80	95.3	93.2	93.0	92.8	93.2	93.1	93.0		aJ62
22S 27W 14ADC 01	KJ	2458				181.4	177.3	175.2	181.2	178.4	178.1	178.7	aJ70
22S 31W 08CCC 01		2911	171	81		98.2	99.0	99.1	100.8	102.7	102.0	97.9	aJ85
22S 31W 16ADD 01	QU,TO	2904	181	84	85.5	105.5	107.0	107.2	108.3	110.0	109.9	111.3	aJ61
22S 32W 08ACB 01	QU,TO	2884	224	33	40.0	87.5	90.4	94.8	95.5	99.2	99.3	101.6	aJ60
22S 32W 21CDC 01	QU,TO	2903	198	58	66.4	123.8	128.0	130.1	134.5	134.1	136.4	138.0	aJ58
22S 33W 22BAA 01	QU,TO	2900	190	40	47.1	105.8	114.3	114.2	117.7		125.3		qJ60
22S 33W 36AAA 02	QU,TO	2860	200	14	21.5	62.9	63.1	61.4	60.2	55.6			qJ58
†22S 34W 08BCB 01	KN	2987	132	87	108.9	132.8	134.1	134.4	134.7	134.9	138.3	141.3	aJ61
22S 34W 10AAA 01	QU,TO	2933	153	43	59.2	110.7	107.9	109.1	107.5	107.6	107.3	107.3	aJ61
22S 34W 18CDD 01		2984	234	67		147.9	149.5	149.8	151.3	148.4	145.8	149.1	aJ85
22S 34W 26CCC 01		2939				165.4	167.7	168.0	171.0	172.8	173.3	174.5	qJ85
23S 27W 22DAB 01	TO,TO	2654		82		80.5	81.4	79.4	82.6	81.5		80.3	aJ76
23S 28W 22DCD 01	QU,TO	2729		74		75.0	75.1	74.9	75.6	75.1	76.2	75.8	aJ76
23S 28W 34DDC 01	QU,TO	2738		76		92.5	92.1	91.6	93.2	92.9	93.2		aJ76
23S 29W 30BBB 01	QU,TO	2794		75		78.5	78.8	79.0	79.0	84.4	78.4	78.5	aJ76
23S 29W 34CDD 01	TO	2772	147	84	84.0	90.3	90.5	89.4	91.0	89.9	88.8	91.0	aJ66
23S 30W 04ACC 01	QU,TO	2846		65		67.6	68.2	68.3	69.2	68.6	68.5	69.0	aJ76
23S 30W 19CCB 01	QU,TO	2862	142	89	82.2	87.4	87.9	88.5	89.1	87.4	89.4	90.3	aJ61
23S 31W 03DCD 01	QU,TO	2877	167	72	83.0	107.3	107.8	107.1	108.5	116.9	110.6		aJ61
23S 31W 17ABA 01		2900	210	90		107.3	108.5	108.6	109.9	112.6	112.4	113.9	aJ85
23S 32W 11ADC 01	QU,TO	2937	242	117	122.7	147.9	149.8	150.7			155.1		aJ60
23S 32W 31CBD 01	QU,TO	2876	324	41	49.4		90.2	84.8	85.5	85.8	90.8	94.8	aJ58
23S 33W 17BBB 01	QU,TO	2904	340	26	60.3	144.8	150.4	141.5		145.3	139.8		aJ58
23S 33W 26ABB 01	QU,TO	2890	327	42	50.4	105.6	109.4	109.3	111.0	106.5	108.3	110.8	aJ58
23S 33W 28CDC 01	TO,TO	2904		46	61.2	109.6	111.6	104.9	112.4	104.3	103.9	109.3	qJ58
23S 34W 17CCC 01	QU,TO	2974	349	46	70.0	138.3	141.6	145.0	139.6	130.8	135.1	142.8	aJ58
23S 34W 21DDC 01	QU,TO	2961	356	41	71.6	130.2	128.6	124.8	129.5	123.4	120.2	131.0	mJ58
24S 31W 27CCB 01	QU,TO	2883	295	114	119.5	130.0	131.3	131.1	142.0	142.0	136.6	142.9	qD42
24S 32W 03DAC 01	QU,TO	2881	299	70	80.9	110.0	110.9	111.2	112.5	111.8	112.4	114.0	qJ34
24S 32W 35DD 01	QU,TO	2811	256	21	27.2			39.2	43.4	44.4			aD62
24S 33W 09CCD 01	QU	2865	355	11		57.2	55.1	46.7	52.1	48.5	49.6	52.7	mJ77
24S 33W 09CCD 02	QA	2865				16.5	15.1	12.3	13.0	14.6	16.8	19.3	mJ77
24S 33W 09CCD 03	KD	2865				62.7	65.8	59.6	60.4	60.3	63.1	65.4	mJ80
24S 33W 18BDB 02		2878	338	8		67.4	71.3	60.7	70.3	94.2	101.7	107.8	aJ79
24S 33W 19DBB 02		2928	447	57		114.3	114.0	108.2	112.8	135.6	143.5	142.8	aJ77
24S 33W 22BCC 01		2888		38		73.7	73.2	71.2	70.7	71.1	70.6	75.1	qD75
24S 33W 22DCA 01	QU,TO	2905	405	71			111.5	107.3	108.7	109.0	111.2	113.7	qD73
24S 33W 28DAA 01	QU,TO	2886	386	34		99.7	100.0	96.0	96.2		100.7	103.0	qD73
24S 33W 34CAC 01	QU,TO	2910	435	60		126.2	127.3	123.6	124.7	127.9	130.3	133.1	aD74
24S 34W 01BCB 01	QU,TO	2894	316	12	24.7	65.6	66.4	58.9	62.5	64.2	53.6	60.3	aJ61
25S 31W 21CAB 01	QU	2788	228	27	20.4			35.1	45.5	46.1	47.0	49.8	aJ61

25S 31W 35DBA 01	QU	2801	256	52	49.9	77.0			75.4	83.6	87.0		aD58
25S 32W 22DBC 01	QU,TO	2865	373	65	62.0	98.7	101.3	103.1	116.7	131.0	116.6	113.5	aD68
25S 32W 31DDC 01		2871						111.5	115.7	117.6	119.7	125.5	qD83
25S 32W 35ADB 01	QU,TO	2857	417	67	68.0	100.0	102.5	104.3	107.6	109.8	111.7	114.9	aD60
25S 33W 03BCC 01		2902		47			52.9	53.0	54.8	52.8	50.4	53.1	qD75
25S 33W 05ABD 01	QU,TO	2920	510	52		121.3	123.2	122.0	124.7	129.4	132.2	135.9	qD73
25S 33W 09ABD 01	QU,TO	2909	514	50		118.4	120.5	119.4	120.7	125.3	128.2	131.3	qD73
25S 33W 15DAC 01	QU,TO	2915	535	71		138.7	140.1	140.7	142.9	146.5	150.3	152.7	qD72
25S 33W 16DCC 01		2920		62		90.1	90.2	92.5	92.5	94.1	89.4	89.9	qD75
25S 33W 17DBD 01	QU,TO	2940	530	78		135.1	136.3	138.2	142.9	148.1	151.4	155.1	qD73
25S 33W 33CDA 01		2915	460	65		117.6	122.8	124.1	131.7	132.1	135.5	140.8	aJ85
25S 33W 35DBD 01	QU,TO	2894	474	63		109.5	114.2		124.3	128.0		138.0	aJ74
25S 34W 06AAA 01	QU,TO	2972	397	52		109.3	110.0	111.4	113.4	117.6	118.8	125.4	aJ75
25S 34W 10ABB 01	QU,TO	2962	412	62		95.3	100.5	103.0	103.6	106.1	105.9	106.6	qJ75
25S 34W 34DBD 01	QU,TO	2945	440	65	70.0	117.4	126.7	122.4	128.1	146.5	150.7	140.1	aJ70
26S 31W 01DDA 01	QU,TO	2811	301	75	74.0	104.7	107.1	108.4	111.8	113.6	115.5	118.3	aD59
26S 31W 06BBB 01	QU,TO	2832	327	55	55.6	88.0	90.4	92.3	95.6	97.5	102.2	102.2	aD61
26S 31W 31CDC 01	QU,TO	2841	496	83	86.1	135.1	138.5	139.9	144.6	145.7	148.3	152.3	aJ61
26S 31W 36CAB 01	QU,TO	2817	332	82	80.3	126.0	127.4	128.7	131.8	134.3	138.0	139.1	aD61
26S 32W 22ABB 01	QU,TO	2899	564	113	115.6	147.3	149.3	150.3	154.3	155.1	156.4	159.1	aD62
26S 33W 17DBD 01		2900	520	60		111.0	114.4	117.0	121.4	124.6	127.9	132.2	aJ81
26S 33W 26ABB 01	QU,TO	2929	554	113	118.3	162.4	166.6	170.5	175.3	178.7	183.5	186.9	qJ61
26S 34W 05ADC 01		2960		72		114.7	123.2		130.6	132.4	144.1	144.5	aJ81
26S 34W 21BBD 01		2955		77		130.2	133.4	137.1	143.2	146.7	150.9		aJ81

TABLE 2. DERIVED HYDROLOGIC DATA, FINNEY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
21S 30W 05BBB 01	QU,TO									
21S 31W 26CCC 01	QU,TO	75.1	0		0.2	0.0				
21S 32W 08ABD 01	QU	118.8	-83	-77.5	-2.0	-1.6	-3.0	114	31	-73
21S 32W 20CBD 01	QU,TO	112.0	-81	-66.9	-2.1	-1.6	-2.6	169	88	-48
21S 32W 26DAA 01	QU,TO	109.1	-13	-10.3	0.0	-0.3	-0.4	75	62	-17
21S 33W 29BBC 01		86.2	-70		2.1	-1.3		90	20	-78
21S 34W 14DBB 01	KN	101.0	-45	-32.0	9.7	-0.9	-1.2	41	-4	-110
21S 34W 16AAD 02	QU,TO									
22S 27W 14ADC 01	KJ	178.7			-0.6					
22S 31W 08CCC 01		97.9	-17		4.1	-0.3		90	73	-19
22S 31W 16ADD 01	QU,TO	111.3	-27	-25.8	-1.4	-0.5	-1.0	97	70	-28
22S 32W 08ACB 01	QU,TO	101.6	-69	-61.6	-2.3	-1.3	-2.4	191	122	-36
22S 32W 21CDC 01	QU,TO	138.0	-80	-71.6	-1.6	-1.5	-2.8	140	60	-57
22S 33W 22BAA 01	QU,TO									
22S 33W 36AAA 02	QU,TO									
22S 34W 08BCB 01	KN	141.3	-54	-32.4	-3.0	-1.0	-1.2	45	-9	-120
22S 34W 10AAA 01	QU,TO	107.3	-64	-48.1	0.0	-1.2	-1.9	110	46	-58
22S 34W 18CDD 01		149.1	-82		-3.3	-1.6		167	85	-49
22S 34W 26CCC 01		174.5			-1.2					
23S 27W 22DAB 01	TO,TO	80.3	2			0.0				
23S 28W 22DCD 01	QU,TO	75.8	-2		0.4	0.0				
23S 28W 34DDC 01	QU,TO									
23S 29W 30BBB 01	QU,TO	78.5	-4		-0.1	-0.1				
23S 29W 34CDD 01	TO	91.0	-7	-7.0	-2.2	-0.1	-0.3	63	56	-11
23S 30W 04ACC 01	QU,TO	69.0	-4		-0.5	-0.1				
23S 30W 19CCB 01	QU,TO	90.3	-1	-8.1	-0.9	0.0	-0.3	53	52	-2
23S 31W 03DCD 01	QU,TO									
23S 31W 17ABA 01		113.9	-24		-1.5	-0.5		120	96	-20
23S 32W 11ADC 01	QU,TO									
23S 32W 31CBD 01	QU,TO	94.8	-54	-45.4	-4.0	-1.0	-1.7	283	229	-19
23S 33W 17BBB 01	QU,TO									
23S 33W 26ABB 01	QU,TO	110.8	-69	-60.4	-2.5	-1.3	-2.3	285	216	-24
23S 33W 28CDC 01	TO,TO	109.3	-63	-48.1	-5.4	-1.2	-1.9			
23S 34W 17CCC 01	QU,TO	142.8	-97	-72.8	-7.7	-1.9	-2.8	303	206	-32
23S 34W 21DDC 01	QU,TO	131.0	-90	-59.4	-10.8	-1.7	-2.3	315	225	-29
24S 31W 27CCB 01	QU,TO	142.9	-29	-23.4	-6.3	-0.6	-0.9	181	152	-16
24S 32W 03DAC 01	QU,TO	114.0	-44	-33.1	-1.6	-0.8	-1.3	229	185	-19
24S 32W 35DD 01	QU,TO									
24S 33W 09CCD 01	QU	52.7	-42		-3.1	-0.8		344	302	-12
24S 33W 09CCD 02	QA	19.3			-2.5					
24S 33W 09CCD 03	KD	65.4			-2.3					
24S 33W 18BDB 02		107.8	-100		-6.1	-1.9		330	230	-30
24S 33W 19DBB 02		142.8	-86		0.7	-1.7		390	304	-22
24S 33W 22BCC 01		75.1	-37		-4.5	-0.7				
24S 33W 22DCA 01	QU,TO	113.7	-43		-2.5	-0.8		334	291	-13
24S 33W 28DAA 01	QU,TO	103.0	-69		-2.3	-1.3		352	283	-20
24S 33W 34CAC 01	QU,TO	133.1	-73		-2.8	-1.4		375	302	-19
24S 34W 01BCB 01	QU,TO	60.3	-48	-35.6	-6.7	-0.9	-1.4	304	256	-16
25S 31W 21CAB 01	QU	49.8	-23	-29.4	-2.8	-0.4	-1.1	201	178	-11
25S 31W 35DBA 01	QU									

25S 32W 22DBC 01	QU,TO	113.5	-49	-51.5	3.1	-0.9	-2.0	308	260	-16
25S 32W 31DDC 01		125.5			-5.8					
25S 32W 35ADB 01	QU,TO	114.9	-48	-46.9	-3.2	-0.9	-1.8	350	302	-14
25S 33W 03BCC 01		53.1	-6		-2.7	-0.1				
25S 33W 05ABD 01	QU,TO	135.9	-84		-3.7	-1.6		458	374	-18
25S 33W 09ABD 01	QU,TO	131.3	-81		-3.1	-1.6		464	383	-17
25S 33W 15DAC 01	QU,TO	152.7	-82		-2.4	-1.6		464	382	-18
25S 33W 16DCC 01		89.9	-28		-0.5	-0.5				
25S 33W 17DBD 01	QU,TO	155.1	-77		-3.7	-1.5		452	375	-17
25S 33W 33CDA 01		140.8	-76		-5.3	-1.5		395	319	-19
25S 33W 35DBD 01	QU,TO	138.0	-75			-1.4		411	336	-18
25S 34W 06AAA 01	QU,TO	125.4	-73		-6.6	-1.4		345	272	-21
25S 34W 10ABB 01	QU,TO	106.6	-45		-0.7	-0.9		350	305	-13
25S 34W 34DBD 01	QU,TO	140.1	-75	-70.1	10.6	-1.4	-2.7	375	300	-20
26S 31W 01DDA 01	QU,TO	118.3	-43	-44.3	-2.8	-0.8	-1.7	226	183	-19
26S 31W 06BBB 01	QU,TO	102.2	-47	-46.6	0.0	-0.9	-1.8	272	225	-17
26S 31W 31CDC 01	QU,TO	152.3	-69	-66.2	-4.0	-1.3	-2.5	413	344	-17
26S 31W 36CAB 01	QU,TO	139.1	-57	-58.8	-1.1	-1.1	-2.3	250	193	-23
26S 32W 22ABB 01	QU,TO	159.1	-46	-43.5	-2.7	-0.9	-1.7	451	405	-10
26S 33W 17DBD 01		132.2	-72		-4.3	-1.4		460	388	-16
26S 33W 26ABB 01	QU,TO	186.9	-74	-68.6	-3.4	-1.4	-2.6	441	367	-17
26S 34W 05ADC 01		144.5	-73		-0.4	-1.4				
26S 34W 21BBD 01										

Ford County

TABLE 1. SELECTED HYDROLOGIC DATA , FORD COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
25S 22W 20AAA 01	TO	2437		65	62.6	60.4	60.1	59.8	59.5	59.2	59.0	61.1	qD39
25S 22W 27CCD 01	KD	2432				119.8	129.3	128.5	137.4	133.7	135.0	142.8	qD70
25S 23W 11CCC 01	KD	2424				78.6	63.2	53.4	95.9	93.0	81.7	93.0	aD68
25S 23W 12BBB 01	KD	2390				152.7	158.4	157.4	156.9	155.0	154.7	164.7	qD72
25S 25W 32CDD 01	QU,KD	2607				186.7	188.2	187.9	193.4	194.1	202.1	202.6	aJ81
25S 25W 32DAD 01		2593				73.8	73.8	73.5	74.0	74.3	75.0	75.7	aJ85
25S 26W 25CDD 01	TO	2623	187	79		77.0	72.0	76.7	79.0	84.5	87.1	78.5	aJ77
25S 26W 30ABC 01	TO	2679	225	104		111.1	110.9	111.3		115.4	115.0	114.7	aJ77
26S 21W 17DBC 01	KD	2348				60.7	58.7	60.8	63.6	62.0	62.8	65.3	qD73
26S 21W 23ADA 01	QA	2262		6	7.3	8.2	7.4	7.0	8.2	8.9	6.2	7.0	qD38
26S 21W 25CCC 01		2270				6.3	5.8	5.2	6.8	6.2	5.1	8.2	aJ85
26S 22W 21DCD 01		2377				40.6	41.5	38.1	43.6	40.3	39.5	41.8	aJ82
26S 23W 02ABB 01		2451				79.5	79.2	79.9	79.2	81.2			aJ85
26S 23W 10DAD 01		2463				177.8	180.0	176.9	176.5	177.2	177.2	179.8	qD68
26S 24W 29DDD 01	TO	2575		130		137.3	137.2	139.9	142.5	139.4	143.8	149.1	qD68
26S 24W 31DDA 01	TO	2463		11		17.0	16.1	14.0	18.3	18.9	20.3	26.6	qD68
26S 24W 33CDA 01	TO	2466		26		31.2	27.8	25.6	32.6	33.0	33.5	40.8	aD68
26S 25W 16DCC 01		2619					143.5	139.9	142.4	141.7	141.8	145.5	aJ80
26S 26W 18CCB 01		2558				9.4	10.1	8.9	11.9	10.6	13.6	13.8	aJ81
26S 26W 32DCC 01		2616		74		86.3	85.7		87.7	89.2	91.4	95.8	qD77
26S 26W 36DCC 01	TO	2543	168	31		42.3	47.4	41.7	41.8	43.3	52.6	57.3	aJ77
27S 21W 10DBB 01		2291				7.0		6.2	7.2	6.7	7.6	8.0	aJ85
27S 22W 09DAB 01		2418					59.5	59.5	64.6	64.2	64.2		aJ82
27S 23W 24BCB 01	KD	2395				41.1	38.6	43.6	42.0	53.1	57.2	74.6	aD74
27S 23W 36CCC 01	TO	2428	147	46		45.4	45.5	45.5	46.5	46.8		47.8	aJ77
27S 24W 03BBD 01	TO	2455		19		24.5	24.5	24.2	24.4	24.8	25.3	27.1	aD68
27S 24W 03CDD 01	TO	2445				11.9	11.5	10.7	14.7	13.8	14.9	18.8	qD73
27S 24W 04BBC 01	TO	2453		11		15.1	14.4	14.2	16.4	16.7	19.5	24.2	qD68
27S 24W 09AAD 01	TO	2448		10		20.6	20.1	20.2	23.7	23.2	24.7	28.3	aD72
27S 24W 16BDB 01		2515				76.1	75.8	76.2	78.1	78.6	79.6	83.1	qD73
27S 24W 26DAA 01	TO	2512	191	79		90.7	91.1	92.4	92.4		93.9	95.7	aJ77
27S 25W 09ACA 01		2546				68.6	68.9	68.0	69.6	68.7	70.8	73.2	aJ81
27S 25W 25BBB 01		2574				116.4	117.2	117.9	119.6	119.8	120.8	123.0	aJ81
28S 21W 10DDD 01		2349		41		42.8	42.1	41.6	44.2	42.9	47.5	46.4	aJ77
28S 21W 23DBC 01	TO	2370					74.6	73.8	76.7	76.0	77.5		aJ77
28S 21W 25ABB 01		2365	149			71.1	70.5	70.1	72.1	71.2	72.4	74.9	aJ81
28S 22W 05ADD 01		2370				17.4	17.6	18.0	19.2	19.3	19.0	19.4	aJ81
28S 22W 12CAC 01	TO	2405	82	66		61.5	61.2	61.1	62.8	62.8	69.5	63.9	aJ76
28S 22W 32BAB 01	TO	2485	161	121		127.1	129.7	123.2		132.8	139.7	142.1	aJ77
28S 23W 18BAB 01		2547	239			136.5	136.6	137.2	138.0	138.5	144.7	140.0	aJ81
28S 23W 24ABB 01		2465					94.7	94.9	95.3	95.7	101.7	96.6	aJ80
28S 24W 08DCC 01		2578		133		145.2	140.8	143.4	142.8	143.4	144.4	146.1	qD77
28S 24W 22CDA 01		2500				104.4	106.4	106.7	107.7	108.3	109.3	110.6	aJ76
28S 24W 35CAB 01		2528	450			102.9	102.3	103.1	103.8	104.1	111.8	106.1	aJ81
28S 25W 06ABB 01		2643		144		149.2	149.6	150.8	166.2	151.6	161.1	154.7	qD72
28S 25W 19BBB 01	TO	2635	265	133		142.9	145.1	144.9	146.9	147.3	164.5	151.1	aJ77
28S 26W 06ABB 01	TO	2685	195	133		162.5	163.6		165.8	172.5	184.4	174.2	aJ77
28S 26W 10BAA 01		2608	192			98.5	99.3	99.9	101.6	102.5	103.9		aJ85
28S 26W 13CAA 01		2635				138.2	139.6	139.1	147.7	141.6	142.9	144.4	qD78

29S 21W 05BBB 01	TO	2418		98	96.6	104.8	100.2	99.8	100.6	100.9	101.3	102.2	qD56
29S 21W 20CAD 01		2445				134.2	133.8	134.1	135.0	134.6	136.7	135.8	aJ80
29S 22W 17DAD 01	TO	2475	240	119		128.4	127.8	127.8	129.7	129.3	143.8	136.1	aJ77
29S 22W 36ACA 01		2445	242			138.9	136.8	135.8	136.5	136.8		137.8	aJ79
29S 24W 01ABA 01	TO	2560	220	140		143.5	144.3	144.4	145.3	145.6	146.3	147.5	aJ76
29S 24W 13BCA 01		2530	212			113.7	114.1	114.1	114.9	114.9	115.5	116.3	aJ80
29S 24W 18BAA 01	TO	2610	210	149		157.6	158.0	158.6	163.0	159.6	160.6	160.4	aJ76
29S 25W 03ADA 01	TO	2630	220	152		177.1	183.7	180.5	183.8	184.9	193.5	192.2	aJ77
29S 25W 10BBB 01		2617		139		157.7	161.5	158.4	164.4	165.3			aJ78
29S 26W 01CDD 01	TO	2583	163	78		91.9	92.5	94.3	98.5	98.4	106.1	97.1	aJ77
29S 26W 20BDD 01		2575	164			103.6	101.8	102.1	104.8	106.1	110.5	113.1	aJ80
29S 26W 29ABB 01		2558				84.3	88.7	86.9	89.9	93.1	96.6	102.5	aJ71
29S 26W 36BBB 01	TO	2532	212	26		23.6	28.5	26.5	30.4	30.4	33.1	37.2	aJ77

TABLE 2. DERIVED HYDROLOGIC DATA, FORD COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
25S 22W 20AAA 01	TO	61.1	4	1.5	-2.1	0.1	0.1			
25S 22W 27CCD 01	KD	142.8			-7.8					
25S 23W 11CCC 01	KD	93.0			-11.3					
25S 23W 12BBB 01	KD	164.7			-10.0					
25S 25W 32CDD 01	QU,KD	202.6			-0.5					
25S 25W 32DAD 01		75.7			-0.7					
25S 26W 25CDD 01	TO	78.5	1		8.6	0.0		108	109	1
25S 26W 30ABC 01	TO	114.7	-11		0.3	-0.2		121	110	-9
26S 21W 17DBC 01	KD	65.3			-2.5					
26S 21W 23ADA 01	QA	7.0	-1	0.3	-0.8	0.0	0.0			
26S 21W 25CCC 01		8.2			-3.1					
26S 22W 21DCD 01		41.8			-2.3					
26S 23W 02ABB 01										
26S 23W 10DAD 01		179.8			-2.6					
26S 24W 29DDD 01	TO	149.1	-19		-5.3	-0.4				
26S 24W 31DDA 01	TO	26.6	-16		-6.3	-0.3				
26S 24W 33CDA 01	TO	40.8	-15		-7.3	-0.3				
26S 25W 16DCC 01		145.5			-3.7					
26S 26W 18CCB 01		13.8			-0.2					
26S 26W 32DCC 01		95.8	-22		-4.4	-0.4				
26S 26W 36DCC 01	TO	57.3	-26		-4.7	-0.5		137	111	-19
27S 21W 10DBB 01		8.0			-0.4					
27S 22W 09DAB 01										
27S 23W 24BCB 01	KD	74.6			-17.4					
27S 23W 36CCC 01	TO	47.8	-2			0.0		101	99	-2
27S 24W 03BBD 01	TO	27.1	-8		-1.8	-0.2				
27S 24W 03CDD 01	TO	18.8			-3.9					
27S 24W 04BBC 01	TO	24.2	-13		-4.7	-0.3				
27S 24W 09AAD 01	TO	28.3	-18		-3.6	-0.3				
27S 24W 16BDB 01		83.1			-3.5					
27S 24W 26DAA 01	TO	95.7	-17		-1.8	-0.3		112	95	-15
27S 25W 09ACA 01		73.2			-2.4					
27S 25W 25BBB 01		123.0			-2.2					
28S 21W 10DDD 01		46.4	-5		1.1	-0.1				
28S 21W 23DBC 01	TO									
28S 21W 25ABB 01		74.9			-2.5				74	
28S 22W 05ADD 01		19.4			-0.4					
28S 22W 12CAC 01	TO	63.9	2		5.6	0.0		16	18	13
28S 22W 32BAB 01	TO	142.1	-21		-2.4	-0.4		40	19	-53
28S 23W 18BAB 01		140.0			4.7				99	
28S 23W 24ABB 01		96.6			5.1					
28S 24W 08DCC 01		146.1	-13		-1.7	-0.3				
28S 24W 22CDA 01		110.6			-1.3					
28S 24W 35CAB 01		106.1			5.7				344	
28S 25W 06ABB 01		154.7	-11		6.4	-0.2				
28S 25W 19BBB 01	TO	151.1	-18		13.4	-0.3		132	114	-14
28S 26W 06ABB 01	TO	174.2	-41		10.2	-0.8		62	21	-66
28S 26W 10BAA 01										
28S 26W 13CAA 01		144.4			-1.5					
29S 21W 05BBB 01	TO	102.2	-4	-5.6	-0.9	-0.1	-0.2			

29S 21W 20CAD 01		135.8		0.9				
29S 22W 17DAD 01	TO	136.1	-17	7.7	-0.3	121	104	-14
29S 22W 36ACA 01		137.8					104	
29S 24W 01ABA 01	TO	147.5	-8	-1.2	-0.2	80	73	-9
29S 24W 13BCA 01		116.3		-0.8			96	
29S 24W 18BAA 01	TO	160.4	-11	0.2	-0.2	61	50	-18
29S 25W 03ADA 01	TO	192.2	-40	1.3	-0.8	68	28	-59
29S 25W 10BBB 01								
29S 26W 01CDD 01	TO	97.1	-19	9.0	-0.4	85	66	-22
29S 26W 20BDD 01		113.1		-2.6			51	
29S 26W 29ABB 01		102.5		-5.9				
29S 26W 36BBB 01	TO	37.2	-11	-4.1	-0.2	186	175	-6

Geary County

TABLE 1. SELECTED HYDROLOGIC DATA , GEARY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
11S 06E 27CBB 01		1057			20.7	17.7	15.3	15.7	16.9	17.8	21.5	22.5	qM66

TABLE 2. DERIVED HYDROLOGIC DATA, GEARY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
11S 06E 27CBB 01		22.5		-1.8	-1.0		-0.1			

Gove County

TABLE 1. SELECTED HYDROLOGIC DATA , GOVE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
11S 26W 04CDC 01	TO	2583	190	62	60.0	62.5	67.4	64.5	64.3	64.4	64.6	67.1	aJ70
11S 27W 04CCD 01	TO	2708					97.9	98.5	100.1	98.4			aJ70
11S 27W 13ABB 01		2671				115.4	118.5	118.8	125.4	126.5		128.5	aJ84
11S 27W 36BCC 01	TO	2676	140	71		75.8	76.6	74.8	79.2	76.3	77.3	76.7	aJ70
11S 28W 08AAA 01		2797				116.2	117.8	117.2	116.1	116.1	116.3	122.0	aJ84
11S 28W 17DDC 01	TO	2784				95.4	95.9	95.4	95.4	95.6	95.6	104.9	aJ70
11S 28W 26ABA 01		2749				91.9	92.6		92.9	92.5	92.8	93.7	aJ84
11S 29W 04DAD 01	TO	2844	170	109		112.9	113.2	113.0	114.3	113.2	113.4	113.8	aJ68
11S 29W 33BBA 01		2857				104.8	105.0	105.0	105.1	105.2	105.4	105.4	aJ84
11S 30W 27ABB 01	TO	2922	165	117		129.1	129.3	128.5	130.1	128.8	127.9	129.3	aJ70
11S 30W 28CBA 01		2925				124.1	124.8	124.9	126.7	125.1	125.5	125.1	aJ85
11S 30W 36CBB 01		2885				106.4	107.5	106.5	109.1	107.3	104.8	107.3	aJ85
11S 31W 12AAB 01	TO	2959				105.0		104.3	105.5	105.0	108.4	106.9	aJ70
11S 31W 27ADC 01		2913				51.8	50.7	50.2	49.7	51.4	51.8	52.3	aJ84
11S 31W 35BDC 01		2951				97.4	98.7		98.1	100.0			aJ84
12S 26W 12BCC 01	TO	2573				38.2	38.6	37.2	38.3	38.1	38.7	41.1	aJ70
12S 27W 10CCB 01		2700				77.9	79.7	77.8	77.8	79.0	78.4	79.5	aJ85
12S 27W 12ABB 01	TO	2636				50.5	52.1	50.1	49.7	50.1	50.1	50.5	aJ84
12S 28W 07DDD 01		2742				48.8	49.5	48.0	48.8	49.5	49.6	49.6	aJ84
12S 28W 12DDD 01	TO	2741				94.4	95.2	94.9	95.1	95.1	95.1	95.5	aJ68
13S 26W 20CBC 01	QA	2432	43		11.1	15.8	16.4	12.1	14.3	14.5	15.7	16.7	aJ71

TABLE 2. DERIVED HYDROLOGIC DATA, GOVE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
11S 26W 04CDC 01	TO	67.1	-5	-7.1	-2.5	-0.1	-0.3	128	123	-4
11S 27W 04CCD 01	TO									
11S 27W 13ABB 01		128.5								
11S 27W 36BCC 01	TO	76.7	-6		0.6	-0.1		69	63	-9
11S 28W 08AAA 01		122.0			-5.7					
11S 28W 17DDC 01	TO	104.9			-9.3					
11S 28W 26ABA 01		93.7			-0.9					
11S 29W 04DAD 01	TO	113.8	-5		-0.4	-0.1		61	56	-8
11S 29W 33BBA 01		105.4			0.0					
11S 30W 27ABB 01	TO	129.3	-12		-1.4	-0.3		48	36	-25
11S 30W 28CBA 01		125.1			0.4					
11S 30W 36CBB 01		107.3			-2.5					
11S 31W 12AAB 01	TO	106.9			1.5					
11S 31W 27ADC 01		52.3			-0.5					
11S 31W 35BDC 01										
12S 26W 12BCC 01	TO	41.1			-2.4					
12S 27W 10CCB 01		79.5			-1.1					
12S 27W 12ABB 01	TO	50.5			-0.4					
12S 28W 07DDD 01		49.6			0.0					
12S 28W 12DDD 01	TO	95.5			-0.4					
13S 26W 20CBC 01	QA	16.7		-5.6	-1.0		-0.2		26	

Graham County

TABLE 1. SELECTED HYDROLOGIC DATA , GRAHAM COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
06S 21W 19CDC 01	TO	2305	135			100.5	99.8		100.4	100.3	101.0	99.8	aD78
06S 22W 19CCC 01	TO	2395	198			108.6	108.2	107.7	107.6	107.3	107.2	107.0	aD76
06S 23W 13BBB 01	TO	2340	183	55		57.5	57.6	57.0	57.3	56.9	57.1	57.8	aD76
06S 23W 17CCA 01		2406				74.0	74.2	73.8	74.2	74.0	73.9	74.1	aD84
06S 24W 14AAA 01		2527				116.5	116.9	116.2	116.1	117.3	116.4	118.9	aD84
06S 24W 28BAB 01	TO	2478		96		101.2	101.9	100.8	101.1	102.0		101.5	qD76
06S 25W 12CCC 01	TO	2538	224	135		142.0	142.5	142.3	142.2	142.5	142.6	142.5	aD76
06S 25W 28CBC 01	TO	2540	180	109	102.7	112.5	106.8	106.7	107.3	108.1	109.4	110.0	qD62
07S 22W 10BBC 01	TO	2217	72	6		8.4	9.9	8.2	8.6	8.7	8.5	7.9	aD78
07S 22W 19BBB 01	TO	2295	63	39		37.5	38.5	36.6	38.0	37.6	37.4	38.5	aD76
07S 24W 08CBA 01	TO	2519	244	126		127.2	127.7	127.4	128.0		127.6	128.1	aD78
07S 25W 24BBB 01	TO	2495	210	85		87.7	88.1	88.0	88.4	88.4	88.6	89.0	aD78
07S 25W 33DDD 01		2502				107.8	101.6	99.8	100.3	100.7	101.4	101.1	aD84
08S 21W 17ABB 01	QA	2035				23.8	26.6	22.8	23.8	23.2	23.1	24.2	qD75
08S 22W 18CDC 01	QA	2122				8.4	9.3	8.9	10.3	8.7	9.8	9.3	qD77
08S 24W 23ACC 01	QA	2242				33.4	31.9	34.5	35.3	35.6	35.9	36.7	qD76
08S 25W 24BAB 01		2302				30.6	31.7	29.9	30.1	29.5	29.1	29.7	aD84
09S 24W 22BAA 01	TO	2491	110	94		94.5	97.2	92.1	92.2	92.7	92.4	93.0	aD77
09S 25W 14DDD 01	TO	2534	134	90		92.0	92.2	91.8	91.8	92.2	92.0	92.2	aD79

TABLE 2. DERIVED HYDROLOGIC DATA, GRAHAM COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
06S 21W 19CDC 01	TO	99.8			1.2				35	
06S 22W 19CCC 01	TO	107.0			0.2				91	
06S 23W 13BBB 01	TO	57.8	-3		-0.7	-0.1		128	125	-2
06S 23W 17CCA 01		74.1			-0.2					
06S 24W 14AAA 01		118.9			-2.5					
06S 24W 28BAB 01	TO	101.5	-6			-0.1				
06S 25W 12CCC 01	TO	142.5	-8		0.1	-0.2		89	82	-8
06S 25W 28CBC 01	TO	110.0	-1	-7.3	-0.6	0.0	-0.3	71	70	-1
07S 22W 10BBC 01	TO	7.9	-2		0.6	0.0		66	64	-3
07S 22W 19BBB 01	TO	38.5	1		-1.1	0.0		24	25	4
07S 24W 08CBA 01	TO	128.1	-2		-0.5	0.0		118	116	-2
07S 25W 24BBB 01	TO	89.0	-4		-0.4	-0.1		125	121	-3
07S 25W 33DDD 01		101.1			0.3					
08S 21W 17ABB 01	QA	24.2			-1.1					
08S 22W 18CDC 01	QA	9.3			0.5					
08S 24W 23ACC 01	QA	36.7			-0.8					
08S 25W 24BAB 01		29.7			-0.6					
09S 24W 22BAA 01	TO	93.0	1		-0.6	0.0		16	17	6
09S 25W 14DDD 01	TO	92.2	-2		-0.2	0.0		44	42	-5

Grant County

TABLE 1. SELECTED HYDROLOGIC DATA , GRANT COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
27S 35W 17ADD 01	QU,TO	3086	462	175	185.7	242.6	245.7	252.1	253.4	256.7	259.8	264.9	aU54
27S 35W 25BDC 01		3046				229.2	229.9	233.0	238.2	240.5	242.0	246.7	aJ82
27S 36W 18DCB 01	QU,TO	3065	395	104	116.5	190.0	191.4	206.4	200.2	208.3	199.0		aJ59
27S 36W 21DCC 01	QU,TO	3132		199		275.8	279.7	282.4	278.0	287.4	289.0	293.8	aJ60
27S 36W 25CC 01	QU,TO	3133	438	216	253.6		312.8	315.1			318.7		aJ59
27S 37W 04ABB 01	QU,TO	3080	316	70	86.4	168.9	171.4	181.0	185.9	191.7	186.2	187.4	aJ58
27S 37W 11ABA 01	QU,TO	3093	368	107	131.4	198.1	201.1	203.7	192.9	206.7	207.5	211.8	aJ59
27S 37W 16AAD 01		3075	324	54		228.9	221.2	222.3	225.4	229.1	222.7	225.9	aJ84
27S 37W 21BDD 01		3058		58		196.3	198.8	204.3		214.0	205.9	208.7	aJ67
27S 38W 12ADC 01	QU,TO	3076	280	34	65.5	189.0	182.9	196.2	203.3	208.2	202.2	204.1	aJ60
27S 38W 15BBB 01	KJ	3148			132.9	171.3	171.7	173.1	185.6	181.5	178.7	172.2	aJ58
27S 38W 22CBB 01	QU,TO	3110	340	49	76.8	163.8	166.7		172.0	168.0	161.3	167.5	aJ58
27S 38W 23CBB 01	QU,TO	3105	335	50	98.2	163.2	161.7	157.3	166.4	161.6	161.1	160.0	aJ43
27S 38W 32BCC 01	QU,TO	3131	371	50	105.1	162.5	164.1	165.7				170.9	aJ40
28S 35W 03DBB 01		3079				274.6	283.2		292.0	288.0	288.9	292.0	aJ84
28S 35W 05BCC 01	QU,TO	3117	457	237	253.2		320.6	327.0	329.4	329.4	330.2	332.8	aJ64
28S 35W 15CBB 01	QU,TO	3064	509	213	250.7	292.1	301.2	303.7	295.3	299.3	305.3		aJ58
28S 35W 36ABC 01	QU,TO	3032	572	222	236.4	312.3	315.0	317.8	322.3		323.8	326.9	aJ59
28S 36W 18ABC 01		3050	345	95		228.7	234.5	237.7	239.9	235.6	232.6	240.7	aJ84
28S 36W 21CDD 01	QU,TO	3066	430	158	193.8	278.4	282.2	287.0	287.4	292.0	284.7	289.5	aJ66
28S 37W 02BBB 04		3072				247.3	250.4	254.0	258.0	255.6	251.0	253.7	aJ81
28S 37W 10BCD 02	QU,TO	3057	350	49	100.7	204.8	207.2	205.3	207.1	227.4	225.6		aJ58
28S 38W 17AAA 01	QU,TO	3112	422	41	118.1	209.1	223.0	210.0	227.2	232.9	233.3	232.6	aJ63
28S 38W 33BDB 01		3125				209.7	216.1	219.5	212.7	213.2	214.4	218.9	aJ82
29S 35W 07CBD 01	QU,TO	3036	441	168		277.4	275.2	279.5	289.2	281.3	278.4	263.4	aJ79
29S 35W 24BAA 01	TO	3037	562	239		325.4	334.2	335.3	342.6	342.7	343.9	347.5	aJ84
29S 35W 28ACC 01	QU,TO	2975	500	147	185.4	254.3	256.8	260.5	263.6	264.6	265.1	266.6	aJ59
29S 36W 19BCB 01	QU,TO	2995	405	44	118.0	204.8	207.1	208.1	218.9		212.5	217.2	aJ59
29S 36W 33ADB 01		3011	466	91		227.0	226.5	231.9	247.3	248.0	246.1		aJ84
29S 37W 03CDB 01	QU,TO	3051	421	71	133.0	230.3	230.8	239.7	247.5	245.1		254.0	aJ67
29S 37W 08CBA 01	QU,TO	3065	430	46	114.5	230.2	230.6	247.2	254.9	245.2	244.5	248.9	aJ59
29S 37W 29BBA 01	QU,TO	3095	504	74	148.0	267.0	266.2	272.3	278.8	279.6	279.1	283.0	aJ53
29S 38W 20CDC 01	QU,TO	3139	489	59	80.8	160.4	168.1	180.4	192.1	192.6			aJ63
29S 38W 35CCD 01	QU,TO	3124	469	74	115.1	175.7	177.6	180.8	183.4	183.1	185.7	187.0	aJ58
30S 35W 02DBC 01	QU,TO	3020	525	225	240.5					318.5	318.3		aJ58
30S 35W 19BCD 01	QU,TO	3004	474	134	153.3	198.8	193.1	204.8	203.7		205.1	206.8	aJ58
30S 36W 01BBB 01	QU,TO	2973	463	98	130.4	220.0	207.8	207.6	221.2	220.3	218.4	220.8	aJ63
30S 36W 04ABB 01	QU,TO	3033	493	113			162.1	166.5	157.3	141.4	151.4	152.3	aJ68
30S 36W 32BBC 01	QU,TO	3064	384	113	122.5	160.4	162.9	168.3	176.5	172.9	174.5	180.0	aJ60
30S 37W 02BAA 02	QU,TO	3102	507	122	221.7	299.5	300.6	306.3	310.7	310.2	306.4	308.9	aJ57
30S 37W 03DBA 01	QU,TO	3108	458	120		264.3		273.6		281.8	284.2	283.8	aJ59
30S 37W 20CBC 01	QU	3125	385	114	164.6	212.6		221.2	223.9	225.6	227.5	229.8	aJ41
30S 38W 13CCC 01	QU,TO	3142	467	102	146.7	206.0	211.6	217.5		223.3	227.6	231.5	aJ57
30S 38W 15DBC 01	QU	3144	360	89	118.7	178.5	187.6	195.3	195.0	194.1	196.1	200.2	aJ58
30S 38W 30ACA 01	QU,TO	3152	377	69	82.1	167.2	173.4	178.6	187.0	190.2	194.5		aJ59

TABLE 2. DERIVED HYDROLOGIC DATA, GRANT COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
27S 35W 17ADD 01	QU,TO	264.9	-90	-79.2	-5.1	-1.7	-3.0	287	197	-31
27S 35W 25BDC 01		246.7			-4.7					
27S 36W 18DCB 01	QU,TO									
27S 36W 21DCC 01	QU,TO	293.8	-95		-4.8	-1.8				
27S 36W 25CC 01	QU,TO									
27S 37W 04ABB 01	QU,TO	187.4	-117	-101.0	-1.2	-2.3	-3.9	246	129	-48
27S 37W 11ABA 01	QU,TO	211.8	-105	-80.4	-4.3	-2.0	-3.1	261	156	-40
27S 37W 16AAD 01		225.9	-172		-3.2	-3.3		270	98	-64
27S 37W 21BDD 01		208.7	-151		-2.8	-2.9				
27S 38W 12ADC 01	QU,TO	204.1	-170	-138.6	-1.9	-3.3	-5.3	246	76	-69
27S 38W 15BBB 01	KJ	172.2		-39.3	6.5		-1.5			
27S 38W 22CBB 01	QU,TO	167.5	-119	-90.7	-6.2	-2.3	-3.5	291	173	-41
27S 38W 23CBB 01	QU,TO	160.0	-110	-61.8	1.1	-2.1	-2.4	285	175	-39
27S 38W 32BCC 01	QU,TO	170.9	-121	-65.8		-2.3	-2.5	321	200	-38
28S 35W 03DBB 01		292.0			-3.1					
28S 35W 05BCC 01	QU,TO	332.8	-96	-79.6	-2.6	-1.8	-3.1	220	124	-44
28S 35W 15CBB 01	QU,TO									
28S 35W 36ABC 01	QU,TO	326.9	-105	-90.5	-3.1	-2.0	-3.5	350	245	-30
28S 36W 18ABC 01		240.7	-146		-8.1	-2.8		250	104	-58
28S 36W 21CDD 01	QU,TO	289.5	-132	-95.7	-4.8	-2.5	-3.7	272	141	-48
28S 37W 02BBB 04		253.7			-2.7					
28S 37W 10BCD 02	QU,TO									
28S 38W 17AAA 01	QU,TO	232.6	-192	-114.5	0.7	-3.7	-4.4	381	189	-50
28S 38W 33BDB 01		218.9			-4.5					
29S 35W 07CBD 01	QU,TO	263.4	-95		15.0	-1.8		273	178	-35
29S 35W 24BAA 01	TO	347.5	-109		-3.6	-2.1		323	215	-33
29S 35W 28ACC 01	QU,TO	266.6	-120	-81.2	-1.5	-2.3	-3.1	353	233	-34
29S 36W 19BCB 01	QU,TO	217.2	-173	-99.2	-4.7	-3.3	-3.8	361	188	-48
29S 36W 33ADB 01										
29S 37W 03CDB 01	QU,TO	254.0	-183	-121.0		-3.5	-4.7	350	167	-52
29S 37W 08CBA 01	QU,TO	248.9	-203	-134.4	-4.4	-3.9	-5.2	384	181	-53
29S 37W 29BBA 01	QU,TO	283.0	-209	-135.0	-3.9	-4.0	-5.2	430	221	-49
29S 38W 20CDC 01	QU,TO									
29S 38W 35CCD 01	QU,TO	187.0	-113	-71.9	-1.3	-2.2	-2.8	395	282	-29
30S 35W 02DBC 01	QU,TO									
30S 35W 19BCD 01	QU,TO	206.8	-73	-53.5	-1.7	-1.4	-2.1	340	267	-21
30S 36W 01BBB 01	QU,TO	220.8	-123	-90.4	-2.4	-2.4	-3.5	365	242	-34
30S 36W 04ABB 01	QU,TO	152.3	-39		-0.9	-0.8		380	341	-10
30S 36W 32BBC 01	QU,TO	180.0	-67	-57.5	-5.5	-1.3	-2.2	271	204	-25
30S 37W 02BAA 02	QU,TO	308.9	-187	-87.2	-2.5	-3.6	-3.4	385	198	-49
30S 37W 03DBA 01	QU,TO	283.8	-164		0.4	-3.2		338	174	-49
30S 37W 20CBC 01	QU	229.8	-116	-65.2	-2.3	-2.2	-2.5	271	155	-43
30S 38W 13CCC 01	QU,TO	231.5	-130	-84.8	-3.9	-2.5	-3.3	365	236	-35
30S 38W 15DBC 01	QU	200.2	-111	-81.5	-4.1	-2.1	-3.1	271	160	-41
30S 38W 30ACA 01	QU,TO									

Gray County

TABLE 1. SELECTED HYDROLOGIC DATA , GRAY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1940	1966	1986	1987	1988	1989	1990	1991	1992	Data type
24S 27W 08CCC 01	QU,TO	2697	138	66	59.1	74.0	75.2	73.9	80.3	75.9	77.9	78.5	aJ56
24S 27W 14ABB 01	QU,TO	2654	92	74	66.2	68.1	65.4	64.2	64.9	64.6	64.2	65.1	aJ56
24S 27W 29BCC 01		2703	152	72		84.6	86.4	85.0	86.8	87.0	87.9	89.1	aJ85
24S 28W 28BBA 01		2750	240	93		108.3	109.7	110.0	112.0	111.7	111.8	112.9	aJ85
24S 28W 31DD 01	QU,TO	2754	264	91	87.9	124.8	123.2	122.7		127.0	128.1	130.8	aJ64
24S 28W 36ACA 01	TO	2720	135	85	83.3	97.3	98.3	97.9	98.3	99.0			aJ56
24S 29W 16DCA 01	QU,TO	2787	222	98	96.2		115.0	114.4		116.4	124.9	119.0	aJ64
24S 29W 18CCB 01	QU,TO	2814	220	106	109.8	130.5	126.4	126.6	131.7	131.7	132.9	134.4	aJ64
24S 30W 33ADD 01	TO	2857	282	130		149.9	149.9	151.7	156.6	157.2	170.6		aJ85
25S 27W 33ABB 01	QU,TO	2728	249	134	131.8	138.7	139.1	140.9	143.5	145.7	148.0	140.9	aJ65
25S 29W 07BCB 01	QU,TO	2830	281	131	129.0	143.8	145.6	145.5	148.1	148.2	150.4	152.4	aJ64
25S 29W 14ABB 01	QU,TO	2776		107	107.1	132.4	133.2	131.8	136.1	136.6	137.8	139.8	aJ56
25S 30W 20BCB 01	QU,TO	2734	184	9	9.8	10.9	10.9	9.4	11.5	13.1	13.4	16.2	aJ56
26S 27W 13BBC 01	QU,TO	2567	165	9	7.9	12.6	8.6	4.6	8.9	8.1	10.0	12.5	aJ39
26S 27W 27CDD 01	QU,TO	2612	222	33		50.4	53.7	54.2	57.6	57.7	61.4		aJ70
26S 28W 06DDB 01		2647	147	9		12.0	11.9	11.6	13.2		14.3	15.5	aJ85
26S 29W 15BCA 01		2732	232	62		89.3	91.5	91.7	93.2	96.0			aJ85
26S 29W 35CCC 01	QU,TO	2742	242	72	71.6	101.6	103.4	106.8	110.0	112.6	113.6	119.5	aJ65
26S 30W 01ABC 01		2740				67.7	69.1	67.3	70.2	69.1	71.3	75.5	aJ84
26S 30W 24DDD 01	QU,TO	2754	253	54		90.6	103.3	103.7	105.6	97.2	105.6	111.9	aJ72
27S 27W 01BAA 01		2631				85.1	86.2	87.3	89.1	90.6	92.4	95.7	aJ85
27S 27W 07ADC 01	QU,TO	2686	186	82	74.0	94.1	99.5	101.4		103.3	107.4	109.1	aJ67
27S 27W 10CDB 01	QU,TO	2712	235	131	123.4	144.3	145.7	147.3	150.3	150.6	151.9	153.8	aJ64
27S 27W 25CCD 01	QU,TO	2732	228	167	163.8	181.0	183.1	183.7	188.7	187.1	190.0	188.6	aJ37
27S 28W 05AAA 01	QU,TO	2707	228	66		94.0	98.0	98.5	106.7	101.6	109.2	109.1	aJ71
27S 28W 30CCA 01	QU,TO	2738	218	78		107.1		110.9	113.0	115.3	117.3	120.0	aJ70
27S 29W 27CAA 01		2760	235	83		105.7	107.1	110.6	113.3	115.3	118.3	122.0	aJ85
27S 30W 08BBB 01	QU,TO	2790	265	68	66.6	110.5	115.7	114.8			121.2	124.3	aJ64
27S 30W 23BBA 01	QU,TO	2772	247	68	63.9	108.8	112.2	113.6	116.7	119.2	124.8	129.5	aJ40
27S 30W 34CCC 01	QU,TO	2807	404	102	101.0	147.4	150.5	152.2	154.7	157.3	158.9	163.5	aJ67
28S 27W 03BBB 01	QU,TO	2755	260	166		190.7	194.0	186.8	186.2	186.9	191.0	189.8	aJ72
28S 28W 07CDD 01		2775	250	117		182.8	187.5	189.1	194.0		203.3	194.2	aJ85
28S 28W 20ADD 02	QU,TO	2795	220	145	146.2	147.8	149.1	150.1	148.3	147.8			aJ64
28S 29W 16ACC 01	QU,TO	2799	299	121	125.0	161.0	162.0	162.9	164.0	165.5	166.9	168.5	aJ65
28S 30W 10DDD 01	QU,TO	2814	469	115	120.9	167.8	170.4	171.8	178.5		180.0	180.6	aJ64
28S 30W 17BBA 01	TO	2817	497	110	110.4	163.1	165.5	167.5	171.2	175.2	173.8	177.5	aJ59
28S 30W 24BAB 01	QU,TO	2804	429	114	119.5	164.0	167.1	168.9	180.7	174.7	176.9	179.2	aJ61
29S 27W 30BCC 01	QU,TO	2655	280	87	103.0	133.1	135.7	139.1		144.9	145.8	146.7	aJ59
29S 28W 28CDC 01	TO	2688	278	88	91.2		124.6	126.7	129.7	130.9	133.6	133.9	aJ59
29S 29W 10ABB 01		2745				121.7	123.6	124.6	127.4	128.4	129.2	135.9	aJ81
29S 29W 27BCB 01	QU,TO	2739	494	98	101.0	139.7	139.9	141.9	143.8	145.3	147.9	150.3	aJ65
29S 30W 22BBC 01	QU,TO	2816	446	144	144.6	180.1	182.4	192.1	200.7	203.9	206.1		aJ65
29S 30W 35ACD 01	QU,TO	2805	445	146	147.8	204.1	203.9	203.6	206.8	208.9	211.5		aJ65

TABLE 2. DERIVED HYDROLOGIC DATA, GRAY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
24S 27W 08CCC 01	QU,TO	78.5	-13	-19.4	-0.6	-0.3	-0.7	72	60	-17
24S 27W 14ABB 01	QU,TO	65.1	9	1.1	-0.9	0.2	0.0	18	27	50
24S 27W 29BCC 01		89.1	-17		-1.2	-0.3		80	63	-21
24S 28W 28BBA 01		112.9	-20		-1.1	-0.4		147	127	-14
24S 28W 31DD 01	QU,TO	130.8	-40	-42.9	-2.7	-0.8	-1.7	173	133	-23
24S 28W 36ACA 01	TO									
24S 29W 16DCA 01	QU,TO	119.0	-21	-22.8	5.9	-0.4	-0.9	124	103	-17
24S 29W 18CCB 01	QU,TO	134.4	-28	-24.6	-1.5	-0.5	-0.9	114	86	-25
24S 30W 33ADD 01	TO									
25S 27W 33ABB 01	QU,TO	140.9	-7	-9.1	7.1	-0.1	-0.4	115	108	-6
25S 29W 07BCB 01	QU,TO	152.4	-21	-23.4	-2.0	-0.4	-0.9	150	129	-14
25S 29W 14ABB 01	QU,TO	139.8	-33	-32.7	-2.0	-0.6	-1.3			
25S 30W 20BCB 01	QU,TO	16.2	-7	-6.4	-2.8	-0.1	-0.2	175	168	-4
26S 27W 13BBC 01	QU,TO	12.5	-4	-4.6	-2.5	-0.1	-0.2	156	153	-2
26S 27W 27CDD 01	QU,TO									
26S 28W 06DDB 01		15.5	-7		-1.2	-0.1		138	132	-4
26S 29W 15BCA 01										
26S 29W 35CCC 01	QU,TO	119.5	-48	-47.9	-5.9	-0.9	-1.8	170	123	-28
26S 30W 01ABC 01		75.5			-4.2					
26S 30W 24DDD 01	QU,TO	111.9	-58		-6.3	-1.1		199	141	-29
27S 27W 01BAA 01		95.7			-3.3					
27S 27W 07ADC 01	QU,TO	109.1	-27	-35.1	-1.7	-0.5	-1.4	104	77	-26
27S 27W 10CDB 01	QU,TO	153.8	-23	-30.4	-1.9	-0.4	-1.2	104	81	-22
27S 27W 25CCD 01	QU,TO	188.6	-22	-24.8	1.4	-0.4	-1.0	61	39	-36
27S 28W 05AAA 01	QU,TO	109.1	-43		0.1	-0.8		162	119	-27
27S 28W 30CCA 01	QU,TO	120.0	-42		-2.7	-0.8		140	98	-30
27S 29W 27CAA 01		122.0	-39		-3.7	-0.8		152	113	-26
27S 30W 08BBB 01	QU,TO	124.3	-56	-57.7	-3.1	-1.1	-2.2	197	141	-28
27S 30W 23BBA 01	QU,TO	129.5	-62	-65.6	-4.7	-1.2	-2.5	179	118	-34
27S 30W 34CCC 01	QU,TO	163.5	-62	-62.5	-4.6	-1.2	-2.4	302	241	-20
28S 27W 03BBB 01	QU,TO	189.8	-24		1.2	-0.5		94	70	-26
28S 28W 07CDD 01		194.2	-77		9.1	-1.5		133	56	-58
28S 28W 20ADD 02	QU,TO									
28S 29W 16ACC 01	QU,TO	168.5	-48	-43.5	-1.6	-0.9	-1.7	178	131	-26
28S 30W 10DDD 01	QU,TO	180.6	-66	-59.7	-0.6	-1.3	-2.3	354	288	-19
28S 30W 17BBA 01	TO	177.5	-68	-67.1	-3.7	-1.3	-2.6	387	320	-17
28S 30W 24BAB 01	QU,TO	179.2	-65	-59.7	-2.3	-1.3	-2.3	315	250	-21
29S 27W 30BCC 01	QU,TO	146.7	-60	-43.7	-0.9	-1.2	-1.7	193	133	-31
29S 28W 28CDC 01	TO	133.9	-46	-42.7	-0.3	-0.9	-1.6	190	144	-24
29S 29W 10ABB 01		135.9			-6.7					
29S 29W 27BCB 01	QU,TO	150.3	-52	-49.3	-2.4	-1.0	-1.9	396	344	-13
29S 30W 22BBC 01	QU,TO									
29S 30W 35ACD 01	QU,TO									

Greeley County

TABLE 1. SELECTED HYDROLOGIC DATA , GREELEY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
16S 39W 02BDC 01	TO	3520	220	81		137.5	139.7	141.1	143.2	143.3	142.6	154.4	aJ70
16S 39W 22DCB 01	TO	3529	163	95	88.8	136.0	131.2	131.8	131.8	135.4	136.9		qJ64
16S 40W 15ACC 01	TO	3650	192	114	119.9	151.5	151.7	152.7		169.0	159.9	156.3	aJ65
16S 40W 17CBC 01	TO	3688				158.9	160.3	159.6		163.6	164.7	164.8	qJ85
16S 40W 26ADA 01	TO	3602	157	93		117.0	118.0	119.0	121.5	120.3	120.9	121.1	aJ76
16S 41W 20BAD 01	TO	3739	234	129	131.3	169.6	170.5	171.9		175.0	176.2	176.3	aJ66
16S 42W 22BCB 01	TO	3828	237	183	198.5	209.7	200.3	200.8	200.7	201.2	201.7	207.3	aJ66
16S 42W 25AAA 01		3763							174.0	184.0	183.0	185.8	aJ89
17S 39W 02BAA 01	TO	3511	161	102		117.6	117.6	117.8	117.3	118.6	118.6	118.8	qJ72
17S 39W 22ABB 01	TO	3527	195	118	123.3	136.5	131.7	131.8	132.6	134.2	134.1	132.3	aJ65
17S 39W 34CCB 01	TO	3505	135	95		98.8	96.1	96.6	95.9	97.5	96.7	96.6	aJ77
17S 40W 15CCB 01	TO	3607	209	123	127.0	138.3	138.8	138.9	138.0	138.9	137.5	139.7	aJ62
17S 40W 17BBA 01	TO	3663	217	165		179.4		185.5	184.9	186.1	186.5	186.0	aJ72
17S 40W 31BBA 01	TO	3663	218	151	168.1	165.7	163.4	164.1	164.7	162.4	162.7	161.5	aJ65
17S 42W 27CBB 01	TO	3768	61	31		36.6	37.0	36.6	38.8	40.4	37.4	37.0	qJ71
18S 39W 07BBD 01	TO	3564	145	109		116.2	116.3	114.6	114.8	114.6	114.8	114.8	aJ69
18S 39W 19CDA 01	TO	3510	100	70		74.0	74.2	74.2	75.6	76.9	76.6	75.8	aJ72
18S 39W 23CCB 01	TO	3485	185	113	122.2	133.1	133.4		133.2	134.1	134.6		aJ67
18S 39W 24AAC 01	TO	3467	183	105		135.3	135.1	134.8	134.4	136.5	138.1	138.4	aJ63

TABLE 2. DERIVED HYDROLOGIC DATA, GREELEY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
16S 39W 02BDC 01	TO	154.4	-73		-11.8	-1.7		139	66	-53
16S 39W 22DCB 01	TO									
16S 40W 15ACC 01	TO	156.3	-42	-36.4	3.6	-1.0	-1.4	78	36	-54
16S 40W 17CBC 01	TO	164.8			-0.1					
16S 40W 26ADA 01	TO	121.1	-28		-0.2	-0.7		64	36	-44
16S 41W 20BAD 01	TO	176.3	-47	-45.0	-0.1	-1.1	-1.7	105	58	-45
16S 42W 22BCB 01	TO	207.3	-24	-8.8	-5.6	-0.6	-0.3	54	30	-44
16S 42W 25AAA 01		185.8			-2.8					
17S 39W 02BAA 01	TO	118.8	-17		-0.2	-0.4		59	42	-29
17S 39W 22ABB 01	TO	132.3	-14	-9.0	1.8	-0.3	-0.3	77	63	-18
17S 39W 34CCB 01	TO	96.6	-2		0.1	0.0		40	38	-5
17S 40W 15CCB 01	TO	139.7	-17	-12.7	-2.2	-0.4	-0.5	86	69	-20
17S 40W 17BBA 01	TO	186.0	-21		0.5	-0.5		52	31	-40
17S 40W 31BBA 01	TO	161.5	-11	6.6	1.2	-0.3	0.3	67	57	-15
17S 42W 27CBB 01	TO	37.0	-6		0.4	-0.1		30	24	-20
18S 39W 07BBD 01	TO	114.8	-6		0.0	-0.1		36	30	-17
18S 39W 19CDA 01	TO	75.8	-6		0.8	-0.1		30	24	-20
18S 39W 23CCB 01	TO									
18S 39W 24AAC 01	TO	138.4	-33		-0.3	-0.8		78	45	-42

Hamilton County

TABLE 1. SELECTED HYDROLOGIC DATA , HAMILTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
21S 39W 07CBA 01	TO	3497	215	196	194.0	185.3	183.0		188.5	181.9	181.0	183.4	aU62
22S 39W 03BBB 01	TO	3453	199		191.2	183.4	183.2	182.0	188.7		191.5	191.6	aU62
23S 39W 15ADD 01	QU,TO	3325	144		130.1	129.2	129.5	128.2	129.6	129.9	129.5	133.8	aU62
23S 40W 29DDB 01	KU	3397			240.3	308.0	309.4	315.5	321.3	309.0	307.4	309.9	aU62
23S 42W 19CBB 01	QA,QU	3339	67	20	24.1	25.7	25.4	24.5	32.9	24.3	24.8	26.0	aU62
23S 42W 26DCA 01	QA	3309	70	29	23.7	25.9	26.2	28.0	26.3	26.3	27.0	26.7	aU61
23S 42W 27DDB 01	QA	3311	70	23	20.0	22.9	21.9	23.0	23.1	23.3	22.7	23.2	aJ61
23S 42W 34CBB 01	QA	3307	58	13	9.6	10.5	10.4	10.5		10.9	11.0	11.2	aU61
23S 43W 21ABA 01	QA	3364	29	15	15.0	12.5	13.0	12.8	12.9	13.4	13.9	14.5	aU44
23S 43W 23BCB 01	QA	3356	68	21	20.5	20.8	21.1	20.8	27.2	21.4	21.7	21.8	aU47
23S 43W 25CBD 02	QA	3335	47	8	8.8	8.3	8.0	8.0	8.4	8.8	8.4	8.7	aU58
23S 43W 26BCC 01	QA	3343	22	7	7.1	7.9	9.2	7.5	7.8	7.8	8.0	8.2	aU60
24S 39W 19CBC 01	QA	3175	65	6	6.7	8.4	8.7	8.8	9.2	9.2	9.5	9.8	aU50
24S 39W 22CCB 01	QA	3152	42	8	11.8	11.7	12.7	11.0	10.8	11.1	11.5	11.8	aU48
24S 39W 35BAC 01	QA	3143	43	9	5.4	8.5	8.7	8.7	8.9	8.7	8.3	8.8	aU53
24S 39W 35CBA 01	QU	3146	97	11	11.4	15.1	15.4	15.3	15.6	15.6	15.3	15.8	aU58
24S 40W 07CBB 01	QA	3233	58	14	13.9	13.4	14.9	15.1	15.2	15.4	15.7	17.3	aU48
24S 40W 17BBB 01	QA	3221	71	13		13.4	14.0	13.8	15.0	15.5	15.4	16.0	aD70
24S 40W 23AAB 01	QA	3204	104	26	24.4	23.6	25.6	25.4	28.8	26.8	27.2	27.4	aU59
24S 40W 31BBB 01	QU	3287			63.6	66.7	64.4	65.7	65.1	64.5	64.7	64.4	aU60
24S 41W 01DAD 01	QA,QU	3254	45		14.7	25.4	25.0	24.9	23.4	25.1	25.8	27.0	aU61
24S 42W 04AAD 01	QA	3304	44	7	6.5	10.1	9.7	4.1	7.6	11.7		15.8	aU62
24S 42W 28DDD 01	KJ	3455			160.0		165.3	166.0	166.0	166.9	167.2	166.9	aJ61
24S 43W 14CBB 01	KJ	3452		114	110.8		120.2	117.6	115.4	115.3	120.8	119.0	aJ39
25S 39W 02CAD 01	QU,TO	3156	46	24	27.9	34.8	34.7	33.6	34.1	34.4	32.6	32.9	aU60
25S 39W 23BDD 01	QU,TO	3286	133		78.7	90.8			90.8	90.3	89.6	89.4	aU62
25S 40W 01CA 01	QU	3218	58	46	45.8				51.3	50.7			au62
25S 40W 26BBB 01	KJ	3412		213	215.0	221.6	224.7	224.0	229.6	225.5	226.6	226.3	aU40
25S 43W 03ABB 01	KJ	3575			190.5	248.3	266.0	275.9	263.2	264.3	263.8	262.9	aJ62
25S 43W 25CCD 01	QU,TO	3490	225	101	121.4	148.6	150.4	150.4	151.2		153.3	154.4	aU61
26S 41W 20BCD 01	QU,TO	3317	242	17	20.7	32.4	34.7	39.3	37.8	39.4	40.5	42.2	aU62
26S 41W 32DDB 01		3354							146.2	153.2	161.9	161.2	aU89
26S 41W 36CCC 01	QU,TO	3270	231	35	29.0	56.6	59.2	62.2	63.1	65.5	66.9	73.3	aJ66
26S 42W 10BB 02	QU,TO	3405	245	52	77.2	112.2	115.0	116.7	120.7	126.3	128.0	130.2	aJ61
26S 42W 17CBB 01	QU,TO	3458			108.1	170.8		172.3	176.6	179.9	182.8	185.8	uU60
26S 42W 22DCC 01		3414							175.3		174.0	186.8	aF89
26S 43W 25DCC 01	QU,TO	3508	258	128		222.0	218.7	220.9	225.0	227.5	229.3	232.1	aJ72

TABLE 2. DERIVED HYDROLOGIC DATA, HAMILTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	Water-level change (feet) 1966–92	Water-level change (feet) 1991–92	Average annual water-level change (feet/year) 1940–92	Average annual water-level change (feet/year) 1966–92	Saturated thickness (feet) 1940	Saturated thickness (feet) 1992	Percentage change saturated thickness 1940–92
21S 39W 07CBA 01	TO	183.4	13	10.6	-2.4	0.3	0.4	19	32	68
22S 39W 03BBB 01	TO	191.6		-0.4	-0.1		0.0		7	
23S 39W 15ADD 01	QU,TO	133.8		-3.7	-4.3		-0.1		10	
23S 40W 29DDB 01	KU	309.9		-69.6	-2.5		-2.7			
23S 42W 19CBB 01	QA,QU	26.0	-6	-1.9	-1.2	-0.1	-0.1	47	41	-13
23S 42W 26DCA 01	QA	26.7	2	-3.0	0.3	0.0	-0.1	41	43	5
23S 42W 27DDB 01	QA	23.2	0	-3.2	-0.5	0.0	-0.1	47	47	0
23S 42W 34CBB 01	QA	11.2	2	-1.6	-0.2	0.0	-0.1	45	47	4
23S 43W 21ABA 01	QA	14.5	1	0.5	-0.6	0.0	0.0	14	15	7
23S 43W 23BCB 01	QA	21.8	-1	-1.3	-0.1	0.0	-0.1	47	46	-2
23S 43W 25CBD 02	QA	8.7	-1	0.1	-0.3	0.0	0.0	39	38	-3
23S 43W 26BCC 01	QA	8.2	-1	-1.1	-0.2	0.0	0.0	15	14	-7
24S 39W 19CBC 01	QA	9.8	-4	-3.1	-0.3	-0.1	-0.1	59	55	-7
24S 39W 22CCB 01	QA	11.8	-4	0.0	-0.3	-0.1	0.0	34	30	-12
24S 39W 35BAC 01	QA	8.8	0	-3.4	-0.5	0.0	-0.1	34	34	0
24S 39W 35CBA 01	QU	15.8	-5	-4.4	-0.5	-0.1	-0.2	86	81	-6
24S 40W 07CBB 01	QA	17.3	-3	-3.4	-1.6	-0.1	-0.1	44	41	-7
24S 40W 17BBB 01	QA	16.0	-3		-0.6	-0.1		58	55	-5
24S 40W 23AAB 01	QA	27.4	-1	-3.0	-0.2	0.0	-0.1	78	77	-1
24S 40W 31BBB 01	QU	64.4		-0.8	0.3		0.0			
24S 41W 01DAD 01	QA,QU	27.0		-12.3	-1.2		-0.5		18	
24S 42W 04AAD 01	QA	15.8	-9	-9.3		-0.2	-0.4	37	28	-24
24S 42W 28DDD 01	KJ	166.9		-6.9	0.3		-0.3			
24S 43W 14CBB 01	KJ	119.0	-5	-8.2	1.8	-0.1	-0.3			
25S 39W 02CAD 01	QU,TO	32.9	-9	-5.0	-0.3	-0.2	-0.2	22	13	-41
25S 39W 23BDD 01	QU,TO	89.4		-10.7	0.2		-0.4		44	
25S 40W 01CA 01	QU									
25S 40W 26BBB 01	KJ	226.3	-13	-11.3	0.3	-0.3	-0.4			
25S 43W 03ABB 01	KJ	262.9		-72.4	0.9		-2.8			
25S 43W 25CCD 01	QU,TO	154.4	-53	-33.0	-1.1	-1.0	-1.3	124	71	-43
26S 41W 20BCD 01	QU,TO	42.2	-25	-21.5	-1.7	-0.5	-0.8	225	200	-11
26S 41W 32DDB 01		161.2			0.7					
26S 41W 36CCC 01	QU,TO	73.3	-38	-44.3	-6.4	-0.7	-1.7	196	158	-19
26S 42W 10BB 02	QU,TO	130.2	-78	-53.0	-2.2	-1.5	-2.0	193	115	-40
26S 42W 17CBB 01	QU,TO	185.8		-77.7	-3.0		-3.0			
26S 42W 22DCC 01		186.8			-12.8					
26S 43W 25DCC 01	QU,TO	232.1	-104		-2.8	-2.0		130	26	-80

Harper County

TABLE 1. SELECTED HYDROLOGIC DATA , HARPER COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
32S 06W 01DDD 01		1360				24.0	24.7	23.7		25.3	28.5	30.3	aU86

TABLE 2. DERIVED HYDROLOGIC DATA, HARPER COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
32S 06W 01DDD 01		30.3			-1.8					

Harvey County

TABLE 1. SELECTED HYDROLOGIC DATA , HARVEY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
22S 02W 05CBD 01		1468				47.7	47.3	46.3	46.6	46.7	48.8	49.4	aJ84
22S 02W 29BBA 01		1445				18.9	19.2	18.7	21.2	21.0	24.1	24.1	aJ70
22S 03W 02DCD 01	QU	1450				34.1	33.9	33.6	36.2	35.9	39.1	41.1	aJ70
22S 03W 29BAD 01	QU	1430				6.9	9.3	9.6	15.0	13.9	19.4	22.0	aJ81
22S 03W 35AAA 01	QU	1420				6.1	6.9	7.2	12.2	12.3	16.9	19.0	aJ70
23S 01W 19AAC 01	QU	1420				31.6	31.5	29.7	32.3	32.1	34.2	35.9	aJ70
23S 01W 28AAD 01		1403				19.5	20.2	19.5	21.9	21.7	22.0	22.5	aJ71
23S 02W 22CCD 01	QU	1395				12.8	14.2	14.0	17.1	15.6	18.4	18.4	aJ81
23S 02W 34DCC 01	QU	1399				13.3	12.5	11.7	15.8	16.3	16.3	16.9	qJ49
23S 03W 06DDD 01	QU	1495				65.9	67.5	67.9	72.2	71.9	73.9	78.2	aJ82
23S 03W 14AAC 01	QU	1450				32.8	32.9	33.3	37.5	35.3	39.6	42.3	aJ81
23S 03W 32DCC 02	QU	1445				8.2	7.9	7.9	10.0	10.1	11.2	12.5	qJ39
24S 01W 05AAB 01		1394				22.3	24.0	21.8	26.0	25.6	26.9	28.9	aJ81
24S 01W 19BCC 01	QU	1383				18.6	20.1	19.0	21.9	21.7	23.2	25.6	aJ84
24S 01W 22BCC 01	QU	1390				24.6	26.8	25.3	28.3	28.0	28.9	29.3	aJ81
24S 02W 28DDD 01	QU,QU	1403				34.5	30.3	32.2	37.3	37.8	82.2	40.1	qJ58
24S 03W 14BBB 01	QU	1430				15.3	15.3	15.3	15.3	15.7	15.8	16.2	qJ65

TABLE 2. DERIVED HYDROLOGIC DATA, HARVEY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1944–92	1974–92	1991–92	1944–92	1974–92	1944	1992	1944–92
22S 02W 05CBD 01		49.4			-0.6					
22S 02W 29BBA 01		24.1			0.0					
22S 03W 02DCD 01	QU	41.1			-2.0					
22S 03W 29BAD 01	QU	22.0			-2.6					
22S 03W 35AAA 01	QU	19.0			-2.1					
23S 01W 19AAC 01	QU	35.9			-1.7					
23S 01W 28AAD 01		22.5			-0.5					
23S 02W 22CCD 01	QU	18.4			0.0					
23S 02W 34DCC 01	QU	16.9			-0.6					
23S 03W 06DDD 01	QU	78.2			-4.3					
23S 03W 14AAC 01	QU	42.3			-2.7					
23S 03W 32DCC 02	QU	12.5			-1.3					
24S 01W 05AAB 01		28.9			-2.0					
24S 01W 19BCC 01	QU	25.6			-2.4					
24S 01W 22BCC 01	QU	29.3			-0.4					
24S 02W 28DDD 01	QU,QU	40.1			42.1					
24S 03W 14BBB 01	QU	16.2			-0.4					

Haskell County

TABLE 1. SELECTED HYDROLOGIC DATA , HASKELL COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
27S 31W 24CDC 01	QU,TO	2816	366	94	97.8	147.7	150.3	152.3	156.0	158.3	162.2	166.1	aJ64
27S 31W 31BCC 01	QU,TO	2895	520	151	154.8		204.9	207.2	210.9	211.9	214.6	219.8	aJ48
27S 32W 03CBB 01		2872		92		139.9	142.5	145.8	151.8	156.3	154.3	159.0	aJ85
27S 32W 06CBB 01	QU,TO	2905	465	107		154.9	155.4	161.1	165.9	168.1	171.4	176.2	aJ73
27S 32W 19CCD 01	QU,TO	2906	456	118	130.0	181.0	183.7	190.0	198.7	200.2	204.1	211.3	aJ54
27S 33W 29DAA 01	QU,TO	2995	540	194	186.3	270.8	271.9	279.3	284.0	289.7	292.2		aJ65
27S 34W 16DDD 01		3000				192.8	190.9	194.9	200.9	202.3	205.4	210.5	aJ82
27S 34W 28DAA 02		3042				234.2	237.7	242.8	250.5	250.7	251.5	258.3	aJ77
28S 31W 35CCB 01	QU,TO	2863	443	156	171.9		215.4	219.2	223.2	229.8	225.3	228.8	aJ64
28S 32W 18BBB 01	QU,TO	2951	581	192	203.3	301.1	302.5	315.7		315.4	318.6		aJ66
28S 32W 24BCC 01	QU,TO	2910	549	175	181.5	229.5	231.7	234.0	234.0	233.2	232.6	234.7	aF64
28S 33W 20DDD 01		2967						340.2	319.2	320.9	323.3	322.6	aJ85
28S 34W 15DAB 01	QU,TO	3020	570	243	263.0		370.7	377.3	366.7	366.4	369.3	373.7	qJ66
29S 31W 09CB 01	QU,TO	2871	466	166	169.4	220.0	223.6	225.9	228.9	232.0	234.0	238.2	aJ64
29S 31W 34BCA 01	QU,TO	2858	468	168	172.7	222.4	224.7	227.3	233.5	233.3	236.7	240.4	aJ56
29S 32W 04AAA 01		2914				247.3	260.3	263.5	263.0	264.9	266.1	271.0	aJ85
29S 32W 19CCC 01	QU,TO	2923	598	208	218.2	291.6	296.0	298.8	303.9	312.0	315.3	313.1	aJ59
29S 32W 26CBB 02	QU,TO	2895		191	204.1	257.5	261.1	264.1	267.7	269.7	273.5	277.0	qJ60
29S 33W 01AAB 01	QU,TO	2946	601	213	226.3	329.0	336.5	334.9		346.8	352.8	351.7	aJ58
29S 33W 28BCB 01	QU,TO	2963	558	212			307.6	311.3	315.1		321.0	323.5	aJ70
29S 33W 34DDD 01		2950				310.0	314.9	318.3	322.2		326.7	332.8	aJ85
30S 31W 24BBC 01		2831				204.5	213.1	214.9	214.8	217.5	217.3	215.9	aJ85
30S 31W 26ABB 01		2834				229.2	232.9	234.8	238.2	238.5	238.3	235.7	aJ85
30S 32W 11BBB 01	QU,TO	2885	560	188	202.4	263.1	270.1	268.4		272.5			aJ61
30S 32W 31BAB 01	QU,TO	2906	466	194	202.0	259.4	264.0	268.5	271.0	271.9	274.1	276.8	aJ58
30S 34W 05BBB 01	QU,TO	3006	531	223	232.7	302.2	301.1	308.8		309.6	310.7	314.0	aJ57
30S 34W 30ADD 02		2843		63		105.5	109.0	111.6	114.3	116.4	118.8	122.2	aJ78

TABLE 2. DERIVED HYDROLOGIC DATA, HASKELL COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
27S 31W 24CDC 01	QU,TO	166.1	-72	-68.3	-3.9	-1.4	-2.6	272	200	-26
27S 31W 31BCC 01	QU,TO	219.8	-69	-65.0	-5.2	-1.3	-2.5	369	300	-19
27S 32W 03CBB 01		159.0	-67		-4.7	-1.3				
27S 32W 06CBB 01	QU,TO	176.2	-69		-4.8	-1.3		358	289	-19
27S 32W 19CCD 01	QU,TO	211.3	-93	-81.3	-7.2	-1.8	-3.1	338	245	-28
27S 33W 29DAA 01	QU,TO									
27S 34W 16DDD 01		210.5			-5.1					
27S 34W 28DAA 02		258.3			-6.8					
28S 31W 35CCB 01	QU,TO	228.8	-73	-56.9	-3.5	-1.4	-2.2	287	214	-25
28S 32W 18BBB 01	QU,TO									
28S 32W 24BCC 01	QU,TO	234.7	-60	-53.2	-2.1	-1.2	-2.0	374	314	-16
28S 33W 20DDD 01		322.6			0.7					
28S 34W 15DAB 01	QU,TO	373.7	-131	-110.7	-4.4	-2.5	-4.3	327	196	-40
29S 31W 09CB 01	QU,TO	238.2	-72	-68.8	-4.2	-1.4	-2.6	300	228	-24
29S 31W 34BCA 01	QU,TO	240.4	-72	-67.7	-3.7	-1.4	-2.6	300	228	-24
29S 32W 04AAA 01		271.0			-4.9					
29S 32W 19CCC 01	QU,TO	313.1	-105	-94.9	2.2	-2.0	-3.7	390	285	-27
29S 32W 26CBB 02	QU,TO	277.0	-86	-72.9	-3.5	-1.7	-2.8			
29S 33W 01AAB 01	QU,TO	351.7	-139	-125.4	1.1	-2.7	-4.8	388	249	-36
29S 33W 28BCB 01	QU,TO	323.5	-112		-2.5	-2.2		346	235	-32
29S 33W 34DDD 01		332.8			-6.1					
30S 31W 24BBC 01		215.9			1.4					
30S 31W 26ABB 01		235.7			2.6					
30S 32W 11BBB 01	QU,TO									
30S 32W 31BAB 01	QU,TO	276.8	-83	-74.8	-2.7	-1.6	-2.9	272	189	-31
30S 34W 05BBB 01	QU,TO	314.0	-91	-81.3	-3.3	-1.8	-3.1	308	217	-30
30S 34W 30ADD 02		122.2	-59		-3.4	-1.1				

TABLE 1. SELECTED HYDROLOGIC DATA , HODGEMAN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
21S 22W 12BCB 01	QA	2156			35.5	51.1	51.2	50.4	52.9	55.3		56.7	qD60
22S 22W 13CCC 01	QA	2152			24.0	34.1	33.6	30.6	34.3	35.8	36.7	39.2	qD65
22S 24W 14BBC 01	KD	2460				266.3	267.6	261.8	278.9	274.3	271.6	285.0	aD71
22S 24W 15BDA 01	KD	2463				265.3	266.4	261.2	276.2	270.7	271.6	281.9	aJ71
22S 24W 16ADB 02	KD	2465				262.2	269.5	259.7	276.1	268.6	229.5	267.8	qD72
22S 24W 24DDD 01	KD	2360					160.8	158.3	169.4		164.9	177.8	aJ70
22S 24W 25DDC 01	KD	2332				138.7	138.4	134.4	159.3	142.9	147.1	156.6	qD70
22S 24W 26DDA 01	KD	2365					152.8	151.1	156.5	156.4	158.1	158.6	aJ70
22S 24W 35DAC 01	KD	2312				127.7	118.3	114.2	135.6	120.0	129.5	137.7	aD70
23S 22W 07DAA 01	KD	2239				78.2	76.7	75.1	79.9	80.3	82.6	90.2	qD72
23S 23W 04AAD 01	KD	2235				32.4	31.6	30.8	45.2	36.5	39.2	45.5	uD70
23S 23W 04DCA 01	KD	2236				33.0	37.2	29.6		37.2	40.3	46.2	aD70
23S 23W 12ABD 01	KD	2256				88.3	86.2	86.1	90.7	66.9	74.1	66.9	aD70
23S 24W 11DAA 01	KD	2335				138.2	136.1	133.5	137.4	142.9	148.7	156.5	qD70
23S 26W 07CCC 01		2612				325.3	327.7	321.4	324.5	322.5		325.0	qJ68
23S 26W 20CCC 01		2594				46.2	46.2	45.4	47.5	47.4	47.5	47.7	aJ85
23S 26W 26AAD 01		2590				67.7	69.2	68.8	70.5	69.5	69.1	69.0	aJ85
23S 26W 31CDD 01	TO	2621	122	71		67.5	68.6	70.0	71.1	70.8	70.0	71.1	aJ77
24S 21W 20CBB 01	KD	2348				79.2	77.6	77.4	77.7	77.1	77.4	77.5	aJ77
24S 23W 03CCC 01	TO	2422	90			57.3	58.7	58.2	61.2	61.1	61.0	63.2	aJ77
24S 23W 06AAB 01	KD	2457				212.1	211.3	211.2	212.2	210.2	209.5	214.7	qD73
24S 24W 02CCC 01	TO	2478	90			59.4	59.6	60.3	63.9	62.8	61.9	68.7	aJ77
24S 24W 20CCC 01	TO	2511	86			68.4	63.1	62.7	63.3	63.5	64.1	64.5	aJ77
24S 25W 22BAB 01		2545				84.1	80.2	79.9	82.7	83.7	86.1	87.3	aJ85
24S 26W 35CBC 01	TO	2608		63		61.1	60.5	59.5	59.8	59.3	59.0	59.5	qD54

TABLE 2. DERIVED HYDROLOGIC DATA, HODGEMAN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
21S 22W 12BCB 01	QA	56.7		-21.2			-0.8			
22S 22W 13CCC 01	QA	39.2		-15.2	-2.5		-0.6			
22S 24W 14BBC 01	KD	285.0			-13.4					
22S 24W 15BDA 01	KD	281.9			-10.3					
22S 24W 16ADB 02	KD	267.8			-38.3					
22S 24W 24DDD 01	KD	177.8			-12.9					
22S 24W 25DDC 01	KD	156.6			-9.5					
22S 24W 26DDA 01	KD	158.6			-0.5					
22S 24W 35DAC 01	KD	137.7			-8.2					
23S 22W 07DAA 01	KD	90.2			-7.6					
23S 23W 04AAD 01	KD	45.5			-6.3					
23S 23W 04DCA 01	KD	46.2			-5.9					
23S 23W 12ABD 01	KD	66.9			7.2					
23S 24W 11DAA 01	KD	156.5			-7.8					
23S 26W 07CCC 01		325.0								
23S 26W 20CCC 01		47.7			-0.2					
23S 26W 26AAD 01		69.0			0.1					
23S 26W 31CDD 01	TO	71.1	0		-1.1	0.0		51	51	0
24S 21W 20CBB 01	KD	77.5			-0.1					
24S 23W 03CCC 01	TO	63.2			-2.2				27	
24S 23W 06AAB 01	KD	214.7			-5.2					
24S 24W 02CCC 01	TO	68.7			-6.8				21	
24S 24W 20CCC 01	TO	64.5			-0.4				22	
24S 25W 22BAB 01		87.3			-1.2					
24S 26W 35CBC 01	TO	59.5	4		-0.5	0.1				

TABLE 1. SELECTED HYDROLOGIC DATA , JACKSON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
06S 15E 27BAB 01		1135			76.2	87.4	88.3	87.5	89.3	89.2	88.9	89.8	aM72

TABLE 2. DERIVED HYDROLOGIC DATA, JACKSON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1944–92	1974–92	1991–92	1944–92	1974–92	1944	1992	1944–92
06S 15E 27BAB 01		89.8		-13.6	-0.9		-0.8			

TABLE 1. SELECTED HYDROLOGIC DATA , JEFFERSON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
11S 16E 25CBA 01		873			26.1	24.0	23.8	25.0	27.5	27.1	27.0		qM66
11S 17E 27BBC 01		860			17.7	17.4	16.9	18.2	20.7	20.0	20.0		qM66
11S 18E 08DAC 01		852			15.1	9.3	10.9	14.3	16.3	15.9	14.6		qM66
11S 19E 29CCA 01		848			19.7	19.8	18.8	21.9	25.4	23.4	23.4		qM66

TABLE 2. DERIVED HYDROLOGIC DATA, JEFFERSON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
11S 16E 25CBA 01										
11S 17E 27BBC 01										
11S 18E 08DAC 01										
11S 19E 29CCA 01										

TABLE 1. SELECTED HYDROLOGIC DATA , JOHNSON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
12S 22E 25BCC 01		780			20.1	23.9	25.0	26.9	31.2	30.0	30.8		qM61
12S 22E 29BBD 01		791				15.1	15.0	18.7	21.9	22.6	21.9		qM67

TABLE 2. DERIVED HYDROLOGIC DATA, JOHNSON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
12S 22E 25BCC 01										
12S 22E 29BBD 01										

Kearny County

TABLE 1. SELECTED HYDROLOGIC DATA , KEARNY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1940	1966	1986	1987	1988	1989	1990	1991	1992	Data type
22S 35W 23CDD 01	TO	3025	175	95	107.6	131.5	132.0	132.7	133.3	133.7	134.2	134.7	aJ61
22S 36W 28DCC 01		3215	210	167			172.8		172.9	175.6	178.1	179.0	aJ84
22S 37W 34BBC 01		3230				135.2	135.8	135.7	136.3	136.3		137.2	aJ86
23S 35W 05ACC 01	TO	3096	180	118	122.7			164.8			151.6	151.8	aJ66
23S 35W 12CCC 01	QU,TO	3009	369	67	79.1	153.3	143.9	149.4	140.4	139.7	145.6	155.5	aJ58
23S 35W 16BBC 01		3038	263	52		139.7	142.4	135.1	137.7	135.6	138.4	136.4	aJ85
23S 35W 25BBB 02	QU,TO	3005	385	46	59.1	120.2	107.2	102.5	106.0	105.8	105.7	109.4	aJ58
23S 36W 04CBB 01	TO	3183	198	142	132.9		143.9	143.4	145.3		142.5	146.7	aJ61
23S 36W 32BBB 01	TO	3234	305	189	218.0	235.9	238.2	240.4	247.4	245.5	247.8	242.3	aJ62
23S 36W 35BBB 01		3193	293	169			213.5	212.3	214.0	213.3	213.6	214.0	aJ85
23S 37W 04ABC 01	TO	3281	233	183			190.7	190.5	194.1	193.6	192.2	192.5	aJ78
23S 37W 28CCB 01	TO	3303	300	218	236.9		254.7	256.2	256.8	256.4	255.7	256.2	aJ61
24S 35W 09CCC 01	QU,TO	2998	358	30	31.0	42.6	36.0	35.3	36.2	35.9	39.2	43.5	aJ58
24S 35W 13CCC 02	QA	2941	346	12	8.2	16.5	16.1	14.7	15.4	15.5		17.9	qJ62
24S 35W 24BCB 01	QA	2941	341	11		27.1	26.4	25.4	26.5	26.4	27.9	27.8	aJ58
24S 36W 23CBB 02	QU,TO	3014	310	26	24.8	31.9	32.3	30.9	32.0	30.6	30.7	32.3	aJ58
25S 35W 02BAA 01	QU,TO	2990	400	52		100.7	101.6	102.6	104.8	106.4	107.7	111.2	qJ75
25S 35W 04BDD 01		2990	410	40			70.3	69.7	71.0	71.3	72.7	75.9	aJ85
25S 35W 17AAA 01	QU,TO	2995	405	37			98.5	98.0	101.2	105.2	108.9	113.6	qJ75
25S 35W 26BAB 01	QU,TO	3005	450	70			136.0	141.2	145.3	151.6	156.0	163.5	aJ75
25S 36W 14B 01		3050				99.9	91.5	95.8	97.0	94.3	94.2	95.8	aJ85
25S 36W 28BBD 01	QU,TO	3050	362	51		91.0		101.3	111.7	112.7	117.0	119.4	aJ69
25S 36W 35CCA 01		3025					101.6	104.1	107.4	109.3	113.6	116.4	qJ77
25S 37W 15ABA 02	QA	3050	30	5		9.0	8.5	9.0	9.4	9.3	10.2	9.8	qJ67
25S 37W 25BAD 02	QU,TO	3056	156	41	38.1	69.1		71.4	73.0	74.2		77.5	aJ62
25S 38W 02BDA 01		3170							96.8	117.1	99.6		aJ84
25S 38W 08CAA 01	QU,TO	3140	90	30	37.5	45.0	44.9	44.9	45.0	45.1	44.8	45.0	aJ66
25S 38W 20ACC 01	QU,TO	3175	75	65	63.2	71.0	71.2	71.3	71.5	69.2	95.2	81.0	aJ62
25S 38W 26ACC 01	QU,TO	3145	145	63	65.4	77.5	75.6	76.1	76.1	76.4	76.3		aJ62
26S 35W 06ACC 01	QU	3008	418	58	60.7	93.4			105.0	109.8	110.3	113.4	aJ65
26S 35W 29BBD 01		3045		113			179.9	185.8	188.8	191.9	194.5	198.8	aJ81
26S 36W 22CCA 01		3090	440	125		172.6	177.3	180.4	184.6	189.8	190.3	194.0	aJ82
26S 37W 06ACB 01	QU,TO	3092	102		26.1	30.7	30.7	30.2	27.1	32.1	29.0	28.8	aJ62

TABLE 2. DERIVED HYDROLOGIC DATA, KEARNY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
22S 35W 23CDD 01	TO	134.7	-40	-27.1	-0.5	-0.8	-1.0	80	40	-50
22S 36W 28DCC 01		179.0	-12		-0.9	-0.2		43	31	-28
22S 37W 34BBC 01		137.2								
23S 35W 05ACC 01	TO	151.8	-34	-29.1	-0.2	-0.7	-1.1	62	28	-55
23S 35W 12CCC 01	QU,TO	155.5	-89	-76.4	-9.9	-1.7	-2.9	302	214	-29
23S 35W 16BBC 01		136.4	-84		2.0	-1.6		211	127	-40
23S 35W 25BBB 02	QU,TO	109.4	-63	-50.3	-3.7	-1.2	-1.9	339	276	-19
23S 36W 04CBB 01	TO	146.7	-5	-13.8	-4.2	-0.1	-0.5	56	51	-9
23S 36W 32BBB 01	TO	242.3	-53	-24.3	5.5	-1.0	-0.9	116	63	-46
23S 36W 35BBB 01		214.0	-45		-0.4	-0.9		124	79	-36
23S 37W 04ABC 01	TO	192.5	-10		-0.3	-0.2		50	41	-18
23S 37W 28CCB 01	TO	256.2	-38	-19.3	-0.5	-0.7	-0.7	82	44	-46
24S 35W 09CCC 01	QU,TO	43.5	-14	-12.5	-4.3	-0.3	-0.5	328	315	-4
24S 35W 13CCC 02	QA	17.9	-6	-9.7		-0.1	-0.4	334	328	-2
24S 35W 24BCB 01	QA	27.8	-17		0.1	-0.3		330	313	-5
24S 36W 23CBB 02	QU,TO	32.3	-6	-7.5	-1.6	-0.1	-0.3	284	278	-2
25S 35W 02BAA 01	QU,TO	111.2	-59		-3.5	-1.1		348	289	-17
25S 35W 04BDD 01		75.9	-36		-3.2	-0.7		370	334	-10
25S 35W 17AAA 01	QU,TO	113.6	-77		-4.7	-1.5		368	291	-21
25S 35W 26BAB 01	QU,TO	163.5	-94		-7.5	-1.8		380	287	-24
25S 36W 14B 01		95.8			-1.6					
25S 36W 28BBD 01	QU,TO	119.4	-68		-2.4	-1.3		311	243	-22
25S 36W 35CCA 01		116.4			-2.8					
25S 37W 15ABA 02	QA	9.8	-5		0.4	-0.1		25	20	-20
25S 37W 25BAD 02	QU,TO	77.5	-37	-39.4		-0.7	-1.5	115	79	-31
25S 38W 02BDA 01										
25S 38W 08CAA 01	QU,TO	45.0	-15	-7.5	-0.2	-0.3	-0.3	60	45	-25
25S 38W 20ACC 01	QU,TO	81.0	-16	-17.8	14.2	-0.3	-0.7	10	-6	-160
25S 38W 26ACC 01	QU,TO									
26S 35W 06ACC 01	QU	113.4	-55	-52.7	-3.1	-1.1	-2.0	360	305	-15
26S 35W 29BBD 01		198.8	-86		-4.3	-1.7				
26S 36W 22CCA 01		194.0	-69		-3.7	-1.3		315	246	-22
26S 37W 06ACB 01	QU,TO	28.8		-2.7	0.2		-0.1		73	

Kingman County

TABLE 1. SELECTED HYDROLOGIC DATA , KINGMAN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
27S 05W 24CDC 01	QU	1477		14	12.6	11.1	12.4	12.3	16.3	12.9	17.1	18.6	aJ55
27S 05W 33ABB 02	QU	1460	60	25	4.0	3.7	5.1	5.3	9.3	8.5	9.3	7.2	aJ73
27S 06W 12CCD 01	QU	1488		7	6.6	7.1	7.1	9.3	11.5	14.2	12.4	12.3	aJ70
27S 06W 16CCB 01		1462	17	1	0.9	2.6	2.6	1.4	3.9		4.1	3.8	aJ73
27S 07W 03ADC 01	QU	1545	25	20	8.2	5.6	6.9	7.8	11.0	11.7	11.2	11.9	aJ56
27S 07W 23BCC 01	QU	1567	14		7.3	6.1	6.6	6.3	7.9	7.8	8.7	8.9	aJ73
27S 08W 14DDC 01	QU	1610		2	0.6				2.4	1.4	2.2	2.8	aJ66
27S 08W 17DAB 01	QU	1665	118	45	34.4	34.7	35.2	33.0	35.5	36.9	39.1	41.1	aJ73
27S 08W 25DAD 01		1622	67			18.4	19.0	15.1	19.6			23.0	aJ64
27S 08W 35CBC 01	QU	1610	54	32	20.4	20.3	22.7	20.5	21.9	22.1	23.1	24.0	aJ66
27S 09W 15ABA 01	QU	1702	153	50	49.8	45.8	45.6	44.8	45.7	46.5	48.2	49.7	aJ73
27S 09W 29AAA 01		1700		30		23.1	24.3	23.2	23.7	24.5	24.8	26.2	aJ80
27S 10W 03DDD 01	QU	1743	145	33	51.0	50.6	51.5	50.2	51.9	53.1	54.2	56.1	qJ66
27S 10W 17DDD 01	QU	1755	171	77	61.9	62.7	63.3	61.8	62.9	64.1	65.0	65.6	aJ74
27S 10W 24DAD 01	QU	1692	117	20	16.0	15.0	18.5	14.9	16.5	16.3	17.1		aJ73
28S 07W 29CDD 01	QU	1601	151	30	26.6	24.9	25.2	24.2	25.4	25.8	26.9	28.0	qJ55
28S 07W 35CCD 01	QU	1585		23	21.9	20.2	20.4	19.7	20.7	17.8	21.8	22.6	aJ67
28S 08W 21BBB 01	QU	1562	49	1	2.3	1.9	2.1	1.6	2.4	2.3	2.7	3.1	aJ74
28S 08W 26ABC 01	QU	1652		77	63.2	59.6	63.0	63.8	60.1	59.8	62.3	62.2	aJ71
28S 09W 01BCC 01		1580	55	15	7.5	6.7	7.2	6.9	8.1	7.3	8.3	8.5	aJ69
28S 09W 21AAA 01	QU	1666	118	34	28.1	27.1	27.9	26.8	27.8	28.4	28.9	30.2	aJ74
28S 09W 29CCC 01	QU	1708	107	30	32.7	31.3		27.4	32.2	33.1	33.8	35.1	aJ74
28S 09W 34AAB 01	QU	1690	75	41	42.8	41.7	41.6	40.8	41.7	43.1	43.8	45.4	aJ68
28S 10W 16BCB 01	QU	1756	154	51	50.2	48.8	49.0	48.5	49.7	50.5	51.8	52.9	aJ71
29S 10W 19DDB 01		1765					23.2	23.3	24.5	24.9	26.7	26.9	aJ85
30S 10W 05BBD 01		1770							43.7	45.5	45.6	46.9	aJ88
30S 10W 28DAC 01		1730							20.3	20.4	22.1	23.9	aJ88

TABLE 2. DERIVED HYDROLOGIC DATA, KINGMAN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
27S 05W 24CDC 01	QU	18.6	-5	-6.0	-1.5	-0.1	-0.3			
27S 05W 33ABB 02	QU	7.2	18	-3.2	2.1	0.4	-0.2	35	53	51
27S 06W 12CCD 01	QU	12.3	-5	-5.7	0.1	-0.1	-0.3			
27S 06W 16CCB 01		3.8	-3	-2.9	0.3	-0.1	-0.2	16	13	-19
27S 07W 03ADC 01	QU	11.9	8	-3.7	-0.7	0.2	-0.2	5	13	160
27S 07W 23BCC 01	QU	8.9		-1.6	-0.2		-0.1		5	
27S 08W 14DDC 01	QU	2.8	-1	-2.2	-0.6	0.0	-0.1			
27S 08W 17DAB 01	QU	41.1	4	-6.7	-2.0	0.1	-0.4	73	77	5
27S 08W 25DAD 01		23.0							44	
27S 08W 35CBC 01	QU	24.0	8	-3.6	-0.9	0.2	-0.2	22	30	36
27S 09W 15ABA 01	QU	49.7	0	0.1	-1.5	0.0	0.0	103	103	0
27S 09W 29AAA 01		26.2	4		-1.4	0.1				
27S 10W 03DDD 01	QU	56.1	-23	-5.1	-1.9	-0.5	-0.3	112	89	-21
27S 10W 17DDD 01	QU	65.6	11	-3.7	-0.6	0.2	-0.2	94	105	12
27S 10W 24DAD 01	QU									
28S 07W 29CDD 01	QU	28.0	2	-1.4	-1.1	0.0	-0.1	121	123	2
28S 07W 35CCD 01	QU	22.6	0	-0.7	-0.8	0.0	0.0			
28S 08W 21BBB 01	QU	3.1	-2	-0.8	-0.4	0.0	0.0	48	46	-4
28S 08W 26ABC 01	QU	62.2	15	1.0	0.1	0.3	0.1			
28S 09W 01BCC 01		8.5	7	-1.0	-0.2	0.1	-0.1	40	47	18
28S 09W 21AAA 01	QU	30.2	4	-2.1	-1.3	0.1	-0.1	84	88	5
28S 09W 29CCC 01	QU	35.1	-5	-2.4	-1.3	-0.1	-0.1	77	72	-6
28S 09W 34AAB 01	QU	45.4	-4	-2.6	-1.6	-0.1	-0.1	34	30	-12
28S 10W 16BCB 01	QU	52.9	-2	-2.7	-1.1	0.0	-0.2	103	101	-2
29S 10W 19DDB 01		26.9			-0.2					
30S 10W 05BBD 01		46.9			-1.3					
30S 10W 28DAC 01		23.9			-1.8					

Kiowa County

TABLE 1. SELECTED HYDROLOGIC DATA , KIOWA COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
27S 16W 10BAC 01	QU	2088	248	28	12.1	25.4	28.0	25.9	29.4	29.2	30.6	32.3	aJ62
27S 16W 19BBD 01	QU	2112	182	37	20.3	32.1	32.7	31.0	33.6	33.4	35.3	37.1	aJ72
27S 16W 28CDD 01	QU	2120	168	65	56.7	65.6	67.7	65.8	68.1	65.8	67.2	68.4	aJ73
27S 17W 21ADC 01	QU	2140	175	39	24.4	34.1	34.7	33.2	35.3	35.6	37.1	38.3	qJ41
27S 18W 13AAA 01	QU	2152	219	24	15.6	23.3	24.1	22.0	26.2	24.8	26.5	28.3	qJ73
27S 18W 18DDC 01	QU	2192	187	26	15.7	18.9	20.0	20.0	23.3	20.6	21.0	21.7	qJ40
27S 18W 22ADC 01	QU	2175	210	29	14.1	23.1	23.8	22.5	24.3	24.6	25.7	27.3	aJ70
27S 18W 36CCA 01									41.3	42.0			aJ88
27S 19W 28CBD 01	QU	2262	187	60	67.9	73.3	73.4	73.1	74.6	74.4	75.9	78.2	aJ73
27S 20W 26ABD 01	QU	2274	174	38	40.6	42.9	42.9	42.0	43.3	42.7	44.0	45.5	qJ69
27S 20W 32ABD 01	QU	2308	108	36	45.2	46.0	45.7	47.0	46.9	46.4	45.9	49.4	aJ69
28S 16W 12BCA 01	QU	2111	211	92	101.0	100.9	100.5	100.2	101.1	101.5	102.6	103.2	aJ60
28S 16W 17AAC 01	QU	2165	245	120	118.0	117.1	117.0	116.9	119.2	118.0	118.5	119.4	aJ62
28S 16W 31DCA 01		2110	192	75		71.5	70.7	69.2	69.6	69.9	70.4	70.9	aJ85
28S 17W 01CAB 01	QU	2135	180	65	55.6	59.8	60.0	59.9	60.8	61.4	62.7	64.0	aJ68
28S 17W 05DDB 01	QU	2163	163	65	62.0	60.3	60.1	59.0	59.6	59.4			aJ69
28S 17W 15DDB 01	QU	2178	191	105	96.0	96.7	96.6	96.4	97.2	97.4	98.4	99.7	aJ62
28S 18W 09BAC 01	QU	2221	182	66	61.7	64.5	64.3	64.4	65.3	65.5	66.4		aJ69
28S 18W 19CCB 01	QU	2268		103	88.0	88.6	88.7	90.2	89.0	89.0	89.7	90.5	aJ66
28S 19W 10AAC 01	TO	2270				92.8	93.0	92.6	93.7	94.0	95.5	97.4	qJ77
28S 19W 30CBC 01	QU	2335	185	116	115.0	112.6	113.8	112.3	113.5	112.7	113.2	114.7	aJ73
28S 19W 33CBD 01	QU	2325	220	133	134.0	133.9	134.6	133.8	134.1	133.7	134.2	135.1	aJ66
28S 20W 12BBD 01	QU	2288	190	64	55.7	57.2	57.0	56.3	56.8	56.5	57.2	58.0	aJ54
28S 20W 30ACA 01	QU	2319	69	32	39.4	41.6	41.1	41.2	42.3	41.7	42.7	44.5	aJ60
29S 16W 02ADB 01									50.1	50.0	50.3	50.8	aJ88
29S 17W 04ABC 01	QU	2125	122	60	50.0	51.6	51.9	51.3	51.6	51.6	52.2	52.9	aJ57
29S 17W 12DAA 01									48.1	48.5	48.6	49.5	aJ88
29S 18W 02ACC 01	TO	2251	196			143.0	142.9	142.6	142.9	142.7	143.2	143.6	qJ77
29S 18W 07BBD 01	QU	2311	256	155	153.5	153.3	153.5	153.7	153.6	153.3	153.8	154.5	aJ68
29S 19W 22BAA 01	QU	2340	250	158	157.0	156.1	156.7	156.5	156.4	156.0	156.4	156.9	aJ67
29S 20W 11CDD 01	QU	2398		170	168.0	166.1	166.4	166.4	166.5	166.2	166.4	169.3	aJ70

TABLE 2. DERIVED HYDROLOGIC DATA, KIOWA COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
27S 16W 10BAC 01	QU	32.3	-4	-20.2	-1.7	-0.1	-1.1	220	216	-2
27S 16W 19BBD 01	QU	37.1	0	-16.8	-1.8	0.0	-0.9	145	145	0
27S 16W 28CDD 01	QU	68.4	-3	-11.7	-1.2	-0.1	-0.7	103	100	-3
27S 17W 21ADC 01	QU	38.3	1	-13.9	-1.2	0.0	-0.8	136	137	1
27S 18W 13AAA 01	QU	28.3	-4	-12.7	-1.8	-0.1	-0.7	195	191	-2
27S 18W 18DDC 01	QU	21.7	4	-6.0	-0.7	0.1	-0.3	161	165	2
27S 18W 22ADC 01	QU	27.3	2	-13.2	-1.6	0.0	-0.7	181	183	1
27S 18W 36CCA 01										
27S 19W 28CBD 01	QU	78.2	-18	-10.3	-2.3	-0.4	-0.6	127	109	-14
27S 20W 26ABD 01	QU	45.5	-8	-4.9	-1.5	-0.2	-0.3	136	129	-5
27S 20W 32ABD 01	QU	49.4	-13	-4.2	-3.5	-0.3	-0.2	72	59	-18
28S 16W 12BCA 01	QU	103.2	-11	-2.2	-0.6	-0.2	-0.1	119	108	-9
28S 16W 17AAC 01	QU	119.4	1	-1.4	-0.9	0.0	-0.1	125	126	1
28S 16W 31DCA 01		70.9	4		-0.5	0.1		117	121	3
28S 17W 01CAB 01	QU	64.0	1	-8.4	-1.3	0.0	-0.5	115	116	1
28S 17W 05DDB 01	QU									
28S 17W 15DDB 01	QU	99.7	5	-3.7	-1.3	0.1	-0.2	86	91	6
28S 18W 09BAC 01	QU									
28S 18W 19CCB 01	QU	90.5	13	-2.5	-0.8	0.3	-0.1			
28S 19W 10AAC 01	TO	97.4			-1.9					
28S 19W 30CBC 01	QU	114.7	1	0.3	-1.5	0.0	0.0	69	70	1
28S 19W 33CBD 01	QU	135.1	-2	-1.1	-0.9	0.0	-0.1	87	85	-2
28S 20W 12BBD 01	QU	58.0	6	-2.3	-0.8	0.1	-0.1	126	132	5
28S 20W 30ACA 01	QU	44.5	-13	-5.1	-1.8	-0.3	-0.3	37	25	-32
29S 16W 02ADB 01		50.8			-0.5					
29S 17W 04ABC 01	QU	52.9	7	-2.9	-0.7	0.1	-0.2	62	69	11
29S 17W 12DAA 01		49.5			-0.9					
29S 18W 02ACC 01	TO	143.6			-0.4				52	
29S 18W 07BBD 01	QU	154.5	1	-1.0	-0.7	0.0	-0.1	101	102	1
29S 19W 22BAA 01	QU	156.9	1	0.1	-0.5	0.0	0.0	92	93	1
29S 20W 11CDD 01	QU	169.3	1	-1.3	-2.9	0.0	-0.1			

Labette County

TABLE 1. SELECTED HYDROLOGIC DATA , LABETTE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
31S 21E 15CCC 02		836			7.3	10.5	6.9	7.6	13.6	7.1	14.1	14.5	qM67

TABLE 2. DERIVED HYDROLOGIC DATA, LABETTE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
31S 21E 15CCC 02		14.5		-7.2	-0.4		-0.4			

Lane County

TABLE 1. SELECTED HYDROLOGIC DATA , LANE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
16S 29W 26CCD 01	TO	2803	140	90	89.2	105.2	106.5	106.0	107.6	108.6	109.0	109.5	aJ72
16S 29W 33BAB 01	TO	2813							109.9	110.1	110.9	111.2	aJ88
16S 30W 24DCC 01	TO	2840	155	109		120.5	121.9	121.5	122.4	124.9	122.9	124.5	aJ72
16S 30W 29CDD 01	TO	2884	174	121		127.9	128.4	128.2	128.9	129.5	129.3	129.9	aJ72
16S 30W 34DAB 01	TO	2857	172	116		123.0	125.9			128.3	125.6		aJ77
17S 27W 20CCC 01	TO	2717	127	84				100.5	100.9	100.6	100.0		aJ73
17S 27W 26CCC 01	TO	2678	127	80		96.7	96.4	95.7	95.3	96.4	95.9	95.4	aJ73
17S 28W 07BBB 01	TO	2785	170	83		98.4	99.2	99.5	100.7	101.5	102.0	101.4	aJ73
17S 28W 15BBC 01	TO	2760	150	84		104.8	105.7	105.6	106.4	107.1	106.7	107.5	aJ73
17S 28W 26ABB 01	TO	2735	140	85	88.2	102.3	102.5	102.6	103.3	103.4	103.5	104.0	aJ63
17S 28W 34CBB 01	TO	2747	132	78		90.7	91.0	91.0	91.1	93.0	94.7	96.2	aJ77
17S 29W 36BAA 01	TO	2784	119	70		85.2	87.0	88.3	88.0	88.6	89.0	89.2	aJ73
17S 30W 13CBB 01	TO	2846	151	84	83.9	90.8	91.2	91.4	92.7	93.1	93.5	94.9	aJ48
17S 30W 20BBB 01	TO	2889	165	87		102.5				127.2	121.5	123.4	aJ77
18S 27W 13CCC 01	TO	2674	95	88	86.1	86.3	86.2	86.4	86.0	85.7	85.8	85.9	aJ48
18S 28W 18ACC 01	TO	2764	95	51		69.1		67.1	65.9	68.3	65.3	66.0	aJ72
18S 29W 04DAD 01	TO	2801	110	56		66.5	70.6	67.3	68.9	69.3	69.4		aJ72
18S 30W 02AAA 01	TO	2849	124	68		86.3	85.5	88.4	90.5	90.2	89.0	91.0	aJ71
18S 30W 04BAB 01	TO	2872	125	69		74.8	75.5	75.9	76.7	77.1	77.3	77.4	aJ77
18S 30W 23AAA 01	TO	2848	150	55		64.4	63.4	64.6	63.7	62.0	61.3	63.5	aJ77

TABLE 2. DERIVED HYDROLOGIC DATA, LANE COUNTY

Well number	Geo-logic unit	Depth to water (feet)	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
		1992	1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
16S 29W 26CCD 01	TO	109.5	-20	-20.3	-0.5	-0.5	-0.8	50	31	-38
16S 29W 33BAB 01	TO	111.2			-0.3					
16S 30W 24DCC 01	TO	124.5	-16		-1.6	-0.4		46	31	-33
16S 30W 29CDD 01	TO	129.9	-9		-0.6	-0.2		53	44	-17
16S 30W 34DAB 01	TO									
17S 27W 20CCC 01	TO									
17S 27W 26CCC 01	TO	95.4	-15		0.5	-0.4		47	32	-32
17S 28W 07BBB 01	TO	101.4	-18		0.6	-0.4		87	69	-21
17S 28W 15BBC 01	TO	107.5	-24		-0.8	-0.6		66	43	-35
17S 28W 26ABB 01	TO	104.0	-19	-15.8	-0.5	-0.5	-0.6	55	36	-35
17S 28W 34CBB 01	TO	96.2	-18		-1.5	-0.4		54	36	-33
17S 29W 36BAA 01	TO	89.2	-19		-0.2	-0.5		49	30	-39
17S 30W 13CBB 01	TO	94.9	-11	-11.0	-1.4	-0.3	-0.4	67	56	-16
17S 30W 20BBB 01	TO	123.4	-36		-1.9	-0.9		78	42	-46
18S 27W 13CCC 01	TO	85.9	2	0.2	-0.1	0.0	0.0	7	9	29
18S 28W 18ACC 01	TO	66.0	-15		-0.7	-0.4		44	29	-34
18S 29W 04DAD 01	TO									
18S 30W 02AAA 01	TO	91.0	-23		-2.0	-0.5		56	33	-41
18S 30W 04BAB 01	TO	77.4	-8		-0.1	-0.2		56	48	-14
18S 30W 23AAA 01	TO	63.5	-9		-2.2	-0.2		95	87	-8

Leavenworth County

TABLE 1. SELECTED HYDROLOGIC DATA , LEAVENWORTH COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
12S 22E 21BCD 01		793			21.7	26.9	25.8	28.5	30.8	29.6	30.5		qM67
12S 22E 22CAA 01		785			13.7	18.6	19.2	22.6	25.2	24.5	23.9		qM67

TABLE 2. DERIVED HYDROLOGIC DATA, LEAVENWORTH COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1944–92	1974–92	1991–92	1944–92	1974–92	1944	1992	1944–92
12S 22E 21BCD 01										
12S 22E 22CAA 01										

Logan County

TABLE 1. SELECTED HYDROLOGIC DATA , LOGAN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
11S 32W 04ACD 01	TO	3059	208	96	102.0	111.7	113.6	112.6	110.7	114.3			aJ68
11S 32W 19AAB 01	TO	3073	183	92		103.7	103.3	103.3	104.5	104.3	105.1	105.5	aJ75
11S 32W 31CCD 01		3054				68.7	71.3	70.4	70.1	71.8	73.3	73.6	aJ84
11S 32W 36ABA 01	TO	3009				91.4	89.2	91.9	89.9	93.4	91.9	92.4	aJ70
11S 33W 10BDD 01		3113				116.6		117.0	117.2	117.7		118.4	aJ84
11S 33W 14DCC 01	TO	3117				131.3		132.3	132.2		137.4	133.7	aJ69
11S 34W 13AAB 01	TO	3184				143.8	143.9	143.7	144.2	144.3	144.1	142.0	aJ84
11S 34W 16CDB 01	TO	3218	170	122	118.4	121.1	120.2	120.2	120.5	120.1	120.2	120.9	aJ59
11S 35W 01DCC 01	TO	3268				153.5	152.4	153.1	153.5	153.0			aJ69
11S 36W 06ADD 02	TO	3380	220	142	137.0	167.6	168.9	165.2	166.5	173.0	177.9	178.9	aJ65
11S 37W 01DCD 01		3369				168.0	169.6	167.6	169.5	170.7	169.3	167.9	aJ79
13S 36W 20CCB 01	QA	3023	30					9.5	10.9	11.1	10.6	10.8	aJ70
15S 37W 29AAA 01	TO	3420	60			32.9	33.8	33.4	33.5	33.7	33.7		aJ71

TABLE 2. DERIVED HYDROLOGIC DATA, LOGAN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
11S 32W 04ACD 01	TO									
11S 32W 19AAB 01	TO	105.5	-14		-0.4	-0.3		91	78	-14
11S 32W 31CCD 01		73.6			-0.3					
11S 32W 36ABA 01	TO	92.4			-0.5					
11S 33W 10BDD 01		118.4								
11S 33W 14DCC 01	TO	133.7			3.7					
11S 34W 13AAB 01	TO	142.0			2.1					
11S 34W 16CDB 01	TO	120.9	1	-2.5	-0.7	0.0	-0.1	48	49	2
11S 35W 01DCC 01	TO									
11S 36W 06ADD 02	TO	178.9	-37	-41.9	-1.0	-0.9	-1.6	78	41	-47
11S 37W 01DCD 01		167.9			1.4					
13S 36W 20CCB 01	QA	10.8			-0.2				19	
15S 37W 29AAA 01	TO									

McPherson County

TABLE 1. SELECTED HYDROLOGIC DATA , MCPHERSON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
18S 03W 30CCC 01	QU	1515				111.2	110.8	111.1	111.8	112.2	114.1	115.0	aJ70
18S 04W 21CCC 01	QU	1412				9.6	10.2	9.9	11.4	12.5	13.7	14.4	aJ70
19S 01W 32DAC 01	QU	1590				46.2	46.3	45.1	45.1	45.6	46.5	47.8	aJ70
19S 03W 16BCB 01	QU	1511				100.5	99.7	104.3	99.6	99.3	101.6	101.5	aJ70
19S 03W 31BBA 01	QU	1494				81.2	81.4	79.4	82.2	82.6	83.9	85.0	aJ70
19S 04W 15AAC 01		1494				85.8	85.9		85.7	86.1	87.0	89.1	aJ70
20S 01W 22BBB 01	QU	1527				7.3	6.9	5.6	9.5	9.7	11.4	12.7	aJ70
20S 01W 29DDD 01	QU	1530				6.2	7.3	5.6	8.1	11.0	12.0		aJ81
20S 03W 22DAA 01	QU	1473				37.5	37.6	37.5	38.6	39.4	40.2	43.2	aJ70
20S 03W 30BBA 01	QU	1476				53.5	52.6	53.7	54.6	55.2	56.5	58.1	aJ70
20S 04W 15BDD 01	QU	1474				52.5	53.1		53.8	54.4		57.3	aJ70
20S 04W 27DAC 01	QU	1467				40.7	41.5	41.5	43.7	44.1	46.2	48.0	aJ70
21S 02W 12BBB 01	QU	1503				10.3	10.6	10.1	11.8	13.2	14.1	15.3	aJ81
21S 02W 28CBA 01	QU	1467				37.3	35.5	35.3	35.2	36.7	38.1	41.0	aJ70
21S 02W 36ACA 01	QU	1475				8.7	9.4	11.1	12.7	12.6	14.0	14.5	aJ80
21S 03W 06CBD 01	QU	1464				44.2	43.6	43.1	44.8	45.5	45.9	49.1	aJ70
21S 03W 22BBB 01	QU	1450				34.0	33.9	29.8	33.0	34.4	34.9	35.4	aJ70
21S 03W 33BBC 01	QU	1461				45.2	43.8	42.6	45.7	46.4	49.2	52.2	aJ70
21S 04W 26CDC 01	QU	1445				31.3	30.2	29.2	34.3	34.4	38.8	42.5	aJ70

TABLE 2. DERIVED HYDROLOGIC DATA, MCPHERSON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
18S 03W 30CCC 01	QU	115.0			-0.9					
18S 04W 21CCC 01	QU	14.4			-0.7					
19S 01W 32DAC 01	QU	47.8			-1.3					
19S 03W 16BCB 01	QU	101.5			0.1					
19S 03W 31BBA 01	QU	85.0			-1.1					
19S 04W 15AAC 01		89.1			-2.1					
20S 01W 22BBB 01	QU	12.7			-1.3					
20S 01W 29DDD 01	QU									
20S 03W 22DAA 01	QU	43.2			-3.0					
20S 03W 30BBA 01	QU	58.1			-1.6					
20S 04W 15BDD 01	QU	57.3								
20S 04W 27DAC 01	QU	48.0			-1.8					
21S 02W 12BBB 01	QU	15.3			-1.2					
21S 02W 28CBA 01	QU	41.0			-2.9					
21S 02W 36ACA 01	QU	14.5			-0.5					
21S 03W 06CBD 01	QU	49.1			-3.2					
21S 03W 22BBB 01	QU	35.4			-0.5					
21S 03W 33BBC 01	QU	52.2			-3.0					
21S 04W 26CDC 01	QU	42.5			-3.7					

Meade County

TABLE 1. SELECTED HYDROLOGIC DATA , MEADE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
30S 26W 04CBB 01	QU,TO	2525	415	11	20.7	45.8	48.8	49.8	58.4	58.5	62.3	74.3	aJ39
30S 26W 13ABB 01		2575				64.0				67.3	67.4	68.4	aJ86
30S 26W 32DDD 01		2488	388	16		17.9	18.7	17.3	19.7	20.0	20.6	22.5	aJ85
30S 27W 20ABA 01		2564				56.8	60.4	62.7	71.3	69.3	74.2	75.1	aJ85
30S 27W 23ABB 01	QU,TO	2531	321	12	16.5	42.0	44.4			54.6	54.4	63.0	aJ39
30S 27W 27BBB 01		2518				25.5	22.1	24.7	37.3	32.7	36.3	37.8	aJ85
30S 27W 32DDD 01		2475	315	26	11.8	7.1	7.7	8.1	9.2	7.5	8.6	9.6	qJ53
30S 28W 17ABB 01	QU,TO	2697	517	102	109.6	141.3	144.7	146.7	164.5	160.9	156.0	157.4	aJ65
30S 28W 33AAA 01		2646	466	85		119.2	120.3	124.2	124.8	126.7	128.4	131.4	aJ85
30S 29W 23CAD 01	QU,TO	2744	544	134	141.3	178.0	180.0	181.2	184.3	186.6	188.5	192.8	aJ65
30S 29W 28BBB 01	QU,TO	2758	553	137	137.8	176.2	175.8	177.2	186.8	189.8	191.0	194.5	aJ59
30S 30W 06CCC 01		2825	449	152		199.5	201.3		207.4	210.9	213.0	217.1	aJ65
30S 30W 28ABB 01	QU,TO	2803	508	150	145.9	188.6	191.7	191.6	205.8	205.7	214.3	208.1	aJ59
31S 26W 30BBB 01	QU,TO	2516		98		102.1	102.0	103.6	105.3	104.8	105.2	106.3	aJ75
31S 27W 20AAA 02	QU,TO	2466	326	15		27.1	28.1	29.3	37.8	35.3	39.8	43.4	aJ75
31S 28W 02CCC 01		2623				124.4	121.2	122.3	129.1	130.6	140.9	133.9	aJ84
31S 28W 10BCB 01	QU,TO	2643	463	114	112.2	139.4	136.9	138.5	146.3		169.0	171.3	aJ65
31S 28W 26ABB 01		2496				30.5	27.0		37.4	41.7	45.1	49.9	aJ86
31S 29W 02DBB 01		2720	420	130		175.2	178.0		173.3	174.2	175.8		aJ85
31S 29W 25AAA 02	QU,TO	2698	438	145	156.5	178.3	181.2	182.8		188.5	195.3	191.9	aJ65
31S 29W 30AAA 01	QU,TO	2741	461	136	130.2	169.0	166.7	166.2	173.9	172.9	174.1	181.8	aJ65
31S 30W 16BBC 01	QU,TO	2770	505	136	133.9	186.3	188.9	191.1	197.7	199.5	206.3	206.1	aJ65
32S 28W 04ADD 01	QU,TO	2546	366	63	66.1	73.9	71.4	74.4	74.0	73.9	75.1	75.9	aJ39
32S 29W 05CC 01	QU,TO	2719	464	139	137.3	168.2	167.7	168.6	169.7	159.9	160.9	155.7	aJ59
32S 29W 27AAB 02	QU,TO	2688	555	143		149.8	149.5	149.4	151.8	152.5	144.8	154.5	aJ75
32S 30W 09CCC 01	QU,TO	2764	504	155	156.7	192.9	194.3	197.0	202.2		199.5	207.2	aJ65
33S 28W 29BCB 01	TO	2371	160	14	14.3	14.8	15.6	15.3	17.3	15.1	14.9	15.2	aJ39
33S 29W 36AAB 01	QU,TO	2463	283	81	81.3	87.1	87.2	90.9	94.5		88.6	88.5	aJ65
33S 30W 21ACC 01		2725				183.2		183.8	204.2	205.9			aJ85
34S 28W 05BDA 01		2350				25.8	24.7	25.2	26.4	25.7	24.5	25.6	aJ86
34S 30W 22CBC 01	TO,TO	2675	675	191		197.7	198.3	198.5	199.7	200.6	189.9	202.0	aJ75
35S 30W 10CDA 01	QA,QU	2393	318	23	23.1	25.9	25.4	25.2	26.5	24.9	24.4	26.5	aJ65

TABLE 2. DERIVED HYDROLOGIC DATA, MEADE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
30S 26W 04CBB 01	QU,TO	74.3	-63	-53.6	-12.0	-1.2	-2.1	404	341	-16
30S 26W 13ABB 01		68.4			-1.0					
30S 26W 32DDD 01		22.5	-7		-1.9	-0.1		372	366	-2
30S 27W 20ABA 01		75.1			-0.9					
30S 27W 23ABB 01	QU,TO	63.0	-51	-46.5	-8.6	-1.0	-1.8	309	258	-17
30S 27W 27BBB 01		37.8			-1.5					
30S 27W 32DDD 01		9.6	16	2.2	-1.0	0.3	0.1	289	305	6
30S 28W 17ABB 01	QU,TO	157.4	-55	-47.8	-1.4	-1.1	-1.8	415	360	-13
30S 28W 33AAA 01		131.4	-46		-3.0	-0.9		381	335	-12
30S 29W 23CAD 01	QU,TO	192.8	-59	-51.5	-4.3	-1.1	-2.0	410	351	-14
30S 29W 28BBB 01	QU,TO	194.5	-58	-56.7	-3.5	-1.1	-2.2	416	359	-14
30S 30W 06CCC 01		217.1	-65		-4.1	-1.3		297	232	-22
30S 30W 28ABB 01	QU,TO	208.1	-58	-62.2	6.2	-1.1	-2.4	358	300	-16
31S 26W 30BBB 01	QU,TO	106.3	-8		-1.1	-0.2				
31S 27W 20AAA 02	QU,TO	43.4	-28		-3.6	-0.5		311	283	-9
31S 28W 02CCC 01		133.9			7.0					
31S 28W 10BCB 01	QU,TO	171.3	-57	-59.1	-2.3	-1.1	-2.3	349	292	-16
31S 28W 26ABB 01		49.9			-4.8					
31S 29W 02DBB 01										
31S 29W 25AAA 02	QU,TO	191.9	-47	-35.4	3.4	-0.9	-1.4	293	246	-16
31S 29W 30AAA 01	QU,TO	181.8	-46	-51.6	-7.7	-0.9	-2.0	325	279	-14
31S 30W 16BBC 01	QU,TO	206.1	-70	-72.2	0.2	-1.3	-2.8	369	299	-19
32S 28W 04ADD 01	QU,TO	75.9	-13	-9.8	-0.8	-0.3	-0.4	303	290	-4
32S 29W 05CC 01	QU,TO	155.7	-17	-18.4	5.2	-0.3	-0.7	325	308	-5
32S 29W 27AAB 02	QU,TO	154.5	-12		-9.7	-0.2		412	401	-3
32S 30W 09CCC 01	QU,TO	207.2	-52	-50.5	-7.7	-1.0	-1.9	349	297	-15
33S 28W 29BCB 01	TO	15.2	-1	-0.9	-0.3	0.0	0.0	146	145	-1
33S 29W 36AAB 01	QU,TO	88.5	-8	-7.2	0.1	-0.2	-0.3	202	195	-3
33S 30W 21ACC 01										
34S 28W 05BDA 01		25.6			-1.1					
34S 30W 22CBC 01	TO,TO	202.0	-11		-12.1	-0.2		484	473	-2
35S 30W 10CDA 01	QA,QU	26.5	-4	-3.4	-2.1	-0.1	-0.1	295	292	-1

Morton County

TABLE 1. SELECTED HYDROLOGIC DATA , MORTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
31S 39W 18CCC 01	QU,TO	3246	226	116	135.6		204.8	203.7	214.4	212.9	215.2	212.1	aJ62
31S 39W 33BCC 01	QU,TO	3253	278	123	160.0	231.0	224.9	233.2	242.6	228.0			aJ67
31S 40W 29ABB 01	QU,TO	3331	233	141	166.1	183.6	184.6	183.2	184.7	185.8	186.2	186.7	aJ59
31S 41W 07CDD 01	KJ	3441				135.6	135.9		135.9	135.5	135.1	135.3	aJ67
31S 41W 31CBB 01	KJ	3441			73.0	99.2	100.9	94.9	96.1	93.7	91.3	95.5	aJ67
31S 42W 29AAB 01	QU,TO	3510		74	93.1	101.1	100.3	101.0	99.1	97.5	99.9	101.0	aJ62
31S 43W 03CB 01	QU,TO	3609		61	65.7		64.3	64.5	65.4	66.4	65.7	63.9	aJ60
31S 43W 14DDC 01	KU	3576			67.7	69.8	70.8	70.2	71.6	71.4	71.6	72.1	aJ39
32S 40W 07BDC 01		3302		52			109.4	109.3	110.5	111.6	111.5	112.3	aJ84
32S 40W 21ADB 01	QU,TO	3342	237	132	156.0	191.0	193.7	193.6	199.9	197.8	195.2	196.3	aJ67
32S 41W 15CDC 01	QU,TO	3360			18.0	20.0	21.6	22.0	21.7	20.6	21.7	23.5	aJ67
32S 41W 35DCC 01		3420				173.8	168.1	180.3	181.0	182.0	181.9	188.4	aJ84
32S 42W 14CCC 01	QU,TO	3500			90.6	127.0	127.8	124.1	129.7	125.4	126.7	127.0	aJ62
32S 42W 21BCC 01	QU,TO	3526	186	64	113.6			155.1	168.3	158.5	158.6	157.7	aJ59
32S 42W 26CDD 01	QU,TO	3485	175	75	102.0		151.0	119.2	121.4	125.0	125.9	126.8	aJ67
32S 43W 08CBD 01		3615		45		95.1	94.5	93.3	97.7	104.1	101.6	102.5	aJ84
32S 43W 17DCC 01	TO	3626	146	60	60.0		74.1	73.0	74.9	75.3			aJ67
32S 43W 28BBC 01		3526				63.2	64.4	64.5		65.5	67.9	67.0	aJ84
33S 39W 04DBB 01	TO	3237	357	87		97.5	97.8	97.8	101.7	102.4	103.4	104.5	aJ84
33S 39W 16ABB 01	QU,TO	3234	344	82	70.0	76.3	77.2	77.5	86.7	79.5	83.3	80.6	aJ62
33S 40W 27CCC 01	QU,TO	3308	323	98	80.0	82.7	81.3	81.5	82.2	82.1	82.3	82.0	aJ67
33S 41W 03AAD 01	QU,TO	3425	445	113	117.2	144.5	140.9	146.6	148.0	148.8	146.4		aJ59
33S 41W 33DDD 01	QU	3377	157	68	69.4	70.4	69.1	68.6	68.0	68.8	68.9	67.1	aJ63
33S 42W 05DCC 01		3235						70.1		71.5	71.3	71.3	aJ84
33S 42W 21BCB 01	QU,TO	3527	167	87	85.0	89.2	89.2	88.6	89.5	88.7	89.6	89.4	aJ67
33S 43W 08BDA 01	QU,TO	3643	183	86	95.0	105.4	105.3	107.3	109.1		112.3	107.2	aJ67
33S 43W 09DBA 01		3612				87.5		88.9	90.4	90.4			aJ86
34S 39W 06CCA 01		3310	355	140		121.0	123.0	120.7	121.8	122.5	118.7	119.7	aJ84
34S 40W 16ABB 01		3363	388	163		145.1	144.9	144.7	145.9	144.1	148.5	143.3	aJ84
34S 41W 26DCD 01		3360	290	120		158.2	159.2	160.3	162.0	162.8	163.8	164.5	aJ84
34S 41W 28CBA 01		3299				119.7	120.1	121.1	121.2	123.1	124.2	125.0	aJ84
34S 42W 05BDC 01	QU,KJ	3449	69	31	38.4	39.6			39.7		39.8	39.8	aJ59
34S 42W 22CDB 01	QU,TO	3492	112	92		79.4	79.2		79.4	79.6	79.0	80.1	aJ67
34S 43W 07BDD 01	KJ	3655		125	147.2	149.3	149.5	149.7	149.9	149.2	149.9	151.0	aJ63
35S 39W 06CDD 01		3330	510	175		211.5	212.8	212.2	229.3	221.1	216.1	218.5	aJ84
35S 40W 03BBB 02		3369					178.5	178.7	179.9	180.4	180.7	181.3	qJ87
35S 41W 16CCD 01		3385		80		215.5	215.6	216.5	225.9	219.1	218.1	220.9	aJ84
35S 42W 02DBB 01		3554				169.0	169.5	170.1		171.3	174.1	173.4	aJ84
35S 43W 04AAC 01		3554	179	76		81.1	83.0	78.4		86.6	88.3	90.2	aJ84
35S 43W 13BDB 01	QU,TO	3615	305	151		184.2	190.3	186.5	192.2	191.1	190.6		aJ71

TABLE 2. DERIVED HYDROLOGIC DATA, MORTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
31S 39W 18CCC 01	QU,TO	212.1	-96	-76.5	3.1	-1.8	-2.9	110	14	-87
31S 39W 33BCC 01	QU,TO									
31S 40W 29ABB 01	QU,TO	186.7	-46	-20.6	-0.5	-0.9	-0.8	92	46	-50
31S 41W 07CDD 01	KJ	135.3			-0.2					
31S 41W 31CBB 01	KJ	95.5		-22.5	-4.2		-0.9			
31S 42W 29AAB 01	QU,TO	101.0	-27	-7.9	-1.1	-0.5	-0.3			
31S 43W 03CB 01	QU,TO	63.9	-3	1.8	1.8	-0.1	0.1			
31S 43W 14DDC 01	KU	72.1		-4.4	-0.5		-0.2			
32S 40W 07BDC 01		112.3	-60		-0.8	-1.2				
32S 40W 21ADB 01	QU,TO	196.3	-64	-40.3	-1.1	-1.2	-1.6	105	41	-61
32S 41W 15CDC 01	QU,TO	23.5		-5.5	-1.8		-0.2			
32S 41W 35DCC 01		188.4			-6.5					
32S 42W 14CCC 01	QU,TO	127.0		-36.4	-0.3		-1.4			
32S 42W 21BCC 01	QU,TO	157.7	-94	-44.1	0.9	-1.8	-1.7	122	28	-77
32S 42W 26CDD 01	QU,TO	126.8	-52	-24.8	-0.9	-1.0	-1.0	100	48	-52
32S 43W 08CBD 01		102.5	-58		-0.9	-1.1				
32S 43W 17DCC 01	TO									
32S 43W 28BBC 01		67.0			0.9					
33S 39W 04DBB 01	TO	104.5	-18		-1.1	-0.3		270	253	-6
33S 39W 16ABB 01	QU,TO	80.6	1	-10.6	2.7	0.0	-0.4	262	263	0
33S 40W 27CCC 01	QU,TO	82.0	16	-2.0	0.3	0.3	-0.1	225	241	7
33S 41W 03AAD 01	QU,TO									
33S 41W 33DDD 01	QU	67.1	1	2.3	1.8	0.0	0.1	89	90	1
33S 42W 05DCC 01		71.3			0.0					
33S 42W 21BCB 01	QU,TO	89.4	-2	-4.4	0.2	0.0	-0.2	80	78	-3
33S 43W 08BDA 01	QU,TO	107.2	-21	-12.2	5.1	-0.4	-0.5	97	76	-22
33S 43W 09DBA 01										
34S 39W 06CCA 01		119.7	20		-1.0	0.4		215	235	9
34S 40W 16ABB 01		143.3	20		5.2	0.4		225	245	9
34S 41W 26DCD 01		164.5	-45		-0.7	-0.9		170	126	-26
34S 41W 28CBA 01		125.0			-0.8					
34S 42W 05BDC 01	QU,KJ	39.8	-9	-1.4	0.0	-0.2	-0.1	38	29	-24
34S 42W 22CDB 01	QU,TO	80.1	12		-1.1	0.2		20	32	60
34S 43W 07BDD 01	KJ	151.0	-26	-3.8	-1.1	-0.5	-0.1			
35S 39W 06CDD 01		218.5	-44		-2.4	-0.8		335	292	-13
35S 40W 03BBB 02		181.3			-0.6					
35S 41W 16CCD 01		220.9	-141		-2.8	-2.7				
35S 42W 02DBB 01		173.4			0.7					
35S 43W 04AAC 01		90.2	-14		-1.9	-0.3		103	89	-14
35S 43W 13BDB 01	QU,TO									

Ness County

TABLE 1. SELECTED HYDROLOGIC DATA , NESS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
16S 24W 15ABB 01	TO	2500				29.8	29.9	29.4	29.7	29.8	29.7	29.8	aJ75
18S 21W 25AAB 01	QA	2085				29.5	29.2	26.9	28.7	29.3	28.8	30.0	aJ74
18S 21W 31CAA 01	QU	2122				32.2	31.6	29.0	30.1	30.5	30.0	31.5	qJ71
18S 24W 36ADB 01	QA	2235				33.9	32.7	31.5	32.2	32.4	32.7	32.5	aJ74
18S 25W 33BBC 01	QA	2402				29.5	29.9	27.2	27.5	27.6	28.2	28.9	aJ74
18S 26W 06BAB 02	QA,TO	2570					7.5	7.0	7.9	7.8	7.7	7.7	aJ74
19S 23W 01CCB 01		2214				87.5	88.1	86.9	87.8	88.6	90.0	89.4	aJ71
19S 23W 08CBB 01		2220				22.5	22.2	18.6	20.5	21.4	21.7	22.0	qJ65
20S 22W 20CCC 01		2189				57.5	57.7	56.0	46.8	47.3	47.0	47.8	qJ40
20S 22W 35BCC 01	QA	2168				44.8	45.1	43.6	45.4	46.2	45.9	48.4	aJ74
20S 23W 32CDA 01		2233				37.2	36.2	36.8	35.9	36.7	36.5	37.1	qJ40
20S 26W 07BDC 01	QA	2538				23.3	21.9	19.7	24.4	23.2	23.5	24.7	aJ74

TABLE 2. DERIVED HYDROLOGIC DATA, NESS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
16S 24W 15ABB 01	TO	29.8			-0.1					
18S 21W 25AAB 01	QA	30.0			-1.2					
18S 21W 31CAA 01	QU	31.5			-1.5					
18S 24W 36ADB 01	QA	32.5			0.2					
18S 25W 33BBC 01	QA	28.9			-0.7					
18S 26W 06BAB 02	QA,TO	7.7			0.0					
19S 23W 01CCB 01		89.4			0.6					
19S 23W 08CBB 01		22.0			-0.3					
20S 22W 20CCC 01		47.8			-0.8					
20S 22W 35BCC 01	QA	48.4			-2.5					
20S 23W 32CDA 01		37.1			-0.6					
20S 26W 07BDC 01	QA	24.7			-1.2					

TABLE 1. SELECTED HYDROLOGIC DATA , NORTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
01S 21W 17AAA 01		2290				85.3	84.9	83.6	83.6	83.4	83.0	82.6	aD76
01S 23W 15AAA 01		2340				33.2	32.7	32.3	32.1	32.4	32.6	32.8	aD76
01S 24W 13BCB 01		2425				116.3	116.1	115.7	115.3	115.2	115.0	115.0	aD76
01S 25W 25BBB 01		2405				42.8	43.8	43.6	43.2	43.2	43.4	43.4	aD85
02S 21W 33CCC 01						94.2	94.2	93.7	93.5	93.6	93.6	93.8	aD76
02S 23W 22AAA 01		2378				75.6	75.3	74.9	75.1	74.7	75.2	75.3	aD76
02S 25W 14AAA 01						142.4	141.8	141.9	141.5	141.5	141.1	140.9	aD76
04S 23W 03DDD 01						90.4	90.3	89.8	89.5	89.3	89.1	89.0	aD76
04S 23W 26CCC 01						46.1	46.1	45.8	45.7	45.8	45.9	46.2	aD76
04S 25W 13CCC 01						120.1	119.8	119.2	118.6	118.5	118.3	118.2	aD76

TABLE 2. DERIVED HYDROLOGIC DATA, NORTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
01S 21W 17AAA 01		82.6			0.4					
01S 23W 15AAA 01		32.8			-0.2					
01S 24W 13BCB 01		115.0			0.0					
01S 25W 25BBB 01		43.4			0.0					
02S 21W 33CCC 01		93.8			-0.2					
02S 23W 22AAA 01		75.3			-0.1					
02S 25W 14AAA 01		140.9			0.2					
04S 23W 03DDD 01		89.0			0.1					
04S 23W 26CCC 01		46.2			-0.3					
04S 25W 13CCC 01		118.2			0.1					

Osborne County

TABLE 1. SELECTED HYDROLOGIC DATA , OSBORNE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
06S 12W 23CDC 01		1505			23.0	25.3	24.5	22.0	23.6	23.1	23.4	24.7	qM45
07S 12W 28ABA 01		1531				32.7	32.2	30.4				34.3	qM46
07S 15W 10CCC 01		1648			17.2	17.6	17.4	16.5		17.7	16.8	17.3	qM64

TABLE 2. DERIVED HYDROLOGIC DATA, OSBORNE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
06S 12W 23CDC 01		24.7		-1.7	-1.3		-0.1			
07S 12W 28ABA 01		34.3								
07S 15W 10CCC 01		17.3		-0.1	-0.5		0.0			

Pawnee County

TABLE 1. SELECTED HYDROLOGIC DATA , PAWNEE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
21S 15W 11CBB 01	QA	1932		3	4.9	9.5	10.2	8.9	10.1	9.8	10.4	11.6	aJ73
21S 15W 31BAD 01	QU	1972		8	10.3	18.3	18.0	16.7		19.4	16.3	22.6	aJ73
21S 16W 14ADC 01		1970		5		15.9	16.1	13.8	16.3	15.6	14.8	18.7	aJ85
21S 18W 32DAA 01	QA	2056		19	16.5	32.7	32.3	28.4	31.7	31.6	31.0	35.1	qJ63
21S 19W 27CCC 01		2077		23		44.1	44.6	42.9	45.6	46.5	47.3	49.9	aJ44
21S 19W 30BCC 01		2087		29	33.3	47.3	47.8	46.4	48.8	49.9	50.3	53.2	qJ65
21S 20W 29BBB 01		2104		24	34.8	46.0	46.3	47.3	47.4	48.7	48.6	51.6	qJ65
22S 15W 03AAA 01	QU	1970	207	18	15.5	28.9	29.4	28.7	29.9	30.6	29.1	32.7	aJ73
22S 15W 03AAA 02	QU	1970	207		18.7	30.5	30.8	30.1	31.9	32.5	33.6	35.1	qJ73
22S 15W 09CCA 01	QU	1989							34.1	34.8			aJ88
22S 15W 13DCA 01	QU	1976	171	29	17.5	37.8	37.7	37.2		40.3	41.5	42.9	aJ69
22S 15W 33DDD 01		2003	128	28		34.3	33.3	32.8	35.4	36.6	38.1	39.5	aJ85
22S 16W 03CBC 02	QA	1996		8	9.4	14.9	14.0	13.6	15.4	15.9	16.8	18.3	aJ73
22S 16W 06BBA 01	QA	2010		8	14.6	18.1	17.7	16.9	19.0	17.8	18.4	20.0	qJ61
22S 16W 23AAA 01	QU	2011	106	24	21.8	36.6	36.7	36.2	38.1	38.3	39.7	40.1	qJ70
22S 16W 32CDD 01		2047				31.7	30.5	29.4	32.5	34.2	35.3	37.6	aJ85
22S 17W 05BBC 02		2036		15		26.7	25.3	21.6	26.8	26.4	27.6	28.6	aJ81
22S 17W 18AAD 01	QU	2047		27		38.8	36.4	33.5	38.1	38.6	38.5	40.8	qJ64
22S 17W 24CBC 01	QA	2034		12	5.6		10.6	9.3	10.7	11.4	12.0	15.5	aJ71
22S 17W 27BAB 01									7.7	8.2	7.7	9.5	aJ88
22S 19W 07AAA 01		2102				63.1	61.6	58.0	67.2	65.4	64.2	66.8	qJ77
22S 19W 10BBA 01		2087				55.6	55.7	52.9	58.1	58.0	59.2	66.3	qJ78
23S 15W 12DDB 01		1974	145			30.4	28.8	29.6	32.4	32.4	32.8	34.2	aJ86
23S 15W 21DCC 01		2030							34.1	36.1	37.0	38.8	aJ88
23S 16W 11CDC 01	QU	2038							25.9	26.6	27.1	27.7	aJ88
23S 16W 35CCD 02		2060				29.3	28.6	26.7	30.3	31.3	32.8	34.2	qJ81
23S 17W 10CDB 01	QU	2091	91	29	25.4	38.1	38.0	36.1	37.7	39.0	40.1	41.2	aJ68
23S 18W 28DAD 01	QU	2102	51	5	6.3	8.9	8.3	8.4	9.4	9.0	9.6	9.4	qJ73
23S 18W 36DAC 01	QU	2116	96	21	8.2	25.8	24.4	21.1	24.2	25.8	27.3	28.5	aJ61

TABLE 2. DERIVED HYDROLOGIC DATA, PAWNEE COUNTY 1944 1974

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
21S 15W 11CBB 01	QA	11.6	-9	-6.7	-1.2	-0.2	-0.4			
21S 15W 31BAD 01	QU	22.6	-15	-12.3	-6.3	-0.3	-0.7			
21S 16W 14ADC 01		18.7	-14		-3.9	-0.3				
21S 18W 32DAA 01	QA	35.1	-16	-18.6	-4.1	-0.3	-1.0			
21S 19W 27CCC 01		49.9	-27		-2.6	-0.6				
21S 19W 30BCC 01		53.2	-24	-19.9	-2.9	-0.5	-1.1			
21S 20W 29BBB 01		51.6	-28	-16.8	-3.0	-0.6	-0.9			
22S 15W 03AAA 01	QU	32.7	-15	-17.2	-3.6	-0.3	-1.0	189	174	-8
22S 15W 03AAA 02	QU	35.1		-16.4	-1.5		-0.9		172	
22S 15W 09CCA 01	QU									
22S 15W 13DCA 01	QU	42.9	-14	-25.4	-1.4	-0.3	-1.4	142	128	-10
22S 15W 33DDD 01		39.5	-12		-1.4	-0.3		100	89	-11
22S 16W 03CBC 02	QA	18.3	-10	-8.9	-1.5	-0.2	-0.5			
22S 16W 06BBA 01	QA	20.0	-12	-5.4	-1.6	-0.3	-0.3			
22S 16W 23AAA 01	QU	40.1	-16	-18.3	-0.4	-0.3	-1.0	82	66	-20
22S 16W 32CDD 01		37.6			-2.3					
22S 17W 05BBC 02		28.6	-14		-1.0	-0.3				
22S 17W 18AAD 01	QU	40.8	-14		-2.3	-0.3				
22S 17W 24CBC 01	QA	15.5	-4	-9.9	-3.5	-0.1	-0.6			
22S 17W 27BAB 01		9.5			-1.8					
22S 19W 07AAA 01		66.8			-2.6					
22S 19W 10BBA 01		66.3			-7.1					
23S 15W 12DDB 01		34.2			-1.4				111	
23S 15W 21DCC 01		38.8			-1.8					
23S 16W 11CDC 01	QU	27.7			-0.6					
23S 16W 35CCD 02		34.2			-1.4					
23S 17W 10CDB 01	QU	41.2	-12	-15.8	-1.1	-0.3	-0.9	62	50	-19
23S 18W 28DAD 01	QU	9.4	-4	-3.1	0.2	-0.1	-0.2	46	42	-9
23S 18W 36DAC 01	QU	28.5	-8	-20.3	-1.2	-0.2	-1.1	75	68	-9

Pottawatomie County

TABLE 1. SELECTED HYDROLOGIC DATA , POTTAWATOMIE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
09S 11E 19CDB 01		975				29.9		32.0	34.5	33.7	33.8		qM74
09S 11E 31DCC 01		962			15.3	15.1	14.5	15.7	17.6	17.1	17.3		qM59
09S 11E 32ADC 01		968				20.3	19.1	22.0	25.1	24.1	24.2		qM77
10S 10E 10DBC 01		973			20.6	19.3	18.7	20.6	22.5	21.6	22.6		qM66
10S 11E 03BCA 01		963				18.2	18.1	20.9	25.9	23.6	25.7		qM77
10S 11E 04ACB 01		968				26.3	24.1	27.2	31.4	32.0	29.4		qM67
10S 12E 07BBC 01		944				15.8		16.7	18.9	16.9	17.9		qM74

TABLE 2. DERIVED HYDROLOGIC DATA, POTTAWATOMIE COUNTY 1950 1966

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
09S 11E 19CDB 01										
09S 11E 31DCC 01										
09S 11E 32ADC 01										
10S 10E 10DBC 01										
10S 11E 03BCA 01										
10S 11E 04ACB 01										
10S 12E 07BBC 01										

Pratt County

TABLE 1. SELECTED HYDROLOGIC DATA , PRATT COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
26S 11W 01DDB 01	QU	1801	171	23	23.5	23.1	22.9	21.1	23.8	22.7	23.3	24.9	aJ73
26S 11W 27AAC 01	QU	1808	143	23	23.1	21.7	21.9	19.7	23.2	23.2	24.0	24.4	aJ64
26S 11W 29BCB 01	QU	1830	183	19	16.0	13.2	13.2	11.5	14.4	13.6	14.5	15.7	aJ64
26S 12W 17CCA 01	QU	1906	196	37	34.1	32.0	31.3	28.3	31.6	31.1	32.7	34.0	aJ64
26S 12W 34CDC 01	QU	1884	207	46	43.2	41.0	41.7	39.5	42.3	32.8	34.5	44.3	aJ64
26S 12W 34CDC 02	QU	1884	207	46	41.0	40.0	40.7	34.2	41.5	40.6	42.3	43.5	aJ64
26S 13W 16DAA 01	QU	1929	174	20	15.6	21.3	20.6	17.3	21.5	20.7	23.1	24.6	aJ67
26S 13W 19BBD 01	QU	1953	193	18	14.4	24.0	23.7	19.1	23.0	22.9	25.2	26.3	aJ63
26S 13W 34BCB 01	QU	1950	230	44	46.7	49.9	49.2	46.3	48.2	48.7	49.5	50.5	qJ59
26S 14W 17DCB 01	QU	2010	213	10	16.5	27.1	26.7	22.0	27.3	28.6	31.9	32.0	qJ60
26S 15W 01AAB 01		2020					22.5	18.8	23.0	23.3	25.2	26.8	aJ86
26S 15W 17BBC 01		2050							21.7	22.1	23.4	24.4	aJ88
27S 11W 12CBC 01	QU	1783	99	51	46.3	44.3	45.3	41.3	43.6	47.3	49.0	49.7	aJ74
27S 11W 31DAA 01	QA	1726	126	8	2.7	4.7	4.9	4.3	5.7	5.7	5.9	6.1	aJ64
27S 12W 12DAA 01		1838				54.2	54.2	50.5	53.4	55.0	56.9	58.5	qJ80
27S 12W 33CBA 01	QU	1777	152	3	1.2	2.4	2.4	2.4	3.4	3.3	3.6	3.5	aJ64
27S 13W 13DDC 01	QU	1897	145	72	57.0	57.1	56.9	55.4	57.0	57.2	58.1	58.7	aJ64
27S 14W 03DAC 01	QU	1995	220	35		43.8	44.0	39.8	43.5	43.6	45.6	46.3	aJ79
27S 14W 12DDD 01	QU	1983	252	53	57.7	62.3	61.6	60.0	60.5	60.5	61.4	62.4	qJ74
27S 14W 21CAB 01	QU	1998	203	39	34.2	43.4	43.0	41.0	43.4	43.4	45.4	46.3	aJ64
27S 15W 02ABC 01	QU	2036		26		30.5	30.4	29.7	32.0	32.8	35.3	35.8	aJ82
27S 15W 05CDB 01		2070						25.9	29.4	30.5	31.8	32.7	aJ87
27S 15W 32CCA 01	QU	2068	193	48	45.9	56.5	52.6	51.0	52.4		57.1	55.0	aU73
27S 15W 36ADD 01	QU	2050	245	75	73.7	76.3	75.7	73.6	75.5	75.9	77.7	78.6	aJ73
28S 11W 12ACC 01	QU	1755	155	36	32.1	32.4	33.6	32.4	34.6	36.0	37.2	38.4	aJ73
28S 11W 20CAC 01		1840	215	70		67.7	67.7	65.9	67.5	69.9	71.0	72.9	qJ79
28S 12W 21BAD 01	QU	1882	207	83	81.8	81.7	81.3	85.1	80.7	81.6	82.6	83.2	aJ64
28S 12W 34CCC 01		1902							100.6	100.5	101.8	102.8	aJ88
28S 13W 02DDC 01	QU	1827	179	9	8.1	14.6	13.1	12.6	14.4	13.1	13.4	15.1	aJ73
28S 13W 17AAA 01	QU	1938	189	72	72.0	69.2	75.6	69.6	69.7	70.3	70.8	70.8	aJ64
28S 13W 26DCB 01	QU	1916	191	89	91.0	90.3	92.6	89.2	89.4	89.6	90.5	91.0	aJ64
28S 14W 14CCC 01	QU	1984	194	80	76.9	77.0	77.1	75.6	77.3	77.4	78.5	78.8	aJ64
28S 15W 23CCD 01	QU	2071	271	109	108.0	107.2	108.5	107.7	108.8	106.7	107.3	107.9	aJ73
29S 11W 06AAA 01		1828	173	50		42.2	42.2	40.3	42.0	43.7	45.9	48.1	aJ84
29S 11W 09ADD 01	QU	1830	170	55	48.9	50.7	51.5	49.7	52.6	54.0	56.4	58.8	aJ64
29S 11W 29AAD 01	QU	1849	199	63	57.4	57.9	58.7	57.6	59.2	60.8	64.8	64.5	aJ73
29S 12W 20CCD 01	QU	1907	232	95	98.4	97.5	97.1	96.0	98.0	97.1	98.6	98.8	qJ66
29S 13W 12ABB 01		1906	196	76		70.4	69.9	68.9	69.3	69.7	70.5	71.4	aJ84
29S 13W 31CAA 01	QU	1893	154	31	30.6	30.8	30.2	29.5	30.4	29.9	31.1	31.5	aJ64
29S 14W 12ABB 01		1988	233	108		99.6	99.0	98.6	98.5	98.6	99.1	99.3	aJ84
29S 14W 17DBD 01		2012	222	102		97.5	97.0	96.5	96.6	96.6	97.7	98.1	aJ79
29S 15W 02CCA 01	QU	2035	215	78	85.2	93.4	93.3		93.1	96.5	102.3	106.5	aJ73
29S 15W 18ADA 01	QU	2050	175	78	86.0	91.8	90.9	89.7	84.9		91.6	90.4	aJ73
29S 15W 25AAB 02			117			33.8	33.4	32.7	33.6	33.5	34.4	34.7	aJ86

TABLE 2. DERIVED HYDROLOGIC DATA, PRATT COUNTY

Well number	Geologic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
26S 11W 01DDB 01	QU	24.9	-2	-1.4	-1.6	0.0	-0.1	148	146	-1
26S 11W 27AAC 01	QU	24.4	-1	-1.3	-0.4	0.0	-0.1	120	119	-1
26S 11W 29BCB 01	QU	15.7	3	0.3	-1.2	0.1	0.0	164	167	2
26S 12W 17CCA 01	QU	34.0	3	0.1	-1.3	0.1	0.0	159	162	2
26S 12W 34CDC 01	QU	44.3	2	-1.1	-9.8	0.0	-0.1	161	163	1
26S 12W 34CDC 02	QU	43.5	3	-2.5	-1.2	0.1	-0.1	161	164	2
26S 13W 16DAA 01	QU	24.6	-5	-9.0	-1.5	-0.1	-0.5	154	149	-3
26S 13W 19BBD 01	QU	26.3	-8	-11.9	-1.1	-0.2	-0.7	175	167	-5
26S 13W 34BCB 01	QU	50.5	-7	-3.8	-1.0	-0.1	-0.2	186	180	-3
26S 14W 17DCB 01	QU	32.0	-22	-15.5	-0.1	-0.5	-0.9	203	181	-11
26S 15W 01AAB 01		26.8			-1.6					
26S 15W 17BBC 01		24.4			-1.0					
27S 11W 12CBC 01	QU	49.7	1	-3.4	-0.7	0.0	-0.2	48	49	2
27S 11W 31DAA 01	QA	6.1	2	-3.4	-0.2	0.0	-0.2	118	120	2
27S 12W 12DAA 01		58.5			-1.6					
27S 12W 33CBA 01	QU	3.5	-1	-2.3	0.1	0.0	-0.1	149	149	0
27S 13W 13DDC 01	QU	58.7	13	-1.7	-0.6	0.3	-0.1	73	86	18
27S 14W 03DAC 01	QU	46.3	-11		-0.7	-0.2		185	174	-6
27S 14W 12DDD 01	QU	62.4	-9	-4.7	-1.0	-0.2	-0.3	199	190	-5
27S 14W 21CAB 01	QU	46.3	-7	-12.1	-0.9	-0.1	-0.7	164	157	-4
27S 15W 02ABC 01	QU	35.8	-10		-0.5	-0.2				
27S 15W 05CDB 01		32.7			-0.9					
27S 15W 32CCA 01	QU	55.0	-7	-9.1	2.1	-0.1	-0.5	145	138	-5
27S 15W 36ADD 01	QU	78.6	-4	-4.9	-0.9	-0.1	-0.3	170	166	-2
28S 11W 12ACC 01	QU	38.4	-2	-6.3	-1.2	0.0	-0.4	119	117	-2
28S 11W 20CAC 01		72.9	-3		-1.9	-0.1		145	142	-2
28S 12W 21BAD 01	QU	83.2	0	-1.4	-0.6	0.0	-0.1	124	124	0
28S 12W 34CCC 01		102.8			-1.0					
28S 13W 02DDC 01	QU	15.1	-6	-7.0	-1.7	-0.1	-0.4	170	164	-4
28S 13W 17AAA 01	QU	70.8	1	1.2	0.0	0.0	0.1	117	118	1
28S 13W 26DCB 01	QU	91.0	-2	0.0	-0.5	0.0	0.0	102	100	-2
28S 14W 14CCC 01	QU	78.8	1	-1.9	-0.3	0.0	-0.1	114	115	1
28S 15W 23CCD 01	QU	107.9	1	0.1	-0.6	0.0	0.0	162	163	1
29S 11W 06AAA 01		48.1	2		-2.2	0.0		123	125	2
29S 11W 09ADD 01	QU	58.8	-4	-9.9	-2.4	-0.1	-0.6	115	111	-3
29S 11W 29AAD 01	QU	64.5	-2	-7.1	0.3	0.0	-0.4	136	135	-1
29S 12W 20CCD 01	QU	98.8	-4	-0.4	-0.2	-0.1	0.0	137	133	-3
29S 13W 12ABB 01		71.4	5		-0.9	0.1		120	125	4
29S 13W 31CAA 01	QU	31.5	-1	-0.9	-0.4	0.0	-0.1	123	123	0
29S 14W 12ABB 01		99.3	9		-0.2	0.2		125	134	7
29S 14W 17DBD 01		98.1	4		-0.4	0.1		120	124	3
29S 15W 02CCA 01	QU	106.5	-29	-21.3	-4.2	-0.6	-1.2	137	109	-20
29S 15W 18ADA 01	QU	90.4	-12	-4.4	1.2	-0.3	-0.2	97	85	-12
29S 15W 25AAB 02		34.7			-0.3				82	

Rawlins County

TABLE 1. SELECTED HYDROLOGIC DATA , RAWLINS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
01S 33W 29CCC 01	TO	2992	144	115	115.6	113.3	112.8	112.8	115.1	112.2	112.3	112.6	aJ60
02S 31W 03CAD 01	QA	2665	42	15	14.7	16.4	17.7	17.7	18.6	17.1	18.7	19.3	aJ65
02S 32W 20DCD 01	QA	2735	32	5	8.3	10.6	12.2	12.1	12.8	11.8	13.0	14.2	aJ65
02S 33W 26DCC 01	QA	2798	46	13	19.8	22.3	23.4	23.6	24.2	23.1	24.2	25.3	aJ65
02S 35W 13ABB 01	TO	3178	208	174	170.3	168.9	168.6		168.5	168.2	168.2		aJ52
02S 35W 34CAA 01	QA,TO	3064	112	29	29.6	30.8		30.1	31.1	31.3		31.7	aJ52
02S 36W 13DDD 01	TO	3286	260	186	190.1	188.9	187.8	188.3		197.4	187.6	189.3	aJ64
02S 36W 36BAA 01	TO	3263	280	160	169.8	174.6	174.6	174.6	174.4	173.9	173.7	168.9	aJ65
03S 31W 07CBD 01	TO	2960	200	142	146.3	145.1		144.5		145.2	144.8		aJ59
03S 33W 03DCC 01	QA	2823	62	22	20.6	25.0	26.6	25.8	26.9	25.8	26.8	27.0	aJ59
03S 33W 08CDC 01	QA	2855	52	20	16.1	19.1	21.5	21.7	22.5	23.0	21.7	21.3	aJ64
03S 34W 03ABB 01	QA	2882	40	12	13.8	13.8	14.8	14.2	16.6	14.4		14.3	aJ64
03S 34W 26BAC 01	QA	2900	40	7	8.4	15.0		10.6	14.3	10.0	11.7	9.7	aJ64
03S 35W 24CBB 01	QA	3001	50	21	24.7	27.1	27.4	26.9	27.5	27.3	27.1	26.3	aJ65
03S 36W 14CBB 01	TO	3332	309	188	191.2	200.3	201.1	201.9	212.9	200.3	220.0	220.1	aJ65
03S 36W 17CCC 01	TO	3375	300	196	195.3	209.2	210.2	211.3	219.2	211.7	212.5	211.8	aJ62
03S 36W 21DBC 01	TO	3345						199.3	198.8	202.5	203.3	220.2	aJ87
04S 31W 16ABD 01	QA	2761	50	7	7.9	10.7	11.5	10.7	11.2	11.7	11.8	12.5	aJ65
04S 33W 10ABC 01		3086				143.5	143.9	143.3	144.1	143.1	143.2	143.1	aJ85
04S 33W 18DDA 01	TO	3068	153	88	87.6	86.5	85.8	85.5	87.4	85.4	85.3	85.3	aJ52
04S 33W 28DCA 01	TO	3125	237	152	151.2	151.3	149.3	149.0		150.6	149.5	152.2	aJ64
04S 34W 33CBC 01	TO	3160	210	115	117.2	118.4	120.8	118.8	126.8	119.9	119.9	119.1	aJ64
04S 35W 06DCD 01	TO	3252	260	157	157.8	161.9			164.2	164.2	160.0	160.1	aJ52
04S 35W 29DDD 01	TO	3219	224	150	150.1	149.8	149.7	148.4	149.6	150.5	149.7	149.6	aJ52
04S 36W 23CBB 01	TO	3351				215.2	215.9	215.2	215.5	216.7	216.0	214.4	aJ67
04S 36W 23DCA 01		3339				211.9	212.6	212.6	212.1	212.3	214.2	212.2	aJ85
05S 31W 10DDA 01	TO	2820	70	30	40.1	42.6	41.5	41.7	44.0	44.7	43.7		aJ64
05S 31W 20CCA 01	TO	2865	68	22	29.7	33.0	33.2	31.5		35.9	33.4	33.5	aJ65
05S 32W 14CDD 01	TO	3020	180	130	130.8	133.6	130.2	130.0	129.8	130.3	129.6	129.7	aJ64
05S 33W 29BDA 01	TO	3042	115	12	17.0	17.9	19.0	18.9	19.3	20.1	20.3	20.3	aJ64
05S 34W 01BBB 01	TO	3137	237	116	114.3	114.6	114.1	113.8	113.8	113.7		113.7	aJ52
05S 34W 28ADC 01	TO	3207	247	127	134.1	133.5	132.8	132.9	142.9	140.8	133.3		aJ65
05S 35W 30CBC 01		3336				171.2	170.2	170.3	171.2	171.5	172.6	172.4	aJ85
05S 36W 21BCD 01	QA,TO	3220	155	17	15.5	18.0	19.0		19.3	18.2	18.6	22.5	aJ64

TABLE 2. DERIVED HYDROLOGIC DATA, RAWLINS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
01S 33W 29CCC 01	TO	112.6	2	3.0	-0.3	0.0	0.1	29	31	7
02S 31W 03CAD 01	QA	19.3	-4	-4.6	-0.6	-0.1	-0.2	27	23	-15
02S 32W 20DCD 01	QA	14.2	-9	-5.9	-1.2	-0.2	-0.2	27	18	-33
02S 33W 26DCC 01	QA	25.3	-12	-5.5	-1.1	-0.3	-0.2	33	21	-36
02S 35W 13ABB 01	TO									
02S 35W 34CAA 01	QA,TO	31.7	-3	-2.1		-0.1	-0.1	83	80	-4
02S 36W 13DDD 01	TO	189.3	-3	0.8	-1.7	-0.1	0.0	74	71	-4
02S 36W 36BAA 01	TO	168.9	-9	0.9	4.8	-0.2	0.0	120	111	-8
03S 31W 07CBD 01	TO									
03S 33W 03DCC 01	QA	27.0	-5	-6.4	-0.2	-0.1	-0.2	40	35	-13
03S 33W 08CDC 01	QA	21.3	-1	-5.2	0.4	0.0	-0.2	32	31	-3
03S 34W 03ABB 01	QA	14.3	-2	-0.5		0.0	0.0	28	26	-7
03S 34W 26BAC 01	QA	9.7	-3	-1.3	2.0	-0.1	-0.1	33	30	-9
03S 35W 24CBB 01	QA	26.3	-5	-1.6	0.8	-0.1	-0.1	29	24	-17
03S 36W 14CBB 01	TO	220.1	-32	-28.9	-0.1	-0.8	-1.1	121	89	-26
03S 36W 17CCC 01	TO	211.8	-16	-16.5	0.7	-0.4	-0.6	104	88	-15
03S 36W 21DBC 01	TO	220.2			-16.9					
04S 31W 16ABD 01	QA	12.5	-6	-4.6	-0.7	-0.1	-0.2	43	38	-12
04S 33W 10ABC 01		143.1			0.1					
04S 33W 18DDA 01	TO	85.3	3	2.3	0.0	0.1	0.1	65	68	5
04S 33W 28DCA 01	TO	152.2	0	-1.0	-2.7	0.0	0.0	85	85	0
04S 34W 33CBC 01	TO	119.1	-4	-1.9	0.8	-0.1	-0.1	95	91	-4
04S 35W 06DCD 01	TO	160.1	-3	-2.3	-0.1	-0.1	-0.1	103	100	-3
04S 35W 29DDD 01	TO	149.6	0	0.5	0.1	0.0	0.0	74	74	0
04S 36W 23CBB 01	TO	214.4			1.6					
04S 36W 23DCA 01		212.2			2.0					
05S 31W 10DDA 01	TO									
05S 31W 20CCA 01	TO	33.5	-12	-3.8	-0.1	-0.3	-0.1	46	35	-24
05S 32W 14CDD 01	TO	129.7	0	1.1	-0.1	0.0	0.0	50	50	0
05S 33W 29BDA 01	TO	20.3	-8	-3.3	0.0	-0.2	-0.1	103	95	-8
05S 34W 01BBB 01	TO	113.7	2	0.6		0.0	0.0	121	123	2
05S 34W 28ADC 01	TO									
05S 35W 30CBC 01		172.4			0.2					
05S 36W 21BCD 01	QA,TO	22.5	-6	-7.0	-3.9	-0.1	-0.3	138	133	-4

Reno County

TABLE 1. SELECTED HYDROLOGIC DATA , RENO COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
22S 04W 12CDA 01	QU	1449				32.8	32.7	31.3	37.6	36.2	43.1	47.4	aJ70
22S 04W 32BBC 01	QU	1510				12.7	14.0	15.3	18.7	14.6	18.0	19.6	aJ71
22S 05W 17BCC 01						6.7	6.7	7.3	10.2	7.5	10.2	12.4	aJ84
22S 06W 18BCB 01						7.6	9.1	8.7	10.5	7.7	10.0	10.9	aJ84
22S 06W 28CCB 01		1555				8.3	8.8	8.8	9.7	9.1	9.7	11.2	qJ82
22S 07W 17DCB 01	QU	1596			2.0	4.8	4.6	3.5	5.6	4.0		6.1	aJ73
22S 08W 09DBB 01	QU	1670		35		31.3	32.9	31.5	33.7	30.2	31.3	33.8	aJ73
22S 08W 23DAD 01	QU	1651			29.3	28.2	29.4	27.0	29.4	25.7	26.4	29.8	aJ73
22S 09W 03BBD 01	QU	1712		20	29.1	33.4	34.4	31.5	35.8	31.9	32.6	36.1	aJ73
22S 09W 17BAB 01	QU	1732		10	9.8	17.1	19.8	16.5	21.9	16.7	18.2	19.7	aJ73
22S 09W 25BBA 01	QU	1705			18.9	21.8	22.8	20.9	24.1	21.1	21.4	23.3	aJ73
22S 10W 02DCC 01	QU	1736		12	1.6	7.4	9.9	7.9	12.6	9.1	10.5	14.1	aJ73
22S 10W 08BBB 01	QU	1764		6	5.9	12.8	14.2	13.6	17.0	15.1	15.4	18.3	aJ74
22S 10W 30DAA 01	QU	1775		10	3.9	9.2	9.5	7.6	14.1	12.0	13.3	16.2	aJ74
23S 04W 03BAB 02		1470					2.5	4.4	8.4	3.9	7.9	7.8	aJ70
23S 04W 16BBB 01	QU	1570				18.9	19.1	20.7	23.7	24.0	24.4	26.1	aJ70
23S 04W 30BAA 01	QU	1491				7.2	6.7	7.4	9.5	9.1	9.9	10.0	aJ71
23S 06W 15BAC 01						9.2	9.7	9.4	10.1	9.8	10.1	10.5	aJ84
23S 06W 31DCB 01	QU	1577		27	32.4	30.7	30.1	29.0	29.4	29.6	30.1	30.8	qJ71
23S 07W 01ABA 01	QU	1567		7	5.3	7.7	8.1	8.0	9.0	8.4	8.7	9.1	aJ66
23S 07W 05ABA 01	QU	1623		20	22.5	23.9	25.4	23.7	27.5	22.7	25.6		aJ73
23S 07W 13DDD 01	QU	1604		49	52.8	52.2	51.9	51.3	51.9	51.8	52.4	53.0	aJ73
23S 08W 18AAD 01	QU	1675		15	10.5	12.0	13.2	11.2	14.3	13.5	13.0	14.2	aJ73
23S 09W 05CBD 01	QU	1740		9	12.0	18.5	19.6	17.1	20.0	15.7	18.0	21.6	aJ69
23S 09W 21DDB 01	QU	1732		7	3.2	10.5	10.1	9.0	14.3	9.7	12.9	17.0	aJ57
23S 09W 35CCC 01	QU	1718	110	10	13.6	18.6	16.9	14.8	17.4	17.7	18.1	18.8	qJ74
23S 10W 02BAB 01	QU	1751		7	3.0	6.9	7.1	6.5	9.2	6.6	8.3		aJ73
23S 10W 25CAC 01	QU	1752		18	4.5	14.3	14.0	10.6	14.7	12.2	14.3		aJ59
23S 10W 29DCA 01		1783							18.7	17.5	19.0	21.5	aJ88
24S 04W 05CDB 01	QU	1480				7.3	7.0	7.9	10.0	9.4	10.4	10.4	aJ71
24S 04W 14DAC 01	QU	1455				7.4	7.2	7.9	10.0	9.7	10.7	11.1	aJ71
24S 04W 25BBD 01	QU	1448				4.2	4.4	4.5	6.4	6.0	6.7	6.9	aJ81
24S 04W 31DAB 01		1485				26.1	25.6	25.7	28.9	29.3	30.5	31.3	aJ69
24S 05W 10CCA 01	QU	1509				20.3	20.3	19.9	20.9	20.9	21.2	21.4	aJ72
24S 06W 03AAB 01		1554					27.2	26.5	27.2		28.2	28.8	aJ86
24S 06W 23CBA 01						9.2	6.9	7.6	10.6	8.5	10.7	10.8	aJ84
24S 07W 08ADA 02		1633				43.3	42.2	41.0	41.0	41.4	41.5	42.2	aJ85
24S 07W 28AAA 01	QU	1588		13	14.1	10.4	9.0	9.2	10.8	10.0	11.3	12.0	aJ73
24S 08W 04AB 01		1660		13		12.7	10.0	9.0	13.0	11.7	13.0	14.9	aJ79
24S 08W 18BAC 01	QU	1649			2.5	4.9	2.6	3.7	6.7	5.3	6.3	8.0	aJ55
24S 08W 34DAC 01	QU	1590			6.4	5.9	5.1	4.9	6.3	5.2	6.1	6.3	aJ71
24S 09W 19DDB 01	QU	1704		17	21.9	23.3	22.6	20.3	22.6	23.4	24.1	25.2	aJ66
24S 10W 06DBB 01	QU	1797		17	17.9	24.4	24.6	19.9	23.3	24.1	24.0	26.5	aJ73
24S 10W 17DDC 01	QU	1755		9	11.8	17.6	17.2	14.3	17.4	17.5	17.9	19.4	aJ73
24S 10W 31CBC 01		1750				10.0	9.9	9.0	10.5	10.2	10.6	11.0	aJ84
25S 04W 02ABB 01	QU	1449				8.3	8.4	8.0	9.3	9.2	9.3	9.8	aJ81
25S 07W 07BBD 01	QU	1602			24.3	22.4	22.7	22.6	23.7	22.6	23.2	23.6	aJ67
25S 07W 36CCC 01	QU	1570			24.5	24.0	23.9	24.1	26.4	26.1	27.9	29.3	aJ72
25S 08W 19ADB 01	QU	1607			7.3	7.3	7.1	8.6	10.3	12.0	9.2	10.6	aJ73

25S 09W 01DCD 01	QU	1658		10	12.8	14.3	13.1	11.4	13.5	13.6	14.5	15.9	aJ65
25S 09W 17BBC 01	QU	1710		7	12.6	15.0	12.3	10.1	13.3	13.2	14.6	16.3	aJ73
25S 09W 30DDA 01	QU	1693		15	16.0	17.1	16.6	16.3	17.8	17.4	17.5	18.5	aJ54
25S 10W 14BBB 01	QU	1748	115	25	24.9	26.3	25.5	22.3	24.7	25.3	25.7	26.9	aJ73
25S 10W 19ABD 01	QU	1790		33	27.9	31.5	28.0	24.7	28.3	28.1	29.3	30.9	aJ73
26S 06W 13BAB 01	QU	1475			7.2	6.8	7.4	8.6	10.0	10.3	10.9	12.1	aJ72
26S 06W 34BBC 01	QU	1545			17.6	15.6	15.2	15.5	16.9	16.7	17.8	19.1	aJ68
26S 07W 12DCC 01	QU	1582			30.6	28.8	27.7	27.0	28.6	29.2	31.4	33.3	aJ70
26S 07W 21DDC 01	QU	1620			21.5	17.5	18.3	17.3	18.9	19.9	21.1	22.1	aJ59
26S 08W 06DCC 01		1670						6.5	9.3	8.6	9.7	11.1	aJ87
26S 09W 10DDB 01	QU	1686		26	19.8	19.7	20.0	21.4	21.3	19.8	19.8	20.0	aJ53
26S 09W 18AAA 01	QU	1668		17	8.3	6.5	7.1	6.6	8.6	7.4	8.4	9.7	aJ74
26S 09W 31DCC 01		1735				52.0	52.9	50.6	53.8	54.4	57.0	58.8	aJ84
26S 09W 34DBD 01	QU	1685		25	25.3	23.0	24.0	22.2	24.7	25.7	27.6	30.1	aJ73
26S 10W 18CDC 01	QU	1797		13	24.6	23.6	23.8	21.8	24.2	24.7	25.1	25.8	qJ73
26S 10W 32BBD 01	QU	1760		5	24.5	25.0	25.3	23.4	27.2	27.3	28.2	29.4	aJ72

TABLE 2. DERIVED HYDROLOGIC DATA, RENO COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
22S 04W 12CDA 01	QU	47.4			-4.3					
22S 04W 32BBC 01	QU	19.6			-1.6					
22S 05W 17BCC 01		12.4			-2.2					
22S 06W 18BCB 01		10.9			-0.9					
22S 06W 28CCB 01		11.2			-1.5					
22S 07W 17DCB 01	QU	6.1		-4.1			-0.2			
22S 08W 09DBB 01	QU	33.8	1		-2.5	0.0				
22S 08W 23DAD 01	QU	29.8		-0.5	-3.4		0.0			
22S 09W 03BBD 01	QU	36.1	-16	-7.0	-3.5	-0.3	-0.4			
22S 09W 17BAB 01	QU	19.7	-10	-9.9	-1.5	-0.2	-0.6			
22S 09W 25BBA 01	QU	23.3		-4.4	-1.9		-0.2			
22S 10W 02DCC 01	QU	14.1	-2	-12.5	-3.6	0.0	-0.7			
22S 10W 08BBB 01	QU	18.3	-12	-12.4	-2.9	-0.3	-0.7			
22S 10W 30DAA 01	QU	16.2	-6	-12.3	-2.9	-0.1	-0.7			
23S 04W 03BAB 02		7.8			0.1					
23S 04W 16BBB 01	QU	26.1			-1.7					
23S 04W 30BAA 01	QU	10.0			-0.1					
23S 06W 15BAC 01		10.5			-0.4					
23S 06W 31DCB 01	QU	30.8	-4	1.6	-0.7	-0.1	0.1			
23S 07W 01ABA 01	QU	9.1	-2	-3.8	-0.4	0.0	-0.2			
23S 07W 05ABA 01	QU									
23S 07W 13DDD 01	QU	53.0	-4	-0.2	-0.6	-0.1	0.0			
23S 08W 18AAD 01	QU	14.2	1	-3.7	-1.2	0.0	-0.2			
23S 09W 05CBD 01	QU	21.6	-13	-9.6	-3.6	-0.3	-0.5			
23S 09W 21DDB 01	QU	17.0	-10	-13.8	-4.1	-0.2	-0.8			
23S 09W 35CCC 01	QU	18.8	-9	-5.2	-0.7	-0.2	-0.3	100	91	-9
23S 10W 02BAB 01	QU									
23S 10W 25CAC 01	QU									
23S 10W 29DCA 01		21.5			-2.5					
24S 04W 05CDB 01	QU	10.4			0.0					
24S 04W 14DAC 01	QU	11.1			-0.4					
24S 04W 25BBD 01	QU	6.9			-0.2					
24S 04W 31DAB 01		31.3			-0.8					
24S 05W 10CCA 01	QU	21.4			-0.2					
24S 06W 03AAB 01		28.8			-0.6					
24S 06W 23CBA 01		10.8			-0.1					
24S 07W 08ADA 02		42.2			-0.7					
24S 07W 28AAA 01	QU	12.0	1	2.1	-0.7	0.0	0.1			
24S 08W 04AB 01		14.9	-2		-1.9	0.0				
24S 08W 18BAC 01	QU	8.0		-5.5	-1.7		-0.3			
24S 08W 34DAC 01	QU	6.3		0.1	-0.2		0.0			
24S 09W 19DDB 01	QU	25.2	-8	-3.3	-1.1	-0.2	-0.2			
24S 10W 06DBB 01	QU	26.5	-10	-8.6	-2.5	-0.2	-0.5			
24S 10W 17DDC 01	QU	19.4	-10	-7.6	-1.5	-0.2	-0.4			
24S 10W 31CBC 01		11.0			-0.4					
25S 04W 02ABB 01	QU	9.8			-0.5					
25S 07W 07BBD 01	QU	23.6		0.7	-0.4		0.0			
25S 07W 36CCC 01	QU	29.3		-4.8	-1.4		-0.3			
25S 08W 19ADB 01	QU	10.6		-3.3	-1.4		-0.2			
25S 09W 01DCD 01	QU	15.9	-6	-3.1	-1.4	-0.1	-0.2			

25S 09W 17BBC 01	QU	16.3	-9	-3.7	-1.7	-0.2	-0.2			
25S 09W 30DDA 01	QU	18.5	-4	-2.5	-1.0	-0.1	-0.1			
25S 10W 14BBB 01	QU	26.9	-2	-2.0	-1.2	0.0	-0.1	90	88	-2
25S 10W 19ABD 01	QU	30.9	2	-3.0	-1.6	0.0	-0.2			
26S 06W 13BAB 01	QU	12.1		-4.9	-1.2		-0.3			
26S 06W 34BBC 01	QU	19.1		-1.5	-1.3		-0.1			
26S 07W 12DCC 01	QU	33.3		-2.7	-1.9		-0.2			
26S 07W 21DDC 01	QU	22.1		-0.6	-1.0		0.0			
26S 08W 06DCC 01		11.1			-1.4					
26S 09W 10DDB 01	QU	20.0	6	-0.2	-0.2	0.1	0.0			
26S 09W 18AAA 01	QU	9.7	7	-1.4	-1.3	0.1	-0.1			
26S 09W 31DCC 01		58.8			-1.8					
26S 09W 34DBD 01	QU	30.1	-5	-4.8	-2.5	-0.1	-0.3			
26S 10W 18CDC 01	QU	25.8	-13	-1.2	-0.7	-0.3	-0.1			
26S 10W 32BBD 01	QU	29.4	-24	-4.9	-1.2	-0.5	-0.3			

Republic County

TABLE 1. SELECTED HYDROLOGIC DATA , REPUBLIC COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
01S 03W 01CCA 01		1610				140.0	140.0	138.0	147.7	141.2	141.7	144.3	qM72
01S 03W 09CBD 01		1635				140.3	140.7	140.0	142.5		140.7	142.8	aM79
01S 04W 15AAA 01		1680				177.1	176.1	175.3	178.0	176.1	176.5	178.6	qM79

TABLE 2. DERIVED HYDROLOGIC DATA, REPUBLIC COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
01S 03W 01CCA 01		144.3			-2.6					
01S 03W 09CBD 01		142.8			-2.1					
01S 04W 15AAA 01		178.6			-2.1					

Rice County

TABLE 1. SELECTED HYDROLOGIC DATA , RICE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
20S 08W 22AAA 01		1644		14		13.7	14.5	14.0	15.9	15.6	15.1	17.3	qJ79
20S 09W 12DDA 01	QA	1664		11	8.3	12.8	12.8	12.1	14.2	14.2	15.4	16.2	qJ60
20S 09W 28ACD 01									20.3	20.8		22.1	aJ88
20S 10W 27BBB 01		1786		46		33.3	35.5	33.4	34.5	34.6	34.0	34.9	aJ85
20S 10W 36ACD 01		1715		10		13.0	14.2	13.9	14.5		14.8	15.8	aJ77
21S 07W 04AAC 01		1615		14		12.7	13.7	13.9	15.6		15.8	16.4	aJ77
21S 07W 26CBD 01		1595		10		11.0	13.0	12.3	14.5	13.8	13.6	15.0	aJ77
21S 08W 09CBD 01		1647		9		11.2	12.2	11.4	13.4	13.2	12.6	14.4	qJ77
21S 08W 25ABB 01		1620		7		4.3	5.6	5.1	7.0	4.5	5.8	7.0	qJ77
21S 08W 32DBB 01		1641		3		6.7	7.3		8.1	7.2	7.8	7.8	aJ85
21S 09W 02DDA 01		1670		9		12.7	13.3	12.9	14.8	13.8	14.3	15.8	aJ77
21S 09W 15AAC 02		1669				6.0	6.8	6.3	7.1	6.9	6.5	6.5	aJ85
21S 10W 16CDC 01		1720					6.7	6.1	7.2	7.4	5.6	7.6	aJ84

TABLE 2. DERIVED HYDROLOGIC DATA, RICE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
20S 08W 22AAA 01		17.3	-3		-2.2	-0.1				
20S 09W 12DDA 01	QA	16.2	-5	-7.9	-0.8	-0.1	-0.4			
20S 09W 28ACD 01		22.1								
20S 10W 27BBB 01		34.9	11		-0.9	0.2				
20S 10W 36ACD 01		15.8	-6		-1.0	-0.1				
21S 07W 04AAC 01		16.4	-2		-0.6	0.0				
21S 07W 26CBD 01		15.0	-5		-1.4	-0.1				
21S 08W 09CBD 01		14.4	-5		-1.8	-0.1				
21S 08W 25ABB 01		7.0	0		-1.2	0.0				
21S 08W 32DBB 01		7.8	-5		0.0	-0.1				
21S 09W 02DDA 01		15.8	-7		-1.5	-0.1				
21S 09W 15AAC 02		6.5			0.0					
21S 10W 16CDC 01		7.6			-2.0					

TABLE 1. SELECTED HYDROLOGIC DATA , RILEY COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
10S 09E 17BDD 01		996			20.7	17.3	13.4	15.6	19.0	20.0	19.9		aM66

TABLE 2. DERIVED HYDROLOGIC DATA, RILEY COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
10S 09E 17BDD 01										

TABLE 1. SELECTED HYDROLOGIC DATA , ROOKS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
07S 17W 24BBB 01		1713			14.3	15.7	15.0	13.7	15.5	12.8			qM58
07S 19W 23CDB 01		1878			18.7		15.3	15.1	17.2	15.9	16.4	18.0	qM58

TABLE 2. DERIVED HYDROLOGIC DATA, ROOKS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
07S 17W 24BBB 01										
07S 19W 23CDB 01		18.0		0.7	-1.6		0.0			

Rush County

TABLE 1. SELECTED HYDROLOGIC DATA , RUSH COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
18S 16W 23DCC 01		1930					27.2	19.2	23.9	24.5	24.7	24.7	qM86
18S 16W 23DCC 02		1930					29.3	21.1	26.3	27.3	27.0	28.8	qM86
18S 17W 22AAD 01		1960			25.8							37.1	qM60
18S 17W 23BCC 01		1958			25.1	37.1	37.3	33.9	35.2	36.6	36.1	37.0	qM60
18S 18W 27AAC 01		1993			27.6	36.8	36.9	34.9	34.0	34.0	33.6	33.3	qM65
18S 19W 20ADD 01		2034					32.6	30.3	31.6	32.5	31.3	31.5	qM69
18S 20W 14CCC 01		2050				25.8	24.9	22.0	22.8	23.3	22.4	24.2	qM60
18S 20W 19AAD 01		2077			31.2	28.6	29.2	25.6	27.4	28.4	26.3	29.1	qM60

TABLE 2. DERIVED HYDROLOGIC DATA, RUSH COUNTY

Well number	Geo-logic unit	Depth to water (feet)	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
		1992	1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
18S 16W 23DCC 01		24.7			0.0					
18S 16W 23DCC 02		28.8			-1.8					
18S 17W 22AAD 01		37.1		-11.3			-0.4			
18S 17W 23BCC 01		37.0		-11.9	-0.9		-0.5			
18S 18W 27AAC 01		33.3		-5.7	0.3		-0.2			
18S 19W 20ADD 01		31.5			-0.2					
18S 20W 14CCC 01		24.2			-1.8					
18S 20W 19AAD 01		29.1		2.1	-2.8		0.1			

TABLE 1. SELECTED HYDROLOGIC DATA , SALINE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
13S 01W 23BCB 02		1172				18.6	19.0	17.2	20.1	18.9	20.5	21.1	qM82
13S 02W 33DDC 01		1207				22.5	23.6	22.1	24.6	25.1	24.8	25.7	qM85

TABLE 2. DERIVED HYDROLOGIC DATA, SALINE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
13S 01W 23BCB 02		21.1			-0.6					
13S 02W 33DDC 01		25.7			-0.9					

Scott County

TABLE 1. SELECTED HYDROLOGIC DATA , SCOTT COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
16S 31W 17DDD 01	TO	2931	161	118		119.2	120.0	120.2	123.9	121.1	122.0	121.5	aJ51
16S 31W 31BCB 01	TO	2958	168	127	128.4	134.5	135.8	135.8	140.0	137.5	136.9	140.4	aJ51
16S 32W 16BCA 01		2999							158.3	157.7	157.7	158.0	aJ88
16S 33W 19CBB 01	TO	3097	192	124	140.7	159.9	161.5	163.2	159.5	159.5	160.4	161.5	qJ59
16S 33W 33BAA 01	TO	3066	194	130		150.4	151.8	152.1	153.2	153.7	154.0	154.8	aJ69
16S 34W 09CCB 01	TO	3146	181	118	133.5	157.8	158.6	158.8	159.5	160.0	160.9	161.3	aJ51
16S 34W 29CBB 01	TO	3160	181	119	134.1	166.7	167.5	167.9	169.0	169.2	170.9	174.1	aJ67
17S 31W 04DCC 01	TO	2932	170	117		125.7		128.9	134.2	133.7	134.5	127.6	aJ76
17S 31W 19CDA 01	TO	2960				121.5	123.7	127.6	128.8	127.4	127.3	129.9	aJ83
17S 31W 35CCB 01	TO	2925	147	86		97.5	99.9	98.1	105.8	99.2	99.4	100.0	aJ77
17S 32W 16BBB 01	TO	2980	231	88		140.6				142.0	140.2		aJ71
17S 32W 27BBB 01	TO	2990	180	95	107.0	143.0	147.0	148.7		148.7	150.2		aJ65
17S 32W 31BCB 01	TO	2984	245	68	88.6		138.7			146.5	148.9		aJ66
17S 33W 14ACB 01	TO	3014	214	93		140.7	140.0	143.4	148.1	146.8	146.2	147.4	aJ69
17S 34W 06BCB 01	TO	3163	194	108	118.5	146.1	147.9	149.7	153.6	152.8	152.7	154.6	aJ65
17S 34W 16ACB 01	TO	3134	194	107	112.1	128.2					135.2	136.3	aJ51
17S 34W 25DBB 01	TO	3092	189	103	114.5	134.9	136.5	137.1	142.9	143.2	141.4	143.7	aJ65
18S 31W 24BCB 01	TO	2913	110	68		74.6	75.6	74.3	73.3	74.6	73.4	72.9	aJ73
18S 31W 27ABA 01	TO	2930	105	70		69.0	68.6	67.1	67.5	67.7	69.1	67.4	aJ77
18S 32W 14BBB 01	TO	2980	175	85	98.4	114.5	114.7	118.6		119.0	120.7		aJ67
18S 32W 17ABA 02	TO	2973				113.5	114.1	117.1	118.8	119.2	119.9	122.0	aJ81
18S 33W 03CCB 01	TO	3008	182	71	83.1	118.2	118.9	122.5	121.5	122.1	122.8	124.1	aJ51
18S 33W 05CCC 01	TO	3041	119	75	84.7	99.6	106.7	102.3	101.4	101.4	102.0	102.4	qJ44
18S 33W 11ABB 01	TO	2981	199	55		115.4	114.8			118.9	120.6		aJ77
18S 33W 15DDD 01	TO	2958	132			90.9	94.2				97.6		aJ75
18S 33W 34ADB 01	TO	2960	122	26		78.7	82.5			85.2	81.4		aJ80
18S 34W 05CBB 01	TO	3148	168	88			117.2	118.9	120.8		119.5	118.2	aJ77
18S 34W 25BBD 01	TO	3092	132	90	95.8	116.3	116.4	113.9	114.3	114.5	114.8	115.2	aJ40
18S 34W 34BBC 01	TO	3130	160	90	100.6	116.9	118.7	119.3	118.7	117.4	118.1	118.1	aJ44
19S 32W 06CCB 01		2937	199	21		68.4	72.2	73.0	75.0	75.9	77.2	77.9	mJ72
19S 32W 32ACB 01	QU,TO	2984	204	69		85.2	85.6	86.4	87.0	88.0	90.5	91.2	aJ73
19S 33W 06DBB 01	TO,TO	3021	117	59		62.7	62.9	68.5	61.4	61.5	61.2	61.3	aJ71
19S 33W 12DDC 01	QA,TO	2939	200	25	29.5	56.4	56.9			60.2	60.7		aJ40
19S 33W 15DBD 01	TO	2964	132	56	70.9	109.9	110.0	110.2	109.3	108.6	109.3	110.9	qJ36
19S 33W 29CBB 02		2994	174	76	101.0	115.1	117.2	113.6	113.9	114.8	115.7	113.9	qJ71
19S 34W 19DCC 01		3138				126.1	126.2	126.4	127.4	126.4	126.5	127.1	aJ80
20S 32W 16DAD 01	TO	2955	155	57		123.9		127.5	125.4	116.3	117.9	116.2	aJ71
20S 32W 30BCD 01	TO	2917	187	25		97.4	101.6	105.8	106.7	108.6	112.6	113.4	aJ77
20S 33W 02DBB 01		2955	155	50	76.6	101.5	101.1			102.0	102.1		aJ41
20S 33W 09BBB 01	TO	2973	128	60	84.5	100.1	100.7	101.1	101.6	103.1	102.2	102.1	qJ31
20S 33W 17BAB 01	TO	2974	132	62	84.8	116.9	118.2			120.6	120.3		aJ40
20S 33W 21ABD 01		2957	147	48	50.9	123.2	126.0	126.0		129.0			aJ44
20S 33W 35DBA 01	QA,TO	2929	147	40	53.2	96.8	100.0	103.9	105.8	105.3	106.1	106.8	aJ44
20S 34W 15BAA 01	TO	3060	138	97		102.7	102.6	102.9		107.8	102.4	103.8	aJ77
20S 34W 36CCD 01	TO	2962	107	53		79.5	80.3	78.4	79.5	78.0	77.3	78.3	aJ71

TABLE 2. DERIVED HYDROLOGIC DATA, SCOTT COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
16S 31W 17DDD 01	TO	121.5	-4		0.5	-0.1		43	40	-7
16S 31W 31BCB 01	TO	140.4	-13	-12.0	-3.5	-0.3	-0.5	41	28	-32
16S 32W 16BCA 01		158.0			-0.3					
16S 33W 19CBB 01	TO	161.5	-38	-20.8	-1.1	-0.7	-0.8	68	31	-54
16S 33W 33BAA 01	TO	154.8	-25		-0.8	-0.5		64	39	-39
16S 34W 09CCB 01	TO	161.3	-43	-27.8	-0.4	-0.8	-1.1	63	20	-68
16S 34W 29CBB 01	TO	174.1	-55	-40.0	-3.2	-1.1	-1.5	62	7	-89
17S 31W 04DCC 01	TO	127.6	-11		6.9	-0.2		53	42	-21
17S 31W 19CDA 01	TO	129.9			-2.6					
17S 31W 35CCB 01	TO	100.0	-14		-0.6	-0.3		61	47	-23
17S 32W 16BBB 01	TO									
17S 32W 27BBB 01	TO									
17S 32W 31BCB 01	TO									
17S 33W 14ACB 01	TO	147.4	-54		-1.2	-1.0		121	67	-45
17S 34W 06BCB 01	TO	154.6	-47	-36.1	-1.9	-0.9	-1.4	86	39	-55
17S 34W 16ACB 01	TO	136.3	-29	-24.2	-1.1	-0.6	-0.9	87	58	-33
17S 34W 25DBB 01	TO	143.7	-41	-29.2	-2.3	-0.8	-1.1	86	45	-48
18S 31W 24BCB 01	TO	72.9	-5		0.5	-0.1		42	37	-12
18S 31W 27ABA 01	TO	67.4	3		1.7	0.1		35	38	9
18S 32W 14BBB 01	TO									
18S 32W 17ABA 02	TO	122.0			-2.1					
18S 33W 03CCB 01	TO	124.1	-53	-41.0	-1.3	-1.0	-1.6	111	58	-48
18S 33W 05CCC 01	TO	102.4	-27	-17.7	-0.4	-0.5	-0.7	44	17	-61
18S 33W 11ABB 01	TO									
18S 33W 15DDD 01	TO									
18S 33W 34ADB 01	TO									
18S 34W 05CBB 01	TO	118.2	-30		1.3	-0.6		80	50	-38
18S 34W 25BBD 01	TO	115.2	-25	-19.4	-0.4	-0.5	-0.7	42	17	-60
18S 34W 34BBC 01	TO	118.1	-28	-17.5	0.0	-0.5	-0.7	70	42	-40
19S 32W 06CCB 01		77.9	-57		-0.7	-1.1		178	121	-32
19S 32W 32ACB 01	QU,TO	91.2	-22		-0.7	-0.4		135	113	-16
19S 33W 06DBB 01	TO,TO	61.3	-2		-0.1	0.0		58	56	-3
19S 33W 12DDC 01	QA,TO									
19S 33W 15DBD 01	TO	110.9	-55	-40.0	-1.6	-1.1	-1.5	76	21	-72
19S 33W 29CBB 02		113.9	-38	-12.9	1.8	-0.7	-0.5	98	60	-39
19S 34W 19DCC 01		127.1			-0.6					
20S 32W 16DAD 01	TO	116.2	-59		1.7	-1.1		98	39	-60
20S 32W 30BCD 01	TO	113.4	-88		-0.8	-1.7		162	74	-54
20S 33W 02DBB 01										
20S 33W 09BBB 01	TO	102.1	-42	-17.6	0.1	-0.8	-0.7	68	26	-62
20S 33W 17BAB 01	TO									
20S 33W 21ABD 01										
20S 33W 35DBA 01	QA,TO	106.8	-67	-53.6	-0.7	-1.3	-2.1	107	40	-63
20S 34W 15BAA 01	TO	103.8	-7		-1.4	-0.1		41	34	-17
20S 34W 36CCD 01	TO	78.3	-25		-1.0	-0.5		54	29	-46

TABLE 1. SELECTED HYDROLOGIC DATA , SEDGWICK COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1944	1974	1986	1987	1988	1989	1990	1991	1992	Data type
25S 01W 07ABD 01	QU	1377				27.6	27.2	26.2	29.0	29.9	32.1	34.1	aJ81
25S 01W 26DBD 01	QU	1351		17	14.5	18.1	18.5	18.2	19.3	19.3	20.2	21.1	qJ37
25S 01W 28DBA 01	QU	1364				12.9	13.7	13.0	15.5	14.6	16.0	17.2	aJ81
25S 02W 16DDA 01	QU	1390				4.4	4.9	5.0	7.3	6.7			aJ81
25S 02W 23DBD 01	QU	1379				8.7	9.1	9.0	11.1	10.6	11.8	13.4	aJ81
25S 03W 03DDD 01	QA,QU	1423				10.1	10.7	11.2	12.8	12.0	13.3	13.7	qJ53
25S 03W 15CCC 01	QU	1428				20.1	20.0	19.8	21.9	21.8	22.9	23.9	aJ81
26S 01W 12BAD 01	QU	1341				14.2	15.8	15.5	16.8	15.6	16.9	17.8	aJ81
26S 01W 19ABA 01	QU	1352				6.1	6.0	5.4	7.4	6.7	8.4	8.7	qJ38
26S 01W 31CCD 01		1370					38.0	37.0	38.6	38.9	39.9	40.8	aJ44
26S 02W 08AAB 01	QU	1397				30.9	29.6	28.7	31.0	31.1	32.2	33.4	aJ81
26S 02W 29AAA 01	QU	1384				25.8	24.8	23.5	24.6	24.8	25.6	26.7	qJ60
26S 03W 02AAC 01	QU	1409				20.9	20.0	18.7	21.2	21.6	23.0	24.4	aJ81

TABLE 2. DERIVED HYDROLOGIC DATA, SEDGWICK COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
25S 01W 07ABD 01	QU	34.1			-2.0					
25S 01W 26DBD 01	QU	21.1	-4	-6.6	-0.9	-0.1	-0.4			
25S 01W 28DBA 01	QU	17.2			-1.2					
25S 02W 16DDA 01	QU									
25S 02W 23DBD 01	QU	13.4			-1.6					
25S 03W 03DDD 01	QA,QU	13.7			-0.4					
25S 03W 15CCC 01	QU	23.9			-1.0					
26S 01W 12BAD 01	QU	17.8			-0.9					
26S 01W 19ABA 01	QU	8.7			-0.3					
26S 01W 31CCD 01		40.8			-0.9					
26S 02W 08AAB 01	QU	33.4			-1.2					
26S 02W 29AAA 01	QU	26.7			-1.1					
26S 03W 02AAC 01	QU	24.4			-1.4					

Seward County

TABLE 1. SELECTED HYDROLOGIC DATA , SEWARD COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
31S 31W 08BCC 01	QU,TO	2829	519	164	169.4	218.8	219.8	220.3	220.1	228.4	240.9	256.6	aJ62
31S 32W 03DAD 01	QU,TO	2845	496	158	174.1	217.7	218.5	220.7		237.2	238.6	242.3	aJ58
31S 32W 31BBB 01		2864	454	174		213.1	217.0	217.8	217.0	221.3	226.1	226.3	aJ85
31S 33W 06CBD 01	QU,TO	2948	498	210	211.2	245.0	247.5	249.5	250.5	255.6	255.5	257.3	aJ58
31S 33W 20DBB 01	QU,TO	2897	537	179	179.1	215.7	216.5	216.0		222.6	218.5	220.5	aJ64
31S 34W 18BBB 01	QU,TO	2951	421	186	186.3	219.0	220.1			231.8	232.3	235.6	aJ58
32S 31W 02BBB 01		2787	497	149		191.8	192.5	193.0	191.8			212.6	aJ85
32S 31W 08BBB 01	QU,TO	2815	455	175	165.5	203.3	204.5	205.7	204.8	213.6	216.0	219.2	aJ64
32S 31W 26CAA 01	QU,TO	2783	453	180	182.9	220.5	220.2			220.0	227.7	229.8	aJ79
32S 32W 14BBB 01	QU,TO	2830	435	180	192.8	222.0	222.5	222.4	222.4	232.6	233.8	237.2	qJ64
32S 32W 19BAB 01	QU,TO	2854	475	189	194.7	217.1	217.5	217.1	217.2	224.7	225.0	224.0	aJ58
32S 33W 04BAA 01		2869		167		193.2	194.0		198.2	201.3	208.5	207.7	aJ81
32S 33W 32DBD 01		2830				151.7	150.8	149.9		155.8	163.9	165.6	aJ85
32S 34W 10DAA 01	QU,TO	2925	470	205	203.5	220.6	220.5	221.6	223.5			240.0	aJ66
32S 34W 32BBB 01	QU,TO	2921	491	159	154.3	174.9	175.4	175.6	182.2	181.3	182.6	185.2	aJ58
33S 31W 09AAB 01		2766						204.3	202.0	208.6	212.9	212.2	aJ88
33S 31W 28DDB 01		2720	550	190		188.5	188.7	191.0	190.6		193.2	189.8	aJ85
33S 32W 28CDD 02	QU,TO	2630	399	60		58.7	58.8	58.9	59.2	58.8	58.7	59.4	aJ74
33S 33W 12AAD 01	QU,TO	2626	316	5	5.7	9.4	9.4	9.9			10.2	12.4	aJ64
33S 33W 20BCC 01		2866		176		194.3	197.8	199.6	201.8	207.6	202.4	203.8	aJ81
33S 33W 25DCC 01		2810		197		198.3	203.0	202.4		202.0	202.4	204.0	aJ67
33S 34W 17DCC 01		2918		123		114.4	118.9	120.6	124.5	122.6	124.1	127.6	aJ83
34S 31W 30BBB 01		2731	671	208		210.2	214.6	214.4	216.0	212.3	213.9	214.3	aJ40
34S 32W 29BAA 01		2765	525	175		168.8	171.7	169.6	170.8	170.7	171.2	173.2	aJ85
34S 32W 35ADA 01	QU,TO	2734		189		190.3	193.2	193.6			194.1	195.9	aJ77
34S 33W 07CCB 01		2901	575	140	126.7	137.1	138.9	138.8	139.9	140.4		142.4	qJ64
34S 34W 16DAA 01	QU,TO	2943	673	114	94.5	125.6		125.7		132.2	129.5	138.1	aJ65
34S 34W 26BCA 01		2908		98			109.9	110.7		113.9	117.6	117.4	aJ85
35S 31W 10AAC 01		2690				193.5	194.0	194.9	196.5	194.8		197.9	aJ85
35S 31W 18BBA 01	QU,TO	2707	497	187	181.9	179.7	181.4	182.6		190.0	198.4		aJ59
35S 32W 06CBB 01		2780	540	150		159.9	160.3	162.0	166.3	164.8	168.9	169.5	aJ85
35S 33W 16BCA 01	QU,TO	2838	658	126	103.7	128.9	129.7	129.5	132.0	130.9	133.7	138.7	aJ64
35S 34W 03CBC 01		2920	660	95		101.9	101.5	102.0		110.4	103.7	108.8	aJ78
35S 34W 10BBB 01	QU,TO	2912	647	90	80.3	78.5	78.7	80.1	81.6	81.5	83.7	85.8	aJ54

TABLE 2. DERIVED HYDROLOGIC DATA, SEWARD COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
31S 31W 08BCC 01	QU,TO	256.6	-93	-87.2	-15.7	-1.8	-3.4	355	262	-26
31S 32W 03DAD 01	QU,TO	242.3	-84	-68.2	-3.7	-1.6	-2.6	338	254	-25
31S 32W 31BBB 01		226.3	-52		-0.2	-1.0		280	228	-19
31S 33W 06CBD 01	QU,TO	257.3	-47	-46.1	-1.8	-0.9	-1.8	288	241	-16
31S 33W 20DBB 01	QU,TO	220.5	-42	-41.4	-2.0	-0.8	-1.6	358	317	-11
31S 34W 18BBB 01	QU,TO	235.6	-50	-49.3	-3.3	-1.0	-1.9	235	185	-21
32S 31W 02BBB 01		212.6	-64			-1.2		348	284	-18
32S 31W 08BBB 01	QU,TO	219.2	-44	-53.7	-3.2	-0.8	-2.1	280	236	-16
32S 31W 26CAA 01	QU,TO	229.8	-50	-46.9	-2.1	-1.0	-1.8	273	223	-18
32S 32W 14BBB 01	QU,TO	237.2	-57	-44.4	-3.4	-1.1	-1.7	255	198	-22
32S 32W 19BAB 01	QU,TO	224.0	-35	-29.3	1.0	-0.7	-1.1	286	251	-12
32S 33W 04BAA 01		207.7	-41		0.8	-0.8				
32S 33W 32DBD 01		165.6			-1.7					
32S 34W 10DAA 01	QU,TO	240.0	-35	-36.5		-0.7	-1.4	265	230	-13
32S 34W 32BBB 01	QU,TO	185.2	-26	-30.9	-2.6	-0.5	-1.2	332	306	-8
33S 31W 09AAB 01		212.2			0.7					
33S 31W 28DDB 01		189.8	0		3.4	0.0		360	360	0
33S 32W 28CDD 02	QU,TO	59.4	1		-0.7	0.0		339	340	0
33S 33W 12AAD 01	QU,TO	12.4	-7	-6.7	-2.2	-0.1	-0.3	311	304	-2
33S 33W 20BCC 01		203.8	-28		-1.4	-0.5				
33S 33W 25DCC 01		204.0	-7		-1.6	-0.1				
33S 34W 17DCC 01		127.6	-5		-3.5	-0.1				
34S 31W 30BBB 01		214.3	-6		-0.4	-0.1		463	457	-1
34S 32W 29BAA 01		173.2	2		-2.0	0.0		350	352	1
34S 32W 35ADA 01	QU,TO	195.9	-7		-1.8	-0.1				
34S 33W 07CCB 01		142.4	-2	-15.7		0.0	-0.6	435	433	0
34S 34W 16DAA 01	QU,TO	138.1	-24	-43.6	-8.6	-0.5	-1.7	559	535	-4
34S 34W 26BCA 01		117.4	-19		0.2	-0.4				
35S 31W 10AAC 01		197.9								
35S 31W 18BBA 01	QU,TO									
35S 32W 06CBB 01		169.5	-20		-0.6	-0.4		390	371	-5
35S 33W 16BCA 01	QU,TO	138.7	-13	-35.0	-5.0	-0.3	-1.3	532	519	-2
35S 34W 03CBC 01		108.8	-14		-5.1	-0.3		565	551	-2
35S 34W 10BBB 01	QU,TO	85.8	4	-5.5	-2.1	0.1	-0.2	557	561	1

TABLE 1. SELECTED HYDROLOGIC DATA , SHERIDAN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
06S 26W 26CBB 01		2636				166.4	167.6	167.1	167.6		167.4	168.5	aD84
06S 27W 05CBB 01		2684				112.1	113.8	113.2	113.3	114.0	112.3	113.1	aD84
06S 27W 08DCA 01	QA,TO	2588	108	21	14.6	21.1	22.2	22.6	23.9	24.4	22.4	22.4	aD64
06S 27W 19ADC 01		2620						33.7	34.0	34.7	34.4	35.1	aD87
06S 27W 27BCC 01	TO	2716	320	162	154.4	162.9		158.9		166.8			uD64
06S 29W 10DBC 01	TO	2823	205	116	118.6	129.6	131.2	133.6		135.6	130.2		aD65
06S 29W 24ABB 01	TO	2781	205	91	96.2	104.8	107.4	108.4	115.9	108.9	108.5	109.3	aD66
06S 29W 33CDA 01	TO	2828	207	94	93.3	117.2	121.6	120.4	117.2	116.8	112.4	113.5	aD65
06S 30W 13BAA 01	TO	2875	216	115		132.6	128.0	130.9	131.8	133.3	130.1	130.4	qD75
06S 30W 14CCD 01	TO	2884	203	95	102.8	110.8	110.8	112.0	112.4	113.1	112.6	113.1	aD65
07S 26W 06AAB 01	TO	2634	204	125	125.9	131.5	132.1	132.3	132.7	135.6	137.1	137.0	aD64
07S 26W 12BAC 01	TO	2559	170	94	91.9	99.2	101.7	103.1	101.4	103.5	102.4	101.1	aD65
07S 26W 19BBC 01	TO	2625	201	115		124.0	125.4	125.4	126.7	127.2	127.7	128.1	qD75
07S 26W 28CAB 01	TO	2634	243	142	148.4	161.7	162.1	159.3	164.4	156.4	156.4	157.3	aD65
07S 27W 22DAC 01		2644				118.9	122.3	115.7	119.8	116.9	117.2	118.1	aD84
07S 28W 08BDC 01	TO	2808	282	140		166.1	166.8	167.7	169.2	171.4	170.6	171.1	aD68
07S 28W 21ABB 01	TO	2774	235	129	131.0	173.3	177.5	177.3	170.8	165.1	164.7	166.9	aD65
07S 28W 36ABA 01	TO	2725	233	123	127.5	151.0	147.1	146.0	144.3	144.9	145.3	146.0	aD64
07S 29W 05BBB 01		2841				104.2	104.9	105.5	107.4	108.1	108.3		aD84
07S 29W 27CCC 01	TO	2869	265	131		195.7	206.8	180.7	186.2	190.4	190.7	191.0	aD76
07S 29W 30ABA 01	TO	2887	255	113	121.8	160.7	160.4	168.7	161.0		165.1	168.9	aD62
07S 30W 08CBB 01		2919				99.2	104.5	104.2	101.6	102.0	102.2	103.4	aD84
08S 26W 14DAA 01	QA	2398	66	13	19.5	13.9	19.2	18.0	19.8	19.8	19.5	20.5	aD65
08S 27W 11DCD 01	QA	2504	60	13	8.5	10.3	10.6	10.4	10.7	10.8	10.6	11.1	aD64
08S 27W 35CBB 01						128.1	128.8	127.6	127.7	128.5	128.9	128.9	aD84
08S 28W 11DAA 01		2692				98.0	99.7	104.8	99.1	99.7	100.1	100.6	aD84
08S 29W 01DCB 01	TO	2823	240	125	122.6	154.5	157.7	157.3	161.3	161.1	161.8	163.0	aD64
08S 30W 11CBC 01	TO	2941	277	123	133.5	182.8	184.9	187.4	188.0	192.9	189.4	191.3	aD64
08S 30W 13DAA 01	TO	2891	257	103	109.7	144.7	147.4	149.9	151.2	154.0	153.0	154.8	qD64
08S 30W 30ABC 01	TO	2962	234	107	105.8	131.6	132.0	132.9	131.7	140.1	142.2	143.3	aD65
09S 26W 22BBB 01		2669				141.5	142.6	137.7	138.6	138.0	141.5	142.5	aD84
09S 27W 12CCC 01	TO	2678	198	104	106.5	113.0	115.3	108.8	107.3	107.5	107.5	107.3	aD66
09S 27W 19DDD 01	TO	2750	205	124	123.6	131.8	133.2	129.4	129.2	130.1	131.4	134.7	aD52
09S 27W 27DAA 01		2705				111.6	113.3	110.6	117.4	113.3	114.3	112.6	aD84
09S 28W 04BCC 01	TO,QA	2677	98	18	25.7	27.1	27.5	27.6	27.8	28.3	28.1	28.5	aD64
09S 29W 03AAA 01		2819				103.4	104.6	105.8	110.9	108.6	110.9	110.7	aD84
09S 29W 17BAB 01	TO	2854	196	84	84.2	106.5	106.3	107.0		110.3	109.4	111.0	aD66
09S 29W 26BAA 01	TO	2863	210	123	132.0	141.8		145.7	139.3		135.5		aD64
09S 30W 03AAB 02	TO	2933	217	118	119.2	144.7	148.3	149.3	150.6	152.4	152.7	163.9	aD64
09S 30W 35BBB 01	TO	2944	215	120	129.3	147.0	148.5	156.6	151.0	157.1	151.1	150.8	qD62
10S 26W 08BAA 01		2590				24.0		23.3	21.2	21.3	21.4		aD84
10S 26W 12AAD 01		2534				27.8	29.1	29.6	28.3	28.7	29.3	28.4	aD84
10S 27W 20CBC 01	QA	2605	50	12	13.9	18.2	21.0	19.7	19.9	22.4	23.1		aD66
10S 27W 22DBA 01	QA	2568	65	10	18.5	20.7	20.6	20.7	23.2	23.7	23.0	23.6	aD65
10S 28W 05DDB 01	TO	2789	173	99	95.2	106.7	108.0	111.0	113.0	109.2	109.9	110.5	aD65
10S 28W 29DAA 01	QA,TO	2691	62	22	25.4	27.1	27.0	25.8	27.2	27.0	26.7	31.1	aD64
10S 29W 02DDD 01		2803				93.4		80.1	82.2	82.2	83.4	83.7	aD84
10S 29W 20CAA 01						30.7	71.2	70.0		74.1	70.9	70.9	aD84
10S 30W 08DDD 01	TO	2930	186	96	93.0	97.9	98.9	100.4	102.3	102.7	103.5	102.3	qD64

10S 30W 12ADA 01	TO	2874	187	89	87.7	106.9	100.3	102.6		107.3	102.9	102.5	aD65

TABLE 2. DERIVED HYDROLOGIC DATA, SHERIDAN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
06S 26W 26CBB 01		168.5			-1.1					
06S 27W 05CBB 01		113.1			-0.8					
06S 27W 08DCA 01	QA,TO	22.4	-1	-7.8	0.0	0.0	-0.3	87	86	-1
06S 27W 19ADC 01		35.1			-0.7					
06S 27W 27BCC 01	TO									
06S 29W 10DBC 01	TO									
06S 29W 24ABB 01	TO	109.3	-18	-13.1	-0.8	-0.4	-0.5	114	96	-16
06S 29W 33CDA 01	TO	113.5	-20	-20.2	-1.1	-0.5	-0.8	113	94	-17
06S 30W 13BAA 01	TO	130.4	-15		-0.3	-0.4		101	86	-15
06S 30W 14CCD 01	TO	113.1	-18	-10.3	-0.5	-0.4	-0.4	108	90	-17
07S 26W 06AAB 01	TO	137.0	-12	-11.1	0.1	-0.3	-0.4	79	67	-15
07S 26W 12BAC 01	TO	101.1	-7	-9.2	1.3	-0.2	-0.4	76	69	-9
07S 26W 19BBC 01	TO	128.1	-13		-0.4	-0.3		86	73	-15
07S 26W 28CAB 01	TO	157.3	-15	-8.9	-0.9	-0.4	-0.3	101	86	-15
07S 27W 22DAC 01		118.1			-0.9					
07S 28W 08BDC 01	TO	171.1	-31		-0.5	-0.7		142	111	-22
07S 28W 21ABB 01	TO	166.9	-38	-35.9	-2.2	-0.9	-1.4	106	68	-36
07S 28W 36ABA 01	TO	146.0	-23	-18.5	-0.7	-0.5	-0.7	110	87	-21
07S 29W 05BBB 01										
07S 29W 27CCC 01	TO	191.0	-60		-0.3	-1.4		134	74	-45
07S 29W 30ABA 01	TO	168.9	-56	-47.1	-3.8	-1.3	-1.8	142	86	-39
07S 30W 08CBB 01		103.4			-1.2					
08S 26W 14DAA 01	QA	20.5	-8	-1.0	-1.0	-0.2	0.0	53	46	-13
08S 27W 11DCD 01	QA	11.1	2	-2.6	-0.5	0.0	-0.1	47	49	4
08S 27W 35CBB 01		128.9			0.0					
08S 28W 11DAA 01		100.6			-0.5					
08S 29W 01DCB 01	TO	163.0	-38	-40.4	-1.2	-0.9	-1.6	115	77	-33
08S 30W 11CBC 01	TO	191.3	-68	-57.8	-1.9	-1.6	-2.2	154	86	-44
08S 30W 13DAA 01	TO	154.8	-52	-45.1	-1.8	-1.2	-1.7	154	102	-34
08S 30W 30ABC 01	TO	143.3	-36	-37.5	-1.1	-0.9	-1.4	127	91	-28
09S 26W 22BBB 01		142.5			-1.0					
09S 27W 12CCC 01	TO	107.3	-3	-0.8	0.2	-0.1	0.0	94	91	-3
09S 27W 19DDD 01	TO	134.7	-11	-11.1	-3.3	-0.3	-0.4	81	70	-14
09S 27W 27DAA 01		112.6			1.7					
09S 28W 04BCC 01	TO,QA	28.5	-11	-2.8	-0.4	-0.3	-0.1	80	70	-13
09S 29W 03AAA 01		110.7			0.2					
09S 29W 17BAB 01	TO	111.0	-27	-26.8	-1.6	-0.6	-1.0	112	85	-24
09S 29W 26BAA 01	TO									
09S 30W 03AAB 02	TO	163.9	-46	-44.7	-11.2	-1.1	-1.7	99	53	-46
09S 30W 35BBB 01	TO	150.8	-31	-21.5	0.3	-0.7	-0.8	95	64	-33
10S 26W 08BAA 01										
10S 26W 12AAD 01		28.4			0.9					
10S 27W 20CBC 01	QA									
10S 27W 22DBA 01	QA	23.6	-14	-5.1	-0.6	-0.3	-0.2	55	41	-25
10S 28W 05DDB 01	TO	110.5	-12	-15.3	-0.6	-0.3	-0.6	74	63	-15
10S 28W 29DAA 01	QA,TO	31.1	-9	-5.7	-4.4	-0.2	-0.2	40	31	-23
10S 29W 02DDD 01		83.7			-0.3					
10S 29W 20CAA 01		70.9			0.0					
10S 30W 08DDD 01	TO	102.3	-6	-9.3	1.2	-0.1	-0.4	90	84	-7
10S 30W 12ADA 01	TO	102.5	-14	-14.8	0.4	-0.3	-0.6	98	85	-13

TABLE 1. SELECTED HYDROLOGIC DATA , SHERMAN COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
06S 37W 07BBA 01	QA	3304	134	5	6.1	7.3	7.4	7.2	7.1	6.3	7.2	7.8	aJ64
06S 37W 16CDD 01	TO	3460	264	157	163.8	171.5	171.9	172.2	173.1	174.1	173.0	173.6	aJ66
06S 37W 19ABB 01	TO	3476	309	150	155.4	160.0	160.7	160.4	168.5	160.5	160.2	159.6	aJ65
06S 39W 09DDD 01	TO	3585	330	145	142.7	149.2	149.5	149.8	150.3	150.4	150.7	150.9	aJ49
06S 40W 10AAC 01	TO	3641	341	151	151.2	161.5	162.9	162.1	161.6	162.9	163.2		aJ64
06S 40W 13CBC 01		3624				147.0	148.2	148.3	148.3	149.5	150.1	150.1	aJ85
06S 40W 30DCC 01	TO	3718	326	159	153.6	168.3	168.9	169.1	169.4	169.6	170.1	170.0	aJ65
06S 41W 19DBD 01	TO	3792	325	162	169.5	183.8	185.4	185.7		188.7	190.9	192.8	aJ65
06S 41W 27DBD 01	TO	3741	325	141	142.1	164.5	164.4	164.9	165.6	165.8	166.6	167.7	aJ64
06S 42W 02AAA 01	TO	3777	277	179	181.7	198.1	199.8	197.3	198.8	199.3	199.6	201.3	aJ59
06S 42W 08CBB 01	TO	3841	304	183	201.3	210.8	211.2	209.8	211.2	211.6	213.3	211.8	aJ64
06S 42W 22DCC 01	TO	3837	315	177	183.1	194.7	195.4	195.8	196.4	197.1	197.6	198.2	aJ65
06S 42W 30ADA 01	TO	3871	309	176	183.6	202.2	204.9	203.5	204.2		205.2	205.4	aJ64
07S 37W 04BBC 01	TO	3455	270	122		136.7	137.6	137.6	138.3	139.0	139.1	143.0	aJ75
07S 37W 05CCB 01	TO	3472	294	124	129.9	138.0	144.4	138.7	139.3	140.0	140.2	140.5	aJ65
07S 38W 28DAA 01		3545				147.4	147.8	148.3	149.2	149.9	149.6	148.9	aJ85
07S 39W 01DCD 01		3563				134.2	133.7	134.6	134.9	134.7	135.6	135.3	aJ85
07S 39W 09BBB 01	TO	3589	295	106	104.8	116.5	117.3	117.6	117.5	117.6	117.6	118.3	aJ64
07S 39W 24BAA 01	TO	3587	300	137	133.9		148.7	148.5	148.4	147.6	146.7		aJ64
07S 40W 06ADB 01	TO	3722	343	152	149.4	168.6	168.4	168.3	168.7	169.3	170.6	171.1	aJ64
07S 40W 29BBA 01	TO	3708	288	121	121.5	140.9	141.6	141.7	141.9	143.2	143.1	143.8	aJ49
07S 40W 35BBB 01	TO	3650	255	102	103.0	125.8	127.4	127.5	129.6	128.1	128.7	128.7	aJ65
07S 40W 36BAB 01	TO	3643	321	105	109.9	133.3	134.9	135.4	136.9	134.2	137.0	136.6	aJ64
07S 41W 07BCB 01	TO	3840	300	180	174.4	198.1	199.5	200.0	200.9	202.3	202.2	207.2	aJ49
07S 41W 28DBB 01	TO	3774	280	111	111.4	128.2	129.3	129.7	130.0	131.6	135.5	135.9	aJ64
07S 42W 07DAA 01	TO	3903	320	163	164.4	195.5	191.9	189.1	188.4	190.1	189.9	192.6	aJ49
07S 42W 17CCC 01	TO	3864	263	119	117.9	141.2	141.9	142.1	142.2	142.9	143.7	145.7	aJ66
07S 42W 27AAB 01	TO	3862	321	142	140.6	165.3	167.2	166.8	169.0	169.1	169.5	170.7	aJ64
08S 37W 03ADB 01	TO	3476	273	126	143.5	156.1	159.9	158.7		159.8	164.6		aJ64
08S 37W 21CCC 01	TO	3496	230	120	121.1	140.1	141.0	141.1	141.3	142.3	143.5	142.9	aJ64
08S 37W 32ABB 01	TO	3468	216	83	80.0	94.9	96.1	96.0	96.3	98.1	98.2	98.6	aJ64
08S 38W 17CDD 01	TO	3603	293	143	142.0	161.2	160.8	162.2	162.1	163.9	165.1	166.1	aJ64
08S 38W 24AAB 01	TO	3513	260	110	111.0	120.7	124.3	125.9	127.1	122.0	123.0	123.7	aJ64
08S 39W 15CCC 01	TO	3642	272	127	135.0	163.5	163.8	164.7	165.3	166.1	166.6	167.5	aJ49
08S 40W 12DBA 01	TO	3670	290	120	133.0	166.1	165.8	166.1	167.5	168.7	170.0	170.0	aJ65
08S 40W 17CDB 01	TO	3727	277	102	108.0	133.1	133.9	134.1	137.0	136.3	137.5	140.7	aJ64
08S 40W 25AAC 01	TO	3701	290	133	158.0	181.5	182.1	182.9	182.2	183.3	183.8	183.8	aJ67
08S 41W 17CBA 01	TO	3843	300	129	129.0	146.3	148.8	149.7	147.1	151.6	150.9	151.7	aJ65
08S 41W 25BBC 01	TO	3754	264	94	96.0	119.3	120.5	120.8	121.9	122.2	123.0	123.8	aJ65
08S 42W 15DDB 01	TO	3859	274	98	99.0	125.9	126.8	126.5	127.9	128.4	128.1	130.7	aJ64
08S 42W 31DCD 01	TO	3872	207	50	58.0	80.6	81.2	81.7	82.2	82.9	83.7	84.3	aJ64
09S 37W 07DDB 01		3496				92.8	93.3	93.7	92.2	93.9	95.8		aJ85
09S 38W 13BCC 01	TO	3510				79.0	79.4	80.5	78.7	81.4	82.4	82.0	aJ76
09S 39W 01DBA 01		3619				156.7	139.7	140.1	140.8	142.0	143.7		aJ85
09S 39W 02BAB 01	TO	3646	246	133		168.4	168.7	169.9	172.3	175.4	176.7		aJ78
09S 39W 10CCB 01		3661				144.4	146.6	139.3	148.8	151.7	154.0		aJ85
09S 39W 19CCC 01	TO	3695	245	105		134.0	134.5	135.4	136.0	139.4	140.5	140.4	aJ72
09S 40W 13CDC 01	TO	3722	260	123	125.0	158.7	159.8	159.4	160.6	161.9	164.1	164.0	aJ64
09S 40W 29BBB 01	TO	3782	246	122	119.0	158.8	156.0	159.7	161.2	162.5	163.4	163.0	aJ64

09S 41W 05DCC 01	TO	3860	265	128	136.0	167.7	168.9	168.8	172.9	173.1	175.5	176.6	aJ64
09S 41W 14BBC 01		3835		129		175.2	176.1	177.4	180.0	181.5	182.2	181.9	aJ69
09S 41W 28AAA 01	TO	3854	290	124	134.0	172.8	173.8	174.3	176.1	177.4			aJ66
09S 41W 34BAB 01	TO	3841	290	111	114.0	148.3	149.5	149.9	151.6	152.1	153.5		aJ64
09S 42W 08AAA 01	TO	3943	271	120	131.0	156.6	157.6	157.3	158.2	158.4		160.0	aJ64
09S 42W 14AAA 01	TO	3901	291	116	131.0	164.4	166.8	165.7	165.8	165.1	166.1	166.6	aJ64
09S 42W 35ABB 01	TO	3916	268	102	103.0	141.9	143.9	143.9	142.5	146.2	146.2		aJ65
10S 37W 23ABB 01	TO	3421	289	171	174.0	193.7	200.4	199.2		200.7	204.1	203.0	aJ67
10S 40W 10ADC 01	QA,TO	3624	68	12	16.0	18.1	18.4	16.5	17.6	18.1	18.8	18.8	aJ64
10S 41W 15CAD 01	TO,QA	3762	117	12	12.0	24.4	25.4		25.8	27.1	28.0	27.8	aJ64
10S 42W 20ABB 01		3968				113.5	113.5	113.9	115.8	117.0	120.3	121.0	aJ84
10S 42W 21BBB 01	TO	3963	223	73	86.0	109.6	110.8	111.8	112.7	116.0		116.0	aJ64
10S 42W 24BAB 01	TO	3903	204	73	84.0	100.9	102.0	102.8		103.9	105.0	106.6	aJ64

TABLE 2. DERIVED HYDROLOGIC DATA, SHERMAN COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
06S 37W 07BBA 01	QA	7.8	-3	-1.7	-0.6	-0.1	-0.1	129	126	-2
06S 37W 16CDD 01	TO	173.6	-17	-9.8	-0.6	-0.4	-0.4	107	90	-16
06S 37W 19ABB 01	TO	159.6	-10	-4.2	0.6	-0.2	-0.2	159	149	-6
06S 39W 09DDD 01	TO	150.9	-6	-8.2	-0.2	-0.1	-0.3	185	179	-3
06S 40W 10AAC 01	TO									
06S 40W 13CBC 01		150.1			0.0					
06S 40W 30DCC 01	TO	170.0	-11	-16.4	0.1	-0.3	-0.6	167	156	-7
06S 41W 19DBD 01	TO	192.8	-31	-23.3	-1.9	-0.7	-0.9	163	132	-19
06S 41W 27DBD 01	TO	167.7	-27	-25.6	-1.1	-0.6	-1.0	184	157	-15
06S 42W 02AAA 01	TO	201.3	-22	-19.6	-1.7	-0.5	-0.8	98	76	-22
06S 42W 08CBB 01	TO	211.8	-29	-10.5	1.5	-0.7	-0.4	121	92	-24
06S 42W 22DCC 01	TO	198.2	-21	-15.1	-0.6	-0.5	-0.6	138	117	-15
06S 42W 30ADA 01	TO	205.4	-29	-21.8	-0.2	-0.7	-0.8	133	104	-22
07S 37W 04BBC 01	TO	143.0	-21		-3.9	-0.5		148	127	-14
07S 37W 05CCB 01	TO	140.5	-17	-10.6	-0.3	-0.4	-0.4	170	154	-9
07S 38W 28DAA 01		148.9			0.7					
07S 39W 01DCD 01		135.3			0.3					
07S 39W 09BBB 01	TO	118.3	-12	-13.5	-0.7	-0.3	-0.5	189	177	-6
07S 39W 24BAA 01	TO									
07S 40W 06ADB 01	TO	171.1	-19	-21.7	-0.5	-0.5	-0.8	191	172	-10
07S 40W 29BBA 01	TO	143.8	-23	-22.3	-0.7	-0.5	-0.9	167	144	-14
07S 40W 35BBB 01	TO	128.7	-27	-25.7	0.0	-0.6	-1.0	153	126	-18
07S 40W 36BAB 01	TO	136.6	-32	-26.7	0.4	-0.8	-1.0	216	184	-15
07S 41W 07BCB 01	TO	207.2	-27	-32.8	-5.0	-0.6	-1.3	120	93	-23
07S 41W 28DBB 01	TO	135.9	-25	-24.5	-0.4	-0.6	-0.9	169	144	-15
07S 42W 07DAA 01	TO	192.6	-30	-28.2	-2.7	-0.7	-1.1	157	127	-19
07S 42W 17CCC 01	TO	145.7	-27	-27.8	-2.0	-0.6	-1.1	144	117	-19
07S 42W 27AAB 01	TO	170.7	-29	-30.1	-1.2	-0.7	-1.2	179	150	-16
08S 37W 03ADB 01	TO									
08S 37W 21CCC 01	TO	142.9	-23	-21.8	0.6	-0.5	-0.8	110	87	-21
08S 37W 32ABB 01	TO	98.6	-16	-18.6	-0.4	-0.4	-0.7	133	117	-12
08S 38W 17CDD 01	TO	166.1	-23	-24.1	-1.0	-0.5	-0.9	150	127	-15
08S 38W 24AAB 01	TO	123.7	-14	-12.7	-0.7	-0.3	-0.5	150	136	-9
08S 39W 15CCC 01	TO	167.5	-41	-32.5	-0.9	-1.0	-1.3	145	105	-28
08S 40W 12DBA 01	TO	170.0	-50	-37.0	0.0	-1.2	-1.4	170	120	-29
08S 40W 17CDB 01	TO	140.7	-39	-32.7	-3.2	-0.9	-1.3	175	136	-22
08S 40W 25AAC 01	TO	183.8	-51	-25.8	0.0	-1.2	-1.0	157	106	-32
08S 41W 17CBA 01	TO	151.7	-23	-22.7	-0.8	-0.5	-0.9	171	148	-13
08S 41W 25BBC 01	TO	123.8	-30	-27.8	-0.8	-0.7	-1.1	170	140	-18
08S 42W 15DDB 01	TO	130.7	-33	-31.7	-2.6	-0.8	-1.2	176	143	-19
08S 42W 31DCD 01	TO	84.3	-34	-26.3	-0.6	-0.8	-1.0	157	123	-22
09S 37W 07DDB 01										
09S 38W 13BCC 01	TO	82.0			0.4					
09S 39W 01DBA 01										
09S 39W 02BAB 01	TO									
09S 39W 10CCB 01										
09S 39W 19CCC 01	TO	140.4	-35		0.1	-0.8		140	105	-25
09S 40W 13CDC 01	TO	164.0	-41	-39.0	0.1	-1.0	-1.5	137	96	-30
09S 40W 29BBB 01	TO	163.0	-41	-44.0	0.4	-1.0	-1.7	124	83	-33
09S 41W 05DCC 01	TO	176.6	-49	-40.6	-1.1	-1.2	-1.6	137	88	-36

09S 41W 14BBC 01		181.9	-53		0.3	-1.3				
09S 41W 28AAA 01	TO									
09S 41W 34BAB 01	TO									
09S 42W 08AAA 01	TO	160.0	-40	-29.0		-1.0	-1.1	151	111	-26
09S 42W 14AAA 01	TO	166.6	-51	-35.6	-0.5	-1.2	-1.4	175	124	-29
09S 42W 35ABB 01	TO									
10S 37W 23ABB 01	TO	203.0	-32	-29.0	1.1	-0.8	-1.1	118	86	-27
10S 40W 10ADC 01	QA,TO	18.8	-7	-2.8	0.0	-0.2	-0.1	56	49	-13
10S 41W 15CAD 01	TO,QA	27.8	-16	-15.8	0.2	-0.4	-0.6	105	89	-15
10S 42W 20ABB 01		121.0			-0.7					
10S 42W 21BBB 01	TO	116.0	-43	-30.0		-1.0	-1.2	150	107	-29
10S 42W 24BAB 01	TO	106.6	-34	-22.6	-1.6	-0.8	-0.9	131	97	-26

Stafford County

TABLE 1. SELECTED HYDROLOGIC DATA , STAFFORD COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1944	1974	1986	1987	1988	1989	1990	1991	1992	
21S 11W 07BBB 01		1808	193	20			17.9	15.7	21.0		21.6	24.8	aJ84
21S 12W 10CDD 01	QU	1845	200	24	4.9	25.1		22.6	27.1		27.8	28.7	aJ73
21S 13W 05CBD 01	QU	1893						27.8	28.0	28.9	30.7	33.6	aJ56
21S 13W 27DDD 02	QU	1877	152	11	0.6	9.0	10.6	7.8	10.8	11.2	11.1	13.0	qJ63
21S 14W 22AAC 01	QU	1926	196	16	4.8	22.3	22.9	21.1	23.3	23.4	24.2	25.9	aJ73
21S 14W 32BAC 01	QU	1949	219	22	16.2	30.1	30.7	30.1		30.4	32.9	34.3	aJ73
22S 11W 07BBB 01	QU	1785	54	10	3.3	4.5	4.6	4.5	5.4	5.2	4.8	5.4	aJ73
22S 12W 05BBD 01	QU	1870	220	21	8.9	18.1	19.4	16.1	20.2	21.2	20.3	23.2	aJ73
22S 12W 30BBD 01	QU	1872	162	13	7.0	15.7	16.2	14.1	17.9	18.1	17.4	19.3	aJ66
22S 12W 36BBB 02	QU	1827	146		0.7	3.0	3.8	3.2	5.7		6.6	7.9	aJ73
22S 13W 05CBC 01	QU	1905	165	6	3.1	17.1	17.9	15.9	18.9	19.4	19.8	21.5	aJ73
22S 13W 12CAC 01	QU	1885	180	20	8.6	19.5	20.4	17.4	21.5	22.4	21.8	24.0	aJ70
22S 13W 29DAD 01	QU	1902	204	17	5.2	17.6	17.6	14.9	19.0	20.1	20.2	22.2	qJ61
22S 14W 14CCA 01	QU	1930	200	12	0.8	21.3	22.0	19.8	23.8	24.5	25.3	27.2	aJ72
22S 14W 35DDB 01	QU	1930	130	20	11.1	27.9	27.9	25.6	29.2	30.4	31.4	33.1	aJ73
23S 11W 02BBB 01	QU	1789	125		1.0	1.3	1.2	1.6	3.7	2.2	3.0	4.1	aJ74
23S 11W 22BCC 01	QU	1802	172	5	17.4	21.4	21.8	20.6	23.1	25.6	22.9	24.7	aJ70
23S 11W 36CCA 01		1803							19.7	19.4	20.4	22.6	aJ88
23S 12W 07DBD 01	QU	1859	174	1	0.5	7.4	8.1	7.0	9.0		8.9		aJ66
23S 12W 22BCC 01	QU	1853	163	4	5.4	12.1	13.2	11.5	16.5	15.3	15.6	17.8	aJ73
23S 12W 36BBC 01	QU	1849	154	8	11.7	14.6	14.9	13.3	16.6	16.4	17.6	20.6	aJ70
23S 13W 08CCB 01	QU	1895	120	8	4.4	12.2	12.4	10.5	13.4	14.3	14.8	16.6	qJ72
23S 13W 30CBB 01	QU	1906	86	11	7.9	12.5	12.3	11.4	13.4		14.4	15.5	aJ73
23S 13W 35CCA 01	QU	1897	150	19	7.3	19.3	18.7	17.5	20.3	21.2	21.8	23.6	aJ68
23S 14W 15ADD 01	QU	1927	76	7	3.3	10.3	10.6	9.8	11.9	12.7	13.5	15.1	aJ70
23S 14W 30BBB 01	QU	1988	168	24	34.4	42.0	41.5	40.7	43.3	43.8	44.8	46.2	qJ74
24S 11W 14CAB 01	QU	1813	156	24	30.0	33.8	32.8	29.3	32.3	32.2	33.0	35.3	aJ73
24S 11W 17DDB 01	QU	1833	133	23	22.8	23.6	22.3	20.2	22.6	22.2	23.2	25.3	aJ73
24S 12W 04CDB 01		1875							22.2	22.5	23.8	26.9	aJ88
24S 12W 17CAB 01	QU	1893	144	22	16.8	24.6	24.7	22.8	27.5	27.9	29.9	33.0	aJ73
24S 12W 34ABC 01	QU	1880	150	29	20.0	22.0	19.3	17.2	21.0	21.4	22.9	25.6	aJ73
24S 13W 16ACA 01	QU	1915	137	18	8.6	20.6	20.2	19.0	21.8	22.6	23.4	25.2	aJ68
24S 13W 20CDD 01		1932					22.1	20.7	22.6	23.6	24.3	25.7	qJ86
24S 13W 36DDD 01		1907	155	21		19.2	18.8	15.9	20.6	21.7	23.3	25.5	aJ79
24S 14W 17AAC 01	QU	1982	132	27	21.7	30.8	30.9	30.1	32.9	33.3	34.4	36.8	aJ67
24S 14W 31BBD 01	QU	1998	158	23	7.8	20.1	20.4	17.6	21.2	22.7	23.8	25.0	aJ65
24S 15W 10BAB 01	QU	2024	114	24	14.6	29.0	29.4	28.3	30.7	31.3	32.4	33.6	aJ70
24S 15W 32DBC 01	QU	2044	184	21	9.9	27.0	26.6	23.5	26.9	27.9	29.5	31.1	aJ73
25S 11W 02ACB 01	QU	1770	90	10	10.3	11.4	11.0	10.4	11.6	11.4	11.8	11.9	aJ73
25S 11W 23DDD 01	QU	1796	156	13	12.9	15.6	14.9	12.1	15.9	14.9	16.0	17.5	qJ74
25S 12W 11AAA 01		1846	81	16		13.0	11.2	9.9	15.9	14.0	15.0	18.3	aJ84
25S 12W 16DCA 01		1868							13.8	12.2	13.5	16.3	aJ88
25S 12W 24DDB 01	QU	1840	145	17	10.2	12.3	11.7	10.3	13.1	12.1	12.8	14.7	aJ73
25S 13W 16AAC 01		1940	142	22		23.2	23.3	20.2	27.4	27.6	29.7	31.9	qJ77
25S 13W 31DDA 01		1973	221	38		18.9	18.9		22.4	23.4	25.9		aJ84
25S 13W 36DCC 01		1102	177	22			9.7	8.5	13.8	12.7	14.7	16.1	aJ84
25S 14W 04AAD 01	QU	1969	149	24	9.2	13.5	13.9	12.3	14.6	14.5	15.4	16.1	aJ73
25S 14W 21DDB 01		1980					12.2	10.4	14.4	14.8	16.1	17.3	aJ84
25S 14W 30CDB 01	QU	2004	214	14	7.2	15.3	14.5	12.4	16.1	16.5	17.8	18.4	aJ59

25S 15W 11BCB 01	QU	2020	174	16	11.7	19.7	21.1	20.1	20.4	20.9	21.4	20.8	aJ73
25S 15W 29BBD 01	QU	2034	184	16	4.3	11.2	10.9	8.7	12.3	12.1	13.4	14.0	aJ73

TABLE 2. DERIVED HYDROLOGIC DATA, STAFFORD COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1944–92	1974–92	1991–92	Average annual water-level change (feet/year) 1944–92	1974–92	Saturated thickness (feet) 1944	1992	Percentage change saturated thickness 1944–92
21S 11W 07BBB 01		24.8	-5		-3.2	-0.1		173	168	-3
21S 12W 10CDD 01	QU	28.7	-5	-23.8	-0.9	-0.1	-1.3	176	171	-3
21S 13W 05CBD 01	QU	33.6			-2.9					
21S 13W 27DDD 02	QU	13.0	-2	-12.4	-1.9	0.0	-0.7	141	139	-1
21S 14W 22AAC 01	QU	25.9	-10	-21.1	-1.7	-0.2	-1.2	180	170	-6
21S 14W 32BAC 01	QU	34.3	-12	-18.1	-1.4	-0.3	-1.0	197	185	-6
22S 11W 07BBB 01	QU	5.4	5	-2.1	-0.6	0.1	-0.1	44	49	11
22S 12W 05BBD 01	QU	23.2	-2	-14.3	-2.9	0.0	-0.8	199	197	-1
22S 12W 30BBD 01	QU	19.3	-6	-12.3	-1.9	-0.1	-0.7	149	143	-4
22S 12W 36BBB 02	QU	7.9		-7.2	-1.3		-0.4		138	
22S 13W 05CBC 01	QU	21.5	-16	-18.4	-1.7	-0.3	-1.0	159	144	-9
22S 13W 12CAC 01	QU	24.0	-4	-15.4	-2.2	-0.1	-0.9	160	156	-3
22S 13W 29DAD 01	QU	22.2	-5	-17.0	-2.0	-0.1	-0.9	187	182	-3
22S 14W 14CCA 01	QU	27.2	-15	-26.4	-1.9	-0.3	-1.5	188	173	-8
22S 14W 35DDB 01	QU	33.1	-13	-22.0	-1.7	-0.3	-1.2	110	97	-12
23S 11W 02BBB 01	QU	4.1		-3.1	-1.1		-0.2		121	
23S 11W 22BCC 01	QU	24.7	-20	-7.3	-1.8	-0.4	-0.4	167	147	-12
23S 11W 36CCA 01		22.6			-2.2					
23S 12W 07DBD 01	QU									
23S 12W 22BCC 01	QU	17.8	-14	-12.4	-2.2	-0.3	-0.7	159	145	-9
23S 12W 36BBC 01	QU	20.6	-13	-8.9	-3.0	-0.3	-0.5	146	133	-9
23S 13W 08CCB 01	QU	16.6	-9	-12.2	-1.8	-0.2	-0.7	112	103	-8
23S 13W 30CBB 01	QU	15.5	-5	-7.6	-1.1	-0.1	-0.4	75	71	-5
23S 13W 35CCA 01	QU	23.6	-5	-16.3	-1.8	-0.1	-0.9	131	126	-4
23S 14W 15ADD 01	QU	15.1	-8	-11.8	-1.6	-0.2	-0.7	69	61	-12
23S 14W 30BBB 01	QU	46.2	-22	-11.8	-1.4	-0.5	-0.7	144	122	-15
24S 11W 14CAB 01	QU	35.3	-11	-5.3	-2.3	-0.2	-0.3	132	121	-8
24S 11W 17DDB 01	QU	25.3	-2	-2.5	-2.1	0.0	-0.1	110	108	-2
24S 12W 04CDB 01		26.9			-3.1					
24S 12W 17CAB 01	QU	33.0	-11	-16.2	-3.1	-0.2	-0.9	122	111	-9
24S 12W 34ABC 01	QU	25.6	3	-5.6	-2.7	0.1	-0.3	121	124	2
24S 13W 16ACA 01	QU	25.2	-7	-16.6	-1.8	-0.1	-0.9	119	112	-6
24S 13W 20CDD 01		25.7			-1.4					
24S 13W 36DDD 01		25.5	-5		-2.2	-0.1		134	130	-3
24S 14W 17AAC 01	QU	36.8	-10	-15.1	-2.4	-0.2	-0.8	105	95	-10
24S 14W 31BBD 01	QU	25.0	-2	-17.2	-1.2	0.0	-1.0	135	133	-1
24S 15W 10BAB 01	QU	33.6	-10	-19.0	-1.2	-0.2	-1.1	90	80	-11
24S 15W 32DBC 01	QU	31.1	-10	-21.2	-1.6	-0.2	-1.2	163	153	-6
25S 11W 02ACB 01	QU	11.9	-2	-1.6	-0.1	0.0	-0.1	80	78	-3
25S 11W 23DDD 01	QU	17.5	-5	-4.6	-1.5	-0.1	-0.3	143	139	-3
25S 12W 11AAA 01		18.3	-2		-3.3	0.0		65	63	-3
25S 12W 16DCA 01		16.3			-2.8					
25S 12W 24DDB 01	QU	14.7	2	-4.5	-1.9	0.0	-0.3	128	130	2
25S 13W 16AAC 01		31.9	-10		-2.2	-0.2		120	110	-8
25S 13W 31DDA 01										
25S 13W 36DCC 01		16.1	6		-1.4	0.1		155	161	4
25S 14W 04AAD 01	QU	16.1	8	-6.9	-0.7	0.2	-0.4	125	133	6
25S 14W 21DDB 01		17.3			-1.2					
25S 14W 30CDB 01	QU	18.4	-4	-11.2	-0.6	-0.1	-0.6	200	196	-2
25S 15W 11BCB 01	QU	20.8	-5	-9.1	0.6	-0.1	-0.5	158	153	-3

25S 15W 29BBD 01	QU	14.0	2	-9.7	-0.6	0.0	-0.5	168	170	1

TABLE 1. SELECTED HYDROLOGIC DATA , STANTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1966	1986	1987	1988	1989	1990	1991	1992	
27S 39W 27BBA 01	QU,TO	3175	395	68	102.2		181.0	176.4	227.6	211.0	205.0	200.7	qJ58
27S 40W 07ABB 01		3273	228	63			106.8	119.1		167.9	131.2	138.3	aJ85
27S 40W 16CCC 01		3259				101.2	107.1	115.3	121.6	122.0	137.7	133.5	aJ85
27S 40W 25CBC 01	QU,TO	3228	328	73	85.8	165.0	169.2	166.0	191.3	175.4	179.6	189.7	aJ59
27S 41W 31CCB 02	QU,TO	3402	308	156	167.6	248.7	243.3		250.3		258.8	255.6	aJ59
27S 41W 35CCC 01	QU,TO	3340			135.0	169.3	172.5	174.8	179.7	184.0	186.7	187.1	aJ59
27S 42W 17CCC 01		3496				237.7	226.3	229.2	230.6	230.5	226.7	236.3	aJ86
27S 42W 31CCC 01	QU,TO	3537	292	167	193.2	238.1	240.5	241.4	245.0	247.5			aJ58
27S 43W 02BBD 01		3544	319	166		228.1	232.2		239.3	241.7	243.6		aJ85
28S 39W 14BBC 01	QU,TO	3158	408	53	97.1	144.9	146.0	146.6	150.4	152.2		155.5	qJ59
28S 39W 16CCC 01		3171	391	49		149.7	157.6	162.8	187.0	186.4	182.3	185.5	aJ84
28S 39W 33ACC 01	QU,TO	3201	428	82	120.1	181.0	186.3	185.2	186.0	182.8	190.2	191.2	aJ59
28S 39W 36ABB 01	QU,TO	3145	412	57	100.3	187.7	189.5	191.6	197.8	198.4	200.6	203.5	qJ59
28S 40W 04CCC 01		3289				194.1	221.6	214.2	231.7	223.3	225.4	230.7	aJ59
28S 40W 12DDD 02	QU,TO	3225	385	83	107.4	211.0	207.7	210.2	224.2	218.4	219.2	219.0	aJ63
28S 40W 32CCB 01	QU,TO	3320	446	158	172.5	237.1				256.1	252.6	255.9	aJ59
28S 41W 02CCC 01		3343	343	141		234.9	236.2	238.3	238.5	238.8	238.6	236.8	aJ85
28S 42W 08CCC 01	QU,TO	3539	300	199	233.9	260.9	259.0	259.9	271.9	274.5			aJ59
28S 42W 20BCC 01		3553				251.0	250.0	250.5	251.6	251.6	251.5	251.3	aJ84
28S 42W 32BBB 01	KJ	3540			215.9	229.9	228.6	233.7	246.6	235.5			aJ59
29S 39W 21DBD 01	QU,TO	3183	413	62	82.6	174.1	179.4	181.8	191.5	192.7	196.1	200.8	aJ59
29S 39W 24DDA 01	QU,TO	3154	449	62	80.0	157.0	149.9	170.9	178.4	181.0	185.3	187.0	aJ48
29S 40W 28ABB 01		3282	422	132		223.5	227.6	230.8	237.6	241.6	247.5	261.7	aJ84
29S 41W 13ACC 01	QU,TO	3344	400	176	192.6	262.2	267.1	266.5	275.1	275.9	282.5		aJ59
29S 42W 08CDC 01	KJ	3517			186.9	195.9	192.7	189.3	194.6	194.7	190.6	191.4	aJ59
29S 42W 24CCC 01	QU,TO	3484			221.2	199.8	206.3	205.1	207.2	205.5	211.0	212.9	qJ60
29S 43W 33CDB 01	KJ	3654			119.8	117.2	115.8	117.0	115.0	116.4	114.7	111.8	aJ59
30S 39W 23BBB 01	QU,TO	3179	404	72	89.5	167.7	167.7	167.6	162.1	161.8	162.5	164.7	aJ58
30S 40W 12BBB 01		3274	434	138		232.6	240.3	241.4	246.3	258.7	261.0	257.6	aJ84
30S 40W 24CDC 01	QU,TO	3237			115.3	166.0	167.1	168.8	174.5	173.9		177.8	aJ59
30S 40W 33CCB 01	KJ	3309			164.3	185.3	186.2	186.8	188.1	187.5	189.3	190.7	aJ59
30S 41W 13CCC 02		3347					201.7	208.0	212.4	204.8	212.3	203.6	aJ77
30S 41W 23DDB 01		3365	205	178		190.8	190.9	190.2	191.1	191.0	196.0	198.3	aJ84
30S 42W 12ACC 01	KJ	3457			188.0	192.3	192.0	193.4	198.9	192.0	192.7	194.2	aJ59
30S 42W 16BDB 01	KJ	3524			187.8	181.0	176.5	174.8	180.0	173.8	173.9	173.8	aJ59
30S 43W 34BBB 01	QU,TO	3622	103	42	66.3	74.7	74.4	73.7	78.2	79.3	81.6	89.8	qJ58
30S 43W 36BB 01	QU,TO	3595			71.6		79.4		81.4	83.0	83.6	84.1	aJ59

TABLE 2. DERIVED HYDROLOGIC DATA, STANTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1966–92	1991–92	Average annual water-level change (feet/year) 1940–92	1966–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
27S 39W 27BBA 01	QU,TO	200.7	-133	-98.5	4.3	-2.6	-3.8	327	194	-41
27S 40W 07ABB 01		138.3	-75		-7.1	-1.4		165	90	-45
27S 40W 16CCC 01		133.5			4.2					
27S 40W 25CBC 01	QU,TO	189.7	-117	-103.9	-10.1	-2.3	-4.0	255	138	-46
27S 41W 31CCB 02	QU,TO	255.6	-100	-88.0	3.2	-1.9	-3.4	152	52	-66
27S 41W 35CCC 01	QU,TO	187.1		-52.1	-0.4		-2.0			
27S 42W 17CCC 01		236.3			-9.6					
27S 42W 31CCC 01	QU,TO									
27S 43W 02BBD 01										
28S 39W 14BBC 01	QU,TO	155.5	-103	-58.4		-2.0	-2.2	355	253	-29
28S 39W 16CCC 01		185.5	-137		-3.2	-2.6		342	206	-40
28S 39W 33ACC 01	QU,TO	191.2	-109	-71.1	-1.0	-2.1	-2.7	346	237	-32
28S 39W 36ABB 01	QU,TO	203.5	-147	-103.2	-2.9	-2.8	-4.0	355	209	-41
28S 40W 04CCC 01		230.7			-5.3					
28S 40W 12DDD 02	QU,TO	219.0	-136	-111.6	0.2	-2.6	-4.3	302	166	-45
28S 40W 32CCB 01	QU,TO	255.9	-98	-83.4	-3.3	-1.9	-3.2	288	190	-34
28S 41W 02CCC 01		236.8	-96		1.8	-1.8		202	106	-48
28S 42W 08CCC 01	QU,TO									
28S 42W 20BCC 01		251.3			0.2					
28S 42W 32BBB 01	KJ									
29S 39W 21DBD 01	QU,TO	200.8	-139	-118.2	-4.7	-2.7	-4.5	351	212	-40
29S 39W 24DDA 01	QU,TO	187.0	-125	-107.0	-1.7	-2.4	-4.1	387	262	-32
29S 40W 28ABB 01		261.7	-130		-14.2	-2.5		290	160	-45
29S 41W 13ACC 01	QU,TO									
29S 42W 08CDC 01	KJ	191.4		-4.5	-0.8		-0.2			
29S 42W 24CCC 01	QU,TO	212.9		8.3	-1.9		0.3			
29S 43W 33CDB 01	KJ	111.8		8.0	2.9		0.3			
30S 39W 23BBB 01	QU,TO	164.7	-93	-75.2	-2.2	-1.8	-2.9	332	239	-28
30S 40W 12BBB 01		257.6	-120		3.4	-2.3		296	176	-41
30S 40W 24CDC 01	QU,TO	177.8		-62.5			-2.4			
30S 40W 33CCB 01	KJ	190.7		-26.4	-1.4		-1.0			
30S 41W 13CCC 02		203.6			8.7					
30S 41W 23DDB 01		198.3	-20		-2.3	-0.4		27	7	-74
30S 42W 12ACC 01	KJ	194.2		-6.2	-1.5		-0.2			
30S 42W 16BDB 01	KJ	173.8		14.0	0.1		0.5			
30S 43W 34BBB 01	QU,TO	89.8	-48	-23.5	-8.2	-0.9	-0.9	61	13	-79
30S 43W 36BB 01	QU,TO	84.1		-12.5	-0.5		-0.5			

Stevens County

TABLE 1. SELECTED HYDROLOGIC DATA , STEVENS COUNTY 1940 1970

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1940	1970	1986	1987	1988	1989	1990	1991	1992	
31S 35W 15BAA 01	QU,TO	3009	449	224	236.4	288.5	289.4	290.3	296.4	291.3	291.0	295.3	aJ59
31S 35W 26DCC 01	QU,TO	2988	447	213	230.2	285.6	286.1	287.5		297.0	294.6		aJ64
31S 36W 02CDD 01	QU,TO	3019	365	139	155.8	184.0	180.6	182.7	178.2	177.9	176.9	180.6	qJ58
31S 36W 27BCB 01	QU,TO	3071	461	136	137.3			184.6		198.7			aJ64
31S 37W 22BCC 01	QU,TO	3096	440	106	128.3	193.1	197.4	202.1	228.3	227.9	229.0	236.8	qJ56
31S 37W 30DDB 01		3138	498	123		216.9	219.8	218.9	226.2	224.8	226.0	229.4	aJ84
31S 38W 17CDA 01	QU,TO	3170	380	110	131.0			183.5		181.3	187.8	184.2	aJ67
31S 39W 23BBB 01	QU,TO	3199	259	98	116.9		163.4			178.6		177.0	aJ58
32S 35W 08DDD 01	QU,TO	3012	502	130		161.6	167.3	166.6	174.3	171.7	171.9	177.0	aJ70
32S 36W 21AAC 01		3067	467	125		183.7	189.1	191.0	194.7	195.8	191.8	195.5	aJ84
32S 37W 10DCC 01	QU,TO	3120	540	127	136.4	167.3		167.6	178.7	174.1	177.0	175.8	aJ58
32S 37W 26BAC 01		3118		124		119.6	117.5	121.4	116.7	123.4	126.0	123.7	aJ83
32S 38W 11ADA 01	QU,TO	3159	529	118	114.1	131.4	132.9	134.6	134.1	135.6	136.5	137.5	aJ65
32S 38W 23BDD 01	QU,TO	3175	505	116	106.2	131.0	133.8	133.2	140.8	141.0			aJ65
32S 39W 02BBB 01	QU,TO	3216	296	96	132.9	189.9	195.7	200.5	232.2	204.3	198.1	191.8	aJ58
32S 39W 14DDD 01		3202				66.0	64.7	65.3	66.6	68.3	77.6	78.5	aJ84
33S 35W 23CBB 01		2968		104		125.0	133.0	132.5		136.8	132.9	143.6	aJ81
33S 36W 26DDD 01	QU,TO	3032	422	121	118.7	146.7	151.9	151.2	157.5	148.4	147.8	165.2	aJ42
33S 37W 17CCC 01	QU,TO	3124	554	83	89.3	98.4	100.1	103.3	107.8	105.2	109.3	109.0	aJ64
33S 37W 23CDB 01	QU,TO	3092	562	87	83.8	96.0	96.6	96.1	96.8	97.0	97.2	101.5	aJ64
33S 38W 06AAB 01	QU,TO	3203	378	93	94.6	92.1	92.3	96.0	92.9		94.5	94.2	aJ59
33S 38W 10ACC 01	QU,TO	3166	466	101	107.7	138.6	140.9	140.6	149.1	145.9	145.8	150.2	aJ58
33S 38W 20DAD 01						149.8	152.5	153.2	158.7	163.2			aJ83
34S 35W 03DCC 01		2981		108		137.2	139.5	140.5	148.5	145.9	150.4	154.2	aJ82
34S 35W 07CBB 01		3014				161.7	160.2	161.1	174.0	176.9		182.4	qJ82
34S 35W 26ACC 01		2977		112		123.6	128.5	128.7	131.3	131.2	134.4	137.6	aJ81
34S 36W 10CAC 01		3065		135		150.9	154.1	155.4	161.3	159.1	163.0	169.2	aJ81
34S 36W 21DBD 01		3079		144		158.2	161.2	161.9	169.4	163.8	165.6	170.2	aJ84
34S 37W 08DAC 01	QU,TO	3162	642	133	113.0	127.6	131.7	133.0	137.8	135.6	135.0	137.3	aJ64
34S 37W 29BBD 01		3170	550	138		153.5	156.0	155.6	157.3	150.7	151.4	153.4	aJ84
34S 37W 35AAD 01		3111	666	129		122.2	124.5	122.9	124.5	124.7	125.4	129.4	aJ84
34S 38W 34CAA 01		3194				154.7	157.4		162.4	163.9		169.0	aJ84
34S 39W 02CCA 01	QU,TO	3248	533	118	108.3	99.9	100.1	99.8	100.0	100.6	100.7	106.6	aJ64
34S 39W 15CAD 01	QU,TO	3280	510	141	141.7	136.7	137.0	141.2		138.1		138.1	aJ65
35S 35W 15BCC 01		2978	618	107		108.3	112.8	111.4		112.6	113.3	113.6	aJ84
35S 36W 01AAA 01	QU,TO	3022	590	120		121.1	125.6	127.7	128.3	130.4	131.7	134.1	aJ70
35S 36W 15AAD 01		3025		93		104.8	107.1	105.4	108.3	109.8			aJ84
35S 37W 16BCC 01		3138				128.3	131.6	131.6	134.1	135.9		139.4	aJ84
35S 39W 10CAD 01	QU,TO	3302	502	183	188.0	191.8	195.5	198.3	196.2	199.8	198.3	199.6	aJ67

TABLE 2. DERIVED HYDROLOGIC DATA, STEVENS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1940–92	1970–92	1991–92	Average annual water-level change (feet/year) 1940–92	1970–92	Saturated thickness (feet) 1940	1992	Percentage change saturated thickness 1940–92
31S 35W 15BAA 01	QU,TO	295.3	-71	-58.9	-4.3	-1.4	-2.7	225	154	-32
31S 35W 26DCC 01	QU,TO									
31S 36W 02CDD 01	QU,TO	180.6	-42	-24.8	-3.7	-0.8	-1.1	226	184	-19
31S 36W 27BCB 01	QU,TO									
31S 37W 22BCC 01	QU,TO	236.8	-131	-108.5	-7.8	-2.5	-4.9	334	203	-39
31S 37W 30DDB 01		229.4	-106		-3.4	-2.0		375	269	-28
31S 38W 17CDA 01	QU,TO	184.2	-74	-53.2	3.6	-1.4	-2.4	270	196	-27
31S 39W 23BBB 01	QU,TO	177.0	-79	-60.1		-1.5	-2.7	161	82	-49
32S 35W 08DDD 01	QU,TO	177.0	-47		-5.1	-0.9		372	325	-13
32S 36W 21AAC 01		195.5	-71		-3.7	-1.4		342	272	-20
32S 37W 10DCC 01	QU,TO	175.8	-49	-39.4	1.2	-0.9	-1.8	413	364	-12
32S 37W 26BAC 01		123.7	0		2.3	0.0				
32S 38W 11ADA 01	QU,TO	137.5	-20	-23.4	-1.0	-0.4	-1.1	411	392	-5
32S 38W 23BDD 01	QU,TO									
32S 39W 02BBB 01	QU,TO	191.8	-96	-58.9	6.3	-1.8	-2.7	200	104	-48
32S 39W 14DDD 01		78.5			-0.9					
33S 35W 23CBB 01		143.6	-40		-10.7	-0.8				
33S 36W 26DDD 01	QU,TO	165.2	-44	-46.5	-17.4	-0.8	-2.1	301	257	-15
33S 37W 17CCC 01	QU,TO	109.0	-26	-19.7	0.3	-0.5	-0.9	471	445	-6
33S 37W 23CDB 01	QU,TO	101.5	-15	-17.7	-4.3	-0.3	-0.8	475	461	-3
33S 38W 06AAB 01	QU,TO	94.2	-1	0.4	0.3	0.0	0.0	285	284	0
33S 38W 10ACC 01	QU,TO	150.2	-49	-42.5	-4.4	-0.9	-1.9	365	316	-13
33S 38W 20DAD 01										
34S 35W 03DCC 01		154.2	-46		-3.8	-0.9				
34S 35W 07CBB 01		182.4								
34S 35W 26ACC 01		137.6	-26		-3.2	-0.5				
34S 36W 10CAC 01		169.2	-34		-6.2	-0.7				
34S 36W 21DBD 01		170.2	-26		-4.6	-0.5				
34S 37W 08DAC 01	QU,TO	137.3	-4	-24.3	-2.3	-0.1	-1.1	509	505	-1
34S 37W 29BBD 01		153.4	-15		-2.0	-0.3		412	397	-4
34S 37W 35AAD 01		129.4	0		-4.0	0.0		537	537	0
34S 38W 34CAA 01		169.0								
34S 39W 02CCA 01	QU,TO	106.6	11	1.7	-5.9	0.2	0.1	415	426	3
34S 39W 15CAD 01	QU,TO	138.1	3	3.6		0.1	0.2	369	372	1
35S 35W 15BCC 01		113.6	-7		-0.3	-0.1		511	504	-1
35S 36W 01AAA 01	QU,TO	134.1	-14		-2.4	-0.3		470	456	-3
35S 36W 15AAD 01										
35S 37W 16BCC 01		139.4								
35S 39W 10CAD 01	QU,TO	199.6	-17	-11.6	-1.3	-0.3	-0.5	319	302	-5

Sumner County

TABLE 1. SELECTED HYDROLOGIC DATA , SUMNER COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
30S 04W 34BAA 01		1460				22.5	23.1	22.2		24.9		28.3	aU81
31S 04W 01DAC 01		1441				15.5	15.2	15.0		18.4		22.0	aU86
31S 04W 02BBB 01		1435				5.8	5.6	5.5		7.9		11.4	aU86

TABLE 2. DERIVED HYDROLOGIC DATA, SUMNER COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
30S 04W 34BAA 01		28.3								
31S 04W 01DAC 01		22.0								
31S 04W 02BBB 01		11.4								

TABLE 1. SELECTED HYDROLOGIC DATA , THOMAS COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
06S 31W 03ADB 01	TO	2957	192	109	115.0	115.7	115.7	115.0	116.5	115.6	115.1		aJ65
06S 31W 33CCD 01	QA,TO	2916	131	18	10.0	30.3	31.1	31.9	33.2	34.5		29.7	aJ64
06S 32W 12CBC 01	TO	3020	210	115	114.0	119.2	119.7		117.2	123.2	117.6	117.8	aJ42
06S 32W 29CDC 01	TO	3077	204	113	111.0	123.7	122.4	123.2	125.6	126.2	125.4	125.8	aJ64
06S 33W 07BBB 01	TO	3177	234	137		137.8	138.9	138.4	139.8	141.3	141.4	141.5	aJ79
06S 33W 23DDD 01	QA	2997	81	9		11.4	12.8	12.1	13.8	16.0	16.4	16.4	aJ78
06S 34W 01DDD 01	TO	3180				141.6	143.1	142.7	143.6	144.9	145.0	145.2	aJ71
06S 34W 11CDD 01	TO	3218	253	158	156.0	161.7	161.3	160.1	161.4	163.1	162.9	163.9	aJ67
06S 34W 17CBC 01	TO	3261	258	151	151.0	158.7	159.1	159.0	159.0	160.9	161.2	167.6	aJ62
06S 34W 22DCA 01		3207				128.0	128.1		130.1	131.4	131.8	132.5	aJ84
06S 34W 31CDB 01						130.6	131.7	136.5	133.3	134.6	134.0	135.9	aJ85
06S 35W 02CDD 01	TO	3245	250	117	127.0	129.7	129.8	129.9	130.3	129.3	130.7	131.1	aJ64
06S 35W 26ACB 01	TO	3300	255	151	150.0	154.8	155.2	156.7	157.5	159.5	158.4	159.7	aJ65
06S 36W 06BCD 01	TO	3408	323	174	178.0	190.5	188.9	189.2	189.6	189.7	193.7		aJ64
06S 36W 11ACC 01	TO	3360	280	168	161.0	167.1	166.8	167.2	168.5	170.7	171.4	171.4	aJ64
06S 36W 30DCB 01	TO	3417	307	152	147.0	155.4	155.5	156.1	156.7	156.9	157.6	156.9	aJ64
06S 36W 34DDB 01	TO	3334	246	99	94.0	102.6	103.2	103.0	103.6	103.6	104.1	104.5	aJ64
07S 31W 01DCA 01	TO	2956	246	108	101.0	123.5		125.1			121.7	122.4	aJ64
07S 32W 07ACA 01	TO	3056	146	68	64.0	79.0	79.5	79.9	80.8	81.5	82.2		aJ42
07S 32W 33BCB 01		3082				115.3	116.1	116.4	118.5	120.7	120.9	121.7	aJ84
07S 33W 07BDA 01	TO	3203	254	141	149.0	154.4	155.6	155.3	155.5	155.8	155.1	156.2	aJ64
07S 33W 35ADD 01	TO	3145	252	131	131.0	150.6		152.6		160.8	158.6		aJ65
07S 34W 25AAA 01	TO	3167	240	106	106.0	112.2	113.3	112.5	112.5	115.0	119.0	121.7	aJ66
07S 34W 26DBD 01	TO	3177	230	104	104.0	112.4	119.0	119.6	113.8	113.9	114.6	127.2	aJ64
07S 35W 09CCC 01	TO	3315	265	124		128.1	128.9	129.8	131.5	132.6	132.8		aJ80
07S 36W 17CCC 01	TO	3417	267	139	134.0	143.6	145.5	147.2	147.7	150.5	149.2	153.8	aJ62
08S 31W 03CDD 01	TO	3003		110		135.2	137.7	139.0	141.0	144.1	146.2	148.3	aJ80
08S 31W 20CDD 01	TO	3026	220	98	101.0	118.0	120.1	121.7	123.8	125.9	128.0	130.3	aJ64
08S 32W 07BAA 01	TO	3102	272	98	99.0	121.1	123.1	123.4	136.2	133.3	129.5	129.8	aJ64
08S 32W 12DBC 01	TO	3057	217	110	108.0	117.0	118.4	119.5	121.6	123.9	124.8	125.9	aJ64
08S 32W 27DAB 01	TO	3078	228	112	110.0	124.1	128.1	123.8	126.0	127.2	128.2	129.2	aJ42
08S 33W 34BBC 01	TO	3168	197	130	130.0	151.7	155.4	155.9	157.8	159.4	161.0	162.0	aJ64
08S 34W 01BAC 01	TO	3177	270	113	116.0	124.4	126.5	126.7	127.6	128.7	129.3	131.0	aJ47
08S 34W 06CBC 01	TO	3266	227	130	135.0	137.9	149.7	137.9	153.6	140.0	139.1	145.5	aJ64
08S 34W 23CBD 01	TO	3232	235	162	155.0	178.5		180.4	182.4	184.6	182.5	182.9	aJ64
08S 34W 29CCC 01		3283				205.0	206.8	207.5	209.1	211.4	210.3		aJ84
08S 35W 04CCC 01		3302				94.8	94.8	94.8	95.0	95.2	95.2	95.3	aJ84
08S 36W 15CBB 01		3365				85.9	86.1	86.1	86.3	87.0	87.1	87.5	aJ84
08S 36W 18ABA 02	TO	3428		120		129.5	132.7	131.3	132.7	131.9	131.3	132.1	aJ42
08S 36W 31BCD 01		3369				45.2	45.2	45.0		46.7	50.8		aJ84
09S 31W 10BBB 01	TO	2999	177	85	83.0	92.3	90.2	90.5	92.4	95.3	93.0	94.3	aJ66
09S 31W 17CCC 01		3016				88.6	89.9	89.9	91.0	92.8	93.5	94.1	aJ84
09S 31W 36AAB 01	TO	3013	209	130	131.0	142.4	143.4	143.7		147.0	148.3	152.6	aJ64
09S 32W 03AAA 01		3051				97.5	99.4	99.9	101.1	101.7	103.3	103.6	aJ84
09S 32W 27BCD 01	TO	3076	207	97	98.0	121.4	121.6	123.3	124.3	125.1	126.1	126.6	aJ64
09S 33W 35AAD 01	TO	3145	250	125	129.0	157.4	158.6	158.8	159.8	162.8	164.7	166.4	aJ64
09S 34W 11CCC 01		3180				120.2	122.8	123.9	125.9	128.5	130.4	136.8	aJ85
09S 34W 12ADA 01	TO	3199	269	134		159.7	161.5	162.7	164.6	167.8	170.0	190.0	aJ79
09S 34W 17ABA 01		3229				154.2	155.5	155.9	157.2	158.7	159.7	160.2	aJ84

09S 35W 32DAA 01	TO	3361	235	182	188.0	186.8	193.4	195.7	201.6	205.2	189.4	211.2	aJ68
10S 31W 26AAA 01	QA,TO	2891	31	11	5.0	12.2	12.0	12.1	12.5	12.6	13.2	14.5	aJ64
10S 31W 29AAB 01	TO	2997	190	82	82.0	91.3	91.6	92.5	91.6	91.6	91.8	92.7	aJ64
10S 32W 11BAA 01	TO	3072	171	110	105.0	120.1	120.7	120.2	120.5	121.2	122.0	123.0	aJ65
10S 32W 29DCB 01	TO	3064	184	78	80.0	98.4	96.4	96.9	97.0	97.1	103.4	98.6	aJ64
10S 33W 03DBC 01	TO	3145	254	120	127.0	152.6	152.5		153.6		159.3		aJ64
10S 33W 06BBC 01	TO	3191	315	136		172.6	177.4	171.4	175.1	178.5	178.5	181.5	aJ71
10S 33W 19CBD 01	TO	3161	166	100	99.0	106.2	106.2	105.9	106.0	106.1	106.5	107.3	aJ64
10S 34W 12BCD 01	TO	3220	297	157	169.0	169.3	171.4		172.4	172.5	178.4	179.7	aJ64
10S 34W 29BBC 01		3208				91.6	88.8		89.2	88.6	88.8	88.7	aJ84
10S 35W 09ABB 01		3290				113.1	113.4	112.7	113.0	113.2	112.7	112.4	aJ84
10S 36W 16CCC 01		3366				128.7	130.2	130.5	131.4	132.2	133.5	133.1	aJ84

TABLE 2. DERIVED HYDROLOGIC DATA, THOMAS COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
06S 31W 03ADB 01	TO									
06S 31W 33CCD 01	QA,TO	29.7	-12	-19.7		-0.3	-0.8	113	101	-11
06S 32W 12CBC 01	TO	117.8	-3	-3.8	-0.2	-0.1	-0.1	95	92	-3
06S 32W 29CDC 01	TO	125.8	-13	-14.8	-0.4	-0.3	-0.6	91	78	-14
06S 33W 07BBB 01	TO	141.5	-5		-0.1	-0.1		97	93	-4
06S 33W 23DDD 01	QA	16.4	-7		0.0	-0.2		72	65	-10
06S 34W 01DDD 01	TO	145.2			-0.2					
06S 34W 11CDD 01	TO	163.9	-6	-7.9	-1.0	-0.1	-0.3	95	89	-6
06S 34W 17CBC 01	TO	167.6	-17	-16.6	-6.4	-0.4	-0.6	107	90	-16
06S 34W 22DCA 01		132.5			-0.7					
06S 34W 31CDB 01		135.9			-1.9					
06S 35W 02CDD 01	TO	131.1	-14	-4.1	-0.4	-0.3	-0.2	133	119	-11
06S 35W 26ACB 01	TO	159.7	-9	-9.7	-1.3	-0.2	-0.4	104	95	-9
06S 36W 06BCD 01	TO									
06S 36W 11ACC 01	TO	171.4	-3	-10.4	0.0	-0.1	-0.4	112	109	-3
06S 36W 30DCB 01	TO	156.9	-5	-9.9	0.7	-0.1	-0.4	155	150	-3
06S 36W 34DDB 01	TO	104.5	-6	-10.5	-0.4	-0.1	-0.4	147	142	-3
07S 31W 01DCA 01	TO	122.4	-14	-21.4	-0.7	-0.3	-0.8	138	124	-10
07S 32W 07ACA 01	TO									
07S 32W 33BCB 01		121.7			-0.8					
07S 33W 07BDA 01	TO	156.2	-15	-7.2	-1.1	-0.4	-0.3	113	98	-13
07S 33W 35ADD 01	TO									
07S 34W 25AAA 01	TO	121.7	-16	-15.7	-2.7	-0.4	-0.6	134	118	-12
07S 34W 26DBD 01	TO	127.2	-23	-23.2	-12.6	-0.5	-0.9	126	103	-18
07S 35W 09CCC 01	TO									
07S 36W 17CCC 01	TO	153.8	-15	-19.8	-4.6	-0.4	-0.8	128	113	-12
08S 31W 03CDD 01	TO	148.3	-38		-2.1	-0.9				
08S 31W 20CDD 01	TO	130.3	-32	-29.3	-2.3	-0.8	-1.1	122	90	-26
08S 32W 07BAA 01	TO	129.8	-32	-30.8	-0.3	-0.8	-1.2	174	142	-18
08S 32W 12DBC 01	TO	125.9	-16	-17.9	-1.1	-0.4	-0.7	107	91	-15
08S 32W 27DAB 01	TO	129.2	-17	-19.2	-1.0	-0.4	-0.7	116	99	-15
08S 33W 34BBC 01	TO	162.0	-32	-32.0	-1.0	-0.8	-1.2	67	35	-48
08S 34W 01BAC 01	TO	131.0	-18	-15.0	-1.7	-0.4	-0.6	157	139	-11
08S 34W 06CBC 01	TO	145.5	-16	-10.5	-6.4	-0.4	-0.4	97	82	-15
08S 34W 23CBD 01	TO	182.9	-21	-27.9	-0.4	-0.5	-1.1	73	52	-29
08S 34W 29CCC 01										
08S 35W 04CCC 01		95.3			-0.1					
08S 36W 15CBB 01		87.5			-0.4					
08S 36W 18ABA 02	TO	132.1	-12		-0.8	-0.3				
08S 36W 31BCD 01										
09S 31W 10BBB 01	TO	94.3	-9	-11.3	-1.3	-0.2	-0.4	92	83	-10
09S 31W 17CCC 01		94.1			-0.6					
09S 31W 36AAB 01	TO	152.6	-23	-21.6	-4.3	-0.5	-0.8	79	56	-29
09S 32W 03AAA 01		103.6			-0.3					
09S 32W 27BCD 01	TO	126.6	-30	-28.6	-0.5	-0.7	-1.1	110	80	-27
09S 33W 35AAD 01	TO	166.4	-41	-37.4	-1.7	-1.0	-1.4	125	84	-33
09S 34W 11CCC 01		136.8			-6.4					
09S 34W 12ADA 01	TO	190.0	-56		-20.0	-1.3		135	79	-41
09S 34W 17ABA 01		160.2			-0.5					
09S 35W 32DAA 01	TO	211.2	-29	-23.2	-21.8	-0.7	-0.9	53	24	-55

10S 31W 26AAA 01	QA,TO	14.5	-4	-9.5	-1.3	-0.1	-0.4	20	17	-15
10S 31W 29AAB 01	TO	92.7	-11	-10.7	-0.9	-0.3	-0.4	108	97	-10
10S 32W 11BAA 01	TO	123.0	-13	-18.0	-1.0	-0.3	-0.7	61	48	-21
10S 32W 29DCB 01	TO	98.6	-21	-18.6	4.8	-0.5	-0.7	106	85	-20
10S 33W 03DBC 01	TO									
10S 33W 06BBC 01	TO	181.5	-46		-3.0	-1.1		179	134	-25
10S 33W 19CBD 01	TO	107.3	-7	-8.3	-0.8	-0.2	-0.3	66	59	-11
10S 34W 12BCD 01	TO	179.7	-23	-10.7	-1.3	-0.5	-0.4	140	117	-16
10S 34W 29BBC 01		88.7			0.1					
10S 35W 09ABB 01		112.4			0.3					
10S 36W 16CCC 01		133.1			0.4					

Trego County

TABLE 1. SELECTED HYDROLOGIC DATA , TREGO COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
12S 23W 20CCC 01		2373				19.6	18.6	17.6	19.9	20.5	19.8	22.2	qM60

TABLE 2. DERIVED HYDROLOGIC DATA, TREGO COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
12S 23W 20CCC 01		22.2			-2.4					

TABLE 1. SELECTED HYDROLOGIC DATA , WABAUNSEE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet) 1950	1966	1986	1987	1988	1989	1990	1991	1992	Data type
10S 10E 15DCC 01		971			15.5	12.8	10.9	13.9	16.9	15.1	15.7		qM66
10S 12E 29ADD 01		944				16.1	14.0	18.0	21.2	17.8	20.1		qM74

TABLE 2. DERIVED HYDROLOGIC DATA, WABAUNSEE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
10S 10E 15DCC 01										
10S 12E 29ADD 01										

Wallace County

TABLE 1. SELECTED HYDROLOGIC DATA , WALLACE COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
11S 38W 35CCC 02	TO	3372	189	81	76.0	124.9	126.2	127.8	125.2	120.3	120.3	118.7	aJ66
11S 42W 08DDC 01	TO	3953	98	98		109.9	110.3	109.0	107.4	108.9	110.9	112.7	aJ69
11S 42W 10AAD 01	TO	3948				128.6	130.0	130.7	130.8	134.1	136.7	132.5	aJ70
13S 39W 33BBB 01	TO	3322				26.3	26.0	25.8	26.7	27.2	27.2	27.2	qJ70
13S 43W 36ABB 01	TO	3894	270	149	149.0	182.2	183.0		186.0	189.4	191.6	184.4	aJ57
14S 38W 21DCC 01	TO	3538	94	82	80.1	82.2	82.5	82.3	82.7	82.5	82.6	82.4	aJ51
14S 39W 28CAA 01	TO	3602							157.4	155.0	150.8	149.9	aJ88
14S 40W 23ADD 01	TO	3645	220	118	124.5	157.1	156.0	157.4	157.7		160.6	160.9	aJ58
14S 40W 29ABA 01	TO	3702	230	137		174.7	174.0	175.3	178.0	185.3	183.0	184.0	aJ69
14S 41W 18DCB 01	TO	3778	387	106					173.5	169.5	170.8	167.6	aJ77
14S 41W 22BBC 01	TO	3729	218	84	86.1	124.9	128.2	130.1	133.1	138.4	142.8	144.4	aJ58
14S 42W 10BAA 01	TO	3838	403	133		177.2	186.1	187.3	189.6	193.9	195.3	195.6	aJ69
15S 38W 05CCB 01	TO	3531	144	76		103.9	104.3			106.1	106.3	106.3	aJ77
15S 38W 14CCD 01	TO	3486	150	70	81.1	105.5	107.2	104.6	105.2	105.8	106.6	106.5	aJ58
15S 38W 21CCC 01		3510							147.8	149.9	150.6	151.4	aJ88
15S 38W 36CBB 01	TO	3461	153	76	80.8	121.4	122.9		124.9	126.6	127.8		aJ58
15S 39W 02BCA 01	TO	3585	195	109	125.0	152.8	151.2	153.3	153.1	154.6	155.9	154.7	aJ58
15S 39W 06CBC 01	TO	3631	223	106	118.8	146.1	153.3		157.8	159.4	163.6	162.8	aJ65
15S 39W 08ACC 01	TO	3623	222	113	129.9	162.6	160.8	163.0	163.7	165.5	166.0	169.3	qJ48
15S 39W 26ACC 01	TO	3561	239	90	111.5	159.5	153.8	157.3	157.7	161.8	160.0	159.8	aJ60
15S 40W 03BAB 01	TO	3636	254	86	85.0	124.3	124.3	126.2	128.6	130.6	132.4	134.0	qJ57
15S 40W 09DCB 01	TO	3653	261	85	90.8	130.3	131.8	133.3	135.4	137.1	142.4		aJ67
15S 40W 26CAB 01	TO	3646	245	100	102.0	134.1	137.3	137.7	141.3	143.8	146.3	148.8	aJ69
15S 41W 02AAA 01	TO	3766							212.3	218.1	211.4	215.9	aJ88
15S 41W 05ACB 01	TO	3794	235	136	147.2	204.7	207.9	193.1	201.0	207.7	199.4	200.7	aJ58
15S 41W 27CBC 01	TO	3750	230	145		189.0	191.5	192.4	195.5	197.1	198.8	200.1	aJ69
15S 41W 36DDB 02	TO	3695	265	104	113.1	145.2	146.4	148.3	147.1	151.0	153.1	155.4	aJ66
15S 42W 02BBB 01	TO	3854	225	159	166.9	212.3	203.2	204.0	204.6	205.0	205.9	206.0	aJ69
15S 42W 32BDA 01	TO	3901	271	216	233.9		247.9	245.2		247.6	247.4	244.6	aJ69
15S 42W 36CDC 01	TO	3844	270	194	214.1		245.3		248.9	248.7	249.4	250.7	aJ51

TABLE 2. DERIVED HYDROLOGIC DATA, WALLACE COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
11S 38W 35CCC 02	TO	118.7	-38	-42.7	1.6	-0.9	-1.6	108	70	-35
11S 42W 08DDC 01	TO	112.7	-15		-1.8	-0.4		0	-15	
11S 42W 10AAD 01	TO	132.5			4.2					
13S 39W 33BBB 01	TO	27.2			0.0					
13S 43W 36ABB 01	TO	184.4	-35	-35.4	7.2	-0.8	-1.4	121	86	-29
14S 38W 21DCC 01	TO	82.4	0	-2.3	0.2	0.0	-0.1	12	12	0
14S 39W 28CAA 01	TO	149.9			0.9					
14S 40W 23ADD 01	TO	160.9	-43	-36.4	-0.3	-1.0	-1.4	102	59	-42
14S 40W 29ABA 01	TO	184.0	-47		-1.0	-1.1		93	46	-51
14S 41W 18DCB 01	TO	167.6	-62		3.2	-1.5		281	219	-22
14S 41W 22BBC 01	TO	144.4	-60	-58.3	-1.6	-1.4	-2.2	134	74	-45
14S 42W 10BAA 01	TO	195.6	-63		-0.3	-1.5		270	207	-23
15S 38W 05CCB 01	TO	106.3	-30		0.0	-0.7		68	38	-44
15S 38W 14CCD 01	TO	106.5	-37	-25.4	0.1	-0.9	-1.0	80	44	-45
15S 38W 21CCC 01		151.4			-0.8					
15S 38W 36CBB 01	TO									
15S 39W 02BCA 01	TO	154.7	-46	-29.7	1.2	-1.1	-1.1	86	40	-53
15S 39W 06CBC 01	TO	162.8	-57	-44.0	0.8	-1.4	-1.7	117	60	-49
15S 39W 08ACC 01	TO	169.3	-56	-39.4	-3.3	-1.3	-1.5	109	53	-51
15S 39W 26ACC 01	TO	159.8	-70	-48.3	0.2	-1.7	-1.9	149	79	-47
15S 40W 03BAB 01	TO	134.0	-48	-49.0	-1.6	-1.1	-1.9	168	120	-29
15S 40W 09DCB 01	TO									
15S 40W 26CAB 01	TO	148.8	-49	-46.8	-2.5	-1.2	-1.8	145	96	-34
15S 41W 02AAA 01	TO	215.9			-4.5					
15S 41W 05ACB 01	TO	200.7	-65	-53.5	-1.3	-1.5	-2.1	99	34	-66
15S 41W 27CBC 01	TO	200.1	-55		-1.3	-1.3		85	30	-65
15S 41W 36DDB 02	TO	155.4	-51	-42.3	-2.3	-1.2	-1.6	161	110	-32
15S 42W 02BBB 01	TO	206.0	-47	-39.1	-0.1	-1.1	-1.5	66	19	-71
15S 42W 32BDA 01	TO	244.6	-29	-10.7	2.8	-0.7	-0.4	55	26	-53
15S 42W 36CDC 01	TO	250.7	-57	-36.6	-1.3	-1.4	-1.4	76	19	-75

Washington County

TABLE 1. SELECTED HYDROLOGIC DATA , WASHINGTON COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
01S 05E 05ADA 01		1370				36.9	33.2	34.6	37.7		39.1	41.4	qM79
04S 02E 14CCC 01		1485				46.1	45.6	43.1	43.6		46.0	47.1	qM79
05S 01E 31DDD 01		1278				16.9	14.7	16.2	18.2		18.1	19.5	qM75

TABLE 2. DERIVED HYDROLOGIC DATA, WASHINGTON COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet)			Average annual water-level change (feet/year)		Saturated thickness (feet)		Percentage change saturated thickness
			1950–92	1966–92	1991–92	1950–92	1966–92	1950	1992	1950–92
01S 05E 05ADA 01		41.4			-2.3					
04S 02E 14CCC 01		47.1			-1.1					
05S 01E 31DDD 01		19.5			-1.4					

TABLE 1. SELECTED HYDROLOGIC DATA , WICHITA COUNTY

Well number	Geo-logic unit	Land surface altitude (feet)	Depth to bedrock (feet)	Depth to water by year (feet)									Data type
				1950	1966	1986	1987	1988	1989	1990	1991	1992	
16S 35W 06AAB 01	TO	3208	118	71	81.5	82.8	83.2	84.7	83.4	84.0	86.9	77.6	aJ48
16S 35W 13CCC 01	TO	3182	170	118	126.6	157.7	158.8	159.2	160.0	159.9	159.7		aJ65
16S 35W 20CCC 01	TO	3228	189	103	124.6	155.2	160.3	162.4		159.5	160.0	159.1	aJ50
16S 36W 03DCC 01	TO	3267	138	87		132.2	131.6		131.3	136.6	136.6	135.6	aJ47
16S 36W 07BCB 01	TO	3319	140	80	91.8	115.2	117.4	120.6	119.4	119.9	119.6	120.3	aJ48
16S 36W 21CCC 01	TO	3295	205	84	99.9	151.7	151.6		154.5	154.8	155.2		au68
16S 36W 30CBC 01	TO	3319	218	87	109.3	155.9	154.5	165.2	153.1	153.7	155.3	157.1	aJ56
16S 36W 34CCC 02	TO	3275				138.3	137.9	140.1	141.1	142.3	145.0	143.8	aJ85
16S 36W 36CBC 01	TO	3246	200	91	105.4	134.3	135.1		136.7		138.6		aJ64
16S 37W 17BBB 01	TO	3399	194	86	101.0	144.0	145.9	146.0	147.7	148.9	150.0	151.7	aJ66
16S 37W 30BAB 01	TO	3404				156.3	155.3	154.8	156.6	158.2	159.4	160.3	aJ85
16S 38W 10ABB 01	TO	3458	208	83	96.3	143.5	146.4	147.9	150.7	155.4	154.0	153.8	aJ51
16S 38W 26BBB 01	TO	3424	197	75	112.0	140.6	141.2	142.0	144.1	143.9	144.8	142.8	aJ61
17S 35W 15CDC 01	TO	3194	204	98	110.0	133.9	135.2		136.6	138.0	139.2		au65
17S 35W 27CCC 01	TO	3195	210	91	109.6	143.6	144.5	145.9	151.2	155.7	152.5	151.3	aJ55
17S 35W 30CBB 01	TO	3235	218	94	126.6	160.2	163.6	166.8	169.1	167.6	171.3	169.6	aJ51
17S 36W 10CBB 01	QA,TO	3202	97	29		60.0	61.0		62.9	66.8	64.8		au71
17S 36W 23BCC 01	TO	3258	228	100	125.3	155.3	156.8		160.6		169.0		au40
17S 36W 33BCB 01	TO	3286	208	98	113.3	145.0	145.9	147.0	147.2	148.1	151.7	149.6	uJ65
17S 37W 08BAA 01	TO	3374	196	84	101.2	133.4	134.1	135.5	137.1	137.9	143.3	144.1	aJ51
17S 37W 13CDD 01	TO	3300	175	70		107.7	110.8	115.1	117.3	114.5	118.8	116.7	aJ72
17S 37W 28CCC 01	TO	3360	190	85	98.4	137.0	138.2	144.4	142.0	144.0	144.0	148.2	aJ64
17S 38W 21BBB 01	TO	3446	165	100	100.3	126.4	129.5	127.7		126.2	126.7	126.9	aJ64
17S 38W 24ACC 01	TO	3394	210	86	104.5	132.7	132.3			138.2	141.6		au51
17S 38W 28CCC 01	TO	3446	190	105	113.6	144.8		146.2	146.5		147.1	150.5	aJ67
18S 35W 08BBC 02	TO	3217	186	82		134.7	137.0	135.8	136.2	137.9	139.4	139.4	aJ70
18S 35W 14DCD 01	TO	3171	137	80	91.1	114.0	115.8	116.2		116.8	118.8	116.9	aJ51
18S 35W 31DDD 01	TO	3210				95.4					99.7	100.5	aJ72
18S 37W 01BBB 01	TO	3315	174	80	108.4	138.3	139.7	140.5	144.3	147.1	147.5	149.8	aJ65
18S 37W 21BBB 01	TO	3360	175	85	113.6	161.7	158.1	158.7	158.3	162.9	166.6	159.5	aJ62
18S 38W 02BCC 01	TO	3414	199	95	115.7	153.0	151.4	154.7	154.5	159.3	156.3	156.9	aJ65
18S 38W 08BBD 01	TO	3432	182	82		129.2	132.4		129.9	130.7	131.5		au70
18S 38W 20ACC 02	TO	3440	169	90	108.7	130.7	130.3	130.2	130.2	131.9	133.6	133.2	aJ51
18S 38W 23BAB 01	QA,TO	3340	108	23		40.2	25.7	42.3	43.4	42.5	47.1	36.0	aJ71
18S 38W 31DBC 01	TO	3450	148	109	108.7	121.2	121.0	120.4	120.0	118.9	119.1	119.7	aJ48
18S 38W 36DDD 01	TO	3374	129	78	82.4	83.8	84.1	84.3	87.3	84.7	85.5	86.4	aJ51
19S 35W 08BBB 01	TO	3217	135	85		96.0	96.9	98.2	103.1	100.0	101.6	99.8	aJ77
19S 36W 15BAA 01	TO	3236	112	71		78.8	79.1	79.8	79.9	80.5	79.8	80.3	aJ69
19S 37W 22AAB 01	TO	3330	138	98		100.6	100.4	100.2	99.8		103.4	104.7	aJ69
19S 37W 28ABB 01	TO	3357							109.8	103.5	103.6	105.1	aJ88
19S 38W 26CCB 01	TO	3408	173	96			99.0	108.0	98.7	98.2	98.4	99.7	aJ69
19S 38W 31CBC 01	TO	3463	205	140		139.0	139.2	139.2	139.1	139.5	139.6	140.8	aJ69
20S 35W 15BBB 01	TO	3129				68.1	68.2	67.9	68.1	67.9	67.9	68.0	aJ81
20S 37W 29DCC 01	TO	3359	139	98		107.4	105.6	106.0	99.7	99.0	104.2	103.7	aJ70
20S 38W 17CBD 01	TO	3442	232	135		141.1	141.2	140.4	141.2	142.5	141.7	141.9	aJ71
20S 38W 33BBA 01	TO	3424	205	126	134.0	139.7	139.7	139.9	139.7	139.7	140.3	138.9	aJ63

TABLE 2. DERIVED HYDROLOGIC DATA, WICHITA COUNTY

Well number	Geo-logic unit	Depth to water (feet) 1992	Water-level change (feet) 1950–92	1966–92	1991–92	Average annual water-level change (feet/year) 1950–92	1966–92	Saturated thickness (feet) 1950	1992	Percentage change saturated thickness 1950–92
16S 35W 06AAB 01	TO	77.6	-7	3.9	9.3	-0.2	0.2	47	40	-15
16S 35W 13CCC 01	TO									
16S 35W 20CCC 01	TO	159.1	-56	-34.5	0.9	-1.3	-1.3	86	30	-65
16S 36W 03DCC 01	TO	135.6	-49		1.0	-1.2		51	2	-96
16S 36W 07BCB 01	TO	120.3	-40	-28.5	-0.7	-1.0	-1.1	60	20	-67
16S 36W 21CCC 01	TO									
16S 36W 30CBC 01	TO	157.1	-70	-47.8	-1.8	-1.7	-1.8	131	61	-53
16S 36W 34CCC 02	TO	143.8			1.2					
16S 36W 36CBC 01	TO									
16S 37W 17BBB 01	TO	151.7	-66	-50.7	-1.7	-1.6	-2.0	108	42	-61
16S 37W 30BAB 01	TO	160.3			-0.9					
16S 38W 10ABB 01	TO	153.8	-71	-57.5	0.2	-1.7	-2.2	125	54	-57
16S 38W 26BBB 01	TO	142.8	-68	-30.8	2.0	-1.6	-1.2	122	54	-56
17S 35W 15CDC 01	TO									
17S 35W 27CCC 01	TO	151.3	-60	-41.7	1.2	-1.4	-1.6	119	59	-50
17S 35W 30CBB 01	TO	169.6	-76	-43.0	1.7	-1.8	-1.7	124	48	-61
17S 36W 10CBB 01	QA,TO									
17S 36W 23BCC 01	TO									
17S 36W 33BCB 01	TO	149.6	-52	-36.3	2.1	-1.2	-1.4	110	58	-47
17S 37W 08BAA 01	TO	144.1	-60	-42.9	-0.8	-1.4	-1.7	112	52	-54
17S 37W 13CDD 01	TO	116.7	-47		2.1	-1.1		105	58	-45
17S 37W 28CCC 01	TO	148.2	-63	-49.8	-4.2	-1.5	-1.9	105	42	-60
17S 38W 21BBB 01	TO	126.9	-27	-26.6	-0.2	-0.6	-1.0	65	38	-42
17S 38W 24ACC 01	TO									
17S 38W 28CCC 01	TO	150.5	-46	-36.9	-3.4	-1.1	-1.4	85	40	-53
18S 35W 08BBC 02	TO	139.4	-57		0.0	-1.4		104	47	-55
18S 35W 14DCD 01	TO	116.9	-37	-25.8	1.9	-0.9	-1.0	57	20	-65
18S 35W 31DDD 01	TO	100.5			-0.8					
18S 37W 01BBB 01	TO	149.8	-70	-41.4	-2.3	-1.7	-1.6	94	24	-74
18S 37W 21BBB 01	TO	159.5	-75	-45.9	7.1	-1.8	-1.8	90	16	-82
18S 38W 02BCC 01	TO	156.9	-62	-41.2	-0.6	-1.5	-1.6	104	42	-60
18S 38W 08BBD 01	TO									
18S 38W 20ACC 02	TO	133.2	-43	-24.5	0.4	-1.0	-0.9	79	36	-54
18S 38W 23BAB 01	QA,TO	36.0	-13		11.1	-0.3		85	72	-15
18S 38W 31DBC 01	TO	119.7	-11	-11.0	-0.6	-0.3	-0.4	39	28	-28
18S 38W 36DDD 01	TO	86.4	-8	-4.0	-0.9	-0.2	-0.2	51	43	-16
19S 35W 08BBB 01	TO	99.8	-15		1.8	-0.4		50	35	-30
19S 36W 15BAA 01	TO	80.3	-9		-0.5	-0.2		41	32	-22
19S 37W 22AAB 01	TO	104.7	-7		-1.3	-0.2		40	33	-18
19S 37W 28ABB 01	TO	105.1			-1.5					
19S 38W 26CCB 01	TO	99.7	-4		-1.3	-0.1		77	73	-5
19S 38W 31CBC 01	TO	140.8	-1		-1.2	0.0		65	64	-2
20S 35W 15BBB 01	TO	68.0			-0.1					
20S 37W 29DCC 01	TO	103.7	-6		0.5	-0.1		41	35	-15
20S 38W 17CBD 01	TO	141.9	-7		-0.2	-0.2		97	90	-7
20S 38W 33BBA 01	TO	138.9	-13	-4.9	1.4	-0.3	-0.2	79	66	-16

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